



PREPARED FOR NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS

COLLIN COUNTY TRANSIT NEEDS ASSESSMENT AND PLANNING STUDY

DRAFT FINAL

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Prepared in cooperation with the Regional Transportation Council, the North Central Texas Council of Governments, and the Texas Department of Transportation.

The contents of this report reflect the views of the authors who are responsible for the opinions, findings, and conclusions presented herein. The contents do not necessarily reflect the view or policies of the Regional Transportation Council, the North Central Texas Council of Governments, or the Texas Department of Transportation.

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EXECUTIVE SUMMARY

INTRODUCTION

The focus of this Transit Needs Assessment and Planning Study is to review existing services, identify gaps and potential ways to fill those gaps, and develop a set of proposed transportation alternatives. Many stakeholders described the possible benefits of new transportation services within Collin County, including the economic development potential in filling job vacancies in lower-income jobs such as at the Premium Outlets in Allen; incorporation of isolated populations in Princeton, Farmersville and elsewhere into the regional social service, employment, healthcare, and education network; and providing alternatives to driving for residents of Frisco, McKinney and other parts of the county. An obstacle for providing transportation services is that Collin County's network of informal and human service providers is very small, with only a handful of them providing transportation services, and most of the services are limited to a specific set of clients. With Collin County's growth has come an awareness that not all residents of the county can afford to drive, and that some people have disabilities (or other potential limitations, such as medical conditions) which make it difficult for them to provide their own transportation. In addition, many people who commute in their own car are finding traffic congestion and long travel times to be a disincentive to living in Collin County, eroding a quality of life that has been impacted by rapid growth in the last decade.



Much of Collin County, like McKinney, is low density and designed around the automobile, making it difficult to serve with traditional fixed-route transit services.

COLLIN COUNTY, TEXAS

Population

An understanding of the distribution and density of population and employment is an integral part of the transportation planning process. Demographics such as population, age distribution, and travel behavior all tell a story about the complex travel needs of residents and employees, especially as they relate to the use of transit and transportation services. Based on an array of demographic factors, primary transit needs in Collin County are identified on the east side of McKinney (east of S. McDonald Road), the south and southeast side of Plano, and portions of Allen, Frisco, Celina, and some of the cities on the east side of the county, which have no fixed-route transit service access.



Some of Collin County's smallest cities are anticipating enormous growth. Farmersville's population is projected to increase 1,500% by 2030.

Collin County has experienced extensive growth in the past four decades. In 1970, the county had approximately 67,000 residents. For the subsequent two decades, the county experienced an expansive period of growth at an average rate of ten percent each year. Beyond 1990, the county continued to grow at a high rate, but less than the previous two decades. By 2010, Collin County's population was approximately 780,000 residents.

The most populous cities in Collin County include Plano, McKinney, Frisco, and Allen, all of which are within the central or southwestern quarter of the county. The northern and eastern portions of Collin County retain their rural character, although there are small pockets of

residential development and small communities. These areas of low-density can be roughly demarcated by lands to the east of US 75 and north of US 380.

The greatest concentrations of people and jobs in Collin County are in and around Plano (and Richardson to the south), which has the best current jobs-to-housing ratio, but also in McKinney and Frisco where more jobs are projected to be created in the next eight years. Most of the major employers and activity centers are located along major freeways and highways, meaning they may be accessible from potential future corridor-based transit operations.

Existing Transportation

Transit services in Collin County are available through a limited number of public agencies, namely TAPS for fixed-route services in McKinney and paratransit services throughout the county, and DART fixed-route and paratransit services in the Plano area. TAPS services are relatively new in Collin County, having replaced CCART in July 2013, which ceased operating the services now provided by TAPS. There are also small transportation services offered by churches, human service agencies, and medical facilities in the county, but these are largely not available to the general public. Taxis and Greyhound bus lines provide some limited local and regional service options for people traveling within, to, or from Collin County.

For a county with such a large population, Collin County has very few public transportation options, particularly outside of the Plano area which is relatively well served by DART services. McKinney's transit routes have been cut dramatically in recent years and experience on-time performance problems and very low ridership. Countywide paratransit operations were plagued with a high number of trip denials in 2012, and have carried fewer than two passengers per hour, on average, over the past several years. With TAPS' assumption of services, there is anticipation that the agency will reconsider the existing services and develop services with the potential to attract increased ridership in the next few years.



TAPS operates local fixed routes in McKinney, commuter buses to Plano, and dial-a-ride service throughout Collin County (in areas not served by DART).

Until summer 2013, no commuter services operated from any Collin County cities north of Plano, but TAPS now operates Commuter Connect service from McKinney to DART's Parker Road Station in Plano, which serves as the terminus for the DART Rail Red Line. There is high demand for access to DART services, and as a result, DART initiated a paid parking program for residents of non-DART-member cities.

In addition to TAPS and DART services, Plano Senior Rides operates a taxi program that allows Plano senior residents to purchase taxi vouchers at a reduced cost. Programs for agency clients are also operated by the Samaritan Inn in McKinney, Plano Community Homes, LifePath (serving people with developmental and behavioral disabilities), and a number of schools and churches.

PUBLIC INPUT

Interviews

To initiate the Transit Needs Assessment and Planning Study for Collin County, the consulting team conducted a series of interviews with representatives of Collin County's various jurisdictions, political leaders, leaders of advocacy and community booster organizations, employers, and community members to understand the range of issues and concerns about existing transit services, transportation gaps and service needs. The primary challenges they identified were traffic congestion; the poor quality and availability of public transit services in Collin County; limited transportation options for seniors, low-income residents and people with disabilities; that planning is done exclusively for automobiles; and that DART rail service terminates in Plano. Individuals provided a lot of input about local transit services, much of it critical of CCART, which operated the services when interviews were conducted. One of the key perspectives voiced by both elected officials and human service agency representatives was that this study would, presumably, address one of their primary concerns: that there is little understanding of the level of existing transportation need. Based on input, the following were identified as the key needs/issues: service for transit-dependent populations, commuter transportation, DART service improvements, improved services in McKinney, the need for transportation for special events, the lack of transit service coordination (primarily between DART and Collin County's transit operations), and the need for better marketing.

Public Meetings

Public meetings were conducted in Frisco, McKinney and Plano in October 2012 to share information about the study, present preliminary findings, and to hear from members of the public about transportation needs and priorities, as well as the vision for public transportation in Collin County. Comments from the meetings generally focused on concerns about a lack of service within communities or between communities. For example, in the Frisco and McKinney meetings, individuals representing those cities, as well as Allen and some smaller cities, discussed concerns about a need for local service, especially for people with limited transportation options: seniors and people with disabilities. Many participants talked about the need for regional transportation, linking



At public meetings, participants expressed a preference for transit to serve (1) seniors and people with disabilities and (2) commuters.

cities in Collin County and providing connections from McKinney, Celina, Allen, Frisco, and Wylie to DART. While some participants expressed frustration that DART service is not available north of Plano, others focused their comments on targeting transit services to concentrations of residents with the greatest need, and talked about population growth, voicing concerns that planning needs to be done before the population grows and congestion increases.

The meetings illustrated that the public has a limited knowledge of transit service. Although most McKinney participants indicated some familiarity with the local transit service, only one-fourth of the Plano meeting participants said they were familiar with countywide demand-response service outside of the DART service area, and fewer than half of Frisco participants indicated they were familiar with the service.



Survey respondents said they had little information about the availability of CCART services in Collin County. CCART has been replaced by TAPS.

Surveys

In addition to the interviews and public meetings, the effort to assess the transit needs of Collin County residents consisted of two types of surveys: an online, or web, survey designed to solicit information from the general population of Collin County residents and a printed/paper survey distributed to transit riders and individuals affiliated with selected human service agencies in Collin County. A total of 1,423 surveys were completed online and 274 paper surveys were returned, for a total of 1,697 completed surveys.

Survey respondents who use transit or are affiliated with a human service agency generally indicated greater need for transit service, had lower incomes, and a higher proportion of senior citizens in their households. Only 27% were employed. Many of them indicated they had a disability which limits mobility. Web survey respondents were more affluent and had more vehicles available. The data suggests there are very few “choice transit riders” (people who have a car but opt to use transit instead of driving) in portions of McKinney and Plano: that current public transportation serves people with few mobility options.

Transit users valued their existing services and want more of them. Only 20% of the paper survey respondents said they drive. Many noted concerns about limitations of DART service in Plano and limited service hours, as well as poor coverage and limited frequencies of fixed routes in McKinney. Existing transit users were most interested in links between Collin County cities and local service in those cities. Non-transit users were predominantly interested in commuter services to Dallas or connections to DART.

Many survey respondents said that some level of service should be made available. Those who supported transit indicated they would use public transportation more if the transit stop were near their home and destination, and if services operated at preferred hours and frequencies. Connections to DART rail and service to localities within Collin County were oft-cited potential new services that appealed to the respondents.

Overall, the survey findings suggested that if transportation solutions for people with fewer mobility options are addressed (a focus on local services, links between Collin County cities or dial-a-ride services), the general public is unlikely to take much note of them, but there would be

support from likely users, which represent a relatively small proportion of Collin County's general population.



Wide roads without sidewalks and busy intersections make it difficult for people to access regular fixed route public transit services.

PREFERRED STRATEGIES

As a result of the analysis conducted as part of this planning study, a series of preferred service alternatives were identified focusing on the short term (three to five years), allowing for more efficient use of existing funds and the expansion of funding to support pilot efforts to initiate new services or extend existing services, if appropriate. An approach that is mindful of the county's increasing demographic and income diversity will be necessary for these strategies to be successful.

Carpools—and the promotion of carpooling and ridesharing programs both for commuters and for other

trip purposes— were noted as being appropriate for all communities within Collin County, including rural areas; vanpools offer a more structured approach to carpooling in Collin County's larger and modest-sized suburban cities.

Community shuttles that provide basic access to stores or medical facilities, primarily for trips from smaller communities, were identified as a key priority for not only serving unmet needs for people without other transportation options, but also as a way for the transit agency, TAPS, to more efficiently address the needs of multiple people making trips to the same location rather than serving those with multiple dial-a-ride trips. Even still, general public dial-a-ride, which currently exists, will continue to serve a beneficial purpose in rural areas and small cities.

Two suburban cities that also have an employment base, Allen and Frisco, were found to be lacking several services that would be appropriate. Local circulation via dial-a-ride or deviated routes and employer-based site-specific shuttles will be preferred strategies in both of these cities, along with new express bus service, primarily to access DART services in Plano, but also possibly beyond Plano to Dallas.

Express bus service, which makes use of park-and-ride lots to access high-speed buses, has been recently implemented in McKinney and will likely grow to be a valued transportation improvement. McKinney will also benefit from more effective local transit service operations, either via a combination of modified fixed routes and dial-a-ride, or some hybrid flexible/deviated route services.



Frisco's new town center is designed to be pedestrian-oriented. Deviated routes might be an appropriate solution to tie the new development to Frisco's lower density neighborhoods.

APPROACH TO IMPLEMENTING THE PREFERRED STRATEGIES

This report presents a planning study but not a transit service plan. The goal is to provide a set of options that could be further developed and implemented by TAPS and the various jurisdictions

in Collin County. Although conceptual services are identified, a comprehensive service plan should be developed before implementing any of the strategies discussed in this report. In addition to the preferred strategies, other key considerations include the following:

- A mix of commuter and non-commute strategies is needed in Collin County. If transit is seen as an economic development tool (creating livable communities, encouraging job development, etc.), then it may have a greater chance of achieving public support from residents than a service that is perceived as a “safety net” for people without their own cars.
- Coordination and/or integration of transit operations (TAPS and DART working well together) can benefit local transit riders as well as long-distance commuters.
- Since it is impossible for buses to serve every street in any given service area, complementary pedestrian (and bicycle) infrastructure is essential to allow passengers to access transit and destinations not directly served by a transit route. The goal of encouraging transit ridership can be supported through improvements to the physical environment, but jurisdictions will need to create and retrofit communities that are supportive of transit.
- Monitoring transit performance is important. A set of proposed transit performance measures offers a valuable tool for allocating scarce resources (their use in the service planning and allocation process will avoid potentially inequitable, and possibly inefficient, allocations of service).
- In order to attract and retain passengers, transit must be easy to use and intuitive to understand. Marketing and public information is a critical component of providing public transportation. This was not a priority of CCART but has been advanced by TAPS.



Although Allen is growing quickly, much of the development is on major highways, far from the old downtown area.



With a larger transit operation in Collin County, opportunities would become available for increased coordination with human service transportation providers. Financial support from employers and colleges could improve access for people getting to jobs or going to school.

OTHER SERVICE STRATEGIES

The challenge of implementing short-term transportation services and programs in Collin County stems from the limited experience that most communities in the county have had with transit. If services are successful and public support for TAPS service is strong, a well-operated service could attract local funding as a match for federal dollars that Collin County has been unsuccessful in generating in the past.

Other strategies were evaluated to identify the preferred strategies. These strategies, or tools, offer a resource for Collin County and its various jurisdictions and could be implemented in the future if the preferred strategies are successful in meeting proposed service standards.

Effectively, once there are more services available in Collin County, opportunities will become available to coordinate with human service agencies, make better use of private transportation providers (e.g., taxis and shuttle services) and reduce per-unit costs by having cities, employers and other entities adopt a more regional focus to addressing transportation needs. Some of the other tools that may be of value in the future include implementation of a volunteer driver program, efforts to centralize human service and public transit in a mobility management program, cost sharing opportunities, a subsidized taxi program, reorienting dial-a-ride service as a program for people with disabilities or other eligible populations, new fixed-route services, more commuter express bus services, etc. In addition, public information and marketing for transportation programs and services is essential, so Collin County residents will know what is available to them and will understand what local taxes/financial support are providing in their community.

FINANCIAL

A key challenge is that Collin County's cities view transportation as one of many services they could offer, but it is generally a low priority. Given competing needs for public safety, roads, housing, schools, and economic development, a significant number of Collin County's cities have opted to focus their resources on these other priorities. Other than Plano, which funds DART, McKinney is the only jurisdiction in Collin County that makes a local contribution to support transit service. For many federal operating funds, a 50% local match is required, meaning that for every dollar invested locally, the federal transit funds provide an additional dollar. For federal capital funds, a 20% local match is required. When a 20% local match is required, for every dollar invested locally, federal transit funds provide an additional four dollars. Several of Collin County's smaller cities do not understand how their local dollars can be leveraged and in some cases, that they could achieve modest levels of transit service for a small investment in transportation.

It is important to identify potential revenue sources and recommend a funding approach to carry forward strategies in Collin County. Without specific action plans prepared, it is difficult to identify a specific funding source to fully fund each strategy, but revenue sources that have potential applicability for the recommended strategies are identified. Many of the funding sources are programmed and allocated by the Texas Department of Transportation (TxDOT) and the North Central Texas Council of Governments (NCTCOG) including funds from the Federal Transit Administration (FTA) and the Federal Highway Administration (FHWA). Federal and state funding sources are available for one-time capital investments, transportation planning, and for transportation operations, with some sources intended specifically for transit-dependent populations. NCTCOG relies on competitive calls for projects and other funding initiatives to determine which projects receive money.



DART's Parker Road Station in Plano is a destination many people expressed interest in accessing by transit. Parking fees for residents of DART non-member cities are designed to offer access to non-residents, while enabling DART to recover costs from Collin County cities that do not fund its operations.

Local sales tax can provide a source of revenue for transit services. The State of Texas places a combined sales tax limit of 8.25% for all taxing authorities.¹ The state sales tax rate is 6.25%, leaving 2% for local entities. Some local jurisdictions assess the entire 2%, some a lesser amount. Among the 19 cities in Collin County and the ten that are partially in Collin County, 19 have sales tax rates that meet the maximum of 8.25%, meaning that in order to achieve a local match, jurisdictions must reallocate how they use their local sales tax dollars (i.e., shifting funds from economic development to transit) or find a different source of funding that can serve as a local match.

¹ Taxing authorities include cities, counties and special transportation authorities as defined by the state's transportation code (453.401, Transportation Code)

1 INTRODUCTION

The potential exists for new and expanded local and intercity public transit service and other transportation programs in Collin County. Current public transit services are limited to two operators. Dallas Area Rapid Transit (DART) operates in Plano, with a range of different services that include light rail, fixed-route bus service, on-call general public demand-response service, ADA-complementary paratransit service, and a senior taxi voucher program. Texoma Area Paratransit System, better known as TAPS Public Transit, operates limited fixed routes in McKinney, some commuter bus services, and general public and specialized demand-response paratransit service in Collin County. Collin County Area Regional Transit (CCART) operated most of these services until July 2013, when TAPS assumed operations of transit in Collin County.

The focus of this Transit Needs Assessment and Planning Study is to review existing services, identify gaps and potential ways to fill those gaps, and develop a set of proposed transportation alternatives. Many stakeholders described the possible benefits of new transportation services within Collin County, including the economic development potential in filling job vacancies in lower-income jobs such as at the Premium Outlets in Allen; incorporation of isolated populations in Princeton, Farmersville and elsewhere into the regional social service, employment, healthcare, and education network; and providing alternatives to driving for residents of Frisco, McKinney and other parts of the county.

Based on the findings, a mix of spatial, temporal, and market-based gaps are identified. These include areas where transit service (1) is not readily available or offers limited hours, (2) where transit vehicle fleets or staff resources are limited and cannot serve all trip requests, and (3) where demands for transportation likely exceed the capacity of existing providers to offer mobility for certain population groups.

The outcomes of this study focus on the short term: within three to five years. This allows for the possible use of available public funds to support pilot efforts to initiate new services or expand existing services, if appropriate. This also limits the scope of the study to solutions that can be implemented without significant capital investment in infrastructure, as opposed to longer-term plans for the county and the region. The near-term alternatives for transit to be developed through this plan may lay the groundwork for future conversations about long-term transit alternatives.

Preferred strategies defined in this study are not limited to traditional fixed-route bus operations. Opportunities to address transportation demands can be made with the provision of deviated bus routes, vanpools, carpools and specialized lifeline services, such as community shuttles. Implementation of some of the services may require changes in local and regional policies with regard to funding, oversight, and service areas, and may also entail new ways to leverage human service and local funds, as well as federal and state sources, to provide additional monies for transportation.

RELEVANT STUDIES/PROJECT BACKGROUND

In developing this plan, the consulting team reviewed a number of existing plans and policies to provide context. Many of these provide guidance for future growth in North Texas and Collin County, and describe planning efforts specifically related to transportation. Highlights from some of the key documents, including those with specific relevance for this Collin County Transit Needs Assessment, are summarized in this section.

Vision North Texas

Vision North Texas is a private, public and academic partnership created to serve as a forum for important issues of growth and development. Through Vision North Texas, leaders and experts around the region have created a vision for a preferred future and a practical set of action steps North Texans can take to achieve this vision. These recommendations have been included in “North Texas 2050,” a ‘game book’ for the North Texas region that was released at the Regional Summit in 2010. The document contains two major sections that present a 2050 vision and the actions to achieve it:

- 1) *A Vision for North Texas* proposes a Vision Statement and a set of twelve Guiding Principles for the region’s growth and development. It describes a preferred future for North Texas by identifying five policy areas (natural, rural, separate community, outer tier and inner tier), and two types of important centers (employment centers and mixed use centers) that are focal points for the region and its communities.
- 2) The *Action Package* identifies the tools and techniques needed for action to achieve this vision. The action package includes incentives, best practices, model ordinances and templates, technical assistance, benchmarks & indicators, new institutions/entities, regional coordination & collaboration, and communication.

These efforts focus on future rail, with coordinated investments in park-and-rides, bicycle infrastructure and pedestrian facilities. They note the importance of a regional coordination structure for oversight and development of projects, and look at a variety of transportation demand management strategies. The effort also discusses the assumption of a mature bus system throughout the region.

Mobility 2035

In March 2011, the Regional Transportation Council approved a new long-range transportation plan – Mobility 2035 – for the Dallas-Fort Worth area. This plan was developed with public input and collaboration with regional transportation partners. As the region anticipates an influx of nearly three million people over the next 25 years, all modes of transportation will need to be enhanced just to keep pace with growth. The Mobility 2035 public transportation goals include:

- Improve the availability of transportation options for people and goods.
- Support travel efficiency measures and system enhancements targeted at congestion reduction and management.
- Assure all communities are provided access to the regional transportation system and the planning process.
- Preserve and enhance the natural environment, improve air quality, and promote active lifestyles.

- Encourage livable communities which support sustainability and economic vitality.
- Develop cost-effective projects and programs aimed at reducing the costs associated with constructing, operating, and maintaining the regional transportation system.

The plan specifically identifies future corridors that may impact Collin County's transportation network. These included bicycle and off-street pedestrian trails in Collin County and a set of passenger rail recommendations that include the Cotton Belt Line (at the southern end of the county, providing an east-west connection across the region), a link north from Plano to McKinney and on to Grayson County, and rail along the Frisco Corridor from Prosper through Frisco and into Denton County.

Collin County Mobility Plan (2007 Update)

The Collin County Mobility Plan is a comprehensive, multimodal plan for transportation systems to serve the mobility needs of the County and guide major transportation investments. The purpose of the Mobility Plan is to identify the transportation needs of area residents and businesses. It identifies the future transportation network that will be needed to serve projected population and employment growth and increased travel demand. The Collin County Mobility plan is currently being updated to reflect growth and demand in the County.

Future rail transit and high occupancy vehicle (HOV) lanes are key components of the Mobility Plan for Collin County. The study suggested that rail passenger service will provide a viable alternative to the private automobile, whereas HOV lanes will provide travel time savings for express buses, carpools, and vanpools. The study recommends that new major transportation improvement projects be identified for future addition to the Mobility Plan. These would include new regional roadway corridors in the far north and eastern sections of the County, as well as additional transit improvements in areas that are currently outside of the DART service area. Consistent with the 2030 Regional Mobility Plan, the Collin County Mobility Plan includes HOV lanes on US 75 from McKinney to Dallas. In conjunction with the continuation of existing fixed-route and demand-responsive bus service, these new facilities would provide Collin County residents with several alternative travel opportunities to the private automobile. The Mobility Plan includes a countywide system of roadways based on relatively traditional suburban highway standards, as well as recommendations for hike-and-bike-trails. The focus on transit is relatively limited, but assumes extension of DART light rail to the north and new intermodal facilities.

Regional Public Transportation Coordination Plan (2006)

In 2006, the North Central Texas Regional Public Transportation Coordination Plan was created and adopted through a process led by the North Central Texas Council of Governments and with participation from individuals representing transportation providers, health and human service organizations, workforce boards, advocacy groups, transit customers, and the business community. The plan emphasized coordinated delivery of transportation services throughout the 16-county North Central Texas region, which includes Collin County, and encouraged increased efficiencies in public and human service transportation to better serve older adults, people with disabilities, low-income individuals and other groups with transportation challenges.

Policy focus areas of the 2006 Regional Coordination Plan were communication and education, resources, and seamless transportation services. Public transportation providers, local governments and non-profits in and around Collin County have used the policies and implementation strategies contained in the plan to identify and seek funding for projects that

would improve access to jobs and education, medical services and community resources. The current Collin County Transit Needs Assessment and Planning Study is being conducted in coordination with an update to the 2006 plan through a planning effort called Access North Texas (www.accessnorthtexas.org).

Intermodal Hub Study (2011)

In October 2009, Collin County, the North East Texas Rural Rail Transportation District (NETEX), and NCTCOG began a study to examine the feasibility of an intermodal hub within the County. The purpose of the study was to determine if a need exists for a third regional intermodal/logistics hub. Based on the elements that are necessary for a successful intermodal hub, including access to rail, a major roadway facility, and availability of land, the Farmersville site (Study Area 3) at the intersection of the proposed Regional Outer Loop and the KCS rail line, was determined to be the area best suited to an intermodal hub and warranted further study. The Intermodal Hub Study concluded that the City of Farmersville and Collin County could move ahead and take the preliminary steps to make the area attractive as an intermodal hub. While this site was recommended for further study as an intermodal hub, the study determined that the need was not immediate.

United We Ride Project Evaluation Report (2011)

In FY 2010, the Texas Department of Transportation (TxDOT) received United We Ride (UWR) federal funding for three pilot project sites for a “train the trainer” program in mobility management. The focus of the project involved educating health and human service and workforce agency case workers with the help of a transportation solutions coordinator to ensure that transportation options available in their respective communities filtered down to the clients of the various agencies. TxDOT’s primary goal was to simplify individual customers’ access to public transportation by assuring that case workers and mobility managers from diverse agencies are fully informed of transportation resources and needs in their communities. They also wanted to ensure that these agencies integrate innovative practices to assure individual customers’ transportation needs are routinely and efficiently met as part of each agency’s standing operating procedures.

After a statewide request for proposals, TxDOT selected pilot sites to implement innovative programs that utilize Transportation Solutions Coordinators (TSCs) to provide training to local social caseworkers on the importance of, and the options for, transportation access. Three pilot projects were selected by TxDOT for funding:

- Heart of Texas Council of Governments (HOTCOG) and the Heart of Texas Rural Transit District (HOTRTD) - The TSC worked to ensure that social workers were aware of the services provided so that they could link their clients to public transportation.
- Dallas Rapid Transit (DART) - The key goal of the TSC was to improve communication among interested individuals in Collin County in an effort to foster the creation of new transportation options.
- TAPS - The TSC sought to increase ridership levels in Wise County.

Plano is the only community in Collin County which has DART services or any general public transportation system. The UWR project provided the opportunity to introduce the concepts of mobility management and coordinated transportation to the Plano community. Barriers exist in the area when accessing fixed route transit. Recognizing these challenges, DART’s UWR project

attempted to form partnerships with social service agencies in the area to identify transportation needs and funding/resources to assist clients who are unable to access fixed-route transit.

Overall, evaluation findings indicate that the Texas UWR project demonstrated critical potential to improve usage of public transportation. The research team identified five key recommendations: 1) allow leadership to matter, 2) strategize a meaningful kick-off, 3) localize tools, solutions and networking, 4) implement communication and comparison vehicles, and 5) continue effective local trainings.

Cotton Belt Corridor Study (2010) and Corridor Innovative Finance Initiative (2011)

The Cotton Belt Corridor is an approximately 62-mile rail corridor from Sycamore School Road in Southwest Fort Worth to the Dallas Area Rapid Transit (DART) Red Line Light Rail Corridor. The NCTCOG Cotton Belt Corridor Study determined the feasibility of extending transit services within Collin County beyond the current DART service area. This study evaluated the engineering feasibility and environmental implications of implementing rail transit in the existing Cotton Belt and Santa Fe railroad corridors.

The implementation of passenger rail within the Cotton Belt Corridor would provide an alternative to some fairly congested freeways within the planning area. The connection of three light rail lines and two regional rail lines, A-Train and The T's Southwest-to-Northeast Project, makes regional connectivity a key component of the Cotton Belt Corridor. The Cotton Belt Corridor also offers opportunities to connect with the proposed Burlington Northern and Santa Fe Railway (BNSF) regional rail corridor between Frisco and Irving (Frisco Corridor), with a connection in downtown Carrollton.

Following up on the study, the Regional Transportation Council (RTC) and NCTCOG developed innovative financial mechanisms and revenue streams to potentially implement passenger rail service in the corridor. The Innovative Finance Initiative investigated and analyzed a long list of possible funding sources for the Cotton Belt Corridor. Phase One of the initiative, completed in December 2011, identified and developed a preliminary set of potential revenue streams able to provide a viable option to reduce the Cotton Belt funding gap. Revenue streams identified for the Cotton Belt could generate a net present value estimated at \$2.1 billion to \$3.0 billion, depending on assumptions and inputs used in the finance model. Phase Two focuses on developing a project financing plan, addressing equity concerns among jurisdictions, and allocating specific resources within jurisdictions.

City of Frisco Public Transit Study (2008)

The City of Frisco Public Transit Study looked at the feasibility of and need for public transportation services that would focus on Frisco residents. The study used a public involvement process that included outreach, interviews, and surveys with the general public, stakeholders, employers, elected officials, social service agency heads, and others. Citizens and Frisco community leaders expressed a strong need for public transportation for elderly and disabled citizens. Many see a demand for some form of transit to get workers to Frisco for jobs of all kinds. There also was a consensus on the need for commuters to get to and from Dallas, as well as for connections to surrounding cities. Citizens, employers, and social service agencies expressed the need for internal circulation. Business and community leaders saw only a small need for a shuttle-type service linking retail and entertainment venues and hotels. All groups agreed that commuter

rail is a highly desirable form of transportation. Part of the outreach process also included identifying potential users of public transportation services in Frisco. Large concentrations of potential users of commuter express bus service were identified through this process; however, data were insufficient to identify users of other types of service.

Based on the research from the study, the following transit services were identified as feasible and desirable for Frisco:

- Coordination of carpool and vanpool options
- Flexible bus route for circulation within Frisco
- Express bus service for commuters to and from downtown Dallas
- Bus route connection to DART light rail station in Plano
- Coordination with rural providers in Denton and Collin County
- Feeder services to future commuter rail stations in Frisco

Frisco Corridor Conceptual Engineering & Funding Study (2010)

The Frisco Corridor is part of a long-term multimodal vision for the Dallas-Fort Worth region. The proposed rail service within the Frisco Corridor is intended to connect residential and employment centers in eastern Denton and western Collin County and is one of several corridors identified in the Mobility 2035 Plan.

This study helps define the Frisco Corridor through conceptual engineering and funding stages. The purpose of this study was to assist in supporting passenger rail service implementation in the corridor through the identification of key issues, selecting potential station locations, and to further investigate rail alignment options. The plan goes on to document existing environmental conditions, potential impacts, and serves as a baseline document for future, more developed planning efforts.

The study summary evaluated pros and cons of potential station locations along the alignment and developed six different corridor alternatives (including no-build). Each alternative was analyzed on a number of factors including estimated ridership, number of stations, total capital cost, and a number of environmental characteristics.

City of Frisco Comprehensive Plan (2006)

In 2006, the City of Frisco adopted its Comprehensive Plan. As part of this planning document, one chapter focused specifically on transportation issues. A major component is a future thoroughfare plan that outlines major transportation projects including new roadways and railway service running roughly parallel to the Dallas North Tollway. The plan notes that future land uses around proposed stations would be zoned as “transit-oriented land uses” which would consist of high-density, mixed-use districts. It was also noted that Frisco should consider initiating circulator transit service prior to or immediately following the development of rail transit service. These circulator services would connect a proposed downtown Frisco station to developments in the vicinity. Within the city’s stated transportation policies, transit-related goals include the need to reduce vehicle trips by offering transportation mode choices and establish a viable transit system within the city.

JARC-Funded Projects

Plans for two pilot projects were funded by the Job Access/Reverse Commute (JARC) grant. The goal of the JARC program is to improve access to transportation services to employment and employment related activities for welfare recipients and eligible low-income individuals and to transport residents of urbanized areas and non-urbanized areas to suburban employment opportunities. The Federal Transit Administration (FTA) provides JARC funding, which is distributed through a call for projects issued by the NCTCOG.

City of Allen Pilot Program (2009)

In order to meet the needs of employees and local businesses, the City of Allen applied for JARC funds to design and implement a pilot program that would transport individuals to the major employment centers within Allen and link Allen residents to DART services (initially, it was proposed for the service to link with DART at the Parker Road Station, and in the future potentially link to TAPS in McKinney). Both DART and TAPS operate regionally, which will extend the potential reach of the pilot program. The goal of this program is to benefit employees that require transportation assistance in order to work and local businesses that require access to a larger pool. This pilot program would represent the first time that a true public transit system will operate in the City of Allen.

While funds have been approved for this project, the City of Allen has been waiting on DART to approve access before it can finalize details with its bus service.

McKinney-Plano Shuttle (2009)

Service was implemented in July 2013, but the original goal of the McKinney-Plano Shuttle was to establish a fixed route service that allows McKinney residents a new option for commuting to work in Plano or cities to the south. The proposed McKinney-Plano Shuttle was to create two shuttle bus routes from the City of McKinney to DART's Parker Road Station. One route would depart from McKinney and arrive at the DART Parker Road Station. The other service would depart from McKinney and arrive at the major employment hub in Plano's Legacy Town Center area. Both routes were proposed to have two morning runs and two afternoon/evening runs (existing service operates to Parker Road Station, with three morning and four afternoon runs).

City of McKinney Sustainability Plan (Draft, Fall 2011)

The City of McKinney was awarded a grant as part of the Energy Efficiency and Conservation Block Grant (EECBG) program to undertake several activities, including developing a Community Sustainability Plan. The Sustainability Plan's purpose is to identify essential elements of community sustainability and provide analysis and guidelines for the implementation and/or furtherance of community initiatives to ultimately achieve a more sustainable McKinney. The Sustainability Plan, prepared as a draft document in the fall of 2011, was not approved, but provides a framework for a sustainable city by including measurable indicators and planning principles for all key areas of the city. It is relevant for this study because, regarding transportation, the Sustainability Plan's goal is to "provide diverse transportation options that are safe, efficient and cost-effective, as well as develop commute solutions that will reduce traffic congestion, lower costs associated with roadway development and maintenance, and improve air quality." The Plan discusses various ways to achieve these goals via short- and long-term initiatives such as completing the City of McKinney On-Street Bicycle Master Plan, increasing

awareness and knowledge of Complete Streets design techniques, expansion of the Transportation Demand Management Program, and increasing multi-modal transit options.

ELEMENTS OF THIS REPORT

A significant amount of data was collected and analyzed in the development of this report. Information from relevant background studies and reports are integrated in the various chapters. The remainder of this report includes the following chapters:

- Demographic data, including population densities and employment concentrations, as well as travel data is described in **Chapter 2**, the travel market analysis. It provides a summary of commute and non-commute patterns. This information begins to build a case for where new services might be most effective. This information provides a basis for identifying potential markets for public transportation in Collin County.
- Transit services are described in **Chapter 3**, with a focus on CCART performance. The chapter also describes transit facilities and other regional operators. This information allows for an understanding of where services exist today, how existing services might be modified to serve additional needs, and the capacity of the existing network to accommodate new travel demands.
- Stakeholder input is summarized in **Chapter 4**, providing a selection of comments and concerns from representatives of Collin County's diverse organizations, including human service providers, business interests, city staff and elected officials, and transportation providers.
- **Chapter 5** provides a discussion of how transit services are organized, administered and operated in some other counties, cities and regions. Given the concerns raised about Collin County's needs for more substantial transit operations, this provides some sample models that could be considered in the next phase of the study.
- **Chapter 6** provides a summary of the public meetings, reviewing the comments and concerns raised by meeting participants, as well as the findings from surveys of transit users and non-users in Collin County.
- Based on the array of needs identified in Chapters 1 through 6, **Chapter 7** identifies transportation service alternatives that could potentially address the various mobility needs of Collin County residents.
- **Chapter 8** is an evaluation of the various transportation service alternatives and presents the outcomes of the evaluation effort, defining the preferred strategies to address Collin County's short-term transportation needs. The chapter reviews each preferred service strategy and discusses cost and implementation factors.
- **Chapter 9** discusses several issues related to the implementation of new or expanded services in Collin County, including the value of marketing, the need for performance measures and standards, and the necessity for local funding to sustain the services proposed.
- **Chapter 10** presents a financial strategy, discussing estimated costs for the preferred strategies and potential funding sources that may be available to TAPS and the various jurisdictions within Collin County to support transit services.

2 DEMOGRAPHICS, ACTIVITY CENTERS, AND TRAVEL ANALYSIS

INTRODUCTION

Collin County is a predominantly suburban county located in north central region of Texas, 19 miles north of downtown Dallas. The County is a part of the Dallas-Fort Worth-Arlington Metropolitan area (DFW Metroplex). Collin County is bordered by Dallas County and Rockwall County on the south, Denton County on the west, Grayson County and Fannin County on the north, and Hunt County on the east.

Collin County has experienced extensive growth in the past four decades. In the past decade in particular, the population has grown by nearly 60%, to over 800,000 residents. While the number of people traveling in Collin County has increased, transit options do not exist for most residents and it has been difficult to measure whether the diverse needs of the county are being met. As the North Central Texas region continues to grow, Collin County may face challenges in achieving an efficient and cost-effective set of transportation services to meet the demands of residents.

An understanding of the distribution and density of population and employment is an integral part of the transportation planning process. Demographics such as population, age distribution, and travel behavior all tell a story about the complex travel needs of residents and employees, especially as they relate to the use of transit and transportation services. The presentation of relevant data in this chapter is based largely on a series of maps and tables that show regional population characteristics, including those markets with a higher propensity to use public transit or consider an alternative commute mode.

COLLIN COUNTY POPULATION GROWTH

As noted, Collin County's population has grown significantly over the past four decades. In 1970, Collin County had approximately 67,000 residents. For the subsequent two decades, the county experienced an expansive period of growth at an average rate of ten percent each year. Beyond 1990, the county continued to grow at a high rate, but less than the previous two decades. By 2010, Collin County's population was approximately 780,000 residents.

When compared to other counties in the Dallas-Fort Worth Metroplex, Collin County's growth far exceeds the average. Eight of the 10 fastest-growing cities in North Texas are in Collin County, with rates averaging more than 250%. Between 1970 and 2010, the county experienced a 1,069% increase in population.

POPULATION INFORMATION

Residential Population Densities

Collin County is 886 square miles, with a population density of 930 persons per square miles (2010 US Census). The most populous cities in Collin County include Plano, McKinney, Frisco and Allen, all of which are within the central or southwestern quarter of the county. The northern and eastern portions of Collin County retain their rural character, although there are small pockets of residential development and small communities. These areas of low-density can be roughly demarcated by lands to the east of US 75 and north of US 380.

Figure 2-1 shows the 18 most populous cities countywide, and excludes Dallas, which has about 47,000 Collin County residents based on 2010 US Census. Frisco has been included, but has a significant portion of its population living in neighboring Denton County.

Figure 2-1 Rates of Population Growth and Projected Population Growth by City

City	2000	2010	2000-2010 % Increase	2012 Estimate Jan 1*	2010-2012 % Increase	2030**	2010-2030 % Increase
Allen	43,554	84,246	93.43%	86,600	2.79%	100,004	18.70%
Anna	1,225	8,249	573.39%	8,580	4.01%	38,444	366.04%
Blue Ridge	672	822	22.32%	851	3.53%	6,077	639.29%
Celina	1,861	6,028	223.91%	6,260	3.85%	48,004	696.35%
Fairview	2,644	7,248	174.13%	7,390	1.96%	19,332	166.72%
Farmersville	3,118	3,301	5.87%	3,300	-0.03%	54,423	1548.68%
Frisco	30,312	116,989	285.95%	125,500	7.28%	164,258	40.40%
Lavon	387	2,219	473.39%	2,480	11.76%	13,139	492.11%
Lowry Crossing	1,229	1,711	39.22%	1,710	-0.06%	7,065	312.92%
Lucas	2,890	5,166	78.75%	5,450	5.50%	11,452	121.68%
McKinney	54,369	131,117	141.16%	136,180	3.86%	330,197	151.83%
Melissa	1,350	4,695	247.78%	5,200	10.76%	67,799	1344.07%
Murphy	3,099	17,708	471.41%	18,020	1.76%	15,301	-13.59%
Parker	1,379	3,811	176.36%	3,910	2.60%	11,615	204.78%
Plano	219,890	259,841	18.17%	261,900	0.79%	259,024	-0.31%
Princeton	3,477	6,807	95.77%	7,010	2.98%	16,638	144.42%
Prosper	2,097	9,423	349.36%	12,190	29.36%	36,025	282.31%
St. Paul	630	1,066	69.21%	1,070	0.38%	2,218	108.07%
Wylie	14,536	41,427	185.00%	42,690	3.05%	75,217	81.57%
<i>Remainder of County</i>	<i>102,956</i>	<i>70,467</i>		<i>68,099</i>		<i>220,655</i>	
Collin County Total	491,675	782,341	59.12%	804,390	2.82%	1,496,887	91.33%

Source: US Census 2000 & 2010.

* = 2012 Population Estimates NCTCOG

** = Collin County Mobility Plan 2007 Update – Appendix D.

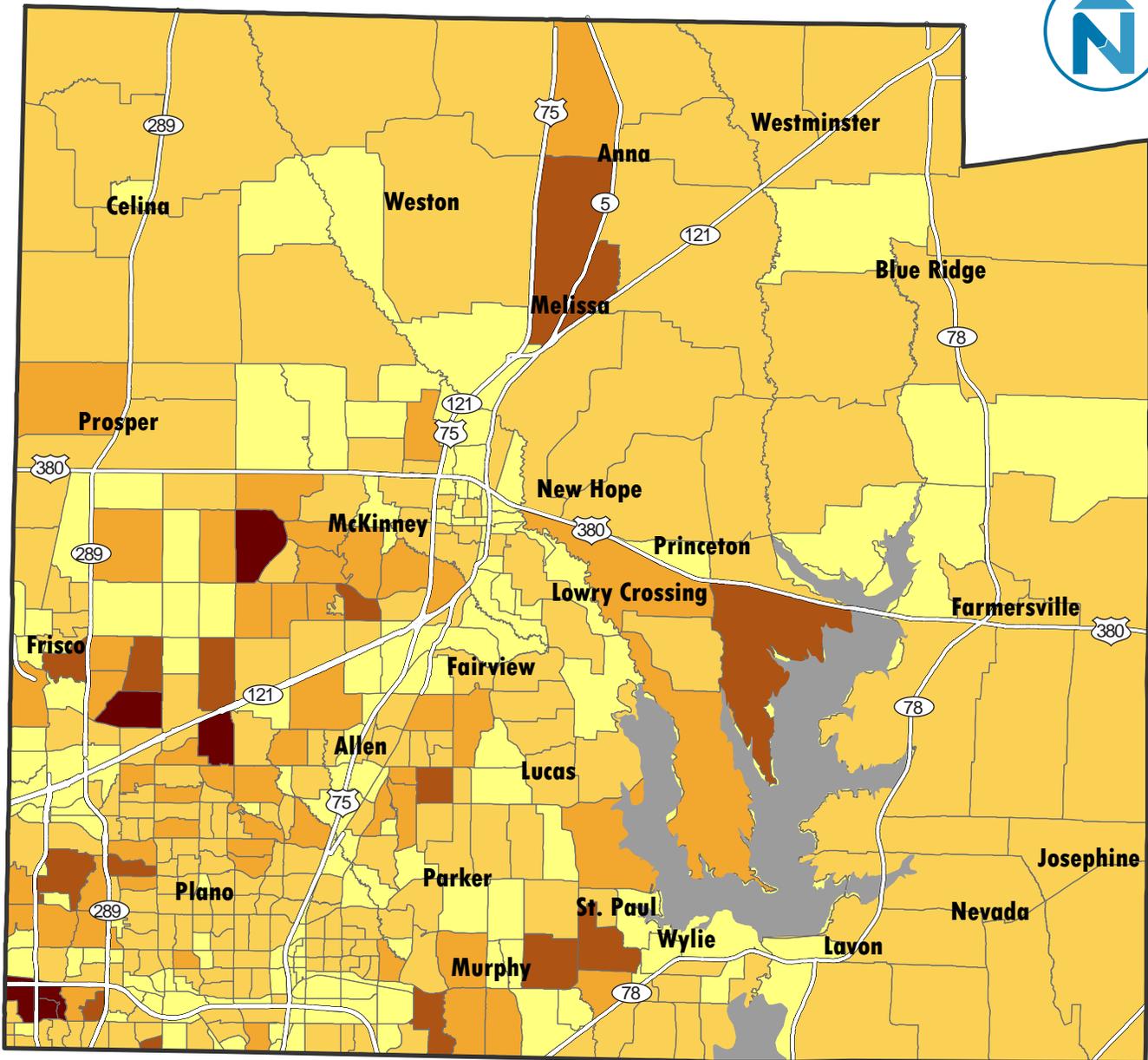
Collin County's population grew by 60% from 491,675 residents in 2000 to 782,341 residents in 2010. The population in Collin County has grown considerably faster than the rest of the Dallas-Fort Worth region - nearly three times the regional growth rate. Collin County ranks seventh in population size in Texas after Harris, Dallas, Tarrant, Bexar, Travis and El Paso Counties. Between 2000 and 2010, the population in Frisco grew by 286% - from 30,312 to 116,989. The US Census Bureau reported that McKinney's population jumped by 141% since 2000 and is currently the 19th largest city in Texas up from 49th in 2000. In the last decade, many cities have doubled or tripled their population. The city of Anna experienced a 575% increase in population between 2000 and 2010. In general, Collin County is developing or growing from the southwest (e.g., Dallas, Plano, and Richardson) to the northeast/east portion of the County (e.g., Anna, Melissa, Blue Ridge, and Farmersville).

Looking ahead to 2030, Farmersville, Melissa, and Celina are expected to continue to be the fastest growing cities in Collin County. As a whole, the county is projected to reach its "build-out" or ultimate population of 2,166,000 people in 2045.¹ This would be nearly three times the existing (year 2010) population. Population maps are shown in Figure 2-2 and Figure 2-3.

¹ According to the Collin County Mobility Plan Update 2007

Figure 2-2 Population (by Traffic Survey Zone)

COLLIN COUNTY



2012 POPULATION (NUMBER OF PEOPLE)

BY TSZ

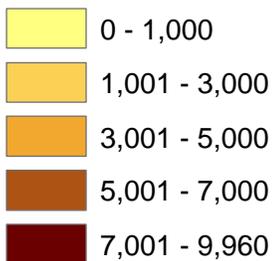
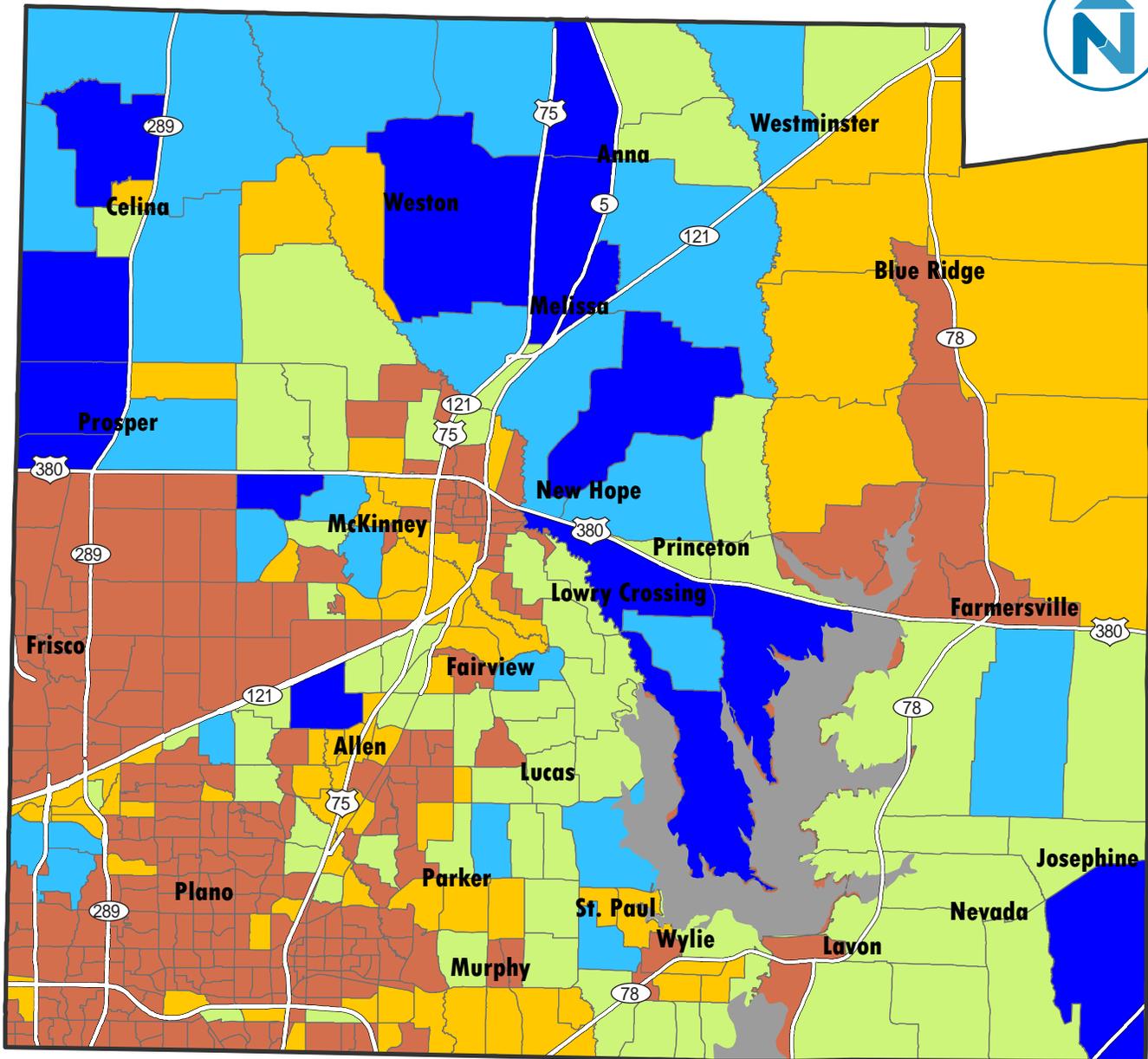


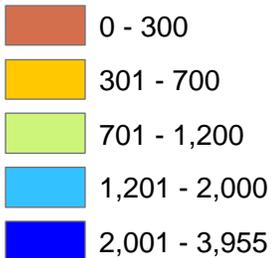
Figure 2-3 Projected Population Change 2012-2020 (by Traffic Survey Zone)

COLLIN COUNTY



POPULATION CHANGE 2012 - 2020

BY TSZ



Population Characteristics

In comparing Collin County to NCTCOG area averages, there are several noticeable differences. The median household income in Collin County is nearly \$28,000 more than the regional average, while the percentage of persons living below the poverty level is roughly 5% lower than the regional average. Figure 2-4 highlights some of these key comparisons.

Figure 2-4 Population Characteristics of Collin County

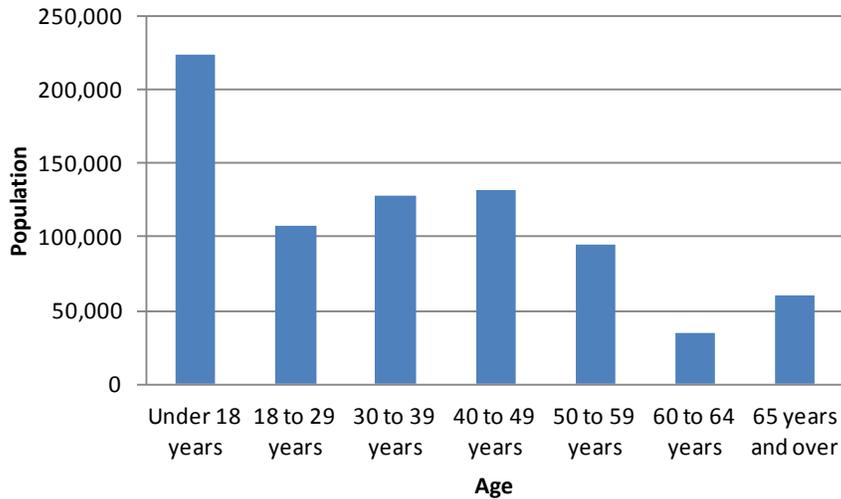
	Collin County	NCTCOG Area
% Change in Population 2000-2010*	59.1%	23.2%
Language other than English Spoken at Home (2010)	24.6%	34.2%
High School Graduates (2010)	92.8%	82.8%
Bachelor's Degree or Higher (2010)	48.3%	30.6%
Median Family Income (2010)	\$80,500	\$70,827
Persons Below Poverty Level (2010)	6.9%	21.4%
Families Below Poverty Level (2010)	4.8%	10.3%

Source: 2006-2010 ACS 5 yr from NCTCOG. * = 2000 Census & 2010 Decennial Census

Based on recent US Census and 2011 American Community Survey (ACS) data, the county's population is predominantly white (72%) and most people speak English as their first language at home (76%). The next largest group is reported as those of Latino origin (15%). Among residents who are employed, the majority have jobs in the "management, professional, and related occupations" category (50%), while 27% have "service and office" jobs. According to the US Bureau of Labor Statistics, the unemployment rate within Collin County as of August 2012 was 6.3%.

With regard to age, the largest proportion of the county falls within the 30-49 age group (33%), followed by persons under age 18 (28.7%), with the senior population (65+) being a relatively small eight percent of the county's total population. The median age in Collin County is 35 years old.

Figure 2-5 Age Distribution in Collin County



Transit-Dependent Populations

As discussed, there are some portions of the population that are more likely than others to use transit service. Typically, these individuals, for reasons related to economics, ability or age are less able to own or operate a private vehicle. As a result, they are more likely to depend on transit as their primary form of transportation. For purposes of this analysis, the study team identified transit dependent characteristics based on age, including both youth (individuals aged 19 or less) and older adults (people age 65 or older); ability, defined by the US Census as persons with disabilities; and income, consisting of both zero-vehicle households and low income households. All of these populations exist in Collin County and some rely, to an extent, on DART or TAPS for basic transportation services.

Low Income

Populations with lower incomes typically have high rates of transit use due to the high cost of owning and operating a private automobile. Although Collin County’s median income is substantially higher (and levels of poverty much lower) compared to the remainder of Texas, there are still a substantial number of low-income individuals within the county. ² Based on the 2006-2010 ACS data, nearly seven percent of Collin County residents live at or below the poverty line. This equates to approximately 54,000 individuals. In the greater Dallas-Fort Worth region, approximately 21% of the population lives below the poverty line. Among those in Collin County who are below the poverty line, the largest proportion takes public transportation to work.

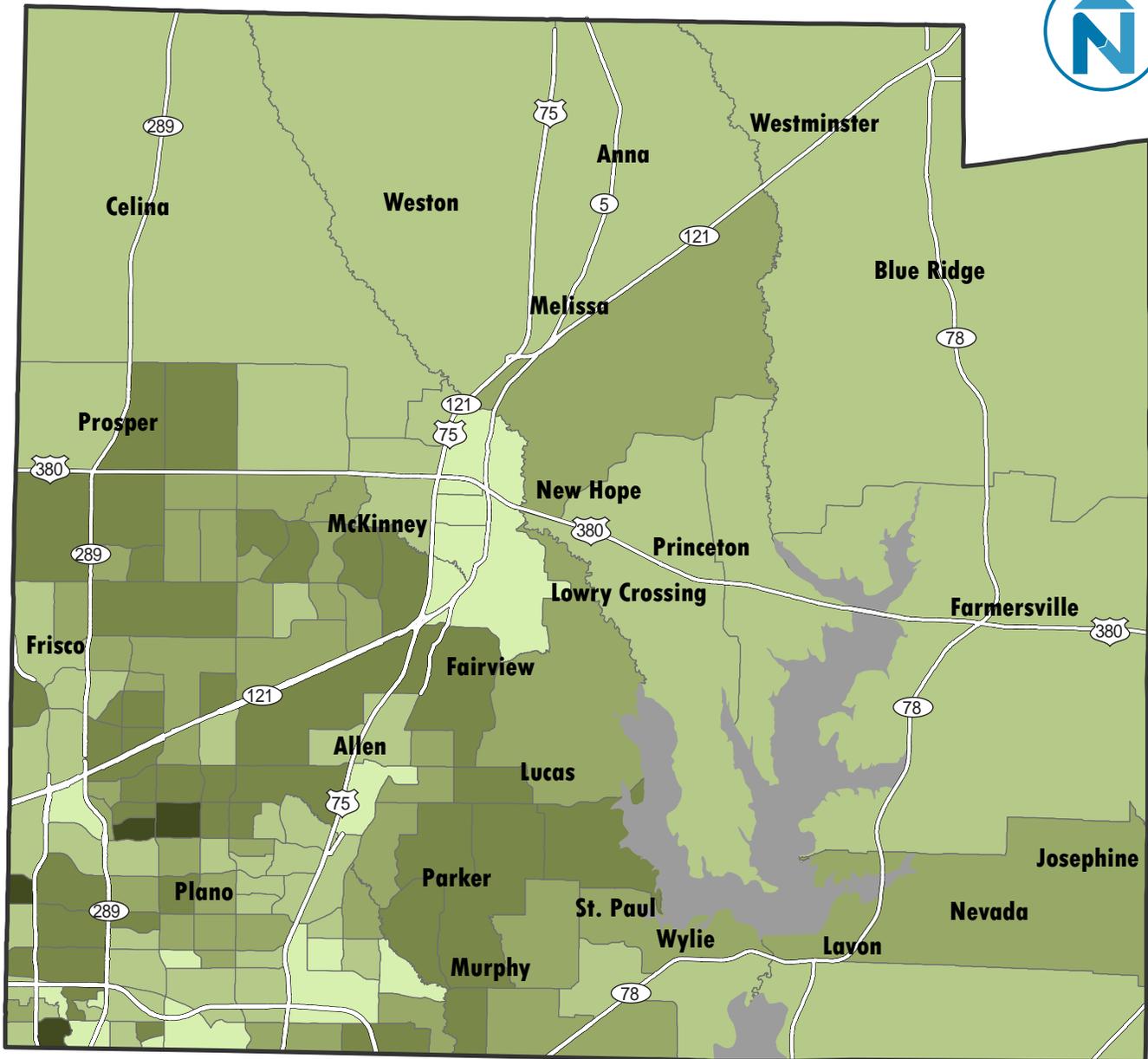
As shown in Figure 2-6, portions of the County with some of the lower median household incomes include rural areas in the northeast/east portion of the County. However, sections of Plano and McKinney also have areas where the median household income is under \$50,000. In McKinney, 10% of the population lives below the poverty level.³ Median income is far higher in Prosper, Parker, and sections of Plano.

² The median household income in Texas is \$49,646 based on the US Census Bureau, 2006-2010 American Community Survey

³ US Census Bureau, 2006-2010 American Community Survey

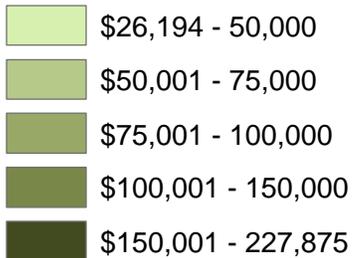
Figure 2-6 Median Household Income

COLLIN COUNTY



MEDIAN HOUSEHOLD INCOME

2010 BY TRACT



In most situations, vehicle ownership is also a reasonable proxy for income status and use of public transportation. This is to say, in an auto-oriented environment such as Collin County, it is likely that not owning a vehicle is due to lack of income as compared to choice. Similarly, lack of vehicle ownership typically correlates to a group that uses public transportation more frequently. Based on Census information, people who ride public transportation have the lowest median earnings (per individual) among all of the modes. This information can be found below in Figure 2-7. Among the proportion of individuals that use public transportation in Collin County, 34% do not have access to a vehicle of any kind.

Figure 2-7 Commute Mode and Median Individual Income in Collin County

Commute Mode	Median Individual Income ⁴
Car, truck, or van: Drive alone	\$40,991
Car, truck, or van: Carpool	\$24,788
Public transportation (excluding taxicab)	\$13,725

Source: US Census Bureau, 2011 American Community Survey

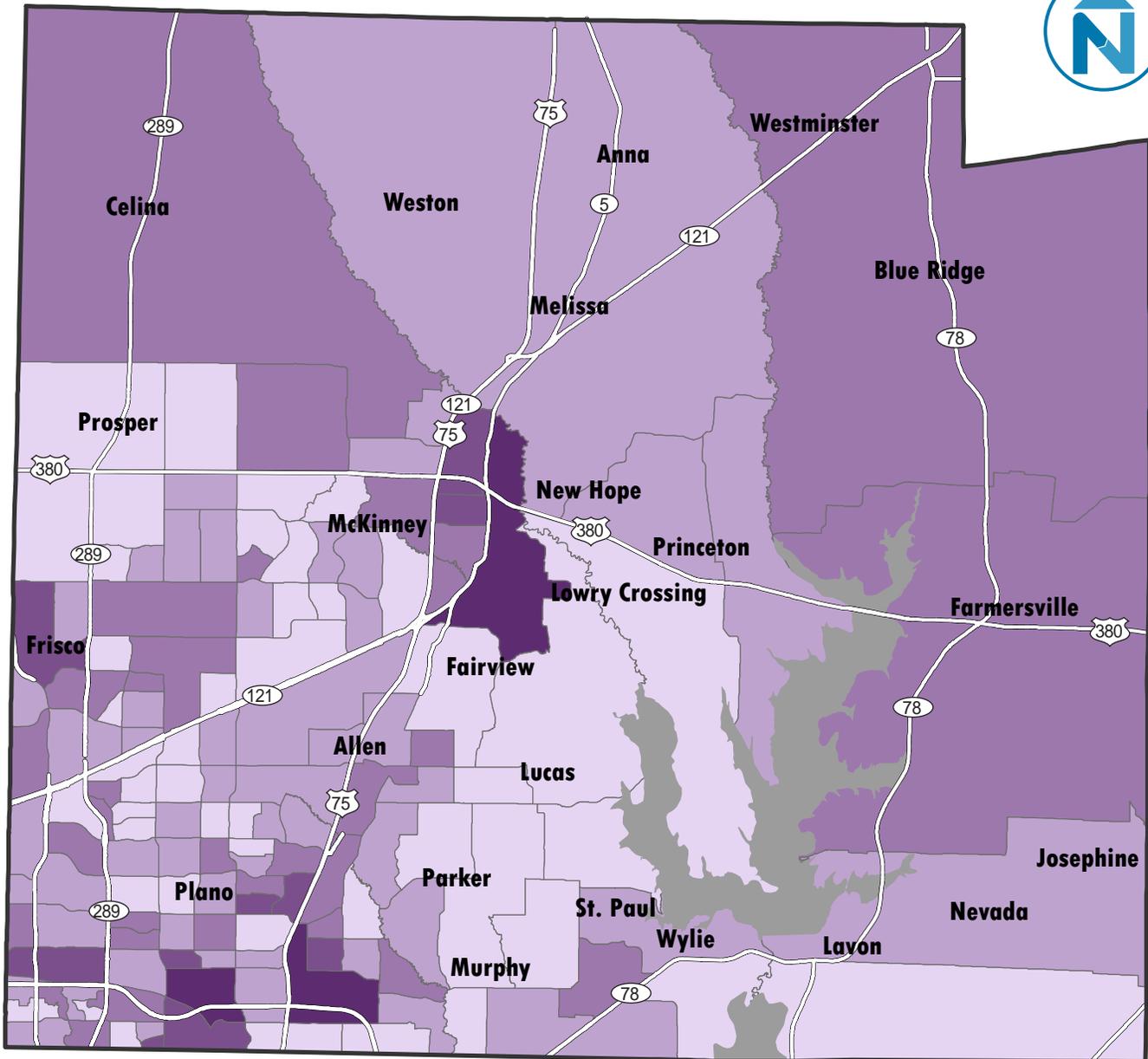
Households without Vehicles

Households that do not have access to a vehicle represent another measure of income — often a very strong indicator of households likely to use transit (Figure 2-8). These households may not have the economic means of owning a vehicle, or are unable to drive, such as some senior citizens and persons with disabilities. In Collin County, 34% of transit riders had no vehicle available and an additional 46% has just one vehicle available for the household. The highest concentrations of households without vehicles are in Fairview and McKinney. Given the similar distributions of seniors and lower income residents, it is likely that a portion of households that do not own a vehicle include seniors.

⁴ Earnings in the past 12 months (in 2011 inflation-adjusted dollars) for workers. US Census Bureau, 2006-2010 American Community Survey

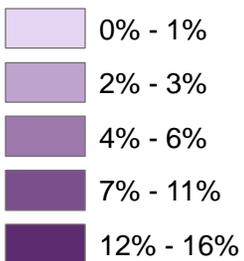
Figure 2-8 Households with Zero Vehicles

COLLIN COUNTY



PERCENT OF HOUSEHOLDS WITH ZERO VEHICLES

2010 BY TRACT



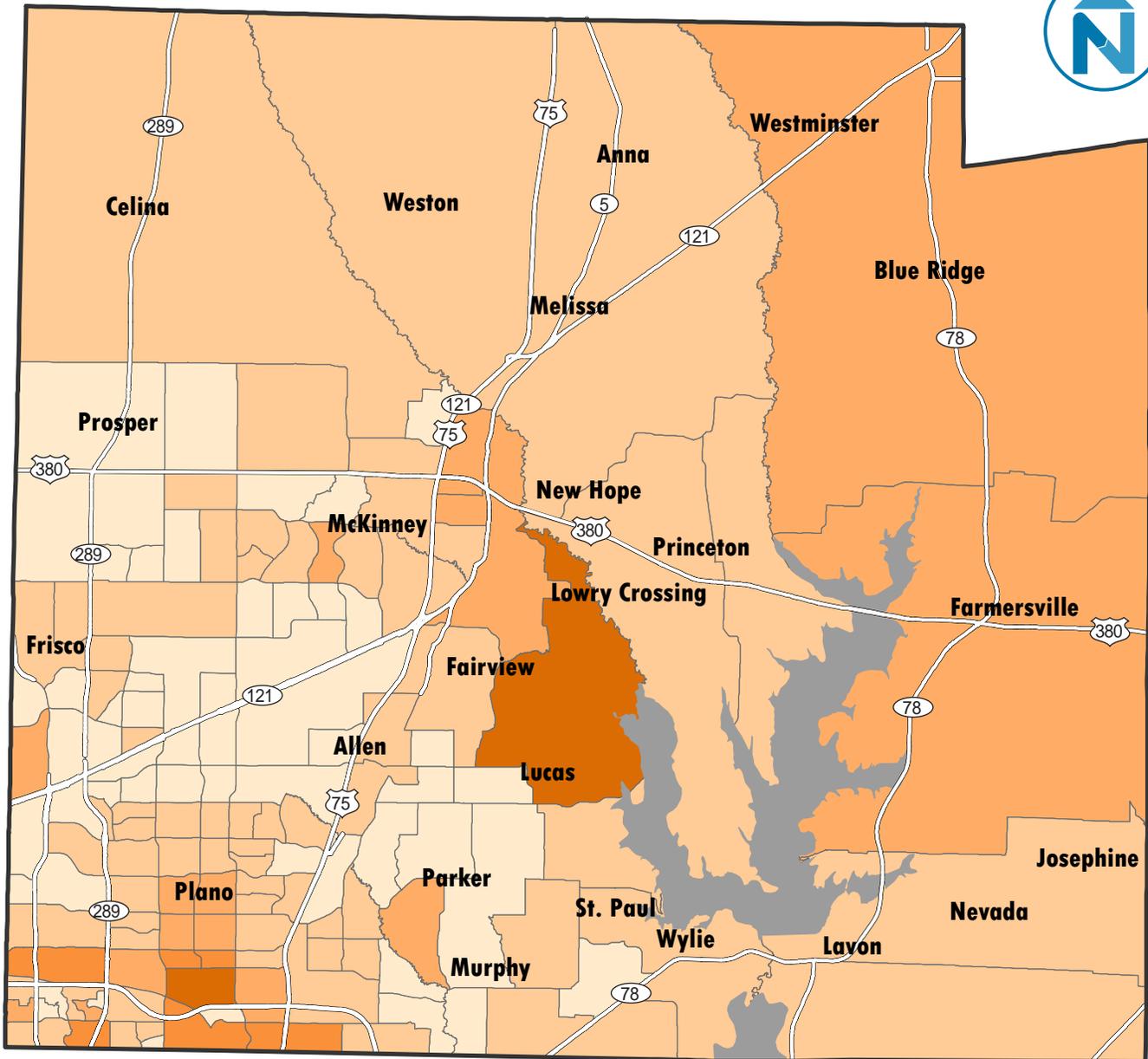
Seniors

With advancing age, people tend to be less able to own and/or operate a personal vehicle. As a result, older adults typically have higher than average rates of transit usage. In general, most research suggests that the 65 and over population group uses transit largely for non-work, locally oriented trips. Many seniors depend on public transportation to take them shopping, to medical appointments, etc. As of 2010, Collin County's senior population represents 7.6% of the county's total population. Among those who use public transportation for work trips, seniors make up only 4.3%.

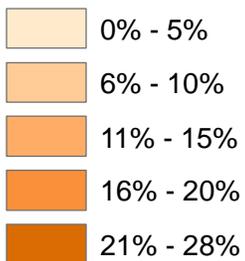
Based on 2010 Census data, seniors reside throughout the county, but larger concentrations of seniors are found in Lucas and Fairview, areas that are generally not served well by public transportation. In Fairview, over 27% of the population is over age 65, while in Lucas, 9.8% of the population is over age 65. Senior population density is shown in Figure 2-9.

Figure 2-9 Collin County Senior Density in 2010

COLLIN COUNTY



**PERCENT POPULATION AGE 65 AND UP
2010 BY TRACT**



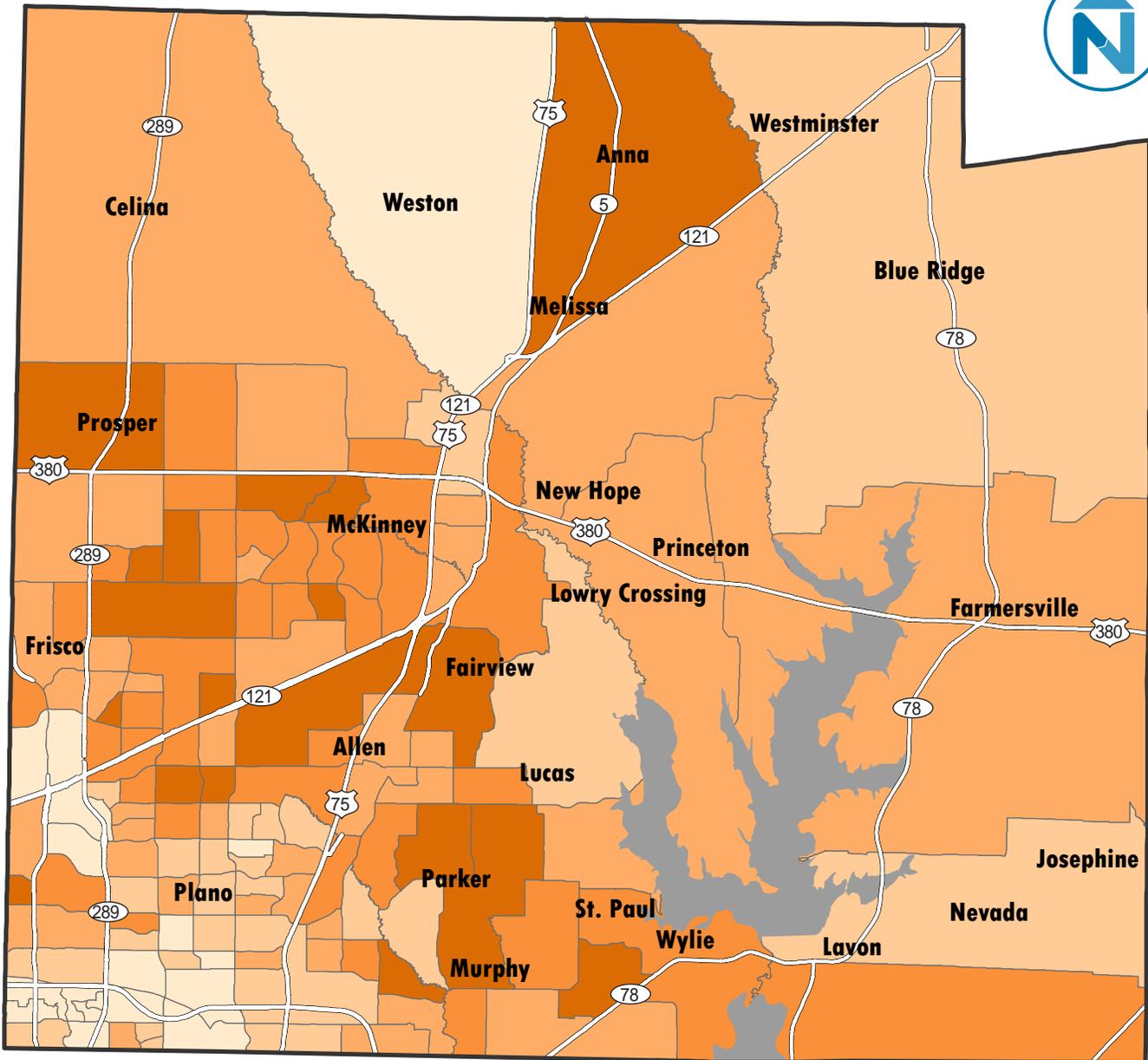
Youth

Another significant transit market is youth (under the age of 18). While youth often rely heavily on local transit services because many of them are unable to or unwilling to drive themselves, they tend to use transit services less often than seniors because parents can often provide for their transportation needs. Nevertheless, regional and local services can be valuable for after-school transportation.

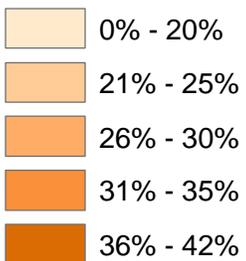
Figure 2-10 shows the density of youth under the age of 18. In Collin County, 28.7% of the population is under the age of 18. The city of Anna clearly stands out as having the highest concentrations of youth in the region, although there are high density pockets of youth throughout Collin County. According to the US Census Bureau 2010, 49.1% of households in the city of Anna had children under the age of 18 living with them. The percentage of population in Anna under the age of 18 is 34% and the median age is 30 years. Similarly in the town of Prosper, 35% of the population is under the age of 18, with a median age of 34.5. Young people tend to live in neighborhoods that are comprised mostly of other families, and youth population density is clearly higher than senior population density countywide.

Figure 2-10 Collin County Youth Density in 2010

COLLIN COUNTY



**PERCENT POPULATION UNDER 18 YEARS
2010 BY TRACT**



People with Disabilities

People with disabilities often have a significant need for transportation provided by others. People with disabilities represent a sizeable portion of transit ridership on both of Collin County’s transit operations. Many of them use regular general public dial-a-ride, deviated and fixed-route services, although others rely on ADA paratransit service provided by DART.

Although US Census data is available to illustrate concentrations of people with disabilities, the geographic distribution of people with disabilities in Collin County mirrors the general population densities, suggesting that to serve all people with disabilities by transit requires significant service coverage of the region. Much of the working-age population with severe physical or cognitive disabilities who travel to workshops, jobs, or socialization programs are served by specialized nonprofit transportation providers.

In Collin County, approximately six percent of the total population has a disability. In the city of Wylie, over seven percent of the population has a disability. Figure 2-11 below highlights the percent of people with disabilities in some of the larger cities in Collin County. One of the key challenges with providing transit to populations in the most rural portions of the county, especially people with disabilities, is that low densities and long distances make the provision of transit service very costly.

Figure 2-11 Population with a Disability

	Total Population	Population with Disability	Percent with Disability
Allen	81,608	4,934	6.0%
Frisco	110,934	4,815	4.3%
McKinney	124,095	7,055	5.7%
Plano	257,897	14,110	5.5%
Wylie	38,884	2,892	7.4%
Collin County	762,153	44,818	5.9%

Source: 2010 ACS 3 yr estimates

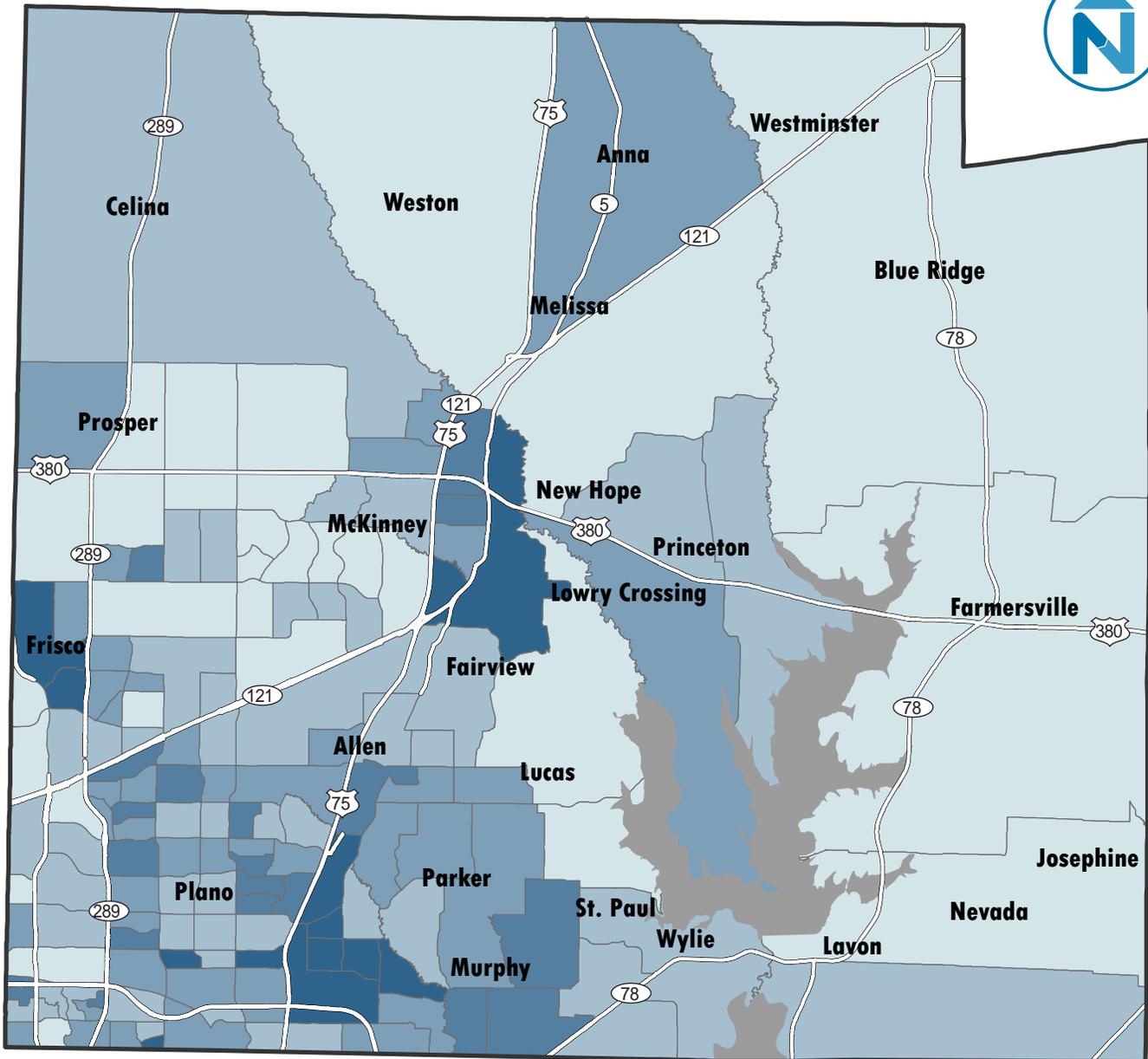
Limited English Proficiency Population

Groups with limited English proficiency (LEP) also typically have higher rates of transit use. The lack of English proficiency may limit an individual’s ability to participate in the economy, resulting in lower income. For this study, LEP was defined as households that are linguistically isolated, as identified in the 2010 American Community Survey, which states that a household is linguistically isolated if all adults speak a language other than English and no one speaks English “very well.”

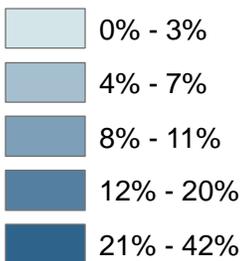
In Collin County, 18% of the population speaks English less than “very well.” The largest percentage of these individuals speaks Spanish (9%), followed by other Indo-European languages (5%). There are higher proportions of the population in LEP households in parts of Frisco, Plano, Fairview and McKinney than in other parts of the county.

Figure 2-12 Percent of Population that Speaks English Less Than Very Well

COLLIN COUNTY



**PERCENT POPULATION THAT SPEAKS ENGLISH LESS THAN VERY WELL
2010 BY TRACT**



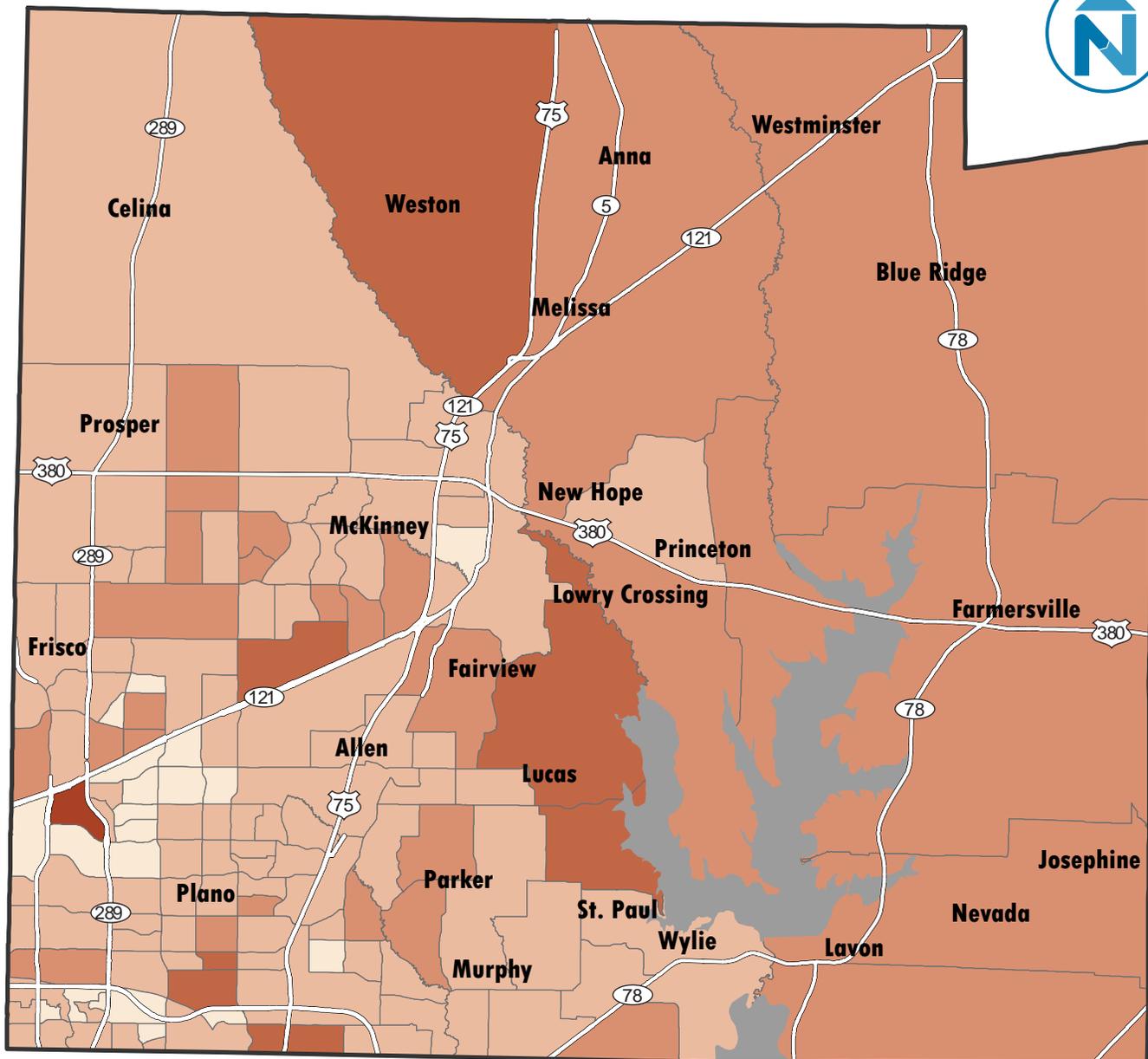
Military Veterans

Military veterans are another important group who use transit. Many need reliable, affordable and accessible transportation choices to get to work and school, visit family and friends, and receive medical care and community services. At the same time, a host of societal and demographic changes have led to specific mobility challenges for veterans. For example, many older World War II and Korean War veterans no longer drive, yet may require transportation for ongoing medical care.

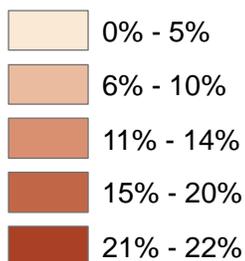
According to the 2011 ACS, there are approximately 45,000 veterans (7.7% of the civilian population over 18 years old) living in Collin County. Veterans live throughout Collin County, with a higher percentage living in Weston, Fairview, and Lucas. In the city of Weston, 16.3% of the population over the age of 18 has served in the military. Nearly a third of the veterans in Weston (30.2%) are over the age of 65. In the city of Lucas, 12% percent of the population over the age of 18 has served in the military and 37% of them are over 65 years old.

Figure 2-13 Collin County Veterans

COLLIN COUNTY



**VETERANS, AS PERCENT OF CIVILIAN POPULATION AGE 18+
2010 BY TRACT**



ACTIVITY CENTERS

Another component of the Transit Needs Assessment is to identify major trip destinations including major employers, shopping centers, schools, and medical facilities. Locating the most commonly traveled-to sites in and around Collin County can help indicate primary travel corridors and travel patterns. This review includes destinations for both potential choice riders and transit-dependent riders who tend to require access to social services, low-wage jobs, and senior programs. Major destinations include a range of sites such as shopping centers, educational facilities, medical centers, dialysis clinics, senior centers, and other community resources.

In Collin County, many major destinations are also major employers, indicating that residents are traveling during both commuting and non-commuting hours to the same areas. Figure 2-14 shows a map of the major destinations in Collin County, along with existing transit services. A discussion of each type of destination is provided below. A review of transit services is provided in Chapter 3.

Major Employers

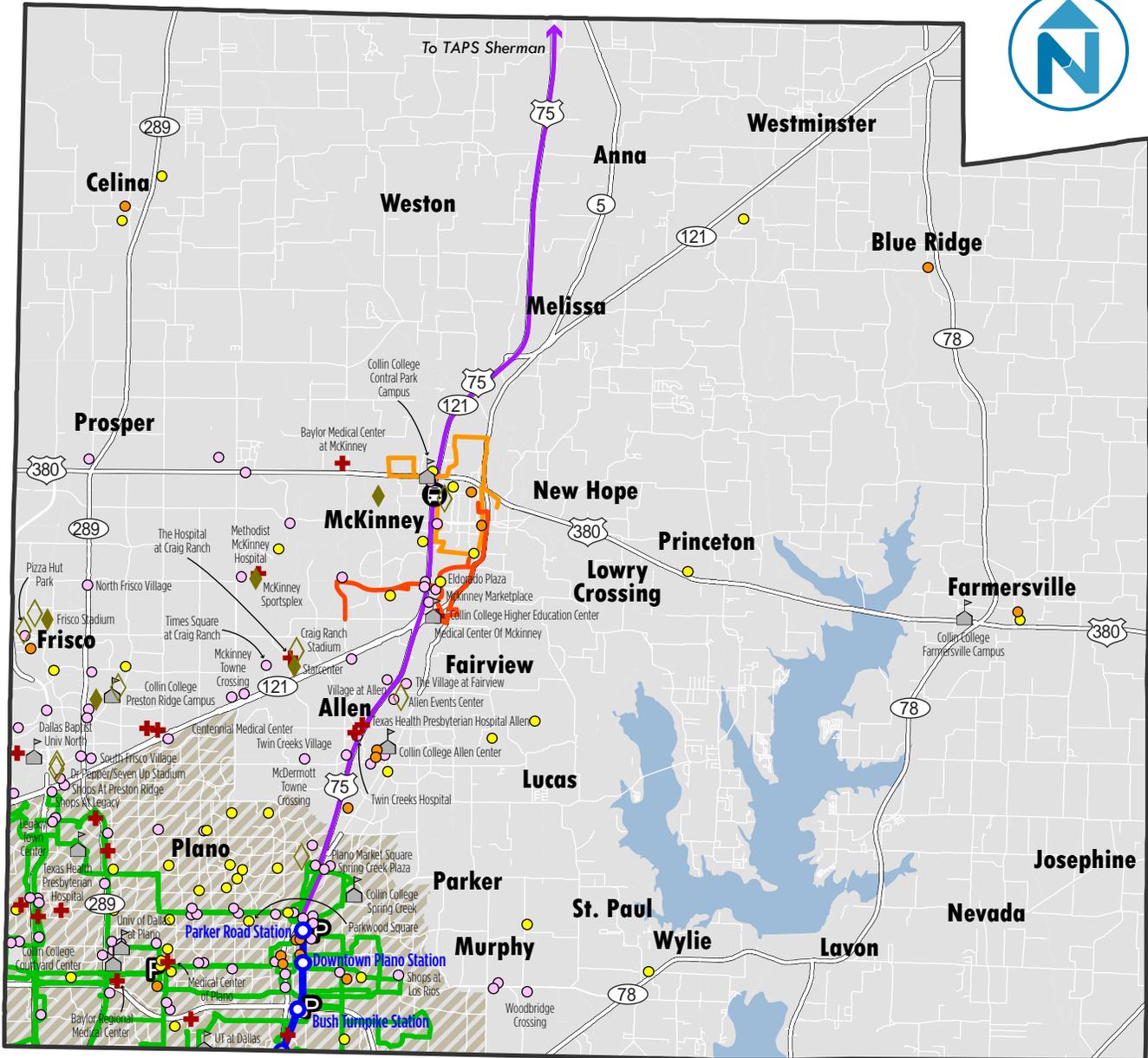
In August 2012, *Money* magazine ranked Collin County 6th in the nation on its prestigious list of "Best Places to Live for Job Growth." Collin County is one of the nation's fastest growing counties in terms of population, but also in terms of job creation. From 2000-2011, the county's employment base grew by 56%.⁵

To gain a better understanding of travel patterns in Collin County, a list of major employers was compiled (Figure 2-15). The largest employers in Collin County are mainly located in Plano and McKinney. The list of major employers is diverse in various sectors including education, government, healthcare, manufacturing and services. Some of the major employers in Collin County include JC Penney Co. Inc., Stonebriar Centre, Texas Instruments, Richardson Independent School District, The Shops at Willow Bend, Frito Lay Inc., Bank of America Home Loans, and others. Many public organizations — cities, hospitals and school districts — are among the largest employers in the study area and over 50 businesses in Collin County employ 500 employees or more.

⁵ City of Plano Economic Development Department

Figure 2-14 Activity Centers in Collin County

COLLIN COUNTY



TRANSIT AND MAJOR DESTINATIONS

- | | | | |
|---------------------------|---------------------------|--------------------------|--------------------|
| Station | DART Rail | Arena/Stadium | Greyhound Station |
| DART Bus | DART Bus | Athletic | Park-and-Ride Lots |
| CCART Rte 100 | CCART Rte 100 | Higher Education | |
| CCART Rte 300 | CCART Rte 300 | Hospital | |
| CCART Paratransit | CCART Paratransit | Senior Center | |
| DART Paratransit | DART Paratransit | Senior Living Facilities | |
| TexExpress (TAPS to DART) | TexExpress (TAPS to DART) | Retail/Commercial | |

Figure 2-15 Major Employers in Collin County

Employer	Number of Employees	Industry	City
Texas Instruments	11,300	Technology	Multiple Locations
JC Penney	7,298	Retail	Plano
Plano Independent School District	6,400	Education	Plano
Bank of America Home Loans	5,400	Finance	Multiple Locations
Frisco Independent School District	5,000	Education	Frisco*
Richardson Independent School District	4,900	Education	Richardson*
HP Enterprise Services	4,800	Technology	Plano
Stonebriar Centre	3,456	Retail	Frisco*
Shops at Willow Bend	3,240	Retail	Plano
Capital One	3,175	Finance	Plano
Frito-Lay	3,000	Food	Plano
Raytheon	2,980	Manufacturing	Multiple Locations
University of Texas at Dallas	2,830	Education	Richardson
Ericsson	2,650	Technology	Plano
McKinney Independent School District	2,580	Education	McKinney
Alcatel	2,280	Manufacturing	Plano
Dell Services	2,200	Technology	Plano
AT&T Inc	2,140	Professional/Technical	McKinney, Murphy, Princeton, Wylie
CHC Acquisition Corp.	2,000	Health Care	Plano
Collin County Government	1,700	Government	McKinney and Countywide
Presbyterian Hospital of Plano	1,670	Health Care	Plano
Medical Center of Plano	1,565	Health Care	Plano
Countrywide Financial Corp.	1,500	Finance	Multiple Locations
T-Mobile USA Inc.	1,500	Information	Frisco
The Centre at Preston Ridge	1,500	Education	Frisco
City of Plano	1,440	Government	Plano
Dr. Pepper Snapple Group.	1,250	Manufacturing	Plano
State Farm Mutual Auto Insurance	1,234	Finance	Multiple Locations
American Pad and Paper	1,200	Manufacturing	Richardson
Collin College	1,187	Education	Plano
Pepsi Co.	1,100	Manufacturing/Distribution	Plano

Employer	Number of Employees	Industry	City
Lattimore Materials	1,100	Manufacturing	McKinney
Torchmark Corp.	1,100	Finance/Insurance	McKinney
City of Frisco	1,100	Government	Frisco
CIGNA Healthcare	1,065	Insurance	Plano
Encore Wire	1,000	Manufacturing	McKinney
City of Richardson	985	Government	Richardson*
McKinney Medical Center	950	Health Care	McKinney
City of McKinney	850	Government	McKinney
City of Allen	684	Government	Allen

Sources: Collin County, Plano Chamber of Commerce, McKinney Chamber of Commerce, State of Texas, Texas Tribune, City of Frisco
 *Location in both Collin County and other county (Richardson - Dallas County; Frisco - Denton County)

Figure 2-16 illustrates where jobs are concentrated in Collin County, showing the number of employees by traffic survey zone. The map illustrates the significant concentrations of jobs in the Plano area.

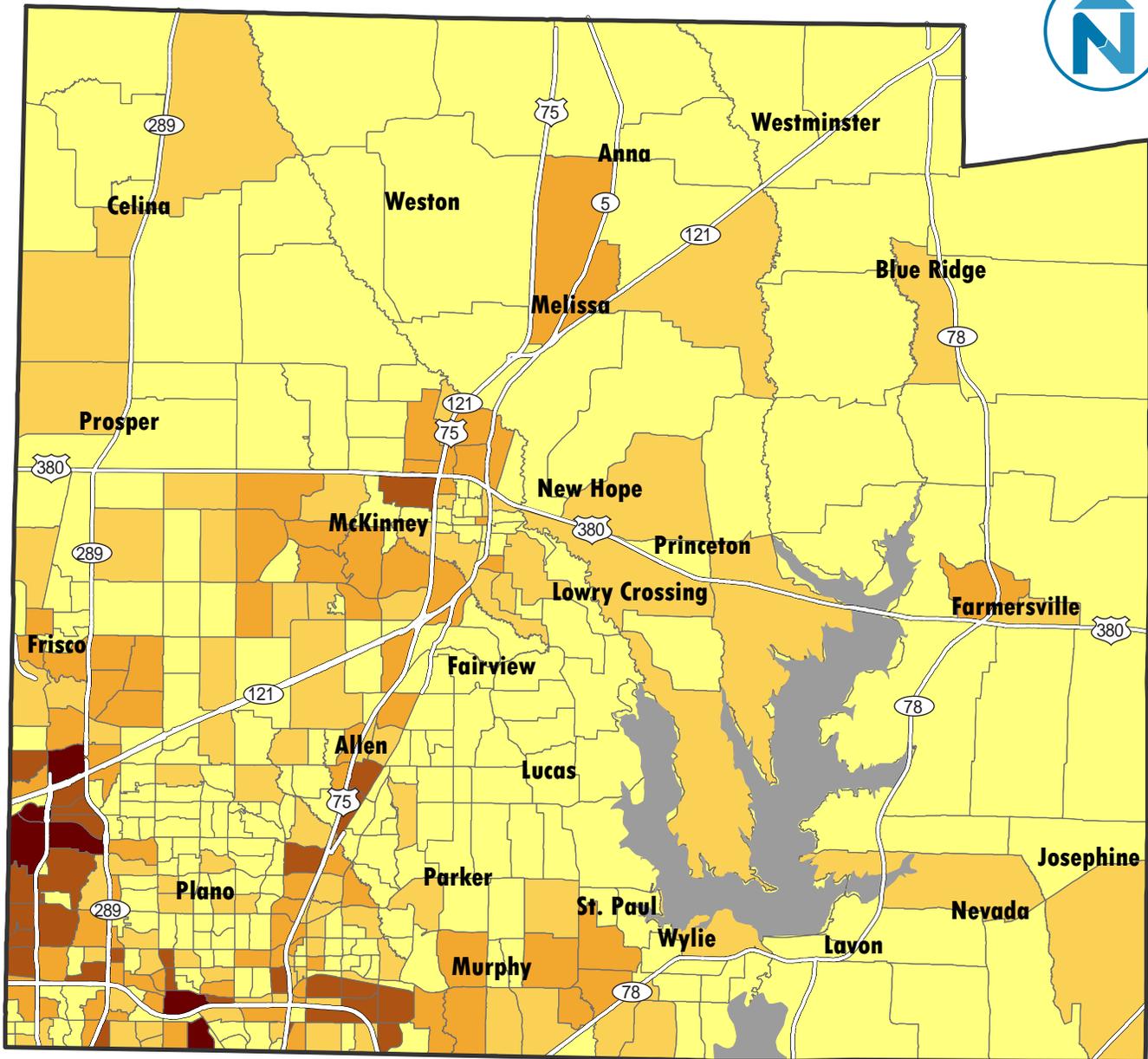
Figure 2-17 shows population and employment concentrations, highlighting that only a few areas (a small portion of McKinney and portions of Plano) have a significant mix of residential and job locations, and that in most cases, jobs and employment are in different zones. Figure 2-18 shows employment growth projected in Collin County between 2012 and 2020, much of which is expected in areas along highway corridors and areas to the north of where jobs are concentrated today.

The findings illustrate that commuter transportation is a critical element of this planning effort, and must be considered among the service alternatives. Southbound travel is predominant from cities in Collin County, with the largest employers in Plano and in Dallas County. This trend is shifting, however. For example, the growing number of jobs in outlet stores in Allen is attracting lower-wage retail employees from Dallas.

According to NCTCOG travel demand model projections, demand for travel from north and central Collin County to Plano and Dallas County is expected to continue to grow. Job creation, however, is occurring throughout the county and, as a result, future commute patterns could change as major employers locate along corridors in Frisco, Allen and McKinney. For this planning study's five-year outlook, no significant new commuter trends are forecasted, but cities throughout Collin County are expected to attract new jobs (and more residents for those jobs), which may increase demands for local commuter transit access within Collin County cities.

Figure 2-16 Employment (by Traffic Survey Zone)

COLLIN COUNTY



2012 EMPLOYMENT (NUMBER OF JOBS)

BY TSZ

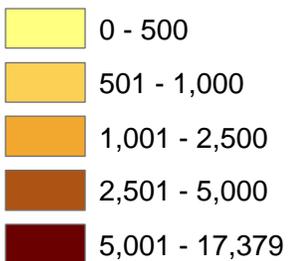
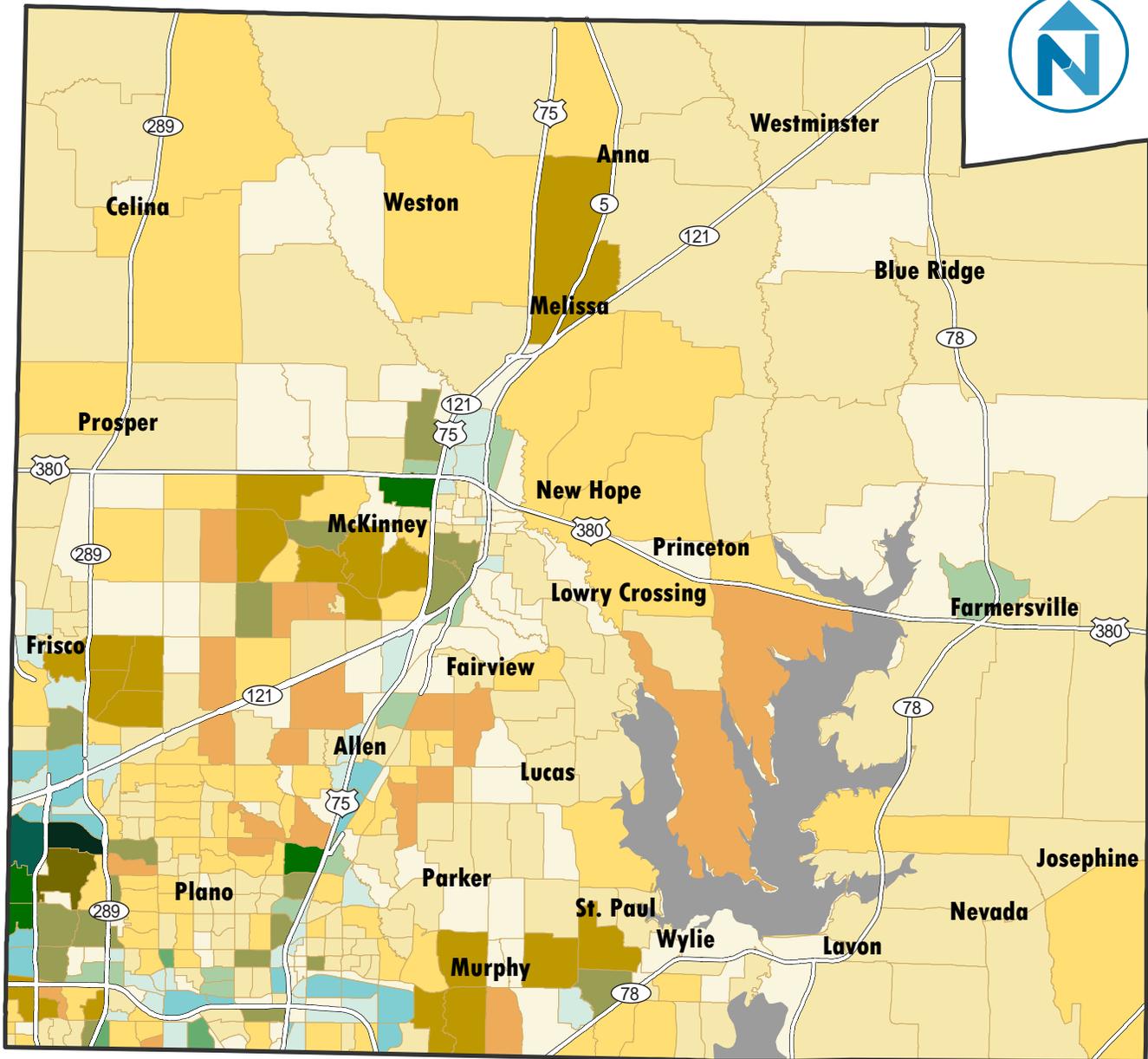


Figure 2-17 Population and Employment (by Traffic Survey Zone)

COLLIN COUNTY



2012 POPULATION AND EMPLOYMENT

2012 TSZ
POP/EMP MATRIX

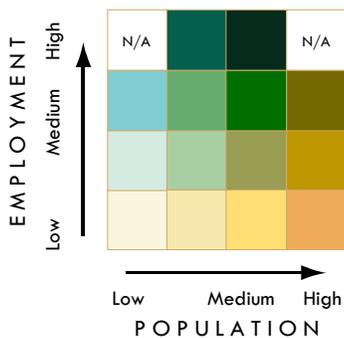
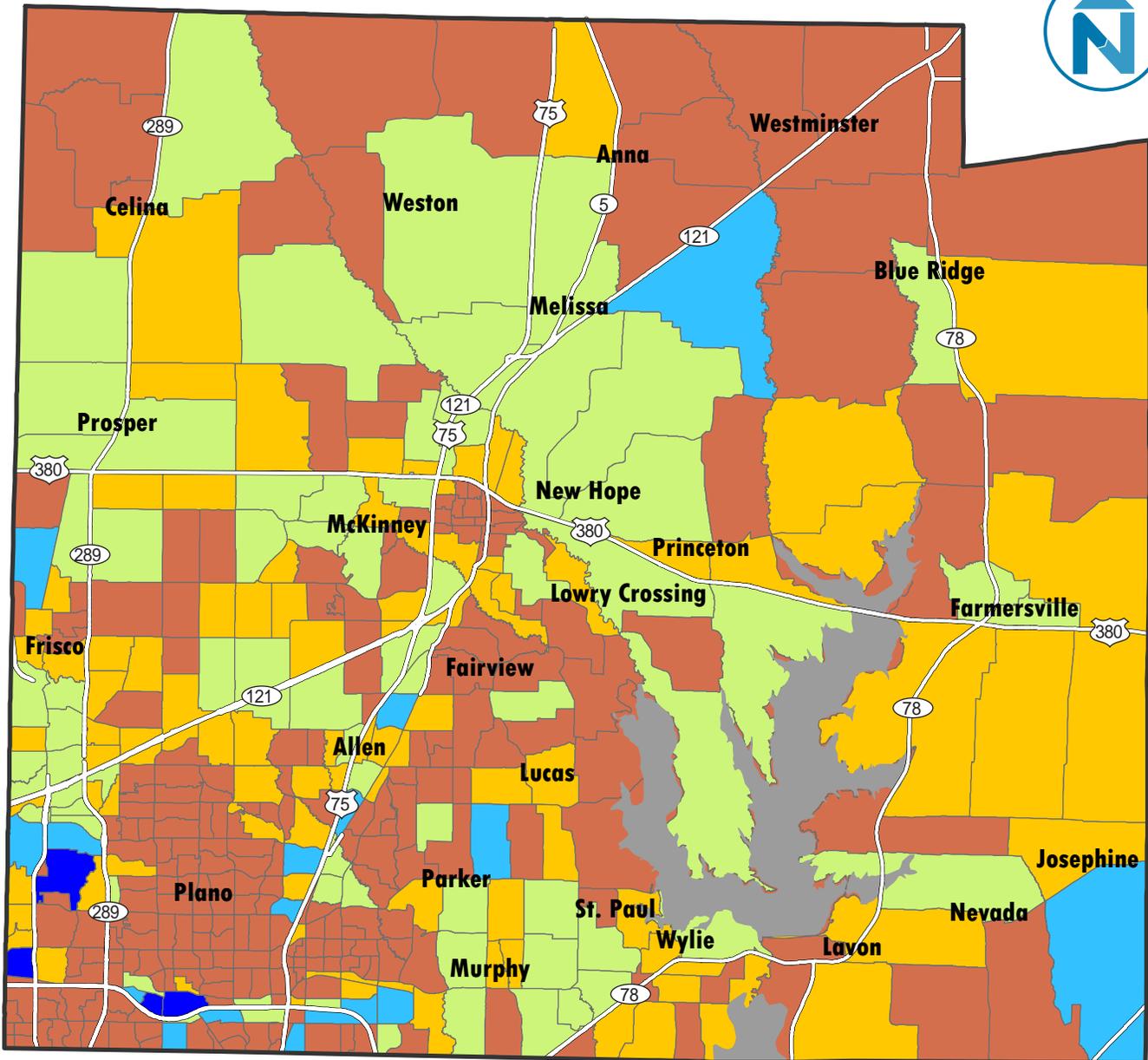


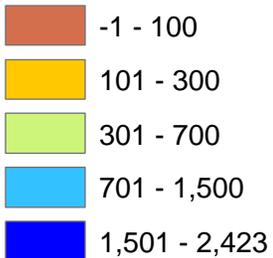
Figure 2-18 Employment Change 2012-2020 (by Traffic Survey Zone)

COLLIN COUNTY



EMPLOYMENT CHANGE 2012 - 2020

BY TSZ



Colleges and Universities

Several technical colleges, as well as four-year and graduate education programs have on-campus classes in Collin County. Collin College's original campus, Central Park Campus (CPC) is located in McKinney just west of U.S. Highway 75 on Highway 380. Dallas Baptist University also has an extension site in Frisco, and the University of Texas at Dallas sits on a site that is in both Collin and Dallas Counties.

Colleges and universities often have the potential for a higher transit ridership base than services designed for the general public, particularly when colleges assess a fee for parking, or when students have limited access to a reliable automobile. Many colleges and universities partner with transit agencies to promote ridership.

Collin College, formerly known as the Collin County Community College District, is a community college district which serves Collin and Rockwall counties. Founded in 1985, the district has grown as the county has grown - from around 5,000 students in 1986 to about 51,000 in 2011. The primary campuses in Collin County include the following:

- The Preston Ridge Campus, located in Frisco, opened in July 1995. Collin College's business and high-tech programs are centered at Preston Ridge, and the culinary arts program moved there in 2009.
- The Central Park Campus, located in McKinney, opened in 1985 with renovations completed in the fall of 2009. The Central Park Campus is a comprehensive campus.
- The Spring Creek Campus, located in Plano, opened in fall of 1988. This campus is the largest, providing general classes and housing the college system's honors, fine arts, and athletics programs.

Collin College also has campuses of smaller capacity in Allen, located in Allen High School, in Plano, for continuing education, and one in Rockwall, (located in neighboring Rockwall County) within the Rockwall Independent School District's Administration/Education Center.

In January 2010, Collin College opened the doors to its Higher Education Center, located at the intersection of Central Expressway and State Hwy. 121 in McKinney. The Higher Education Center hosts a number of bachelor's, master's and doctoral programs from five North Texas universities: Dallas Baptist University, Texas A&M University-Commerce, Texas Woman's University, The University of Texas at Dallas and the University of North Texas.

Medical Facilities

Several large medical facilities exist throughout Collin County. There are five hospitals in Plano, two in Frisco, two in McKinney, and one in Allen. All of the hospitals offer adult care and have emergency facilities.⁶

The primary medical facilities in Collin County include the following:

- The Heart Hospital Baylor, located in Plano
- Baylor Medical Center, located in Frisco and McKinney
- Texas Health Center for Diagnostics and Surgery Plan, located in Plano

⁶ Source: <http://www.thirdage.com/d/h/collin-county-hospitals-tx>

- Baylor Regional Medical Center at Plano
- Texas Health Presbyterian Hospital, located in Plano
- Medical Health Center of Plano
- Centennial Medical Center, located in Frisco
- Texas Health Presbyterian Hospital, located in Allen
- Medical Center of McKinney
- The Hospital at Craig Ranch, located in McKinney

Shopping

Major shopping destinations throughout Collin County were identified and are indicated on the map in Figure 2-14. Shopping and retail destinations include major shopping centers such as malls like Stonebriar Centre, various Target and Wal-Mart Supercenters, Collin Creek Shopping Center, and The Shops at Willow Bend. In addition, there are several large shopping centers anchored by other big box retailers. The primary traditional department stores in Collin County include JC Penney, Sears, and Macy's, while supermarkets include Albertson's and Kroger, among others.

The highest concentrations of large shopping centers and retail centers can be found along State Highway 75 in Plano and McKinney, as well as in the southern part of the county along State Highway 121. Supermarkets and other smaller retail services can be found scattered throughout the county.

TRAVEL PATTERN ANALYSIS

Studying patterns of travel from, to, and within a study area is among the initial steps of the planning process in the development of short- and long-range transportation plans. Documentation of residents' work and non-work travel patterns and destinations plays an important role in the definition of markets in need of public transportation services.

Methodology

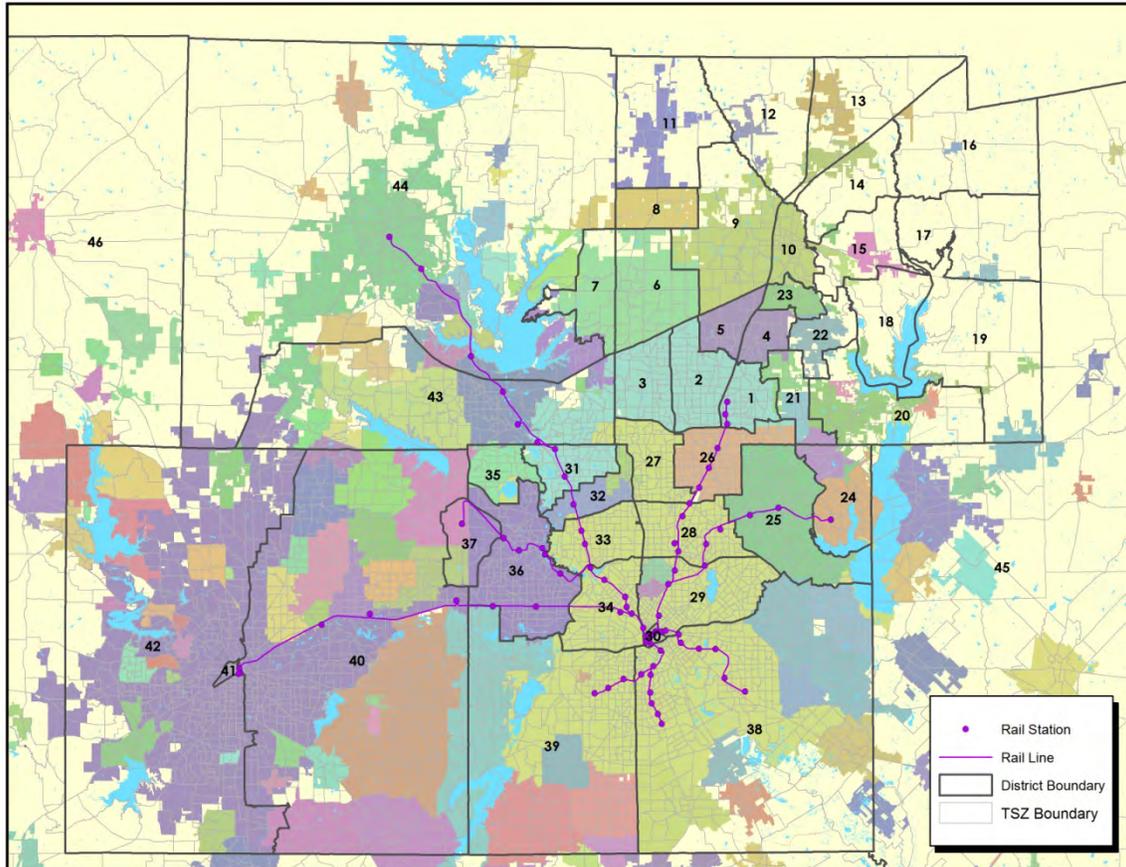
For this purpose, estimated 2012 person trip tables showing the flow of regional travel by zones of origin and destination, generated by NCTCOG's travel demand model, are used in the mapping of Collin County's trip-making patterns under existing conditions. The model has been validated to match the observed data within acceptable margins of error, and is considered to simulate the existing conditions reasonably well.

For this exercise, the region was divided into summary districts, with smaller and more detailed districts in Collin County, and larger ones outside of the immediate study area. Two rounds of analysis were conducted.

The first looked at travel from Collin County districts to other Collin County districts and larger regional districts around the Metroplex. Regional zone-based person trips were aggregated up to 42 districts where people are traveling and mapped for the following areas in the study area, which are shown in Appendix A: Allen, Fairview-Lucas, Frisco, McKinney, Murphy-Lavon, Plano, and Prosper.

After the first round of analysis, districts were then refined, and a second round of analysis looked at 46 districts in Collin County, north Dallas County and other locations where trip ends were identified in the first round for Collin County residents. These refined districts are shown on the map in Figure 2-19.

Figure 2-19 Travel Analysis: Districts Map – Collin County and the Region

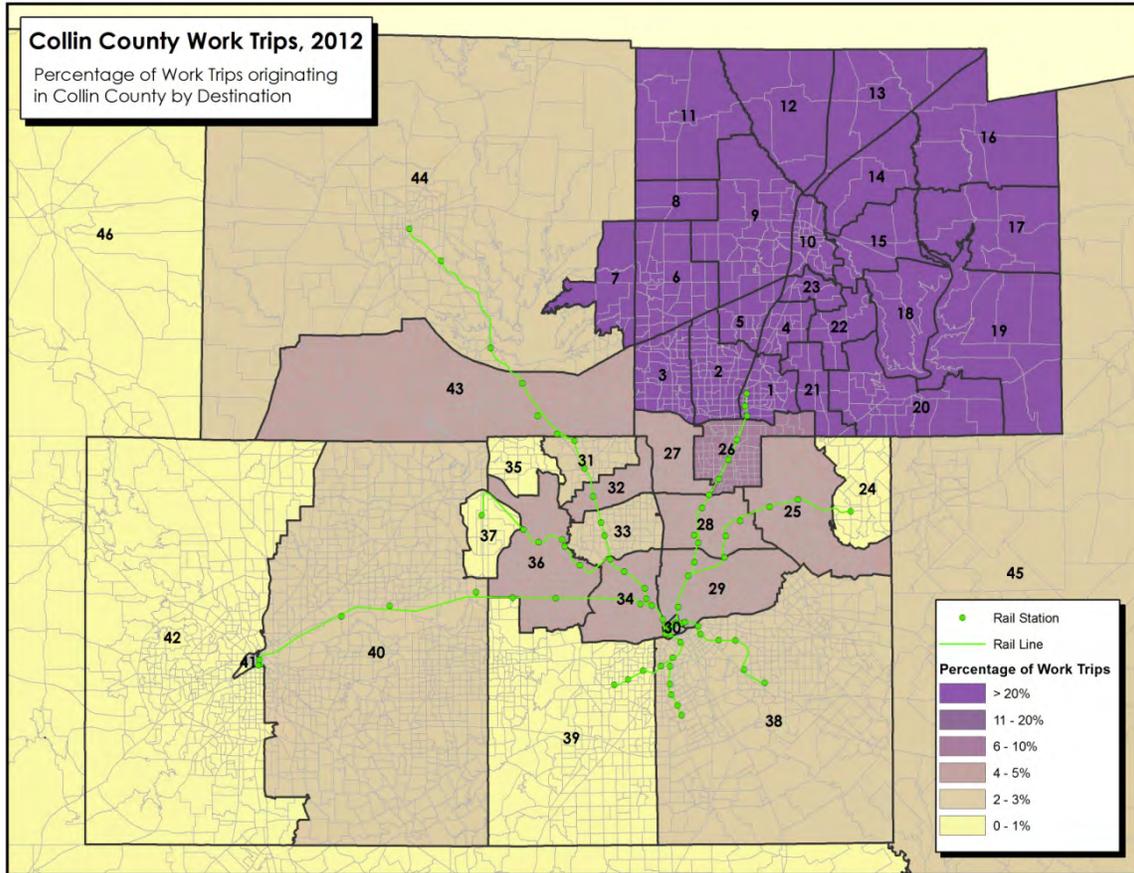


Mode-neutral person trips were divided into work and non-work categories, and person trips were allocated among districts as shown in the maps and tables in Figures 2-20 through 2-23.

Findings

Based on the analysis, it was found that approximately 45% of work trips generated in Collin County are absorbed within the county; 32% are attracted to north-central Dallas County (i.e., north Dallas, Richardson, Carrollton and Farmers Branch); 12% to Irving and Coppell; and 7% to south Denton County. Only 2% of those trips are attracted to downtown Dallas (Figure 2-20).

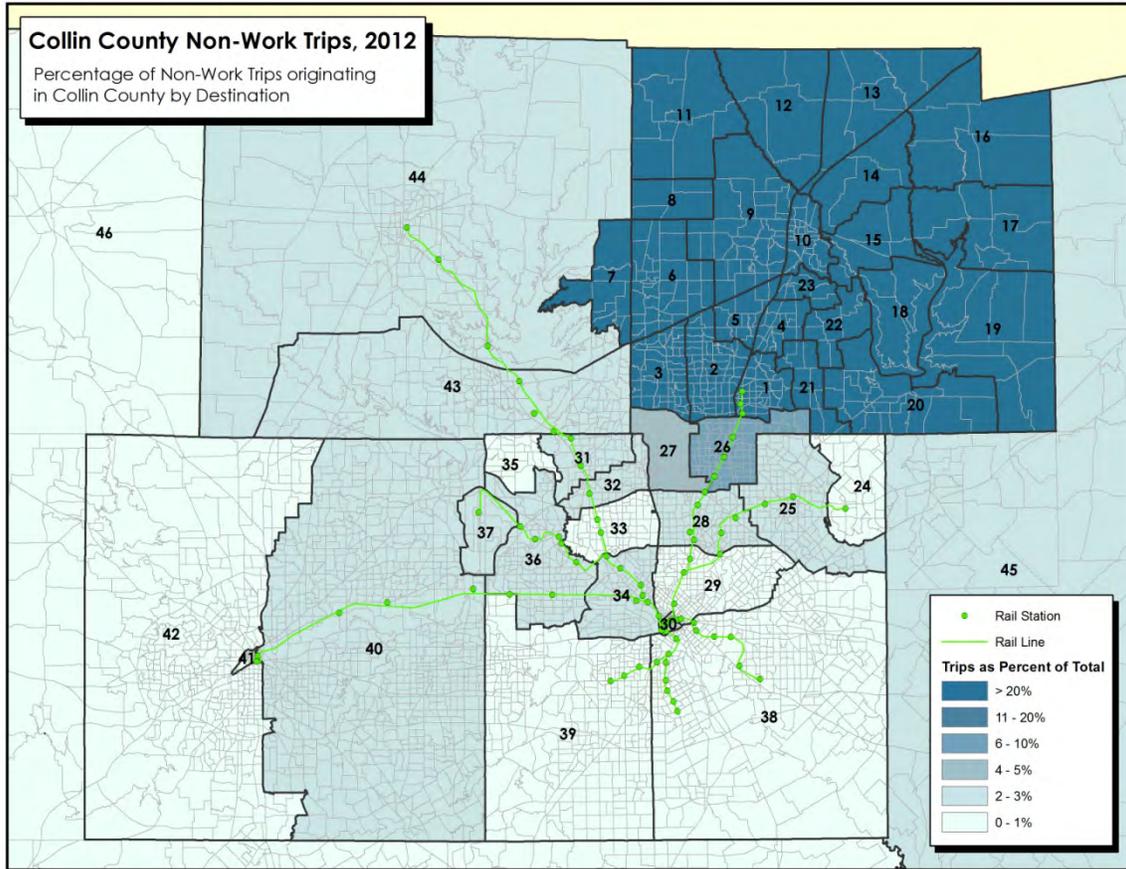
Figure 2-20 Where Collin County Residents Travel for Work (Percentage)



Source: NCTCOG Travel Demand Model, 2012

Non-work trips originate from home and terminate at non-work locations (e.g., a trip from home to the grocery store, or to a medical facility). Non-work trips also include those leaving from non-home origins (e.g. a trip from the medical facility to the pharmacy). For the most part, non-work trips from Collin County cities and communities are either absorbed internally or attracted to adjacent towns. North-central Dallas County remains an important destination for non-work trips originating in Collin County. Approximately 70% of non-work trips generated in Collin County are absorbed within the county; 22% of non-work trips are destined to the north-central Dallas County area (Figure 2-21).

Figure 2-21 Where Collin County Residents Travel for Other/Non-Work Trips (Percentage)



Source: NCTCOG Travel Demand Model, 2012

Estimated 2012 transit trips in Collin County were also analyzed as part of this exercise. Transit work trips in Collin County are all generated in Plano. DART's Red line terminates at Parker Road in Plano, with a second station in downtown Plano. Local and feeder bus lines are also in place. NCTCOG's 2012 computer-coded transit network does not carry services in Collin County beyond DART.. Almost all transit work trips generated in Plano terminate in Dallas County. Non-work transit trips generated in Plano have a higher internal absorption rate (28%).

Review of travel patterns of individual cities within the county suggests that for areas where employment opportunities exist, a proportionate ratio of generated work trips are absorbed internally. The rest are attracted either to the adjacent communities or to Dallas County. Communities that rely on other localities for employment naturally have heavier outbound work commute flows. Plano and McKinney are examples of communities where the majority of work trips are satisfied internally. On the other hand, residents of Prosper, Fairview, and Lucas tend to travel to the adjacent communities or Dallas County to work.

COLLIN COUNTY TRANSIT NEEDS ASSESSMENT AND PLANNING STUDY | DRAFT FINAL REPORT
North Central Texas Council of Governments

Figure 2-22 Daily Home-to-Work Trips by District

DISTRICT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46
1. East Plano	6,097	3,393	1,706	772	255	305	36	10	279	292	11	6	16	11	19	4	9	13	13	413	379	34	35	228	2,496	6,487	1,997	2,144	1,204	680	853	1,612	593	975	222	1,435	184	988	278	425	15	36	714	137	329	42
2. Central Plano	6,235	17,036	14,655	2,039	1,459	3,866	330	88	1,618	1,294	88	25	71	49	79	19	36	35	28	460	374	65	117	373	4,166	12,503	7,119	5,905	3,893	2,928	3,251	6,231	2,415	4,158	942	5,847	788	2,523	1,169	1,872	70	159	3,495	973	785	119
3. West Plano	1,359	4,942	17,851	399	323	3,369	305	52	544	423	52	9	24	17	28	7	13	11	10	133	99	16	33	145	1,613	4,692	5,619	3,077	2,469	2,237	2,853	5,474	1,925	3,200	736	4,492	578	1,274	865	1,364	49	128	3,506	815	314	84
4. East Allen	2,624	2,411	2,066	4,927	1,112	986	85	37	1,311	1,608	43	25	68	49	116	18	50	74	32	641	688	231	331	196	1,822	3,790	1,671	2,022	1,328	840	768	1,488	645	1,164	253	1,614	230	1,113	359	540	3	15	804	294	517	39
5. West Allen	819	1,645	1,819	955	1,045	975	74	30	886	716	31	12	33	23	37	9	16	16	10	121	99	32	77	60	641	1,622	921	941	652	492	457	904	380	690	178	938	147	444	200	337	5	16	624	234	178	15
6. Frisco/Collin	623	1,835	7,736	496	511	8,361	665	235	1,759	802	230	20	46	32	51	13	24	18	15	111	74	24	58	81	892	2,266	2,998	1,974	1,790	1,697	1,768	3,482	1,366	2,407	693	3,314	517	906	674	1,179	38	90	2,724	1,466	269	69
7. Frisco/Denton	250	637	3,823	126	120	2,175	1,308	92	382	204	80	6	13	9	14	4	7	5	5	36	26	6	15	39	429	1,136	1,631	994	875	815	1,083	1,964	780	1,244	452	1,978	304	420	340	674	24	73	1,901	1,619	96	42
8. Prosper	74	177	715	57	53	515	80	378	628	256	272	15	20	14	16	5	8	6	5	17	10	3	8	11	115	286	401	267	245	233	235	471	189	334	94	461	72	122	92	158	0	11	333	352	61	10
9. West McKinney	1,396	2,612	5,335	1,596	1,482	4,065	401	536	15,020	6,280	498	129	312	211	282	69	123	92	72	362	228	84	239	139	1,435	3,361	2,879	2,419	2,065	1,884	1,648	3,296	1,421	2,633	687	3,527	576	1,262	768	1,288	3	62	2,316	1,721	843	59
10. East McKinney	453	785	1,451	695	510	875	67	71	3,250	6,318	64	58	145	100	194	17	37	53	20	130	88	43	153	31	264	823	553	386	247	189	298	595	189	294	116	450	67	138	68	130	-	3	478	194	140	3
11. Celina	110	251	962	88	75	669	101	307	812	419	1,808	80	76	31	28	15	16	11	10	29	17	5	12	17	181	434	611	431	411	398	359	728	306	563	147	761	121	184	122	227	-	20	489	803	118	22
12. Weston	108	167	320	105	69	201	25	57	617	652	195	319	194	71	41	28	21	13	11	30	18	6	15	11	116	273	212	194	139	76	118	239	102	133	50	242	23	64	11	40	-	1	156	172	143	2
13. Anna/Melissa	248	392	733	247	165	413	45	66	1,190	1,639	170	215	2,055	424	170	226	121	54	53	88	44	16	40	27	242	598	444	392	241	116	242	494	187	203	104	394	43	127	18	72	-	0	328	231	634	1
14. Melissa/New Hope	87	136	256	92	60	148	16	21	451	769	31	37	192	339	180	64	59	45	26	49	21	9	20	12	85	205	151	132	98	74	82	167	67	109	35	165	24	59	14	36	-	0	113	72	235	0
15. Princeton/Lowry Crossing	228	307	587	260	139	327	31	32	749	1,446	36	29	98	198	914	46	164	205	74	196	82	43	67	40	242	469	328	282	222	174	180	365	144	251	75	355	56	186	45	91	-	1	251	127	483	1
16. Blue Ridge	85	133	250	85	54	140	15	20	342	480	44	49	283	273	131	684	229	47	89	77	23	10	17	20	101	203	148	111	43	-	81	155	33	4	29	39	1	88	-	6	-	-	110	70	1,149	0
17. Farmersville	113	138	264	122	58	146	14	16	321	491	18	16	71	111	237	151	1,153	123	303	182	46	22	26	41	173	217	143	135	142	71	77	158	41	23	32	63	2	193	15	9	-	-	109	55	1,422	0
18. SW Collin County	318	323	488	340	124	265	26	25	558	972	28	20	71	133	487	42	213	671	107	361	138	78	65	65	357	569	310	306	240	129	158	319	126	175	64	305	28	251	32	51	-	-	208	108	685	1
19. Josephine/Royce City	150	152	219	80	37	98	10	10	195	287	11	8	32	45	117	57	401	71	1,171	456	59	14	16	128	519	469	232	349	461	315	104	206	63	217	32	107	1	674	118	14	-	-	102	41	3,272	15
20. Wylie/Lavon/St. Paul/ Nevada	1,608	1,124	983	454	127	229	27	10	244	354	12	6	20	26	82	20	104	76	280	5,926	1,063	146	58	869	3,244	3,904	1,506	1,911	1,561	967	677	1,316	528	991	195	1,312	170	2,201	455	405	1	11	548	120	2,255	88
21. Parker/Murphy/Sachse	1,201	784	617	441	97	140	17	5	126	154	6	3	8	7	19	3	13	18	18	732	817	51	30	298	1,567	2,550	852	1,021	693	395	380	729	294	516	106	727	97	792	183	230	6	15	312	70	302	33
22. Lucas	368	316	333	408	108	165	16	7	216	355	9	5	15	15	62	6	28	50	17	371	174	122	64	71	432	647	297	375	294	186	142	278	128	239	51	324	48	348	86	103	-	1	153	61	232	11
23. Fairview	280	301	463	438	167	265	24	10	382	637	12	7	20	16	50	5	18	22	10	158	94	53	154	39	289	523	289	321	244	175	148	297	130	244	62	325	53	228	76	116	-	2	205	80	142	4
24. Rowlett/Pleasant Valley/Sachse	1,287	1,235	1,196	172	72	218	30	6	105	110	7	3	7	6	15	5	21	12	51	1,136	436	22	14	3,320	7,769	4,944	1,936	3,325	3,286	1,960	811	1,561	626	1,531	224	1,477	192	5,496	873	522	17	45	663	130	2,968	177
25. Garland	3,654	3,359	3,050	421	183	517	69	14	242	239	15	6	15	11	20	5	19	14	51	989	602	30	27	2,764	45,055	21,689	8,143	20,637	13,618	5,256	1,927	4,785	2,246	4,953	498	3,413	393	17,102	2,002	1,089	44	113	1,547	265	3,146	377
26. Richardson	2,956	3,362	2,813	328	137	428	56	11	177	181	11	4	11	8	13	3	8	8	14	400	353	17	20	400	7,018	28,156	9,746	11,724	4,308	2,049	1,789	4,921	1,654	2,714	390	2,569	306	2,531	647	697	24	64	1,314	213	528	93
27. Far North Dallas	1,789	3,654	8,357	275	141	1,275	160	28	243	204	29	5	13	9	15	4	7	6	10	178	127	11	18	229	3,423	14,581	31,781	14,813	7,066	5,281	6,923	21,557	5,592	7,852	1,129	7,632	864	2,841	1,722	1,955	64	174	4,398	582	445	162
28. NE Dallas/N of Loop 12	1,246	1,606	1,746	200	89	305	40	7	113	106	8	3	7	4	7	2	3	4	8	141	98	8	12	275	12,971	15,771	14,744	61,945	25,546	8,703	2,042	9,377	6,551	11,910	470	5,027	450	7,535	2,015	1,118	41	104	917	140	644	200
29. NE Dallas/S of Loop 12	772	943	1,219	125	57	232	31	6	80	73	7	2	5	3	6	2	4	3	13	169	94	7	8	443	11,258	7,273	7,886	32,181	81,036	34,277	1,615	6,659	6,132	31,008	431	7,602	608	26,975	6,162	2,030	95	214	728	121	1,176	466
30. Dallas CBD	5	8	19	1	0	4	1	0	1	1	0	0	0	0	0	0	0	0	0	1	1	0	0	3	35	49	107	218	1,412	2,536	37	131	149	1,170	12	252	18	651	338	74	4	8	15	3	14	16
31. Carrollton	259	516	1,565	44	26	279	36	6	50	38	6	1	2	2	3	1	1	1	2	28	20	2	3	35	421	1,315	3,532	1,691	1,207	1,051	8,249	7,756	2,806	2,387	945	4,678	460	467	510	954	25	68	2,674	256	65	39

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DISTRICT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46
32. Farmers Branch/Addison	139	275	874	24	15	158	21	4	29	22	4	1	1	1	2	0	1	1	1	16	11	1	2	19	382	990	4,215	2,491	1,555	1,259	4,130	11,031	4,234	2,837	512	3,781	336	542	509	686	17	47	954	115	50	37
33. NW Dallas/N of Loop 12	108	203	612	19	12	119	16	3	23	17	3	0	1	1	1	0	1	1	1	13	9	1	1	16	491	1,116	3,834	5,109	4,580	3,365	2,584	8,484	17,301	12,037	689	8,974	562	1,171	1,199	1,155	27	72	751	98	63	69
34. NW Dallas/S of Loop 12	50	94	278	9	5	54	7	1	10	7	1	0	0	0	1	0	0	0	0	6	4	0	1	11	202	478	1,529	2,320	7,527	6,259	672	2,211	3,692	19,779	201	4,336	249	1,613	1,937	579	15	35	249	30	43	52
35. Coppell	98	182	565	19	15	172	28	4	32	26	4	1	2	1	2	1	1	1	1	13	9	1	2	17	190	487	774	567	559	646	2,556	2,165	1,577	1,731	3,841	6,446	973	299	516	2,142	50	137	2,297	297	40	44
36. Irving	169	321	878	33	20	196	32	5	40	30	5	1	2	1	2	1	1	1	2	22	15	1	3	28	423	956	2,348	2,385	4,669	5,522	5,357	7,431	10,724	20,601	3,530	83,157	7,289	2,069	7,769	12,955	230	577	2,091	283	105	210
37. DFW Airport	0	0	0	0	-	0	0	-	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0	1	1	1	1	2	3	4	2	23	7	1	2	12	0	1	1	0	0	0	
38. SE Dallas County	1,163	1,270	1,541	175	80	291	38	7	109	98	8	3	7	4	9	3	11	7	35	440	198	13	12	1,199	14,650	6,392	6,491	16,708	48,294	40,477	1,725	5,879	5,054	29,196	533	8,930	702	127,277	23,256	3,414	135	365	931	141	6,340	3,286
39. SW Dallas County	187	289	750	36	20	165	24	4	37	27	5	1	2	1	2	0	2	1	6	56	25	2	3	114	1,345	1,453	3,220	5,132	18,769	26,862	2,223	5,343	7,167	38,397	1,207	27,789	3,733	30,319	116,364	29,250	762	2,040	1,075	166	1,003	5,919
40. E Tarrant County	348	652	1,877	75	62	598	103	16	131	97	19	2	5	4	7	1	2	2	3	57	34	4	8	97	1,251	1,922	4,017	4,942	12,145	15,764	5,975	9,791	11,685	31,422	8,954	81,068	28,793	12,291	59,096	568,319	37,021	95,207	11,555	3,850	670	20,598
41. Fort Worth CBD	0	1	3	0	0	1	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-	0	1	2	5	6	17	22	7	12	13	38	12	95	36	13	51	964	1,414	1,448	22	11	0	36
42. W Tarrant County	17	42	191	3	4	75	24	6	15	7	7	0	0	0	0	-	-	0	-	1	1	0	0	4	65	85	263	343	1,688	2,322	787	1,086	1,549	4,376	1,263	10,898	3,795	2,065	7,669	109,656	43,798	264,232	6,750	4,147	32	26,104
43. S Denton County	1,519	3,122	12,361	327	261	3,073	485	66	545	421	71	11	28	20	32	8	15	12	14	190	128	16	33	233	2,547	7,316	11,500	6,012	5,190	5,104	17,354	18,519	9,291	11,426	10,259	30,176	6,028	2,525	3,450	20,249	990	5,383	58,520	12,210	446	1,101
44. N Denton County	913	2,238	11,329	446	406	5,983	2,303	618	1,920	936	931	66	86	51	68	20	32	26	21	135	95	23	53	141	1,496	4,142	6,030	3,557	2,994	2,813	6,422	9,004	4,624	5,896	4,602	14,477	2,850	1,283	1,528	11,219	1,334	6,849	25,278	112,905	256	4,331
45. Hunt/Rockwall/Kauffman Counties	1,630	1,763	1,989	373	175	503	59	34	595	769	43	34	137	159	249	321	784	147	1,481	1,499	328	50	50	2,087	9,138	6,497	3,412	6,671	11,191	8,723	1,270	2,732	1,454	6,587	338	3,008	277	25,283	4,786	1,435	29	90	1,043	200	127,477	2,268
46. Outer Counties	96	128	380	17	11	133	37	12	39	18	18	1	1	0	1	0	1	0	4	37	16	1	1	80	939	744	1,273	2,505	8,825	11,217	684	1,692	1,900	10,541	490	6,282	1,250	20,441	29,975	48,696	11,074	63,228	3,403	6,165	1,790	279,110

Source: NCTCOG Travel Demand Model, 2012

Note: Shaded cells show local trips within a district

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Figure 2-23 Daily Other/Non-Work Trips by District

DISTRICT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46
1. East Plano	52,314	17,068	4,819	2,624	1,161	1,245	158	45	992	889	47	32	76	59	90	25	38	80	52	980	1,440	135	129	663	5,715	22,798	4,200	2,986	1,529	613	1,334	2,197	861	1,310	498	2,184	1,810	1,367	556	1,467	37	223	2,074	655	1,026	212
2. Central Plano	21,453	124,058	59,131	3,808	7,717	21,305	1,190	234	4,039	2,711	175	76	170	145	197	53	68	109	66	652	665	141	266	749	5,874	33,065	14,385	5,848	3,341	1,703	4,594	7,875	2,843	4,046	1,848	7,155	4,814	2,329	1,509	4,467	94	531	8,623	2,864	1,688	509
3. West Plano	3,040	22,915	157,328	863	1,521	28,993	2,175	310	2,304	1,293	267	59	141	102	155	48	62	77	56	356	262	65	134	451	2,874	11,207	19,147	4,371	3,073	1,583	6,781	11,688	3,095	3,915	1,858	6,874	4,850	1,954	1,687	4,561	98	634	15,986	4,681	1,147	666
4. East Allen	7,752	7,225	4,694	33,860	7,079	3,774	275	92	4,533	5,707	82	79	179	170	342	44	88	295	56	952	2,932	1,174	2,317	291	1,884	7,660	2,786	1,980	1,180	639	1,012	1,742	826	1,432	549	2,264	1,450	928	515	1,527	37	191	1,969	836	994	158
5. West Allen	2,027	6,122	5,051	3,118	16,072	5,244	300	87	3,687	2,380	69	44	102	87	126	26	33	60	22	173	187	92	334	113	825	3,296	1,540	943	595	317	630	1,091	470	810	384	1,262	853	454	293	978	21	120	1,614	735	403	103
6. Frisco/Collin	907	4,297	29,566	724	2,117	99,886	3,693	1,023	6,117	1,719	564	68	134	107	151	43	56	67	40	169	117	54	141	172	1,073	3,240	5,263	1,961	1,569	957	2,512	4,275	1,592	2,373	1,356	4,048	2,320	1,052	995	3,304	68	421	7,514	5,024	724	427
7. Frisco/Denton	331	1,061	10,725	128	289	12,414	16,727	390	849	399	172	19	33	29	37	12	16	16	12	47	32	11	26	63	441	1,585	2,635	927	769	539	1,429	2,317	1,012	1,061	1,068	2,932	647	470	513	2,165	37	211	5,321	8,675	307	225
8. Prosper	105	312	1,676	62	135	2,315	353	4,746	2,523	670	1,876	47	48	42	38	12	16	15	10	21	13	6	13	19	134	429	642	267	237	174	313	553	258	352	197	704	663	161	165	532	12	68	754	1,019	170	80
9. West McKinney	1,750	4,031	9,729	2,052	6,163	14,602	942	2,114	125,379	20,818	1,097	449	826	615	647	137	171	218	100	326	231	142	547	179	1,206	3,935	3,356	1,649	1,309	856	1,590	2,771	1,272	2,012	1,043	3,481	2,202	990	844	2,800	65	356	4,094	3,051	1,263	352
10. East McKinney	713	1,335	2,106	1,113	1,601	2,157	195	186	14,860	51,750	181	325	882	684	1,105	102	172	289	91	242	133	127	627	91	518	1,413	864	597	438	224	397	660	311	423	245	839	775	389	272	825	23	137	1,037	738	657	113
11. Celina	146	381	1,766	80	150	2,214	295	2,000	1,940	794	15,889	273	139	74	55	32	26	23	17	32	18	8	18	30	208	620	897	416	393	305	443	781	415	589	306	1,173	1,196	285	299	926	25	115	1,038	1,838	340	148
12. Weston	157	268	579	100	159	558	60	125	1,666	2,146	462	2,901	611	259	85	71	34	28	17	30	18	9	24	21	151	473	346	221	187	135	163	290	170	262	126	500	435	156	133	405	4	26	380	387	351	34
13. Anna/Melissa	311	532	1,111	202	315	972	92	98	2,482	4,504	193	653	14,178	1,942	324	799	185	85	68	73	38	18	50	44	306	930	676	442	373	263	317	560	330	532	246	973	1,161	317	265	801	10	47	750	539	1,246	41
14. Melissa/New Hope	113	196	377	95	134	339	35	38	1,212	2,860	43	124	780	4,445	982	334	136	133	45	51	19	14	33	19	108	302	212	143	117	75	99	172	96	147	72	275	157	104	82	246	7	24	241	180	441	22
15. Princeton/Lowry Crossing	272	433	897	262	309	812	73	53	1,519	5,109	51	69	204	1,129	9,975	136	533	1,478	157	221	84	109	162	60	270	691	482	305	253	165	224	394	218	337	166	628	364	250	169	527	14	51	543	328	1,101	44
16. Blue Ridge	95	161	339	55	78	279	30	26	473	650	39	66	608	1,323	214	5,929	496	61	124	66	16	8	14	26	122	303	231	159	148	102	110	195	122	188	88	364	189	164	107	297	-	8	257	191	2,722	6
17. Farmersville	101	140	290	68	68	241	27	22	363	643	24	24	98	248	543	456	11,177	264	996	203	36	21	23	54	198	275	198	147	163	108	95	165	103	180	74	306	256	255	120	264	-	7	224	171	3,959	25
18. SW Collin County	471	504	794	397	276	671	60	45	1,057	2,477	41	49	119	422	3,262	92	592	6,591	204	653	237	347	131	117	482	919	516	364	306	191	226	401	233	336	165	678	332	375	185	532	11	38	503	301	1,619	47
19. Josephine/ Royce City	203	229	363	61	58	230	26	19	276	441	20	16	50	93	212	145	1,873	139	9,612	1,401	74	18	18	184	620	664	373	366	476	325	158	276	181	403	103	525	363	884	311	428	4	17	289	180	9,641	96
20. Wylie/Lavon/ St. Paul/ Nevada	3,458	2,278	2,135	835	420	879	97	34	712	952	34	25	57	86	250	64	295	452	1,387	48,027	4,481	950	215	3,239	5,841	6,924	2,163	1,754	1,502	794	836	1,436	736	1,115	428	2,045	921	2,598	729	1,374	38	179	1,323	488	6,346	239
21. Parker/Murphy/ Sachse	4,485	2,163	1,526	1,886	438	579	59	17	436	474	17	12	27	26	69	12	33	104	45	3,018	9,636	356	131	1,845	3,658	7,247	1,411	1,004	653	305	503	862	391	513	229	1,053	387	822	259	644	16	86	763	246	709	86
22. Lucas	873	744	802	1,301	500	690	53	19	718	1,299	17	16	35	52	303	14	50	358	30	1,384	777	2,038	530	142	558	1,219	503	360	260	149	200	351	185	329	131	527	253	297	128	375	10	39	421	184	459	37
23. Fairview	561	858	1,061	1,484	1,030	1,034	72	24	1,408	3,052	21	22	51	57	181	12	31	85	17	246	190	325	2,013	55	296	1,127	507	346	227	133	198	351	173	303	141	489	244	185	111	375	9	42	490	216	270	33
24. Rowlett/ Pleasant Valley/Sachse	2,520	2,654	2,662	228	189	827	103	25	283	266	25	12	26	24	47	19	54	47	127	2,838	1,707	51	32	43,498	23,159	9,400	2,853	3,119	3,637	1,715	1,017	1,756	872	1,767	488	2,334	1,189	9,062	1,300	1,542	46	226	1,557	499	13,407	393
25. Garland	8,942	8,367	7,320	768	589	2,176	308	80	873	743	87	41	94	72	113	45	101	100	231	2,133	1,505	100	88	11,899	270,402	66,876	14,402	41,447	27,274	5,850	2,944	6,660	3,909	6,539	1,271	6,825	5,967	50,430	4,404	4,731	149	801	4,208	1,507	12,338	1,426
26. Richardson	15,173	17,736	11,135	1,285	837	2,487	399	98	1,096	871	111	50	120	84	129	45	63	95	103	1,451	2,047	111	129	1,824	25,734	223,000	32,929	28,925	7,949	2,363	3,670	8,419	3,281	4,218	1,104	5,066	5,764	5,414	1,877	3,530	93	594	5,069	1,671	2,535	726
27. Far North Dallas	3,978	12,693	41,153	601	571	6,851	839	156	997	646	151	37	86	62	90	33	42	53	56	404	292	46	71	578	6,219	47,708	199,222	36,399	10,995	4,422	18,169	65,567	12,071	10,780	2,700	12,309	6,706	4,943	3,334	6,043	122	750	17,402	2,686	1,624	982
28. NE Dallas/N of Loop 12	3,112	4,712	7,188	575	443	2,388	366	95	744	572	107	38	88	63	89	36	50	57	92	491	303	48	68	1,020	39,935	48,140	50,698	316,292	82,692	13,344	5,259	21,331	17,959	22,337	1,740	12,180	7,678	21,970	6,697	6,499	182	1,027	4,696	1,706	3,997	1,669

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DISTRICT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46
29. NE Dallas/S of Loop 12	1,689	2,668	5,073	370	308	1,911	305	85	600	439	101	32	74	53	76	35	58	51	123	462	232	38	49	1,252	28,634	15,489	19,748	87,477	420,204	70,714	3,895	12,746	15,047	77,701	1,598	18,963	9,924	97,721	22,714	10,813	367	1,817	3,943	1,642	6,605	3,470
30. Dallas CBD	189	353	786	71	59	320	72	23	142	82	31	8	20	13	19	9	14	12	28	85	37	8	10	163	1,086	1,055	1,930	3,799	25,244	36,178	673	1,675	2,163	17,705	254	3,817	3,563	15,801	9,195	3,410	114	639	806	454	1,106	1,258
31. Carrollton	817	2,046	7,522	194	200	2,007	312	68	418	247	73	17	41	28	42	16	21	24	24	147	94	17	27	185	1,215	3,550	11,481	3,259	2,311	1,251	68,883	27,672	8,548	4,463	4,899	16,277	2,522	1,427	1,992	6,225	98	632	17,536	2,124	579	585
32. Farmers Branch/Addison	909	2,198	7,707	243	244	2,070	361	84	522	298	94	22	53	35	54	21	27	30	32	187	116	23	34	229	1,913	4,636	29,661	9,479	5,335	2,369	26,555	81,407	23,241	7,280	2,701	16,195	4,120	2,696	2,921	5,839	108	715	7,892	1,820	792	806
33. NW Dallas/N of Loop 12	429	967	3,002	124	123	1,017	177	45	279	169	54	14	32	22	32	14	18	19	22	103	59	12	18	123	1,327	2,796	12,712	12,535	10,313	4,433	7,720	27,019	132,624	32,824	2,598	31,375	4,195	3,460	5,357	7,668	135	867	4,423	1,332	699	956
34. NW Dallas/S of Loop 12	391	830	2,135	135	126	826	166	49	303	180	64	17	40	26	39	18	23	23	39	128	66	15	21	192	1,513	2,249	6,117	8,805	35,745	20,231	2,988	7,060	21,549	153,276	1,251	26,651	5,341	13,373	22,474	10,244	255	1,492	2,893	1,268	1,472	2,085
35. Coppell	229	535	1,705	69	86	827	150	30	192	116	34	9	21	14	21	9	11	11	11	54	31	7	13	64	377	902	1,446	699	649	445	6,411	3,339	2,506	1,840	41,549	22,452	1,750	548	1,024	13,980	89	602	15,123	1,503	254	391
36. Irving	827	1,774	4,545	275	257	1,799	366	98	609	365	126	33	78	51	76	35	44	45	55	240	132	29	42	277	1,815	3,201	5,927	4,865	8,590	7,000	17,289	18,345	32,831	42,034	19,981	490,974	15,621	6,941	34,433	64,575	752	4,368	13,986	3,809	1,597	3,196
37. DFW Airport	27	56	118	11	10	54	14	4	25	15	6	2	4	2	3	2	2	2	2	10	5	1	2	11	60	88	131	120	158	101	218	245	269	304	298	3,092	827	160	453	3,469	38	244	432	158	54	145
38. SE Dallas County	1,739	2,373	3,905	385	316	1,647	275	86	652	491	109	40	91	65	103	57	120	84	286	970	376	57	56	3,172	32,503	10,434	11,053	23,891	94,201	55,319	3,099	7,926	9,494	44,083	1,713	19,733	10,671	790,852	90,626	18,818	693	3,662	3,834	1,903	28,730	15,957
39. SW Dallas County	501	1,014	2,576	165	161	1,154	209	66	402	261	86	25	57	39	55	27	44	33	81	218	90	20	27	373	2,488	2,740	5,311	6,435	23,257	27,750	3,563	6,732	12,075	54,017	2,617	52,547	11,423	76,428	748,109	103,845	1,542	7,845	4,581	2,009	4,599	20,115
40. E Tarrant County	1,226	2,495	6,282	414	434	3,209	603	175	1,092	719	228	63	145	103	145	58	77	83	112	394	197	48	72	479	3,110	5,012	7,569	6,718	13,682	13,372	9,658	13,094	17,628	34,103	21,800	137,488	46,278	20,040	122,080	2,634,622	50,991	242,404	38,479	12,895	4,435	60,358
41. Fort Worth CBD	16	30	56	8	6	30	8	3	18	11	4	1	2	2	3	-	-	2	2	8	4	1	1	9	50	52	65	84	163	114	60	78	88	1,060	62	482	1,343	261	639	15,463	15,593	27,967	306	311	70	1,885
42. W Tarrant County	284	551	1,298	98	101	715	142	44	255	166	52	7	15	13	21	2	3	9	5	85	47	10	16	121	774	1,174	1,633	1,542	2,876	2,677	1,503	2,198	2,768	5,861	2,265	14,622	17,011	4,391	11,819	215,071	59,069	1,270,365	20,240	9,829	896	87,827
43. S Denton County	2,263	6,409	44,357	494	741	12,156	1,636	234	1,480	939	226	54	123	91	131	50	64	67	62	325	210	46	87	429	2,871	10,811	24,836	5,777	4,589	3,053	43,543	27,688	11,917	9,794	26,609	47,363	12,381	2,996	4,759	69,545	786	11,397	412,831	37,938	1,499	3,582
44. N Denton County	1,268	3,285	20,274	452	794	18,650	10,625	1,317	3,287	1,653	1,314	142	212	165	193	85	108	93	84	256	148	45	91	312	2,049	5,813	8,623	3,923	3,758	2,935	7,514	9,298	6,298	7,043	7,375	21,643	7,778	2,917	4,046	29,094	1,286	11,417	68,884	552,464	1,634	16,152
45. Hunt/Rockwall/Kauffman Counties	1,776	2,300	3,075	398	328	1,370	212	85	862	875	111	67	213	233	346	574	1,456	255	3,600	2,817	427	85	76	7,281	11,450	6,990	4,411	6,246	10,042	6,186	1,557	2,964	2,380	6,512	925	6,019	3,315	34,086	7,574	6,008	222	1,039	2,582	1,250	667,301	4,882
46. Outer Counties	338	661	1,736	91	101	879	160	49	262	162	59	10	17	16	23	3	17	14	44	131	55	10	14	242	1,679	1,898	3,075	3,333	8,137	8,573	1,738	3,267	4,176	11,097	1,774	14,657	6,424	31,022	54,796	76,947	8,518	93,209	6,842	8,091	5,808	1,401,555

Source: NCTCOG Travel Demand Model, 2012
 Note: Shaded cells show local trips within a district

CONCLUSION

The information presented in this chapter illustrates pockets of potential transit demand that currently exist in portions of Collin County. This current demographic information, activity center data, and travel analysis will serve as the basis for near-term transit alternatives developed through this study. Based on an array of demographic factors, these appear to be focused on the east side of McKinney (east of S. McDonald Road), an area with some access to TAPS local bus routes; the south and southeast side of Plano, areas with access to DART; and other portions of Allen, Frisco, Celina, and some of the cities on the east side of the county, which have no fixed route transit service access. Alternatives must address potential local transit service needs, and may include a mix of fixed-route services or, as have been implemented in other small cities and growing cities, hybrid fixed-deviated services or flex-route services. There is also the need for coordination of social service transportation providers in the provision of service.

The greatest concentrations of people and jobs in Collin County are in and around Plano, which has the best current jobs-to-housing ratio, but also in McKinney and Frisco where more jobs are projected to be created in the next eight years. Most of the major employers and activity centers are located along major freeways and highways, primarily along Highway 75 and 121, meaning they may be accessible from potential future corridor-based transit operations. With very high numbers of people living and working in different cities, regional services must be evaluated, including commuter transit options and ways to encourage carpooling/vanpooling, and expansion of existing services (including those provided by private operators). The southwestern portion of the county has seen high growth rates due to its proximity to the more developed portions of the Dallas region. Nevertheless, significant population growth is projected in the north and east portions of the county – in Anna, Melissa, Blue Ridge, Farmersville – all of which will continue to build "bedroom community" residential developments and likely attract few jobs in the short term. Many of the more rural communities are seeing growth of families with young children. Although these small communities are generally designed around the automobile, meaning people without cars are unlikely to move to them, more young children may present barriers for residents in these communities who might consider using public transportation or carpooling for work because they would need to drop off and pick up their young children from child care or school. Over time, more children in these communities may lead to greater demand for local services to support after-school transportation or transportation for special activities.

3 EXISTING TRANSIT SERVICES

Transit services in Collin County are available through a limited number of public agencies, namely TAPS for fixed-route services in McKinney and paratransit services throughout the county, and DART fixed-route and paratransit services in the Plano area. TAPS services are relatively new in Collin County, having replaced CCART in July 2013, which ceased operations on the services now provided by TAPS. CCART also used to operate a free circulator within the city of Frisco, but this was discontinued. This chapter, prepared initially in 2012, primarily focuses on the services provided by CCART, the predecessor to TAPS in Collin County, and describes CCART's successes and challenges.

Fixed-route public transportation services in Collin County are illustrated in Figure 2-14. More detailed maps on the McKinney fixed-route services are shown in Figure 3-1.

There are also small transportation services offered by churches, human service agencies, and medical facilities in the county, but these are largely not available to the general public. Taxis and Greyhound bus lines provide some limited local and regional service options for people traveling within, to or from Collin County.

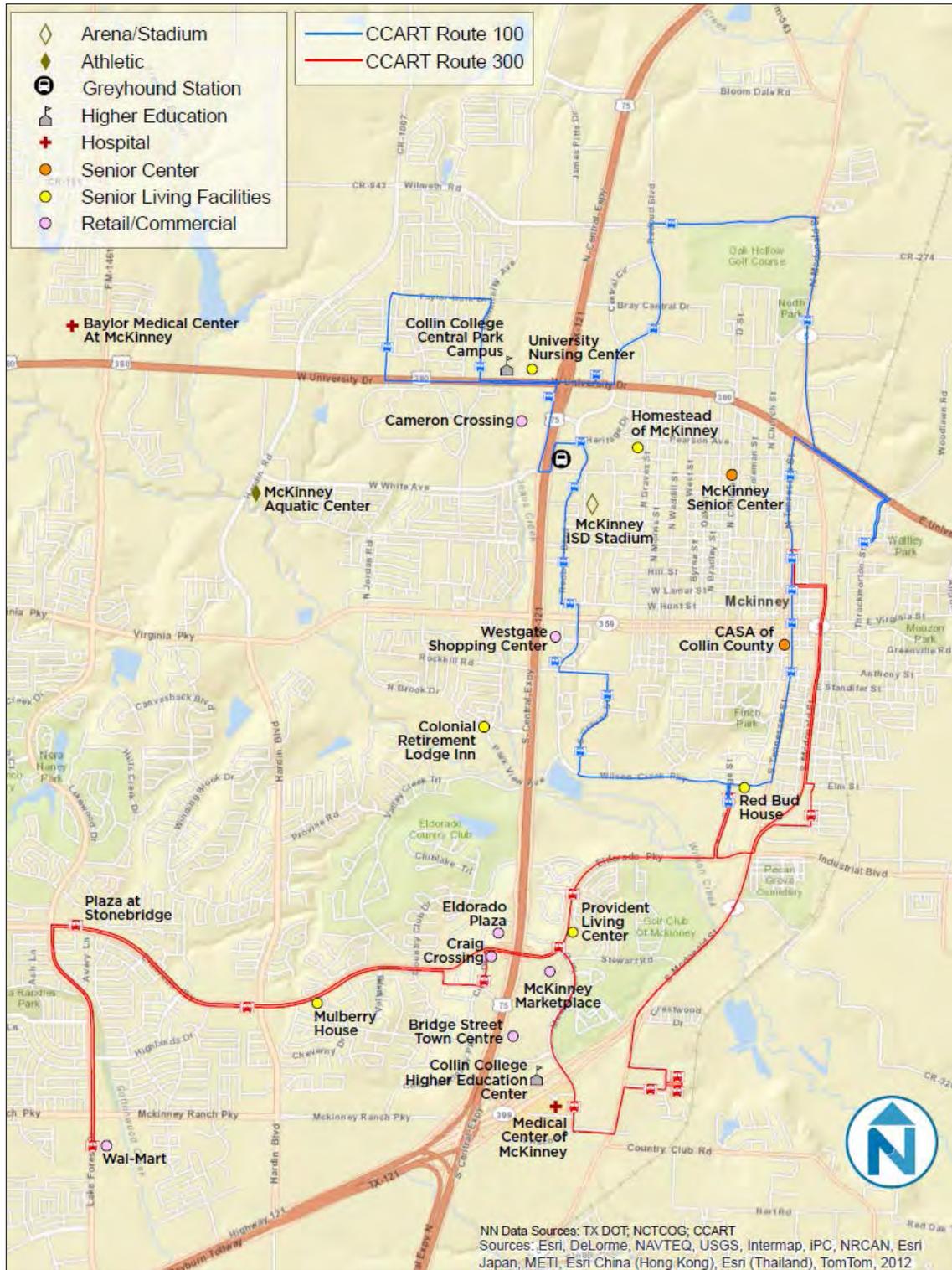
In FY2009 and FY2010 funding for CCART operations was largely based on Federal dollars – primarily 5307 (Urban Area Formula grants) and 5311 (Non-Urban Area Formula grants), as well as State dollars, and match from local and “other” funds. In recent years, funding from several grants has not been fully used, ostensibly due to a lack of local matching funds. CCART's operating budget in FY2012 was \$1,614, 512, which was slightly lower than FY2011, when the total was \$1,681,260. In FY2012, fully 85% of the operating budget was assigned to CCART's paratransit service.

CCART FIXED-ROUTE SERVICES

CCART services were administered by the Collin County Committee on Aging (CCCOA). Fixed-route service was provided between approximately 6:00 AM and 6:00 PM Monday through Friday. CCART operated service on two loop routes, Route 100 and Route 300, which operate on 120-minute headways and are today operated by TAPS. The bus routes and activity centers around McKinney that are served by these routes are illustrated in Figure 3-1.

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Figure 3-1 McKinney CCART Fixed Routes (prior to TAPS' assumption of service)



Annual Ridership and Service Levels

Service levels and ridership in the past five years have both declined significantly due to budget constraints and the resultant service cuts. While there have been reductions in available funding, this is reportedly largely due to the lack of local matching funding, as CCART received a number of federal grants that were not drawn down for this reason.

After operating as a limited senior oriented service through the early 2000's, CCART fixed-route services expanded to five routes by FY2007, known as Routes 100 through 500. Ridership peaked in FY2008, but then steadily declined, particularly after November 2009 when routes 400 and 500 were eliminated, and the following year when the remaining routes were consolidated to two routes, numbers 100 and 300.

According to National Transit Database (NTD) data, ridership decreased from 28,044 to 25,752 between fiscal years 2011 and 2012.

Performance

Figure 3-2 provides an overview of the financial and operating performance of fixed-route services provided by CCART in FY2011 and FY2012 (data for previous years is not considered reliable).

As indicated in the table, fixed-route operating costs have declined during the two years, reflecting the decline in service hours provided. Both ridership and operating costs per passenger also declined during this period, from \$9.93 per passenger to \$9.25. These are still relatively high costs for a fixed-route service. The operating cost per hour for the past two years is quite reasonable in the low \$40 per hour level.

Figure 3-2 CCART Fixed Route Performance

Measure	FY 2011	FY 2012
Operating Costs	\$278,518	\$238,358
Capital Costs	\$0	\$349
Farebox Revenues	\$12,940	\$18,641
Operating Cost/Passenger	\$9.93	\$9.25
Operating Cost/Revenue Hour	\$43.06	\$40.05
Operating Cost/Revenue Mile	\$3.93	\$3.34

Source: NTD

CCART PARATRANSIT

CCART provided two paratransit services: (1) Access service in McKinney, which is the local Americans with Disabilities Act-(ADA) required service, and (2) Countywide curb-to-curb service. Both services were categorized as CCART paratransit operations.

With regard to the Access service, CCART had very loose eligibility screening, based entirely on a doctor's willingness to sign the application form. As a result, CCART's ADA certification was not recognized by DART for that agency's paratransit program. The countywide curb-to-curb service,

now operated by TAPS, was open to the general public, but was promoted as a service to address the needs of seniors and people with disabilities.

Individuals could reserve a trip from 6:00 AM to 3:00 PM on weekdays up to the day before service, and the program experienced very heavy call volumes during the first hour of the service day. Fares for this service are shown in Figure 3-3.

Figure 3-3 CCART Paratransit Fares

Fare Type	Fare
General Public Demand-Response (Curb-to-Curb)	\$3.00
People with disabilities and seniors 60+	\$1.50
Students	\$2.00
Trips to Dialysis Clinics and Senior Center Programs	Free

CCART denied a relatively high number of trip requests. For example, during a three-week period in August 2012, between 140 and 190 trip requests were denied each week. Almost all trip denials are for those trips that are requested by individuals who are not ADA-eligible. The service was usually fully booked a week in advance, but some trip slots become available as individuals canceled their rides. As a result of the long lag time between trip reservation and the scheduled trip date, the system experienced very high no-show and cancellation rates that often exceeded one-third of the total trip requests.

Figure 3-4 provides an overview of the financial and operating performance of the paratransit service provided by CCART in FY 2011 and FY2012.

Many of the trends appear to be the exact converse of the fixed-route trends (Figure 3-2). Overall operating costs and cost per passenger both decreased slightly during this period. The latter figure of \$38.46 per trip is relatively high for a largely rural/semi-urban paratransit program. The significant increase in operating cost per hour is possibly the result of a reporting error.

Figure 3-4 CCART Paratransit Performance

Measure	FY 2011	FY2012
Operating Costs	\$1,402,742	\$1,376,154
Capital Costs	\$761,480	\$4,537
Farebox Revenues	\$62,787	\$36,440
Operating Cost/Passenger	\$41.89	\$38.46
Operating Cost/Revenue Hour	\$36.04	\$60.00
Operating Cost/Revenue Mile	\$3.83	\$3.74

Performance Measures

Figure 3-5 describes the trends in terms of ridership, no-shows and cancellations, productivity and trip distance and length. Ridership reported to the NTD indicate that ridership has

fluctuated in the past three years, with approximately 35,773 annual demand-response trips in FY2012, which was nearly 40% higher than the number of fixed-route riders that year. While no-shows and cancellations remained high at a combined rate of 24%, this was a significant reduction from the 33% in 2010. Productivity was approximately 1.55 trips per hour during this period, which is consistent with a demand-response service that extends over such a large geographic area, with average trip lengths over 10 miles in 2012 and travel times at an average of almost 40 minutes.

Figure 3-5 CCART Paratransit Performance Measures

Measure	FY 2010	FY 2011	FY 2012
Total Trips	39,054	50,616	35,773
% No Show	1.71%	1.46%	2.12%
% Cancellations	31.54%	24.48%	21.57%
Trip/Revenue Hour	1.51	1.63	1.52
Average Trip Distance (miles)	8.67	8.50	10.21
Average Trip Length (minutes)	39.62	36.40	38.91

Common Origins and Destinations on CCART Paratransit

CCART Paratransit service was largely concentrated in the McKinney urbanized area. However, as indicated in the matrix below, there was considerable service from McKinney to other parts of the county, other places in the county to McKinney and Plano, and within other large jurisdictions in the county. The top generators of paratransit trips in the county were McKinney, Allen, and Plano, as shown in Figure 3-6.

Figure 3-6 CCART Paratransit Trip Ends by City, 2011

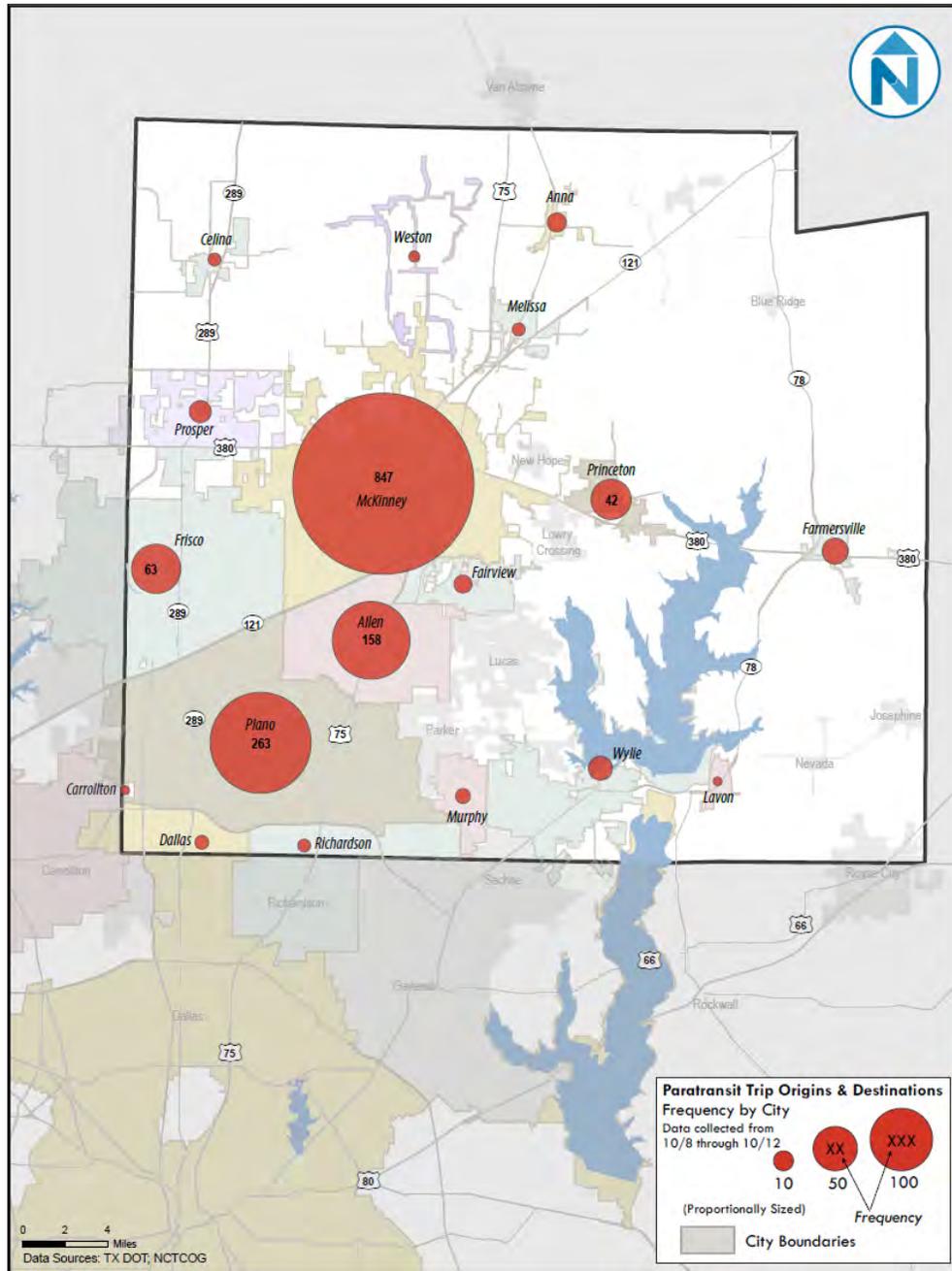
Jurisdiction	Ridership (trips starting and ending)
McKinney	30,375
Allen	7,173
Plano	6,957
Frisco	2,692
Princeton	1,233
Wylie	860
Farmersville	738
Prosper	738

Note: Analysis based on data provided by CCART for FY2011

Paratransit trip origins and destinations by city for one sample week in October 2012 are shown in Figure 3-7. The proportions of trip ends by city are similar to the annual numbers, but the map provides a representation of how these trips are distributed geographically in Collin County.

Figure 3-8 illustrates the extent of inter-jurisdictional travel between various locations in Collin County in FY2011. As expected, there was significant activity between the larger jurisdictions and within McKinney, but there were also many trips *within* jurisdictions such as Allen (1,383), Plano (706), and Frisco (614). These are significant because they are time-consuming for a McKinney-based service, have an impact on overall productivity, and CCART received no local funding from these cities.

Figure 3-7 CCART Paratransit Origins and Destinations by City



2011 data

Figure 3-8 CCART Paratransit Origins and Destinations by City

Pick up City	Drop off City																	Total Pick Up by City
	Allen	Anna	Celina	Dallas	Fairview	Farmersville	Frisco	Lucas	McKinney	Melissa	Murphy	Parker	Plano	Princeton	Prosper	Richardson	Wylie	
Allen	1,383			3	116	2	168	24	1,140	7	1	62	1,201	91	200	39	99	4,536
Anna		70							112	2			2					186
Celina			128						4									132
Dallas	2			19	1				8				53				2	85
Fairview	116			2					10				66					194
Farmersville	2					56	2		304				11	205		1	2	583
Frisco	113					2	614	10	467	2		1	240	3	24			1,476
Lucas	32						13		1				50					96
McKinney	1,076	63	30	11	10	226	733		22,021	258	1		1,569	289	177	5	5	26,474
Melissa	7	5		1			3		250				3					269
Murphy	2								2				100				28	132
Parker	63						1											64
Plano	780			74	28	9	238	33	1,096	4	28		706	7	5	11	215	3,234
Princeton	99						111	4	404				17	3				638
Prosper	210							51	57				11		3			332
Richardson	34						1	1	8				13				1	58
Wylie	101						2				47		338			1	13	502
Total Drop Off by City	4,020	138	158	110	155	409	1,828	67	25,884	273	77	63	4,380	598	409	57	365	38,991

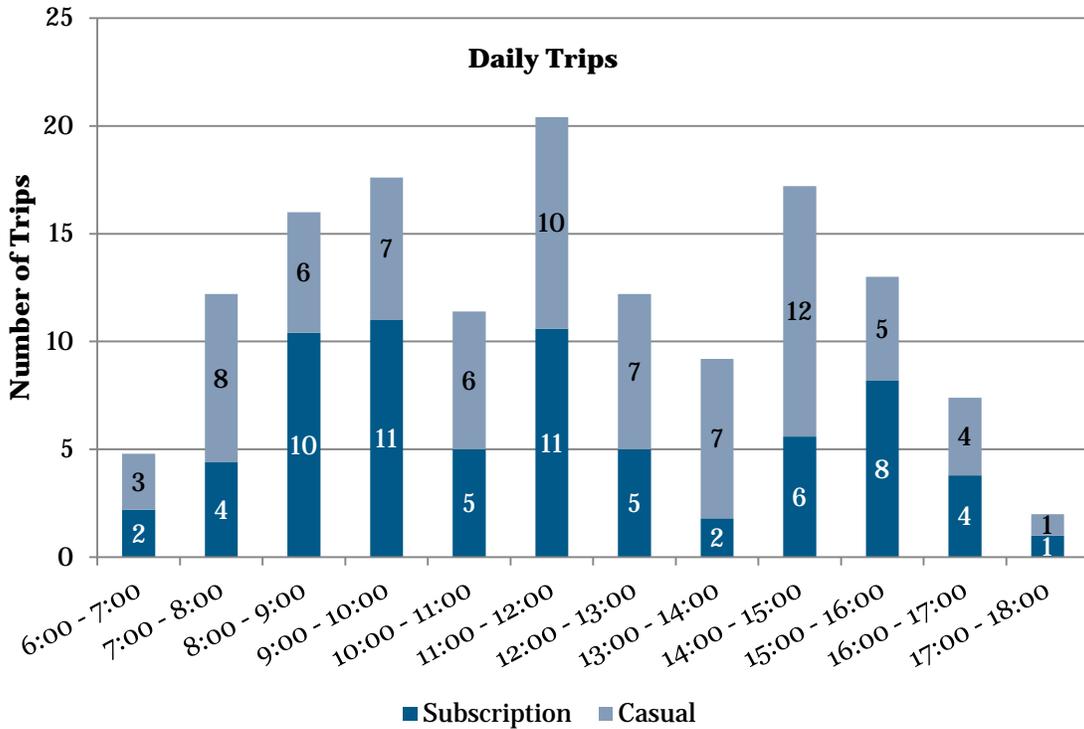
Source: CCART; Note: Trips that originate and terminate within the same city are highlighted.

2011 data

Paratransit Ridership throughout the Service Day

The temporal trends indicated in Figure 3-9 are fairly typical of paratransit programs throughout the country, with peaks in the morning (9:00 to 10:00 AM), midday (which tend to be for nutritional trips), and afternoons (2:00 to 3:00 PM). Rides were nearly evenly split between subscription trips and casual (non-subscription, call to schedule) trips.

Figure 3-9 CCART Paratransit Ridership Trends by Time of Day, Average Weekday



Source: CCART Data collected 10/8/12-10/12/12

Dialysis Trips

Many paratransit programs in the United States are challenged by an increasing number of trips to dialysis clinics, which require more accurate scheduling to fit in with the clinics' schedules for when dialysis machines will be available, and often require greater care for riders who are weak after treatment. While some jurisdictions are attempting to recoup a portion of the actual cost of providing these services, most do not receive more than the prevailing fares. In contrast to most paratransit systems in the country, trips provided by CCART to dialysis clinics were generally provided with no charge to the rider or the clinic, so virtually none of the costs are recouped.

An estimated 2,000 annual trips were provided to dialysis clinics, which was about 5% of the total ridership. Most of these originated in McKinney, but approximately 200 originated in Allen and over 350 in Frisco. The average trip distance for these trips was just over 7 miles.

DALLAS AREA RAPID TRANSIT

Dallas Area Rapid Transit (DART) was created in 1983 when voters in 14 cities and Dallas County approved a one-cent local sales tax. Today, there are 13 member cities, including Plano in Collin County and portions of Dallas and Richardson also in Collin County. The DART service area covers 700 square miles, with an operating budget of more than \$430 million, a bus fleet of 612 vehicles and a rail fleet of 163 vehicles. Systemwide, DART carried 111.8 million passengers during FY 2011.

This section provides an overview of DART's services in Collin County. Because the focus on this study is not on planning for DART services, only general performance information relevant for Collin County is discussed.

DART Facilities

DART owns and operates five primary transit facilities for passengers in Collin County.

Parker Road Station

DART's Parker Road Station is located at Park Blvd. and Archerwood in Plano, and serves as the terminus for the DART Rail Red Line. Several DART bus routes operate to the station, including Routes 350, 410, 452, the DART On-Call North Central Plano service and the Texas Instruments Shuttle. In addition, the station is served by TAPS Texoma Express service from Sherman and the Raytheon Shuttle (and, as of summer 2013, Commuter Connect from McKinney). DART ridership data from October 2011 shows that the Parker Road DART Station represents a significant transfer point for riders on DART fixed route buses. More than 700 daily weekday (average) bus boardings were tallied at the station.

Average weekday rail ridership at the Parker Road station was nearly 3,000 passengers in FY 2011 and dropped only slightly (by about 60 passengers) in 2012.

The Parker Road DART station has about 2,100 parking spaces. DART implemented paid parking at the station for people who live outside of DART member cities (nonresidents) in April 2012. Prior to the paid parking program, the average peak occupancy was nearly 1,900 vehicles; the month after the program was implemented, use of the station by nonresidents parking in the lots dropped by nearly 300 daily cars and continued to decline in subsequent months to more than 400 cars. With the drop in ridership at Parker Road once parking fees were implemented, DART staff saw an increase in ridership at its Bush Turnpike Station, where parking remained free of charge. In September 2012, the average parking occupancy was 1,300, representing only 62% of the lot's existing capacity.

Parking fees for persons who live in non-DART member cities are \$2.00 for up to 12 hours or \$5 for 24 hours. Monthly parking is available for \$40 or \$60 for a reserved parking space. Parking for special events is \$4.00. Nonresidents without a paid parking sticker may be ticketed and fined up to \$50 per incident.

Northwest Plano Park & Ride

DART's Northwest Plano Park & Ride opened in July 2012 and serves commuters from West Plano, as well as points north, with a direct link to downtown Dallas. The facility also is designed to meet the needs of commuters who live in Dallas and have jobs in Plano. The facility offers services on several routes including a new Express Route (Route 208) that was introduced to

provide service to downtown Dallas. Other routes at the facility include 347 from Addison, 452 to the Parker Road Station, 183 from the Addison Transit Center midday, 451 from the Jack Hatchell Transit Center and Forest Lane Station, and two new shuttle services (Routes 346 and 348).

Like Parker Road Station, the Northwest Plano Park & Ride requires persons who live in non-DART member cities to pay a daily fee for parking in any of its 564 spaces, while DART service area residents may park for free (See Parker Road Station above for information about parking fees).

Jack Hatchell Transit Center

The Jack Hatchell Transit Center is located west of I-35E at Gateway Boulevard and 15th Street. The facility has 822 parking spaces, and parking fees are not assessed at this facility. Services at this location include DART routes 451 to Forest Lane Station, 350 to the Addison Transit Center and serving Collin College, and crosstown Routes 451 and 452, as well as the Telecom Corridor FLEX Service. Express Route 210 to downtown Dallas also serves the facility.

DART ridership data from October 2011 shows that the Jack Hatchell Transit Center is a significant transfer point for riders on DART fixed route buses. An average of 545 daily weekday (average) bus boardings were tallied at the facility.

Downtown Plano Station

The Downtown Plano Station is served by the DART Red Rail Line. Unlike the other DART transit facilities in Collin County, the Downtown Plano Station does not have any parking facilities. The facility is served by the East Plano FLEX Service. This station serves about 650 passenger boardings on an average weekday.

Bush Turnpike Station

The Bush Turnpike Station is located within Richardson and is served by the DART Red Rail Line. The facility has 1,193 parking spaces and does not assess a parking fee for persons who live in non-DART member cities. DART saw a jump in parking occupancy at this station when the parking fee program was implemented at the Parker Road Station, from 755 average daily parking spaces occupied in March 2012 to numbers just shy of capacity (1,031) the following month. Average weekday rail boardings at this station are about 1,100.

The station is served by two of DART's FLEX services: the South Plano FLEX Service (Route 843) and the Telecom Corridor FLEX Service (Route 841). It also is a key stop for Route 883, the University of Texas Dallas Shuttle.

DART Services in Collin County

Light Rail

As noted above, DART provides service at three facilities in Collin County. The Red/Orange rail line serves the Parker Road Station, Downtown Plano Station, and Bush Turnpike Station from approximately 4:20 AM to 1:00 AM on weekdays. Total systemwide ridership on light rail was more than 22.3 million in FY 2011, at an average cost per rider of \$5.31. Average weekday ridership systemwide was more than 71,600 in FY 2011.

Fixed Bus Routes

Systemwide, DART operates 114 regular fixed-route bus lines, with more than 11 fixed routes in Collin County, which include a mix of local, crosstown and express routes.

Ridership

While average weekday ridership systemwide is about 126,000, Collin County fixed route-bus ridership is less than 10,000. DART’s FY 2012 cost per passenger was \$6.00 systemwide.

Because the only city exclusively within Collin County in which DART operates is Plano, the consulting team evaluated ridership within Plano. Figure 3-10 illustrates the fixed routes that operate within Plano, as well as those that operate between Plano and another city, arranged by route number. The figure shows the actual number and percentage of total route boardings within Plano, and also illustrates the percent of total passengers who have at least one of their trip ends in Plano.

The data illustrates that Plano is not just the origin for passengers who reside within Plano, but is also an important destination for persons who live elsewhere but travel to Plano for jobs, school, shopping, medical and other purposes.

Figure 3-20 DART Bus Routes in Plano

ROUTE		Weekday Average Boardings for Entire Route	Weekday Average Boardings in Plano	Percent of Total Passengers with a Trip End (Boarding and/or Alighting) in Plano
208	Express Route: Northwest Plano Park & Ride to Downtown Dallas	361	142	78.9%
210	Express Route: Jack Hatchell Transit Ctr (Norman F Whitsitt Pkwy & Commerce Dr) & Ride to Downtown Dallas	303	144	95.2%
346	Suburban Route: Northwest Plano Park & Ride-Tennyson Pkwy-Parkwood-Granite Park	18	18	100.0%
347	Suburban Route: Northwest Plano Park & Ride-Addison Transit Ctr via arterials parallel to North Dallas Tollway	644	124	38.6%
348	Suburban Route: Northwest Plano Park & Ride-JC Penney HQs	121	121	100.0%
350	Suburban Route: Collin College-Parker Rd Stn- Jack Hatchell Transit Ctr -Preston - Addison Transit Ctr	1,025	608	100.0%
410	Crosstown Route: Parker Road Stn-South Garland Transit Ctr via Jupiter	1,203	305	50.8%
451	Crosstown Route: Northwest Plano Park & Ride-Forest Lane Stn-Jack Hatchell Transit Ctr via Coit	1,114	480	86.2%
452	Crosstown Route: Parker Road Station-Northwest Plano Park & Ride-Jack Hatchell Transit Ctr	873	403	100.0%

Source: DART Farebox Data; September 2012 Ridership

Shuttles

Shuttles are also operated within Collin County, including the UT Dallas Shuttle (Route 883) that links Bush Turnpike Station with UT Dallas, and the TI Shuttle between Parker Road Station and Wagner/Chase Oaks. These services are supported by UT Dallas and Texas Instruments, which cover the hourly operating costs by paying DART directly to operate these services for them.

FLEX Routes

DART operates three FLEX routes within Collin County. All of them operate weekdays, and the East Plano service also operates Saturdays.

The East Plano FLEX route serves an area bounded by Westwood Drive to the west, Park Blvd. and Royal Oaks Drive to the north, Valencia Drive to the east, and Capital Ave. and Summit Ave. to the south. Service operates along Shiloh Road between 18th Street and Park Blvd., along Park between Shiloh and Rigsbee Drive, and Rigsbee between Park and 18th. In September 2012, this route carried 5,829 weekday passengers, an average of 307 per day. Saturday ridership for the month was 764, or 153 per Saturday.

The South Plano FLEX service operates in the area bounded by the North Central Expressway to the west, 13th Street to the north, North Star Road to the east, and Infocom Drive to the south. Service operates to/from the Bush Turnpike Station. In September 2012, the South Plano FLEX service carried 1,501 weekday passengers, an average of 79 per day.

The Telecom Corridor FLEX service area is bounded by Marsh Lane on the west, Park Blvd. and Plano Parkway on the north, Moroney Drive on the east and Lookout Drive and President George Bush Turnpike on the south. Service operates to/from the Bush Turnpike Station. September 2012 ridership data shows the route carried 2,761 weekday passengers, an average of 145 per day.

DART On-Call

DART On-Call service is a general public demand response service that operates within North Central Plano, in an area bounded by Legacy Drive to the north, Avenue K to the east, Parker Road to the south, and Custer Road to the west. This area is unserved by other transit routes. For the month of September 2012, the North Central Plano DART On-Call service carried 1,966 passengers, an average of 103 per day.

Individuals may schedule a trip on the On-Call service up to one week in advance, or as soon as one hour before the trip request.

DART On-Call will honor midday and two-hour passes (see next section), but only local one-way fares and day passes may be purchased on board. The DART On-Call one-way fare is \$2.50 for the general public or \$1.25 for seniors, people with disabilities and students (elementary, middle, high and college students).

DART Paratransit

DART offers paratransit services to eligible persons with an ADA-certifiable disability anywhere in Plano, Richardson, Dallas, or the rest of the DART service area. The service is not available elsewhere in Collin County beyond the DART service area.

DART Paratransit provides curb-to-curb access with vans and taxi cabs, and has more than 11,200 eligible users throughout the entire DART service area (as of September 2012).

Systemwide, ridership on paratransit for FY 2011 was 790,000. Based on DART data, the cost per passenger on paratransit in FY 2011 was \$47.12, higher than CCART’s cost per passenger, but covering a much larger service area and providing significantly more service.

Fares

Within DART’s service area, the fare structure is tiered depending on the services used (and thus, the distance an individual travels). The regular local fare is \$2.50, good for up to two hours of unlimited rides (a reduced fare for seniors, youth, and people with disabilities is \$1.25), but passengers riding midday only may pay a fare as low as \$1.75. Fares are shown in Figure 3-11.

Figure 3-11 DART System Fares

	Local (Rail, Local Bus, and Flex Service)	System (DART services and TRE)	Regional (DART services, The T, TRE and DCTA)	Reduced (Senior, Disability, Youth, Student)
Two-Hour Pass	\$2.50	\$3.50	\$5.00	\$1.25
Day Pass	\$5.00	\$7.00	\$10.00	\$2.50
Midday Pass (9:30 AM to 2:30 PM)	\$1.75		\$3.50	
7-Day Weekly Pass	\$25.00		\$50.00	
Monthly Pass	\$80.00	\$100.00	\$160.00	\$40.00
Paratransit	\$3.00			

Source: DART

Plano Senior Rides

In addition to traditional fixed routes, FLEX routes and On-Call services, DART supports the City of Plano in providing transportation services for seniors. Services are funded by DART with a local match from Plano and a grant to the Plano Wellness Center for Older Adults.

The Plano Senior Rides Program is a supplemental taxi voucher program. The taxi program allows Plano residents age 65 and older to pay up to \$25 for taxi vouchers worth \$100 (participants request voucher booklets for a \$2.50 co-pay per book valued at \$10). Vouchers may be applied toward taxi fares for rides that are reserved via Irving Holdings, which dispatches for four different taxi providers.

Eligible seniors must be registered for the program via the Plano Wellness Center. Neither persons certified for DART Paratransit nor persons who live in Plano’s public community homes (which provide their own transportation services) are eligible for the program. As of November 2012, 77 individuals were registered for the program, with 48 having purchased taxi vouchers in the previous three months.

TEXOMA AREA PARATRANSIT SYSTEM/TAPS PUBLIC TRANSIT

TAPS is a political subdivision of the State of Texas which provides a variety of transportation options to residents of six counties in north central Texas. The agency, which currently has a budget of \$11.9 million and almost 100 vehicles in its fleet, has implemented transit service in north central Texas, and began operating in Collin County in 2013. Fixed-route ridership \

increased from less than 100,000 trips in 2009 to over 400,000 anticipated in 2012. TAPS also operates a demand-response transportation service in Grayson, Fannin, Cooke, Montague, Clay, and Wise Counties. According to TAPS management, all services have been designed with significant local input to reflect the specific needs in each area.

TAPS' limited commuter service from outside of Collin County makes three stops in the county. Two of these stops are not open to the general public (Tex Express to Raytheon, and the St. Mary's College service), and the third is at the Parker Road DART Station in Plano. Thus, an individual boarding at the Parker Road Station has closed-door service to Grayson County, unless he or she is a Raytheon employee. TAPS' new Commuter Connect service provides express bus service from McKinney to DART's Parker Road Station.

In response to requests from potential riders, TAPS administration and CCART administration had discussed possibly pulling off Highway 75 on TAPS' Sherman-Plano run, but this option was not been pursued. However, it is important to note that as of November 14, 2012, according to TAPS' Executive Director, TAPS was in an "overmatch" fiscal situation (the agency exceeded the local match required for federal funds), whereas Collin County's transit operation has been faced with a situation in which it has not been able to use already appropriated federal funds due to a lack of local matching dollars.

OTHER TRANSPORTATION PROVIDERS

Other transportation providers offer services to specialized populations in Collin County, and in some cases, to the general public. In some cases, these represent additional transportation options available to certain communities, and could potentially be incorporated into a comprehensive countywide transportation program.

For-Hire Vehicles (Taxi and Limousines)

Several taxi providers operate service in Collin County, and several have local offices and dispatch centers in the county. A partial list of some of the providers serving Collin County, based on data from NCTCOG and in-county taxi listings from chambers of commerce includes the following:

- Alamo Cab
- Allen Taxi Cab
- Ambassador Cab
- Call My Driver
- Checker Cab
- Cowboy Cab
- Dallas Taxi
- Diamond Taxi
- DFW Reliable Taxi
- Eagle Cab
- Executive Taxi Freedom Cab
- Golden Cab
- Jet-Taxi
- King Cab
- Kwik Taxi
- Legacy Taxi
- Star Cab
- Taxi Dallas
- Texas Cab
- Wylie Taxi
- Yellow Checker Cab

In addition, 116 limousine companies are registered and authorized to operate to and from Collin County destinations. Of those with a registered business addresses in Collin County, four providers have a business addresses in Allen, nine in Frisco, two in Murphy, one in McKinney, 30 in Plano, one in Sachse, and three in Wylie.

NCTCOG estimates that nearly 8,000 trips are made each month via taxi to/from locations in Collin County.

Other Private Transportation Services

In addition to taxi, some private for-profit providers are based in Collin County, and provide limousine service or specialized services. Most are general public services, and many serve primarily airport trips (Super Shuttle) or transportation needs for special events. One McKinney-based provider, Take Care Shuttle, operates service strictly for children, designed to fill the gaps in transit, and specializes in after-school and extra-curricular transportation. A similar service is available in Frisco – the Frisco KIDS Shuttle operates before and after school.

The Frisco Shuttle is a private for-profit operator of transportation services in Frisco that provides a commuter link to the Northwest Plano Park & Ride, which is served by several DART routes, including those offering express bus services to downtown Dallas. Passengers are charged \$15 per one-way trip to Plano from Frisco. The Frisco Shuttle is also available for local transportation services within Frisco and to and from other regional destinations.

Some in-home care services and transportation is provided by Home Helpers Easy Riders Transportation Service in Plano, and some assisted living facilities also provide transportation services for their residents.

Regional/National Carriers

There is no Amtrak service through Collin County. Greyhound buses depart twice daily in the northbound direction from McKinney to Tulsa, Oklahoma, and twice daily southbound to Dallas. The schedule to Dallas would not allow most people to use Greyhound service for their commute, with trips departing McKinney at 9:50 AM and 4:20 PM, and trips arriving from Dallas at 7:35 AM and 1:45 PM. The schedule effectively allows for someone to travel from McKinney to Dallas on a daytime trip and spend about two hours there. The stop location is the McKinney Convenience Store at 1400 N Central Expressway.

Nonprofit, Public and Human Service Transportation Providers

A number of churches and schools own and operate vehicles for their congregants or students. In addition, some public agencies, such as Collin County's Veterans Services program, will provide occasional, informal transportation assistance as needed using staff vehicles.

The Samaritan Inn, a McKinney-based program serving homeless residents, operates a 21-person bus that is used to transfer clients from their facility in McKinney to DART in Plano to access jobs, and other services as needed. Plano Community Homes, which provides housing for seniors, also operates transportation services for residents.

Lifepath, serving people with developmental and behavioral disabilities, owns 21 vehicles: the largest non-school based human service transportation fleet in the county. These are operated primarily by the agency's residential staff to transport clients to appointments, jobs, and other services.

Vanpools

Although not a transit mode, vanpools represent an important piece of Collin County's transportation network because they afford access to major employers outside the county, and also to major employers within Collin County. Based on NCTCOG data, 34 vanpools travel to employment destinations in Collin County. Although five of these originate in Collin County, most of the others come from Dallas County, although one travels from Denton County. An additional 39 vanpools travel from Collin County to work destinations elsewhere in the region, with the majority going to Dallas County, but seven serving Denton County, six operating to Grayson County, and one operating to each of the following counties: Rockwall, Fannin, Kaufman, Raines, and Tarrant.

Vanpools and carpools may serve as a useful tool for Collin County commuters to reach work destinations. Expansion of this type of shared-ride commuter transportation may be a valuable piece of the future transportation network in Collin County.

CONCLUSION

For a county with a 2012 population exceeding 800,000, Collin County has very few public transportation options, particularly outside of the Plano area which is relatively well served by DART services. Public transportation is complemented by a limited number of private and nonprofit services, but these are generally not available to the general public, and are very limited in scope.

While land use development in the county reflects the fact that the vast majority of the population has access to a car, for those who do not, the lack of transportation represents significant mobility challenges. In particular, seniors, people with disabilities, and low-income residents who do not have access to a car for all their trips are most impacted by the lack of comprehensive transportation.

The reduction in fixed-route services in the McKinney area under CCART resulted in a significant reduction in ridership. Simultaneously, the fixed-route service offered by TAPS just to the north of Collin County, and now within the county, expanded dramatically during the same period. This suggests that the provision of comprehensive, well-planned public transportation does have the potential for attracting ridership in the next few years, even in largely low-density portions of Collin County.

4 STAKEHOLDER INTERVIEWS

To initiate the Transit Needs Assessment and Planning Study for Collin County, the consulting team conducted a series of interviews. The purpose of the meetings was to understand the range of issues and concerns about existing transit services, transportation gaps and service needs. The intention of this summary is to represent the array of concerns voiced by staff representatives of Collin County’s various jurisdictions, political leaders, leaders of advocacy and community booster organizations, employers, and community members.

Interviews were conducted in person and by telephone with individuals and organizations selected by the study’s Project Review Committee. Stakeholders were assured that their answers were provided in confidence.

MAJOR TRANSPORTATION CHALLENGES FACING COLLIN COUNTY

Stakeholders were asked to share their perspectives on major transportation challenges facing Collin County and the region. They were not asked to comment specifically on transit, but rather on transportation challenges in general. The primary issues identified most often by stakeholders included the following:

- Traffic congestion
- Poor quality and availability of public transit services in Collin County
- Limited transportation options for seniors, low-income residents and people with disabilities
- Planning is done exclusively for automobiles
- DART rail service terminates in Plano

These comments generally reflect the findings of data and comments from citizens at public meetings. Many stakeholders acknowledged that transit has some value in the community, but that the regional mindset is still focused on the automobile and that anything less than regional rail service is unlikely to be considered an effective solution for Collin County.

Stakeholders talked a lot about CCART services, which no longer operate in the county, having been replaced by TAPS. Although some identified positive characteristics of CCART – including the fact that service is available, that it serves key destinations in McKinney such as Wal-Mart and the First Baptist Church, and that fares are reasonable – many comments about the agency acknowledged that it simply did not provide enough service. Some comments about the transit agency and its operations were quite negative, with one stakeholder noting that “there is not an effective, efficient or reliable means of transportation” in Collin County, and another being less diplomatic and stating simply that “CCART is terrible,” a sign of frustration with limited services. When asked to qualify their statements about CCART, stakeholders talked about organizational

issues, pointing to past management problems, as well as operational issues, such as capacity of the agency to take reservations for service, travel times, service reliability and availability, and other factors including marketing and customer service. Many stakeholders were aware that there had been a management change at CCART, and some expressed optimism that operations might be improved.

One of the key perspectives voiced by both elected officials and human service agency representatives was that this study would, presumably, address one of their primary concerns: that there is little understanding of the level of existing transportation need or the level of resources that should be invested in Collin County to address those needs.

A selection of the comments about key challenges is included in Figure 4-1.

Figure 4-1 Sample Stakeholder Comments about Key Challenges

Traffic Congestion	Allen has explosive population growth.
	This is Texas and almost everyone has a car. The biggest problem is parking. It's free everywhere.
	The freeways are already congested. What will that be like in a few years?
Quality and availability of public transportation	CCART is terrible. They say they do not have any more capacity.
	The biggest issue is that only Plano has DART.
	It's very difficult to navigate the existing services and the system; CCART stops at our facility, but it is not a satisfactory means of transportation.
	Even if CCART went back to be the way it used to be, would be a huge improvement.
Limited transportation options for seniors, low income residents, and people with disabilities	Mostly older people have limited options.
	Most veterans in Collin County don't have a problem getting to the VA or different clinics because they have people who will drive them or some of them can drive themselves.
	Rural nature of the county means there are lots of little towns. It's hard for those people to get to our facilities.
	There is a lack of transportation.
	We've had testimonials of people riding bikes long distances. If you don't have a car, there's no other way to get around.
Planning is done exclusively for automobiles	The County is interested in multimodal transportation; the investments are in roads.
	Transit might have some benefits for college students in the future, as enrollment grows. But right now, people are driving so we are building more parking.
	No formal carpooling exists in Collin County.
DART rail service terminates in Plano	The lack of DART service north of Plano is a huge issue.
	I'd love to see DART come to McKinney.
	Developers are interested in transit. The Premium Outlets supports picking people up at Parker Road to take them to the shops. We're also hearing from restaurants that they need transportation for employees to get to work.

KEY TRANSIT-SPECIFIC NEEDS

Stakeholders were asked what they consider to be the primary transit-related needs. Based on variety of comments and opinions expressed by stakeholders, the following were identified as the key needs/issues:

- **Service for transit-dependent populations.** Noted by the majority of stakeholders, a need exists to provide transit services that meet the demands of older persons and people with disabilities. Although most of the stakeholders indicated some familiarity with CCART, several said they believed the service did not have the capacity to serve their clients'/consumers' needs and/or the service was not available to them (including representatives from smaller cities and rural areas). One human service representative said, "I think they might limit ridership depending on a [rider's] destination." Some stakeholders talked about the need for reduced fares and increased subsidies for CCART.
- **Commuter transportation.** Serving the needs of commuters was among the most frequently noted service request. Stakeholders shared information about their commutes (e.g., one individual who lives in Ellis County, drives 48 miles each way to and from work, and discussed traffic congestion problems), and talked about the need for a transit link to the Parker Road DART station, especially from McKinney and Allen. At least a couple of human service agencies are operating their own buses to take people to DART. One stakeholder noted, "We can no longer add capacity to our roads, so transit will be important, and the mindset in the county is changing." Several people indicated support for HOV lanes, although one stakeholder expressed annoyance with the preference given to carpoolers. Stakeholders also talked about the urgency to provide transit to get people to jobs in Collin County, noting that there is not a sufficient low-wage workforce that resides within Collin County for retail and other service jobs. According to stakeholders, these individuals need access to Collin County jobs from Dallas County and elsewhere.
- **DART service improvements.** DART paratransit is used by people with disabilities in Plano and represents an important mode for access. Stakeholders generally reported satisfaction with DART paratransit: that on-time performance has improved and service is reliable. Stakeholders were also pleased with the variety of services available to transit-dependent populations, although some talked about the need for DART fixed route service improvements (additional routes and better frequencies). Certain stops were identified as being inaccessible: without sidewalks, ramps, or a crossing signal.
- **Improved services in McKinney.** Because McKinney is the only city north of Plano to offer local transit service, stakeholders commented on the insufficient funding provided by the City of McKinney to operate that service. Many of the people interviewed in McKinney were critical of the city's lack of support for a more robust local transit operation, and a few of them pointed to places like Plano and Denton as models of support for transit. Others said they thought McKinney would support more transit once officials have a better handle on needs.
- **Transportation for special events.** A few stakeholders talked about the value of transit service for access to baseball games, concerts and cultural activities in Dallas, and evening/social activities.
- **Coordination.** Some stakeholders acknowledged that there are few bus routes today and additional funding for transit is likely to be limited. As a result, some said alternatives to traditional transit need to be found by coordinating the few agency-

- provided operations, as well as a way to link cities north of Plano with DART services in that city.
- **Other transit service needs.**
 - **Information for policymakers about transit.** Some elected officials and others said they were disappointed with bus transportation options in Collin County, but talked about the lack of data-driven information to figure out how to plan for service to get people where they need to go. They mentioned CCART did not report its performance on a regular basis.
 - **Improved transit marketing.** Persons interviewed said transit information, especially outside of Plano, is not easy to access. CCART had no web-based information and their materials were not regularly updated. Several human service agency representatives said that CCART did not provide outreach to them.

Some stakeholders pointed to examples of what they see as possible models for Collin County, including the expansion of DART, while others gave examples from their travel overseas, noting the success of European communities in providing extensive transit service in rural areas and smaller cities, as well as comprehensive regional rail operations outside of major urban areas. Several stakeholders mentioned what one stakeholder called the “hypocrisy” of DART for charging residents of non-member cities to use transit, either with parking fees or proposed user fees, and talked about the need for more regional cooperation and regionalized service delivery.

Other stakeholders discussed transportation planning fatigue, noting they had been trying to implement local and regional transit services for more than a decade, and were often critical of local jurisdictions and Collin County for not taking a proactive approach to plan for future transportation options.

BUILDING SUPPORT FOR TRANSIT

Of the various stakeholders interviewed, representatives from one city that is nearing build out were the most forthcoming with regard to the value of transit service, noting that new residents move there and wonder where the transit is and where the taxis are. As that city completes the process of investing its sales tax dollars in infrastructure-related economic development projects, city staff believes elected officials will consider shifting how those funds are used to support transit services.

This potential for local financial support was not voiced by representatives from most of Collin County’s cities, especially some of its smallest and fastest growing. In fact, many stakeholders indicated they do not envision additional public funding support for transit in Collin County, especially from cities or the County, with nearly one-half of the stakeholders commenting about a lack of political interest in transit services. Even still, it was acknowledged that public funding is important, and that transit providers need to secure local and state funding. Several people talked about the challenge of competition, from an economic development standpoint, among cities without DART, with one person noting, “McKinney has other priorities [than transit], with building the infrastructure and for now, the city needs to attract the tax base to offset the tax burden on residents.” A similar perspective was echoed in other cities.

Key observations by stakeholders were that political support will be challenging in the fast-growing cities because their focus is on growth, assuming relatively high-income residents who would have no interest in transit service, and with a perception among Collin County elected officials that transportation for transit-dependent residents is best served by private enterprise;

that funding, in general, is going to be challenging because almost all cities are collecting 4A and 4B sales tax revenues, have no flexibility to collect other sales tax revenue, and an ad velorum tax for transportation would be unpopular; and that public support is mixed regarding transit needs and potential transit service goals. Sample comments about building support for funding and operating of transit are included in Figure 4-2. The survey data described in Chapter 6 provides more information about public support for transit.

Figure 4-2 Sample Stakeholder Comments about Building Support for Transit

Political Support	The overarching piece of the equation: there is not the political will to pay for rail or local transit.
	Would have to have a really strong story - very strong – to channel more 4A-4B funding into transit.
	The people who need transit are lower income and a payment for transit would be a burden. But this is a conservative county that wants to spend minimally on transit.
	Unless it's mandated by the State, the Collin County Commissioners Court would not be supportive of transit.
Funding Sources	If the dollars were to come from anywhere, we would have to justify the return on investment.
	Bigger cities like Frisco, McKinney and Allen – not Wylie as much – are communities that [have the resources and] could afford some investment in public transit
	We need to be sober about how we invest in transit.
	Some of the cities might be supportive: they have CDBG funds that could be used if someone could sell transit as economic development.
	We tried to pass a bill for locals to vote a one cent sales tax to fund transit, but you're not going to get a local options tax.
	Right now there is not only not a funding mechanism, but there has not been a meeting of the minds. Transportation is the answer [for regional cooperation] because it is an equalizer and will take pressure off cities trying to get things for themselves.
Public Support	You need a champion to use the economic development funds for transit. The majority of people in Allen would not see the need for transit.
	We get calls all the time to get people somewhere and we have to tell them there's no service available. I think they're surprised.
	You should work with the chambers of commerce. They are the ones that make things happen politically.

The consulting team asked stakeholders to identify funding opportunities that would benefit potential mobility options in Collin County. Although a few individuals suggested there might be opportunities to get funds from the private sector, several noted the likelihood is limited. Certain private employers were suggested as potential funders if they were to encounter difficulty recruiting employees due to a lack of commuter transportation, but stakeholders generally said

they would not expect private employers to fund transportation to serve the needs of seniors, people with disabilities, and others with limited transportation options. It was suggested that Collin College might have an interest in transit, but stakeholders from the college said that was untrue: Collin College has invested a lot in parking facilities, and almost all of their students drive, except to their campus in Plano where some use DART. When asked whether student fees might be used to help fund transit, essentially offering enrolled students a transit pass subsidized by fees collected from all students, stakeholders indicated they believed neither administrators nor students would be supportive.

Although there was significant agreement that public support and funding will be a challenge, there was also an acknowledgement from most stakeholders that Collin County's needs cannot be met without public dollars.

DEVELOPMENT AND OTHER IMPACTS

Persons interviewed provided information about their organizations and plans for expansion (or contraction). Staff from cities and public agencies provided the consulting team with information about future development corridors which, depending on their value for this study, will be considered in the development of service alternatives.

Key issues discussed included the following:

- Continued residential development in Celina, McKinney, Allen, Frisco and Wylie (and concerns about a jobs-housing imbalance in the short term in some of the fastest growing cities).
- More intensified development along Highway 121, which may become an important employment and entertainment corridor.
- Apartment construction in Plano, adjacent to the Collin College Spring Creek campus.
- New development along Highway 75 to the north of Collin County.
- Expectations for a significant increase in highway traffic over the next ten years.

GOALS FOR THIS STUDY

Persons who were interviewed were asked what they hoped might be an outcome of the effort. The answers were diverse, but are summarized by theme.

- **To change the way transit is organized and administered in Collin County.** Stakeholders suggested the need for an organization other than CCART for managing transit in Collin County.
- **To increase transit ridership on existing services.** Expectations include identifying strategies to increase the use of transit and its effectiveness through advertising, rebranding, and partnering with private sector groups and other public sector organizations.
- **To implement new/expanded services.** Suggestions included paratransit service expansion (more vehicles, more capacity and more availability), the introduction of fixed routes in the rural communities so that people will have intercity access, more local fixed routes in McKinney and Plano, and some modest proposals like local on-call services in the communities without transit (provided by buses, taxis, or human service operators).

- **To take a more regional approach to transit.** DART is viewed as the regional provider by many of the stakeholders, some of whom did not understand why DART is not available throughout the county (they did not understand the funding mechanisms). Some people expressed frustration that there is not a regional approach in place to plan for transit: “We need to lay the infrastructure so that when transit comes, we can capitalize off the economic development.”
- **To find solutions to enhance coordination.** Stakeholders also talked about the need for coordination, getting support from a regional group of organizations and individuals interested in an investment in a better transportation system. Individuals also insisted that CCART and DART should be able to operate beyond current boundaries. One stakeholder noted that CCART, DART and TAPS need to have better working agreements.
- **To plan for long-term growth and future transit demands.** Although the focus of this study is on the short-term, many people talked about the need for DART rail to go north of Plano (“All the way to Sherman,” according to one stakeholder).
- **To evaluate different ways to provide transportation services.** Some people said they favor rail and bus service, but were interested in what taxis or private providers might offer. A few people who were concerned about an expansion of government services noted that the potential for contracting for service should be considered in this study. DART’s mobility management efforts were acknowledged, and one person discussed DART’s “interest in shifting resources to community organizations.”
- **To evaluate fare alternatives for transit-dependent populations.** Some transit fares are deemed high. Ideas included a voucher program for individuals who need assistance, and reduced fares for seniors and youth riders.

Other expectations of the study, not related to these primary themes, included an approach to improve Medicaid transportation, an outcome that addresses Collin County’s air quality problems, and interest in eliminating HOV lanes.

CONCLUSION

The Project Review Committee identified stakeholders to provide a diversity of insight that would reflect the concerns of the community at large. These individuals were relied upon to describe the “pulse of the community,” but do not necessarily represent the full range of concerns among the citizens of Collin County. Stakeholders offered a wide array of ideas and suggestions about Collin County’s transportation future.

The comments suggest that focusing on mobility efforts to serve the needs of people who have limited transportation options is a transportation priority, but to achieve public support, may need to be paired with some efforts to offer commuter transportation service or local fixed-route services that appeal to higher income residents. If transit is seen as an economic development tool (creating livable communities, encouraging job development, etc.), then it may have a greater chance of achieving public support from Collin County residents than a service that is perceived as a “safety net” for people without their own cars. This will be a difficult balance to strike, and substantiates an approach to developing transit alternatives in Collin County that serve as building blocks to possible future commuter services and integration with DART.

One stakeholder summed up the consensus about services that target the general population: “A lot of people enjoy the time to themselves in their car. Transit and carpooling are not part of the Texas mindset. Only gas prices will encourage change.” Nevertheless, there was a sense that a financial support structure for transit will likely be necessary.

5 COMPARING CCART AND OTHER AGENCIES: ADMINISTRATION AND PERFORMANCE

As Collin County grows quickly and transit needs are identified, one of the critical elements may be future models for transit governance, administration and staffing of transit services. This chapter serves two purposes: (1) to compare governance, management and staffing models at a sample of other transit providers with the previous structure of CCART and (2) provide performance comparisons for CCART and peer transit operators to understand how similar/dissimilar CCART's ridership and cost characteristics were to those elsewhere. It is important to note that this peer comparison was prepared prior TAPS' assumption of transit service operations in Collin County. Information about TAPS does not include service operating today in Collin County.

SELECTION OF COMPARATIVE TRANSIT PROVIDERS

The first step in this review was to identify a number of transit providers that would provide useful information regarding potential service models for Collin County. Peer agencies were chosen because they were generally of similar size and scope to CCART, had some similar characteristics to Collin County, or represented varying types of governance and organizational alternatives.

Based on input from NCTCOG staff and a preliminary review of a large group of similar transit systems, seven peers in Texas (and one also serving Oklahoma) were identified, as well as one in Virginia:

- Arlington Transit (ART), Arlington County, Virginia
- Denton County Transportation Authority (DCTA), Texas
- Capital Area Rural Transportation System (CARTS), Texas
- Texoma Area Paratransit System (TAPS), Texas
- Public Transit Services (Palo Pinto, Parker and Jack County), Texas
- Harris County Transit/Harris County Rides, Texas
- Brazos Transit District, Texas
- Colorado Valley Transit District (CVTD), Texas

These agencies present a mix of Transit Districts, independent agencies, and County departments. Some are privately contracted and others publicly operated, and they operate a wide variety of fixed routes and demand-response services. A descriptive summary of the selected systems is shown in Figure 5-1.

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Figure 5-1 Overview of Peer Transit Providers (2011 Data)

Location	Provider Name	Organizational Overview	Service Area (sq mi)	Service Area Population
Collin County, TX	CCART	<ul style="list-style-type: none"> ▪ Housed within the Collin County Committee on Aging (CCCOA), a nonprofit organization ▪ CCCOA had an 11-member Board, responsible for all of the agency's functions, including transit. ▪ Day-to-day operations were managed by the CCART Program Director, who works under the agency's Executive Director. ▪ Operations were managed by CCART staff; maintenance is contracted 	886	812,226
Arlington County, VA	ART	<ul style="list-style-type: none"> ▪ Housed within the County's Environmental Services Department ▪ Governed by the five-member Arlington County Board ▪ 15-member Transit Advisory Committee appointed by the County Manager provides additional policy oversight ▪ Managed by County staff; the Transit Bureau reports to the Deputy Director of Transportation and Development within the Department of Environmental Services ▪ Operations and maintenance are provided by a contractor (Forsythe Transportation) 	26 for fixed routes; ADA paratransit includes multiple counties	210,000
Brazos Valley, TX	Brazos Transit District	<ul style="list-style-type: none"> ▪ Governed by a 7-member Board of Directors ▪ 10 administrative staff positions ▪ 90 staff members dedicated to operations and maintenance 	74	132,500
Bastrop, Blanco, Burnet, Caldwell, Fayette, Hays, Lee, and non-urbanized areas of Travis and Williamson, TX	CARTS	<ul style="list-style-type: none"> ▪ Governed by a Board made up of a member from each of the nine Commissioners Courts ▪ Regional Planning Groups provide guidance and input ▪ 12 full time staff members for Administration, 105 full-time employee equivalents (FTEs) for Operations, 6 FTEs for Maintenance, 16 FTEs for Call Center. 	~6,200	427,869
Colorado Valley, TX	CVTD	<ul style="list-style-type: none"> ▪ The systems' basic form of governance is a Transit District and Nonprofit ▪ Governed by 8-member Board of Directors ▪ There are 2 full time staff members ▪ The Executive Director is responsible for supervision and oversight of operations and maintenance 	3,220	117,124

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Location	Provider Name	Organizational Overview	Service Area (sq mi)	Service Area Population
Denton County, TX	DCTA	<ul style="list-style-type: none"> ▪ Governed by a 14-member board. Large cities, small cities and at-large members serve 2 years ▪ The Board is supported by a professional staff, headquartered at DCTA's administrative offices in Lewisville. ▪ The president oversees the day-to-day operations of DCTA and implements policies set forth by the Board ▪ Bus and paratransit operations are conducted under a contract with First Transit. Rail operations are provided under a contract with Herzog Transit Services, Inc. 	157	234,552
Harris County, TX	Harris County Transit	<ul style="list-style-type: none"> ▪ Housed within the County's Community Services Department Transit Division ▪ Governed by a 5 member Board: 4 County Commissioners and 1 County judge ▪ RIDES Program has an advisory council ▪ Harris County manages all contracts, but all services are provided by subcontractors ▪ Subcontractors are chosen through a competitive RFP process ▪ Funded by New Freedom grant and utilizes farebox revenue generated from ticket sales purchased by nonprofits, municipalities and private dollars as local match 	200	350,500
Palo Pinto, Parker and Jack County, TX	PTS	<ul style="list-style-type: none"> ▪ PTS is Transit District governed by 7-9 Board members ▪ Management and operations is within the agency itself and is coordinated by the director of operations 	2,765	154,082
North TX and Southeastern OK	TAPS	<ul style="list-style-type: none"> ▪ The TAPS Board of Directors consists of a 10-member board. ▪ The Board has fiduciary and public oversight responsibility and meets on a bi-monthly basis ▪ The agency is managed by a team of 14 members ▪ TAPS has a total of 136 staff members (105 drivers and 12 dispatchers) 	5,624	282,827

The review consisted of a two-step process. First, a questionnaire was developed to gather information about each agency. To understand the key features of each agency’s structure, background research was conducted. Data was collected from a number of sources including the National Transit Database (NTD), agency websites, and other agency-related materials. The information was then sent to contacts at selected peer review agencies to check for accuracy. Step two involved sending a questionnaire to a contact at each agency and then conducting a follow-up telephone interview. In most cases, interviews were conducted with staff in planning, operations and maintenance, or financial departments.

While the subsequent sections review how other transit systems compared to CCART, or Collin County in general, more detailed information about CCART’s former operations is included in Chapter 3.

GENERAL SERVICE CHARACTERISTICS

To understand the transit services operated by each of the selected peer transit providers, the figures that follow provide a general description of the transit services (Figure 5-2) as well as the operating statistics (Figure 5-3) for each of the peer transit providers. A comparison is provided between the data for the fixed-route services and the demand-response services for each transit provider.

Figure 5-2 Peer Transit Providers: General Service Description

Peer Transit Provider	General Transit Service Description
CCART	CCART provided public transportation in all areas of Collin County. CCART operated two fixed routes in the City of McKinney and a curb to curb service throughout Collin County.
ART	ART operates within Arlington County, Virginia and supplements Metrobus service and provides connections between local neighborhoods and Metrorail and Virginia Railway Express stations. ART also provides paratransit service within Arlington County.
Brazos Transit District	Brazos Transit District is a general public transportation provider that operates fixed routes, waterway cruisers, paratransit service, demand-response service, and park & rides. The District was founded in 1974 and serves sixteen counties in Central and East Texas. The District is a political sub-division of the State of Texas.
CARTS	The Capital Area Rural Transportation System (CARTS) provides transportation to the one hundred and twenty-three communities in nine counties within their service area. The nine counties served by CARTS are Bastrop, Blanco, Burnet, Caldwell, Fayette, Hayes, Lee, and non-urbanized areas of Travis and Williamson Counties. CARTS provides fixed routes, demand-response service, and community shuttles to rural areas outside of the Capital Metro service area.
CVTD	Founded in 1986, Colorado Valley Transit District (CVTD) is a public transportation provider which serves a four-county rural region west of the Houston area within the 13-county Houston-Galveston Area Council (H-GAC) planning region. CVTD’s service area covers 3,220 square miles in Austin, Colorado, Waller, and Wharton Counties. CVTD provides weekday demand-response and deviated fixed route transit services within and between each county in the service area. In addition, CVTD provides scheduled trips on selected weekdays from Austin, Colorado, and Waller Counties to the Katy area.

Peer Transit Provider	General Transit Service Description
DCTA	Local fixed routes in Denton and Lewisville and flex route in Highland Village; Campus-oriented fixed routes to UNT and NCTC; Commuter Express between Denton County and Downtown Dallas; Access paratransit in Denton, Lewisville and Highland Village.
Harris County Transit/Rides	Harris County's program is designed to fill the gaps where Houston METRO is not available and to coordinate many transportation providers to deliver basic mobility for people with disabilities, seniors, and low-income residents.
PTS	Public Transit Services provides demand-response, job access/reverse commute, educational, medical, and social transportation services. Services are provided to the general public and there are no eligibility requirements.
TAPS	TAPS Public Transit is a private, nonprofit corporation that serves the general public in Fannin, Grayson, Cooke, Wise, Clay & Montague Counties. TAPS originated as a van service provided by thirteen separate Senior Centers and communities in Fannin, Grayson, and Cooke counties. TAPS was created through an effort, led by the Area Agency on Aging, to better consolidate funds and other resources to upgrade services and become more efficient as an organization. TAPS is a political subdivision of the state. In its decades of operation, TAPS has grown into a system of almost 100 buses and vans providing close to 400,000 trips per year in a six-county service area.

COMPARISON OF TRANSIT AGENCIES

While the geographies of the agencies may vary, other characteristics bind them together to be effective peer agencies. Among service area characteristics, the peer service areas range from 26 square miles (ART) to more than 6,200 square miles (CARTS). As a comparison, Collin County is in the middle of the range with an 886-square mile service area. The service area populations among the peer agencies range from 117,124 (Colorado Valley Transit) to 427,869 (CARTS). Collin County's service area population is nearly twice as great as CARTS, at 812,226.

As shown in Figure 5-3, the various peer agencies provide a wide range of fixed--route and demand-response service levels. Brazos Transit District operates the fewest number of revenue hours at nearly 100,000 hours of fixed-route service and 60,000 hours of demand-response service per year. In 2011, CCART operated nearly 6,500 hours of fixed-route service and 40,000 hours of demand-response service.

As shown in Figure 5-3, CCART provided fewer service hours and carried fewer passengers than any of the peer transit providers for both fixed-route and demand-response service, despite its large service area and relatively high service area population.

Operating costs also vary widely among peer transit providers, with CCART having had the lowest total annual operating costs (\$278,000 for fixed routes and \$1.4 million for demand-response service) while Brazos Transit District had the highest (\$8.8 million for fixed routes and \$4.3 million for demand-response service). CCART's demand-response service was somewhat more comparable to the peer transit providers, though CCART still had the lowest total annual operating cost.

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Figure 5-3 Operating Statistics

Transit Agency	Annual Revenue Hours		Annual Revenue Miles		Annual Boardings		Annual Operating Cost	
	Fixed Route	Demand Response	Fixed Route	Demand Response	Fixed Route	Demand Response	Fixed Route	Demand Response
Collin County Committee on Aging (CCART)	6,468	38,918	70,848	366,346	28,044	33,486	\$278,518	\$1,402,742
Arlington Transit (ART), Virginia*	92,522	22,063 / 11,256	1,066,671	237,177 / 94,954	2,261,128	27,876 / 49,976	\$7,884,299	\$1,257,163 / \$1,451,734
Brazos Transit District	96,729	58,756	1,830,958	1,235,899	1,292,345	83,721	\$8,787,361	\$4,370,251
Capital Area Rural Transportation System (CARTS)**	151,928		2,089,886		415,143		\$7,734,318	
Colorado Valley Transit**	37,343		404,737		65,285		\$1,098,127	
Denton County Transportation Authority (DCTA)	96,826	18,214	1,343,447	234,287	2,393,035	34,873	\$6,415,051	\$1,643,131
Harris County Transit***	6,578	39,358	71,291	588,075	25,594	64,963	\$460,996	\$1,520,750
Public Transit Services (Palo Pinto, Parker, and Jack County)	NA	43,751	NA	882,714	NA	78,255	NA	\$2,226,991
Texoma Area Paratransit System (TAPS)	14,382	107,819	381,253	2,026,767	98,610	212,860	\$710,949	\$2,921,964

Note: 2011 National Transit Database (NTD) data, except where noted.

*ART offers two demand response services. Both demand response numbers are shown in this table as "regular demand response / demand response - taxi"

**NTD data not available. Information sourced from 2010 Texas Transit Statistics prepared by Texas Department of Transportation. All numbers are from 2010.

***NTD data for Harris County was only available for 2010 at time of writing.

OVERALL PERFORMANCE DATA AND INDICATORS

The operational data and indicators of transit performance listed in Figures 5-4 through 5-9 were calculated to compare CCART with the other selected agencies. The data are for each agency's operations, separating fixed route from ADA paratransit, if applicable.

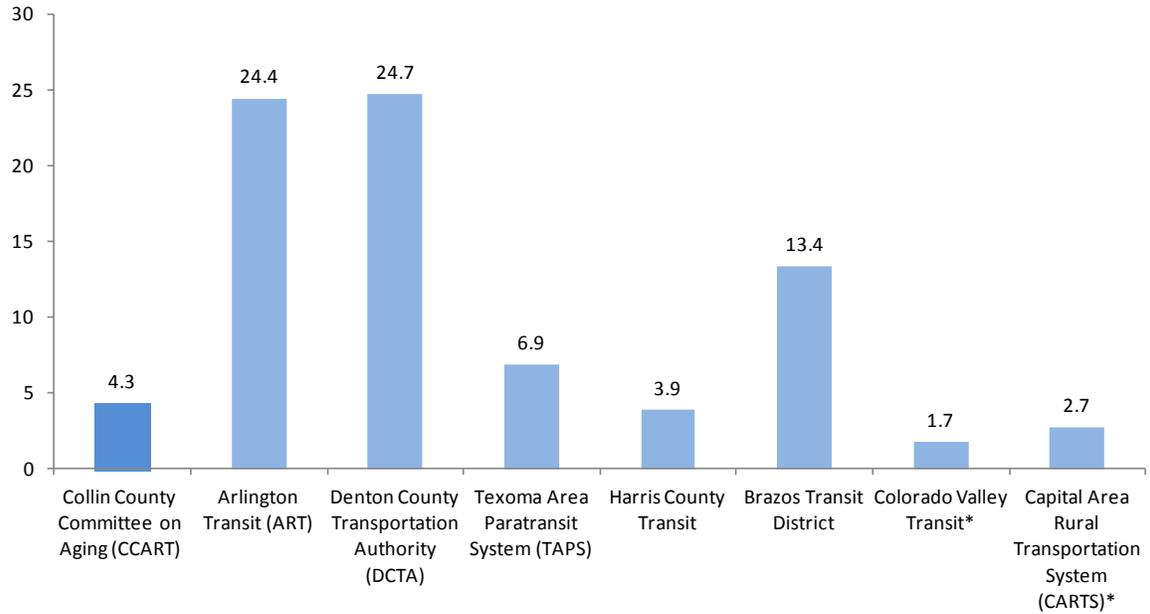
The calculated performance indicators include:

- *Passengers per Annual Revenue Hour*: a measure of productivity representing transit use per hour of service provided. It is calculated as the number of boardings divided by the number of hours that vehicles are in revenue service (including layover /recovery time).
- *Annual Operating Cost per Passenger*: a measure of cost effectiveness representing the average cost of providing a transit trip. It is calculated as the total operating cost divided by the number of boardings (unlinked trips).
- *Annual Operating Cost per Annual Revenue Hour*: a measure of cost efficiency representing average operating costs per hour of transit service. It is calculated as operating cost divided by the total number of revenue hours of service provided.

Figure 5-4 and 5-5 provide a comparison of passenger productivity for the peer agencies and CCART for fixed-route and demand-response service. DCTA carried the highest numbers of passengers per hour at 24.7, while Colorado Valley Transit carried the lowest at 1.7. The average number of passengers per hour for all agencies is 10.3. In 2011, CCART had the fourth lowest number of passengers per hour among the group, at 4.3 passengers per hour for fixed route transit.

Among the demand response peer agencies, most carried roughly the same number of passengers per revenue hour, ranging from under one to just over two passengers per hour. CCART had the lowest number, with less than one passenger per hour (0.9), and ART had the highest with 2.3 passengers per hour. This level of productivity is typical in the industry for paratransit services.

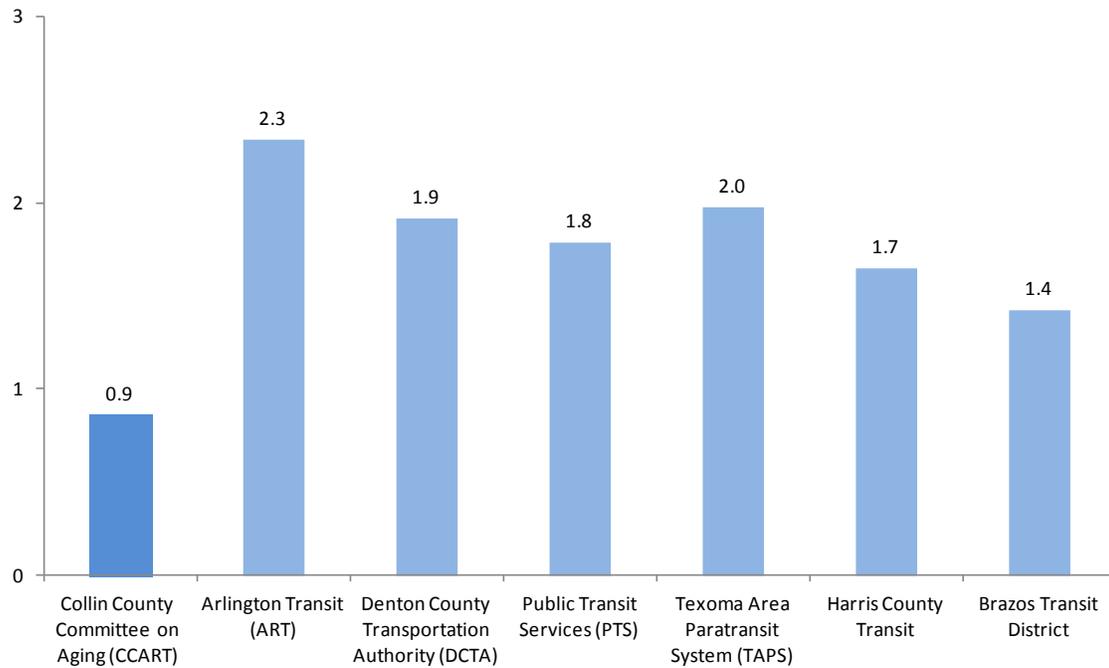
Figure 5-4 Fixed Route Passengers per Hour for Peer Agencies



* All numbers are combined for fixed route and demand response service.

Source: 2011 National Transit Database (NTD) data, except Harris County (2010 NTD), and Capital Area Rural Transportation System (CARTS) and Colorado Valley Transit (both 2010 numbers from TxDOT)

Figure 5-5 Demand Response Passengers per Hour for Peer Agencies

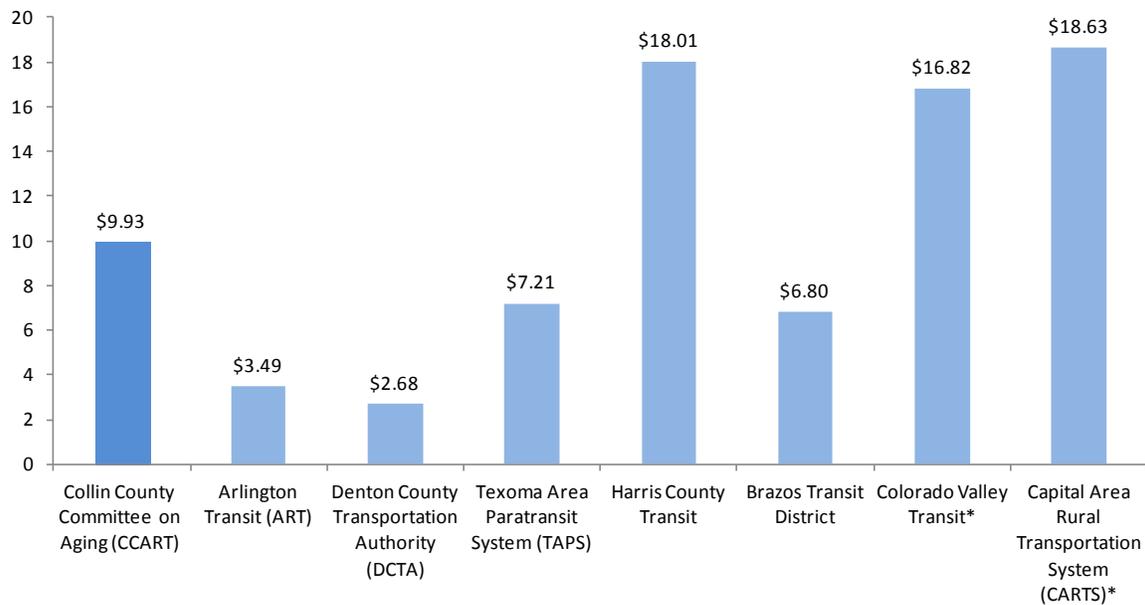


Source: 2011 National Transit Database (NTD) data, except Harris County (2010 NTD), and Capital Area Rural Transportation System (CARTS) and Colorado Valley Transit (both 2010 numbers from TxDOT)

Figures 5-6 and 5-7 provide a comparison of cost per passenger for the peer agencies and CCART for both fixed-route and demand-response services. For fixed-route transit, CARTS had the highest passenger costs at \$18.63 while DCTA had the lowest cost per passenger (\$2.68). Compared to other peer agencies, CCART had a slightly lower-than-average per-passenger cost among the group at \$9.93. The average for all agencies is \$10.45.

For demand-response service, TAPS had the lowest among the peers in its cost per passenger at \$13.73. CCART had the third highest operating cost per passenger for demand-response service at \$41.89, as shown in Figure 5-7. Brazos Transit District had the highest costs per passenger at \$52.20.

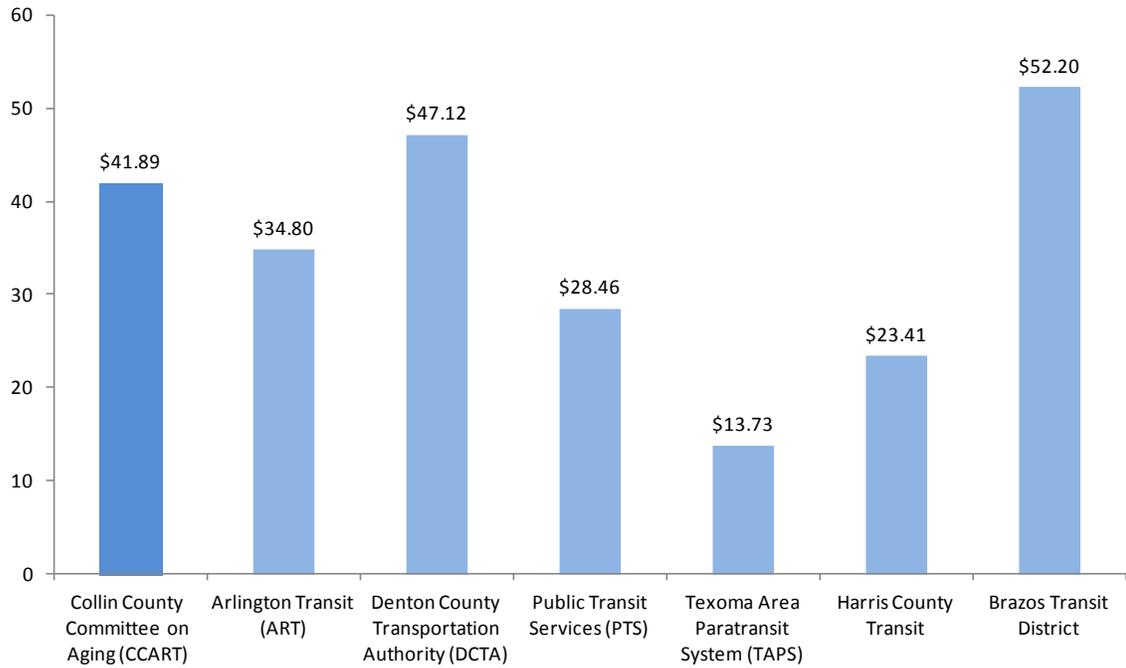
Figure 5-6 Fixed Route Cost per Passenger for Peer Agencies



* All numbers are combined for fixed route and demand response service.

Source: 2011 National Transit Database (NTD) data, except Harris County (2010 NTD), and Capital Area Rural Transportation System (CARTS) and Colorado Valley Transit (both 2010 numbers from TxDOT)

Figure 5-7 Demand Response Cost per Passenger for Peer Agencies

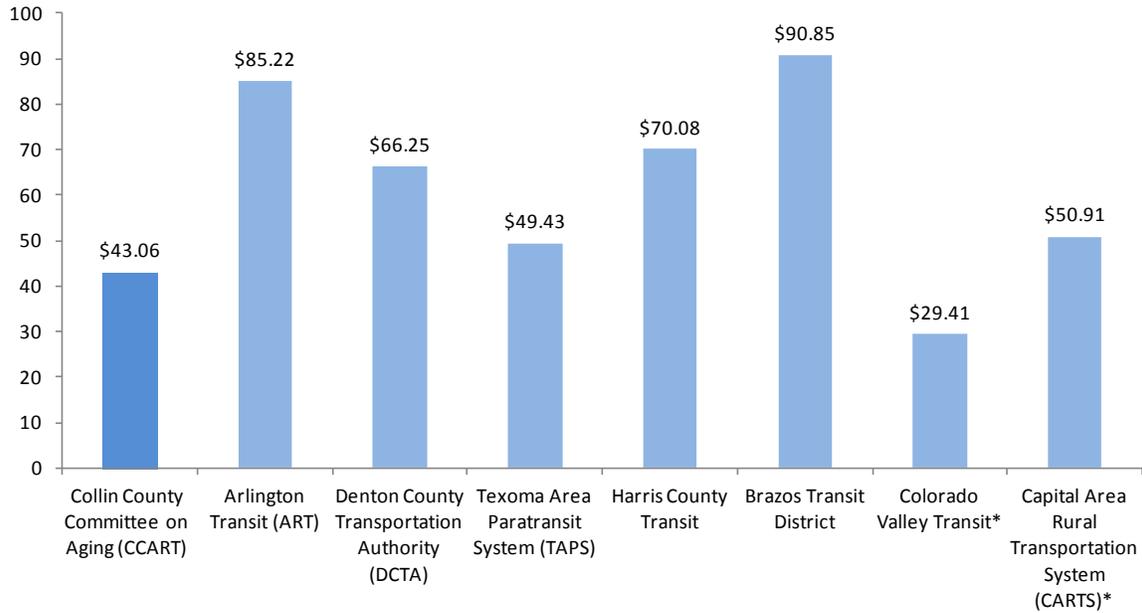


Source: 2011 National Transit Database (NTD) data, except Harris County (2010 NTD), and Capital Area Rural Transportation System (CARTS) and Colorado Valley Transit (both 2010 numbers from TxDOT)

Figures 5-8 and 5-9 provide a comparison of operating cost per revenue hour for the peer agencies and CCART for fixed route and demand response service. In 2011, CCART had the second lowest operating costs at \$43.06 for fixed-route service while Brazos Transit District had the highest cost per revenue hour (\$90.85). Colorado Valley Transit had the lowest operating costs among the group at \$29.41 per hour. The average for all agencies is \$60.65.

In terms of operating costs per revenue hour for demand-response services, CCART again had the second lowest operating costs at \$36.04 per hour. DCTA had the highest hourly costs at \$90.21 and TAPS had the lowest hourly cost at \$27.10. The average cost per hour for demand response service is \$56.94.

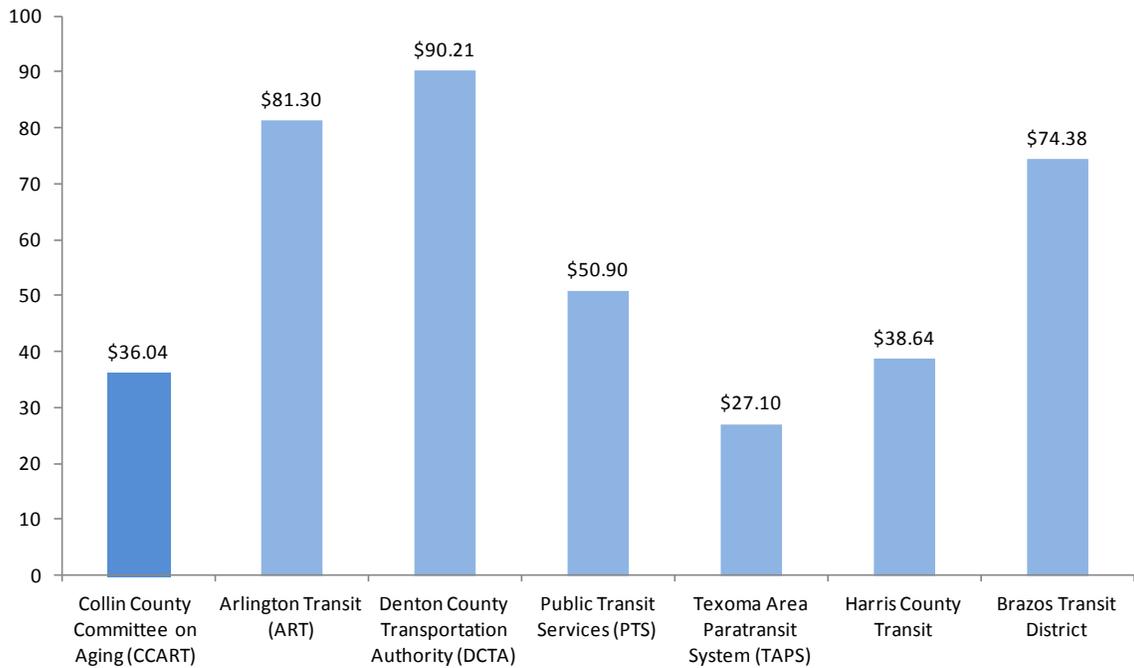
Figure 5-8 Fixed Route Operating Cost per Revenue Hour



* All numbers are combined for fixed route and demand response service.

Source: 2011 National Transit Database (NTD) data, except Harris County (2010 NTD), and Capital Area Rural Transportation System (CARTS) and Colorado Valley Transit (both 2010 numbers from TxDOT)

Figure 5-9 Demand Response Operating Cost per Revenue Hour



Source: 2011 National Transit Database (NTD) data, except Harris County (2010 NTD), and Capital Area Rural Transportation System (CARTS) and Colorado Valley Transit (both 2010 numbers from TxDOT)

GOVERNANCE AND MANAGEMENT

This is no “right” answer to transit governance and management. The peer transit providers can be divided into two main types: those governed by a city or county government and those governed by independent boards. Management and staffing approaches for both types of governance may vary and are described in more detail in the following section.

Municipal/County Governance

For transit providers with municipal or county governance, either the city or county commission acts as the governing board providing oversight and policy direction. Figure 5-10 summarizes the management and staffing approaches used by the peer transit providers that are under municipal or county governance.

Figure 5-10 Governance and Management for Peer Transit Providers

Transit Provider	Governing Body	Management	Administration and Operations
ART, Virginia	<ul style="list-style-type: none"> Five-member Arlington County Board 15-member Transit Advisory Committee appointed by the County Manager provides policy oversight 	<ul style="list-style-type: none"> County staff Includes administrative functions (e.g., accounting and grants management) 	<ul style="list-style-type: none"> Contractor Vehicle and facilities owned by the County
Harris County Transit	<ul style="list-style-type: none"> Nonprofit, public service agency, a division of the Harris County Community Services Department Harris County Commissioners Court is oversight body 	<ul style="list-style-type: none"> County staff – 6 staff members for Harris County Rides, 5 staff members for fixed route service Rides Program has a Mobility Manager and advisory council 	<ul style="list-style-type: none"> Harris County Transit manages all contracts, but all operations are handled by subcontractors.

For municipal or county-governed transit providers, administrative and management staff is almost always city or county personnel, as is the case with the transit providers shown in Figure 5-10. Operations and maintenance staff can either be municipal employees, or can be contract employees, as is the case with ART in Arlington County, Virginia. In Arlington County, the transit facilities and vehicle fleet are owned by the County, but operated and maintained by the contractor (Forsythe Transportation).

Harris County Transit is part of the Transit Division of the Harris County Community Services Department. In 2003, Harris County launched the Rides Program, formerly known as the Harris County Coordinated Transportation Program (HCCTP). Rides coordinates many of Harris County’s transportation resources to provide mobility options for people with disabilities, seniors, and low-income residents of Harris County who cannot be served by METRO. The governing board for Harris County Transit consists of four County Commissioners and one County judge. The Rides program has an advisory council made up of stakeholders and a Mobility Manager. Harris County has the flexibility to add additional contracted staff members depending on the number of grants they receive.

Independent Governance

Transit providers with independent governing boards can have several different forms. They can be independent government agencies, nonprofit public service corporations (like CCART or TAPS), or a joint powers authority. Governing boards may be elected or appointed by city or county councils or boards. Independent governance allows transit boards to focus solely on transit issues and, at least conceptually, to provide better governance and oversight.

Most of the peer transit services are operated directly by their agency, including PTS, TAPS, Colorado Valley Transit and Brazos Transit District. The Denton County Transportation Authority uses a contractor for bus, paratransit and rail operations.

Management, administrative, operations, and maintenance personnel may be employees of the independent agency or nonprofit corporation, contract employees, or some combination. Figure 5-11 summarizes the governance, management and staffing approaches used by the peer transit agencies that are independently governed.

Figure 5-11 Governance and Management for Peer Transit Providers with Independent Governance

Transit Provider	Governing Body	Management	Administration and Operations
Brazos Transit District	<ul style="list-style-type: none"> Urban Transit District with a board 	<ul style="list-style-type: none"> 7 staff members for general management/administration 	<ul style="list-style-type: none"> 90 staff members for operations/maintenance There are 4 maintenance shops with 2 supervisors and 9 employees
CARTS	<ul style="list-style-type: none"> CARTS is governed by a 9-member Board of Directors, with each member appointed by one of the Commissioners Courts in the CARTS District 	<ul style="list-style-type: none"> CARTS is a Rural Transit District formed through inter-local agreement by nine county governments There are 12 FTE staff members, as well as 105 operational staff members and 6 maintenance staff 	<ul style="list-style-type: none"> CARTS operates all of their services All administrative functions are handled by staff led by the General Manager
CVTD	<ul style="list-style-type: none"> Eight-member Board of Directors, appointed by the Board Transit district, nonprofit agency 	<ul style="list-style-type: none"> All administrative functions handled by 2 full-time staff 	<ul style="list-style-type: none"> Executive director is responsible for the supervision and oversight of operations and maintenance.
DCTA	<ul style="list-style-type: none"> Transportation Authority; 14-member board appointed by respective entities 	<ul style="list-style-type: none"> The Board is supported by professional staff, headquartered at DCTA's administrative offices in Lewisville. 	<ul style="list-style-type: none"> Professional planning, Marketing, and finance staff for agency administration; operations are contracted
PTS	<ul style="list-style-type: none"> PTS is a Transit District with governing board of directors, executive director, administrator, and director of operations. 	<ul style="list-style-type: none"> There are 7 board members who are recommended to serve by the board itself. 	<ul style="list-style-type: none"> Agency staff is in charge of administration
TAPS	<ul style="list-style-type: none"> Nonprofit, private corporation Defined as a rural transit district 10-member board appointed by City Council or County Commission 	<ul style="list-style-type: none"> The agency is managed by a management team consisting of 14 members 	<ul style="list-style-type: none"> 98 buses and vans providing over 360,00 trips per year Coordinates with Rolling Plains Management transit provider to provide medical trips

Brazos Transit District is a rural and a small urban transit district. The district has inter-local agreements and contracts with local governments which provide local match for the operating funds, much like the City of McKinney provided a local match, albeit limited, for CCART service in McKinney. In the agreements, there are provisions that allow input from the cities/counties regarding the service they provide to the residents in their area.

CARTS provides rural, urban, and medical transportation in a nine-county area, in addition to coordinating with other area agencies that provide human services transportation. CARTS has three intermodal facilities and service agreements with other public and intercity transit providers and has become known for its effective use of advanced public transportation systems technologies to improve passenger service, including demand-response transit-scheduling software, voice and data communications, and automatic vehicle location. All administrative functions are handled by a staff of 12 led by the General Manager. In addition, these staff members handle all planning activities collaboratively. In addition to the Board, the Regional Planning Groups provide guidance and input. In five years, CARTS administrative staffing has grown by 3 FTEs while operations staffing has increased by 31 FTEs.

CVTD is a nonprofit public transportation system governed by local board members of the participating communities. In addition to state and federal funds, funding is provided by county and city contributions, fares, donations, contracts (e.g., Houston Galveston Area Council for senior citizen transportation in Austin & Waller County, United Way for Waller County), local stakeholders, and grants from other agencies or businesses.

TAPS, operating to the north and through Collin County, provides an interesting example. The TAPS Board of Directors consists of ten members, including the chair. Current members are Councilmen, County Commissioners, judges, a mayor and a civic leader. Members are appointed by the City Council or County Commission in which they reside. The board has fiduciary and public oversight responsibility, and meets on a bi-monthly basis.

The agency is managed by a management team consisting of 14 members and has a total of 136 staff members. This includes 105 drivers (not full-time equivalents) who are unionized and therefore form a sub-coop which is managed by a General Manager, the only contracted position in the agency, and he reports directly to the CEO. Based on the sub-coop structure, the drivers act as agents of TAPS, and are therefore subject to limited penalties in the event of litigation against TAPS. The staff complement also includes 12 dispatchers, besides the management team described above. TAPS has undergone significant growth since its founding. Since 2009, when fixed-route service was first introduced, staff has grown from 46 employees to 136. To accommodate this growth, the positions of Procurement, Quality and Assurance, Grants Administration, Mobility Managers, IT, and Safety and Security were added during that time. However, the basic governance and management structure has remained the same. Besides the input of the Board of Directors, TAPS has also relies on ad hoc entities to solicit advice on service design. For example, when TAPS secured a \$1.7 million JARC grant to extend service across state lines (one of the first in the US to do so), the agency set up a Transit Advisory Committee in Durant, Oklahoma that consisted of the local mayor, legislative aides, employers, and representatives of the college and the Choctaw Nation. The committee designed and took ownership of the service, which was implemented in August 2012.

The current oversight and management structure is considered to be very effective according to the Chief Executive Officer, and allows for flexibility in meeting the mobility needs of residents as they are identified, together with optimal public oversight. TAPS also coordinates extensively with agencies in its seven-county area and with the Rolling Plains Management transit provider

(neighboring rural provider) to provide medical trips. Coordination activities vary widely, and many are based quite successfully on informal, even verbal, agreements between TAPS and the other agencies.

Denton County Transportation Authority (DCTA) is governed by a 14-member board appointed by respective entities. Large cities, small cities and at-large members serve two-year terms. Board members must have professional experience in the field of transportation, business, government, engineering or law. In accordance with DCTA by-laws, the Board adopts the annual operating budget and is responsible for setting policy. The president oversees the day-to-day operations of DCTA and implements policies set forth by the Board.

TRANSIT MAINTENANCE

Transit agencies can either maintain their own transit system or use subcontractors for maintenance if they do not have the staffing or facility resources. While CCART contracted out its maintenance, PTS has a small maintenance facility at the main location in Mineral Wells for running repairs. This facility has one repair bay with a roll-up door. PTS utilizes multiple subcontractors for maintenance. For specialized maintenance needs, such as wheelchair lift repair, PTS has contractors in Fort Worth and Irving. Supervision and oversight for operations and maintenance is within the agency itself (not contracted) and is coordinated by the director of operations (1 staff member).

CARTS indicated that while they operate their transit system directly, they maintain approximately 60% of their vehicles in house and out-source approximately 40% of their vehicles. Harris County Transit's vehicles are all maintained by subcontractors and the agency does not own any vehicles. The Program Manager of Harris County Rides indicated that County staff monitors all subcontractors for compliance, including annual monitoring visits, maintenance checks, and drug and alcohol testing.

FUNDING

Figure 5-12 summarizes the sources for operating and capital funds for CCART and the peer transit providers. The comparison illustrates the increased level of transit service that can be provided with different funding sources. Transit agencies in Texas that operate as authorities typically have dedicated revenue from sales taxes. These local taxes provided nearly one-third of agency revenues, for most of these agencies. The majority of transit agencies, however, are transit districts without dedicated sales taxes, and must work with local agencies or receive financial assistance from the State of Texas to secure their local match. Fare revenue typically accounts for a modest proportion of total funds for all agencies, although Brazos Transit District receives nearly one-third of its revenues from fares. DCTA's fare revenue is relatively high due to direct contributions to the agency from the University of North Texas and Texas Woman's University.

CCART relied heavily on federal funding for operations. CCART was one of the few agencies that did not report any local funds for operations and maintenance or capital costs, although the City of McKinney provided a local contribution for service which was categorized by CCART as contract revenue even though it partially covered operating costs. Colorado Valley Transit and CARTS also rely heavily on state, federal, and other funding sources.

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Figure 5-12 Percentages of Funding Sources for Peer Transit Providers

Peer Transit Agency	Fare Revenue	Local Funds		State Funds		Federal Funds		Other		Total Funds	
	O&M	O&M	Capital	O&M	Capital	O&M	Capital	O&M	Capital	O&M	Capital
Collin County Committee on Aging (CCART)	4%	0%	0%	29%	0%	57%	100%	10%	0%	\$1,712,457	\$761,480
Arlington Transit (ART), Virginia	22%	53%	91%	25%	1%	0%	8%	1%	0%	\$11,398,155	\$18,305,107
Brazos Transit District	32%	29%	0%	0%	0%	39%	100%	0%	0%	\$13,157,612	\$1,639,882
Capital Area Rural Transportation System (CARTS)*	2%	0%		8%		36%		54%		\$8,468,239	
Colorado Valley Transit*	5%	0%		19%		56%		20%		\$2,039,187	
Denton County Transportation Authority (DCTA)	20%	64%	7%	0%	89%	14%	4%	2%	0%	\$16,502,685	\$87,503,437
Harris County Transit**	11%	26%	0%	0%	0%	63%	0%	0%	0%	\$1,981,746	\$0
Public Transit Services (Palo Pinto, Parker, and Jack County)	3%	26%	0%	18%	0%	52%	100%	0%	0%	\$2,226,991	\$314,580
Texoma Area Paratransit System, Inc (TAPS)	8%	2%	0%	22%	0%	64%	85%	3%	15%	\$3,632,909	\$652,539

*NTD data not available. Information sourced from 2010 Texas Transit Statistics prepared by Texas Department of Transportation. All numbers are from 2010.

**NTD data for Harris County was only available for 2010 at time of writing.

CONCLUSION

While many of the examples are multi-county agencies and districts, the peers provide some interesting examples and potential models for transit services in Collin County and illustrate some collaborative efforts that have grown successfully to serve an array of needs across multiple county lines. The review suggests CCART had some unique characteristics, including an operating environment with very few complementary providers. Fewer transportation providers makes it more difficult to coordinate to offer transportation services. The peers show that a number of successful programs have grown quickly through close collaboration, high performance, and staffing to meet demands.

The sample data substantiates an assertion that CCART's performance was weak in terms of passengers per hour and cost per passenger, due primarily to low ridership, but overall costs were low. CCART ran a very lean operation compared with many of the peers, most of which are larger agencies and provide more service. While this may be positive in terms of relatively low expenditures for transit in Collin County (outside the DART service area), this also comes as a result of very limited service and an operation which was criticized by some stakeholders as not having had enough capacity for meet existing demand.

If indeed CCART's services were to have grown, the peer agencies provide some models for how that might happen: through new or existing multi-county transit districts, municipal or county-managed transit programs, or maintaining nonprofit management with participation (and funding) from multiple jurisdictions and agencies. Unlike CCART, administered and operated by the Collin County Committee on Aging, none of the peer agencies has a primary focus on services other than transportation. Based on the information in this review, Collin County's transit needs might be best served by an agency whose primary mission is transportation, and which can bring in local operating and capital funds (and thus, a local match for federal funds) – an area where CCART underperformed compared with peers.

6 PUBLIC INPUT: PUBLIC MEETINGS AND SURVEYS

The importance of soliciting public feedback cannot be understated. One of the key elements of this study is to define potential service options to address public demands.

This chapter reviews findings from two primary sources of public guidance on this study: public meetings and surveys.

PUBLIC MEETINGS

Public Meetings were conducted in Frisco, McKinney and Plano on October 30 and 31, 2012 at the following locations:

- Frisco, October 30, 2012, 2:00 – 3:00 PM, Public Library, Vivian Stark McCallum Room
- McKinney, October 30, 2012 5:00 – 6:00 PM, McKinney Performing Arts Center
- Plano, October 31, 2012, 10:00-11:00 AM, Plano Environmental Education Center

The purpose of the meetings was to share information about the study, present preliminary findings, and to hear from members of the public about transportation needs and priorities, as well as the vision for public transportation in Collin County. At the time meetings were held CCART still operated transit services in McKinney and throughout Collin County. These services were transitioned to TAPS in 2013.

Meetings were advertised via a press release widely distributed to media organizations, stakeholders and city representatives in Collin County. Notices were also posted on buses (see an example in Appendix B), on Craigslist, on selected city websites and the NCTCOG website. Local newspapers in Frisco, McKinney and Plano provided coverage of the meetings as did NBC 5 local news.

A total of 57 individuals signed in at the meeting in McKinney, with 32 in Frisco and 31 in Plano. It is assumed that a small number of people did not sign in, so the estimated total attendance at the three meetings is between 120 and 130 people.

Each meeting included a presentation provided by the consultant, which offered an overview of the study and study schedule, key demographic findings, and next steps. Most of each meeting was dedicated to questions and comments from meeting participants who shared a range of perspectives about transit needs (as well as deficiencies of existing services), service opportunities, and expectations/goals for project outcomes. The notes from the three meetings are included in Appendix B.

In addition to verbal comments and questions, participants were asked to complete a questionnaire about their preferences (see Appendix B), and also participated in a couple of “dot exercises” to define the preferences of the attendees.

Based on the questionnaire responses, many of the meeting participants indicated some experience with transit, either locally or in the region. Of the 51 individuals who answered whether they had ever taken a ride on CCART, 39 (76%) said they had not, while 12 (24%) said they had. Of the 58 individuals who indicated whether they had ever taken a trip on another transit system (including DART, The T, TRE, DCTA, or others), 33 (57%) said they had, with most listing DART, while 35 (43%) said they had not.

Key Transit Service Needs

Comments from the meetings generally focused on concerns about a lack of service within communities or between communities. For example, in the Frisco and McKinney meetings, individuals representing those cities, as well as Allen and some smaller cities, discussed concerns about a need for local service, especially for people with limited transportation options: seniors and people with disabilities. A group of seniors from the Denton County portion of Frisco were in attendance in that city discussing the value of having transportation options available to people as they age, especially in the growing number of retirement communities. At both the McKinney and Frisco meetings, several participants talked about the need for local transportation, and in McKinney, a number of people expressed concerns about CCART's route network, service hours and overall very limited access to transit. Participants in the Plano meetings voiced general satisfaction with DART's existing local services.

Although the topic of local transportation was an issue, those in attendance verbally expressed greater concerns about the need for regional transportation, linking cities in Collin County and providing connections from McKinney, Celina, Allen, Frisco and Wylie to DART. An informal poll of meeting participants in McKinney showed that of the 30 who raised their hand in response to a question about whether local or regional transit was most important, 25 responded that regional transit was more important, while only five responded that local transit was more important.

The feedback questionnaires from the meetings supported what was said aloud. Questionnaires asked individuals whether they would be interested in new or expanded transit service in their community. Of the 59 responses, 53 (90%) indicated yes, they would be interested; four (7%) marked no, they would not be interested; and two provided comments but did not provide an answer. When asked about interest in new or expanded transit service linking their community with another city, of the 59 responses, 50 (85%) marked yes, that they would be interested; three (5%) marked no and five (10%) either wrote on the form that they did not know, marked neither, or provided a comment that they may be interested depending on the service.

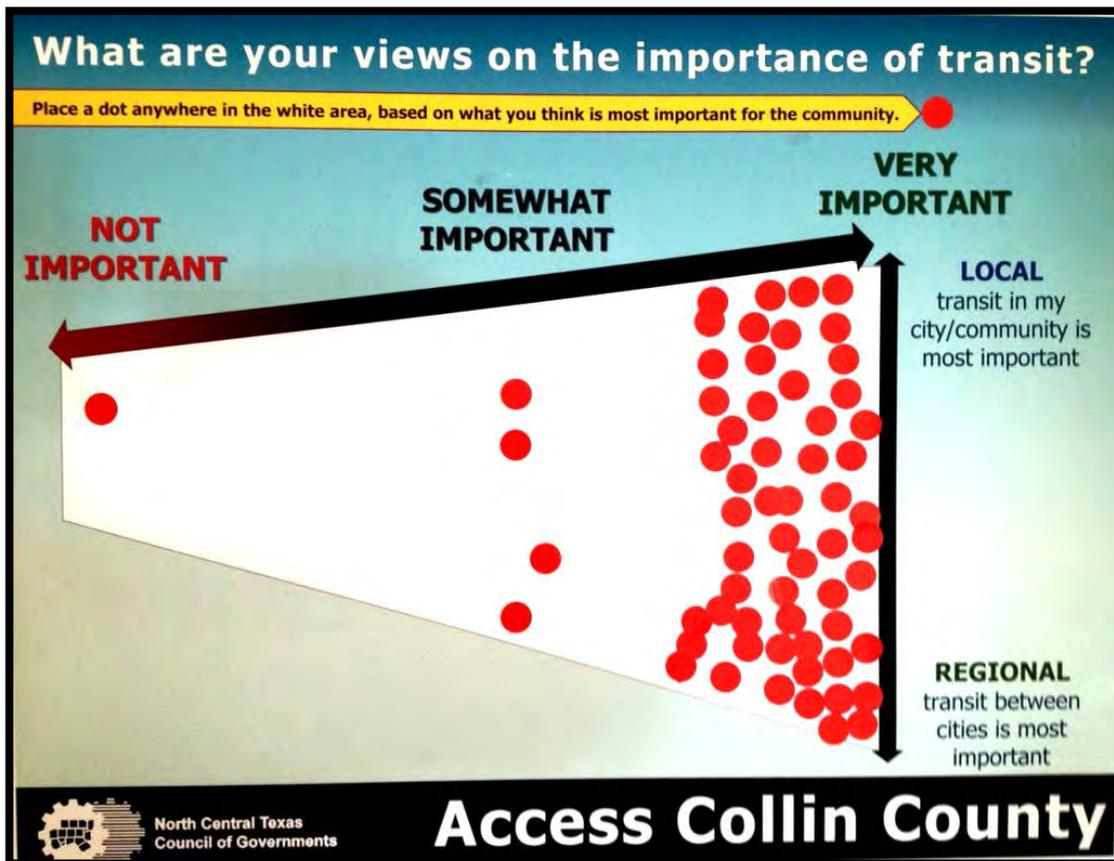
Some participants expressed frustration that DART service is not available north of Plano; others were knowledgeable about the sales tax requirement to be a DART member city and raised concerns about the lack of coordination among regional transit operations.

Key concerns related to transit need were related to transportation options for seniors, interest in building on existing services, and an acknowledgement that the areas with greater need ("the east side of town" in McKinney, Allen and Plano) are likely to generate transit ridership. Participants also talked about population growth, voicing concerns that planning needs to be done before the population grows and congestion increases.

The public has a limited knowledge of transit service. Although most McKinney participants indicated some familiarity with the service, only one-fourth of the Plano meeting participants said they were familiar with CCART's countywide demand-response service and fewer than half of Frisco participants indicated they were familiar with the service. That CCART has limited funding

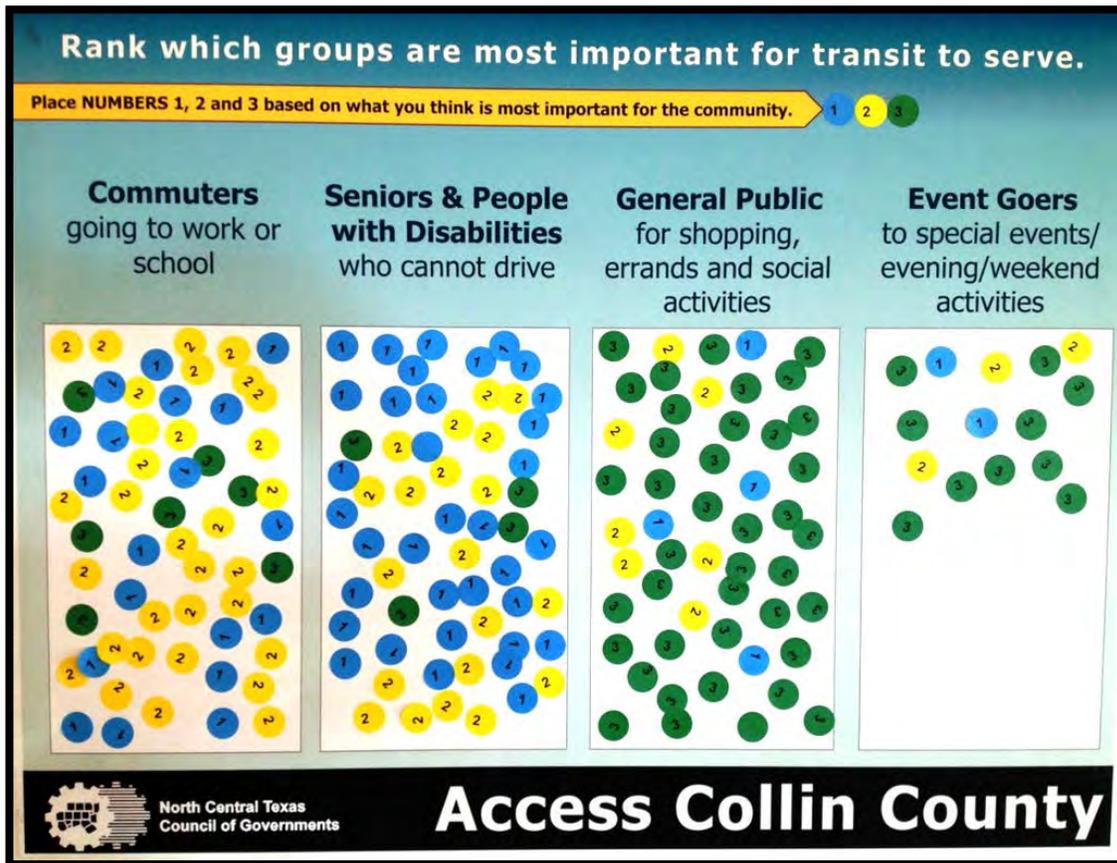
was acknowledged, but misinformation exists: some agencies at the Plano meeting indicated they understood their clients were not eligible for CCART service or that CCART did not serve certain smaller cities in Collin County.

Figure 6-1 What Are Your Views on the Importance of Transit?



Meeting participants were asked to place dots on two different boards posted at the meetings to indicate their preferences regarding transportation needs and services. As shown in Figure 6-1, the vast majority of participants at the three meetings who placed a dot on the board inquiring about how important transit is to the community indicated that transit is very important, with only a handful of participants indicating transit as somewhat or not important. As the figure illustrates, two of the “somewhat important” dots and a higher concentration of “very important” dots are placed toward the regional end of the spectrum with regard to a preferred service type, but a number of people indicated that local or a mix of local and regional services are important.

Figure 6-2 Rank Which Groups are Most Important for Transit to Serve



When asked to rank which groups/markets are most important to serve, participants were given three dot stickers: a blue one to represent their first choice, a yellow dot for their second choice, and a green one for their third choice. The categories from which they could choose included commuters going to work and school, seniors and people with disabilities who cannot drive, the general public (for shopping, errands and social activities), or event goers (to special events/evening and weekend activities). As shown in Figure 6-2, seniors and people with disabilities were ranked first by the largest group of meeting participants (35 #1 rankings, compared with 19 #1 rankings for commuters, four for the general public and two for event goers). Commuters were generally deemed the second priority, and service for the general public as the third. Transportation for event goers received the smallest number of dots. Even still, it is worth noting that the comments provided on the questionnaires suggested the reason many people attended the meeting was personal interest in services for the general public, including commuters.

Direction for this Study from the Public Meetings

The fact that the study is looking at short-term solutions was emphasized in all three meetings, but questions were posed about why such a short timeframe is being considered. In all three meetings participants talked about the need to plan further ahead: to look at future rail corridors, longer-term fixed route bus networks and investment strategies that take a regional approach. One person stated, “We need to figure out what is the cost of *not* having transit service.”

NCTCOG and local governments throughout the region address longer-term questions about transportation and transit through complementary planning efforts that include: the region’s mobility plan, currently Mobility 2035, and the County’s mobility plan (see this report’s Introduction for short summaries); rail feasibility studies; local comprehensive plans; and specialized plans such as those addressing downtowns, transit-oriented development, or land use. The current planning effort, as described to attendees at the public meetings, fills in the picture for public transportation over the next five years and will provide options to take Collin County and the region toward those long-term goals.

One participant noted that a correlation must be made between transit and economic development and – with agreement from other meeting participants— said that bringing in employers and elected officials will be important to the success of transit in Collin County. People talked about the importance of “pushing elected officials” to support transit.

A few people raised concerns about spending tax dollars or soliciting federal or state funds for local transit, emphasizing the importance of local funding sources and private providers.

The feedback questionnaires provided an opportunity for meeting participants to express their thoughts about the study. Comments ranged from optimistic statements to concerns about cost, to specific concerns about impacts. Sample comments are as follows:

General Statements

- This gives me hope for transportation options in Collin County.
- A sustainable community needs public transportation.
- It’s helpful to hear what others think about transportation.
- It’s important for Frisco’s future.
- I feel that public transportation needs to be all over at any cost. Like one gentleman said, it all needs to fit together.

Specific Concerns

- What is this going to cost the taxpayer? How much debt will be incurred? Taxpayers are hurting too! Disabled and elderly need transportation, but [we should] spend on transit for them without spending money we don’t have. Cut spending elsewhere in the budget to fund these transit needs.
- We do need transit for the disabled, but it would make McKinney like any other metro city and it would lose its unique appeal to newcomers. It would create more traffic/exhaust fumes (dirty air).
- Who is going to fund this? Allen, McKinney, and Frisco opted out of DART so they should be asked to step up to the plate to help fund.

- As corporations move north, transit options to the south become necessary. The need for transit is not just a demographic issue, but is driven by the desires of employees and employers.
- I fear service will only be geared toward aged and disabled.
- I think in regards to long term planning to make the DART system more available to other areas like McKinney, it's important to talk to McKinney and inquire about making their sales tax apply to DART.
- I am a vocational rehabilitation counselor covering Collin County and I am interested in transit services for the blind and visually impaired individuals.

Direction for Consulting Team

- Need to talk to major employers in Frisco about their needs.
- Need to work in conjunction with NCTCOG.

TRANSIT NEEDS SURVEYS

In addition to the public meetings, the effort to assess the transit needs of Collin County residents consisted of two types of surveys: an online, or web, survey designed to solicit information from the general population of Collin County residents and a printed/paper survey distributed to CCART transit riders and individuals affiliated with selected human service agencies in Collin County. The distinction between the two survey types is important, because the paper survey included additional questions specific to transportation challenges faced by persons who were more likely to have fewer transportation options. The web survey is included in Appendix D. The paper survey is included in Appendix E.

The purpose of the survey was not necessarily to provide statistically significant results, but to offer additional supportive information when considered along with public input, stakeholder input, and the analysis of demographic and land use data. This chapter summarizes the outcome of the survey efforts.

Methodology

Surveys were developed by Nelson\Nygaard based on surveys used by NCTCOG in the update of the region's public transportation coordination plan, "Access North Texas." Questions were added based on findings from stakeholder interviews and issues uncovered in the analysis of travel and demographic data.

The web surveys were formatted by NCTCOG staff and placed on the NCTCOG website at collinsurvey.org. The survey was available in both English and Spanish, and was promoted via several channels. To inform McKinney residents about the web survey, Dikita Enterprises (Dikita) produced and delivered 46,000 water bill inserts to the City of McKinney, printed in English and Spanish, alerting the recipients to the web survey and asking for their participation. Surveys were also promoted via press releases; emails to individuals and organizations in the project database; slips of paper distributed at public meetings; and postings on Craigslist and community internet message boards in Frisco, Celina, Anna, McKinney, Plano, Wylie and Farmersville.

Dikita formatted the printed surveys and then produced, printed, and delivered them. The printed surveys were also available in both English and Spanish. Surveys were mailed to more than 2,200 registrants in the CCART database, handed out on McKinney local CCART routes, and were delivered to an array of human service agencies including the McKinney Senior Recreation Center,

Aging and Disability Resource Center, Veterans Services, Department of Assistive and Rehabilitative Services (DARS), LifePath Systems, the Maurice Barnett Geriatric Wellness Center, the Plano Senior Recreation Center, and Workforce Solutions for North Central Texas.

The total number of surveys distributed by Dikita was 2,400. Beyond this, some agencies also requested PDFs so they could print more as needed. It is unknown how many were reprinted and distributed.

A total of 1,423 surveys were completed online and 274 paper surveys were returned, for a total of 1,697 completed surveys. Upon completion of the surveys, three names were randomly drawn using a Web-based random number generator and each winner was contacted and awarded a \$50 VISA gift card.

Though not used in this survey methodology, a random sample methodology to gather responses representative of Collin County's residents at a 99% confidence level and 5% confidence interval would have required responses from 665 randomly selected individuals. The survey methodology selected for this study was intended to supplement data analysis conducted throughout this study process and was not intended to satisfy requirements of a true random sample. Nevertheless, the large number of surveys returned embodied a wide variety of experiences, perceptions and opinions regarding transit in Collin County that satisfied the survey's intent.

Findings

The survey results are discussed in the following sections. Whenever the questions of both web and paper surveys are the same, the results are presented together. Because of the differences between the two surveys, some results are presented only for either the paper survey or the web survey.

Demographics

Residence of Respondents

Because the residents of the City of McKinney received information about the survey in their water bills, most of the respondents to the web survey (approximately 72%) are from the City of McKinney. McKinney residents also represent about 47% of the respondents to the paper survey. On the whole, they represent about 68% of all respondents. About 10% of the respondents were from Plano.

Based on the response rates, the surveys are not proportionally representative of Collin County's population based on city of residence. Greater numbers of residents from communities with local transit service – McKinney and Plano – responded to the survey, but almost all cities in the county have some representation among survey respondents (see Figure 6-3).

Figure 6-3 Where Do You Live?

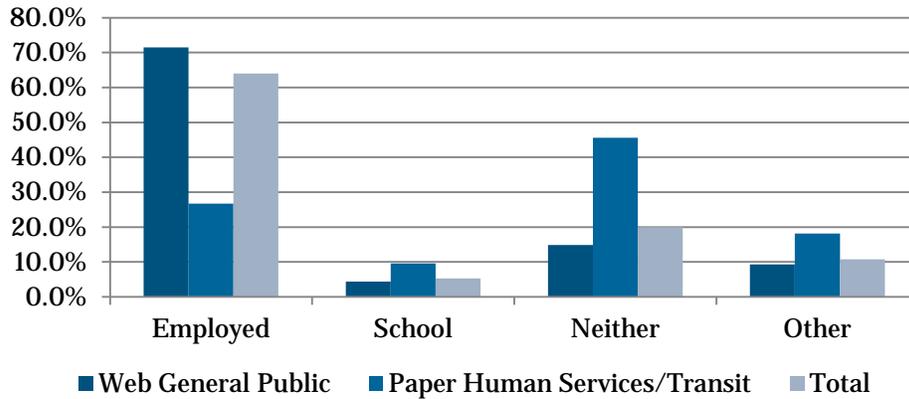
Response	Paper Survey		Web Survey		Total	
	Human Service/ Transit Users		General Public			
	Count	Percent	Count	Percent	Count	Percent
(No response)	9	3.3%	28	2.0%	37	2.2%
Allen	19	6.9%	35	2.5%	54	3.2%
Anna	2	0.7%	22	1.5%	24	1.4%
Blue Ridge	1	0.4%	2	0.1%	3	0.2%
Carrollton			1	0.1%	1	0.1%
Celina			2	0.1%	2	0.1%
Dallas	9	3.3%	14	1.0%	23	1.4%
Fairview	4	1.5%	6	0.4%	10	0.6%
Farmersville	6	2.2%	4	0.3%	10	0.6%
Frisco	10	3.6%	72	5.1%	82	4.8%
Garland			3	0.2%	3	0.2%
Lavon			3	0.2%	3	0.2%
Lowry Crossing			4	0.3%	4	0.2%
Lucas			3	0.2%	3	0.2%
McKinney	128	46.7%	1,029	72.3%	1157	68.2%
Melissa			5	0.4%	5	0.3%
Murphy	5	1.8%	12	0.8%	17	1.0%
New Hope			1	0.1%	1	0.1%
Parker	1	0.4%	3	0.2%	4	0.2%
Plano	53	19.3%	111	7.8%	164	9.7%
Princeton	10	3.6%	6	0.4%	16	0.9%
Prosper	3	1.1%	11	0.8%	14	0.8%
Richardson	3	1.1%	9	0.6%	12	0.7%
Sachse			6	0.4%	6	0.4%
Van Alstyne			2	0.1%	2	0.1%
Wylie	7	2.6%	23	1.6%	30	1.8%
Other	3	1.1%	5	0.4%	8	0.5%
Total	274	100.0%	1,423	100.0%	1,697	100.0%

Employment Status

Individuals were asked whether they work or are in school, and if so where.

Nearly 72% of the web survey respondents are employed, while only 27% of paper survey respondents are employed (Figure 6-4). Almost 46% of the paper survey respondents are neither employed nor attending school, reflecting the dependency of this market segment on human service agencies or transit in Collin County. The vast majority (more than 90%) of individuals who listed “other” marked that they were, in fact, retired.

Figure 6-4 Are You Currently Employed or in School?



Among respondents who are employed and provided their employment location, the primary work destinations include McKinney (27%), Dallas and Plano (19% for each), Richardson (6%), and Frisco and Allen (both 5%) reflecting the similar findings from the analysis of NCTCOG travel demand model data. Thirteen percent of respondents indicated multiple work destinations or other locations, primarily in the Dallas-Fort Worth region. McKinney (28%) and Plano (22%) are the primary commute destinations identified by survey respondents who attend school. Work and school locations are shown in Figure 6-5 and Figure 6-6.

Figure 6-5 Primary Work Locations (Both Survey Types)

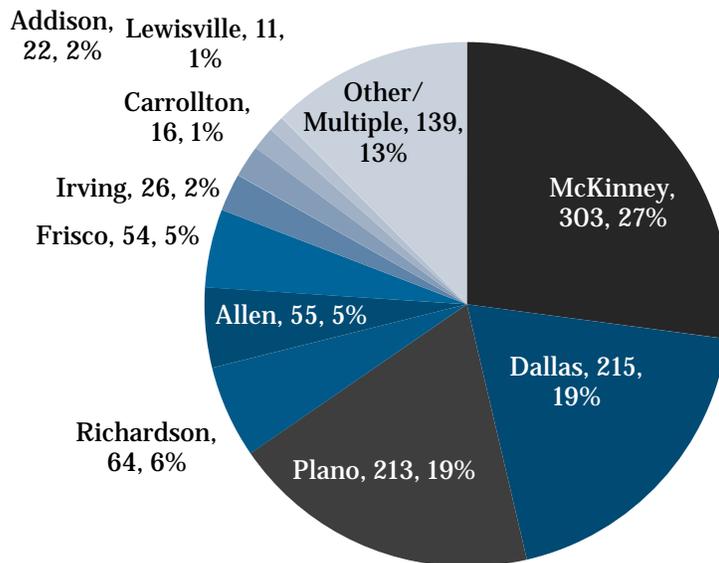
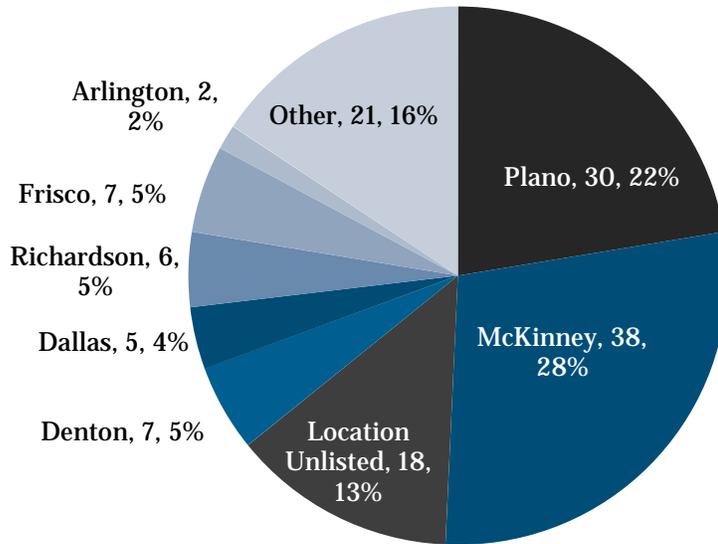


Figure 6-6 Primary School Locations (Both Survey Types)



Gender

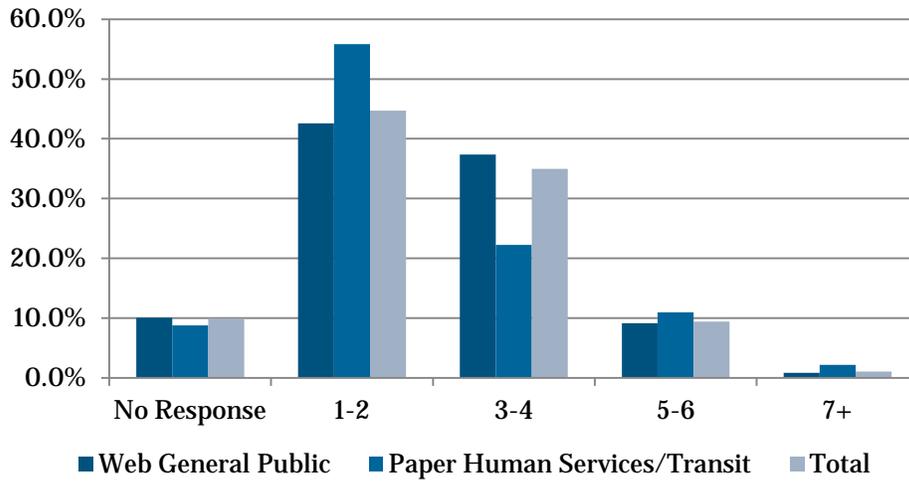
More women than men completed the survey. Of persons indicating their gender, 55% of surveys were completed by women; 45% were completed by men. Women comprised 67% of the respondents who completed the human services/transit paper survey, and about 53% of the general public web survey. Men comprised 33% of the respondents who completed the human services/transit paper survey, and 48% of the general public web survey.

Household Composition

Individuals were asked about the size of their household, how many seniors reside in the household, and how many persons age 18 and under are in the household.

A greater proportion of people who completed the paper human services/transit survey live alone or with one other person than individuals who completed the web general public survey. About 56% of the human services/transit respondents have household sizes of one or two, compared to about 43% of the general public respondents, a significant proportion of whom (37%) live in households with three or four residents, reflecting the high number of children living in households in Collin County (see below).

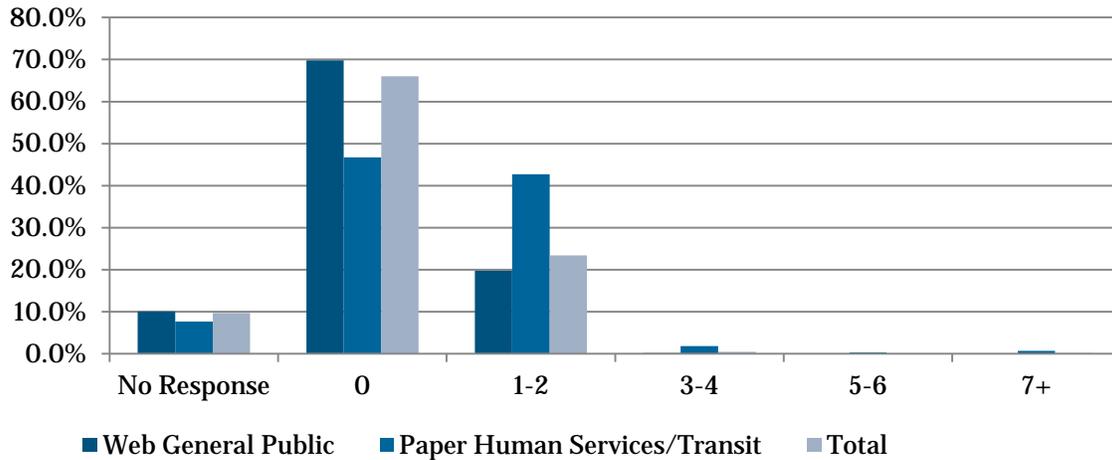
Figure 6-7 Including You, How Many People Currently Live in Your Household?



Seniors

Approximately 46% of respondents for the paper human services/transit survey live in households with at least one senior age 65 or older; in contrast, only about 20% of respondents completing the general public survey have at least one senior in their household. 2010 Census Data for Collin County shows 15% of households have a resident 65 or older. Figure 6-8 illustrates the number of seniors in respondents' households.

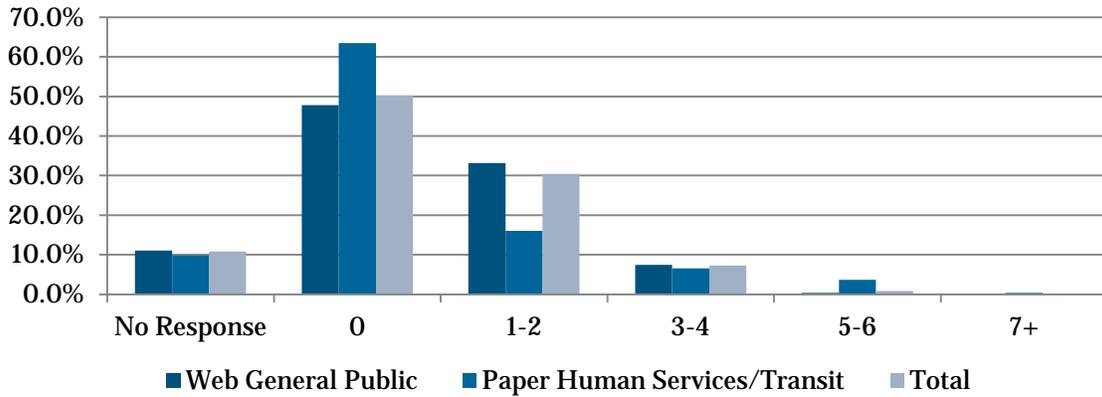
Figure 6-8 How Many [People in Your Household] Are Age 65 or Older?



Young People

The majority of paper human services/transit survey respondents are neither young themselves nor do they have young people living in their home: 64% have no household member 18 years old or younger, while 16% have one or two household members 18 years old or younger. The web general public survey responses closely match Census data with 42% of respondents reporting at least one household resident age 18 or under. US Census data shows 42.5% of households in Collin County have residents under age 18.

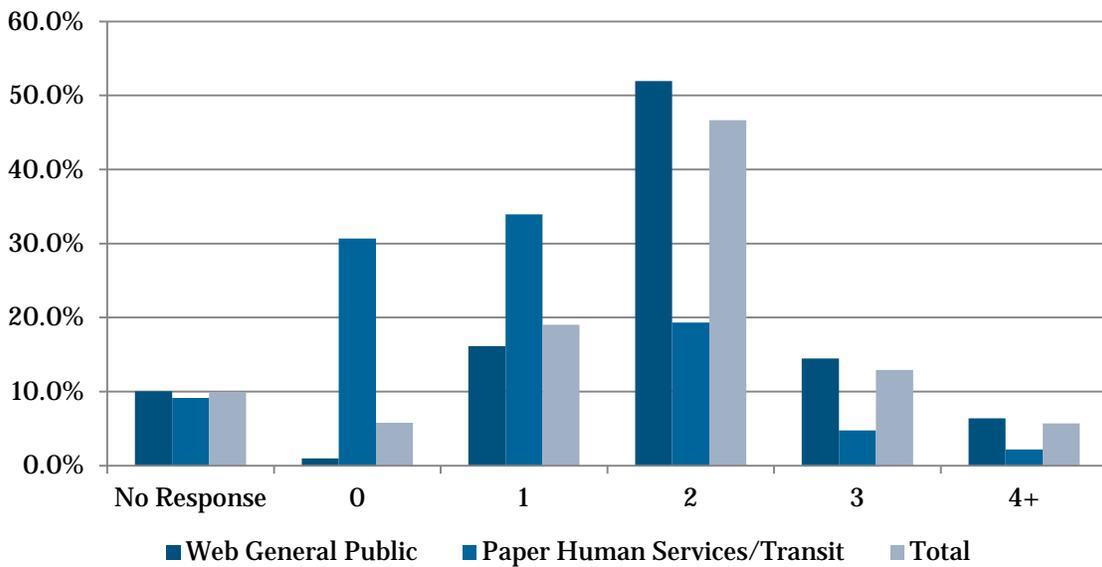
Figure 6-9 How Many [People in Your Household] Are Age 18 or Younger?



Availability of Vehicles

Survey respondents were asked how many vehicles they have available in their home, including automobiles, motorcycles, scooters, etc. For both survey types, the majority of households have at least one vehicle available to them. Thirty-one percent of the respondents completing the paper human services/transit survey do not have any working vehicles in their household, while 34% have one vehicle and 26% have two or more working vehicles. In contrast, only 1% of the web general public survey respondents indicated they did not have any working vehicles, while 72% have two or more working vehicles. Availability of vehicles is shown in Figure 6-10.

Figure 6-10 How Many Working Vehicles (including Automobiles, Motorcycles, Scooters, etc.) Does Your Household Have?



Annual Household Income

Figure 6-11 shows the annual household income of the respondents. In general, those who completed the paper human services/transit survey have lower household incomes than those who completed the web general public survey. The majority (60%) of paper survey respondents have an annual household income below \$35,000 compared with 16% of web survey respondents. US Census data finds that 70% of households in Collin County have incomes of \$50,000 or greater, which compares similarly with 68% of the web survey households.

Figure 6-11 What Is Your Annual Household Income?

Response	Paper		Web		Total	
	Human Services/ Transit Users		General Public			
	Count	Percent	Count	Percent	Count	Percent
No Response	44	16.1%	212	14.9%	256	15.1%
Under \$25,000	127	46.4%	50	3.5%	177	10.4%
\$25,000 - 34,999	37	13.5%	65	4.6%	102	6.0%
\$35,000 - 49,999	24	8.8%	127	8.9%	151	8.9%
\$50,000 - 74,999	21	7.7%	254	17.8%	275	16.2%
\$75,000 - 99,999	9	3.3%	235	16.5%	244	14.4%
\$100,000 +	12	4.4%	480	33.7%	492	29.0%
Total	274	100.0%	1,423	100.0%	1,697	100.0%

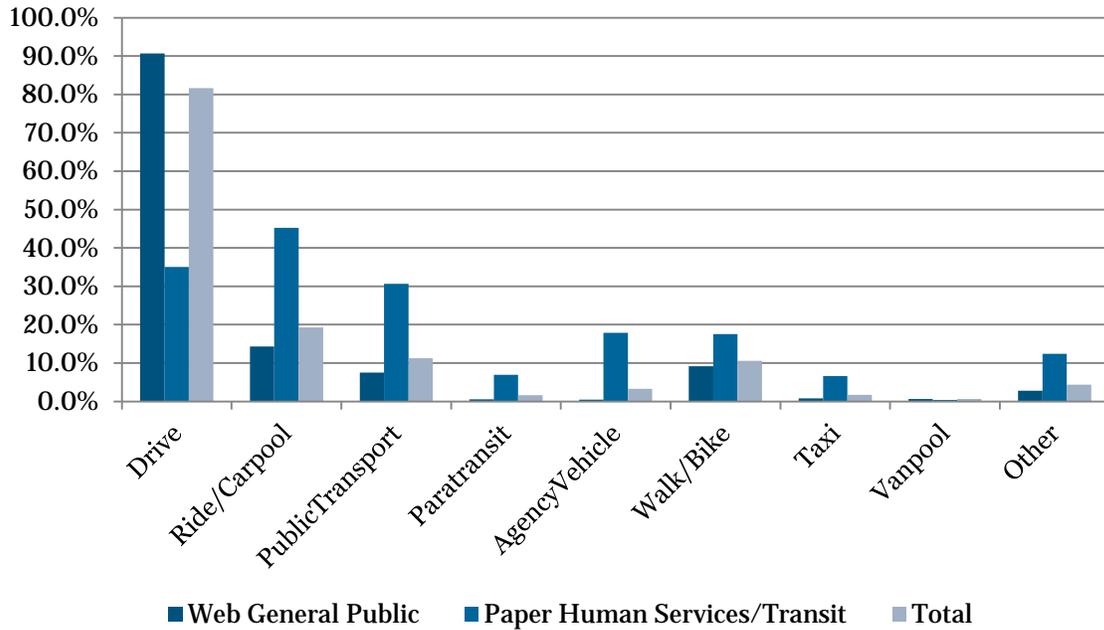
Disability

The paper human services/transit user survey asked about whether individuals have a disability that makes it hard for them to travel. The majority – 54% -- indicated that indeed they have a disability that impacts their ability to travel.

Travel Characteristics

The surveys asked individuals how they typically travel (Figure 6-12), and allowed them to choose more than one response. Because the survey effort focused on people with an interest in transit and specifically sought public transit riders, the percentage of transit users among the population of survey respondents is higher than that of the general population. Looking at all the responses collectively, the private automobile is the travel mode used by nearly all respondents, either as a driver or as a rider. While 90% of the web general public survey respondents indicated they typically drive where they need to go, only 35% of the human services/transit users survey respondents said they drive: 45% of them get a ride (or carpool), 31% use public transit and 7% use paratransit. The respondents to the paper survey typically marked multiple boxes on the survey (they use transit, get a ride and paratransit) while the vast majority of respondents to the general public survey marked only one box: drive. Those who use public transportation account for six percent of the web survey respondents. Walking and biking account for 18% of the paper survey respondents, compared with only nine percent for web survey respondents.

Figure 6-12 How Do You Usually Travel to Get Where You Need to Go?



The data illustrates the significant differences in travel characteristics among members of the general population and individuals who require services provided by human service agencies or who use transit in Collin County.

Travel Limitations

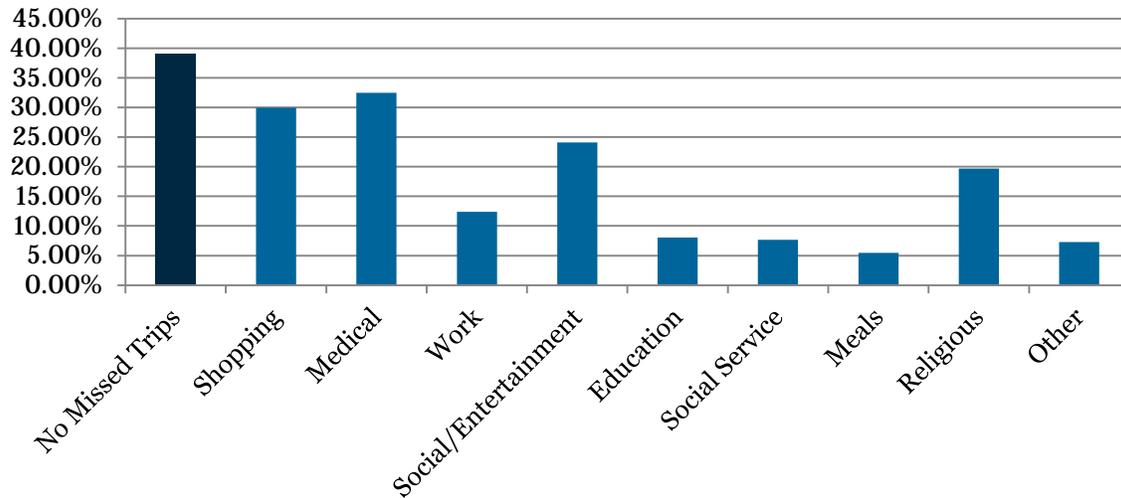
A set of specific questions was asked of those individuals who completed the paper human services/public transit surveys to better understand any limitations of existing transit services. They found that significant numbers of individuals could not travel somewhere due to a lack of transportation. When asked, “Is there anywhere you would like to travel but cannot due to lack of transportation?” 57% of the respondents providing an answer indicated “yes” and 43% indicated “no.” Respondents answering affirmatively were asked to list where they would like to travel, and could list multiple destinations. Plano was listed most often (57 respondents), followed by Dallas (45 respondents), McKinney (42 respondents), and Allen (32 respondents). Other top destinations included Frisco (14) and Denton (7), but Arlington, Farmersville, Richardson, Wylie, Sacshe, DFW Airport, Lewisville, and other regional cities were also listed. Trip purposes were also listed and most were discretionary for clothes shopping, movies, sporting events, visiting family, arts centers/museums and church, but also included medical and grocery shopping. It should be noted that even though many of the desired trip types are discretionary, studies have found that social and recreational trips can be critical for good health, well being and helping individuals stay connected to their community and thus can be as important as medical and grocery shopping trips.

Missed Activities

Survey respondents were asked if, at any time in the last six months, they had missed any specific types of activities due to a lack of transportation. Thirty-nine percent of respondents said they had not missed any trips, indicating a majority had missed at least some trips due to a lack of transportation. Medical trips were the trips missed most often (32%), followed by shopping trips

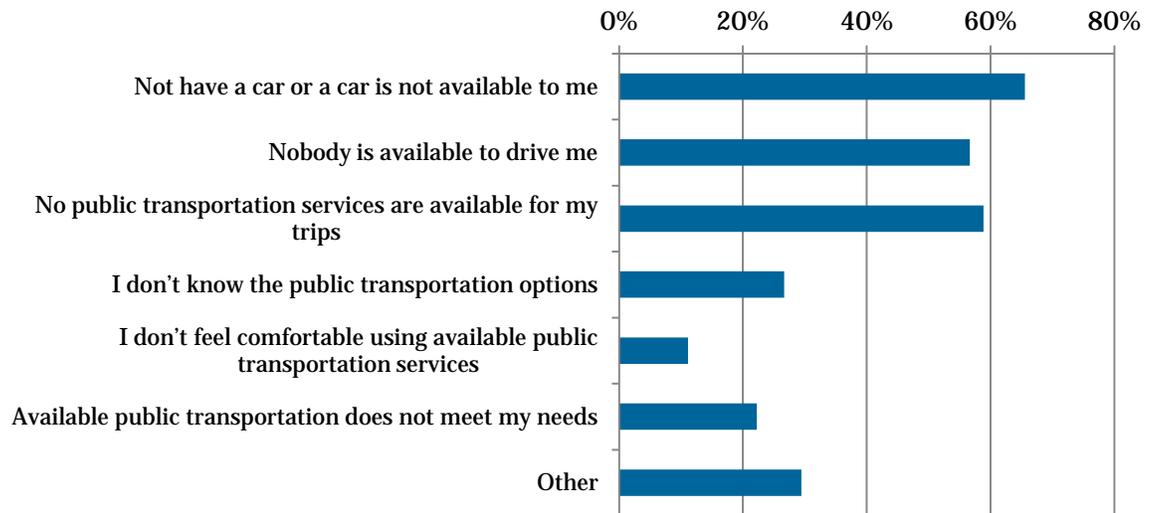
(30%), and social/entertainment (24%). Nearly one-fifth of respondents indicated they had missed religious activities (many noting church services) due to a lack of transportation. This information, shown in Figure 6-13, reinforces the data collected from stakeholders and persons attending public meetings that a portion of the population risks being isolated or disenfranchised due to a lack of transportation.

Figure 6-13 In the Last Six Months, Have You Missed Any of the Following Trips Due to a Lack of Transportation? (Paper Human Services/Transit Surveys)



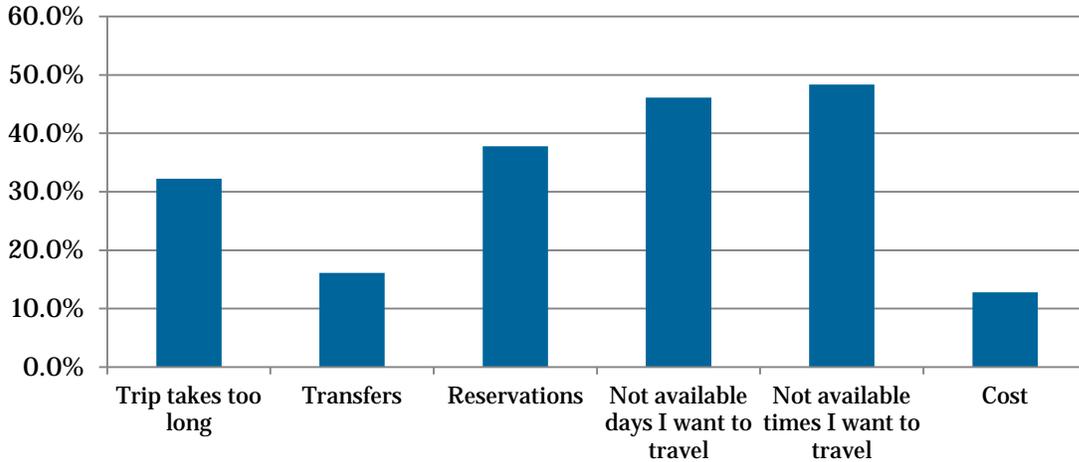
Among those who indicated they had missed trips, they were asked to indicate all of the reasons (multiple answers accepted) they had missed trips. Two-thirds (66%) said they missed trips because they had no car available. Fifty-seven percent said they had no driver available, and 59% said that public transportation was not available. The specific reasons why people missed trips are shown in Figure 6-14. Among those who indicated “other,” one of the most common responses was one of the existing categories: that public transportation was not available or did not meet their needs to the location they wanted to go. Comments included, “No pick up in Murphy,” “No public transport in McKinney,” and “No public transportation in Allen,” suggesting the need for improvements to CCART’s information resources but also possibly some personal experience with limited capacity (comments included “Have to call four days in advance” and “If I miss the CCART I will have to wait another 1hr 20 min for another.”). Other comments included, “No public transportation on weekends,” and several others noted limited DART services in Plano.

Figure 6-14 What Keeps You From Getting Where You Need to Go?
(Paper Human Services/Transit Surveys)



Respondents who indicated public transportation services are not available or do not meet their needs were asked why. Forty-eight percent indicated transit was not available at the times they wanted to travel, followed by 46% who said that service was not available days of the week they wanted to travel. The inability to make a reservation accounted for 38% of responses, and long travel times for 32%. Responses are shown in Figure 6-15

Figure 6-15 Why Does Public Transportation Not Meet Your Needs?

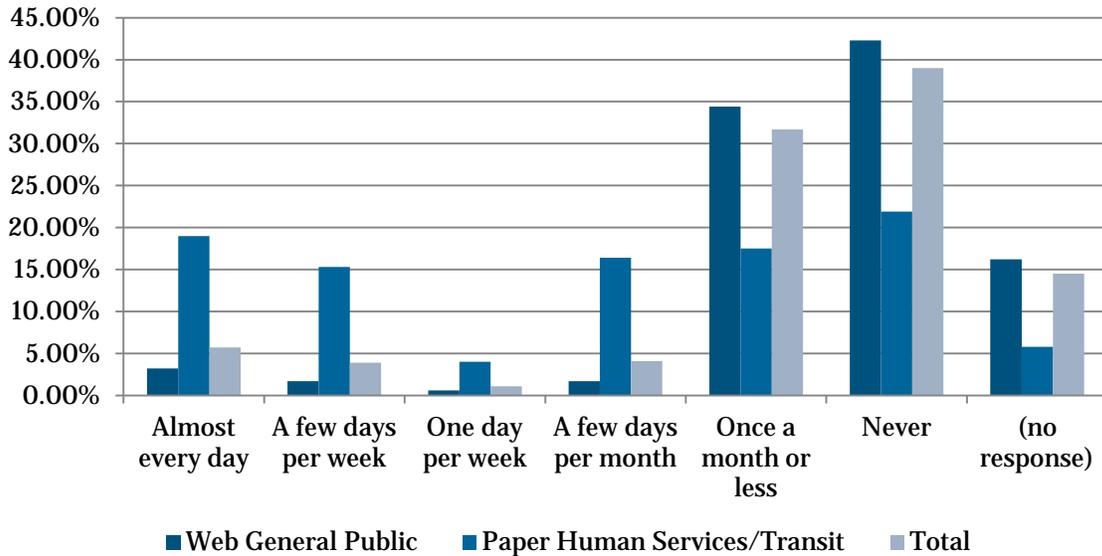


Use of Public Transportation

Frequency of Use

Respondents to both the web general public survey and the paper human service/transit surveys were asked how often they had used public transportation during the past six months. Most had never used it, and among those who had, the largest group had used it infrequently. Figure 6-16 illustrates that 32% of web survey respondents took a ride on transit once a month or less. Only three percent rode transit almost every day, showing how limited the experience of using transit is for the vast majority of Collin County’s residents. Of respondents to the paper survey, well over one-third whom use transit, 19% indicated riding transit every day, and another 15% ride a few days each week. Sixteen percent ride a few days per month. Only 22% said they had used no public transit at all during the past six months.

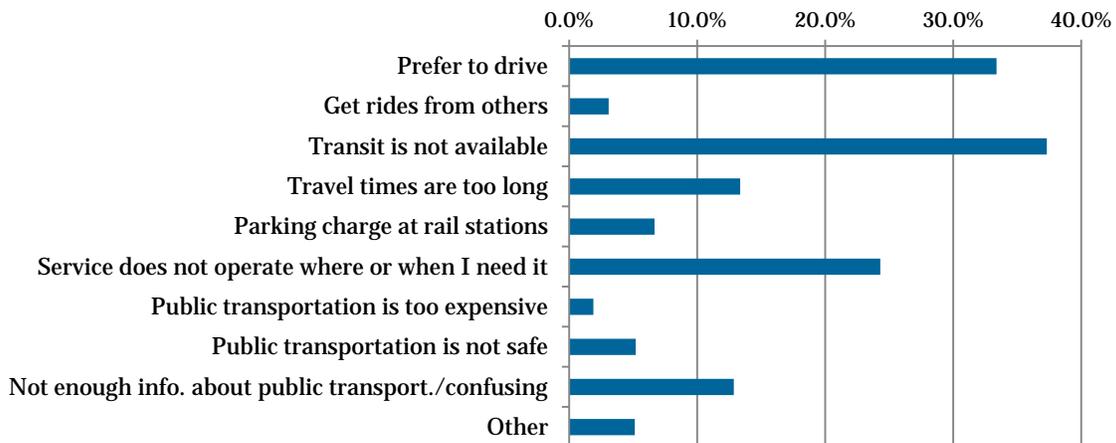
Figure 6-16 How Often Have You Used Public Transit in the Past Six Months?



Reasons for Not Using Transit

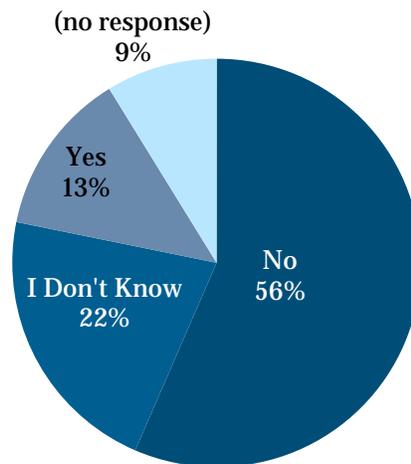
Figure 6-17 shows why respondents had not used public transportation in the past six months. Respondents were able to mark all relevant answers. The largest group of people indicated that transit is not available (37%), and one-third of respondents (33%) indicated they prefer to drive. Nearly one-quarter of respondents (24%) said that public transit service does not operate where or when it is needed. Thirteen percent indicated that they do not have enough information about public transit or that it is too confusing.

Figure 6-17 Why Have You Not Used Any Public Transportation in the Past Six Months? (Web General Public Survey)



Lack of transit service in portions of Collin County and, in some cases, limited information about transit services logically contribute to limited ridership. The survey asked whether public transportation was available in the neighborhood or community where respondents live (Figure 6-18). Only 13% said that public transportation is available where they live. Fifty-six percent definitively said that transit is not available, while 22% said they did not know. Another nine percent of respondents skipped this question.

Figure 6-18 Does Public Transportation Currently Serve the Neighborhood/Community Where You Live? (Web General Public Survey)

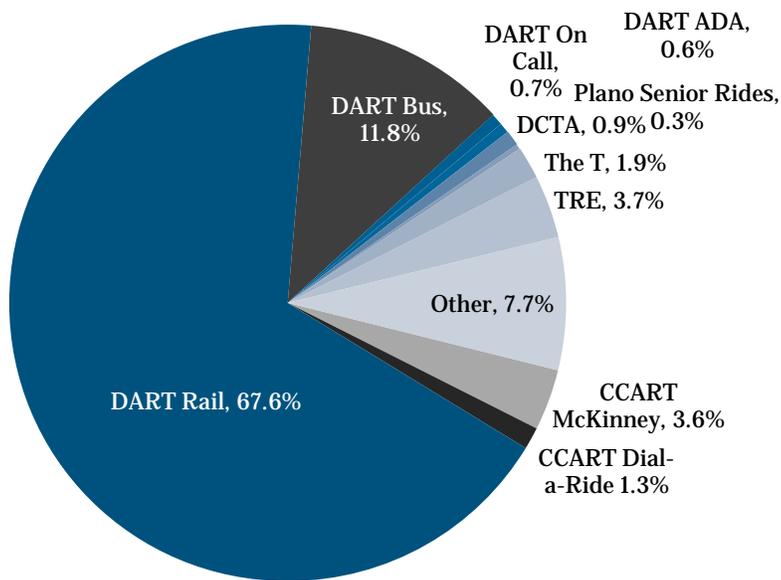


Public Transportation Services Used

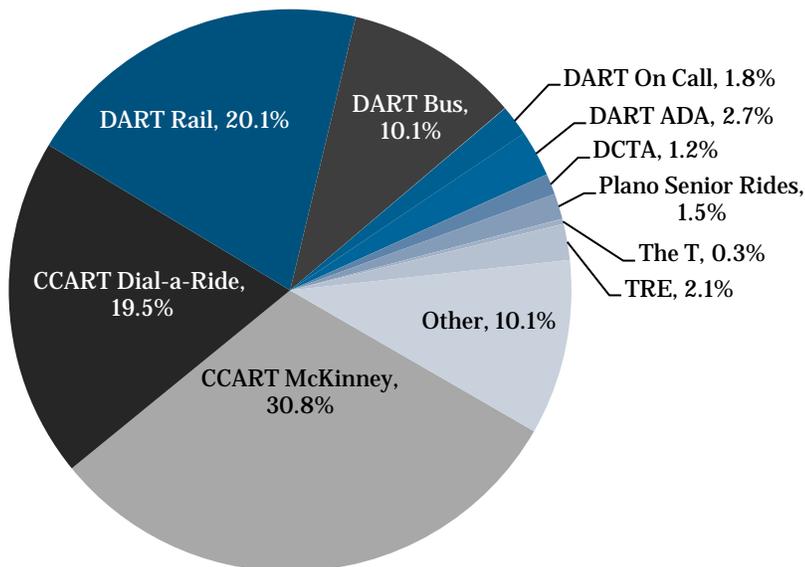
Figure 6-19 shows the various public transportation services used by the respondents to both surveys. Individuals could mark more than one public transportation service if they had used more than one. The information shows that DART Rail is used most often by respondents completing the general public survey, while bus routes in McKinney, DART Rail, and countywide dial-a-ride are the most used transit services for respondents to the paper survey.

Figure 6-19 Which Public Transportation Services Have You Used in The Last Six Months?

Web General Public Survey



Paper Human Services/Transit Survey



Opportunities

Factors to Encourage the Use of Public Transportation

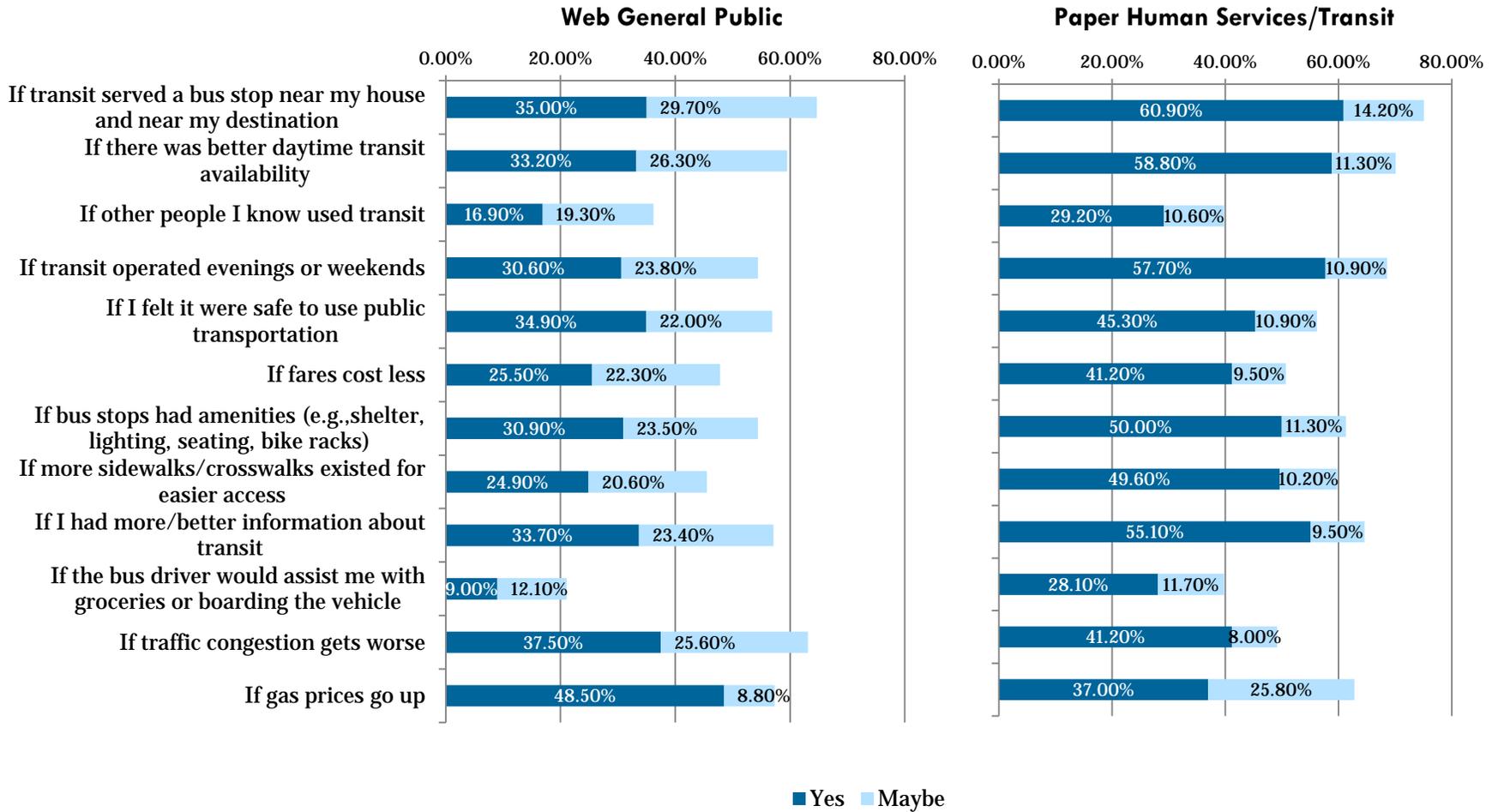
Both surveys asked respondents to indicate whether any of a series of conditions would encourage them to use public transportation more often. Overall, those who completed the paper survey were much more likely than those who completed the web survey to indicate that the various conditions would encourage them to ride more often (see Figure 6-20).

Among the respondents of the web survey, about 65% would possibly consider using public transportation more if bus stops were near their home and destinations, and about 63% might do so if the traffic congestion were to get worse. Nearly one-half of respondents (49%) indicated a definitive “yes” to using public transit more if gas prices were to go up. Least likely to encourage public transit use included driver assistance and if the respondent knew other people who used transit.

Among those responding to the paper human services/transit survey, almost 75% indicated they might use public transportation more if the bus stops were near their home and destinations, and 70% would do so if daytime transit availability were better. More than 60% of users of human services/transit also cited evening/weekend transit service, more/better information about transit, and gas prices going up as factors that would encourage them to use public transportation more.

In general, there were very few differences among factors that would encourage transit use for high-income respondents versus low-income respondents, with only a few exceptions. Low-income respondents were more likely than higher earners to list “if the bus driver would assist me with groceries or boarding the vehicle” as a factor to encourage ridership, but higher-income respondents showed greater sensitivity to gas prices, indicating a greater willingness to use transit more often if gas prices were to increase. Lower-income respondents, perhaps more attuned to the experience of using local transit, were also more likely to indicate “if bus stops had amenities (such as shelters, lighting, seating, or bike-racks)” and “if more sidewalks/crosswalks existed for easier access” as factors encouraging transit use.

Figure 6-20 Would Any of the Following Encourage You to Use Public Transportation More Often?



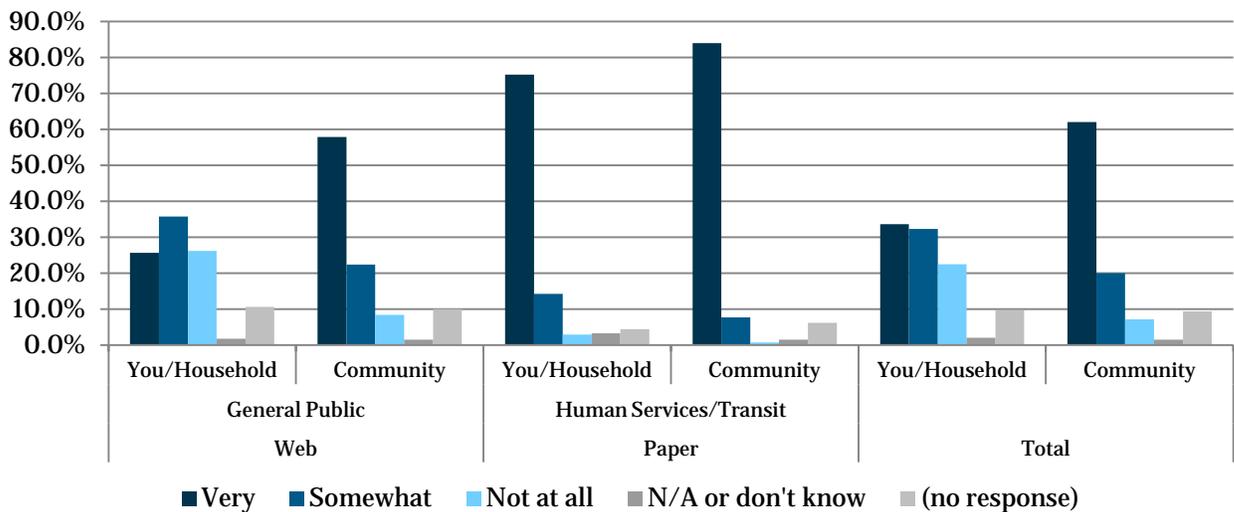
Importance of Transit

Figure 6-21 shows the importance of local transit to the individual respondent and his/her household, as well as the perceived value to the community. Overall, respondents indicated that even if transit is not necessarily important to them personally (for themselves and their household), most indicated that it is important to have transit available in the community.

Three-quarters (75%) of the respondents to the human services/transit survey consider it to be very important for themselves and their households to have local transit available, and even more, 84%, marked transit for the community is very important. Another 14% said it is somewhat important for themselves.

Of those who completed the web general public survey, only 26% consider local transit to be very important for themselves and their households, but more than twice as many, 58%, said it is important to have transit service available in the community. Another 36% said transit was somewhat important for themselves and their households. More than one-quarter of respondents (26%) indicated transit was not at all important for themselves or their household, but only eight percent said it is not important for the community to have transit available. This suggests that even people who may not use transit now, nor have much likelihood of using it in the future, generally support some level of transit service as a value to the community.

Figure 6-21 How Important is it to Have Local Transit Available for (1) You and Your Household and (2) in the Community?



Potential New Public Transportation Services

Looking ahead to solutions, surveys asked which of a list of potential new services would be most appealing to respondents and their household members. They could indicate more than one service, if necessary.

The following table illustrates respondents' preferences to potential new public transportation services. Fifty-eight percent of respondents to the web survey indicated that a service connecting Collin County cities to DART rail would be their preference. Thirty-two percent said bus routes linking Collin County cities would be preferred and 28% indicated local bus service would be most

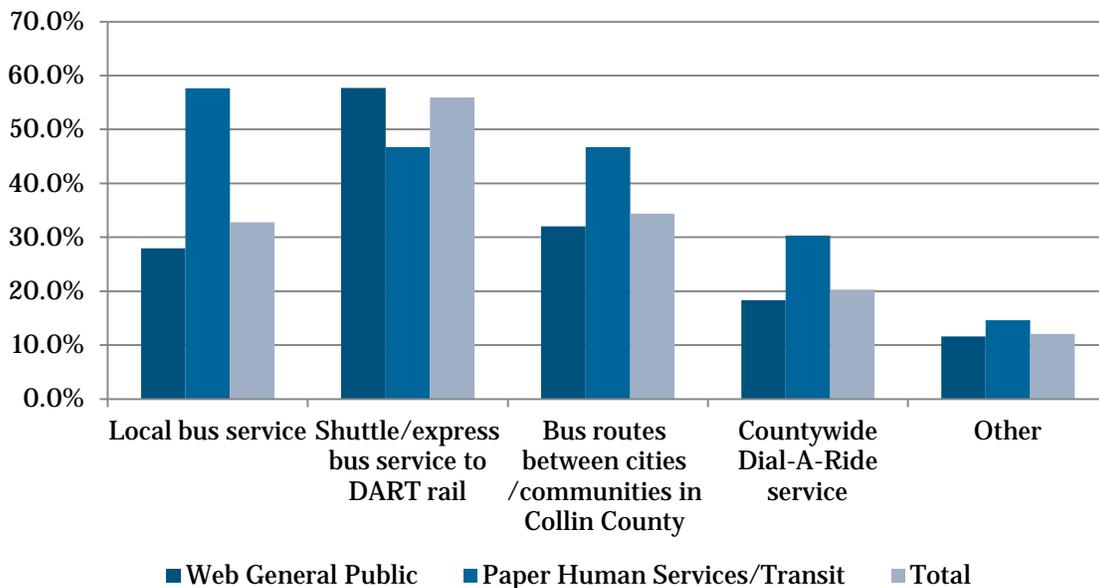
appealing. These preferences generally reflect the comments from individuals at public meetings and input from project stakeholders.

The preferences were quite different for those who completed the paper human services/transit survey, where a significant number of respondents marked multiple service options and a majority (58%) listed local bus service as most appealing, followed by both service to DART rail and bus routes between Collin County cities (both 47%). Thirty percent of these respondents listed countywide dial-a-ride service as most appealing. Those who ride transit every day listed service to DART as most appealing, as did those who ride very infrequently or not at all. Those who currently ride transit a few days a week – and therefore likely not using transit to commute – marked local bus service as most appealing.

By far, the most common preference among those who listed “other” was an extension of rail service north of Plano. Rail service was left off the list of options due to the short-term nature of this particular study, but it is an issue of great importance to a number of Collin County residents. Among the non-rail “other” services listed were commuter bus service directly to Dallas (not a link to DART), better/new bicycle paths and pedestrian paths, taxi services, and enhanced paratransit services.

A number of people listed specific neighborhoods in Plano and McKinney for local service, and others listed cities without local transit service: Allen, Princeton, Murphy, Frisco and Farmersville. The most common requests for intercity service were between McKinney and Plano, and McKinney and Frisco, but services were listed between almost every possible pair of Collin County cities, as well as from Collin County cities to Dallas, DFW Airport, Richardson, Denton/Denton County, Rockwall County, and other locations.

Figure 6-22 Which of the Following Potential New Services Would Be Most Appealing to You or Members of Your Household?



Comments/Feedback

Respondents were asked if they had any comments they wished to provide. They provided a diverse set of comments which, for summary purposes, were assigned to different categories or themes as shown in Figure 6-23.

A majority of the respondents had no comments to offer. Among those who commented, the largest group of web survey comments (about 14%) involved adding more cities to existing transit systems like DART. Eight percent of the paper survey respondents commented on the same issue.

Respondents talked about the need for service improvements for seniors and people with disabilities, with many individuals noting that they hope transit service will be available to them as they age. Others commented on safety, the concern about non-residents taking transit into their community, and the observation that planning in Collin County has not addressed transportation needs: that future growth will negatively impact the community if there is no investment in transit.

The full set of comments is included in Appendix F.

Figure 6-23 Comments by Theme

Response	Paper Survey		Web Survey		Total	
	Human Services/ Transit User		General Public			
	Count	Percent	Count	Percent	Count	Percent
(No response)	144	52.6%	911	64.0%	1,055	62.2%
Add Cities to Transit System	22	8.0%	208	14.6%	230	13.6%
Connection to DART	8	2.9%	50	3.5%	58	3.4%
Cost	5	1.8%	8	0.6%	13	0.8%
Safety	9	3.3%	19	1.3%	28	1.6%
Service Duration	8	2.9%	2	0.1%	10	0.6%
Service for Disabled/Senior Citizens	20	7.3%	27	1.9%	47	2.8%
Service Frequency	14	5.1%	14	1.0%	28	1.6%
Other	44	16.1%	184	12.9%	228	13.4%
Total	274	100.0%	1,423	100.0%	1,697	100.0%

CONCLUSION

Members of the public who participated in the meetings expressed high level of interest in potential transit services and transportation programs in Collin County. Overall, participants found the meetings helpful. Questionnaire responses overwhelmingly indicated that meetings were useful.

Demographic characteristics from the surveys generally represent the demographic characteristics of Collin County’s population, although there were more females than males among the respondents. Geographic distribution of survey responses does not wholly match

actual population concentrations and responses are skewed toward McKinney, where the city made an extraordinary effort to reach its citizens and encourage them to participate in the survey. Few responses from transit riders throughout the county and poor participation by some human service agencies meant that some of the key issues raised by stakeholders and community members in public meetings were not as prevalent among the survey responses. Nevertheless, the surveys represent another important element of a picture of Collin County's transit needs and preferences.

Persons who use transit or are affiliated with a human service agency from which they received a paper survey generally indicate greater need for transit service, have lower incomes, and a higher proportion of senior citizens in their households. Only 27% are employed. Many of them indicated they have a disability which limits mobility. Web survey respondents are more affluent and have more vehicles available. The data suggests there are very few "choice transit riders" (people who have a car but opt to use transit instead of driving) in portions of McKinney and Plano: that current public transportation serves people with few mobility options. In Plano, some of the routes that serve as feeders to DART rail (or distributors to major employment sites) likely attract more choice riders.

Transit users appear to value their existing services and want more of them. Only 20% of the paper survey respondents drive. Many note concerns about limitations of DART service in Plano and limited service hours, coverage and frequencies of fixed routes in McKinney. Existing transit users are most interested in links between Collin County cities and local service. Non-transit users are predominately interested in commuter services to Dallas or connections to DART.

On the whole, transit, as a proposed service in the community, is valued even if individuals are not likely users. Many comments note that some level of service should be made available. Nevertheless, some of the comments include strong opinions opposed to transit service, with concerns raised about impacts to quality of life or concerns about non-residents traveling to Collin County. Those who support transit indicate they would use public transportation more if the transit stop were near their home and destination, and if services operated at preferred hours and frequencies. Connections to DART rail and service to localities within Collin County were oft-cited potential new services that appealed to the respondents.

Overall, the survey findings are unlikely to surprise most stakeholders, policymakers, or Collin County residents. They suggest that if transportation solutions for people with fewer mobility options are addressed (a focus on local services, links between Collin County cities or dial-a-ride services), the general public is unlikely to take much note of them, but there would be support from likely users, which represents a relatively small proportion of Collin County's general population. Potential new services that appeal most to the general population, namely a link to DART and possibly other commuter services, may be less likely to be used by the people who support them most (although the comments suggest that an extension of DART rail service to the north remains a high priority for many).

7 TRANSPORTATION TOOLBOX FOR COLLIN COUNTY

INTRODUCTION

Based on the array of needs identified in Chapters 1 through 6, the project team identified 16 transportation service alternatives that could potentially address the various mobility needs of Collin County residents. The intention of this chapter is simply to define these tools, all of which could be appropriate for implementation in Collin County. Some of tools, such as carpools and community shuttles, are appropriate for nearly all of Collin County's community types. Others, however, are only feasible under certain conditions that may not be present in every community—or at the countywide level—at this time. Maintaining this set of strategies, however, provides a resource for TAPS, Collin County, and the county's various jurisdictions of programs and services that could be implemented in the future. The list of tools is as follows, and each tool is defined in this chapter:

- Volunteer Driver Program
- Mobility Management
- Coordination and Cost Sharing Opportunities
- Subsidized Taxi Program
- Carpool
- Vanpool
- ADA Paratransit/Eligibility-Based Dial-A-Ride
- General Public Dial-A-Ride
- Community Shuttle
- Express Bus/Park-and-Ride Service
- Limited Bus Stop Service
- Point Deviation Service
- Route Deviation
- Feeder/Connector Service to Fixed-Route
- Site-Specific Shuttle
- Local Fixed-Route Bus Service

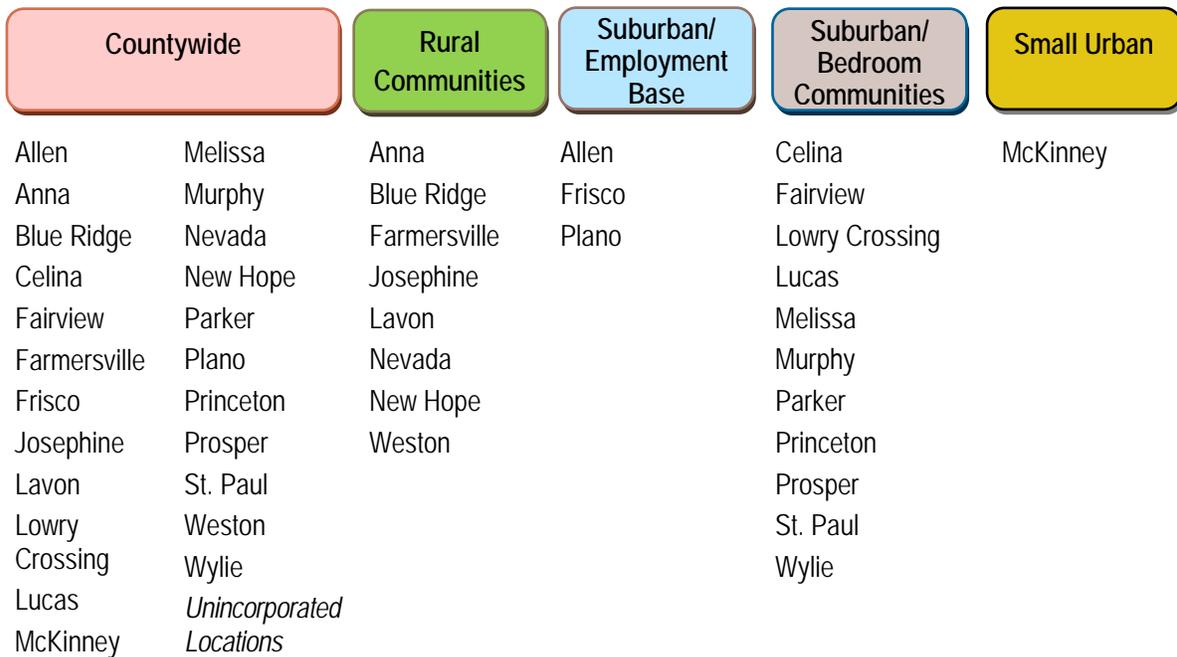
Certain tools would be applicable only in certain types of communities. Collin County is known primarily as a suburban county and many of its cities fit that description well. However, a diverse range of community types exist in the county, and the characteristics of each can determine the most appropriate type of transit service for the community.

The consulting team identified five geographic groupings/designations for defining where the various tools are likely to be most appropriate for implementation in Collin County. These are as follows:

- **Countywide:** This classification applies to the entirety of Collin County and includes all communities and unincorporated areas.
- **Rural Communities:** This group includes Collin County cities that are neither in the Dallas-Fort Worth-Arlington Urbanized Area, nor the McKinney Urbanized Area.
- **Suburban/Employment Base:** This group includes Collin County cities that are part of the Dallas-Fort Worth-Arlington Urbanized Area and attract a significant inflow of work commuters on a daily basis.
- **Suburban/Bedroom Communities:** This group includes Collin County cities that are part of the Dallas-Fort Worth-Arlington Urbanized Area and are primarily residential in nature.
- **Small Urban Community:** This classification applies only to the City of McKinney which has its own Urbanized Area and is not considered part of the Dallas-Fort Worth-Arlington Urbanized Area.

Figure 7-1 illustrates these classifications.

Figure 7-1 Collin County Community Classifications



Each of these community types is referenced with the definition for each tool, providing an understanding of where the services might be considered for implementation in Collin County.

TOOLBOX

Volunteer Driver Program



In this type of program, volunteer drivers use their own vehicles (or vehicles provided by an agency) to provide transportation to targeted individuals such as people with disabilities and seniors. Volunteer driver programs could sometimes include long distance trips outside of Collin County to serve specialized destinations not found in the county such as a VA hospital.

- **Need Being Met:** Increase transportation options, including potential same day service. Provide more personalized service. Service for populations that do not have access to a car or ability to drive
- **Market:** Seniors, disabled, temporary situations (health care, job hunting)
- **Service Parameters (frequency, operating hours etc.):** Varies considerably depending on the program parameters.
- **Existing Conditions required for Success:** Strong volunteer base. Well-established network for volunteer recruitment. Agency able and willing to take on labor-intensive administrative function.
- **Anticipated Outcomes and Level of Service (ridership, productivity etc.):** Entirely dependent on the scale of the program.
- **Extent to which Needs are Addressed:** Successful programs provide highly customized service, but overall trip availability per person is likely to be limited
- **Other Implementation Considerations:** Implementation of a successful program can be long-term, with a key challenge being able to balance the number of volunteers and potential riders, and the former's availability with the times at which trips are needed

Mobility Management



Mobility Management can be interpreted in a number of different ways, but generally refers to a strategic, cost-effective approach to connecting people needing transportation to available transportation resources within a community. Through partnerships with many transportation service providers, mobility managers enable individuals to use a travel method that meets their specific needs, is appropriate for their situation and trip, and is cost-efficient. Mobility managers should also identify when appropriate transportation resources are not available, and assist in developing and implementing them.

- **Need Being Met:** Enhance coordination within a geographic area, and enhance residents' abilities to access existing resources.
- **Market:** Generally serves people with disabilities, seniors and low-income residents
- **Service Parameters (frequency, operating hours etc.):** Not applicable, since this is not an on-the-ground service that is being provided, but rather a means of facilitating access to services

- **Existing Conditions required for Success:** A variety of transportation options that can be accessed by the target population.
- **Anticipated Outcomes and Level of Service (ridership, productivity etc.):** Not applicable
- **Extent to which Needs are Addressed:** Effective mobility management functions can be critical in areas where residents are not aware of their transportation options, particularly in an auto-oriented environment
- **Other Implementation Considerations:** Requires significant level of cooperation between local agencies, and also the commitment of a “host” agency for the mobility management function. Requires several other services to be in place in Collin County in order for mobility management to be effective.

Coordination/Cost Sharing Opportunities



Either through a mobility manager or an oversight entity that is connected to numerous transportation providers in the community, incremental steps can be taken to coordinate resources and enhance the effectiveness of service provision. With regard to cost sharing, this implies seeking opportunities for public entities such as paratransit providers to share trip costs with agencies/organizations whose clients are benefiting from service that exceeds the minimum ADA paratransit service requirements (e.g.. service to dialysis clinics).

- **Need Being Met:** Coordination helps expand the reach of existing services so that more people can be served. Cost sharing can help defray the costs to the paratransit provider of some portion of paratransit service.
- **Market:** Primarily used for services that meet the needs of people with disabilities and seniors.
- **Service Parameters (frequency, operating hours etc.):** Not applicable.
- **Existing Conditions required for Success:** Strong political leadership to bring together different providers, and to ensure that paratransit costs are equitably distributed.
- **Anticipated Outcomes and Level of Service (ridership, productivity etc.):** More service and greater sharing of the costs of service provision.
- **Extent to which Needs are Addressed:** Depends on level of coordination and cost sharing arrangements.
- **Other Implementation Considerations:** Coordination and cost sharing can be most effectively achieved through the focused activities or a mobility manager. Requires several other services to be in place in Collin County in order for mobility management to be effective.

Subsidized Taxi Program

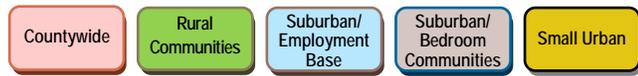


A subsidized taxi program provides discounted taxi vouchers for seniors or people with disabilities, or auxiliary fleet for demand-response service.

- **Need Being Met:** Improved same day, door to door options. Increase existing ridership. More personalized service than some other options. Most likely to be able to provide 24/7 service.

- **Market:** Seniors, disabled, temporary situations (health care, job hunting)
- **Service Parameters (frequency, operating hours etc.):** Can vary depending on budget availability and availability of taxi fleets.
- **Existing Conditions required for Success:** Sizable taxi market. Willingness of taxi companies to participate in the program given federal requirements (drug and alcohol testing, training etc).
- **Anticipated Outcomes and Level of Service (ridership, productivity etc.):** Level of service will vary depending upon available budget, level of subsidy, constraints such as trip limits, eligibility, etc.
- **Extent to which Needs are Addressed:** The flexibility of taxi service can result in significant meeting of needs apart from the high subsidy level required.
- **Other Implementation Considerations:** Given program costs, this may well serve as a lifeline service for those essential trips that cannot be provided by the other options.

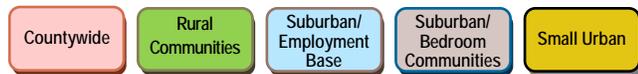
Carpool



Carpools are defined as ridesharing among commuters using a personal vehicle. Carpools are typically used for long-distance commutes, often to destinations outside of the county.

- **Need Being Met:** Transportation option where no others may exist. Reduced commuting cost compared to driving alone, especially for long commutes. Potential for significant time-savings where HOV lanes are available.
- **Market:** Commuters, students
- **Service Parameters (frequency, operating hours etc.):** Route and schedule developed by participants themselves.
- **Existing Conditions required for Success:** Disincentives to driving alone such as long distances, heavy congestion, or tolls. HOV lanes are preferable.
- **Anticipated Outcomes and Level of Service (ridership, productivity etc.):** Fewer vehicles to contribute to peak-hour congestion.
- **Extent to which Needs are Addressed:** Carpools are most effective for recurring work or school commutes, but are not well suited for occasional or periodic trips such as shopping or medical appointments. Carpools also depend on potential participants to have sufficiently similar commuting patterns.
- **Other Implementation Considerations:** Ridematching services can help facilitate and promote carpooling. Such services can be operated by public, private, or nonprofit organizations.

Vanpool

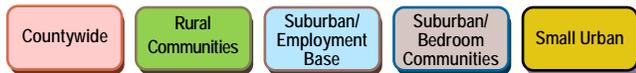


Vanpools offer ridesharing among commuters using a sponsored van. Vanpools are typically used for long-distance commutes, often to destinations outside of the county.

- **Need Being Met:** Transportation option where no others may exist. Reduced commuting cost compared to driving alone, especially for long commutes. Potential for significant time-savings where HOV lanes are available.
- **Market:** Commuters, students (age restrictions may apply).

- **Service Parameters (frequency, operating hours etc.):** Route and schedule developed by participants themselves.
- **Existing Conditions required for Success:** Disincentives to driving alone such as long distances, heavy congestion, or tolls. HOV lanes are preferable.
- **Anticipated Outcomes and Level of Service (ridership, productivity etc.):** Fewer vehicles to contribute to peak-hour congestion.
- **Extent to which Needs are Addressed:** Vanpools are most effective for recurring home-to-work trips, but are not well suited for occasional or periodic trips such as shopping or medical appointments. Vanpools also depend on potential participants to have sufficiently similar commuting patterns.
- **Other Implementation Considerations:** Ridematching services can help facilitate and promote vanpooling. Such services can be operated by public, private, or nonprofit organizations. A small administrative staff is needed to manage vanpool records, service issues, etc.

ADA Paratransit and Eligibility-Based Dial-A-Ride



ADA paratransit or eligibility-based dial-a-ride is a demand-response service for people with disabilities, and sometimes for seniors, too.

- **Need Being Met:** Compliance with federal ADA complementary paratransit requirement where fixed-route service exists. Lifeline service for sensitive population groups where no other transit service exists.
- **Market:** Seniors, disabled
- **Service Parameters (frequency, operating hours etc.):** Comparable to fixed-route service, with no more than double the fare.
- **Existing Conditions required for Success:** ADA paratransit service required within $\frac{3}{4}$ mile on either side of fixed-route service, and during comparable service hours. Non-ADA service requires community support and demand among target ridership.
- **Anticipated Outcomes and Level of Service (ridership, productivity etc.):** ADA paratransit or eligibility-based dial-a-ride services typically generate 2 to 3 passenger trips per vehicle revenue hour, with lower productivity in congested urbanized areas, or where long trips are provided.
- **Extent to which Needs are Addressed:** ADA paratransit or eligibility-based dial-a-ride services provide critical mobility opportunities for select population groups, but reservations must be made at least the day before the trip, and for non-ADA service, restrictions are sometimes placed on trip types and frequency of use by an individual.
- **Other Implementation Considerations:** ADA paratransit or eligibility-based dial-a-ride services typically require dedicated dispatching staff and specialized ridematching software to operate efficiently.

General Purpose Dial-A-Ride



Demand-response service can also be available for the general population.

- **Need Being Met:** In low-density environments with dispersed destinations, demand-response service provides the ability to serve a large geographic area.
- **Market:** Seniors, disabled, general public (for local shopping / services).
- **Service Parameters (frequency, operating hours etc.):** Daily trip limits per passenger are usually included in the program. Hours are based on demand and funding availability.
- **Existing Conditions required for Success:** Dial-a-ride service must have well-defined boundaries to ensure reasonable trip distances and travel times.
- **Anticipated Outcomes and Level of Service (ridership, productivity etc.):** Dial-A-ride services typically generate 2 to 3 passenger trips per vehicle revenue hour.
- **Extent to which Needs are Addressed:** Dial-a-ride services provides a very basic level of mobility coverage in low-density environments, but mostly lack the ability to accommodate travel that is not planned in advance.
- **Other Implementation Considerations:** Dial-a-ride services typically require dedicated dispatching staff and specialized ridematching software to operate efficiently.

Community Shuttle



A community shuttle is a fixed-route or demand-response services in small or rural communities that operate 1 to 3 days a week, typically to a specific location such as a supermarket or medical facility.

- **Need Being Met:** Access to shopping and services on designated days for those with limited transportation options.
- **Market:** Seniors, disabled, general public (for local shopping/services).
- **Service Parameters (frequency, operating hours etc.):** Available at least one day per week. Can be operated as a fixed-route or demand-response service. Service hours depend on funding and ridership demand.
- **Existing Conditions required for Success:** Community shuttles are often considered a life-line service, so “success” must be defined by an oversight body.
- **Anticipated Outcomes and Level of Service (ridership, productivity etc.):** Ridership is highly dependent on the service design, which can be fixed-route or demand-response and range from one round-trip per day to dozens of trips per day.
- **Extent to which Needs are Addressed:** Community shuttles provide life-line coverage in low-density environments, but lack the ability to serve daily commuters.
- **Other Implementation Considerations:** Community shuttles often alternate between different communities on different days. Some communities may be able to support more service days per week than others.

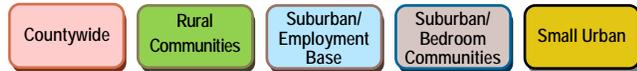
Express Bus/Park-and-Ride Service



Express bus/park-and-ride service is nonstop or very limited-stop commuter service in heavily traveled and congested corridors, often offering an alternative to automobile travel. In Collin County, express bus service would most likely be designed to serve Plano and downtown Dallas.

- **Need Being Met:** Reduced commuting cost compared to driving alone, especially for long commutes. Potential for significant time-savings where HOV lanes are available.
- **Market:** Commuters, general public (when service is available beyond peak hours).
- **Service Parameters (frequency, operating hours etc.):** 30-minute service or better in the peak. Hours depend on demand and funding availability.
- **Existing Conditions required for Success:** Park-and-ride facility and/or connecting local service. HOV lanes are preferable.
- **Anticipated Outcomes and Level of Service (ridership, productivity etc.):** Express bus service typically averages between 15 and 20 passengers per trip.
- **Extent to which Needs are Addressed:** Express bus service is best suited for daily commuter trips to employment destinations outside of the community. Express bus service generally does not address circulation within a community.
- **Other Implementation Considerations:** Express bus service usually operates from park-and-ride lots which can be stand-alone or shared facilities. For shared facilities, it is best to consider a venue with low parking demand during daytime business hours (such as a movie theater).

Limited Stop Service



Limited-stop service operates between regional destinations, often serving multiple cities. Limited-stop service in Collin County may terminate at major destinations or transit hubs outside of the county.

- **Need Being Met:** Connectivity between regional destinations.
- **Market:** Commuters, general public.
- **Service Parameters (frequency, operating hours etc.):** 60-minute service or better in the peak. Regional service is typically an integral part of the transit network and operates all day (6:00 AM to 10:00 PM, for example).
- **Existing Conditions required for Success:** Transit center, park-and-ride and/or connecting local service.
- **Anticipated Outcomes and Level of Service (ridership, productivity etc.):** Regional bus service typically carries 20 passengers or more per revenue hour.
- **Extent to which Needs are Addressed:** Regional bus service is designed to provide limited-stop service between key regional destinations. Local circulation within a community is usually not addressed by regional bus service, except it can occur at a trip end.
- **Other Implementation Considerations:** Regional bus service is usually paired with connecting local service to provide first/last mile connections.

Point Deviation Service



Point deviation service operates with fixed time points but flexible routing between time points (therefore considered one of the variations of “flex” service).

- **Need Being Met:** Point deviation service combines the accessibility features of demand-response service with the scheduled reliability of fixed-route service.
- **Market:** General public.
- **Service Parameters (frequency, operating hours etc.):** 60-minute service or better in the peak for fixed time points. To accommodate flex pick-ups, the travel time between time points must be longer than for direct travel.
- **Existing Conditions required for Success:** 2 or more persons/acre within ¼ mile of fixed time points. 0.5 or more persons per acre average in “flex” area.
- **Anticipated Outcomes and Level of Service (ridership, productivity etc.):** Point Deviation Service typically carries 5 to 7 passengers per revenue hour.
- **Extent to which Needs are Addressed:** For trips from scheduled time points to the flex areas, riders do not need reservations. For trips from flex areas to set time points, riders would need to make reservations to be picked up directly at the curb in front of their origin. For trips entirely within flex areas, riders make reservations for curb-to-curb service. Flex services are considered to be “demand-responsive” under ADA regulations, so complementary paratransit services are not necessary.
- **Other Implementation Considerations:** Some transit agencies charge different fares on point deviation routes depending on if a passenger requested a “flex” trip or boarded and alighted at set time points only.

Route Deviation Service



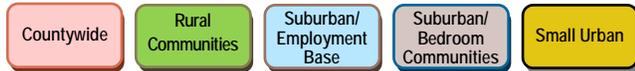
Route deviation services is essentially fixed-route service that allows buses to deviate a certain distance from the defined path upon request. Buses must return to the point of deviation so that no fixed stops are missed.

- **Need Being Met:** Route deviation service combines the accessibility features of demand-response service with the scheduled reliability of fixed-route service. Route-deviation service is slightly more fixed-route than demand-response when compared to Point Deviation Service.
- **Market:** General public.
- **Service Parameters (frequency, operating hours etc.):** 60-minute service or better in the peak for fixed time points. To accommodate flex pick-ups, the travel time between time points must be longer than for direct travel.
- **Existing Conditions required for Success:** 2 or more persons/acre within ¼ mile of the fixed route. 0.5 or more persons per acre average in “flex” area.
- **Anticipated Outcomes and Level of Service (ridership, productivity etc.):** Route Deviation Service typically carries 5 to 7 passengers per revenue hour.
- **Extent to which Needs are Addressed:** Since deviations from the fixed route need to be limited in order to maintain schedule adherence, this mode can only meet the needs of a limited number of people with disabilities. However, it is an effective mode for serving

the needs of those who can benefit from fixed-route service where densities do not justify full fixed-route service.

- **Other Implementation Considerations:** Some transit agencies charge different fares on route deviation routes depending on if a passenger requested a deviation from the fixed route or boarded and alighted at regular bus stops only. Deviations can be at the discretion of a bus driver, depending on the on-time status of a given trip. However, exceptions can be made for people with disabilities who request deviations the day before the trip so that these can be more easily accommodated in the schedule.

Feeder/Connector Service to Fixed-Route



This type of service is fixed-route or demand-response service that is designed to feed passengers from low density environments to near-by transit centers or fixed-route bus stops. Feeder service can also be used to shorten paratransit trips by providing service to fixed-route bus service for those who are conditionally ADA paratransit eligible.

- **Need Being Met:** Feeder/connector services are designed to provide the “last mile connection” that is key to the success and functionality of a regional transit network.
- **Market:** General public.
- **Service Parameters (frequency, operating hours etc.):** 60-minute service or better in the peak for fixed time points. To accommodate flex pick-ups, the travel time between time points must be longer than for direct travel. For feeder service provided to people with disabilities, headways of 15 minutes or less is required in order to avoid long wait times.
- **Existing Conditions required for Success:** 2 or more persons/acre within ¼ mile of the corridor served for fixed-route service. 0.5 or more persons per acre average if demand-response. Paratransit trip requests that are lengthy and can be more efficiently served through transfers from paratransit to fixed-route.
- **Anticipated Outcomes and Level of Service (ridership, productivity etc.):** Depending on the service design and the type of service connecting into, feeder/connector Service could be expected to carry from 2 to 10 passengers per revenue hour.
- **Extent to which Needs are Addressed:** Feeder/connector service complements an existing broader transit network, allowing more passengers to access the system for a wide variety of trip types.
- **Other Implementation Considerations:** Feeder/connector service schedules are usually coordinated with connecting services to ensure a seamless transition for passengers. In the case of paratransit feeder services, many systems provide the full length of the trip on paratransit if there is a missed connection with the fixed-route service rather than have the passenger with disabilities wait.

Site-Specific Shuttle



A site-specific shuttle is a jointly funded service designed to provide a “last-mile” connection to a sponsoring employer, institution, or retail destination.

- **Need Being Met:** Site-specific shuttles are designed to provide the “last mile connection” to and from major employment destinations that are beyond walking distance from regional transit centers or stations.
- **Market:** Commuters.
- **Service Parameters (frequency, operating hours etc.):** 15-minute service or better in the peak.
- **Existing Conditions required for Success:** Joint-funding and marketing sponsor. Transit center or station within relatively close proximity to major employment destination.
- **Anticipated Outcomes and Level of Service (ridership, productivity etc.):** Ridership is highly dependent on the size of the employer served.
- **Extent to which Needs are Addressed:** Site-specific shuttle service complements an existing broader transit network, attracting large numbers of workers who would likely otherwise drive to work.
- **Other Implementation Considerations:** Site-specific shuttles are designed around the needs of a major employer, but are open to the general public if they receive public funding.

Local Fixed-Route Bus Service



This tool is a traditional bus service: regularly scheduled routes making frequent stops along a set path.

- **Need Being Met:** Local fixed-route bus service is designed to serve a variety of local activity centers and often to provide connections to regional services at transit centers and stations.
- **Market:** General public.
- **Service Parameters (frequency, operating hours etc.):** 30-minute service or better in the peak, depending on land use densities.
- **Existing Conditions required for Success:** 8 or more persons/acre within ¼ mile of corridors served.
- **Anticipated Outcomes and Level of Service (ridership, productivity etc.):** Local fixed-route bus Service in a suburban or small urban environment typically carries 8 to 10 passengers per revenue hour. Higher productivities can be expected in more densely populated areas such as Plano.
- **Extent to which Needs are Addressed:** Local fixed-route bus service is designed to meet local mobility needs and connect to regional networks, but is not well suited for long-distance commuter trips.
- **Other Implementation Considerations:** Complementary ADA Paratransit Service must accompany local fixed-route bus service.

CONCLUSION

These tools offer a potential resource for addressing transportation needs as they arise in Collin County. Figure 7-2 provides a summary of the primary needs identified in this study and the various tools that could be applied to address each of the needs, depending on the type of community where the service is implemented. The figure illustrates that a number of the tools, including dial-a-ride services for the general public, express bus services and some of the deviated services, are most likely to address the largest number of needs. Other factors, such as cost and ease of implementation, however, must also be considered in determining the appropriate set of tools to implement in Collin County. Chapter 8 evaluates the appropriateness and likely effectiveness of each of these tools by community type and provides a preferred set of strategies to address Collin County's transportation needs.

Figure 7-2 Summary of Needs and Tools to Address Them

	Volunteer Driver Program	Mobility Mgmt.	Coordination/ Cost Sharing	Subsidized Taxis	Carpool	Vanpool	ADA/ Eligibility-Based Dial-A-Ride	General Public Dial-A-Ride	Community Shuttles	Express Bus/Park-and-Ride Service	Limited Bus Stop Service	Point Deviation Service	Route Deviation	Feeder/ Connector to Fixed Route	Site-Specific Shuttle	Local Fixed-Route Bus
Countywide																
Serve seniors and people with disabilities	•	•					•	•	•			•	•			
Regional links between Collin County cities/communities							•	•	•	•	•					
Improved service levels for transit-dependent populations	•	•					•	•				•	•			
Better information about available transportation services		•														
Options for commuters going to jobs inside and outside of Collin County					•	•		•		•	•	•	•	•		
Affordable transportation options	•	•			•	•	•	•	•	•	•	•	•	•		
Rural Communities																
Connections to local and regional centers					•	•	•	•			•	•	•	•		
Improved access to available demand-response services							•	•				•	•			
Availability of transportation options	•				•	•	•	•	•		•	•	•	•		
Suburban/Employment Base																
Availability of transportation options	•			•	•	•	•	•	•	•	•	•	•	•	•	•
Local transit service/improvements to existing service							•	•				•	•			•
Transit connections to DART bus and rail and/or Dallas										•	•			•		•
Transportation alternatives for seniors	•			•			•	•	•			•	•			•
Coordinated land use planning with transit development						•				•					•	
Availability of carpools and vanpools					•	•										
Suburban/Bedroom Communities																
Connections to local and regional centers		•			•	•	•	•		•	•	•	•	•		
Improved access to available demand-response services							•	•				•	•			
Availability of transportation options	•			•	•	•	•	•	•	•	•	•	•	•		
Small Urban (McKinney)																
Affordable transportation options	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•
Enhanced/more responsive local transit service							•	•				•	•			•
Transit connections to Plano DART and/or Dallas										•	•			•		
Transportation alternatives for seniors	•	•		•			•	•				•	•			•
Coordinated land use planning with transit development						•				•					•	
Improved travel times for commuters					•	•				•	•	•	•	•	•	•

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8 EVALUATION OF ALTERNATIVES AND PRESENTATION OF PREFERRED STRATEGIES

INTRODUCTION

All of the different transportation tools presented in Chapter 7 could be feasible in Collin County in the near-term. To target the appropriate services which are likely to have the greatest impact or be most effective, these services were evaluated. The evaluation was based, in part, on relationships between community types and transit service design. For transportation services to be effective, individual services must be designed to match market demand and operating environments. This chapter presents the evaluation and outcomes of the evaluation effort, defining the preferred strategies to address Collin County's short-term transportation needs.

EVALUATION

Criteria for Evaluating Potential Service Strategies

The various tools were subject to a prioritization process in which criteria that included community support, transportation benefits, financial feasibility, and implementation feasibility were taken into account. These evaluation criteria were developed through an iterative process based on input from key stakeholders and staff from NCTCOG. The specific criteria used to evaluate the alternatives are as follows:

1. Community

The community evaluation criterion is based on the level of community support, whether the tool or strategy serves the greatest need, whether it serves needs of a diverse community, and if it is accepted by the target population. The approach for rankings is as follows:

- High ranking - High community support and serves greatest need
- Medium ranking - Moderate community support and serves greatest need
- Low ranking - Low community support

2. Transportation Benefits

This evaluation criterion accounts for the number of beneficiaries, number of problems solved, and measurable solutions. The approach for rankings is as follows:

- High ranking - Large number of residents benefit, addresses multiple concerns, growth potential
- Medium ranking - Moderate number of residents benefit, addresses multiple concerns
- Low ranking - Small number of residents benefit, addresses one concern

3. Financial

The financial criterion accounts for the overall cost, cost per beneficiary, funding availability, and sustainability of the service (operating and capital). The approach for rankings is as follows:

- Highest ranking - Lowest cost to implement (under \$50,000), most cost effective and financially feasible
- High ranking - Low cost to implement (\$50,000 to \$100,000), cost effective and financially feasible
- Medium ranking - Medium cost to implement (\$100,000 - \$250,000), moderately cost effective and feasible
- Low ranking - High cost to implement (\$250,000 to \$1M), high cost per beneficiary
- Lowest ranking - Highest cost to implement (over \$1,000,000), highest cost per beneficiary

4. Implementation

This criterion considers the implementation timeframe, staging, and complexity of coordination. The approach for rankings is as follows:

- High ranking - Short term (1-2 years), or capable of being implemented in stages, potential for coordination increases likelihood of implementation
- Medium ranking - Medium term (3-4 years), less coordination potential
- Low ranking - Long term (5+ years), may require large upfront fixed costs, least coordination potential

Alternatives Evaluation Summary

Each of the tools was reviewed based on the evaluation criteria. The detailed evaluation is included in Appendix G, but Figure 8-1 summarizes the evaluation and shows the compatibility of each service alternative with regard to the community classifications shown in Figure 7-1 on page 7-2. A white circle indicates that the tool or strategy is least compatible/ appropriate for a classification (it received a low ranking); a black circle shows it is most compatible/appropriate (high ranking). A circle that is both black and white means that strategy may not be ideal, but could be successful under certain circumstances. These medium rankings also suggest that the strategy could potentially be implemented beyond the three- to five-year horizon of this plan because they require baseline data, improved coordination, a longer lead time or additional funding to be successful. It should be noted that the lowest ranking strategies are those deemed not appropriate for implementation in Collin County at this time due to high overall costs or cost per beneficiary, limited public support, or target markets that are outside of the core demographics that are the focus of this plan. They could, however, be appropriate strategies in the future.

Transit services can evolve along with the communities they serve. A vanpool program that is constrained by its own success can be converted into an express bus service. Conversely, a fixed-route bus service that is failing to meet ridership goals can be transformed into a route deviation service to widen its coverage area. Some strategies require supportive infrastructure such as bus stops or park-and-ride lots. These can be viewed as placeholders for transit centers and rail stations if demand warrants.

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Figure 8-1 Evaluation of Short-Term Transit Service Alternatives

Service Alternative	Countywide	Rural Communities	Suburban/ Employment Base	Suburban/ Bedroom Communities	Small Urban
Volunteer Driver Program	◐	◐	◐	◐	◐
Mobility Management	◐	○	○	◐	◐
Coordination/Cost Sharing Opportunities	○	○	◐	◐	◐
Subsidized Taxi Program	○	○	◐	◐	◐
Carpool	●	●	●	●	●
Vanpool	◐	◐	●	●	◐
ADA Paratransit / Eligibility-Based Dial-A-Ride	◐	◐	◐	◐	◐*
General Public Dial-A-Ride	◐	●	●	●	●
Community Shuttles	●	●	●	●	○
Express Bus / Park-and-Ride Service	◐	○	●	◐	●
Limited Bus Stop Service	◐	◐	◐*	◐	◐*
Point Deviation Service	◐	◐	◐	◐	◐
Route Deviation	◐	◐	●	◐	●
Feeder/Connector Service to Fixed-Route	◐	◐	◐	◐	◐
Site-Specific Shuttle	○	◐	●	◐	◐
Local Fixed-Route Bus Service	○	○	◐	○	●

*To be included among prioritized strategies based on input from the Project Review Committee.

● = High Ranking ◐ = Medium Ranking ○ = Low Ranking

Based on the evaluation, several preferred strategies were identified. Carpools — and the promotion of carpooling and ridematching programs both for commuters and for other trip purposes— were noted as being appropriate for all communities within Collin County, as well as at the countywide level. Community shuttles —the lifeline services that provide basic access primarily for shopping trips from smaller communities— were identified as appropriate for nearly all parts of Collin County without regularly scheduled transit services, which, outside of the DART service area, only exist in McKinney. General public dial-a-ride, which currently exists, ranks highly as a solid backbone transit operation to provide either a very a basic level of service in rural areas or a more robust operation in the most populous portions of Collin County.

The suburban/employment base cities, Allen and Frisco, were found to be lacking several services that would be appropriate. Local circulation via dial-a-ride or deviated route, ranked highly. Home to several large employment sites without transit access, along with some political resistance to local support for public transit, site-specific shuttles were also deemed as a preferred strategy in these smaller cities. Based on the evaluation, these cities are appropriate for express bus service, primarily to access DART services in Plano, but also possibly beyond Plano to Dallas.

Express bus service, which makes use of park-and-ride lots to access high-speed buses, was also ranked highly for small urban cities (McKinney), which would also benefit from improved/more effective local transit service operations, either via a combination of fixed routes and dial-a-ride, or some hybrid flexible/deviated route services.

Vanpools were found to be most appropriate in the large and modest-sized suburban cities.

Some of the strategies with the lowest rankings, including mobility management, cost sharing, and making use of a subsidized taxi program would be entirely appropriate for a county like Collin if multiple service providers were already in place. Due to the very low levels of existing service, opportunities are not available for better coordination and comingling riders from different providers. Many of Collin County's cities have very limited taxi service which also prohibits the effective implementation of subsidized taxi programs like those found in Plano, and in Dallas and Tarrant counties.

Local fixed route bus service —perhaps the most traditional solution to addressing transit needs, and something that was identified as being of interest to members of the public who participated in community meetings as part of this project— generally received a low ranking because it can be costly to implement in low-density communities like those that exist throughout Collin County. Some proposed service standards are included in Chapter 9, listing ridership and operations thresholds that afford success to fixed-route and other transit programs.

PREFERRED STRATEGIES

This section addresses how the preferred alternatives could be implemented in Collin County, with some general implementation guidelines that could be developed into program-specific action plans by TAPS, Collin County, and the various cities within the county. For these preferred strategies, cost estimates (or cost ranges) are provided where available, along with potential outcomes and administrative responsibilities. Each strategy is defined along with concerns and considerations about the strategy.

Carpool

Countywide

Implement, Expand and Promote Carpool Program

Concept

- Promote existing carpool ridematching programs
- Encourage carpooling as a transportation strategy in Collin County

Few transportation alternatives exist for commuters traveling to major employment sites in the region because commuter and non-commuter transit coverage is so limited in Collin County. There is also a need for lower cost transportation options where transit is not viable, especially to serve isolated populations in rural portions of Collin County.

Carpooling is an appropriate strategy to address these needs. It is a low-cost solution that can be effective in reducing congestion and providing mobility countywide. Carpooling is effectively the shared use of a car by the driver—usually the owner of the vehicle—and one or more passengers. When carpooling, people either get a ride or offer a ride to others instead of each driving separately.

Collin County's limited transit network, along with input from the community that public investment in transportation should be minimized (and transportation solutions should require personal investment and private resources) suggests that the promotion and facilitation of carpooling in the county is an important strategy. Carpools can offer a lot more flexibility, but require significant personal initiative to organize. TAPS has an opportunity to build upon its transit programs by encouraging people to carpool to buses, or for their full commute, through Try Parking It (www.tryparkingit.com), hosted by NCTCOG. Try Parking It allows users to locate carpool (or vanpool – see page 8-18) matches within the region so commuters can find someone near them with a similar schedule and commute route to share a ride. TAPS, perhaps in combination with local senior centers or a nonprofit, could also facilitate the use of carpools for non-commute purposes: for shopping, doctors' appointments, and recreational activities. These non-commuter carpools are most likely to benefit the senior and youth population.

Commuter carpools are typically used for long-distance commutes and are of particular value for destinations outside of Collin County, including jobs and classes in Denton, Dallas and Tarrant County. Non-commuter carpools could be of value for intra-County trips, primarily from rural communities to McKinney, Allen, Frisco, and Plano. This strategy is summarized in Figure 8-2.

Figure 8-2 Summary of Carpool Scenario

Elements	Immediate Term (Within 3-5 Years)	Opportunities (Longer Term or Phase 2)
Service Design	(1) Promotion of carpool resources and tools for commuters and students; (2) Carpool matching for occasional trips for seniors and other populations with limited resources, those risking isolation	Promotion of ridematching services
Service Hours	Flexible: Route and schedule developed by participants themselves.	Flexible
Headways	N/A	N/A
Vehicle Requirements	Drivers would furnish their own vehicles	Drivers would furnish their own vehicles
Annual Operating Costs (estimated)	Less than \$50,000 per annum	Will depend on promotion and operation of ridematching service
Annual Farebox Revenues (estimated)	\$0	\$0
Annual Ridership (estimated)	Unknown	Will depend on service expansion and introduction of additional HOV lanes
Administrative and Policy Roles	TAPS and NCTCOG; TAPS to help promote existing resources for ridematching and carpool development; non-commute ridematching could be undertaken by a local government or nonprofit agency	Promotional efforts could be expanded
Funding Sources	Contributions from cities, donations from nonprofit agencies, in-kind services	

Expected Benefits

- **For Commuters**
 - Provides a commuter-focused transportation option to serve commute needs of Collin County residents
 - Offers a lower-cost commute solution
 - Increases mobility, provides air quality benefits, and reduces congestion
 - Can be especially effective in areas with HOV lanes, such as Highway 75 in Plano and to the south, allowing carpools to travel at higher speeds than single-occupant vehicles
 - Assists employers with the transportation needs of their employees
- **For others**
 - Reduced isolation
 - Cost savings through shared rides

Potential Obstacles

- Can be difficult to form because of the challenges associated with matching users

- Serve only a limited number of trips; commuter carpools not applicable for part-time employees
- Can be difficult to maintain due to changing travel patterns and needs
- Drivers carry the additional burden of potential legal action from passengers in case of an accident
- Low density communities can make it more difficult to find carpool partners
- Requires at least one participant to have driver's license

Overview

A carpool program is one modest component of a commuter-based transportation. Carpools provide a transportation option where no others may exist. They provide a viable option to commuters and others who want to share a ride and do so without restricting personal mobility or incurring high operating costs. There is potential for significant time-savings where HOV lanes are available.

Carpooling arrangements and schemes for commuters involve varying degrees of formality and regularity. Carpools may be formal —arranged through an employer, public website, etc.— or casual, where the driver and passenger might not know each other or have agreed upon arrangements in advance. Commuter carpools depend on potential participants to have sufficiently similar commuting patterns, so to the extent that residents of suburban and small urban communities are commuting to similar destinations in Plano, McKinney, Richardson, Dallas, or elsewhere, carpooling could work for that subset of the commuting population.

Specific intended benefits to employers and the general public include reduction of automobile congestion around major employment centers, reduction of parking requirements at employment sites, conservation of energy, and reduction of air pollution. Intended user benefits for the journey-to-work trip include low costs, acceptable travel time, ability to read and relax, and convenience. Participants of rideshare programs often are part of commute trip reduction programs, which can provide economic and time-saving benefits, including:

- Discounts on parking permits
- Access to priority parking spaces reserved for car or vanpool vehicles
- Shared vehicle expenses and tolls
- Use of dedicated HOV lanes on major roadways
- Waived or reduced tolls

In all parts of Collin County, carpools are most effective for recurring work or school commutes, however in the most rural portions of the county, they can also be useful for occasional or periodic trips such as shopping or medical appointments. For example, though informal carpools, neighbors might travel together to a common destination. While sharing the ride to the grocery store may not seem to be a critical focus for most carpooling programs, shared travel among seniors, for example, can also help reduce isolation by ensuring that others are aware of an individual's needs.

Operating Characteristics

Ridematching services can help facilitate and promote commuter carpooling. TAPS could work with NCTCOG to develop a campaign specific to Collin County to promote carpooling via the Try

Parking It effort. Try Parking It allows users to locate carpool (or vanpool) matches within the region.

The easiest way to implement the effort would be to link from the TAPS Collin County website or to create a comprehensive transportation information page for Collin County that would provide information about all of the transit and carpooling options available in the county.

For non-commuter carpools, human service agencies in Collin County, including senior centers, LifePath Systems, REACH, and the Collin County Committee on Aging, can work to promote rideshare matching for their consumers. These could be part of an effort to provide a match for riders who are otherwise unreachable by other services and/or are too costly to serve, offer a transportation option for isolated seniors and ambulatory people with disabilities, provide a new option for making longer-distance specialized trips, and even allow people to travel together from smaller communities in Collin County to TAPS services in McKinney and DART services in Plano.

Implementation Considerations

Implementing carpools is quite inexpensive compared with the development of new transit services, but carpools require some initiative by those who need a ride and their success depends on the availability of drivers and other riders who are traveling to the same destinations at the same times. Thus, while carpools can be a useful element of a transportation strategy to serve the needs of commuters as well as non-commute travel needs of seniors, people with disabilities and low-income Collin County residents, they cannot represent the core set of services to meet the identified needs. There are too many variables that may impact their success, including cost to an individual driver or rider, availability of an automobile, scheduling, effectiveness of ridematching programs, ability to serve non-commute transportation, etc. Nevertheless, promoting carpools is very inexpensive. Initiatives to promote carpooling in Collin County can include information on city websites and local newspapers, such as the Allen American, Frisco Enterprise, McKinney Courier Gazette, and the Plano Star Courier, as well as events where the program can be promoted to a wide audience.

Recognizing that it will not be possible to address every transportation need in a rural service area, it is recommended that TAPS assume an active role in promoting carpooling primarily for the benefit of residents and employees. An organization like the Collin County Business Alliance could take an active role in supporting the promotion of carpooling, with major employers working with TAPS and NCTCOG to encourage their employees to share their commute. Collin College campuses do not currently actively encourage carpooling by students or staff/faculty, and carpooling could be an important strategy to reduce the need for more parking at the college's facilities. Key implementation roles are as follows:

For TAPS

- Increase the visibility and understanding of the existing ridematching programs.
- Include carpooling as part of information/transit marketing resources provided on the TAPS website and informational materials about transportation options in Collin County.
- Work with major employers, Collin College, the Collin County Business Alliance to encourage carpooling as a commuter option.
- Promote regional transportation policies that support ridesharing.
- Build strong working relationships with cities, employers and other regional partners.

For Cities, Employers and Other Partner Agencies

- Identify employees, clients, and communities that would benefit from carpooling.
- Develop informal ridematching programs on site and refer individuals to TAPS and Try Parking It.
- Promote the availability of service.
- Consider incentives to encourage carpooling.

Community Shuttle

Countywide

Lifeline Transit for Shopping and Specialized Medical Services

Concept

- Implement lifeline community shuttles in rural and small communities in Collin County.
- Use community shuttles as a tool to provide services cost effectively.

Few transportation options are available for people with limited mobility in Collin County. One of the issues stated often by agency representatives was the need for low-cost options for consumers when traditional transit services may not be financially feasible. Constraints of the existing TAPS countywide dial-a-ride program also suggest the need for more cost-effective options to transport groups of riders to common destinations, such as shopping centers.

Community shuttles can be fixed-route or demand-response services in suburban or rural communities that provide a lifeline operation 1 to 3 days a week. Community shuttles were among the highest ranked services to fill a gap in Collin County, where services can be provided more efficiently by grouping passengers with a common destination and scheduling their trips at the same time.

One of the major constraints countywide, and particularly in the rural and suburban bedroom communities, is that although dial-a-ride service is available, it has been limited in the past and may once again be limited if jurisdictions do not provide the local match required to maintain service. Much of the available service has been in vehicles with few other passengers (average passengers per trip has been less than 2), and buses have had to make costly excursions to pick up a single individual in an outlying community, drive him or her to Plano, and then offer a return trip home. A community shuttle is designed to organize those trips by encouraging people traveling to a certain destination (e.g., a medical facility or shopping center) to schedule their travel on the same day, at the same time. The result is a more efficient use of resources for TAPS, or any other organization sponsoring community shuttle trips, allowing more people to be served. A community shuttle could be valuable in all portions of Collin County, with the exception of any city with existing regularly scheduled transit service—Plano and McKinney—by offering a link to important destinations. This strategy is summarized in Figure 8-3.

Figure 8-3 Summary of Community Shuttle Scenario

Elements	Immediate Term (Within 3-5 Years)	Opportunities (Longer Term or Phase 2)
Service Design	Available at least one day per week in a number of communities, rather than all weekdays in any one community. Can be operated as a fixed-route or demand-response service.	Program expansion to support additional trips.
Service Hours	Service hours depend on funding and ridership demand. Proposed weekday service span of two to three hours per trip, with vehicles operating 8 hours; 6 hours on Saturdays.	Could increase to 10 hours each weekday, and add Sunday service to address church-going and shopping needs.
Headways	N/A	N/A
Vehicle Requirements	Two vehicles assumed to serve Collin County communities (\$140,000 capital cost if vehicles not provided by contract operator).	Additional vehicles can be purchased as needed.
Annual Operating Costs (estimated)	Assuming two vehicles that would be travelling in specific communities on designated days of the week, costs would vary between \$210,000 and \$330,000 (assumes operating cost per hour from \$35 - \$55).	Will depend on service expansion
Annual Farebox Revenues (estimated)	Will depend on program parameters (if service is free or if there is a fare). Some funding could be provided by participating supermarkets, dialysis clinics, etc.	Will depend on service expansion
Annual Ridership (estimated)	5,200 round trip passengers. Ridership is highly dependent on the service design, which can be fixed-route or demand-response. Assumes up to 4.3 passengers per hour.	Will depend on service expansion
Administrative Responsibility	Shuttles could be administered and operated through an existing contract (i.e., TAPS could operate the service in place of dial-a-ride on some days) via a private limousine/taxi provider, or other operator. Participating organizations/oversight could include housing authorities, Collin County, medical facilities, etc.	If successful, community shuttles could be established through collaborative agreements with specific retail groups and to serve the needs of clients of specific agencies.
Funding Sources	FTA 5307, 5310, 5311, contributions from cities, retailers, fares, TDCs	

Expected Benefits

- Offers a low-cost way to address some transportation needs
- Provides service to major activity centers, including retail stores, medical facilities and social service agencies
- Increases traveler independence
- May reduce demand for paratransit/demand response services

Potential Obstacles

- Funds must be secured for capital, administrative and operating expenses
- Need to develop service, implementation and marketing plan
- May be challenging to identify specific retailers/medical facilities to serve and routes

Overview

A community shuttle is typically a small passenger bus or van that connects important community destinations, either travelling within the community or linking the community with a key destination. A model proposed for Collin County could be focused preliminarily on grocery trips from suburban bedroom communities and small rural communities, including Anna, Farmersville, Celina, Fairview, Prosper, Wylie and perhaps others. If successful, the model could be expanded, with the potential to pilot dialysis trips, as well.

Community shuttles would be most effective in Collin County's cities that opt to provide only a very limited local match — enough to support a basic lifeline service. They could replace some of the least efficient TAPS paratransit operations in select communities.

Operating Characteristics and Outcomes

For Collin County's operations, the proposed service is a shopper shuttle operating as a flexible fixed-route, fixed-schedule service designed around the origins and destinations and needs of the community. For example, residents of the Farmersville area may have access to Brookshire's on a regular basis, but once a week a vehicle could travel to Target and/or a supermarket in McKinney, allow riders up to one hour to complete a shopping trip, and return to their home/trip origin in the Farmersville area. The focus of a community/shopper shuttle route is on front-door convenience at the expense of direct routing, providing highly personalized service. In some communities, partial funding for these types of services is provided by the retailers served by the route.

An analysis of current demand response trip patterns should be conducted to plan for an efficient and convenient route.

Costs for a community shuttle vary depending on the per-hour operating cost and the number of shuttle vehicles operating. Assuming an operating cost between \$35 and \$55 per hour for vans, if two vehicles operated all day in various portions of Collin County, annual operating costs could range from about \$210,000 to \$330,000. Capital costs would include vehicles if they are not readily available or provided by a contract operator.

Implementation Considerations

Implementation of community shuttle services in Collin County provides an opportunity to serve common destinations, particularly in smaller cities with limited transportation services. The following series of steps provides a brief overview of what is involved in planning for and implementing a community shuttle service:

For TAPS

- Identify areas of greatest need with an option to pilot a community shuttle service. For example, an evaluation of existing TAPS demand-response service patterns could be conducted to identify specific destinations (stores or clinics) that could be more effectively served by a schedule community shuttle. Outreach should be conducted to those businesses at the shuttle destination to determine willingness to participate/provide funding.
- Develop a service plan. As with the development of potential service options, this should consist of the following key elements:
 - Refined estimate of annual service hours
 - Estimated annual operating costs (could be a range depending on in-house vs. private operations)
 - Number of vehicles required
 - Finalized routing
 - Bus stop locations, if applicable
 - Span of service and service frequency
 - Conceptual service schedules
- Identify operating entity.
- Once an operator has been identified, and vehicles have been secured, the following implementation steps would need to be undertaken:
 - Development of fare media and distribution (if necessary)
 - Development of policies and regulations
 - Development of a process for receiving complaints and compliments
 - Development of schedules and marketing materials
- The lead agency should monitor service and adjust the design of the service as needed.

For Cities and Other Partner Agencies

- Provide outreach to potential destinations and encourage collaboration and potential donations/joint-funding for this service.
- Identify potential funding sources from the agency to support community shuttles for specific client groups.
- Publicize the information about the community shuttles to clients.
- Register individuals for the program and submit registrations to TAPS.
- Solicit feedback from clients who use the shuttles and provide input to TAPS.

General Public Dial-a-Ride

Continued and Expanded Demand-Response Service



Concept

- Provide basic general public transit service in rural and small bedroom communities in Collin County.
- Maintain ongoing dial-a-ride operations by gathering local financial support.

There is a need in Collin County for a very basic level of mobility coverage, especially in low-density communities where people might have dispersed destinations. Dial-a-ride is likely the best option to address that need.

Dial-a-ride is a shared, curb-to-curb transportation service and is available to either the general public or is eligibility based. TAPS currently provides demand-response service in Collin County, having assumed operations from CCART, and averaged 300 passenger trips per day as of August 2013. No information is available about trip denials, but under CCART's operation of the demand-response service a significant number of denials was observed.

The need for mobility within communities and between communities in Collin County is demonstrated in the early chapters of this report. Although services have been available for many years, TAPS has improved marketing, and is reported to be addressing capacity constraints, which, in the past, were primarily a function of inefficient scheduling.

General public dial-a-ride is appropriate in almost all of Collin County's low-density communities, offering transportation primarily to those without other mobility options. Maintaining demand-response service in rural communities and small towns will be essential, and is likely to require an expansion of capacity to address all needs. An expansion of service hours and having more vehicles in operation should be predicated on a local financial commitment to transit from each of Collin County's jurisdictions. This strategy is summarized in Figure 8-4.

Figure 8-4 Summary of Dial-a-Ride Scenario

Elements	Short Term (Within 3-5 Years)	Opportunities (Longer Term or Phase 2)
Service Design	Curb-to-curb, shared ride service based on pre-scheduled trips	Additional vehicles, expanded service area, longer service hours
Service Hours	Typically from about 6:00 AM to 8:00 PM	Service could begin operating at 4:30 AM and end operations after 10:00 PM
Headways	N/A	N/A
Vehicle Requirements	Generally smaller cutaway vehicles (typically up to 27-foot buses)	Need for additional vehicles will depend on service expansion
Annual Operating Costs (estimated)	\$35-\$55 per hour, based on estimated TAPS operating costs. For 2-6 vehicles operating weekdays only, annual operating costs, including administrative costs, are assumed at \$210,000 to \$990,000. Capital costs will depend on need for vehicle acquisition.	Will depend on service expansion

Elements	Short Term (Within 3-5 Years)	Opportunities (Longer Term or Phase 2)
Annual Farebox Revenues (estimated)	Farebox revenues will vary depending on level of service. Based on assumptions above, revenues range from \$36,000 to \$110,000.	Will depend on service expansion
Annual Ridership (estimated)	Annual ridership will vary depending on level of service. Under these scenarios, assuming 3 passengers per hour, ridership ranges from 18,000 to 54,000.	Will depend on service expansion
Administrative Responsibility	TAPS, with local jurisdictions providing financial contributions to share the cost of service	Additional jurisdictions or a consolidated single administrative agency
Funding Sources	FTA 5307, 5310 and 5311, CDBG, contributions from cities, donations from nonprofit agencies, fares, TDCs	

Expected Benefits

- Provides service in rural and suburban bedroom communities without other transportation options (assumes operation of local services in Allen, Frisco, McKinney and Plano) and between these communities
- Already operated by TAPS in Collin County, an expansion of services would reduce trip denials and expand transportation network
- Provides local and regional curb-to-curb travel in Collin County, and also allows for connections to services outside of Collin County
- Facilitates a connection to social services and other programs for people who need it most
- Meets basic mobility needs of transit-dependent members of the community and lays the foundation for a community-based transportation network
- Supports other human service and health agencies by helping them find transportation for their clients and patients

Potential Obstacles

- Requires funding formula for cities and county to share in the cost of the service
- May require new vehicles and support equipment plus capital funds to pay for these investments
- Program managers must work to sustain the interest of stakeholders to ensure that the service is valued by the broader community
- Dial-a-ride trips provide a high level of service to individuals that need it, but are expensive services to provide, especially in terms of cost per trip. The high cost of dial-a-ride service may eventually require managing demand, especially for people who do not need a higher level of service and particularly if other services are introduced in Collin County (see community shuttles example above, as one potential strategy to manage demand).

Overview

Demand-response services provide rides based on passenger requests. Passengers schedule their trip in advance and travel between pre-determined, requested locations, and are often successful in rural and suburban areas where demand is too low to justify fixed-route services. Given the relative low density and the lack of fixed-route transit service outside of McKinney and Plano, dial-a-ride service is a good fit for much of the county and has been valued by those who have used it, according to surveys.

In dial-a-ride service, vehicle routing is determined entirely or primarily in response to passenger requests. Typically passengers may request to be picked up from and taken to any safe location within the defined service area. In Collin County, TAPS' service is deemed a curb-to-curb service.

In a large dial-a-ride system, with multiple vehicles operating throughout a service area, trips must be requested through a call center where vehicles are scheduled and dispatched, as is currently the case with TAPS' demand-response service. TAPS offers both local trips and intercity trips. Dial-a-ride service sometimes includes taxi subsidy programs, in which eligible residents are able to ride taxi services at below-market rates.

Currently, TAPS provides general public demand-response service in all communities except Plano from 6:00 AM to 6:00 PM on weekdays. Riders are asked to reserve a trip at least the day before service.

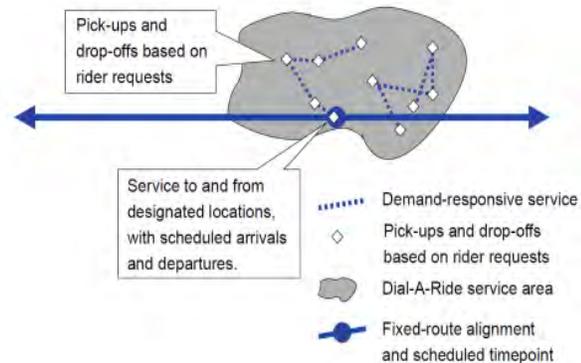
One of the challenges in Collin County has been that although transit services have been available for many years, some people are unaware of the public transit options. A major obstacle for people who perceive a lack of public transportation is that information is not necessarily readily accessible. TAPS' efforts to enhance marketing may help to increase awareness of current services and increase demand for services.

Expanding dial-a-ride services in Collin County means ensuring that denials are minimized and that travel times are reasonable (a typical standard is no more than 2.5 times that of a direct routing). This would help to better meet the transportation needs for individuals with low incomes and people with disabilities, as well as the general public. The service will support the most transit-dependent residents and create a safety net for members of the community, especially for people traveling occasionally, rather than supporting ongoing and regular needs, such as commute trips.

Operating Characteristics and Outcomes

Dial-a-ride service is highly personalized. Once consumers understand how to make reservations and standing appointments, this kind of service can be extremely valuable for people without other transportation options.

Critical decisions for a dial-a-ride service include the size of the area to be served, how far in advance requests will be taken, how dispatching will be done, and whether unscheduled boardings will be allowed at a transfer point with a bus or rail route. The large service area in



Collin County may generate high levels of demand, but also limits the number of trips that can actually be served with each vehicle since each trip is likely to be longer than in a smaller service area.

The specific parameters of reliable and accountable dial-a-ride service in Collin County will need to be defined and documented. Dial-a-ride service should have well-defined boundaries to ensure reasonable trip distances and travel times. It is assumed that services would be available in communities that contribute a local funding match (whether from the city itself or Collin County) and communities that opt not to provide funding for transit would no longer have the service available for residents.

While TAPS may choose to implement a model that leaves the discussion of physical or personal assistance to the rider and driver, the service delivery model ultimately selected may call for specific policies related to rider assistance. TAPS uses dedicated dispatching staff and specialized ridematching software to operate efficiently. It will be important to fine-tune scheduling as TAPS' Collin County program grows to maximize the efficiency and effectiveness of service.

Implementation Considerations

Expanded dial-a-ride service in Collin County has capital requirements, as well as operating expenses— most notably driver and dispatcher wages. Vehicles also need to be cleaned and maintained. In addition, information about how to use the service is necessary.

In order to expand existing services in Collin County, additional vehicles will need to be purchased. TAPS currently has 10 vehicles in operation at peak times.

Expansion of the dial-a-ride services in Collin County should be prioritized as follows:

For TAPS

- Identify the specific communities and trips where the demand exceeds the agency's ability to provide service.
- Expand the number of vehicle service hours to address latent demand, with the goal of meeting all trip requests and lessening the need for trip time negotiations.
- Refine the bus service plan and confirm operating hours, schedules, vehicle requirements and frequencies.
- Finalize service goals, objectives, policies, performance standards and design criteria.
- Establish a workable implementation plan and schedule, including roles and responsibilities.
- Finalize vehicle needs and dispatch procedures.
- Establish marketing, outreach and staff orientation plans.

For Cities and Other Partner Agencies

- Identify any internal transportation programs that could be transferred or discontinued if TAPS' demand-response services in Collin County are able to effectively address needs.
- Advocate for funding from local jurisdictions and Collin County to support expanded demand-response service in the county.
- Work with TAPS to develop vouchers/payment program for partner agency clients using the expanded dial-a-ride service.

- Promote the availability of service.
- Monitor program effectiveness, value to agency of funding support, and opportunities to further expand the program to address agency needs.

Vanpools

Promote Existing Vanpool Program(s)



Concept

- Encourage the use of vanpools as a commute alternative for people who live in Collin County and work either within the county or an adjacent county.
- Market the availability of ridematching programs and existing vanpool services.

Few transportation alternatives exist for commuters traveling to major employment sites in the region, mostly due to a lack of commuter transit coverage. Driving alone can be expensive, and Collin County residents indicated some sensitivity to increased gas prices on the survey, suggesting the need for lower cost transportation options where scheduled transit is not viable.

A vanpool program is one component of a commuter-based transportation program in which strategies are adopted to help commuters avoid driving on their own to work. Vanpools usually involve a group of people who have similar origins and destinations, and whose work patterns allow them to share the commute with a large enough group to justify a van rather than a carpool.

In this strategy, summarized in Figure 8-5, TAPS would help promote the use of vanpool programs operated by DART and The T, as well as DCTA's program in Denton County. DART's vanpool program—the largest in the region— allows for vanpools to be formed to serve any commuter trip that begins or ends in Collin County, so Collin County residents can organize or join a subsidized DART vanpool for commutes within the county or to an adjacent county. The T also administers a vanpool program for employees commuting to Tarrant County. While the short term priority is to promote the existing vanpool programs, longer term, TAPS could develop a vanpool program throughout its service area.

Figure 8-5 Summary of Vanpools Scenario

Elements	Immediate Term (Within 3-5 Years)	Opportunities (Longer Term or Phase 2)
Service Design	Promotion of vanpool programs operated by DART and The T	Development of a vanpool program based within the county.
Service Hours	Depends on riders' work shifts, usually 7-8 AM. to 5-6 PM.	N/A
Headways	N/A	N/A
Vehicle Requirements	Vans, furnished to vanpool drivers by the vanpool service provider	Potential for purchasing vans for program instead of using a vanpool renting contractor
Annual Operating Costs (estimated)	DART's program is available to Collin County residents regardless of where they work. Costs for additional outreach and marketing of the program in Collin County are about \$10,000. To use the service, the cost is about \$480 per van to consumers.	For a new vanpool program, total operating cost is \$10,000 to \$19,000 per van, depending on whether operated in-house or via a contractor; vanpool subsidies range from \$4,000 to \$15,000.
Annual Farebox Revenues (estimated)	N/A for TAPS' role. For DART, \$6,000 - \$14,000 per van (based on existing pricing structure)	Will depend on service expansion
Annual Ridership (estimated)	Assuming a 25% increase in vanpool use, annual participants estimated at 660	Will depend on service expansion
Administrative and Policy Roles	TAPS for promotion, working with DART, as well as The T and DCTA	TAPS could create a new vanpool program; consolidate with DART or DCTA program
Funding Sources	FTA 5307, contributions from cities and employers	

Expected Benefits

- Provides a commuter-focused transportation option to serve long-distance commute needs of Collin County residents
- Uses a model where riders pay a greater share of costs than traditional bus and rail transit (riders pay on average more than 70 percent of vanpool total costs)
- Offers a lower-cost commute solution
- Increases mobility and provides air quality benefits
- Assists employers with the transportation needs of their employees
- Can increase the federal apportionment for transit if managed by a transit agency (which could be an advantage for TAPS if it were to assume control of such a program in the future)

Potential Obstacles

- Enough commuters must live in close proximity to one another and share a work destination
- If a new program is started, potential for duplicative efforts, given other vanpool programs in region
- Serve only a limited number of trips; not applicable for part-time employees
- Costs may be too high for some to participate
- Low density communities can make it more difficult to find vanpool partners
- Requires at least one participant to have drivers' license

Overview

A vanpool program is one component of a commuter-based transportation program. DART administers a vanpool program for persons commuting to jobs in Collin County or residents commuting to jobs outside of Collin County.

Currently, 34 vanpools travel to employment destinations in Collin County, but only five of them originate in Collin County. A total of 39 vanpools travel from Collin County to work destinations elsewhere in the Dallas-Fort Worth region, with the majority going to Dallas County, but seven serving Denton County, six operating to Grayson County, and one operating to each of the following counties: Rockwall, Fannin, Kaufman, Raines, and Tarrant. Most of these vanpools have been formed through DART's existing program which has capacity for expansion if there is demand. Because the program already exists, it is not necessary to develop a new program, but will be important to provide useful targeted information about the benefits of the existing program.

Operating Characteristics and Outcomes

Vanpooling has proven to be most successful in areas with little or no transit service, and is especially beneficial when serving employment locations with a limited supply of parking. Vanpools can be effective in areas with HOV lanes that allow them to travel at higher speeds than single-occupant vehicles and in areas where park-and-ride facilities are available so people can leave their car and travel via van to their work location.

Vanpool operating characteristics are as follows:

- Commuters are assigned to a specific vanpool group/van operating on a fixed schedule.
- Vanpools are formed by a group of 5 to 15 commuters that live close to each other and have similar work schedules and work destinations.
- Routing is determined by individuals in a specific vanpool.
- Vanpools can make multiple stops along the route to pick up riders and/or have a single fixed pick-up location.
- Each vanpool group determines the travel time that works for the schedules of all its members and adheres to that agreed upon schedule.
- There is no flexibility in the departure/arrival times unless predetermined and approved by all members of the group.

- Riders are responsible for their own travel if they are unable to make the fixed departure times.
- Monthly fares are calculated based on number of riders per vanpool group.
- Fares are paid in advance by the vanpool group and the vanpool participants each pay their individual share.
- Base fares are fixed each month. Vanpool groups submit expense reports for gas and other approved out-of-pocket commute expenses.
- Vanpool groups must decide how to divide the group's fees fairly to compensate drivers and to accommodate part-time riders, rider substitution, and/or day riders.
- Requires two volunteer drivers; primary driver and one back-up driver; one member of the group is responsible for tracking vanpool expenses and collecting fares.

Implementing vanpools is comparatively inexpensive versus the development of new transit services, and can benefit from funding, typically, from a number of markets, including the vanpool users, the employers, and the sponsoring agency.

The cost of using a vanpool is lower than operating a car for commuting to work. The cost to Collin County residents who use DART's program is a portion of \$480 per van cost each month, plus gasoline, tolls and other expenses. DART's total annual operating costs are \$16,000 per van, or roughly \$1,000 to \$2,000 per year for a commuter. If TAPS wanted to implement a new vanpool program, costs would be in the range of \$10,000 to \$19,000 per van, depending on whether the vans are owned or rented from a vanpool contractor. Typically, vanpool subsidies range from \$4,000 to \$15,000.

Implementation Considerations

Providing information to encourage greater use of the existing vanpool programs is a relatively simple undertaking compared with some of the other services proposed in this plan and can be scaled to the number of potential users.

For TAPS

- Increase the visibility and understanding of the existing DART vanpool program, as well as the advantages and opportunities of the programs managed by The T and DCTA.
- Include vanpooling as part of customer information services and on the TAPS website.
- Work with both Collin County offices of Workforce Solutions to encourage vanpooling as a commuter option.
- Promote regional transportation policies that support vanpooling.
- Build strong working relationships with cities, employers and other regional partners.

For Cities, Employers and Other Partner Agencies

- Identify businesses, new developments, and specific client groups that would benefit from vanpooling.
- Provide referrals to the vanpool program.
- Promote the availability of service.

Site-Specific Shuttles



Last-Mile Connections for Major Employers and Commercial Developments

Concept

- Encourage private investment in providing employment-focused shuttles to major employment centers in Collin County.

People must drive to nearly all jobsites in Collin County outside of Plano and Richardson. Few transportation alternatives exist for commuters traveling to major employment sites and there is a lack of transit coverage. While transit is not necessarily viable in all areas, private shuttles can help fill a gap.

A site-specific shuttle is most often an employer shuttle. It is typically a service funded in part by the private sector (usually an employer) to provide a “last-mile” connection to a sponsoring employment center or major commercial development. The primary purpose is to offer a connection to and from major job destinations that are beyond walking distance from regional transit centers, major park-and-ride facilities or concentrations of residents. These connections improve job-access opportunities for transit-dependent riders, and make transit more competitive for choice riders. By participating in serving the transportation needs of their employees, these shuttles can expand the pool of potential employees when jobs are located outside the reach of DART or TAPS services.

With several major employers located in some of Collin County’s suburban/employment-based communities, implementation of employer-sponsored site-specific shuttles would provide an alternative for people driving alone to work, and would also provide access to job seekers and others without a car or other form of reliable transportation. Effectively, these shuttles put some of the onus on maintaining a strong, cost-competitive workforce on the employers themselves, allowing them to attract people with the right skills, giving them an advantage in recruiting employees over other businesses or commercial centers that offer no transportation alternative. Unlike most of the other strategies in this chapter, site-specific shuttles could be implemented with or without the involvement of TAPS. This strategy is summarized in Figure 8-6.

If either Frisco or Allen, for example, were to opt out of providing public transportation for residents and employees, shuttles that serve key local commutes would fill a gap. These could be contracted to TAPS, a private shuttle operator, or managed in-house by the employer/commercial development.

Figure 8-6 Summary of Site-Specific Shuttle Scenario

Elements	Immediate Term (Within 3-5 Years)	Opportunities (Longer Term or Phase 2)
Service Design	Shuttle linking major employment site to nearby regional transit center	Expanded service hours, frequency, if demand warrants
Service Hours	Schedules determined by shift change times, or as agreed by participating employers	Schedules determined by shift change times, or as agreed by participating employers
Headways	Schedules determined by shift change times, or as agreed by participating employers	Schedules determined by shift change times, or as agreed by participating employers
Vehicle Requirements	1 to 2 or cut-away vans, plus one spare	2 cut-away vans, plus one spare
Annual Operating Costs (estimated)	\$400,000 per jobsite or commercial center	Will depend on service expansion
Annual Farebox Revenues (estimated)	\$0 (service paid for by participating employers)	Will depend on service expansion
Annual Ridership (estimated)	15,000	Will depend on service expansion
Administrative and Policy Roles	TAPS or private contractor	TAPS or private contractor
Funding Sources	Contributions from cities, employers and developers,	

Expected Benefits

- Follows a private model where employers are beneficiaries of the service and offer the service as a benefit to their employees for recruitment, retention and a competitive advantage
- Offers a low-cost (to the consumer) solution
- Increases mobility and provides air quality benefits
- Primarily addresses commuter transportation, one of the major needs identified in Collin County
- Assists employers with the transportation needs of their employees
- Can significantly reduce needs for expanded parking facilities and other high-cost on-site capital investments
- Complements existing regional investments in transit by facilitating “last mile” connections

Potential Obstacles

- Enough commuters must live in the same community or have a single point of access (e.g., a rail station), and share a work destination
- Serves only a limited market: employees of specific employers or commercial developments (may also serve some retail and/or medical customers, depending on the operation)
- Costs may be too high for many employers to rationalize implementation of service

- Identifying a sustainable funding source and potential operating structure may be difficult

Overview

Many of Collin County's largest employers are in Plano, including Texas Instruments, the largest in the County and one served by a DART-operated site-specific shuttle. Major retail centers include Stonebriar Centre in Frisco and Allen Premium Outlets in Allen. Other large employers include T-Mobile in Frisco; McKinney Medical Center, Encore Wire, Lattimore Materials and Torchmark Corp. in McKinney; and a host of administrative and manufacturing jobs in Plano and Richardson, many of which are served by DART routes.

In most cities and suburban areas in the US, successful site-specific shuttles have come about from involvement of transportation management associations or organizations (TMAs or TMOs), often led by the private sector in partnership with the public sector to solve transportation problems. A TMA is typically a private nonprofit organization run by a board of directors with a small administrative staff. In many cases, their members include employers, developers, building owners, residential communities, and public agencies. Because there has been a growing push for the private sector to assume a greater responsibility for transportation improvements in Collin County, by cooperatively working together and forming a TMA, there are opportunities for private and public funds which would not otherwise be available to individual employers or developers.

This strategy holds a lot of promise for Collin County—especially if services are not provided to the public in the suburban/employment base communities—and relies on private investment for success.

Operating Characteristics and Outcomes

If two major employers in Allen or Frisco opted into a shuttle program, both would presumably serve downtown areas, park-and-ride lots, and major destinations, operating a link between these locations and their worksite. These shuttles would likely operate during commute hours only, but a shuttle to the Premium Outlets in Allen, for example, could operate all day as a way to serve the commute needs of employees working varied shifts and as an economic development tool for the city, allowing patrons to ride to the shopping centers.

Typically, site-specific shuttles operate on a fixed headway (such as every 10 or 15 minutes) making it easy for commuters to opt to ride the shuttle rather than drive all the way to work. Shuttles usually have a unique brand, with a message sign that makes it clear what the purpose of the shuttle is and who is eligible to ride it. Often, if a particular business sponsors the shuttle, the vehicle will be painted with the name of the business. Shuttles could be long-distance operations, departing from a DART station (e.g., in Plano) or they could provide a local link between a residential neighborhood, downtown, and the employer.

Implementation Considerations

Given the stated reluctance of employers in Collin County to fund employee transportation and no regional or state policies/legislation that requires them to partner with transportation providers to fund transportation, getting participation from individual employers interested in sponsoring a shuttle will likely be significant challenge. The formation of a TMA in Collin County could be a very relevant approach. Site-specific shuttles have potential for success in Collin County, but

identifying sustainable funding sources and an operating structure that will achieve support is a significant challenge. Even if multiple employers were to work together, coordinating among several potential participating employers with a variety of shift times can make a shuttle costly to operate or dilute the effectiveness of an employer shuttle by creating long travel times. Some key implementation considerations are as follows:

For TAPS

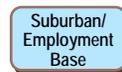
- Work with employers to determine whether they have any difficulty recruiting employees, or if they want to reduce costs for parking/parking management, etc.
- Provide support for their development of site-specific shuttles
- Potentially bid to operate employer site-specific shuttles

For Cities, Employers and Other Partner Agencies

- Employers should assess the needs of their employees and the potential benefits of offering site-specific shuttles, either independently or in collaboration with other employers/commercial centers
- Employers and business groups should assess the potential of forming a TMA (or multiple TMAs) in Collin County
- Assess current costs to provide transportation services to employees and assess costs for implementation of shuttle services
- If employers or cities can achieve a financial commitment for operation of a shuttle program, approach TAPS and/or other possible providers to pilot shuttle service program
- Once implemented, if successful, consider expansion of program and/or reallocating resources to support shuttle as a public operation with public funding

Allen Transit Service Options

Express Bus/Park-and-Ride Service – Route Deviation – General Public Dial-A-Ride



Concept

- Provide limited stop or express service to regional hubs.
- Consider route or point deviation service in portions of Allen.
- Maintain general public dial-a-ride service within Allen

Public transportation in Allen is currently limited to TAPS dial-a-ride service. This curb-to-curb service is available to all residents of Collin County who are not served by DART. Trips must be scheduled at least 24 hours in advance, meaning there is a lack of same-day local service within the City of Allen. In addition, no commuter options exist for Allen residents and workers.

TAPS dial-a-ride service is not permitted to operate in Plano. TAPS does, however, operate a fixed-route service from McKinney to the Parker Road DART station in Plano. Allen residents wishing to use TAPS to travel to Plano must reserve a dial-a-ride trip to McKinney and then transfer to the fixed-route service to Plano. This scenario is indirect and requires out-of-direction travel, and is thus unlikely to attract many Allen commuters. However, Allen residents and officials can look to McKinney for examples of potential service designs that may be appropriate for Allen as well. A summary of this strategy is provided in Figure 8-7.

Figure 8-7 Summary of Allen Service Scenario

Elements	Immediate Term (Within 3-5 Years)	Opportunities (Longer Term or Phase 2)
Service Design	Commuter service from Allen to Plano; deviated fixed-route service focused on retail, medical, and multi-family housing destinations; and general public dial-a-ride service.	Additional commuter service to Dallas and McKinney; conversion of highly productive deviated services to fixed routes with complementary dial-a-ride service
Service Hours	6:00 AM to 6:00 PM Monday through Friday	Expand to weekends if demand warrants
Headways	60 minutes for fixed routes or deviated services; N/A for dial-a-ride; 30-60 minutes for express bus services	30 minutes for fixed routes or deviated services
Vehicle requirements	2 + 1 spare (baseline) for local service; 2 for express	8+ 1-2 spares
Annual Operating Costs (estimated)	\$270,000 for local service; \$85,000 for express	Will depend on service expansion
Annual Farebox Revenues (estimated)	\$21,000 for local service; \$60,000 for express	Will depend on service expansion
Annual Ridership (estimated, based on service standards)	35,000+ total	Will depend on service expansion
Administrative and Policy Roles	TAPS and City of Allen	TAPS, City of Allen and additional funding partners
Funding Sources	FTA 5307, 5310 and 5311, CDBG, contributions from City of Allen, donations from nonprofit agencies, fares, advertising, CMAQ demonstration funds, TDCs, SAFETEA-LU Apportionment	

Expected Benefits

- Provide viable commuting alternatives for Allen residents
- Enhance mobility by offering same-day service where viable
- Focus resources on areas with greatest transit potential
- Preserve safety net of city-wide general public dial-a-ride service

Potential Obstacles

- Identifying funding to sustain services
- Operating local service efficiently in an automobile-oriented environment
- Facilitating cross-jurisdictional connections
- Cultural/political skepticism toward local transit

Overview

The City of Allen has experienced explosive population growth over the past two decades, and is quickly approaching a population of 100,000 residents. Transit service in the city is limited to TAPS dial-a-ride service, which provides curbside service in Collin County, with the exception of Plano. TAPS dial-a-ride service is available to the general public, but is commonly thought of as a service for seniors and people with disabilities.

Allen commuters can access DART's Red and Orange light rail lines at Parker Road Station in Plano. However, many Collin County commuters travel further south to access these lines in order to avoid daily parking charges at Parker Road Station that apply to residents of non-DART cities only.

Public and stakeholder input suggests that focusing on mobility efforts to serve the needs of Allen residents with limited transportation options is a top priority, but to achieve public support, these approaches must be paired with service aimed at commuters and "choice" riders. Based on this input, and the service alternatives evaluation, three potential solutions (or a combination of them) were identified to better meet the transportation needs of Allen residents and attract choice riders: limited stop or express service to regional hubs, route or point deviation service where viable, and city-wide dial-a-ride service.

Operating Characteristics and Outcomes

Limited-Stop or Express Service to Regional Hubs

The most immediate opportunity to build a commuter ridership base in Allen is the introduction of limited-stop or express service to Parker Road Station in Plano. This service could be operated by TAPS, which currently operates two similar services in the US 75 corridor:

- **TexExpress** – a limited-stop service connecting Sherman, Van Alstyne, and McKinney to the Parker Road Station in Plano.
- **Commuter Express** – a nonstop service between McKinney and Parker Road Station in Plano.

Service between Allen and Parker Road Station could likewise be a part of a longer limited-stop route, or a stand-alone route serving Allen and Plano only. Three possible service approaches are:

- Add Allen as a stop on the TexExpress route, for a total of five stops between Sherman and Plano.
- Develop a new route serving just McKinney, Allen, and Plano with departure times staggered with the existing TexExpress and Commuter Express services to reduce overlap and maximize departure times from McKinney.
- Develop a new route to provide nonstop service between Allen and Parker Road Station only.

For Allen residents, all three of the above scenarios would, in effect, offer nonstop service to and from Parker Road Station, as there would be no other stops between Allen and Plano. However, high ridership in the communities north of Allen could make it difficult for Allen residents to find a seat on trips to Plano, and high ridership demand overall could create overcrowding issues on northbound trips from Parker Road Station. Additionally, including too many stops on commuter services creates the risk of alienating choice riders by increasing travel time. These risks are

reduced or eliminated with the development of a new route, but operating a new route is also considerably more expensive than adding a stop to an existing route.

An added benefit of linking Allen and McKinney with a single route is the potential for intra-county travel (other than Plano), including reverse-commuting between Allen and McKinney. The City of Allen has secured \$1.3 million in Federal JARC funding (which will be matched with \$1.1 million in local funding) to facilitate reverse-commuting from Parker Road Station to employment opportunities in Allen.

In the longer-term, there may also be a market for a limited-stop bus route serving McKinney, Allen, and Plano before continuing nonstop to downtown Dallas. With the use of HOV lanes on US 75, nonstop bus service between Parker Road Station and downtown Dallas would be comparable to or faster than Red/Orange Line light rail service on most days. If buses from Allen and McKinney continued on to downtown Dallas, the service would likely attract not only commuters from Allen and McKinney, but also Plano residents and others who currently use light rail service from Parker Road Station. This would be a sensitive issue for DART, as the agency would be concerned about losing riders, but with the assistance of NCTCOG, it may be possible to reach an inter-local agreement whereby the service is jointly funded and branded as DART and TAPS to allow both agencies to claim the passengers (as with DART and The T with TRE passengers). Such a service would also benefit DART by providing relief from the overcrowding that occasionally occurs on light rail, especially in periods of high gas prices.

Another long-term option would be service from McKinney and Allen to downtown Dallas without a stop in Plano. This would closely resemble the Commuter Express service that DCTA used to operate from Denton and Lewisville to Dallas. This option would complement service to Parker Road Station, rather than replace it, because many Collin County commuters have destinations along the Red/Orange line, but north of downtown Dallas.

Commuter service typically includes park-and-ride lots, especially in communities with little or no local service. A possible park-and-ride location in Allen is the Allen Event Center (seven miles from Parker Road Station). Events are generally held in the evening, meaning that parking is plentiful during traditional work and commuting hours. The Allen Event Center is part of the Village at Allen mixed-use development, which has a relatively high concentration of employment and could attract reverse commuters and eventually serve as a focal point for fixed-route transit in the City of Allen.

Route Deviation Service in Parts of Allen

As noted, local transit service in Allen is limited to TAPS dial-a-ride service. This service helps provide a safety net for residents with limited mobility options, but is not well suited for spontaneous trips as reservations must be made at least 24 hours in advance. Recurring trips can be pre-reserved, but dial-a-ride service generally does not allow users the flexibility of changing travel plans on short notice (i.e., staying late at work or school).

Traditional fixed-route service is designed to serve population and activity centers along set corridors and with pre-set schedules. However, the effectiveness of fixed-route service can be somewhat limited in low-density suburban environments, as residents are often not within reasonable walking distance of major arterials, and retail and activity centers are designed with large set-backs to accommodate automobile parking. In Allen, a flex service would be most appropriate, with buses operating along a designated route, but one that they can leave upon request to pick up a passenger within certain parameters before returning to the point of

deviation so that no stops are missed (stops could be widely spaced in some areas). This would combine the accessibility features of dial-a-ride service with the scheduled reliability of fixed-route service, and is thus able to attract commuters and other users who would not generally consider dial-a-ride service.

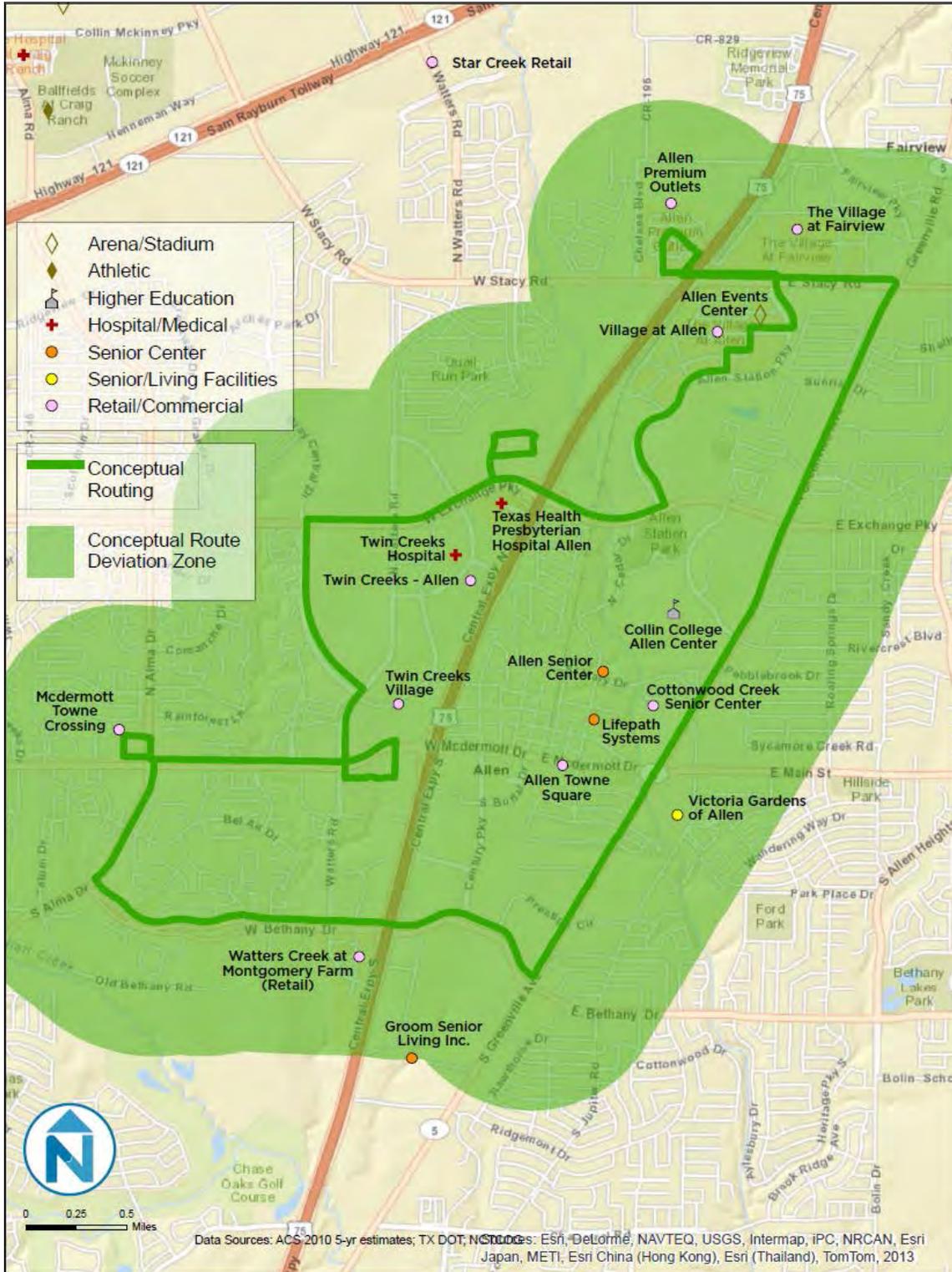
Figure 8-8 shows a conceptual route, serving the majority of Allen's retail, medical, and multi-family housing destinations, as well as Allen High School. Allowing for route deviation would expand the reach of the service into many of the city's single-family residential neighborhoods as well. Ideally, buses would operate both clockwise and counter-clockwise along the loop to allow for reasonable travel times between any two points along the route (alternatively, a point deviation service could be developed using a subset of the destinations shown on the map as designated stops).

The route shown is approximately 14 miles, which is near the upper limit of what can be served in an hour. Optimally, it could be broken into two sections to allow for shorter travel times for some riders. With route deviations, the loop would take longer than an hour and require two buses per direction to maintain hourly frequency. Alternately, the route length can be shortened by serving shopping centers from adjacent arterial streets, unless a closer drop-off is requested as a flex request.

Flex service is usually operated with 12-16 passenger cut-away (van-based) buses because of the level of ridership that the service is expected to generate and the need for maximum maneuverability to facilitate flex requests. TAPS operates and maintains this type of vehicle for local service in McKinney, and would be well positioned to operate a similar service in Allen. Additionally, TAPS service would offer Allen residents a single number (or website) for scheduling dial-a-ride service or requesting a flex deviation.

In the long-term, flex service can evolve into fixed-route service, taking into account frequent flex requests to determine the optimal alignment of the fixed route.

Figure 8-8 Conceptual Routing and Key Destinations in Allen



Citywide General Public Dial-A-Ride Service

In April 2013, TAPS assumed responsibility for operating general public dial-a-ride service in Allen and other Collin County communities formerly served by CCART. The implementation of flex service in Allen will reduce the demand for dial-a-ride service in parts of the city, but the service will still be needed in parts of Allen that are beyond the reach of flex service. If flex service evolves into fixed-route service in Allen, the role of dial-a-ride service will be, in part, to provide complementary paratransit service, as required by the Federal Transit Administration.

In addition, citywide dial-a-ride service acts as a gauge of transit need in the city. High demand for dial-a-ride service in a particular part of the city can justify the introduction of flex service, and eventually fixed-route service in the area.

Implementation Considerations

To implement these services, the following steps are recommended:

For TAPS

- Refine the bus service plan and confirm operating hours, schedules, vehicle requirements and frequencies.
- Finalize service goals, objectives, policies, performance standards and design criteria.
- Establish a workable implementation plan and schedule, including roles and responsibilities.
- Finalize running times for the development of accurate route schedules.
- Identify and prioritize time points/bus stop locations.
- Determine which stops need improvements to enhance their usability and accessibility, such as installation of shelters, benches, curb cuts, etc.
- Test the feasibility of turns, planned bus stop locations, and bus operations along all potential service streets.
- Establish marketing, outreach and staff orientation plans.

For City of Allen

- Identify funding support that could be used to enhance the transit service operation allowing for improved leveraging of existing funds. Consider shifting of economic development funds to transit.
- Consider contribution of capital enhancements: shelters, benches, signs, etc.
- Work with TAPS to develop fares/payment program
- Develop a local transit service advisory committee to advise the City of Allen on transportation needs and services.
- Promote the availability of service.
- Monitor program effectiveness, value to City of Allen, and opportunities to further expand the program to address needs.

Frisco Transit Service Options

Suburban/
Employment
Base

Express Bus/Park-and-Ride Service – Route Deviation – General Public Dial-A-Ride

Concept

- Provide limited stop or express service to regional hubs.
- Consider route or point deviation service in portions of Frisco.
- Maintain general public dial-a-ride service within Frisco.

Like Allen, a lack of commuter options exists for Frisco residents and employees. Public transportation in Frisco is currently limited to TAPS dial-a-ride service. This curb-to-curb service is available to all residents of Collin County who are not served by DART. Trips must be scheduled at least 24 hours in advance.

Opportunities to improve mobility for Frisco residents and visitors may include a combination of local and regional services, with potential roles for TAPS, DART, DCTA, and the City of Frisco. A set of strategies for Frisco is summarized in Figure 8-9.

Figure 8-9 Summary of Frisco Service Scenario

Elements	Immediate Term (Within 3-5 Years)	Opportunities (Longer Term or Phase 2)
Service Design	Commuter service from Frisco to Plano; deviated fixed-route service focused on retail, medical, and multi-family housing destinations; and general public dial-a-ride service.	Express commuter service from Frisco to Dallas; conversion of highly productive deviated services to fixed routes with complementary dial-a-ride service
Service Hours	6:00 AM to 6:00 PM Monday through Friday	Expand to weekends if demand warrants
Headways	60 minutes for fixed routes or deviated services; N/A for dial-a-ride; 30-60 minutes for express bus services	30 minutes for fixed routes or deviated services
Vehicle requirements	2 + 1 spare (baseline) for local service; 2 for express	8+ 1-2 spares
Annual Operating Costs (estimated)	\$270,000 for local service; \$85,000 for express	Will depend on service expansion
Annual Farebox Revenues (estimated)	\$21,000 for local service; \$60,000 for express	Will depend on service expansion
Annual Ridership (estimated, based on service standards)	35,000+ total	Will depend on service expansion
Administrative and Policy Roles	TAPS, City of Frisco, and DART, DCTA	TAPS, City of Frisco, DART, DCTA and additional funding partners
Funding Sources	FTA 5307, 5310 and 5311, CDBG, contributions from City of Frisco, donations from nonprofit agencies, fares, advertising, CMAQ demonstration funds, TDCs	

Expected Benefits

- Provide commuting alternatives for Frisco residents
- Enhance mobility by offering same-day service where viable
- Focus resources on areas with greatest transit potential
- Preserve safety net of citywide general public dial-a-ride service

Potential Obstacles

- Identifying funding to sustain services
- Operating local service efficiently in an automobile-oriented environment
- Facilitating cross-jurisdictional connections
- Cultural/political skepticism toward local transit

Overview

Frisco is Collin County's second largest city, with more than 125,000 residents. Frisco is also a major retail and employment destination and home to the Preston Ridge Branch of Collin College. Transit service in the city is limited to a dial-a-ride service operated by TAPS. Frisco commuters can access express bus service to downtown Dallas at DART's Northwest Plano Park-and-Ride, located just south of Frisco along the Dallas North Tollway. DART's Route 208 offers nearly 20 nonstop trips per day to downtown Dallas. However, the Northwest Plano Park-and-Ride is one of the DART transit facilities covered under the "Fair Share Parking" program, meaning that Frisco residents must pay to park at the facility.

As with other Collin County cities, a transit plan for Frisco must include mobility solutions for commuters as well as residents with limited transportation options, in order to achieve wide public support. Thus, a comprehensive approach to transit in Frisco may include a combination of limited stop or express service to regional hubs, route or point deviation service where viable, and citywide dial-a-ride service.

Operating Characteristics and Outcomes

Limited-Stop or Express Service to Regional Hubs

DART's Fair Share Parking program has in some ways impacted Frisco commuters more than Allen commuters because DART's express Route 208 makes no stops between Northeast Plano Park-and-Ride and downtown Dallas. So, while Allen commuters can avoid parking fees at Parker Road Station by simply parking at another station along the Red Line, the primary choices for Frisco commuters are to pay the parking fee or simply drive to work. Thus, Frisco commuters would likely embrace limited-stop or nonstop service to downtown Dallas from a park-and-ride in Frisco. Such a service could be provided in the following ways:

- Nonstop TAPS service from a park-and-ride in Frisco to the Northwest Plano Park-and-Ride, similar to TAPS service from McKinney to Parker Road Station in Plano.
- Nonstop TAPS service from a park-and-ride in Frisco to downtown Dallas to provide Frisco commuters an alternative to paid parking at the Northwest Plano Park-and-Ride.

- An extension of DART Route 208 from its current terminus at the Northwest Plano Park-and-Ride to a park-and-ride in Frisco to allow for a single-seat, one-stop ride from Frisco to downtown Dallas and to facilitate reverse-commuting into Frisco.

TAPS service to Plano only would require passengers to transfer from a TAPS vehicle to a DART vehicle in Northwest Plano, and may reduce the appeal of the service for choice riders who are sensitive to issues of time and convenience. Service from Frisco to Dallas (bypassing Plano), on or the other hand, would likely be popular with Frisco commuters, but very expensive to operate due to travel distance and the number of vehicles required to provide a reasonable peak frequency.

In the immediate term, an extension of DART Route 208 to Frisco would likely be the most effective approach to building a strong commuter ridership base in Frisco. There are precedents for DART service outside of the DART service area, and the DART Board has set policies for such scenarios. For example, only limited-stop and express service may be “purchased” by cities outside of the DART service area, and the full cost of service from the point it leaves the DART service area must be covered by the purchasing city or agency. Current examples of purchased DART service in the region include Arlington’s MAX service linking to CentrePort Station, the COMPASS service linking Mesquite to DART’s Lawnview Station on the Green Line, and the extension of DART Route 110 to Eastfield College in Mesquite.

In the long term, if commuter ridership from Frisco proves to be strong, the introduction of express service from Frisco to downtown Dallas, similar to the former DCTA Commuter Express service and likely operated by TAPS, may be warranted.

Frisco’s FC Dallas Stadium could serve as an ideal park-and-ride location in Frisco because of its proximity to the Dallas North Tollway and its daytime parking availability (most events are held on weekends and evenings).

FC Dallas Stadium is approximately seven miles from the Northwest Plano Park-and-Ride. This distance is great enough that the two facilities would appeal to different users, even if DART did not impose parking fees on Frisco commuters.

The FC Dallas Stadium’s proximity to Frisco Square and other retail could attract reverse commuters once the area is fully built out. The key to attracting reverse commuters is good connecting transit service and/or good pedestrian connections to facilitate the “last mile” segment of the commute, and a park-and-ride at the stadium could also serve as a transit center with connections to local service in Frisco.

Route Deviation Service in Parts of Frisco

Local transit service in Frisco is limited to TAPS dial-a-ride service. This service helps provide a safety net for residents with limited mobility options, but is not well suited for spontaneous trips as reservations must be made at least 24 hours in advance. Recurring trips can be pre-reserved, but dial-a-ride service generally does not allow users the flexibility of changing travel plans on short notice (i.e., staying late at work or school).

Traditional fixed-route service is designed to serve population and activity centers along set corridors and with pre-set schedules. However, the effectiveness of fixed-route service can be somewhat limited in low-density suburban environments, as residents are often not within reasonable walking distance of major arterials, and retail and activity centers are designed with large setbacks to accommodate automobile parking.

An alternative to fixed-route service in Frisco would be via route deviation service, which would operate along a designated route, but buses can leave the route upon request to pick up a passenger within certain parameters, and then return to the point of deviation so that no stops are missed. Stops could be widely spaced in some areas to allow for deviations to occur between particular stops.

Flex service combines the accessibility features of dial-a-ride service with the scheduled reliability of fixed-route service, and is thus able to attract commuters and other users who would not generally consider dial-a-ride service.

A particular challenge to developing effective local transit solutions for Frisco residents and visitors is the jurisdictional boundary that separates the Stonebrier Centre area in Frisco from the Legacy area in Plano. These areas are top employment and retail destinations for residents of both cities, but transit users would not be able to travel seamlessly between the two without a collaborative effort between agencies and/or municipalities.

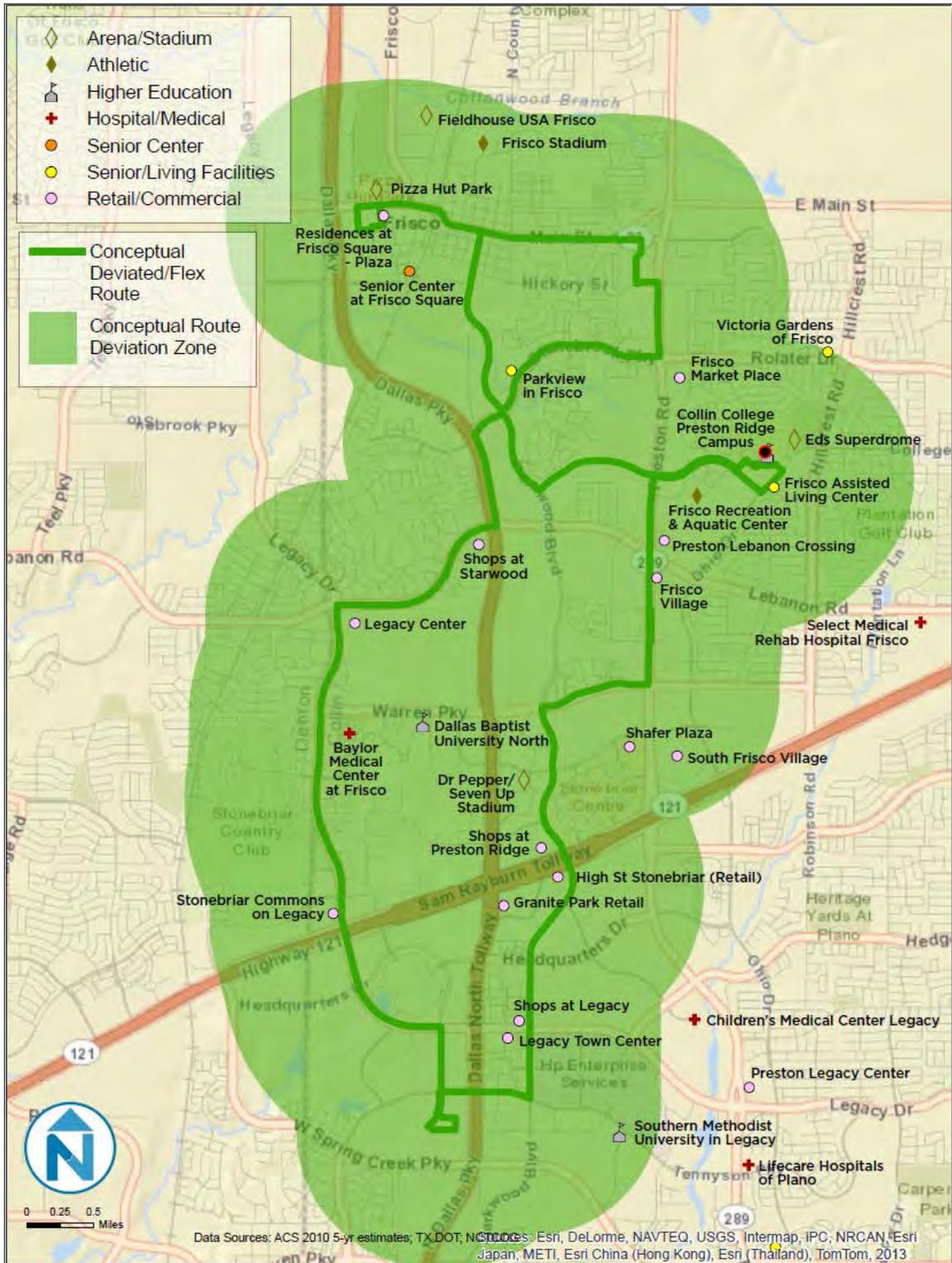
Figure 8-10 shows a conceptual route serving the majority of Frisco's retail, medical, and multi-family housing destinations, as well as Frisco High School and Collin College. The route also serves the Legacy area in Plano and the Northwest Plano Park-and-Ride. Allowing for route deviation would expand the reach of the service into many of the city's single-family residential neighborhoods, as well. Ideally, buses would operate both clockwise and counter-clockwise along the loop to allow for reasonable travel times between any two points along the route (alternatively, a point deviation service could be developed using a subset of the destinations shown in the figure as designated stops).

To allow for cross-jurisdictional service, this route could be jointly funded and jointly branded by DART and TAPS. Alternatively, the service could be run by a private contractor with funding support from some combination of DART, TAPS, the City of Frisco, and the City of Plano.

The route shown below is approximately 21 miles, and would require two vehicles per direction to provide hourly route deviation or point deviation service. Optimally, it could be broken into two or more sections to allow for shorter travel times for some riders. Flex service is usually operated with a 12-16 passenger cut-away (van-based) buses because of the level of ridership that the service is expected to generate and the need for maximum maneuverability to facilitate flex requests. TAPS and DART both operate and maintain this type of vehicle as part of their respective networks.

In the long-term, flex service can evolve into fixed-route service, taking into account frequent flex requests to determine the optimal alignment of the fixed route.

Figure 8-10 Conceptual Routing and Key Destinations in Frisco



Citywide General Public Dial-A-Ride Service

In April 2013, TAPS assumed responsibility for operating general public dial-a-ride service in the Collin County portion of Frisco and other Collin County communities formerly served by CCART. The implementation of flex service in Frisco, will reduce the demand for dial-a-ride service in parts of the city, but the service would still be needed in parts of Frisco that are beyond the reach of flex service. If flex service evolves into fixed-route service in Frisco, the role of dial-a-ride service will be, in part, to provide complementary paratransit service, as required by the Federal Transit Administration.

Consideration must also be given to the portion of Frisco that lies within Denton County. No services are currently available there because the City has opted not to be a member city of DCTA. The Denton County portion of the city is developing as a primarily residential portion of Frisco, with no major trip generators that would suggest the need for fixed or deviated routes, so it could be served by dial-a-ride service. In order to receive service from DCTA, the City of Frisco would need to provide financial support to the agency, likely becoming a member city. For ongoing dial-a-ride service in the Collin County portion of the city, the City will also need to provide a local match to TAPS. The City of Frisco would benefit from a single local service provider, and may be able to purchase citywide services from one of the two providers.

Citywide dial-a-ride service acts as a gauge of transit need in the city. High demand for dial-a-ride service in a particular part of the city can justify the introduction of flex service, and eventually fixed-route service in the area.

Implementation Considerations

To implement these services, the following steps are recommended:

For TAPS

- Refine the bus service plan and confirm operating hours, schedules, vehicle requirements and frequencies.
- Finalize service goals, objectives, policies, performance standards and design criteria.
- Consult with DCTA on cross-county transit operations to serve the Denton County portion of Frisco.
- Establish a workable implementation plan and schedule, including roles and responsibilities.
- Finalize running times for the development of accurate route schedules.
- Identify and prioritize time points/bus stop locations.
- Determine which stops need improvements to enhance their usability and accessibility, such as installation of shelters, benches, curb cuts, etc.
- Test the feasibility of turns, planned bus stop locations, and bus operations along all potential service streets.
- Establish marketing, outreach and staff orientation plans.

For City of Frisco

- Identify funding support that could be used to enhance the transit service operation allowing for improved leveraging of existing funds. Consider shifting of economic development funds to transit.
- Consider contribution of capital enhancements: shelters, benches, signs, etc.
- Work with TAPS to develop fares/payment program; consult with DCTA for potential service implementation in the Denton County portion of the city.
- Develop a local transit service advisory committee to advise the City of Frisco on transportation needs and services.
- Promote the availability of service.
- Monitor program effectiveness, value to City of Frisco, and opportunities to further expand the program to address needs.

McKinney Transit Service Options

Modified Fixed Routes – Deviated Services – General Public Dial-A-Ride-Express Bus/Park-and-Ride and Limited-Stop Bus Service to Plano



Concept

- Streamline existing fixed route services and operate bidirectional services along the primary ridership segments of the fixed route(s).
- As an alternative to the fixed routes, consider route or point deviation service in portions of McKinney.
- Maintain general public dial-a-ride in low-density portions of McKinney to supplement fixed routes and/or deviated routes.
- Continue express bus service to Plano and consider limited-stop midday service.

McKinney's routes have limited service frequencies and provide overall limited transit coverage of the city. McKinney has also encountered problems with public transit reliability, and until recently, had no commuter service beyond the city limits.

McKinney's transit service has suffered with low-ridership fixed bus routes that have not been able to cycle within their existing schedules, resulting in unreliable transit service. Restrictions on where some stops have been allowed has limited the effectiveness of fixed-route service, which only operates in a few primary corridors in the city. Much of the city is unserved by fixed routes, but residents have the option of riding dial-a-ride service. TAPS has an opportunity to redevelop the transit services in McKinney to better address the needs of residents and improve transit service performance.

Assuming status quo funding, the focus in McKinney is on improving efficiency. However, resources are quite limited and additional funding will be necessary to allow for an expansion of services. The conceptual McKinney service scenarios are shown in Figure 8-11.

Figure 8-11 Summary of McKinney Service Scenarios

Elements	Immediate Term (Within 3-5 Years)	Opportunities (Longer Term or Phase 2)
Service Design	Fixed-route or deviated service operating along a primary corridor, supplemented by general public dial-a-ride service in portions of McKinney unserved by route deviations; express bus service and midday limited-stop service between McKinney and Plano	Additional fixed routes/deviated services on the west side of McKinney; Conversion of highly productive deviated services to fixed routes with complementary dial-a-ride service
Service Hours	6:00 AM to 6:00 PM Monday through Friday	Expand to weekends if demand warrants
Headways	60 minutes for fixed routes or deviated services; N/A for dial-a-ride; 30-60 minutes for express bus services	30 minutes for fixed routes or deviated services
Vehicle requirements	4 + 1 spare (baseline) for local service; 2 for express/limited-stop service	8+ 1-2 spares
Annual Operating Costs (estimated)	\$540,000 for local service; \$125,000 for express/limited stop services	Will depend on service expansion
Annual Farebox Revenues (estimated)	\$42,000 for local service; \$78,000 for express/limited stop services	Will depend on service expansion
Annual Ridership (estimated, based on service standards)	55,000+	Will depend on service expansion
Administrative and Policy Roles	TAPS and City of McKinney; potential role for DART	TAPS, City of McKinney and additional funding partners
Funding Sources	FTA 5307, 5310 and 5311, CDBG, contributions from City of McKinney, donations from nonprofit agencies, fares, advertising, CMAQ demonstration funds, TDCs, JARC SAFETEA-LU apportionment	

Expected Benefits

- Enhance mobility in areas served by current fixed routes
- Focus resources on areas with greatest need
- Provide more effective and efficient transportation
- Provide greater transportation coverage
- Improve service reliability
- Improve consistency of service

Potential Obstacles

- Additional funding required to operate additional hours
- Need to develop service and implementation plans
- Additional services may not achieve the ridership needed for the service to be efficient

Overview

Improved local transit service is among the highest priorities in McKinney as determined through interviews with community stakeholders and surveys. McKinney residents, employers and agencies would like to see an expanded local service area and better transit access to key destinations. Figure 8-12 presents the existing fixed routes, as well as destinations identified by transit staff, stakeholders and survey respondents as the most important destinations to serve by transit.

Opportunities exist for significant changes to how service is operated. In suburban residential areas and McKinney's older urban core, fixed-route public transit may not always be the most cost-effective solution for providing mobility. Fixed-route services have been unproductive, and CCART's loss of funding in the past led to reduced route coverage and expanded headways, which remain today under TAPS. Based on the service alternatives evaluation, three potential solutions (or a combination of them) were identified to better meet local transportation needs and allow the transit operation greater flexibility in meeting those needs: modifications to fixed-route service, deviated route service, and dial-a-ride service. In addition, limited stop service from McKinney to Plano was identified as a service of interest to project stakeholders. This section discusses a potential approach to implementation of these options in McKinney.

Modifying Fixed Routes

Fixed route service could be maintained, but route changes should be considered.

Data is not available about the effectiveness of the fixed routes that previously operated in McKinney, but the current service configuration is not user friendly, particularly with headways of 120 minutes. In addition, the lack of marketing and quality of public information about the fixed-route service is inadequate. These and other barriers are reflected in the extremely low passenger usage and productivity. Although a complete re-examination of the route design will be undertaken by TAPS, the objectives of the redesign should be to modify the route alignment to speed up operation, increase frequency of service, and ensure that the highest trip generators are served. This evaluation should consider a number of key problems with the existing operation in developing routes.

- **A determination regarding the City of McKinney's priorities for transit routes.** Based on feedback at the McKinney community meeting, residents expressed a need for service to address the demands of people with few other options. Coverage-based transit routes do that, although they do not necessarily provide good service for everybody. A coverage-based route seeks to penetrate as many neighborhoods and destinations as possible, and rarely is focused on time-sensitive travel. A productivity-focused route, on the other hand, has an objective to attract ridership by focusing service on the densest corridors and major destinations. In McKinney, these are limited but would include Tennessee Street, McDonald Street, University Drive, and possibly a portion of Virginia Parkway. Key destinations include Collin College's Central Park Campus, downtown McKinney, the Redbud Boulevard Wal-Mart, Target, Medical Center of McKinney, and Baylor Medical Center. A policy determination must be made whether it is necessary to serve more than one Wal-Mart or to serve any gated communities that have been designed wholly around automobile access and may even have very limited pedestrian access. An appropriate standard for a very basic level of fixed route service is eight or more persons/acre within $\frac{1}{4}$ mile of the route, but income and demographic

considerations must also be considered. Some stakeholders talked about demand for service along Custer Road and the vicinity of Virginia Parkway and Stonebridge Drive. Although these are areas that most certainly would be accessed by transit if it were available, based on historic travel data, and limited funding of transit in McKinney, regular fixed route transit operations to these areas is unlikely to meet basic performance thresholds.

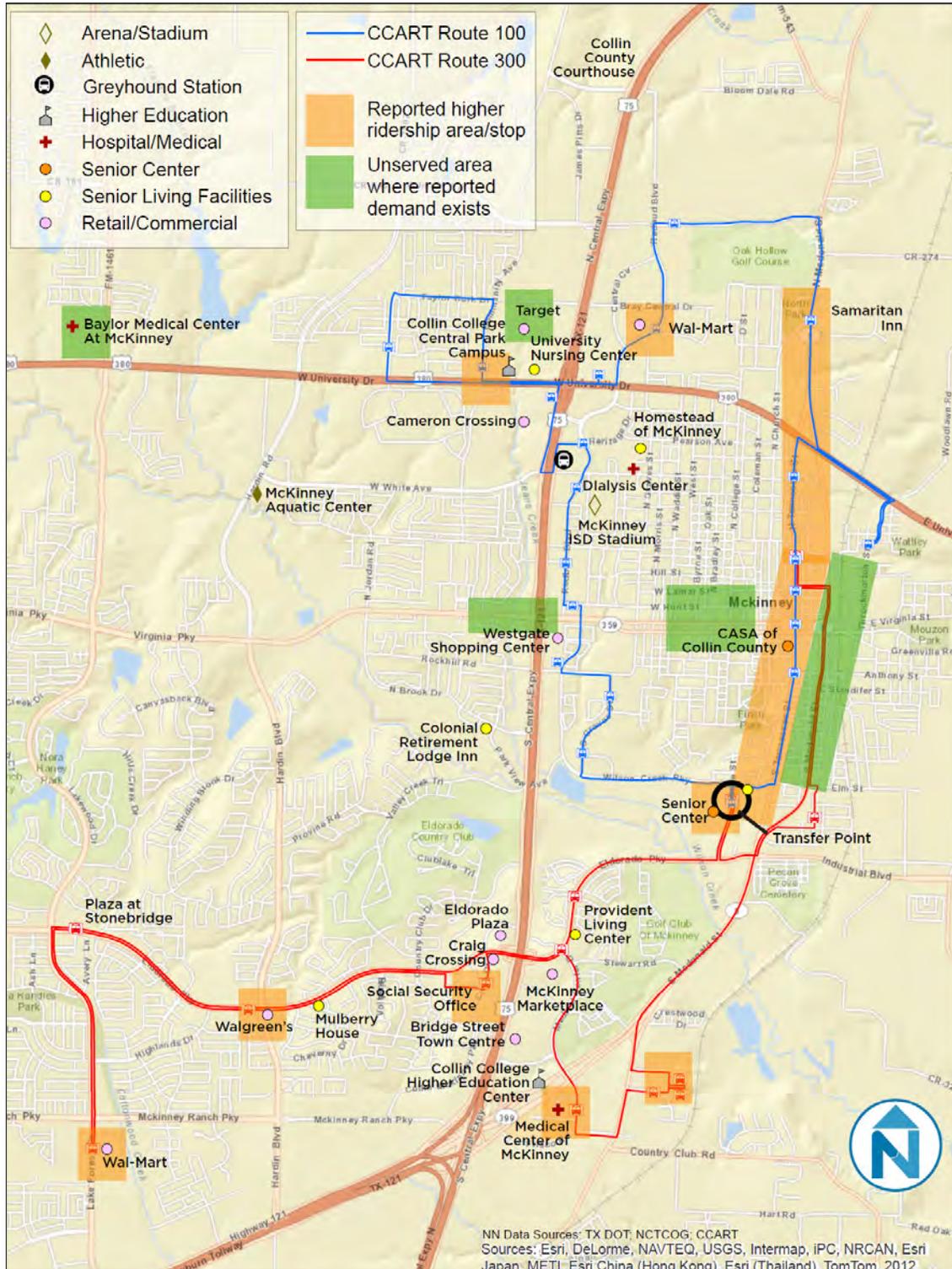
- **The need for reasonably located, visible bus stops in transit service corridors.** A key limitation of the existing fixed routes is a lack of bus stops. The current route structure is simply designed to move buses without giving people an opportunity to ride them. If the current route structure is to be maintained, bus stops should be located approximately every 1/4-mile along the routes.

McDonald Street serves as McKinney's primary north-south corridor on the east side of town, where the demographic composition includes a number of transit-dependent groups, yet in a 3.5-mile stretch along the road (which is also State Highway 5) through the densest part of McKinney, the buses operating on Route 300 make no stops. This is unacceptable for a transit operation along this corridor. It will be essential to work with TxDOT and Collin County to locate stops and pedestrian amenities (including sidewalks and crosswalks) along this corridor to allow transit service to meet the needs of the community. Currently, Route 100 makes stops along Tennessee Street, which parallels McDonald Street, and also serves some higher density neighborhoods, but the option to operate and stop along both streets is essential for a more effective fixed-route service.

Along El Dorado Parkway between Lake Forest Dr and McDonald Street, a 4.5-mile corridor, Route 300 has only five designated stops (including one off the road), at an average distance of 9/10 of a mile, far exceeding a typical suburban bus stop distance standard of 1/4 to 1/2 mile between stops.

- **The need for two-way (bidirectional) service along fixed routes.** McKinney's local bus routes operate as large one-way loops, meaning that a trip for someone living at Plateau Drive and County View Lane to downtown McKinney (Lamar Street at Tennessee Street) requires travel via Wal-Mart on Lake Forest Drive, making the one-way trip take about 45 minutes. The return trip can be completed in about 10 minutes. This is a significant inconvenience that discourages people from using the service; this type of routing only serves people with extreme flexibility, no time constraints and no other transportation options. If fixed routes are to be maintained in McKinney, bidirectional transit service operations are encouraged. Loops at the end of a route can offer some additional coverage as needed, but a route designed as a loop rarely is convenient for most people.

Figure 8-12 Key Ridership and Ridership Demand Areas in McKinney



Hybrid Fixed-Deviated Bus Routes

Route Deviation

A deviated route, also called a flex route, is proposed as one alternative to better serve transit demand in McKinney. Route deviation service would essentially operate as a fixed route, but would allow buses to flex, or deviate, up to $\frac{1}{4}$ or $\frac{1}{2}$ -mile or more from the fixed route before returning to the route to continue the service. Route deviation service could also allow buses to follow a regular fixed route and then deviate to any number of locations within an allotted period of time at specific locations/the route terminus. It is expected that the service would be available to the general public, and could deviate for the general public, although some systems deviate only for eligible riders, usually people with disabilities, youth, or seniors, and some systems charge higher fares for route deviations.

With TAPS' relatively new entry into local transit service in McKinney, there is a lot of flexibility with regard to how the agency might decide to implement the service. Typically, prior to implementation, the existing services would be analyzed to determine which route segments are the most productive and which are the least productive, which could be shifted into a deviation zone and would allow for the buses to complete a route cycle within one hour.

The productivity of route segments on the existing fixed-route service should be analyzed by TAPS to determine if there are very unproductive route segments that could be better served through a variety of "flex" services. Route deviation is one of these flex options. In the route deviation model, the vehicle leaves its designated route upon request to pick up a passenger within certain parameters, and then returns to the point of deviation so that no stops are missed. The specific trip origins and destinations of current paratransit riders could also be evaluated to determine if there are clusters that may be better served by route deviations.

Point Deviation

Point deviation service operates within a defined service area, which incorporates a series of designated locations (such as some of the key landmarks currently served by fixed routes) where the bus will arrive at designated times. However, the bus can circulate along any route between those stops to pick up riders who have requested curbside service (or door to door as needed if ADA-eligible). Point deviation services are usually able to operate at a productivity level that exceeds the current fixed-route productivity, and have the added benefit of being able to serve a subset of the ridership in front of their homes/destinations. One variation on this alternative would be that while there are designated stops in the area, the bus will only travel to specific stops upon request of a general public rider. If the request is made by an individual who is ADA paratransit eligible, then the driver will take that person to their destination.

Figure 8-13, Figure 8-14, and Figure 8-15 illustrate conceptual fixed route, deviated fixed route and point deviation services. These are only conceptual and would need to be fully developed into an operational strategy if any were to be pursued.

Figure 8-13 Conceptual Trunk Route and Point Deviation Zone in McKinney

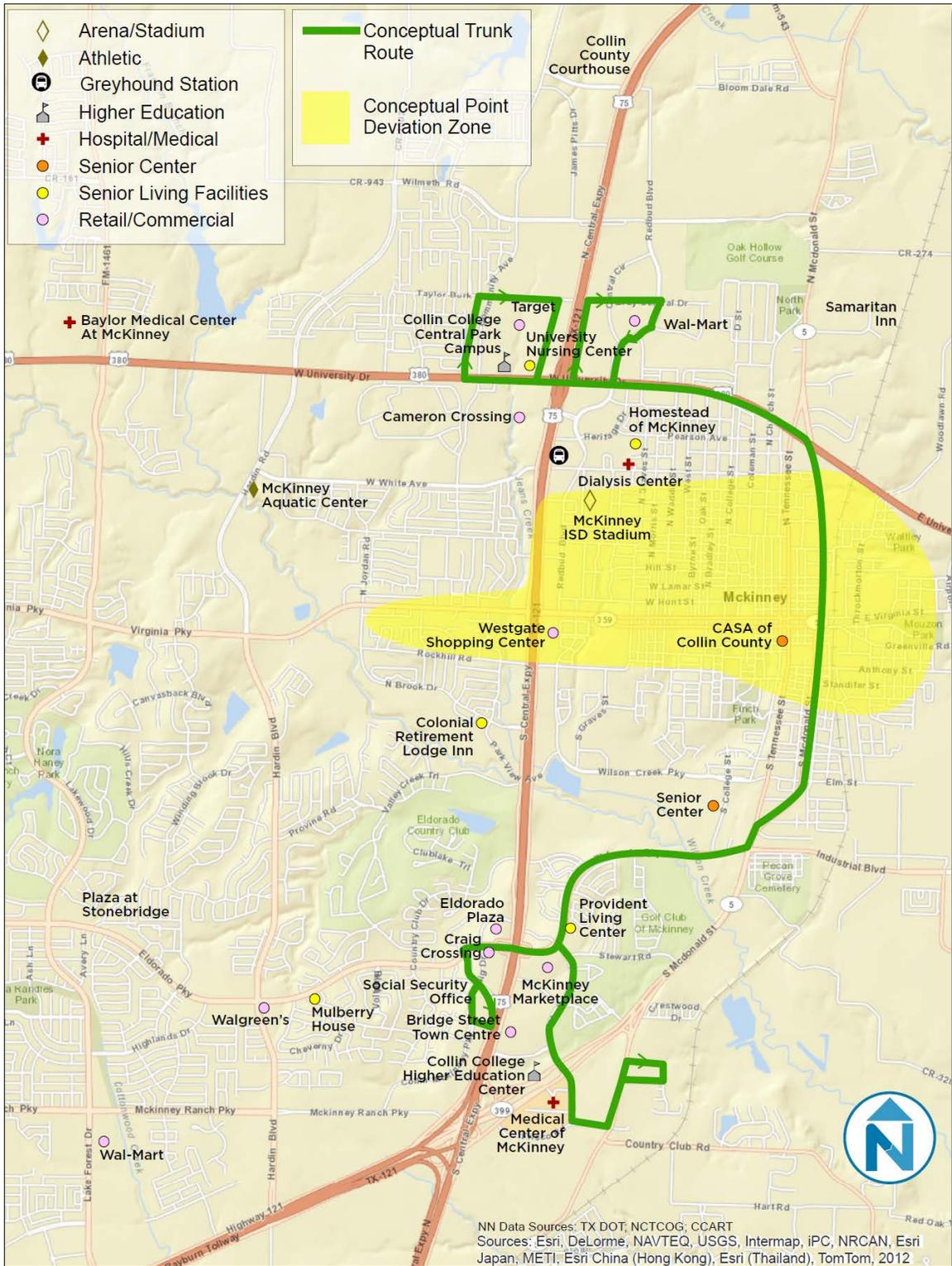


Figure 8-14 Conceptual Deviated/Flex Route in McKinney

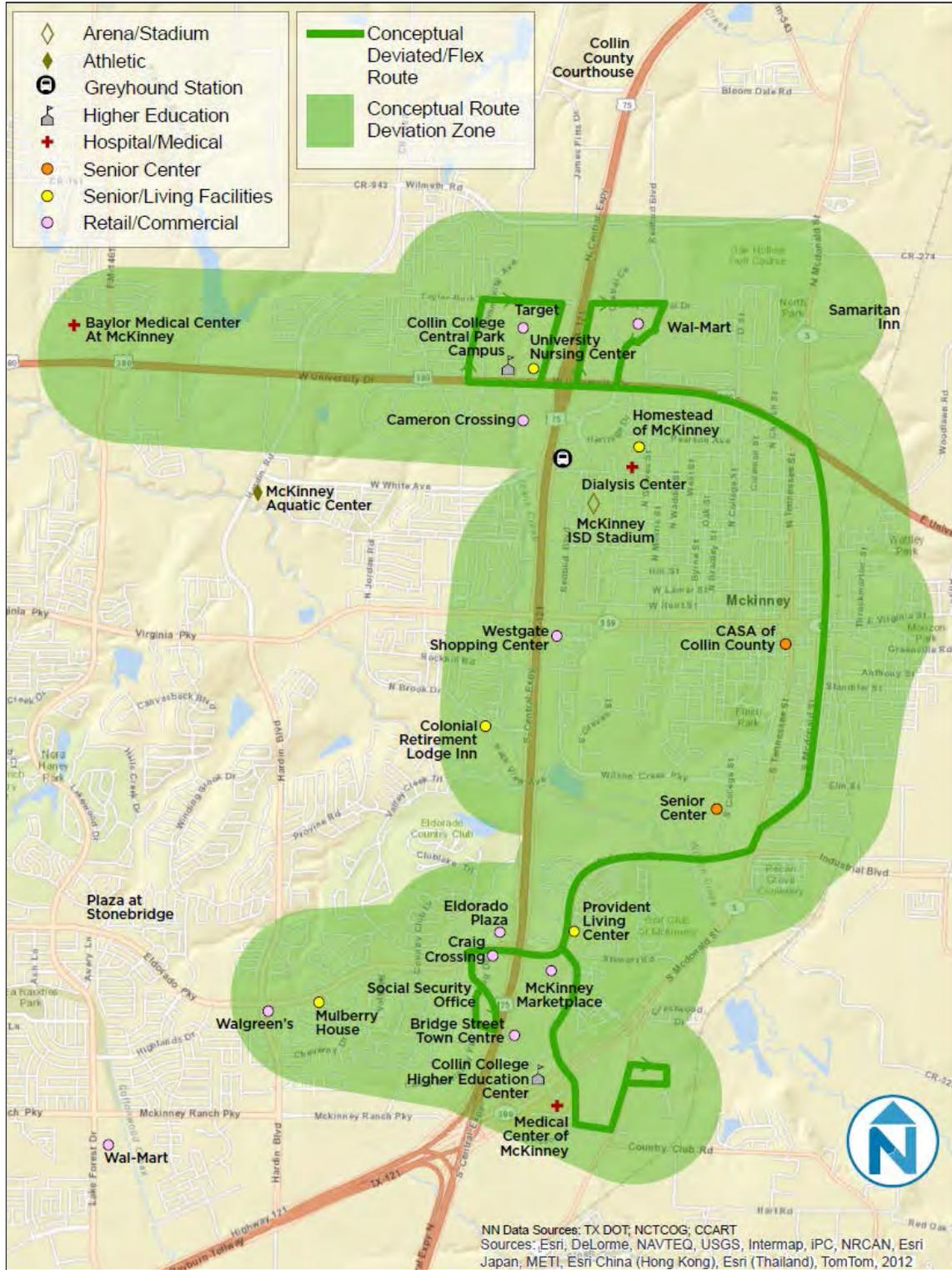
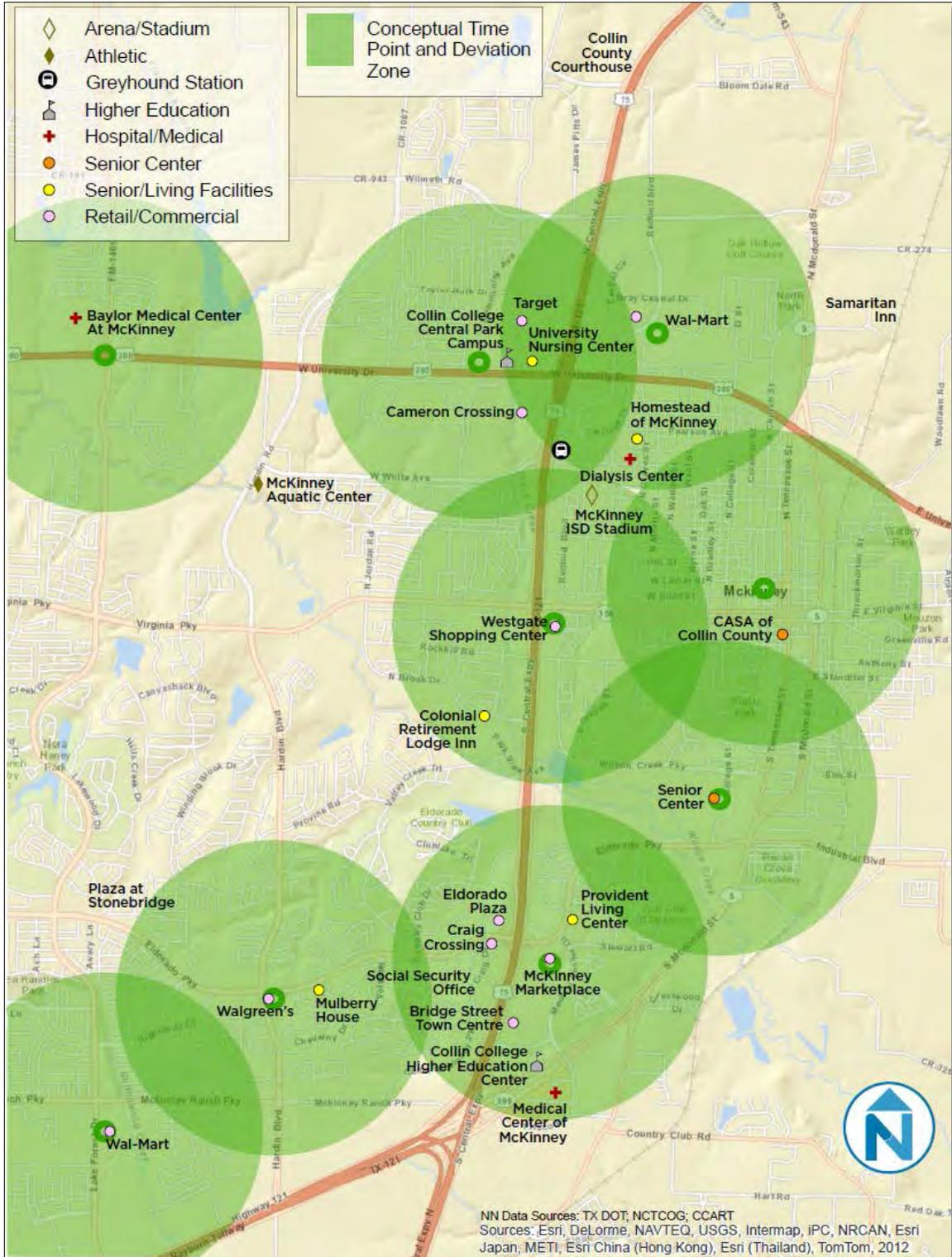


Figure 8-15 Conceptual Point Deviation Route in McKinney



Dial-a-Ride

Based on feedback from the general public and stakeholders, in addition to a service that meets the needs of the general public, a community dial-a-ride service could be implemented in the portions of McKinney not served by fixed or deviated routes. These services could only be available for certain seniors and people with disabilities (or very low-income residents meeting specific income thresholds or participating in specific programs that serve low-income persons) or they could be made available to any resident, possibly at a premium fare.

One of the concerns about dial-a-ride operations in McKinney in past years was that the service was not accountable to the City, and many in the City have been concerned about its availability and the quality of service offered. Under CCART management, about two dial-a-ride vehicles operated in McKinney at any given time, which could still be appropriate in the short term if specific eligibility criteria are established for using dial-a-ride. This assumes that many potential dial-a-ride users would be able to make use of a more effective fixed route or deviated service, and that TAPS would manage the operation to avoid the service duplication which occurs in McKinney (any individual in McKinney may request service to any location in McKinney or elsewhere in Collin County, regardless of whether they have access to one of the local fixed route lines).

If fixed route service is maintained in McKinney, or even expanded, implementation of ADA paratransit will be obligatory. The current paratransit operation is available to any resident of McKinney, and is thus duplicative of the existing fixed routes. For cost savings to TAPS, dial-a-ride policies could be established so that individuals who reside or have a destination within $\frac{3}{4}$ -mile of the fixed route(s) would be required to be deemed eligible under guidelines specified by the ADA. The complexity of administering two local dial-a-ride operations makes this undesirable, but policies that limit dial-a-ride service, in general, to locations not served by the fixed route(s) are encouraged.

Limited-Stop and Express Service to Plano

TAPS has begun a service known as Commuter Connect which operates from a park-and-ride lot on Gateway Boulevard in McKinney, offering seven round-trips per day (three during the morning peak and 4 during the evening peak) to the Parker Road DART Station in Plano. The service is nonstop between McKinney and Plano, but additional routes in this corridor could be operated as limited-stop service.

Desired stops along this corridor might include locations in central McKinney (to the north of the existing park-and-ride lot, which might facilitate transfers to local services), in Fairview/the vicinity of the Allen Premium Outlets, in Allen, and in Plano in the vicinity of Legacy Drive and Spring Creek Parkway. If a limited-stop service were to be implemented, it could operate along Highway 5 south of Fairview, and provide midday service to supplement the express service during the peak periods. Unlike the Commuter Connect service, the purpose of this service would be to offer access to regional shopping, medical and recreational destinations.

A limited-stop service that operates only a few trips each day is unlikely to require a complementary ADA paratransit service, allowing the service to keep costs relatively low.

Even with as much stated demand (and modeled demand, using the NCTCOG Travel Demand Model), ridership on the Commuter Connect service has been very modest during the first several months of operation, averaging fewer than 12 passengers per day in August 2013. If service is able to meet the proposed service standards for passengers per hour (productivity) discussed in Chapter 9, this limited-stop service may offer a worthy companion operation; if Commuter

Connect service is unable to meet service standards after a robust marketing effort and a local service plan that offers connecting service to the intercity routes, limited-stop bus service is seen as unlikely to be successful. Consideration could instead be given to community shuttles serving McKinney and providing lifeline access to Allen and Plano, perhaps two days per week.

For the Commuter Connect service, the option exists to purchase DART service (see discussion of Allen on page 8-28) instead of having TAPS operate the service. Of course, if commuter ridership from McKinney proves to be strong, the introduction of express service from McKinney to downtown Dallas, similar to the former DCTA Commuter Express service and likely operated by TAPS, may be warranted.

Operating Characteristics and Outcomes

Ridership on McKinney's local fixed routes averaged 4.3 passengers per hour in 2011, which is low for fixed routes, and even a small-scale route deviation service in a low-density small urban area. For route deviation in McKinney, expectations are that the service should carry about 5 to 7 passengers per hour given its ability to better penetrate the neighborhoods adjacent to a bus routing. A minimum threshold of 10 passengers per hour would be appropriate for fixed-route service operating at 30-minute headways.

In McKinney, to be cost-effective, it is proposed that general service would operate on 60-minute headways, which could be increased to 30-minute headways if ridership growth occurs and funding becomes available. It is assumed that the fixed route could cycle within 60 minutes round-trip, but if it were to operate as a deviated service, two vehicles would be needed to operate along the route.

The fixed-route service currently operates weekdays only from 6:00 AM to 6:00 PM, but McKinney residents suggested the need for later service hours and weekend hours. A baseline service assumes the same hours of operation in the immediate term, with two vehicles on the fixed routes and two dedicated to local dial-a-ride in McKinney. The result is approximately 12,800 annual vehicle service hours. Weekend service may be warranted and could be provided at about 3,300 additional annual service hours. At a fully allocated operating cost of \$55 per hour for fixed route or deviated route service and \$35 per hour for dial-a-ride, based on historic TAPS hourly costs, total annual operating costs for weekday-only service are estimated at about \$540,000 per year for a very basic level of service. The City of McKinney currently pays \$100,000 in local matching funds, which would represent about 18% of annual operating costs. Fares could help bring total local revenues/contributions collected to about 23% of operating costs.

Ridership growth is dependent on the effectiveness of the route structure, reservations and dispatch procedures, marketing, and fare policies. Based on current and past ridership performance, an expected minimum standard of 5 passengers per hour is appropriate for a deviated service, and should be set at about 10 passengers per hour for a fixed route operating at better headways (30 minutes). A baseline assumption is that the ridership is estimated for the deviated service at between 32,000 and 64,000 annual trips, with about 18,000 passengers per year on local dial-a-ride. Even if fares are maintained at or near current fixed route levels (\$2.00 for the general public, \$1.00 for seniors and people with disabilities), total revenues for the general fixed or deviated service are assumed to be between \$24,000 and \$28,000 annually. Dial-a-Ride revenues are projected at about \$18,000 annually, based on current rates. Consideration should be given to a fare increase on dial-a-ride services, effectively establishing a fare of \$3.00

for all riders (currently, \$3.00 is the general public fare for out of town trips, and \$2.00 is the fare for in-town trips).

Operating costs for a limited-stop bus service, assuming weekday operation with two round-trips per day are estimated at \$55,000 using a simple cutaway vehicle.

Implementation Considerations

Transit services in McKinney are modest compared with operations five years ago when most of the city was covered by bus routes. Better coverage may be a goal of many stakeholders, but the investment in transit needs to match the service on the streets. The City of McKinney was rightfully concerned that public resources may not have been spent as effectively or efficiently as needs warrant. Even still, implementation of improved fixed-route operations or new deviated services will require local investment in transit. If, in fact, the City's goal is to make public transit an effective mode and attractive community resource, it will also require new policies that encourage transit-oriented development and pedestrian-focused land use decisions.

To implement deviated services, policies will need to be established regarding the deviation limits (How far in distance/time will the vehicle deviate?); advance reservation requirements (Can passengers request deviations upon boarding the bus or do they need to book these in advance?); fares (Will there be a premium above the base fixed-route fare?), and others. One of the benefits of providing this type of service is that it serves a more extensive area without the provision of parallel fixed-route and paratransit programs. Since deviations from a fixed route need to be limited in order to maintain schedule adherence, this mode can only meet the needs of a limited number of people with disabilities. However, it is an effective mode for serving the needs of those who can benefit from fixed-route service where densities do not justify full fixed-route service.

Whether fixed route service is maintained or a deviated route is implemented, the City of McKinney and TAPS are encouraged to undertake the following steps to implement service:

For TAPS

- Refine the bus service plan and confirm operating hours, schedules, vehicle requirements and frequencies.
- Finalize service goals, objectives, policies, performance standards and design criteria.
- Establish a workable implementation plan and schedule, including roles and responsibilities.
- Finalize running times for the development of accurate route schedules.
- Establish outbound and inbound garage deadhead times.
- Identify and prioritize bus stops and bus stop locations.
- Set time point references.
- Determine which stops need improvement to enhance their usability, such as installation of shelters, benches, curb cuts, etc. Ensure all regular bus stops are accessible for wheelchair users.
- Test the feasibility of turns, planned bus stop locations, and bus operations along all potential service streets.
- Establish marketing, outreach and staff orientation plans.

For City of McKinney

- Identify funding support that could be used to enhance the transit service operation allowing for improved leveraging of existing funds.
- Consider contribution of capital enhancements: shelters, benches, signs, etc.
- Work with TAPS to develop fares/payment program.
- Develop a local transit service advisory committee to advise the City of McKinney on transportation needs and services.
- Promote the availability of service.
- Monitor program effectiveness, value to City of McKinney, and opportunities to further expand the program to address needs.

CONCLUSION

Collin County only has very limited experience with transit services and other transportation strategies. Although countywide dial-a-ride service is available, without local dollars from the County and the various cities within Collin County, its long-term viability is uncertain. Specific strategies must be considered to address the unique needs of rural areas, suburban communities, and McKinney's small urban characteristics.

The preferred strategies should serve as a basis for the development of action plans to be undertaken by TAPS, the County, and the various cities. Proposed routes are conceptual only and will require review and testing, as well as modification based on specific needs identified by each city where they are proposed.

9 IMPLEMENTATION CONSIDERATIONS

INTRODUCTION

The challenge of implementing short-term transportation services and programs in Collin County stems from the lack of existing services and the limited experience that most communities in the county have had with transit. With the assumption of general public and paratransit service will be carried on by TAPS outside of the DART service area, officials from cities and the County are optimistic that the agency can rebuild some credibility in the transit operation. There is also the expectation that, if services are successful and public support for TAPS service is strong, a well-operated service could attract local funding as a match for federal dollars that CCART was unsuccessful in generating.

An obstacle for providing transportation services is that, unlike the more populous Dallas and Tarrant counties, Collin County's network of informal and human service providers is very small, with only a handful of them providing services, and most of the services are limited to a specific set of clients. With Collin County's growth has come an awareness that not all residents of the county can afford to drive, and that some people have disabilities (or other potential limitations, such as medical conditions) which make it difficult for them to provide their own transportation. In addition, many people who commute in their own car are finding traffic congestion and long travel times to be a disincentive to living in Collin County, eroding a quality of life that has been impacted by rapid growth in the last decade.

Collin County's cities view transportation as one of many services they could offer, but it is generally a low priority. Given competing needs for public safety, roads, housing, schools, economic development, etc., a significant number of Collin County's cities have opted to focus their resources on these other priorities. Plano is the only city that has funded DART (and Richardson, of which only a small sliver is within the county), and McKinney is the only other jurisdiction in Collin County that makes a local contribution to support transit service, limited in past years to \$100,000 annually.

The preferred strategies in Chapter 8, along with the other various tools described in Chapter 7, offer a set of strategies that are implementable and have a strong likelihood of addressing the unmet transportation needs in Collin County. For these services to be successful, however, will require an approach that is mindful of the county's increasing demographic and income diversity, and that requires locally generated funds as a tool to leverage other public dollars. Enhanced funding will allow TAPS and Collin County's various jurisdictions to scale the services appropriately so that they meet demand, can operate reliably and effectively, and can make transit service an attractive option for Collin County residents, whether they are traveling to work, medical appointments, or the supermarket.

This analysis suggests that transit is seen as a benefit that many Collin County residents would embrace. Short-term opportunities to pilot new localized and regional transit services in the county can set the stage for longer term investments in commuter rail, freeway expansion for express buses, and expanded local services. Transit, as one element of comprehensive transportation network, provides an option that, based on national trends, makes Collin County more attractive for potential investment in jobs as an avenue for economic development.

Even faced with the challenging funding environment and a cautious political environment, some of the preferred strategies would be relatively inexpensive to carry forward in a short period of time, and would greatly enhance the availability of effective mobility options for commuters, seniors, youth, people with disabilities, and low-income individuals in Collin County.

KEY CONSIDERATIONS

This report is intended to provide a set of preferred strategies to be reviewed by Collin County's residents, elected officials, employers, TAPS and DART. Strategies that are of interest can be carried forward through a prioritization of the specific issues to be addressed, confirmation of who would be involved in implementation, a detailed examination of what the costs would be, and a review of where funds might be available. In some cases, implementation efforts may involve pilot projects or experiments to test various approaches.

A number of key issues are identified with regard to the implementation of strategies in Collin County. All of these should be considered in carrying forward any of the preferred strategies.

Mix of Commuter and Non-Commute Strategies is Needed in Collin County

Public and stakeholder input suggests that focusing on mobility efforts to serve the needs of Collin County residents with limited transportation options is a top priority, but to achieve public support, these approaches must be paired with service aimed at commuters and “choice” riders. If transit is seen as an economic development tool (creating livable communities, encouraging job development, etc.), then it may have a greater chance of achieving public support from residents than a service that is perceived as a “safety net” for people without their own cars.

Defining the right mix of services will be a critical component of the successful implementation of new services in Collin County. McKinney's fixed routes and most of the countywide demand-response operations have been considered a form of social service which goes wherever people need it. Since there are isolated people with mobility needs scattered in communities throughout Collin County, services are stretched thin but provide some coverage everywhere. Under a social service, or coverage-based approach to transit, the focus is not on high ridership, but rather to provide some limited level of access to individuals wherever they may be.

Most successful transit systems focus some of their resources on what is often called a “productivity strategy.” The assumption is that transit does not strictly serve a social service purpose; instead transit is an element of the transportation infrastructure, and that its purpose is to move many people and move them as cost-effectively as possible. Today, few TAPS dial-a-ride and fixed-route riders would generate vehicle trips as drivers, according to results of the survey data, but many automobile drivers would consider transit if service operated and was competitive with the automobile. Striking the right balance in Collin County between coverage-based and productivity-based services will be critical for soliciting support for new transit services. Data

suggest that both types of service must be provided in Collin County. Currently, based on the allocation of existing resources, the assumption is that about 85 to 90% of total service hours are dedicated to meeting social service-type mobility needs, while only 10 to 15% of services are focused on productivity. The various jurisdictions in Collin County and TAPS' Board of Directors are encouraged to establish goals based on the proportion of resources that should be used to fund each type of service.

Value of Coordination/Integration among Multiple Services

While jurisdictional boundaries are important features for establishing funding mechanisms and zones of responsibility, they are often meaningless to the general public as they navigate between home, work, school, and errands. Like all Collin County residents, transit users are interested in accessing destinations in neighboring cities and neighboring transit districts. Thus, the coordination of transit services operated by various agencies is key to creating seamless connections and facilitating regional travel patterns.

For service in Frisco, consideration will need to be given to DCTA's operations in Denton County. Frisco is in both counties and it may not make sense for both TAPS and DCTA to operate separate services in Frisco. It will be up to the city to determine which is the most appropriate service, and essential for coordination between TAPS and DCTA to make sure that residents of Frisco have a seamless local transit option that, optimally, provides service on both sides of the Collin County line. Another particular challenge to developing effective local transit solutions for Frisco residents and visitors, for example, is the jurisdictional boundary that separates the Stonebrier Centre area in Frisco from the Legacy area in Plano. These areas are top employment and retail destinations for residents of both cities, but transit users would not be able to travel seamlessly between the two without a collaborative effort between agencies and/or municipalities.

Coordination and/or integration can benefit local transit riders as well as long-distance commuters. Integration of transit operations in Plano is an ongoing source of contention between DART and Collin County's various jurisdictions which provide no financial support for DART. DART's approach to parking fees and restrictions on access of some regional bus services may be warranted to avoid overcrowding and overuse of its facilities, but both DART and Collin County's jurisdictions will need to work together to find a solution that meets the needs of consumers. Consumers have indicated they may be willing to pay more for a seamless integration of dial-a-ride and express services with DART in Plano.

Creating Accessible Environments/Pedestrian Access to Transit in Collin County's Cities and Small Communities

Since it is impossible for buses to serve every street in any given service area, complementary pedestrian (and bicycle) infrastructure is essential to allowing passengers to access transit and destinations not directly served by a transit route. In effect, pedestrian and bicycle infrastructure increase the reach of transit service. TAPS will benefit from working with city and county planners to help create rural, suburban and small urban environments that allow transit to be successful. Although there are some traditional small downtowns (in McKinney, Allen, Wylie, Farmerville, and elsewhere), much of the development outside of the town centers is suburban. Suburban land use patterns vary greatly depending on lot size and housing product type, from some large lots in the Lucas area to townhouses in Allen, and new mixed-use development in new urbanist-style developments in Frisco. Much of Collin County remains rural, and even with

significant population growth projected in the largest communities, places like Anna and Blue Ridge are expected to maintain much of their rural character in the future.

In most of the developed areas, access to many of the key destinations is designed only for the automobile. It will be important for planners to work on efforts to create a multi-modal transportation network that accommodates pedestrians, cyclists, transit users, and automobile users. Providing residential sidewalks increases the likelihood that neighborhoods can be walkable, and allows for transit services to be more successful. Pedestrian amenities alone are not always enough to support transit, however. The low-density land use typical of much of Collin County's suburban development can limit the effectiveness of transit, especially fixed-route services, because residents are often not within reasonable walking distance of major arterials, and retail and activity centers are designed with large set-backs to accommodate automobile parking. Planning for a grid of streets that offers a multitude of routes between destinations also can also improve the effectiveness of transit.

The goal of encouraging transit ridership can be supported through improvements to the physical environment, but jurisdictions will need to create and retrofit communities that are supportive of transit. A few cities in Collin County have drafted development guidelines for specific projects that are oriented to pedestrians; TAPS and other potential regional transit providers should be consulted when future developments are planned to ensure they have good access for transit.

Adoption of Service Standards; Monitoring Effectiveness of Programs and Services; Modifying Service as Needed

Monitoring system performance and designing the "right" services are important tasks for transit operators. Performance measures are the criteria by which specific achievements consistent with system objectives are determined. They provide a means to assess whether actual performance is meeting or has met adopted objectives. Selected measures should be monitored on a regular basis (month-to-month, quarterly) by transit staff, and regularly reported to advisory groups or policy makers. Service standards are a benchmark by which service performance is evaluated. There are no national service standards or guidelines but a number of standards have been defined specifically for operating environments like Collin County.

The establishment of standards should reflect the goals and objectives of a community. For transit systems that do not have an established set of service standards, it is often useful to initially set a baseline that reflects current performance, while also establishing a set of goals by which to judge future service performance measures.

A draft set of basic service standards for consideration is presented in Figure 9-1. These proposed measures offer a valuable tool for allocating scarce resources (their use in the service planning and allocation process will avoid potentially inequitable, and possibly inefficient, allocations of service). These measures can be revised and expanded, and are offered as a starting point for modifying/implementing new services in Collin County. Establishing performance standards for service will allow TAPS and each jurisdiction to monitor the effectiveness of services and develop policies to allow for service expansion or contraction based on performance.

Figure 9-1 Proposed 3-Year Minimum Service Thresholds for Transit Operations in Collin County

Basic Performance Measures	Proposed Minimum Service Standards
Passengers per Revenue Hour	<ol style="list-style-type: none"> 1. Regional Express Bus Services – 20 passengers/hour 2. Small Urban Trunk Routes – 10 passengers/hour 3. Flex-Deviated Route – 7 passengers/hour 4. Dial-a-Ride – 3 passengers per hour
Passengers per Revenue Mile	<ol style="list-style-type: none"> 1. Regional Express Bus Services – 1 passenger/mile 2. Small Urban Trunk Routes – 0.8 passenger/mile 3. Flex-Deviated Route – 0.5 passenger/mile 4. Dial-a-Ride - 0.2 passenger/mile
Farebox Recovery	<ol style="list-style-type: none"> 1. Regional Express Bus Services – 2. Small Urban Trunk Routes – 15% 3. Flex-Deviated Route – 10% 4. Dial-a-Ride – 10%
Service Frequency	<ol style="list-style-type: none"> 1. Regional Express Bus Services – 30 minutes peak; 60 minutes off-peak; clockface headways 2. Small Urban Trunk Routes – 30 minutes-60 minutes minimum; clockface headways 3. Flex-Deviated Route – 60 minutes minimum; clockface headways 4. Dial-a-Ride – N/A
On Time Performance	90% on-time performance for all services
Stop Spacing	<ol style="list-style-type: none"> 1. Regional Express Bus Services – 5 miles 2. Small Urban Trunk Routes – ¼ mile 3. Flex-Deviated Route – ¼ mile for stops along route; ¼ mile to ½ mile for off-route pickup locations. 4. Dial-a-Ride – N/A
Accidents /Bus Miles Operated	Fewer than 1 preventable accident/100,000 revenue miles
Trips Cancelled	No trips shall be cancelled

Transportation as a Stated Community Priority: Potential Funding to Support Transportation

Leveraging of local funds is an integral part of effectively expanding transit services and making them more effective in Collin County. One of the most critical ways to leverage funding for transportation services in is by attracting local public funds, donations, payments and fares, human service funds, private dollars and other non-federal co-investment. For many federal operating funds, a 50% local match is required, meaning that for every dollar invested locally, the federal transit funds provide an additional dollar. For federal capital funds, a 20% local match is required for Section 5310 (see Chapter 10). When a 20% local match is required, for every dollar invested locally, federal transit funds provide an additional four dollars.

Effective transit operators know how to leverage public funding sources to maximize the available total funding for transportation programs, allowing more service to be offered than would be provided without the federal dollars. Several of Collin County's smaller cities do not understand how their local dollars can be leveraged and in some cases, that they could achieve modest levels of transit service for a small investment in transportation.

Several stakeholders in this study indicated that their city might be interested in supporting transit if it were viewed as an economic development opportunity, and even that local economic development funds could be used to help fund transit. Education will play an essential role in encouraging Collin County's jurisdictions to help fund local transportation. Outreach and better information by TAPS and NCTCOG can help facilitate this process.

Fare Program

Specific fares for the recommended services are not identified in this plan because the fares will be dependent on an array of circumstances, including TAPS' funding requirements, transfers, and the ability to integrate the fares with existing (and future) fare payment media. Fares should be established to meet the performance standards that are adopted in Collin County.

When new fares are introduced, public hearings must be scheduled.

Importance of Public Information, Visibility, Community Support and Understanding of Transit

In order to attract and retain passengers, transit must be easy to use and intuitive to understand. For many prospective TAPS users in Collin County, a passenger schedule or bus stop is their first introduction to service. Even for seasoned transit users these elements are important wayfinding tools. Thus, passenger schedules and bus stop amenities can play a key role in both attracting and retaining transit users.

TAPS' public information represents an improvement over the information previously provided by CCART. In the future, printed schedules should be formatted and packaged in such a way as to be easy to read and easy to carry. Tri-fold brochures are more convenient to carry in a pocket or purse than a large sheet of paper. For a fixed-route service, or for any of the proposed deviated services, showing a route map, key stop locations, and timetables can greatly increase the comprehensibility of the service.

In the modern era, it is equally important to make transit information easy to find and navigate online. Current and prospective riders typically refer to a transit agency's website to find service information.

TAPS' Collin County website has useful information which can be expanded and updated. Increasingly, people are also relying on Google Maps and Google Transit for trip planning assistance. Google Transit is a powerful trip planning and online mapping tool that can improve the transit experience of existing riders and make transit options known to a new market of potential riders. Transit providers can make their service information available on Google Maps and Google Transit by joining the Google Transit Partners Program free of charge.

Even with the implementation of deviated routes, marked bus stop signs help create a more predictable transit experience for passengers while also advertising the existence of a transit

service to prospective passengers. Bus stop signs typically include information about the services that make the stop, and ideally include information about the schedule and service hours. Increasingly, bus stop signs also feature phone numbers or QR codes linked to automated schedule information. When well kept, passenger amenities also improve the passenger experience and serve as an advertisement for the high quality of service offered. At some heavily used stops, enhanced bus shelters can include features such as lighting and dynamic message signs displaying bus arrival information.

TAPS has done a good job of introducing highly visible vehicle branding, which can raise awareness of transit service in a community, and it appears to be improving the image of local transit. There may be some reluctance by some of the suburban cities and McKinney to forego having their own name or brand on the buses, and this should be explored further to determine if some city-based branding would help encourage Collin County's jurisdictions to provide more funding for transit, allowing them to personalize the service locally. Because a successful brand and logo can also help tie together a variety of marketing elements including vehicles, signs, printed materials, and websites, if any city-based branding is developed, it should still be clear that the service remains part of the TAPS network, making it clear to novice users that the services in Collin County work together.

CONCLUSION

Once the new service is in place, performance should be monitored. Close attention should also be given to running times, to ensure that the lines are cycling as planned. Small schedule adjustments, such as shifting a few minutes from one time point to another, are sometimes in order after three months of observations. However, no significant changes should be made for one year except in cases of cycle failure, safety problems, or overloads and pass-ups.

Determining how successful a service change is should be based on a review of many service performance factors over a one- to two-year period.

10 FUNDING STRATEGIES

INTRODUCTION

It is important to enumerate the key issues related to transportation funding and the various funding sources that may be available to support strategies identified in this report. The information in this chapter should be viewed in the context of two key funding objectives: (1) using current and future resources most efficiently and (2) working with partners (other transit agencies, adjacent jurisdictions) to secure local funding contributions. The latter is important for a number of reasons, including expanding the pool of available funds, securing greater commitment to public transportation and interest on the part of local entities, developing a comprehensive and countywide transportation program in Collin County, and ensuring that a local match is available to leverage state and federal funding.

WORKING WITH AVAILABLE RESOURCES

With limited resources, leveraging federal funds with local funds is critical. Collin County's transit operations have been constrained in past years because the various jurisdictions in the county could not generate the required local match to avail themselves of funds dedicated to the county's transit operations.

Countywide, Suburban Bedroom Communities, and Rural Areas

Over the three-to-five year assumed implementation period of preferred strategies in this study, local funding will need to be generated to maintain the dial-a-ride that operates in the rural portions, suburban areas and small cities in Collin County. Without financial support from Collin County and its jurisdictions, that service would likely be discontinued. CCART operated services beyond its financial capacity, which led to the degradation of services and ultimately the termination of operations. In the immediate term, funding has been secured at the regional level to sustain TAPS' dial-a-ride operations in the county, and TAPS can rely on its available resources to manage that service, but funding has not been generated within Collin County which suggests that ongoing transit operations, especially in rural and suburban bedroom communities, are uncertain. One of the challenges in the development of this report is that data is not readily available about existing costs and performance of TAPS services, which have only been in operation for a few months. However, even without the data, TAPS and jurisdictions in Collin County should be focusing on building ridership without additional funding.

Transportation Development Credits (TDCs, defined on page 10-20) for toll roads and tolled managed lanes can be used as a credit toward what would be the local match for small transit providers who cannot collect a sufficient local contribution to fully fund needed services. NCTCOG intends to allow for the use of these credits in securing federal operating funds as long as the service advances public transit in the region and meets the goals of the Regional

Transportation Council. This suggests a potential cushion that could be available to support many of the preferred strategies in this report, but these funds alone would not demonstrate a commitment to local transit services.

A modest local match, in combination with TDCs in the formula to secure federal funding, may allow for the ongoing operation of dial-a-ride service, but if funding is very limited, that service may need to be restricted to certain rural portions of county, limited to certain days of operation, or be offered to individuals based on an eligibility requirement. Reduced funding may allow for community shuttles and promotion of vanpools and carpools to support the loss of dial-a-ride service in some communities that opt not to fund transportation services (see Maintaining Countywide Dial-a-Ride Operations on page 10-3), but would only provide a very basic safety net for some people.

Suburban/Employment Base Cities

To operate local services for Allen and Frisco, as described in Chapter 8, additional funds will be required. No service can be provided with status quo funding other than a minimal level of dial-a-ride service that is currently offered as part of the countywide operation and may not be available in future years. While these basic costs are shown in Figure 10-1, they suggest the need for a local match in the range of \$175,000 to \$250,000 from each city annually for operations alone. Looking ahead no more than five years, the focus timeframe of this study, it is not expected that significant increases in funding would be required to expand beyond the initial implementation of service because it would take time for ridership to grow to reach the proposed performance standards. Without the implementation of local deviated route services, community shuttles could still be implemented to offer a lifeline for isolated individuals or other transit-dependent populations, and a local match of \$30,000 or less could make this type of service available two or three days per week.

Funding scenarios for these cities assume the potential for some private support to allow for the implementation of site-specific shuttles serving major employment centers in both cities. Without private funding, these services cannot be operated.

McKinney

Given funding constraints —hypothetical as they may seem in the immediate term— TAPS' focus should be on maximizing efficiency with available resources. Meeting proposed performance standards is a first step (i.e., carrying more passengers per hour). Implementation of deviated routes instead of traditional dial-a-ride, or operating community shuttles instead of multiple trips to the same destination, may enable TAPS to better manage demand for services, allowing for resources to be used in communities where demand is greatest. In McKinney in particular, elected officials have indicated that the demonstration of the efficient use of resources is also likely to encourage the city to consider additional funds required to support transit service in the future. TAPS is already building ridership on services that achieved few riders under CCART's operations. If this success continues, this may allow an expansion of services beyond what is anticipated in this report. Even still, this report assumes that for operations in McKinney alone, annual costs are likely to be greater than \$650,000 for a basic service, roughly 50% more than 2012 operating costs in 2012 for fixed routes and dial-a-ride vehicles covering unserved portions of the city. If the current contribution by the City of McKinney is maintained, it is assumed to cover less than 15 percent of operating costs – nowhere close to the 50% match required for federal operating dollars.

MAINTAINING COUNTYWIDE DIAL-A-RIDE OPERATIONS THOUGH COST SHARING

If keeping dial-a-ride service in rural, suburban and other areas outside of the DART service area is a priority for Collin County's various jurisdictions, it would be appropriate to develop an effective approach sharing the cost of transit services. A piecemeal approach, where one city funds dial-a-ride and another opts out, will create an unmanageable system, and would limit riders to only a handful of destinations.

Assuming there can be some agreement that all participating jurisdictions will need to work together cost sharing will become a critical element of the implementation effort. For example, if someone is picked up in Princeton and dropped off in McKinney and then returns home later in the day, should Princeton pay the cost for that trip? Or perhaps McKinney, or Collin County (because most of the trip is operating outside of both cities)? Sharing the cost of transportation services is very common in places where services are provided in overlapping jurisdictions.¹

Collin County would require a compensation mechanism for cooperatively funding transit services. In some cases, agencies and cities have entered into formal Memoranda of Understanding (MOUs) or cost sharing agreements spelling out each party's financial responsibility and the method for sharing costs. Other services have an informal arrangement for cooperatively funding services without a formal written agreement.

Many transportation agencies across the country have implemented methods for sharing the cost of local and regional transit services. The most common cost sharing methods or formulas are based on service hours, miles and population as well as formulas that use a combination of methodologies. Four different formulas plus a formula using a combination of factors are described below.

- **Population-based cost sharing** can be used by cities or agencies and is based on the total population for each jurisdiction or service area. Alternatively, this population formula can consider a segment of the population such as the number of elderly or people with disabilities within a city similar to the way FTA Section 5310 funds are apportioned under MAP-21. A formula based on a population split requires obtaining the most recently available population estimates. The advantage of a population-based funding arrangement is that it is relatively easy to administer.
- **A service quantity formula** is based on units of service provided within a jurisdiction or service area. Units of service are defined as the revenue hours that a vehicle is in service. A service hours method for dial-a-ride service relies on trip scheduling software to calculate the amount of time the vehicle spends in each jurisdiction. Many communities favor this approach over others because it accurately reflects level of services received, but elect to substitute service miles and include other factors such as population.
- **Ridership (or Boardings)** can be used for a cost sharing arrangement although it is difficult to administer. Costs are assigned to jurisdictions based on the number of riders who board in a given city (or service area). The basis for this approach is that a specific

¹ This approach should be seen in contrast to the cost sharing tool cited in Chapter, which specifically addresses social service agencies and clinics whose clients avail themselves of dial-a-ride services without contributing to the cost of service provision.

jurisdiction should pay for its own residents. This approach is commonly used by dial-a-ride services because the passenger's origin can be assumed to be their residential location, making it relatively easy to assign boardings by jurisdiction.

- **A combination of factors** is used by some transit agencies for sharing costs. A combination might be based partly on population, partly on ridership, partly on service miles, etc. A combination of factors can be useful when a particular funding factor biases any single jurisdiction.

These formulas suggest there is no single ideal method for sharing transit service costs, but Collin County should initiate discussions about that would be an appropriate mechanism if the countywide dial-a-ride service is to be maintained and should consider a model that meets its unique political, geographic, service and funding requirements. One could argue that a formula based on service hours or service miles is most equitable because it reflects the level of service received, although it does not take into account the population of the area or the residency of transit users. A combination of factors can be desirable to reflect the complexity involved in developing an equitable funding formula.

UNDERSTANDING POTENTIAL COSTS

An important question for TAPS and Collin County's various jurisdictions is how much money is needed for capital investments, start-up for new programs and services and for ongoing operations? The answer is complex and depends upon the priorities, type, and level of service that will be provided. For purposes of this study, assumptions are made about the level of effort that will be required to implement the proposed strategies, as well as the initial service levels that might be implemented. Because the strategies are only conceptually defined, costs could be much lower or somewhat higher than the costs outlined in this report but it is assumed that specific strategies would be implemented in specific communities. For example, after TAPS has six months of data to review the performance of its existing services in McKinney, it will be better prepared to determine the appropriate types of service to operate in the city, the extent of the service area, and the frequency and span of service. That data can help the agency determine whether to discontinue fixed routes, implement deviated services, etc. which may require more or fewer resources than projected at the conceptual level.

Figure 10-1 summarizes some of the more significant data from Chapter 8, including operating costs, potential service area and administrator. This information is complemented by critical data related to capital requirements and potential funding sources.

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Figure 10-1 Summary of Cost Projections – Collin County Preferred Strategies

	Preferred Service Strategies	Estimated Annual Operating Costs		Administrator	Capital Requirements	Potential Funding Sources
		Low-End	High-End			
Countywide	Carpool Program	\$50,000	\$60,000	TAPS and NCTCOG	No capital costs, drivers would use their own vehicles	Contributions from cities, donations from nonprofit agencies, in-kind services
	Community Shuttle	\$210,000	\$330,000	Existing contract	Two vehicles assumed (\$140,000 capital cost if vehicles not provided by contract operator).	FTA 5307, 5310, 5311, contributions from cities, retailers, fares, TDCs
Rural Communities						
Suburban/Bedroom Communities	General Public Dial-A-Ride	\$210,000	\$990,000	TAPS	Generally smaller cutaway vehicles (typically up to 27-foot buses)	FTA 5307, 5310 and 5311, CDBG, contributions from cities, donations from nonprofit agencies, fares, TDCs
Suburban/Bedroom Communities						
Suburban/Employment Base	Vanpool Program	\$10,000	\$15,000	TAPS for promotion working with DART, as well as The T and DCTA	Vans, furnished to vanpool drivers by the vanpool service provider	FTA 5307, contributions from cities and employers
Suburban/Employment Base						
Suburban/Employment Base	Site-specific shuttles	\$300,000 per jobsite or commercial center	\$400,000 per jobsite or commercial center	TAPS or private contractor	1 to 2 or cut-away vans, plus one spare	Contributions from cities, employers and developers

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Preferred Service Strategies	Estimated Annual Operating Costs		Administrator	Capital Requirements	Potential Funding Sources
	Low-End	High-End			

**Suburban/
Employment
Base**

Allen Transit Service Options Express Bus/Park-and-Ride Service – Route Deviation – General Public Dial-A-Ride	\$270,000 for local service; \$85,000 for express	\$350,000 for local service; \$150,000 for express	TAPS and City of Allen	2 + 1 spare (baseline) for local service; 2 for express	FTA 5307, 5310 and 5311, CDBG, contributions from City of Allen, donations from nonprofit agencies, fares, advertising, CMAQ demonstration funds, TDCs, SAFETEA-LU Apportionment *
Frisco Transit Service Options Express Bus/Park-and-Ride Service – Route Deviation – General Public Dial-A-Ride	\$270,000 for local service; \$85,000 for express	\$350,000 for local service; \$150,000 for express	TAPS, City of Frisco, and DART, DCTA	2 + 1 spare (baseline) for local service; 2 for express	FTA 5307, 5310 and 5311, CDBG, contributions from City of Frisco, donations from nonprofit agencies, fares, advertising, CMAQ demonstration funds, TDCs

Small Urban

McKinney Transit Service Options <i>Modified Fixed Routes</i> – Deviated Services – General Public Dial-A-Ride- Express Bus/Park-and-Ride and Limited-Stop Bus Service to Plano	\$540,000 for local service; \$125,000 for express/limited stop services	\$600,000 for local service; \$175,000 for express/limited stop services	TAPS and City of McKinney; potential role for DART	4 + 1 spare (baseline) for local service; 2 for express/limited-stop service	FTA 5307, 5310 and 5311, CDBG, contributions from City of McKinney, donations from nonprofit agencies, fares, advertising, CMAQ demonstration funds, TDCs, JARC SAFETEA-LU apportionment *
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* These funds have been carried over from the City of Mc Kinney and City of Allen, and are assumed to be available for immediate-term implementation of these strategies.

UNDERSTANDING POTENTIAL FUNDING

Without specific action plans prepared, it is difficult to identify a specific funding source to fully fund each strategy, but revenue sources that have potential applicability for the recommended strategies can be identified. Some small projects and programs may be fundable through existing funding streams that are already available to transportation providers, communities and other agencies in Collin County. However, for enhancing existing services and for new projects and programs, partners will need to explore funding options and access new funds at the local, state, and/or federal level.

Given the current economic climate of constrained revenues at all levels of government, securing funding for transportation projects and programs is very challenging, especially because of competing priorities. The funding sources described below by no means cover the full extent of available funding opportunities; they are intended to represent a comprehensive sample of programs to assist in funding projects and programs that will help advance mobility in Collin County.

Many of the funding sources are programmed and allocated by TxDOT and NCTCOG, including funds from the FTA and the Federal Highway Administration (FHWA). Federal and state funding sources are available for one-time capital investments, transportation planning, and for transportation operations with some sources intended specifically for transit-dependent populations. Federal funding programs are either formula-based or discretionary, and tend to be highly competitive. Nearly all federal funds have matching requirements that can be difficult to cobble together, especially the 50% match for operating funds. Without the availability of local funds to use as the required match, it is not usually possible to leverage and maximize opportunities for federal funds.

NCTCOG relies on competitive calls for projects and other funding initiatives to determine which projects receive money. NCTCOG and its partners select projects that advance regional priorities. Projects are evaluated based on their merits and impact on the transportation system. The selection criteria include cost effectiveness, congestion reduction and coordination with other modes of transportation. If projects will reduce congestion and help the region meet its air quality goals, they are given high priority.

Figure 10-2 reviews federal, state, regional, local and private sector funding sources, indicating their purpose, intended use and applicability to the recommended strategies in Collin County. Following the figure, each funding source is described in further detail.

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Figure 10-2 Opportunities for Transportation Funding in Collin County

Program Fund Source	Funding Purpose	Use of Funds	Eligible Recipients	Local Match Requirement	Applicability to Strategies	Comments
Federal Sources						
FTA Section 5339 Bus and Bus Facilities Program	Capital Projects for bus and bus-related facilities	Capital projects only	Public transit operators	Capital: Federal Share 85%; required 15% match for ADA accessible vehicles; Federal Share 80%; required 20% match for other capital equipment	Funds tend to be for large scale projects; coordinated purchase of several vehicles could increase funding potential. Potential applicability to conceptual transit service strategies in McKinney, Allen and Frisco.	Under MAP-21, this is a new formula grant program under Section 5339 to replace the previous Section 5309 discretionary Bus and Bus Facilities program. Funds can be used to replace, rehabilitate, and purchase buses and related equipment, and to construct bus-related facilities
FTA Section 5307 Urbanized Area Formula Funds, including Mobility Management	Transit planning, operations or capital projects; funds can be used in urbanized areas	Capital projects and operations including job access & reverse commute projects	Public transit operators and counties	Capital: Federal Share 85%; required 15% match for ADA accessible vehicles; Federal Share 80%; required 20% match for other capital equipment; Operations :Federal Share 50%; required 50% match	Applies to services focused on urbanized areas. Applicability to all transit service strategies discussed in urbanized area except carpooling and site-specific shuttles.	Under MAP-21, JARC funds have been consolidated under Section 5307. These funds can be used to provide services to low-income individuals to access jobs or support reverse commuters
FTA Section 5310 Enhanced Mobility of Seniors and Individuals with Disabilities	Funding for capital projects and operations to improve mobility for seniors and persons and persons with disabilities beyond the traditional Americans with Disabilities Act (ADA) paratransit services	Capital projects and operations	State and local government agencies, nonprofit organizations and public transit agencies	Capital: Federal Share 85%; required 15% match for ADA accessible vehicles; Federal Share 80%; required 20% match for other capital equipment; Operations :Federal Share 50%; required 50% match	Strong potential for capital and operating funds for several strategies especially dial-a-ride, deviated route transit services in McKinney, Allen or Frisco, and community shuttles.	Under MAP-21, this program now allows funds for operations, however 55% of program funds must be used for capital projects and 45% for operations to improve mobility for targeted populations

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Program Fund Source	Funding Purpose	Use of Funds	Eligible Recipients	Local Match Requirement	Applicability to Strategies	Comments
FTA Section 5311 Rural Area Formula Funds	Funding for capital projects and operations in non-urbanized areas with population under 50,000	Capital projects and operations including job access and reverse commute projects	Public agencies, local governments, tribal governments, nonprofit agencies	Capital: Federal Share 85%; required 15% match for ADA accessible vehicles; Federal Share 80%; required 20% match for other capital equipment; Operations :Federal Share 50%; required 50% match	Vehicles could be potentially funded for small cities in Collin County; funds could also be used to support deviated routes, fixed routes and dial-a-ride operations, as well as community shuttles, in rural portions of the county.	Agencies apply for formula based funding; unlikely additional funding available. Low-income populations in rural areas is now incorporated as a formula factor under MAP-21. Certain expenditures by vanpool operators may be used as local match, where applicable
US DOT TIGER Discretionary Grant program	Federal funding program for transit agencies pursuing projects to reduce energy consumption or greenhouse gas emissions.	Capital projects and plans for projects that are multi-modal, multi-jurisdictional or otherwise challenging to fund through existing programs	State and local governments, transit agencies and MPOs	Capital: Federal Share 85%; required 15% match for ADA accessible vehicles; Federal Share 80%; required 20% match for other capital equipment	Potential to use these funds for vehicle acquisition for community shuttle and route and deviated services	For FY2014, TIGER funding depends on the outcome of the annual appropriations bill that funds USDOT. TIGER is a highly competitive grant program.
FHWA Surface Transportation Program (STP)	Funding for capital projects, primarily non-transit, except transit projects eligible for assistance under chapter 53 of title 49, including transit capital projects and intercity bus terminals	Capital projects for a variety of transportation projects, including facilities used to provide intercity passenger bus service	Funds go through State governments, and MPOs. Transit agencies are eligible recipients	Capital: Federal Share 85%; required 15% match for ADA accessible vehicles; Federal Share 80%; required 20% match for other capital equipment	Potential to use these funds for vehicle acquisition for community shuttle service and possibly transit service within and between jurisdictions in Collin County	Continuation of SAFETEA-LU STP program. These funds are typically not used for transit

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Program Fund Source	Funding Purpose	Use of Funds	Eligible Recipients	Local Match Requirement	Applicability to Strategies	Comments
Congestion Mitigation and Air Quality Improvement Program (CMAQ)	Funds for transit capital projects that contribute to the attainment or maintenance of federal air quality standards	Primarily for capital projects; a small portion may be used for transit operations	State and local governments, transit agencies	Capital: Federal Share 80%; required 20% match Operations :Federal Share 50%; required 50% match	CMAQ capital funds could be used to purchase vehicles for transit service if able to demonstrate auto trips would be eliminated and reduce emissions; funds could also be used to "jump start" this new service. Most applicable to potential commuter bus services to Plano (or Dallas), and well as carpool and vanpool strategies.	A portion of CMAQ funds may be used for operating expenses for the first three years of new or expanded transit service. These funds are typically not used for transit. CMAQ will fund 100% of Carpool/Vanpool projects
Health and Human Services Funding						
Area Agency on Aging (AAA) - Federal funds get administered though the North Central Texas Area Agency on	Funds for each county are largely based on a formula that includes performance measures from previous years.	Capital projects and operations; home-delivered meals, transportation services and caregiver support programs. Funds are not necessarily suited to provide additional transportation services, but are generally used by transit agencies as part of the overall mix of funding.	State Agencies on Aging distribute funds to regional AAAs; funds can be distributed to sub-recipients such as transportation service providers.	10-15% depending on the program	Potential for capital and operating funds. Since funds are formula based there are limited opportunities for transportation purposes, particularly for new services. May be most applicable for dial-a-ride and community shuttles.	The Older Americans Act directly or indirectly is intended to provide services to those who would otherwise be institutionalized or isolated, and help maintain independence for the elderly. Title III of the Older Americans Act provides funds for Support Services that can include transportation

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Program Fund Source	Funding Purpose	Use of Funds	Eligible Recipients	Local Match Requirement	Applicability to Strategies	Comments
Community Development Block Grant Funds (CDBG) -- Texas Department of Agriculture (Rural CDBG program)	Create or preserve jobs for low income and very low income persons. Provide decent housing and suitable living environments, and expand economic opportunities principally for persons of low- to moderate-income	Provision of public services, within certain limits	Apply for grants through state: Counties with less than 200,000 residents and cities of less than 50,000 residents	Varies depending on type of grant and its intended use	Funds could be used to support dial-a-ride and deviated route services, as well as community shuttles in certain locations	In Arlington, CDBG grants are used to fund Mission Metroplex Inc., which provides free transportation for very low-income Arlington residents to access work, school, and medical or social service appointments Texas CDBG application guide: http://www.texasagriculture.gov/Portals/0/Publications/RED/CDBG/cdbgAppGuide2013-2014CDv2.pdf
Texas Department of State Health Services (DSHS); Ryan White Part B grant	Assist in meeting the health needs of people living with HIV/AIDS.	Funds health care and support services for the under and uninsured; support services may be linked to medical transportation.	Health or other state departments that manage state public health programs; Part B providers may include public or nonprofit entities	States with more than 1 percent of total HIV/AIDS cases reported in the United States during the previous 2 years must provide matching funds with their own resources using a formula outlined in the legislation.	Potential for funding if public or private agency is providing transportation for medical treatment for eligible population. Funds are applicable for TAPS dial-a-ride service to hospitals/treatment centers.	Ryan White Part B funds are originally awarded to states by the U.S. Department of Health and Human Services Administration (HRSA). Funds are administered by the Texas Department of State Health Services (DSHS). Grantees are required to spend at least 75% of funds on core medical services and no more than 25% on support services

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Program Fund Source	Funding Purpose	Use of Funds	Eligible Recipients	Local Match Requirement	Applicability to Strategies	Comments
Regional/Local Sources						
Municipal Sales Tax (City and County Contributions)	Variety of public services including transportation	Capital projects and operations	Cities and Counties	Sales tax revenues could be used as the required local match to help leverage federal funds. They can be a valuable source when no other local funds are available for the required local match	Ten of 29 cities currently do not meet their maximum of 8.25% local sales tax cap and could potentially contribute to transit services. transit services. However, none of the communities are likely to support transit in the near future.	The State sales tax rate is 6.25%. Local entities can increase sales tax rate up to 8.25%; cities at the 8.25% cap could use another source if elect to fund transit
Transportation Development Credits (TDCs)	To help meet federal match requirements	Build, improve, or maintain highways, bridges, or tunnels that were built using toll funds and serve the public purpose of interstate commerce; capital expenses for transit, roadway, bicycle/pedestrian projects	Small transit providers, local agencies, MPOs, states, cities and counties	TDCs could be used as the required local match to help leverage federal funds. They can be a valuable source when no other local funds are available for the required local match	May be used to fund capital transit projects, including vehicles, or operations of transit services. Primary application in Collin County is likely to support transit services in rural and suburban area, and in McKinney, Allen and Frisco.	These are not cash awards, but a credit earned through an accounting system that assigns value to transportation projects built with tolls. This credit can then be used for meeting a federal matching requirement f on other projects
Private Sources						
Service Clubs and Business Organizations	Variety of transportation services, especially capital improvements	Capital projects and operations	wide variety of agencies and organizations	These private sector funds could be used as the required local match to help leverage federal funds. They can be a valuable source when no other local match funds are available	Potential for contributions for many strategies especially for one-time capital expenses, public awareness campaign and promotional materials.	May be interested in paying for highly visible capital amenities

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Program Fund Source	Funding Purpose	Use of Funds	Eligible Recipients	Local Match Requirement	Applicability to Strategies	Comments
Employers	Variety of transportation services, especially capital improvements	Capital projects and operations	wide variety of agencies and organizations	These private sector funds could be used as the required local match to help leverage federal funds. They can be a valuable source when no other local match funds are available	Contributions for promotion of vanpool program, public awareness campaign and one-time capital expenses for transit services especially if employers receive "front door" service. This funding source is most applicable for site-specific shuttles.	Employers sometimes are willing to underwrite transportation to support their workers getting to/from worksite. Employers can provide transit passes to employees as pre-tax transportation fringe benefits, which are not subject to payroll tax.
Social Service Agencies	Variety of transportation services, especially for seniors, people with disabilities and low-income populations	Capital projects and operations	wide variety of agencies and organizations	Funds contributed from social service agencies could be through a cost sharing arrangement and could be used as local match to leverage federal funds	Potential for contributions for all of the preferred service strategies.	Funding is constrained and primarily used for "core" mission, although some funding may be available for transportation services

Federal Funding Opportunities

On July 6, 2012, President Obama signed into law new federal transportation legislation, Moving Ahead for Progress in the 21st Century (MAP-21). MAP-21 reauthorizes surface transportation funding in the United States. The legislation took effect on October 1, 2012 and will guide surface transportation funding for 27 months until January 1, 2015.

MAP-21 includes several strategic changes as compared with SAFETEA-LU, MAP-21's predecessor, including the way human service transportation programs are funded and the associated requirements for coordinated planning.² One of MAP-21's central goals was to reverse the proliferation of smaller and more specialized programs and consolidate them into larger programs that give funders more flexibility. In some ways, this approach strengthens the coordinated planning process because rather than merely expecting programs to be coordinated, the funding sources themselves are coordinated and consolidated. The challenge, however, is to create the appropriate balance within a single funding source to meet the diverse needs of these key groups.

Some of the most salient examples of this change of policy direction are apparent in the way transit funds and in particular, programs directed towards older adults, persons with disabilities and persons with low incomes are funded and distributed.

This section discussed federal funding opportunities and highlights the MAP-21 changes in each of the funding programs.

FTA Section 5339, Bus and Bus Facilities Program

A new formula grant program is established under FTA Section 5339, replacing the previous FTA Section 5309 discretionary Bus and Bus Facilities program. This capital program provides funding to replace, rehabilitate, and purchase buses and related equipment, and to construct bus-related facilities. As part of the distribution formula, each state will receive a \$1.25 million allocation for capital assistance. The Federal share for capital projects remains at 85% with a required 15% match for ADA accessible vehicles.

Eligible subrecipients include public agencies and private nonprofit organizations engaged in public transportation, including those providing services open to a segment of the general public, as defined by age, disability, or low income.

FTA Section 5307, Urbanized Area Formula Funds

The two major changes under the FTA 5307 Formula Funds are:

- Consolidation of Job Access and Reverse Commute (JARC) with 5307 – Activities eligible under the former JARC program are now eligible under the Urbanized Area Formula program. This includes operating assistance for job access and reverse commute activities. In addition, the urbanized area formula for distributing funds now includes the number of low-income individuals as a factor. There is no floor or ceiling on the amount of funds that can be spent on job access and reverse commute activities.

² Sources include: MAP-21 Transit Programs Summary and MAP-21 Program Overview on the FTA website, <http://www.fta.gov/map21>

- New Operating Assistance Authority – Now MAP-21 expands eligibility for using Urbanized Area Formula funds for operating expenses. Since this change applies to urbanized areas over 200,000, entities in Collin County that serve the Dallas-Fort Worth-Arlington urbanized area are eligible for 5307 funding. TAPS is currently one of those eligible grantees because they operate fixed-route service.

FTA Section 5307 provides funding for transit capital and transportation-related planning.

FTA Section 5310, Enhanced Mobility of Seniors and Individuals with Disabilities

Under MAP-21, FTA Section 5310 includes more eligible activities to enhance mobility for seniors and people with disabilities. These activities are (1) former New Freedom activities -- improvements that exceed the requirements of the Americans with Disabilities Act (ADA); (2) public transportation projects to improve access to fixed route transit; (3) public transit projects expressly designed for seniors and people with disabilities, where transit is insufficient, inappropriate or unavailable; and (4) alternatives to public transportation that assist seniors and people with disabilities. Some new changes to the FTA Section 5310 program are summarized below:

- New Distribution Formula – Funds are apportioned based on each state’s share of the targeted populations and are now apportioned to both states (for all areas under 200,000) and large urbanized areas (over 200,000).
- Selection Process – Projects must now be “included” rather than “derived from” a coordinated transportation plan. Projects no longer need to be selected based on a competitive process (this is optional).
- Operating Assistance is now an eligible activity – Section 5310 for the first time can be used for operating assistance. No more than 45% of program funds can be used for operations.
- Minimum Expenditures on 5310 Activities – At least 55 percent of program funds must be spent on the types of capital projects eligible under the former section 5310 -- public transportation projects planned, designed, and carried out to meet the special needs of seniors and individuals with disabilities when public transportation is insufficient, inappropriate, or unavailable.

The Federal share for capital projects under FTA Section 5310 is 85% with a 15% required local match for ADA accessible vehicles and 80% with a 20% required local match for other capital equipment. The Federal share for operating assistance is 50%.

FTA Section 5311, Rural Area Formula Funds

This program provides funding assistance for public transportation projects in nonurbanized areas of Collin County, and these funds are administered by TxDOT. Funds can be used by a local governmental authority, a nonprofit organization, or an operator of public transportation or intercity bus service. The program, first established in the late 1970s, remains a key FTA program. Activities eligible under the former Job Access and Reverse Commute (JARC) Program, which provided services to low-income individuals to access jobs, are now eligible under the Section 5311 program. In addition, the method by which FTA allocates funds to the states now

includes the number of low-income individuals as a factor. There is no floor or ceiling on the amount of funds that a state has to program on job access and reverse commute activities.

US DOT TIGER

The Transportation Investment Generation Economic Recovery (TIGER) program was established as part of the American Recovery and Reinvestment Act of 2009 (ARRA), but has since been reauthorized by Congress. TIGER grants are awarded to road, transit and other capital projects on a competitive basis. The program funds capital projects and plans for projects that are multi-modal, multi-jurisdictional or otherwise challenging to fund through existing programs. In 2013, \$474 million was awarded to a total of 52 projects in 37 states.

Surface Transportation Program (STP)

The Surface Transportation Program (STP) provides flexible funding that may be used by States and localities for projects to preserve and improve roads as well as pedestrian and bicycle infrastructure and transit capital projects including intercity bus terminals. Capital costs for transit projects including vehicles and facilities used to provide intercity passenger bus service are eligible for STP funds.

Congestion Mitigation and Air Quality Funds (CMAQ)

The CMAQ program, which is jointly administered by the FHWA and the FTA, provides funding to TxDOT, NCTCOG, and transit agencies to invest in projects that reduce air pollution in areas that do not meet the National Ambient Air Quality Standards (nonattainment areas), which includes Collin County. CMAQ funds can be used for a wide variety of transit uses, including programs to improve public transit, HOV facilities, Employee Trip Reduction (ETR) programs, traffic flow improvements that reduce emissions, bicycle/pedestrian facilities, park-and-ride facilities, and programs to restrict vehicle use in areas of emission concentration.

MAP-21 legislation redefined telecommuting, ridesharing, carsharing, and pricing projects as eligible for CMAQ funding. These funds are largely used to fund clean air capital projects but a portion of funds can be used for operations to support a demonstration or pilot project for a period of three years. Thereafter, the project is supposed to be financially sustainable or secure other fund sources in the long-term. Starting in FY 2013 all CMAQ projects now require a 20% local match, with the exception of carpool & vanpool projects, which remain 100% Federal funding. Historically the North Central Texas region has not used CMAQ funds for transit purposes.

Ryan White Urban Transportation Foundation

The Ryan White Urban Transportation Program provides funding for HIV-positive individuals with transportation to Ryan White-funded sites as well as private physician, psychiatric, psychological, dental, and optometry appointments. The program also provides transportation to government-sponsored programs such as Social Security appointments and hearings, as well as to food pantries, private pharmacies, and other social service sites.

The Ryan White HIV/AIDS Program stipulates that funds received will not be used to make payments for any item or service to the extent that payment has been made, or can reasonably be expected to be made by sources other than Ryan White funds. Grantees, therefore, must assure

that funded providers make reasonable efforts to secure non-Ryan White HIV/AIDS Program funds whenever possible for services to individual clients.

Older Americans Act – Area Agency on Aging

The Older Americans Act was signed into law in 1965 amidst growing concern over seniors' access to health care and their general well-being. The Act established the federal Administration on Aging/Area Agency on Aging (AAA), *and* charged the agency with advocating on behalf of an estimated 46 million Americans 60 or older, and implementing a range of assistance programs aimed at seniors, especially those at risk of losing their independence. Transportation is a major service under the Act, providing needed access to nutrition and other services offered by the AAA, as well as to medical and other essential services required by an aging population.

No funding is specifically designated for transportation. However, funding can be used for transportation under several sections including Title III (Support and Access Services), Title VI (Grants to American Indian Tribes), and the Home and Community-Based Services (HCBS) program.

Community Development Grant Funds (CDBG)

The Community Development Block Grant (CDBG) is administered through the U.S. Department of Housing and Urban Development (HUD). It is a flexible program that provides communities with resources to address a wide range of unique community development needs. Beginning in 1974, the CDBG program is one of the longest continuously run programs at HUD. The CDBG program allocates annual grants to develop viable communities by providing decent housing, a suitable living environment, and opportunities to expand economic opportunities, principally for low- and moderate-income persons. The U.S. Department of HUD allocates the CDBG funds and requires that no more than fifteen percent of the total annual award be spent on public services, including transportation. This is a highly competitive program.

Local and Regional Funding Opportunities

Several local and regional funding opportunities also exist.

Local Sales Tax

Local sales tax can provide a source of revenue for transit services. The State of Texas places a combined sales tax limit of 8.25% for all taxing authorities³. The state sales tax rate is 6.25%, leaving 2% for local entities. Some local jurisdictions assess the entire 2%, some a lesser amount. Among the 19 cities in Collin County and the ten that are partially in Collin County, 19 have sales tax rates that meet the maximum of 8.25%.

Taxes throughout Collin County may be imposed by either the city or county. However, per Texas mandate, the total sales tax imposed in any area (either City or unincorporated county) may not exceed 8.25%. There are numerous ways to “use” the flexible 2% of sales tax that are provided for local entities.⁴ However, following are the only two taxes that can be used to fund transit projects:

³ Taxing authorities include cities, counties and special transportation authorities as defined by the state's transportation code (453.401, Transportation Code)

⁴ As referenced from the Texas Comptroller's Office. <http://www.texasahead.org/lga/98-721.pdf>

- **Regular Sales Tax (maximum of 1%):** Funds deposited into a city's general fund and can be used for any lawful purpose.
- **Economic Development Tax (maximum of 0.5%):** Funds must be turned over to a development corporation to act on behalf of the city. These funds may be used for public transportation projects.

Collin County itself has the option to impose local sales taxes in portions (incorporated or annexed portions of cities) or throughout the county. Within the state of Texas, counties have two options for administering local sales tax.

1. **County Assistance District Tax (maximum of 2%):** The County may hold an election in all or part of the county to fund numerous types of projects including road maintenance, public safety, civic improvements, or other services that benefit public welfare.
2. **Emergency Services District Tax (maximum of 2%):** The County may hold an election in all or portions of the county to fund emergency service districts. The funds from this tax may be used to hire emergency personnel or to provide emergency services.

Taxing authority held by both Collin County and its cities includes a variety of non-transportation functions such as reduction of property tax burden and funding community venues. In addition, transit authorities can impose a maximum of 1% to create a special authority to impose a sales tax to provide transportation services in participating cities.

In Collin County, every city leverages some type of local sales tax ranging between 1% and 2%. Plano pays 1% toward DART service, as do other cities in the DART service area of Collin County, which includes part of Richardson and small portions of Carrollton, Dallas, and Garland. Murphy is part of the Murphy Municipal Development District, which overlaps with its city boundaries. Figure 10-3 provides a summary of local jurisdictions in Collin County and the composition of their local sales tax.

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Figure 10-3 Collin County Local Sales Tax Rates

City	Existing Local Sales Tax			Total Local Sales Tax (includes state 6.25% sales tax rate)
	Existing City Portion	Other Special Districts	Special District Designation	
Allen	2.00%	0.00%		8.25%
Anna	2.00%	0.00%		8.25%
Blue Ridge	2.00%	0.00%		8.25%
Carrollton	1.00%	1.00%	Dallas MTA	8.25%
Celina	2.00%	0.00%		8.25%
Dallas	1.00%	1.00%	Dallas MTA	8.25%
Fairview	2.00%	0.00%		8.25%
Farmersville	2.00%	0.00%		8.25%
Frisco	2.00%	0.00%		8.25%
Garland	1.00%	1.00%	Dallas MTA	8.25%
Josephine	1.00%	0.00%		7.25%
Lavon	1.50%	0.00%		7.75%
Lowry Crossing	1.75%	0.00%		8.00%
Lucas	1.50%	0.00%		7.75%
McKinney	2.00%	0.00%		8.25%
Melissa	2.00%	0.00%		8.25%
Murphy	1.50%	0.50%	Murphy Municipal Development District	8.25%
Nevada	1.50%	0.00%		7.75%
New Hope	1.00%	0.00%		7.25%
Parker	1.00%	0.00%		7.25%
Plano	1.00%	1.00%	Dallas MTA	8.25%
Princeton	2.00%	0.00%		8.25%
Prosper	2.00%	0.00%		8.25%
Richardson	1.00%	1.00%	Dallas MTA	8.25%
Royse City	2.00%	0.00%		8.25%
Sachse	1.50%	0.00%		7.75%
St. Paul	1.00%	0.00%		7.25%
Weston	1.00%	0.00%		7.25%
Wylie	2.00%	0.00%		8.25%

Source: Texas Comptroller of Public Accounts. 2013. <http://www.window.state.tx.us/taxinfo/local/jul13rates.pdf>

As shown, most cities in Collin County currently assess the maximum 2% allowed for local entities. This means that to contribute funds to future transportation services, many of these cities would need to reallocate existing sales tax revenue to fund transit services, or identify a different source of public funds (e.g., a special district) from which funds could be used in lieu of a sales tax. Remaining communities are unlikely to support transit in the near future.

Transportation Development Credits

TDCs, formerly called toll credits, are a financing tool that allows entities to use federal obligation authority without the requirement of non-federal matching dollars, thus increasing the opportunity to leverage federal funds. TDCs are not cash awards, but a credit earned through an accounting system that assigns value to transportation projects built with tolls. TDCs can provide agencies with federal funds that they would not have access to if there was no available source to serve as the required local match.

For FTA-funded transit projects, capital expenses are preferred uses for TDCs. A grantee may request TDCs to be used as the match on an eligible capital expenditure for federal money received through either a Texas Department of Transportation (TxDOT) administered grant, received directly from FTA or applied for through NCTCOG. Examples of transit projects that have been funded are vehicle purchases, such as large buses and small transit vehicles.

Private Sector Initiatives

A growing trend in the transit industry is to establish public/private partnerships as a way to increase revenues for transit and transportation programs and services. The private sector can be broadly interpreted to include employers, merchants, retail establishments and private nonprofit organizations. Contributions could take the form of ongoing operating support or could also be used for one-time capital purchases such as passenger shelters and benches.

Employer Contributions

The role of business groups and major employers could be viewed similarly to the cities and county in financially supporting a service, and promoting it. The major difference is that employers and business groups tend to provide funds for capital or one-time contributions rather than ongoing operating support. Paying for a passenger shelter or bench would be a valuable financial contribution from the private sector. Employers or merchants that benefit from a service may be interested in supporting it particularly if a bus stop were located at their front door to maximize convenience for their employees or customers. Employers could also help subsidize the cost of transit tickets or passes.

Service Clubs and Business Fraternal Organizations

Organizations such as the Rotary Club, Soroptomists, Kiwanis, and Lions often pay for special projects. For transportation, they might pay for or help contribute toward the cost of a new vehicle or a bus bench or shelter near senior citizen housing. These organizations might also pay for trip reimbursement for after school or child care programs.

Social Service Agencies

Agencies whose clients benefit from the strategies identified in this study should be approached and encouraged to contribute to the services.

Social service agencies could enter into agreements with the transportation provider to bill directly for service. These agencies could share in the cost of service rather than paying the entire cost. Cost sharing is an important element in cobbling together a variety of fund sources, and is an important strategy in itself. This approach is included as one of tools discussed in Chapter 7.

Conclusion

This chapter offers some opportunities to provide the financial resources necessary for the recommended strategies in Collin County. Traditional transportation sources and innovative funding programs are identified, but the information presented illustrates that there is no one single funding program or revenue stream that will fully fund the recommended strategies. There are funding sources that could be pursued to “jump start” a new program or service and provide support during a demonstration phase. Other funding sources are limited to capital investments.

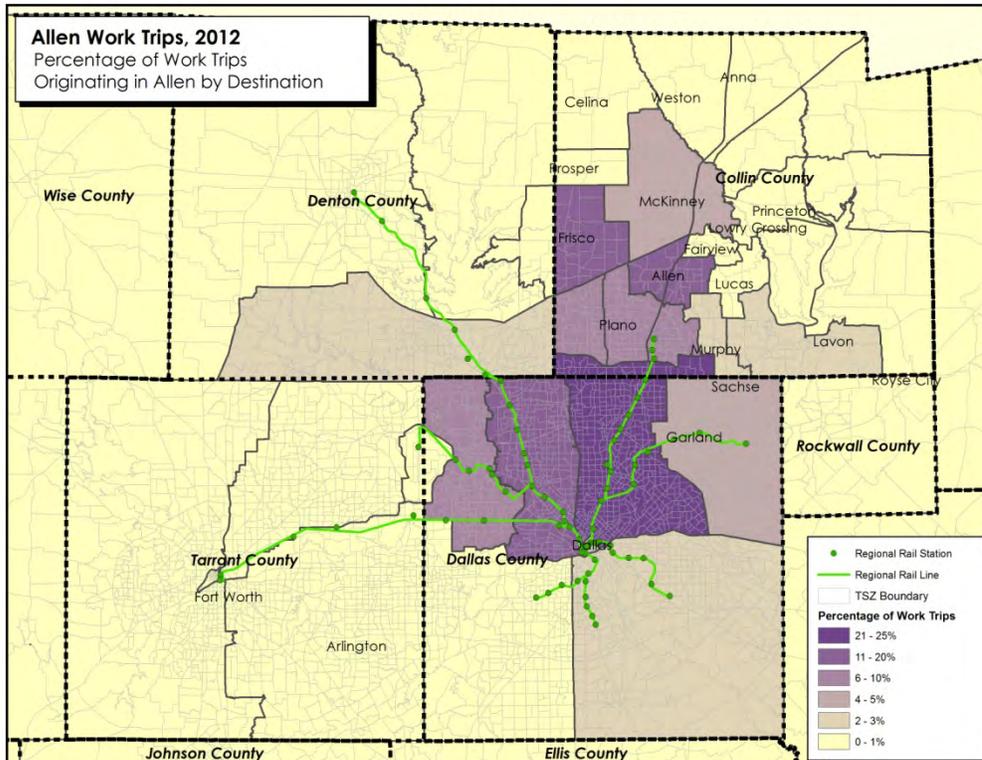
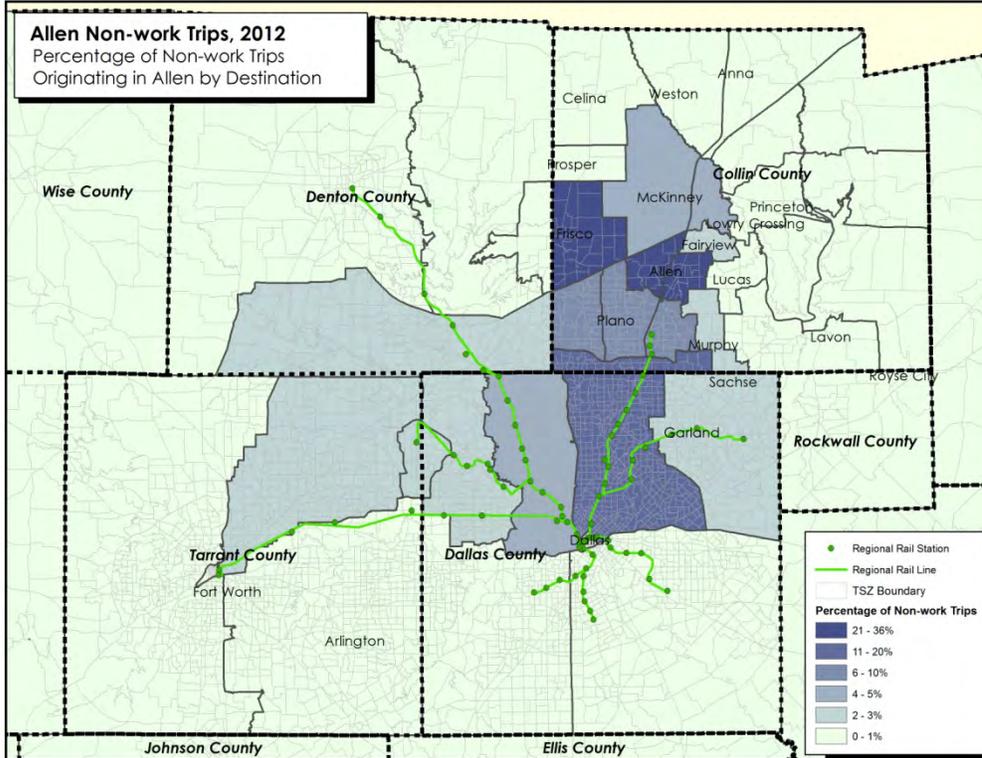
Transportation funding silos make it very challenging to develop a viable funding plan that consists of many different sources. Funding is further complicated by the various eligibility, reporting and matching requirements, suggesting that a cooperative approach to funding is desirable and should help position Collin County when “competing” for discretionary funds. Having a lead agency like TAPS that is knowledgeable about all sources of available funding and is able to navigate the process of procuring grants would benefit all providers in Collin County. Pursuing funding sources in concert with two or more counties could also prove beneficial for new or enhanced services.

At the federal level, the most promising funding opportunities are FTA Section 5307 and Section 5310, as well as AAA and CDBG funds. Although most cities in Collin County are currently at their maximum for local sales taxes, they can use other sources to fund transportation. To encourage cities to do so requires that they be made aware of the value of the recommended transportation strategies to enhance local and regional mobility and how their local constituents will benefit from the new and improved services. Additionally, if cities understand that their financial contributions are part of a cooperative funding plan with an equitable cost sharing strategy, they are more likely to participate. Private sector funds, even if on a small scale, can play an important role in funding new and enhanced services.

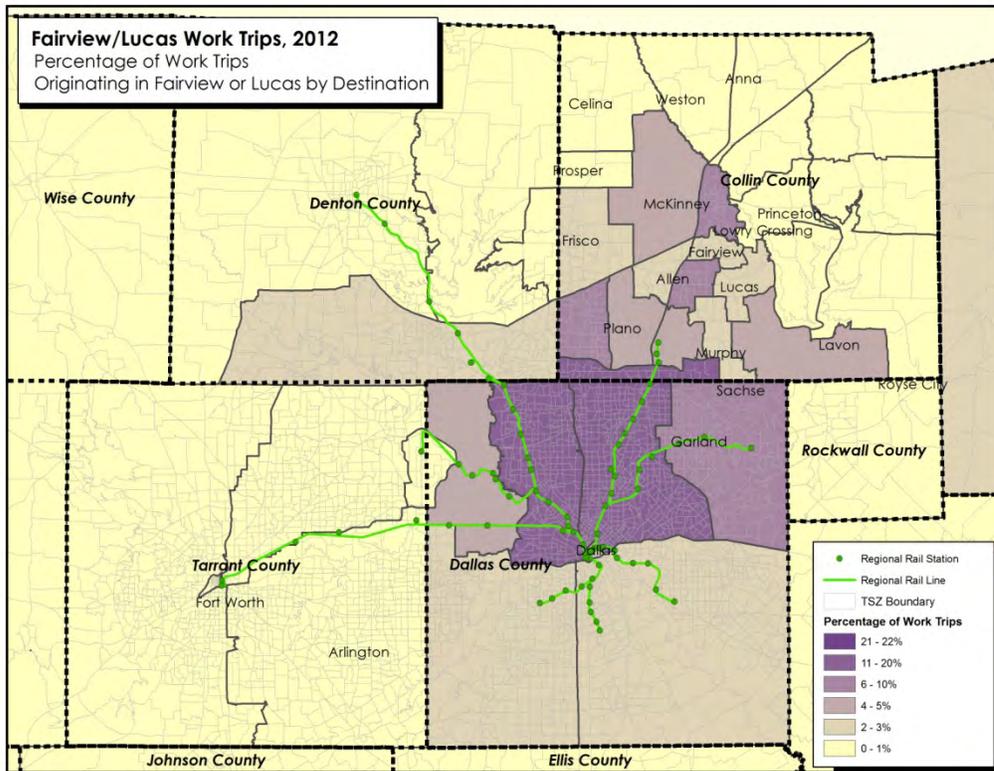
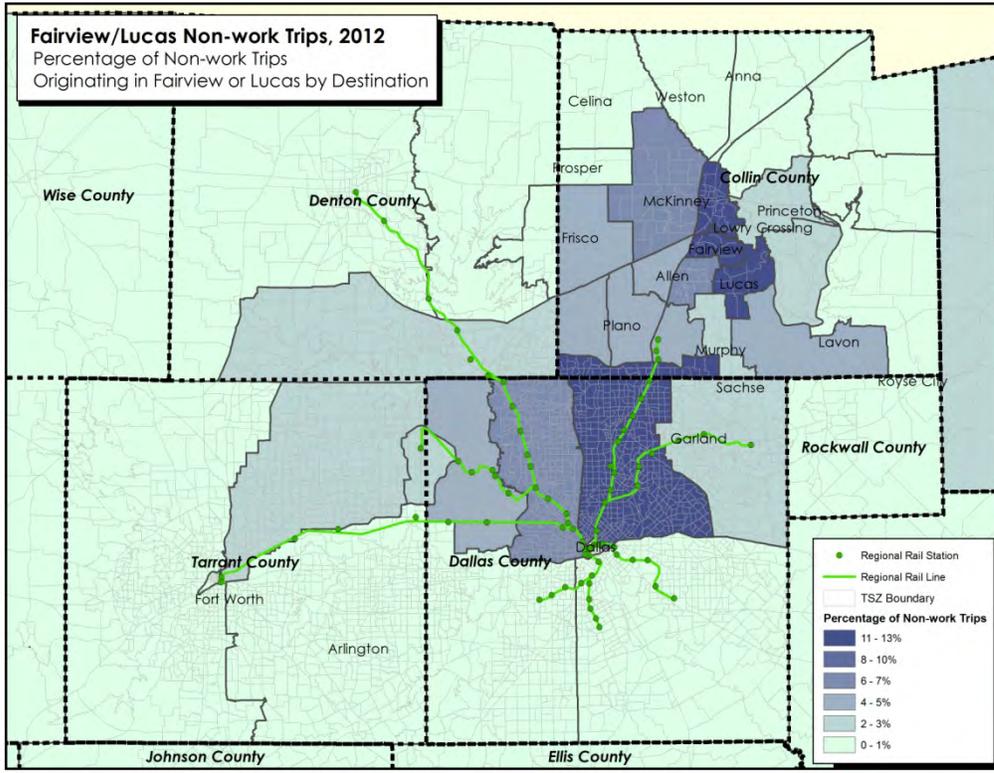
Appendix A Travel Patterns: Selected Cities

The maps in this appendix illustrate the travel patterns for work and non-work trips from seven selected districts in Collin County. See Chapter 2 for more information about the maps included.

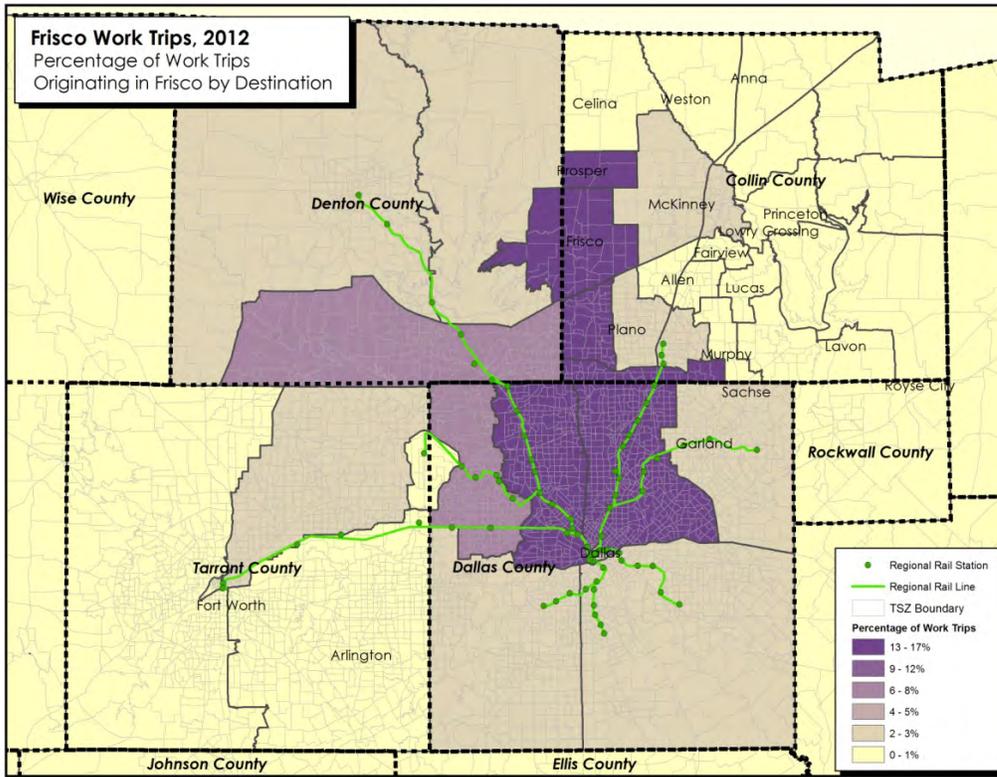
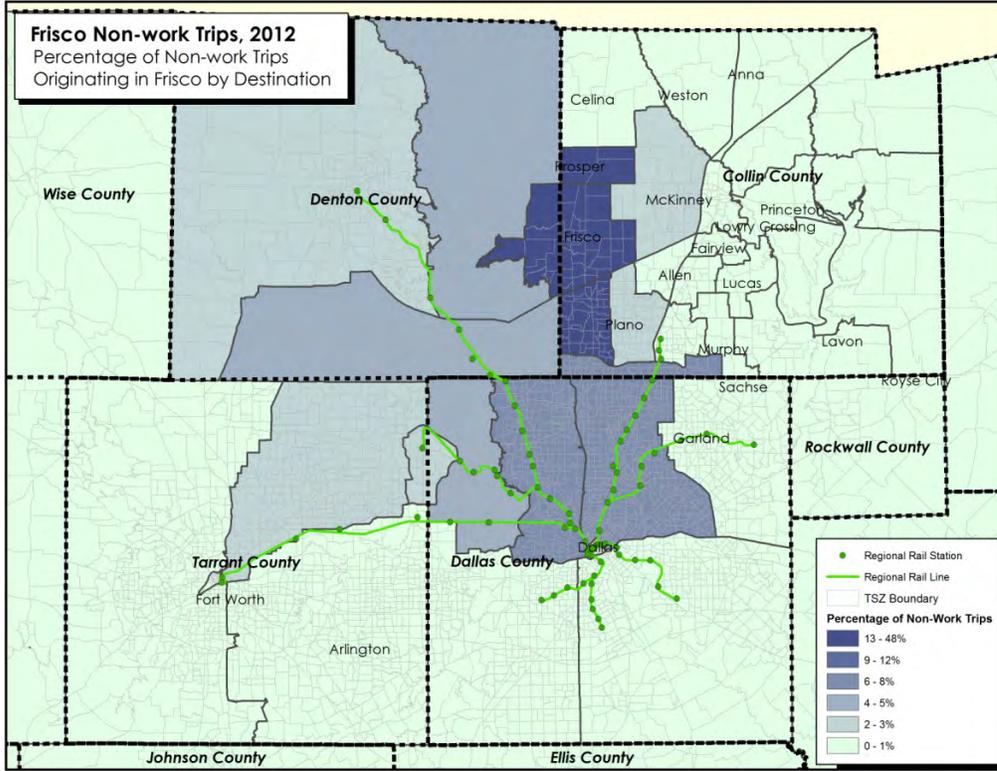
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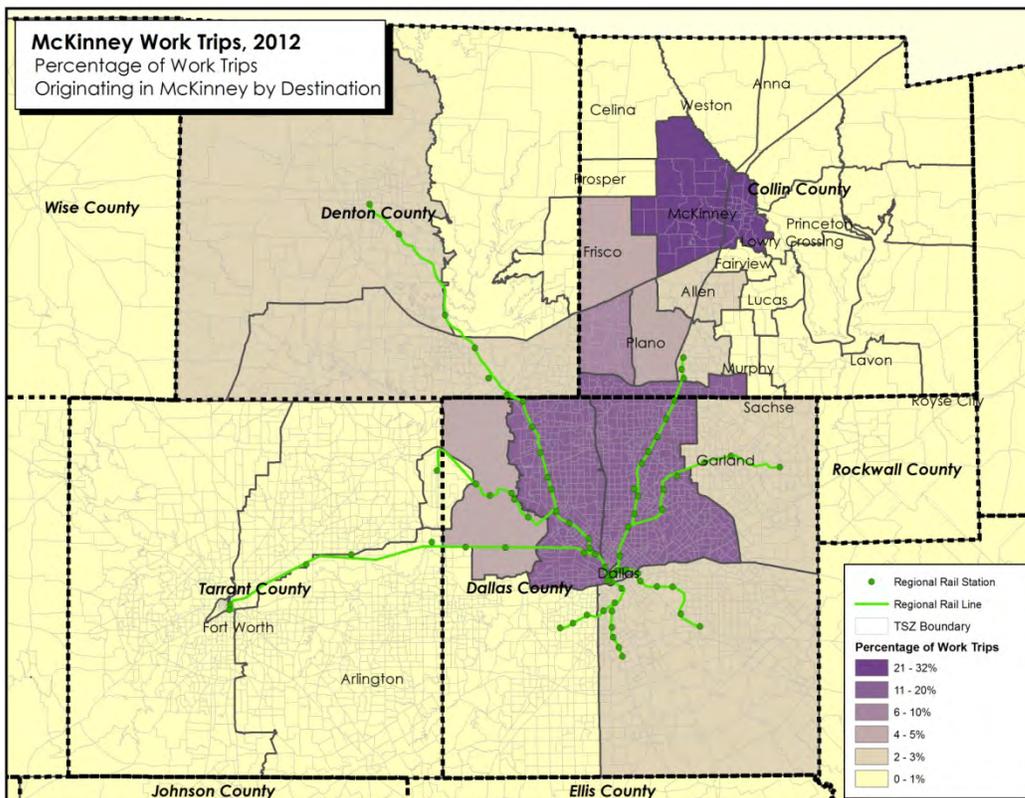
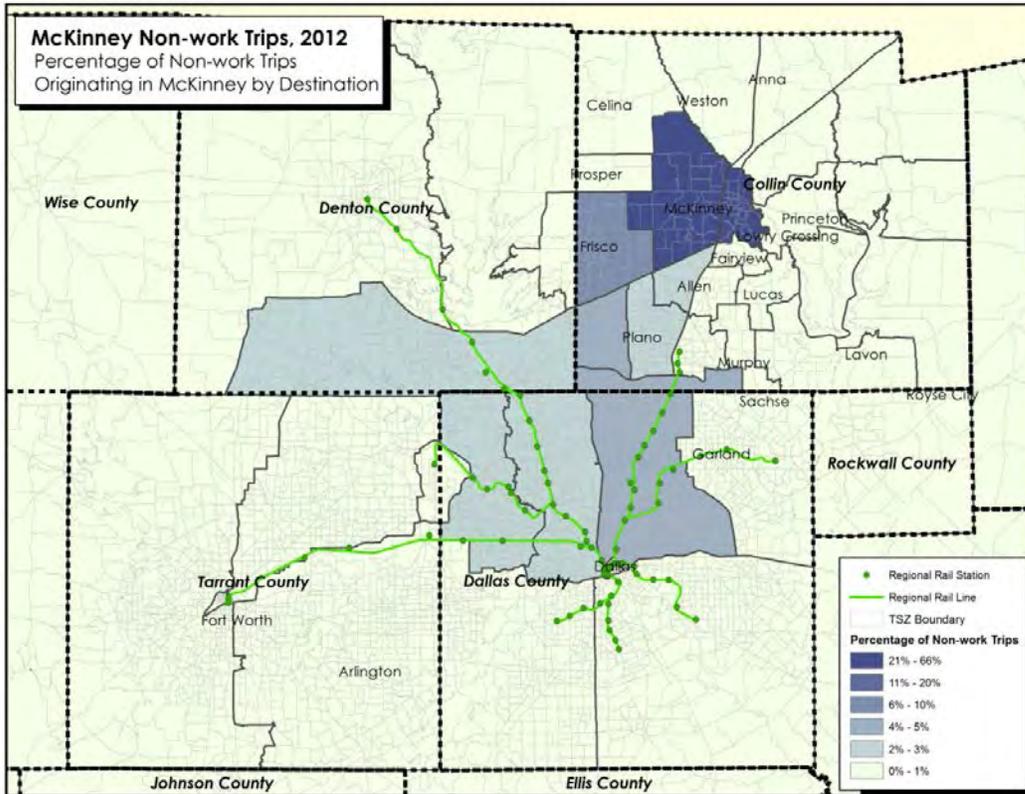
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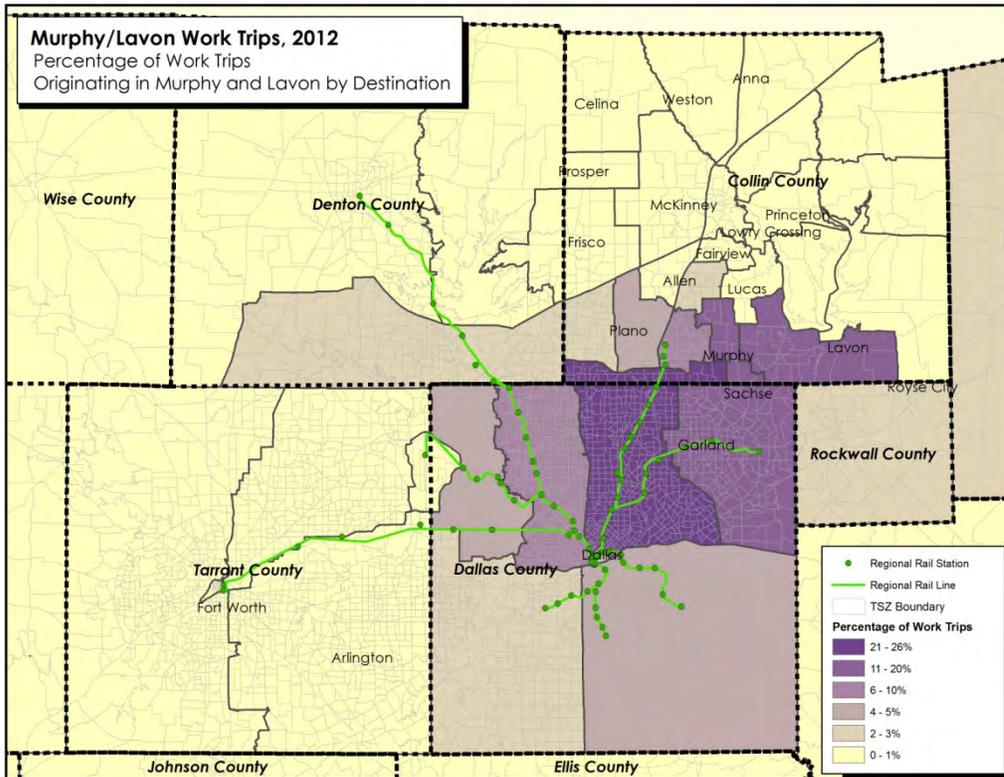
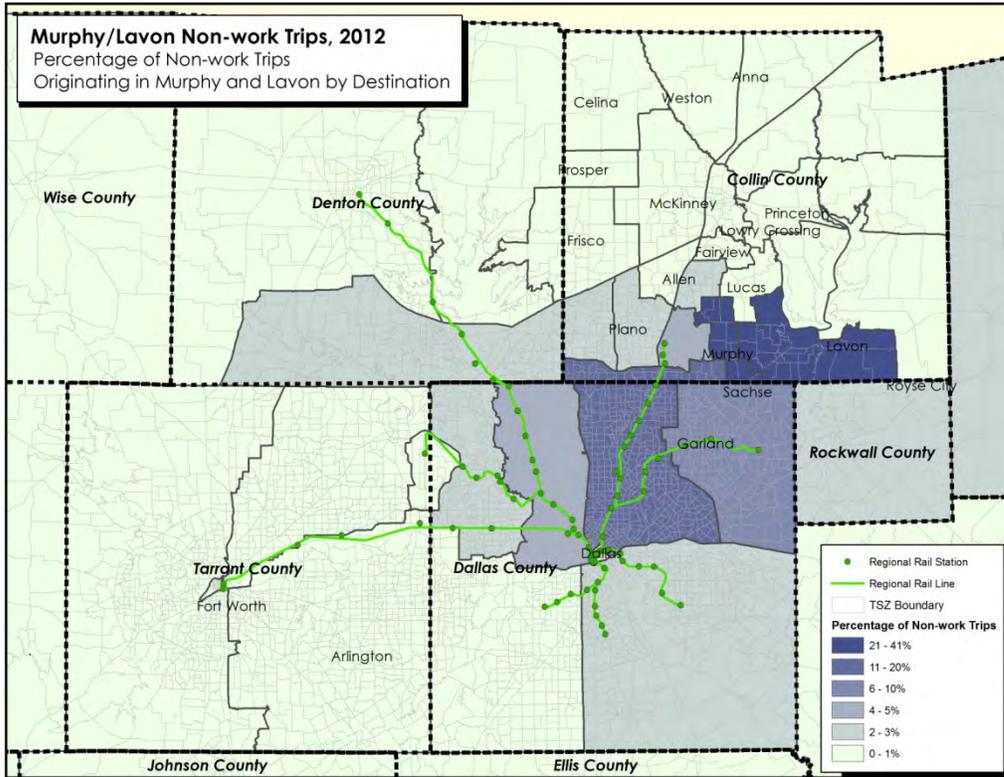
Frisco



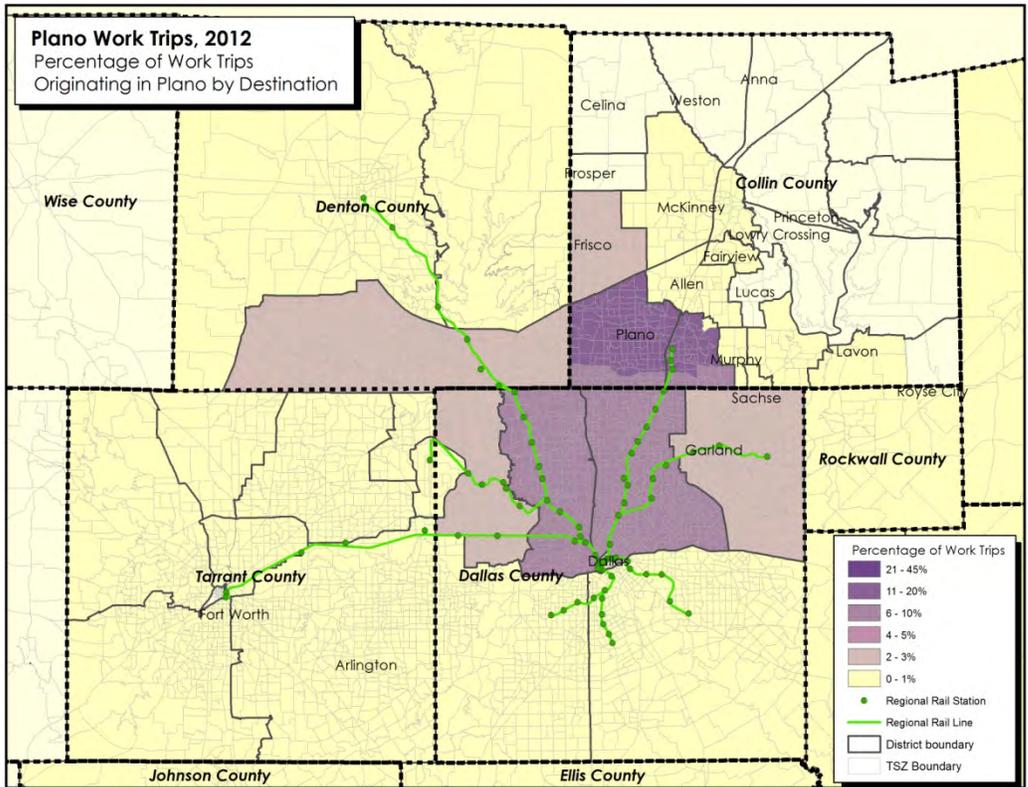
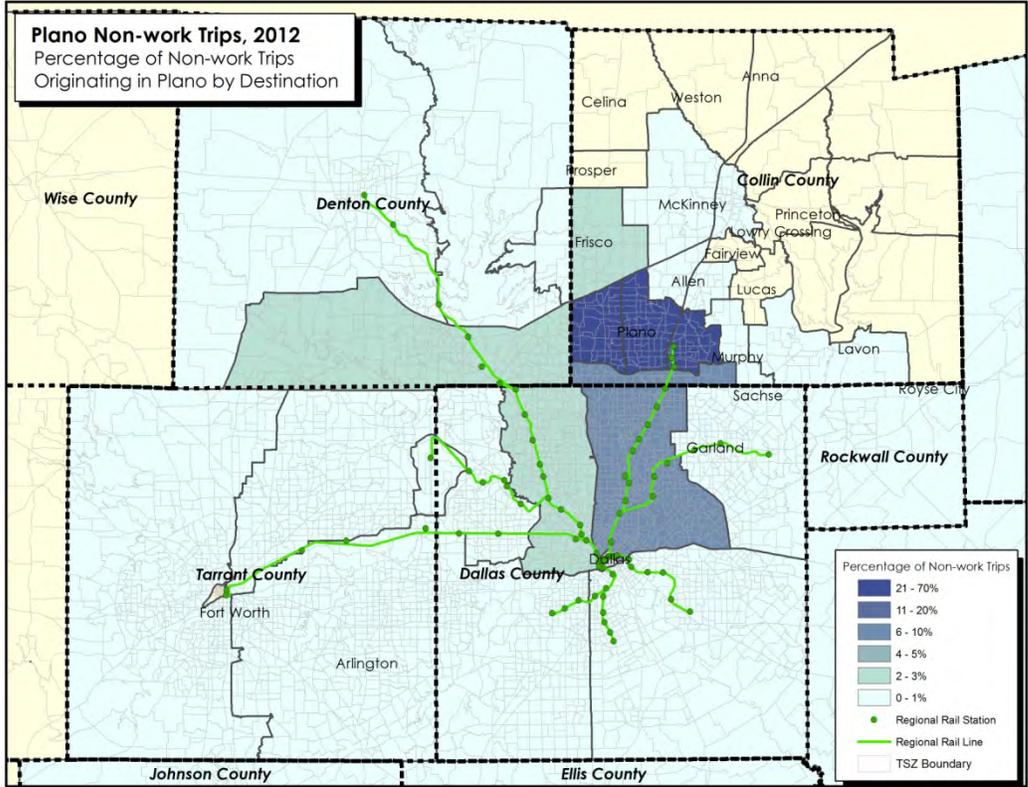
McKinney



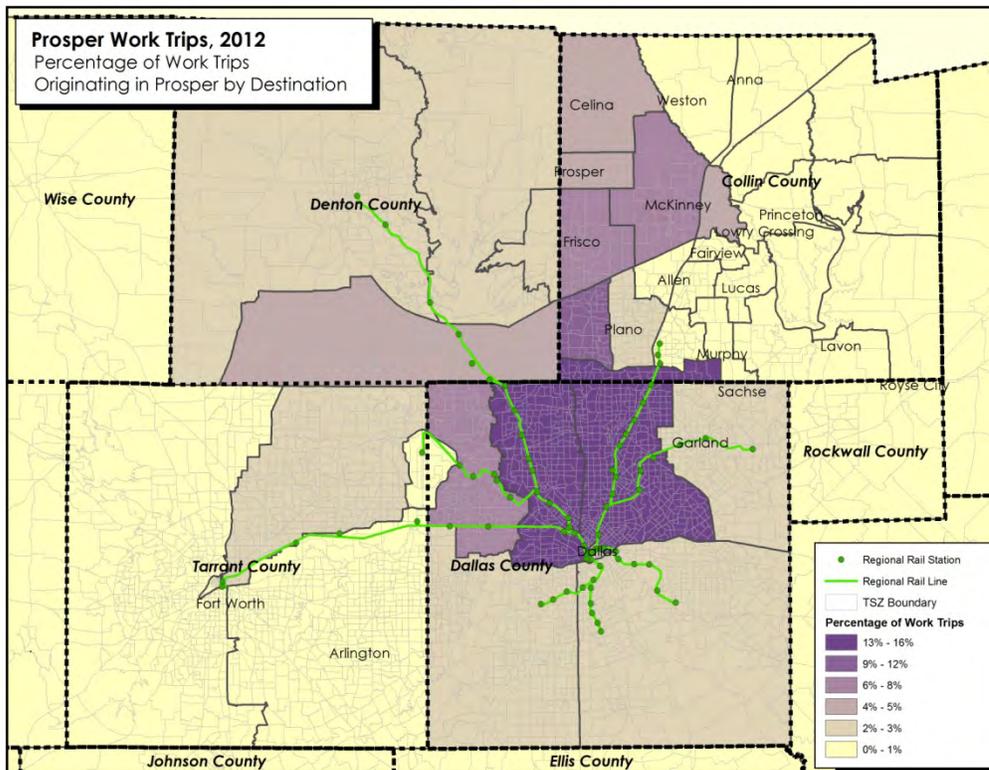
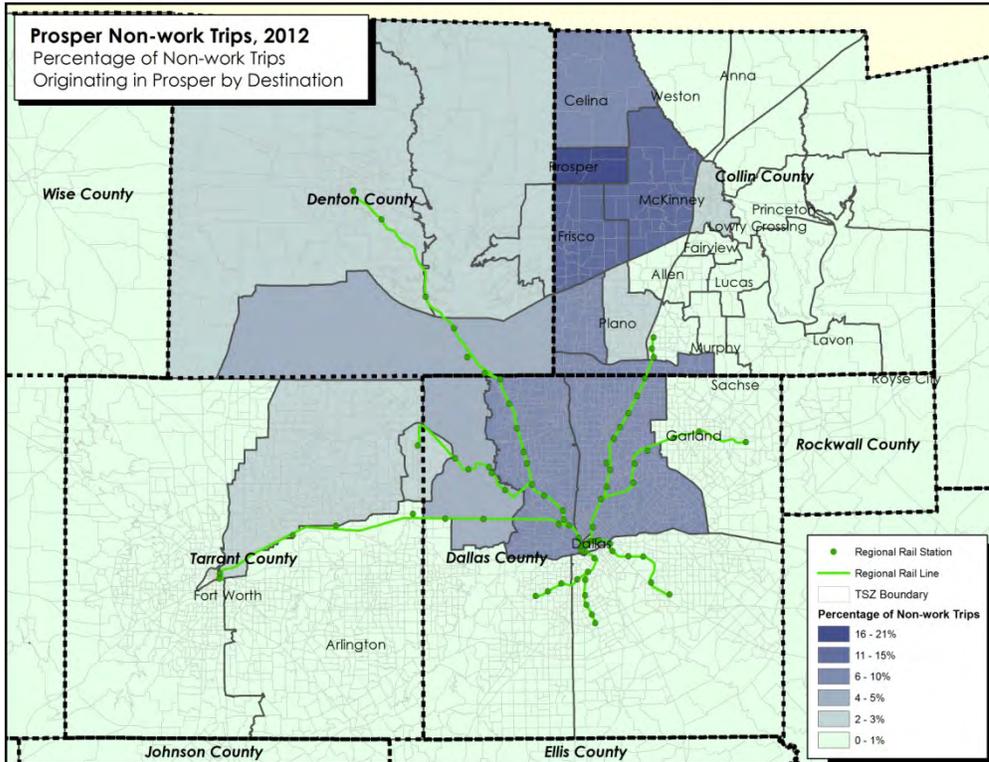
Murphy/Lavon



Plano



Prosper



Appendix B Public Meetings: Materials and Notes

COMMENTS FROM DISCUSSION AT PUBLIC MEETINGS

Frisco

Primary Transit Service Needs:

- Need a link from Frisco to existing service provided by DART and DCTA.
- Local circulation is needed in Frisco, Allen and Fairview.
- Need a link from Allen to Parker Road Station.
- We need to find some way to deal with congestion on 75. It's already bad and will get worse.
- E-W connections are needed across the region: the Cotton Belt line is needed.
- Evening and weekend service on CCART.
- CCART subscription trips need to be available.
- Need for local service in Frisco, especially for seniors, college students and people with disabilities.

Transit Questions and Comments:

- There is a concern that there will not be options for seniors.
- There is a concern about what will happen when Frisco reaches buildout. There will be greater congestion and higher numbers of people on the tollway.
- Nobody wants a 40 foot bus coming through their community.

Direction for Study:

- We need to look at local funding sources rather than relying on state and federal funding sources. (There is a concern about other entities saying how things need to be run in Frisco).
- A correlation needs to be drawn between transit and economic development. This association hasn't been made.

McKinney

Primary Transit Service Needs:

- There is no intercity service to Plano/DART – it makes it difficult to get to work.
- Local service in McKinney is needed – CCART needs to provide more service.
- Priority is a link to Parker Road station.
- Employers are looking at access to DART.

- It's hard to get to jobs in Plano from McKinney.
- Transportation is needed further to the north.
- There is support for a taxi voucher program in McKinney, like the one in Plano.

Transit Questions and Comments:

- Which is more important? 5 said local transit; 25 said regional transit; others noted they are in between
- When were CCART routes actually reviewed last?
- Can we expand CCART service locally? We need to build on the existing service.
- McKinney transit ridership will be primarily from the east side of town.
- Eight people indicated they would consider taking CCART if a route provided access to central McKinney.
- Service to McKinney is needed from Plano and south, and also from Lowry Crossing.
- Need to show the costs associated with the service alternatives.

Direction for Study:

- Cost is a concern.
- Speak to employers; Employers are often not interested in paying for services.
- We need to think ahead for long term rail.
- We need to figure out what is the cost of NOT having transit service
- Cross-jurisdictional funding/taxation will be an issue for the long term.
- It is important to plan ahead for city development to be effectively served by transit.
- There is the challenge of cities having to “buy into” service in Collin County.
- We need to push elected officials to support transit.

Plano

Primary Transit Service Needs:

- Service is needed to locations outside of Collin County: the VA in South Dallas is an important location to serve.
- Links are needed between:
 - McKinney and Plano
 - Wylie to Plano
 - Plano to Rockwall, Tarrant, Denton and Dallas Counties
- Commuter transportation is an important issue.

Transit Questions and Comments:

- DART – Senior Ride program, concern about ongoing operations.
- When polled, only ¼ of participants are familiar with CCART demand response service.
- CCART has limited funding – it needs more funding.

- Plano Community Homes provides their own service. They believe their clients are not eligible for CCART.
- Medicaid Transportation: There are limited options and the service limits who can ride (all family members cannot ride with Medicaid recipient).
- People are aging in place and need to transition from driving to other options. Those other options need to be defined.
- It was acknowledged that Plano has much better service options than the remainder of Collin County. There was a question about DART mobility management change.
- Limitations of DART fixed routes in Plano: they don't go everywhere people want them to go and don't operate frequently in some areas.
- Certain transportation programs are limited to specific populations. There was concern raised that CCART does not serve Princeton. (CCART will follow up).

Direction for Study:

- Need a long term solutions: Why only looking 3-5 years?
- Can't expect non-DART cities to have money for quality service.
- Need to speak to employers in Collin County.

SAMPLE MATERIALS

Figures B-1 and B-2 include a sample public meeting notice and the questionnaire form that was distributed at the public meetings.

Figure B-1 Sample Public Meeting Notice



The graphic is a public meeting notice for the 'Access Collin County: Transit Needs Assessment & Planning Study'. It features a yellow diagonal banner in the top left corner that reads 'You are invited!'. The main title is 'Public Transit Meeting' in large, bold, black font, with a subtitle 'Help to Shape Public Transportation in Collin County' in a smaller, brown font. Below the title is a bulleted list of three questions: 'Where do you want transit to go?', 'How do you want transit service to change?', and 'What improvements are needed?'. To the left of the text are two small images: the top one shows a white van parked on a street, and the bottom one shows a sign for 'FARMERSVILLE' with 'DISCOVER' and 'FARMERSVILLE' text. Below the list is the text 'Tell us what you think and learn about the Planning Study.' followed by '1-Hour Public Meetings about Transit in Collin County:'. This is followed by three meeting details: 'Frisco: Tuesday, October 30, 2:30 – 3:30 PM' at the Frisco Public Library; 'McKinney: Tuesday, October 30, 5:00 – 6:00 PM' at the McKinney Performing Arts Center; and 'Plano: Wednesday, October 31, 10:00 – 11:00 AM' at the Plano Environmental Education Center. A blue banner at the bottom contains the text 'For more information about the study, visit AccessCollin.org'. Below this banner is a paragraph of text in English and Spanish regarding special accommodations. At the bottom right is the logo for the North Central Texas Council of Governments, which consists of a stylized gear with a map of the region inside it, and the text 'North Central Texas Council of Governments' to its right.

You are invited!

Access Collin County:
Transit Needs Assessment & Planning Study

Public Transit Meeting

Help to Shape Public Transportation
in Collin County

- Where do you want transit to go?
- How do you want transit service to change?
- What improvements are needed?

Tell us what you think and learn about
the Planning Study.

1-Hour Public Meetings about Transit in Collin County:

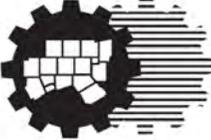
Frisco: Tuesday, October 30, 2:30 – 3:30 PM
Frisco Public Library, McCallum Room, 6101 Frisco Square Blvd.

McKinney: Tuesday, October 30, 5:00 – 6:00 PM
McKinney Performing Arts Center, Gallery, 111 N. Tennessee St.

Plano: Wednesday, October 31, 10:00 – 11:00 AM
Plano Environmental Education Center, 4116 W. Plano Pkwy.

For more information about the study, visit AccessCollin.org

For special accommodations due to a disability or language translation, contact Sarah Chadderdon at 817-695-9180 or schadderdon@nctcog.org by October 26. Reasonable accommodations will be made.
Para ajustes especiales por discapacidad o para interpretación de idiomas, llame al 817-695-9180 o por e-mail: schadderdon@nctcog.org antes de 26 de Octubre. Se harán las adaptaciones razonables.



**North Central Texas
Council of Governments**

Figure B-2 Questionnaire Form

**Access Collin County: Transit Needs Assessment and Planning Study
Public Meeting Feedback Form**

1. In what city do you live? _____

2. Have you ever taken a ride on CCART?
 No Yes *If yes, where and when/how often?* _____

3. Do you ever ride DART, DCTA, The T, Trinity Railway Express (TRE), or any other transit systems?
 No Yes *If yes, which service and when/how often?* _____

4. Are you interested in new or expanded transit service in your community?
 No Yes *Why or why not?* _____

5. Are you interested in new or expanded transit service linking your community with another city?
 No Yes *If yes, which route(s)? What days/times would you like the service(s) to operate?*

6. How did you hear about this meeting? _____

7. Did you find this meeting to be useful?
 No Yes *Why or why not?* _____

8. Please share your comments. Feel free to use the back of this page if you require additional space.

Contact Information (Optional)

Contact me to follow up regarding my comments

Keep me updated about future meetings associated with this study

Name _____
Address _____
Telephone _____ Email _____

Appendix C Collin County Area Transportation Acronyms

CCART	Collin County Area Regional Transit
CCCOA	Collin County Committee on Aging
DART	Dallas Area Rapid Transit
DCTA	Denton County Transportation Authority
FTA	Federal Transit Administration
MAP-21	Moving Ahead for Progress in the 21st Century (Federal surface transportation funding authorization)
NCTCOG	North Central Texas Council of Governments
TAPS	Texoma Area Paratransit System
TRE	Trinity Railway Express
TXDOT	Texas Department of Transportation

Appendix D Online Survey - English

To help plan for Collin County's future, we are conducting a short survey regarding your transportation choices and preferences. This information will be used to help shape public transportation services over the next three to five years.

This survey should take approximately 5 minutes to complete. At the end of the survey, you will have the option of entering a drawing to win one of three \$50 VISA gift cards.

ACCESS COLLIN

Collin County Transit Needs Assessment and Planning Study

About you and your travel

- 1) Where do you live? City: _____ ZIP Code: _____
- 2) Are you currently employed or in school? (check all that apply)
 - Employed (In what city? _____)
 - School (In what city? _____)
 - Neither
 - Other _____
- 3) How do you usually travel where you need to go? (Check all that apply.)
 - Drive myself
 - Get a ride with a friend or family member /carpool
 - Public transportation (either bus or rail)
 - Paratransit (ADA or Dial-A-Ride)
 - Bus or van operated by a senior center, community organization or other agency
 - Walk or bicycle
 - Taxi
 - Vanpool
 - Other: _____

Public Transportation Options

- 4) Does public transportation currently serve the neighborhood/community where you live?
 - Yes → If YES: Please provide the name of the service(s) available _____
 - No
 - I don't know
- 5) Have you used any public transportation at all in the past six months?
 - No → If NO: Why have you not used public transportation? (Mark all that apply)
 - Prefer to drive
 - Get rides from others
 - Transit is not available
 - Travel times are too long
 - Parking charge at rail station
 - Service does not operate where or when I need it
 - Public transportation is too expensive
 - Public transportation is not safe
 - Not enough information about public transportation/too confusing
 - Other: _____

COLLIN COUNTY TRANSIT NEEDS ASSESSMENT AND PLANNING STUDY | DRAFT FINAL REPORT
North Central Texas Council of Governments

Yes → *If YES: Answer 5a and 5b –*

5a. Which service(s) have you used? (Check all that apply)

- | | |
|---|--|
| <input type="checkbox"/> CCART McKinney routes | <input type="checkbox"/> The T (Fort Worth) |
| <input type="checkbox"/> CCART Dial-a-Ride | <input type="checkbox"/> TRE |
| <input type="checkbox"/> DART Rail | <input type="checkbox"/> Other: Which services?
_____ |
| <input type="checkbox"/> DART Regular Buses | _____ |
| <input type="checkbox"/> DART On-Call | What city/cities?
_____ |
| <input type="checkbox"/> DART ADA Paratransit | _____ |
| <input type="checkbox"/> DCTA / Denton County A-train | _____ |
| <input type="checkbox"/> Plano Senior Rides | |

5b. How often do you use public transportation? (Select best answer)

- | | |
|--|---|
| <input type="checkbox"/> Almost every day | <input type="checkbox"/> A few days per month |
| <input type="checkbox"/> A few days per week | <input type="checkbox"/> Once a month or less |
| <input type="checkbox"/> One day per week | <input type="checkbox"/> Never |

6) Would any of the following encourage you to use public transportation more often?

	NO <i>Would not make a difference/Would not consider</i>	MAYBE <i>Consider somewhat</i>	YES <i>Consider Strongly</i>	N/A <i>Don't Know</i>
If transit served a bus stop near my house and near my destination	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If there was better daytime transit availability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If other people I know used transit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If transit operated evenings or weekends	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If I felt it were safe to use public transportation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If fares cost less	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If bus stops had amenities (such as shelter, lighting, seating, or bike racks)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If more sidewalks/crosswalks existed for easier access	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If I had more/better information about transit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If the bus driver would assist me with my groceries or boarding the vehicle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If traffic congestion gets worse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If gas prices go up	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7) Please answer the following questions about the importance of transit:

	Not at all important	Somewhat important	Very important	N/A Don't Know
How important is it <u>to you</u> AND <u>your household</u> to have local transit available in your community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How important do you think it is for <u>the community</u> to have local transit available?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8) Which of the following potential new services would be most appealing to you OR members of your household: (Check all that apply)

COLLIN COUNTY TRANSIT NEEDS ASSESSMENT AND PLANNING STUDY | DRAFT FINAL REPORT
North Central Texas Council of Governments

- Local bus service (In which city? _____ *If local bus service already exists in your city, but not in your neighborhood, which neighborhood? _____*)
- Commuter bus service to DART rail
- Bus routes between cities/communities in Collin County (From where _____ to where _____)
- Countywide dial-a-ride service (Enables you to call and schedule a trip in Collin County)
- Other _____

Household Information (for classification purposes only)

9) What is your gender?

- Female
- Male

10) Including you, how many people currently live in your household?

- 1-2
- 3-4
- 5-6
- 7+

11) How many are age 65 or older?

- 0
- 1-2
- 3-4
- 5-6
- 7+

12) How many are age 18 or under?

- 0
- 1-2
- 3-4
- 5-6
- 7+

13) How many working vehicles (including automobiles, motorcycles, scooters, etc.) does your household have?

- 0
- 1
- 2
- 3
- 4+

14) What is your annual household income?

- Under \$25,000
- \$25,000-34,999
- \$35,000-49,999
- \$50,000-74,999
- \$75,000-99,999
- \$100,000+

15) Do you have any comments or ideas about transportation you would like to share?

To be entered to win one of three \$50 VISA gift cards to use at your favorite merchant, please provide the information below. This information is confidential and is kept separate from your responses to the survey. It will ONLY be used to contact you in the event you are selected as one of the winners. Winners will be notified by email or phone and prizes will be mailed to the address below. Odds of winning depend on number of entries received.

Name _____

Email _____

Address (Only for mailing Prizes)

Phone Number (Only used if we cannot reach you by email)

ACCESS COLLIN

Collin County Transit Needs Assessment and Planning Study

IF YOU HAVE ALREADY COMPLETED A SURVEY LIKE THIS ONE, PLEASE DO NOT COMPLETE ANOTHER.

To help plan for Collin County's future, we are conducting a short survey regarding your transportation choices and preferences. This information will be used to help develop transportation options.

ENTER TO WIN ONE OF THREE \$50 VISA GIFT CARDS!

To enter, just complete this survey AND provide the following information:

NAME: _____

E-MAIL: _____

ADDRESS (to mail prize): _____

PHONE (if we cannot reach you by e-mail): _____

THIS INFORMATION WILL BE KEPT CONFIDENTIAL and will ONLY be used to contact you in the event that your name is drawn as one of the winners. Winners will be notified by e-mail or phone, and prizes will be mailed to the address you provide.

PLEASE MAIL SURVEY BY NOVEMBER 15!

If you wish to enter without completing the survey, please send a postcard with your name, address, phone number, and e-mail to Market Research Department, Dikita Enterprises, Inc. 1420 W. Mockingbird Lane, Suite 600, Dallas, TX 75247. One entry per person.

About You and Your Travel

1.) Where do you live? CITY: _____ ZIP: _____

2.) Are you currently employed or in school? (Check all that apply)

Employed (In what city? _____)

School (In what city? _____)

Neither Other: _____

3.) How do you usually travel to get where you need to go?

(Check all that apply)

Drive myself

Get ride with family member or friend/carpool

Public transportation (either bus or rail)

Paratransit (ADA or Dial-A-Ride)

Bus or van operated by a senior center, community organization, or other agency

Walk or bicycle

Taxi Vanpool Other: _____

Public Transportation Options

4.) Is there anywhere you would like to travel but cannot due to a lack of transportation?

No

Yes → If YES, where do you want to travel? List up to 3 locations

Destination

In which city?

_____	_____
_____	_____
_____	_____

5.) In the last six months, have you missed any of the following trips due to a lack of transportation? (Check all that apply)

I have not missed any trips
→ Skip ahead to question #7

Shopping

Medical

Work

Social or entertainment

Education

Social service appointment

Meals

Religious activity

Other: _____

6.) What keeps you from getting where you need to go?

(Check all that apply)

I do not have a car or a car is not available to me

Nobody is available to drive me

No public transportation services are available for my trips

I don't know the public transportation options

I don't feel comfortable using the available public transportation services

Available public transportation does not meet my needs

→ Why not? (Check all that apply)

Takes too long

Requires too many transfers

Requires advance reservations

Not available on days I need to travel

Not available at times I need to travel

Services cost too much

Other: _____

7.) Do you have a disability that makes it hard for you to travel?

No Yes

8.) Which public transportation services have you used in the last six months? (Check all that apply.)

CCART McKinney Routes DART ADA Paratransit

CCART Dial-A-Ride DCTA / Denton County A-train

DART Rail Plano Senior Rides

DART Regular Buses The T (Fort Worth)

DART On-Call TRE

Other → Which services? _____ What city/cities? _____

9.) How often do you use public transportation?

(Select best answer)

Almost every day

A few days per week

One day per week

A few days per month

Once a month or less

Never

10.) Would any of the following encourage you to use public transportation more often?

	NO	MAYBE	YES	N/A or don't know
If transit served a bus stop near my house and near my destination	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If there was better daytime transit availability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If other people I know used transit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If transit operated evenings or weekends	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If I felt it were safe to use public transportation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If fares cost less	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If bus stops had amenities (such as shelter, lighting, seating, or bike racks)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If more sidewalks/crosswalks existed for easier access	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If I had more/better information about transit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If the bus driver would assist me with my groceries or boarding the vehicle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If traffic congestion gets worse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If gas prices go up	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

11.) Please answer the following questions about the importance of transit:

	Not at all	Some-what	Very	N/A or don't know
How important is it to you AND your household to have local transit available in your community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How important do you think it is for the community to have local transit available?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

ADHESIVE STRIP CONNECTS HERE

12.) Which of the following potential new services would be most appealing to you OR members of your household?

(Check all that apply)

Local bus service - In which city? _____
If local bus service already exists in your city, but not in your neighborhood, which neighborhood? _____

Shuttle/express bus service to DART rail

Bus routes between cities/communities in Collin County
From where _____ to where _____

Countywide Dial-A-Ride service
(Enables you to call and schedule a trip in Collin County)

Other: _____

Household Information (for classification purposes only)

13.) What is your gender?
 Female Male

14.) Including you, how many people currently live in your household?

1-2 5-6
 3-4 7+

15.) How many are age 65 or older?

0 3-4 7+
 1-2 5-6

16.) How many are age 18 or younger?

0 3-4 7+
 1-2 5-6

17.) How many working vehicles (including automobiles, motorcycles, scooters, etc.) does your household have?

0 2 4+
 1 3

18.) What is your annual HOUSEHOLD income?

Under \$25,000
 \$25,000 - 34,999
 \$35,000 - 49,999
 \$50,000 - 74,999
 \$75,000 - 99,999
 \$100,000 +

19.) Do you have any ideas or comments about transportation that you would like to share?



BUSINESS REPLY INDICIA

4.6" x 8.5"

Appendix F Survey Comments

COMMENTS FROM WEB SURVEYS

A robust network of bicycle infrastructure is important now and will become increasingly important in the near future. As a bicycle commuter for the past 3 years, I don't ever want to go back to daily car use if at all possible. Connections from a bicycle network to public transit increase the network area. Take advantage of recreational transit opportunities in Collin County also. Weekend bus service from Plano to Farmersville would allow many people from Collin & Dallas Counties to put their bike on a bus and go ride the North East Texas Trail. They will spend money in Farmersville and other Collin Co. towns along the way!

I'm not sure of the reason, but McKinney does not have a rail line or at least a DART Rail line. If they were to extend the rail line from Parker Station to McKinney, I would use the rail daily to get to and from work. 75 is extremely congested and driving is costly.

Very few questions about bicycle commuting. Bike trails and connectors to other cities is very important to my family and me.

Passenger Rail service should be further considered from Downtown Frisco to DART LRT in Carrollton and Irving. It should also be further considered from Downtown McKinney to the DART LRT in Plano. Local fixed route bus service in Collin County (beyond Plano) would be a waste of tax payer money.

#1 thing we need is DART rail to McKinney. Today I ride my bike 19 miles from McKinney to Richardson and back for work. If there was DART rail anywhere in McKinney I would ride my bike to the train every day.

The light rail is a good start, but better bus service is needed to make the connections.

Provide numerous bike trails to interconnect cities/towns in Collin County with interconnects to other counties. These trails should be free from vehicular traffic. Many trails have already been completed, but a focus should be to connect all these trails into a comprehensive system.

Especially for mobility to / from the workplace, public transportation in the McKinney area is VERY important to our family.

I think there is a huge need for the DART rail to extend farther north to Allen and McKinney for professionals who work in Dallas like myself. If that is not possible any time soon a commuter bus that takes us to DART Rail in Plano would be fantastic and I would pay any price for that convenience. More of my colleagues would look into moving north if the nightmare commute on 75 could be avoided.

I feel public transportation makes it easier for transient, and homeless to move into our neighborhoods / cities. I feel this is a safety concern for our children and our city.

My daughter is Deafblind. Would be great if you could service the blind community in McKinney, regardless of age.

We desperately need some mass transit. I have to take my son to Collin College several times a week because there are no buses. I would like to get on the bus or train near my home and travel to Dallas or Denton or Fort Worth. It's crazy that we don't have transit. When I travel to DC, I can go anywhere in the city and get there quickly with no traffic.

Access to DART Rail is VITAL to continued growth of North Texas. If you build it, they WILL come! As long as fares are reasonable. Recent fare hikes are unfortunate Detriment to rail users - and thereby, added congestion to roadways impacting ALL of us.

I wish Frisco tied into the DART light rail system. Traffic is getting worse, and with the growth of Frisco and surrounding areas, roads will not keep up. We need commuter rail service yesterday.

Mass transit is difficult in the DFW region as employment centers are many and are widely dispersed....most people do not work in downtown Dallas anymore. A much better dial-for-service should be available for poor and disabled folks...note that I did not include elderly....we have a large number of very well-to-do elderly who do not need public assistance for anything.

McKinney North High School has allowed students outside of its school zone to 'transfer' into the school. So students anywhere in MISD can 'transfer' into North by request. However, the school district does not provide transportation for students outside of the North school zone. Transportation can therefore be challenging for working parents of students outside of the 2 mile walk radius. Providing safe transportation for these students to/from McKinney North would seem to address the need to remove cars from the road and provide a desired convenience.

Please have DART consider additional tracks and service to Allen, Fairview, and McKinney.

Hwy 75 is a conduit out of Oklahoma to Dallas and as such is constantly busy. Expansion has only fulfilled the adage of build and they will come. Other routes and other means of transportation are needed. A DART line to Denison thru Allen and connection to Love Field and DFW would relieve the highway congestion and definitely be an alternative to many. If voters in Allen can approve a \$60 million HS football stadium, they can certainly afford to be a DART city. This needs to be pushed in every city to the North. I do not believe it is a question of money but the will of the politics in the various cities. If we can have eminent domain for an oil pipeline, then we can certainly start giving eminent domain to the railroad.

Allen needs bus service to hook up with Plano. Once in Plano, then we can get to the DART rail station at Parker Road. Then, we can go pretty much anywhere.

Any public transport (Bus or Rail) helps to reduce more cars on roads and also reduces accidents. As an individual when they drive their mind is busy with daily routines/worries however in public transport, its driver's job to drive and reduces accidents.

I'm proud of Plano for opting in to DART. I look forward to the Cotton Belt out to the airport. I think the high schools and senior high schools in Plano should provide free DART passes for their students and nice bus stops to try to get them hooked on public transport -- it's amazing how many cars are in the PSHS parking lot. And it's amazing that there is NOT a bus stop at PSHS. It should be easy to get from there to Collin College, UTDallas and Plano downtown. Instead, it's impossible to use buses to make those trips.

I would LOVE to see Wylie buy in to DART. Thank you for requesting feedback via this survey.

Rail is what people want... Buses will reduce property value and increase crime... Do not bring buses to Allen!!!

When I worked downtown, used DART every day. Wish I had the option of going from Plano to Desoto on DART, but the more options available to residents, the better. Still use DART whenever I go downtown to events.

Allow liquor sales in Collin County. The increase in taxes would help pay for rail.

As a person ages, they begin to realize there is no public transportation in Collin county...at all. How will I get around at age 72 or 78? No one to drive me, so what will I do??? Those are questions baby boomers need to be asking and hopefully there will be answers in the next 3-5 years.

Effective public transportation is only viable in areas where the population is dense enough to support it, i.e. within New York City, Chicago, etc. The suburbs of Dallas just don't have the population density to make it effective and worth the tax money. Under the current system, it takes longer to get to your destination and is less convenient than driving yourself. Also, every time my family or I have used public transportation in Collin

County and Dallas County we have been confronted by individuals asking for handouts and once even witnessed a theft. They are not a safe form of transportation.

The NTCOG is not recognized by me nor are they elected officials. They are dictatorial and tyrannical in their decisions. If public transportation comes to Frisco, we will be moving. The only people interested in public transportation are refugees from New Orleans or damn Yankees. I didn't know about the meeting at the library or I would have been there.

Expand DART to other cities

I do NOT want public transportation in my area...I have watched in different cities and neighborhoods in the past deteriorate with this transportation. I know it sounds odd but I have lived in several cities and neighborhoods in the past that have seriously declined in value due to public transportation implemented within the area. I would NOT like to see this implemented here.

It is needed as the population increases, specially the population of older/retiring residents. It will also be good for people with disabilities. However, keep in mind that public transportation will give other people from different communities more access to our community, which may include criminal elements (drug dealers, thieves, etc.). Therefore, if this is to push through, the city must ensure that safety measures are in place. Some of these safety measures are well-lit bus stops/stations, increased police patrol/presence along the bus routes (to discourage criminals), well-trained bus drivers (specially in emergency procedures), etc. Finally, the fare must be reasonable/affordable and regulated by the city to avoid sudden increases.

I feel strongly that a marketing and education effort must be taken in the big suburbs north of Dallas (Plano, Frisco, Allen, and McKinney) to change the culture of driving. We need more sidewalks and more bike lanes. I don't know how to convince people who are used to big cars and driving everywhere but we must start this process in order to create more close knit communities and reduce pollution. I wish I could make a difference. I drive a hybrid car and deliberately chose my job because it was near my home. I would love to take a train to destinations in other cities in the area.

I know it's not in the short term plans, but I do think we should start the process of getting a DART line to run from Downtown Dallas North to Frisco. I understand this can't be accomplished in the next 1-3 years, but I hope within 5-7 years that DART is available in Frisco.

Plano has bus service but the buses routes are not frequent enough to ride the bus. The Jack Hatchell bus routes to downtown continue to diminish... No midday or late evenings.

McKinney is known for its green initiatives. Why is a long term plan not in place to bring Light Rail to the city? Everyone seems to be focused on short term gains but it seems to me the real benefits comes from a long term plan.

I would NOT want bus service to our neighborhood. We used to live in a neighborhood that had on call bus service as well as DART bus service. I believe that having a bus service contributed to the decline of the neighborhood. It was not the only factor but it was a contributing factor. I know that sounds harsh but I need to protect my property values. People in North Texas view bus service in a negative light. I used to use the park and ride light rail service originating at Parker Road but stopped using that when there were robberies on the train. Also, there seems to be a lack of security at the park and ride location - both during peak rush hours and during the day.

I take a bus from the new Plano park n ride to downtown Dallas. A bus from Frisco to downtown Dallas would be great. I think a lot of Frisco people do not take the Plano bus because they have to drive far to bus and pay 40 / month to park. The Plano express bus route 208 is a great option. Just wish I could catch it in Frisco.

Alternatively a feeder bus from Frisco to NW Plano park and ride could be an alternative. But direct bus from Frisco would be best.

Get rail out here.

One of the things I like about Allen, McKinney and Frisco is that it does not have a Public Transportation. I think it can be good for those who can't afford a car but most people in McKinney don't work in McKinney. I see it as urban blight being brought to the burbs/small towns. This county is not a major city but rather suburbia. Not only that, the residents already pay high property taxes, public transit is a huge expense and the we all have to pay for a select few that will actually use it. I don't want it when I know my taxes are going to increase significantly due to the re-election of the guy in Washington.

Would really take advantage of commuter transportation from McKinney down into Dallas where I work, but none is available now. Takes too long for me to drive down to Plano to ride the DART, but I would if it came all the way up to McKinney.

Transportation desperately needed in the US 75 corridor. Whether it is shuttle buses to DART trains or transit centers. Traffic congestion is tremendous increasing travel time and car insurance.

I am concerned that we might get undesirables coming from other cities. Drug dealers from Dallas is something we don't need. I am against the DART Rail coming because of the traffic backup at Bethany, Exchange and Stacy.

It would not be widely used and would cost tax payers more than you can take in to offset expenses. Lived in a similar community in Gwinnett County Georgia and the buses they put in were always empty except the ones going straight to Atlanta. Putting in a system to justify a study is not sound fiscal responsibility.

It is OK to have only a couple of public transportation pick ups in Allen IF there is good ped/bicycle routes and bike parking at the Allen Hub(s). It does NOT require a huge infrastructure or a ton of routes in Allen to be highly successful if people can walk or ride bikes to get there. Now if DART Rail could get an express route to downtown Dallas, I think you would see an amazing ridership from Allen!

Better and more bike routes and trails are needed, especially between the cities and to/from business areas and housing.

I am well served in NW Plano by DART bus and light rail. Most useful to be would be additional bike paths and painted bike lanes on roads. Richardson has done this reasonably well, Plano not so much. Note that I'm referring to paths and roads useful for commuters going places in Plano and commuting to Richardson and Dallas; I am not referring to additional recreational paths. I want to commute safely to work and local businesses by bike, not just go for leisurely bike rides.

Continue the progress with the bike plan. Plano needs more routes to the other cities. US75 is a barrier to riding East-West by the limited number of routes possible by bike.

I would like to see cycling for transportation being more highly promoted and education for drivers to operate around vehicular cyclists. This is especially needed in Garland but my pleas have fallen on deaf ears over here. I appreciate Plano and Richardson's efforts though!

Cycling support must be considered in the planning.

DART rail to connect to the TRE would be helpful. DART rail for daily commuters, although, I am not one of them, is needed.

A robust network of bicycle infrastructure is important now and will become increasingly important in the near future. As a bicycle commuter for the past 3 years, I don't ever want to go back to daily car use if at all possible. Connections from a bicycle network to public transit increase the network area. Take advantage of recreational transit opportunities in Collin County also. Weekend bus service from Plano to Farmersville would allow any

people from Collin & Dallas Counties to put their bike on a bus and go ride the North East Texas Trail. They will spend money in Farmersville and other Collin Co. towns along the way!

Dart rail to connect to the TRE would be helpful. Dart rail for daily commuters, although, I am not one of them, is needed.

I would strongly encourage the investment of DART rail expansion to cities like McKinney--the Plano stop is just too far to drive, park and then sit for another 40 minutes to get to downtown Dallas. My husband and I currently commute together to take advantage of the HOV lanes, but driving on 75 remains congested and dangerous nearly all the time--taking an hour or more to get home WITH HOV lanes. I feel sorry for the poor people driving by themselves all the time. We see at least 1 or more wrecks a day in good weather that back up traffic for miles. We would JUMP at the chance to have greater and easier access to DART rail. (And would be willing to pay for it, too!) - Please - help us with our commute!

I would love for a light rail system that ran alongside the toll roads through the Metroplex. A rail system between the northern suburbs that could get to Dallas, Fort Worth, both airports, the AAC, The Ballpark in Arlington and Cowboys Stadium would be great. I'd easily put the money I currently spend in tolls on rail service to get around.

Another option would be to extend the rail service north to Sherman/Denison - that would be an option with stops in the towns along the road, i.e. McKinney, Melissa, Anna, Van Alstyne, Howe, etc.

I am particularly aware of the issues facing the elderly and the disabled and the difficulties in getting around. Our current system is not connected enough and doesn't run often enough to rely on for the majority of your transportation needs- you can get to some locations but not enough to be able to function successfully without a car or someone on tap to give you a ride.

If they had a rail system to work, I would take it every day I worked.

If people need DART in McKinney then they need to move to Plano. I have moved several times in my career to be close to my job -- moving for work is not a new concept.

If Allen doesn't get public transportation in the next five years we will have to move. About five or so years is the most my husband will be able to drive because of age.

Better bike paths/routes

Making Collin County more bicycle friendly is very important to me.

I really want Allen to get DART Rail.

Extending DART Rail to the Allen line or at least to Stacy road would be a huge benefit for the City of Allen. This would benefit The Villages at Allen & Fairview as well as the outlet mall and restaurants. We have so much to offer especially with the Convention Center so convenient with the hotels and amenities in the area. I ride Dart daily and have seen the benefits of the rail in Downtown Plano as well as riders using the rail to experience activities in Dallas. It's unfortunate Allen did not agree to be part of the initial rail plan. We should not delay and continue to miss additional revenues for our city.

Less time to wait for bus (10-15 minutes at most) during normal working days coupled with good weather shelters for bus stops and reasonable bus fares would encourage Americans to use Public Transport like most Europeans have been doing for years.

I have seen many my daughter's friends, recently graduated from high school, desiring to work and attend CCCC. However, they do not own cars and cannot reach their goals due to the public transportation situation here in Collin County. They have to rely on rides from friends or walk to their destinations. These are smart young people that want to make a life for themselves. I grew up in Pittsburgh Pennsylvania and my family and husband's family would not have been able to have the success we have today without public transportation.

More bike amenities

Need more direct cross town routes. Takes too many changes and too long. Most rides of about 15 miles require two bus changes. As a result, it is much faster to simply use a bicycle.

Allen needs bus service and connector service to DART light rail.

I would like to see a bus route going down 380 to Farmersville to McKinney. From McKinney to the DART rail in Plano.

I am very interested in expanded rail service throughout Collin County.

Transportation for seniors is a big issue forcing many to drive much longer than they should simply because there is no viable alternative. I encourage you to look at this group and their need in greater detail.

What we need are direct routes from the major cities in Collin County. It can be DART or regulations need to allow safe transportation to be offered by private enterprise.

Transportation from Collin College should be available later in the day.

It's important to have more bike trails connecting directly to the DART rail stops.

Need to have better transportation for seniors.

More Bike lanes and bus service in the north part of Collin County into Plano.

I do not want transit service. NO DART!!!! DART will turn us into Garland or Irving, yuck! If traffic bothers you then move closer to your job and stop crying. No on forced you to live in McKinney and work in Dallas. We have a 4A and 4B Board, how are we going to pay for it?

I have a disabled adult son. I have to transport him because the local bus service only runs once per hour and then can take an hour or more to get to his destination, which is a 15 minute drive from here. We don't need big buses; we need frequent buses.

State Legislation must direct more state funding to build and maintain state transportation infrastructure. We do not need more toll roads.

I wish there was more public transportation into McKinney or further into Frisco, possibly prosper.

I am the special education director for Community ISD and while I do not need public transportation, the students I serve desperately need this. We cannot place our special needs students in jobs or with DARS services because our students have no transportation.

Special needs individuals have limited employment options and the access to reliable transportation further limits their opportunities. Having local public transportation to certain business/companies would greatly increase their employment opportunities and their overall independence.

Need a Regional Plan. Need to get away from individual cities buying in. It has crippled public transit. Need to consider rental bikes and bike lanes in congested areas.

I would like to use it, if it was more convenient.

I am 75 yrs old and cannot drive at night. Would be interested in anything that keeps me independent.

My disabled son rides DART Paratransit 5 days a week to and from his dayhab program in Garland, because that is our only option for his transportation. For that reason, we have to live in a community served by DART, but because DART has no competition, the service is expensive (\$30.00 a week) and not terribly good. It would be nice if there were a competitive option.

North Texas is diverse, with employment centers not concentrated, and communities are self sufficient. There is not a focal point so we will be subsidizing public transportation for a few for multiple years. Be smart about mass transit.

It's not transit, its public transit. There is already transit everywhere in the form of personal automobiles, bicycles, and your own two feet. Please make that distinction.

I work for the City of McKinney....as does my husband. We would love to take transit from the Richardson/Garland area to McKinney to work as would many within our office.

WE LIVE JUST OUTSIDE THE WYLIE CITY LIMITS, BUT STILL IN WYLIE SCHOOL DISTRICT.

It is extremely difficult for anyone who does not or cannot drive to get transportation in Collin County, especially if you don't live in Plano. This limits people on options for work and social activities.

Need transportation for disabled and elderly individuals in Murphy.

For 16 years had dedicated ride on CCART, then lost job and cannot get dedicated ride back now. Have to call in daily and no guarantee of ride anywhere.

I would ride the rail everyday IF it had a northern East/West route! Today one must go to downtown then out to Irving, then BUS to closest stop. Takes way too long! A rail that ran along 635 and out to airport (with stops along the way) would be ideal!!!

Would love a DART rail like Plano facility.

I would love to use DART rail to get to work!!

No

Public Transportation is very important. The more accessible for people it becomes the more it will be used. I haven't owned a car most of my adult life. One is limited in choices in life by accessibility of transportation.

Public transportation including the boarding areas must be made safe for the passengersno thugs, panhandlers or free riders must be allowed or all the money spent will have been taxpayer waste.

I have observed the DART busses in my neighborhood but do not know how to access them, nor do I know where they drop you off.

I feel if we had better quality transportation for the disabled and not only for the disabled but also for the general population it would be a good thing. After hearing on the news about Logisticare and how they treated the consumers is unacceptable.

As the Dallas area grows and gas prices continue to rise, so too does the need for dependable public transportation. North/South is covered fairly well by DART rail, but there is not a good solution to East/West.

I would take the train to work (near TI campus) if I could take a bus to the Parker train station. There is no bus service in north east Plano.

Extend rail up thru Sasche to Wylie from Garland or run a spur from Plano to Wylie.

I'm not in favor of HOV lanes. They are not realistic for people who work other than very set hours (because they cannot reliably commute together). The ones on 75 Central are also very dangerous with people trying to get in and out where they shouldn't. Please, no more of them. Lets spend money, and have lanes, only for everyone.

We would prefer that DART light rail came out to the McKinney area since we would be more likely to use that service. It would be nice to be able to ride into Dallas to places like the DMA, Dallas Zoo, and Arboretum.

I hate having to drive back and forth to work each day. It's a two hour commute (1 hour there and 1 back). It's too bad that DART rail doesn't come near my house because it stops near to my work.

We need a cross county (East-West) connection where I live.

More dedicated bicycle paths, more ways to cross busy roads safely, sidewalks from George Bush Rail stop to Jupiter.

I have visited Denton several times for social functions, and etc--I see bus transportation use their--why does MC Kinney not have any if this type-- of transportation when this city for a few yrs. was named the fastest city in growth--seniors such as myself enjoy attending different kinds of functions--not really wanting to drive in heavy traffic any more--actually I hear younger people say the same thing--there is much culture to see and enjoy in other cities--we live in a melting pot of so many different cultures--I personally would use public transportation.

We need the DART rail in McKinney in 2013.

Would be interested in having public transportation available in the rural parts of Collin County. Used to live in Plano and moved to Anna.

Bicycle infrastructure is very important as I prefer to commute by bicycle. I have found that it is only slightly slower than by car and in line with public transportation speeds. Additionally, I enjoy a workout while commuting and interacting with other bikers.

Develop a mobile app that shows buses moving on the city streets so one can calculate better when to be at a specific bus stop, or when the bus will be at the stop.

Public transit is not safe and is not convenient. Spend more time waiting for ride and on a slow ride to destination than it would take to drive yourself.

Would love for the DART train to come to McKinney. I believe there are a lot of people that would use it to get to and from work.

We need a DART rail to follow major tollways like 121, 190 and the Dallas North. If we did - I would use it EVERY day! I hate paying the tolls!!!! And, why doesn't the current DART rail extend to McKinney?

If rail and bus service were available to and from Allen (where I work) from Plano (where I live), I would use the service much more frequently than I do now. Since it is unavailable I cannot take advantage of what public transit options do exist.

More bike lanes and sidewalks that aren't challenged by being too narrow or the presence of power poles, broken glass and other road hazards that make riding the sidewalks dangerous. Try riding a bicycle from Shiloh Rd/Park Blvd to the Angelika movie theater in West Plano -- a death wish! Very difficult to ride a bicycle around Plano. Really appreciate the bike lanes that have been added. Would love to see more buses -- perhaps smaller ones that people can easily hop on and off of, pattering around the main thoroughfares (we enjoyed this easy kind of service in Caracas, Venezuela). LOVE DART RAIL -- Please don't make the price for parking/tickets so hi that it's not even affordable. Aren't the people riding DART actually doing the community a favor by contributing to clean air? Shouldn't they be rewarded instead of punished? Thank you COG for all you do to make our transportation better.

To and from shopping centers

Thank you for composing this survey to deal with transportation in Collin County.

Would like DART to come to McKinney

If the DART line ran all the way into McKinney (and the stupid city of Allen would get the hell out of the way and let it through) I know many people who would, or at least strongly consider riding DART to work into Plano, Richardson, and points south... including myself, rather than driving! At least part of the time.

I would like to see people use golf carts to take kids to and from school via the walking trails.

Having a rail service in McKinney would be great for me. Ride the train from Plano to McKinney and back again would same on \$\$\$ for gas plus maint.

Combo transportation from bus to rail. New Orleans offers a 3 day pass on either type of transportation which was very appealing.

My daughter has a seizure disorder that prevents her from driving. Public transportation access is critical for her long term independence.

Need public transportation

Not really interested in bus services. Would like to see DART rail out in McKinney, with a parking lot so could take rail into town.

In this day and time, I think it is time to bring Railway to McKinney and beyond and AMTRAK would also be a blessing.

From McKinney or central Collin County, a DART rail or bus terminal would be helpful to get to Dallas or Fort Worth or other popular work/entertainment areas of the Metroplex.

Transit at the expense of 4a/4b is not acceptable.

My son is special needs, so unsure on when he will be able to drive. However, transportation to a job once he graduates will be important. Ergo how I answered, to provide a local area transportation options.

It would be great if the DART rail extended further north in Plano.

McKinney needs to be more bicycle/HPV/trike friendly. Designated bike lanes are a hazard to cyclists and motorists. I prefer a Plano-style marked bike route.

Been in other cities (St Louis for one) that have a great DART system. Dallas needs a rail system that you can take all over the city. Been in St Louis when the Cardinals play baseball the rail system is packed. Boston has another decent rail/bus system.

DART rail would be good. I don't think there is enough riders to make buses worthwhile.

My family uses DART for leisure purposes, and benefit from DART more when there are community-wide events.

Personally, rail service is my preferred method of public transportation and I would welcome more of it. The extension of DART's Red Line from Plano to downtown McKinney, for example, I believe would be a positive for the area.

My 23 year old lives in Dallas; she had to move there due to lack of public transportation in Collin County. When she takes DART to come home, it takes her 3 hours to get from Park Lane to Frisco with the rail and bus.

Prefer to drive, because it seems safer.

Rail is preferred because of its speed, but it's not available in McKinney.

Bus services would be great.

None

We need public transportation for young people to get to college and to their jobs. Also we need options for those who want to go out and drink alcohol and have affordable options other than driving. Too many teens are allowed to drive because the parents don't have any other choice. I would use public transportation to avoid parking nightmares at places like the mall and PHP.

I don't actually have a lot of information about what is available through CCART, but public transportation is going to become more and more important to my husband and I as we get older and possibly become unable to drive ourselves where we need to go (grocery store, bank, etc.). A rise in gas prices might also make our driving ourselves too expensive.

DART must strive harder to work smarter and not waste the dollars they have. Your DART stations are poorly designed, the failure to move large crowds, the bad publicity: all this makes it hard to sell mass transit to affluent communities that think this is just another 'gift' to poor people. You'd think nobody at DART ever thought to consult NYC to learn how to run the joint.

McKinney desperately needs a DART rail station.

Our taxes are too high due to the maximum school taxes. Public transit would be nice but not at the cost of higher taxes or more Bond debt.

More and more seniors are moving here because their kids and grandkids live here. Seniors cannot even take evening trips from the senior center because no transportation is available. Seniors need to get to grocery stores and other shopping areas as well.

Would like to see this subject addressed in the McKinney News Letter.

Public transportation does not serve my need right now, But it is good to have service to the DART rail, In case it is needed; Time is very important to me, And public transportation wastes too much time.

There is no way for me to take the DART rail to my school where I teach, but I use it for city events.

Yes, I would love to see DART rail or commuter bus service come to McKinney. We are too large to rely on a community bus, such as C-Cart, which does not travel anywhere I need to be for work or shopping. I work in Plano next to the DART rail station. It would be wonderful to take dart rail or commuter bus to and from McKinney and Plano. This study is long overdue.

I would love to be able to take a bus or have my child take a bus within McKinney to cut down on driving.

Present set up with CCART not workable. Need to transfer at main CCART terminal to get around town.

As McKinney grows so should the transportation system to not only to accommodate the elderly but also the whole community.

I lived in Chicago. Public transportation was great there. It will NOT work here.

We like to use the DART rail for special events. Going to the zoo, state fair and AAC.

I travel by bicycle frequently. Please provide a safe access and planning for bicycles on Collin county roads.

Connect the bike paths, please. PRT Plano > PRT Richardson. Chisholm Trail > Richardson trail via Collin Creek mall.

How about speed train connecting DFW Houston Bush Intercontinental and Austin. This will save a whole lot of time gas and frustrations traveling to & from these cities. It will have a great economic impact to the three cities & the whole state.

DART light rail needs to have service in McKinney.

I would love to see DART extended to McKinney.

Would like to have transportation to DFW and Love field. This is clearly the need.

Would like to see light rail come to Allen and then to McKinney.

I love using DART Rail if I have to go into Dallas or Fair Park. I might would consider using it more often if it was available to McKinney either via Bus to Rail head or an actual station. I hate having to add Parking Cost if I have to go into Plano to catch the train.

No

Yeah, enough with the incessant road construction.

Public transportation is important for those who do not have their own vehicle but need to get to work or around town for errands and etc... Unfortunately, it is also by those who have no intention of using it for that purpose. (I.e. access to various areas for criminal activity and etc.)

I am legally blind and cannot drive. Right now my work is in North Dallas and I live in Plano. We are moving to a new building in March located in Frisco. As of right now since Collin County does not have transportation service between these two cities I have no way to get to my job that I have worked at for 15 years.

There needs to be a shuttle/commuter service to run strictly from neighborhoods to rail. As it is setup now, going from rail to even close to most any neighborhood is a 20 minute ordeal because the routes are too long.

I think other neighborhoods should think about a trolley type system like Craig Ranch (I think our homeowner association fees sustain it). I'm sad ours is floundering, but if there was something for it to connect to like a DART commuter bus or city bus stop.

It is a pity that the DART rail never came all the way to West Plano. It is inconvenient to have to take a bus to go to the train and then take the train. That is cumbersome and takes a lot of time especially when the bus schedule is not frequent enough.

I would love for a subway or rail system that went from the outlying communities like Anna to places in Plano, Frisco, and Dallas. Not only would I take it instead of driving, I could visit shopping and art centers in Dallas that I don't like to drive to.

Local (in city) bus service requires a heavy subsidy. I do not think it is an affordable option for McKinney. It is less expensive to provide cabs for those who need rides, or a dial a ride than getting into the bus business. I speak from experience with being on a city council for a city that had local bus service and it required a significant subsidy. Once you start something like that, it is virtually impossible to eliminate it. Happy to discuss this with you.

Need DART Rail in McKinney

Collin County needs more rail options. I use mass transit to go Downtown, but I have to drive 25 minutes to reach the nearest DART rail station. The Cotton Belt project and other rail services that would serve residents living west of the DART red line should help.

Better public transportation would make us world class, reduce drunk driving, and allow non-drivers greater freedom. In North Texas it is impossible NOT to have a car. And everyone travels one person per car. This is unsustainable.

The orange line goes down 75; the green line goes down George bush and 35. I would like a rail that goes down the Dallas north toll way.

The only reason for my replies that nothing would change my mind about driving is because I live 3.2 miles from work, so it would not be practical to take a bus/train. However I do think that public transportation is VERY VERY important and needs to be expanded in the D/FW area. Other major cities such as New York, Washington DC, Chicago, and Atlanta all have extensive public transportation.

I would love to encourage the cities of Allen and McKinney to join the DART system, so that rail service could be continued up through 380 (ideal stops at: Downtown Allen, Stacy Road, Eldorado / 75, Downtown McKinney, possibly the stadium on Redbud.

We're getting tired of your Agenda 21 planning and following the planning of Plano and Dallas. You're going to destroy what McKinney has become.

Get DART Rail in Order!!!! Get the freeloaders OFF. Get the Drunks off. Have security and PD more visible.

The DART Rail needs to get north to at least McKinney. It should probably go to Sherman due to the growth in the area. I used to ride the DART Light Rail every day. I do not like the paid parking at the Plano lot.

I have been in McKinney for 25 yrs and this is one issue that really concerns me as I approach my 60yrs. We have never had local transportation for the size of the city...surrounding city's.

Need DART Rail service in Colin Collin on the West side.

Yes, I am a licensed social worker and I provide counseling services for the elderly and disabled in Collin County as myself employment. I am highly concerned at the isolation that many of my clients experience due to lack of transportation.

We came from Chicago where public transportation was terrific. The traffic was still heavy if driving but the trains were loaded every day. Parking is so expensive if you drive and an extended rail system here would be fantastic for everyone.

Think public transportation could really provide more of a needed service, but I believe in McKinney, those who have cars would rather rely on themselves than using public transit.

Local taxi service to get from McKinney to doctor appointments in Dallas, Plano etc would help older persons who have difficulty getting to doctor appointments.

It would be nice to have transportation to Collin College. If so, a grandson would live with us.

Would definitely use local bus and transportation to DART if these were available in McKinney. And also bus service between McKinney & Frisco.

I should try harder to find out about local McKinney transportation - are there schedules available somewhere?

It would be really helpful to have more daytime and weekend bus service.

There used to be a CCART that ran on Virginia, that my son would sometimes take to different places in the city, but they stopped, and my son works here in McKinney at 121 and Custer, I work in McKinney as well, but our schedules most time clash so I have to take off work to get him to his job. Public transportation would be great right now so that he could get to work.

DART from McKinney to Dallas is a must.

Extend the DART rail to McKinney

Public transportation is not a big issue for us since or jobs depends on driving because we are realtors. Although when we want to go to events in downtown or even Plano without driving there is no means do so. So we drive ourselves or drive to the DART station in Dallas. I would like to say that some of the issues with transportation

are mostly with the major road on ramps and off ramps during rush hour. I feel they are poorly designed to handle traffic at this time of day.

Public transportation is very important to all the people living in Collin County. It would lessen the congestion on our roads, reduce pollution and open up more places for people to work and seek work who do not drive.

Use DART rail at times for evening and weekend events in Richardson, Dallas, etc. Would like to see better access and would start to use more.

City busses to cover most of the city area needed. Need subsidies to cover cost of provided the service to all the city. If only a limited part of the city is covered then the service will be used very little.

I lived in DC for 5 years, metro was great, safe, and protection from the elements. Dallas rail transit offers no protection from wind and rain.

Please provide better access with sidewalks and bike lanes. In a lot of areas sidewalks do not connect and make walking anywhere dangerous. Also, bike lanes would make commuting on a bicycle much safer, riding on a bicycle on the sidewalk is more dangerous.

I am visually impaired and, if called, cannot get to Jury Duty in McKinney. I could in Dallas. DART is usually good if I'm lucky and the transit schedules mesh well. I spend a LOT of time waiting for buses and must walk half a mile to catch the nearest bus.

I would like to see commuter rail come to McKinney, but am reluctant to support it because of the crime that seems to follow DART rail services.

City of McKinney and Allen need to develop a transit plan and allocate a portion (at least 1/2 %) of the current sales tax for a public transit system. The best solution is to joint DART, but if the sales tax commitment prevents that at the moment, committing at least 1/2 % would allow the development of some bus service. Rail is not necessary and in fact a BRT option using DART ROW which connected further south than Parker Road would be a better option.

Need DART rail out here

DART HOV Lanes need to stay with two people minimum like is in the rest of the country (USA).

I hope that traffic congestion improves as road projects are completed.

If DART rails extended into McKinney to get to Dallas I believe lots of people would use them more often.

Extending DART to the North would be perfect for me. I would definitely leave my car at the station parking lot, and ride to downtown Dallas.

We use to use DART a lot to go into Dallas from Plano. We would like to see a bus line to get to the DART rail.

DART rail ridership would increase by a large factor if service extended until 3am. This would not only increase business revenues in Deep Ellum/Fair Park/etc because more people from the far north suburbs like Plano would be willing to travel there and back knowing they could get home safely on the rail without having to drive drunk, but it would also reduce the loss of life from drunk driving. Only a skeleton schedule would be needed, one or two runs per hour. Also, Arlington really needs to join the 21st century and get over their bigotry about public transportation inviting the homeless. UT Arlington students could REALLY use some damn public transport. The TRE runs right over Arlington and doesn't even stop!!

I live at Country Lane Senior Community in McKinney. My MR daughter lives with me. I would like to have private transportation to day rehab. There was an incident on the CCART bus when I was not with her. She was with her care giver.

Rail service to both DFW and Love airports would be appealing.

We need the rail in McKinney, it takes too long to get anywhere from here.

Would love to see a DART Rail system in McKinney to other cities.

Public transportation is very important for the growth of a city. Please consider adding public transportation to west McKinney, Prosper, and Frisco. Thanks

Here in Plano it's tough to even catch a cab. I have a friend who relocated here and his car died. He had to quit his job in McKinney since there was no way to get there. Now his job search is confined to a 2-3 mile area so he can ride his bike to work.

Please consider this a vote for development of the Frisco line.

Frisco's demographics do not denote a need for public transportation.

Remember that the disabled need to get to work to help contribute to the communities and themselves.

Population density is insufficient and travel locations too decentralized for public transportation to be anything but a gigantic money loser for Frisco.

My children do not drive and it is very difficult for them to get jobs in other areas. This community of Wylie is growing fast and we need public transportation for all age groups and more sidewalks since many people without private transportation walk.

DART should be ashamed at the scale of money wasted....

Would move out of the area if public transit came in. Chose Frisco specifically because there is no public transit.

Remove obsolete CCART stop markers. Publish accurate CCART routes.

Stop tolling roads already paid for (SH 121 section from DFW to Hillcrest that was fully funded before tolling).

Light rail up and down Dallas North Tollway.

I not only do not want public transportation to ever come to Frisco it is not necessary or needed. I grew up in Irving Texas. That city has wasted millions of dollars on empty buses for decades and in effect subsidizes public transportation for its much larger neighbor Dallas. Dallas finally got something that makes sense when they put in light rail.

I feel that it is very important for McKinney to have access to good public transportation, preferably a DART station of our own, or at least good bus service to the nearest DART station.

Without rail service any attempt to bring mass transit into Frisco will never work.

I would like easy access to transportation for the elderly.

Would be willing to use commuter train system if it was extended to McKinney.

Run CCART from stops to events downtown (and late weekend nights to discourage driving). If already doing so, better advertising is necessary.

I would not like to see public busses all over our streets, they slow traffic and from what I have seen in other cities they frequently run nearly empty. A very expensive enterprise for the taxpayers.

If possible provide specific transportation to and from events occurring in and around the downtown and surrounding areas. Also maybe add shuttle service from a remote location to the events, say from a high school parking lot etc.

DART RAIL IN MCKINNEY

As I age and realize that I won't always be able to drive myself, public transportation becomes more important to me.

At the present time I am able and willing to drive most places I need to go. However, I am approaching 70 and realize my circumstances could change. If I could not drive, I could not stay in my home, as my neighborhood is not served by any form of public transportation.

Bring the DART rail out to McKinney or have some kind of transportation from McKinney to Parker Road where we won't need to pay the \$40.00 month for parking.

Extending DART Rail Service beyond Plano would be a great idea, especially since there is a series of out of service tracks that could be leveraged.

I am legally blind so I can't drive a motor vehicle anymore. I depend on friends and the public transit to give me a ride to various places, if it is too far for me to walk to.

I am a proponent of public transportation to reduce pollution and traffic congestion.

I would love to have the option of catching DART Rail from McKinney to downtown Dallas. For me, the Parker Road station is not convenient as I could almost be downtown in the amount of time it takes to get to the station off of 75.

Public Transportation for the Historic and East Side McKinney areas to DART rail mail enable financially stressed folks to work in Plano/Richardson/Dallas.

I would like the DART Rail to come to McKinney. It would make it easier to go to downtown Dallas for day trips etc.

I think DART needs to extend service up to McKinney. I wish there was public transportation to Arlington Sports complex.

Wish DART rail was available from McKinney to Dallas.

I would LOOOOVEEE to see DART come to McKinney. We have no interest in Bus Service.

I would love for the DART rail to come out to Anna. It would make my transportation a breeze and I would be able to cut down on my car usage almost all together.

Extend DART rail to McKinney!

Only lived here 3 years and cannot believe that with a city, McKinney that is growing so fast that there is no rail service. US 75 are a nightmare. Need a car to go most anywhere. I hardly ever go to Dallas, just do not want to drive and the DART is too confusing.

I would use the DART rail to get to work if there were more cross-town rail options and if trains ran more frequently.

I don't believe that local public transportation is feasible in Frisco. Places of interest and homes are too sprawled out. I see no sense in spending a lot of money for longer distance transit either. People go in all directions when they commute and you'd have to work at least close to a transit stop.

Would consider public transit to my office on those days that I can go to the office and stay. Need more information on the routes.

I would love to see the DART rail come to McKinney as originally planned. If Allen won't approve it - then put tracks down and NO stops and continue to McKinney.

I would use the DART rail service to go to work if it was available in McKinney.

I would like to have DART go all the way to McKinney, not stop at the Parker Street station.

More bike trails would be nice.

I would like to see the DART rail service extended to Allen and McKinney.

As stated in the article, most Frisco residents like myself work outside the city. As a consultant, my work may be anywhere in the Metroplex. The problem lies with the fact the nearest DART rail station is approximately 12 miles away in Farmers Branch.

My daughter lives with me. We moved here from San Antonio, Texas. Their public transportation is wonderful. When my daughter moved here she had no transportation. Finding a job that was within walking distance was almost impossible.

Yes, I strongly suggest extending DART rail to northern city, such as Allen & McKinney. When I lived in Dallas/Plano, I didn't have the transit problem since these cities have perfect public transit service. But now I have to leave home much earlier to because it takes so long to travel there.

I have used DART Rail for 9 yrs and think McKinney should have a station so we would not have to drive to Plano to ride DART. Also, I recently broke my ankle and can't drive so it would be very helpful if there was a commuter bus to the DART or a DART station in McKinney.

Not sure it's applicable for your survey, but one form of mass transit that appeals to me is a rail service between cities in the DFW area and along the I-35 corridor between DFW and San Antonio.

McKinney should join DART.

I think we really need a rail service to connect with the one in Plano. I think that would really help people. Also I think we need one going to Denton for kids going to school and also people working there. Mass transportation is going to be the way of the future. We needed it several years ago. So far behind. I have friends that drive to Plano and ride to downtown Dallas where they work. They love it. No traffic. Have ridden the new cars at Denton and they are nice and ride like a top. We went all the way to Fort Worth, had lunch and returned. So nice. No traffic. Like Denton Transportation, they have the rail but also have bus routes. This helps so much. We need this mass transportation in the worst way. We met a lady on Denton rail and she rides from Denton to Dallas and back every day. She loves not having to pay \$200.00 a month for parking and not having to drive 35. She just sides back and relaxes. She said it is wonderful to have this. Go ride it and talk to people to see what they think and need. The work people.

Yes public transportation would make it a lot easier for my children to get to school; I don't know why CCART discontinued most of their routes to begin with.

DART offers only a few routes within Plano and those only seem to connect to the Red Line. I'd like to see routes that offer faster transit times within Plano.

A city bus would be nice with reasonable schedules. This would enable people to get around and back and forth to work. CCART is just too hard to schedule especially when you need a ride every day and in retail your schedule changes so quickly and C-Cart is not flexible at all!!!

More CCART stops and better lighting and weather protection while waiting for the bus.

To have more transportation in the evening.

When we lived in Chicago, we used the El fairly frequently, but we were a lot poorer and traffic/parking was significantly worse. We would probably never use it now.

I would love to see the DART make its way up to McKinney!!

Safety is a major issue these days especially for young women who might be easily taken advantage of.

I've used it in other cities where it is widely available and I haven't used it here only because it isn't a part of the options - I wish it were!

I wish Frisco would participate with DART. There are many Frisco residents who work downtown Dallas. We have to pay to park at some DART parking lots because Frisco does not participate with DART.

I like to see DART move into all Collin, Denton, Dallas, Tarrant, and Rockwall counties. We need to have one big bus and transportation network in DFW area. I wish cities/towns and county leader would work together to build a big transportation system together.

Bus routes to metro area of Dallas and Plano area would be an advantage. Northern Collin County will continue to grow. Developing an exceptional bus transit system similar to one utilized in NJ/NY Port Authority bus system would reduce traffic and make better use of our HOV lanes. We have a huge dependency on our automobiles. We need alternatives like convenient bus routes before we become like so many other gridlocked cities in the South like Houston, Austin, Atlanta and even worse LA! Simply building more lanes will not solve our transportation situation. We will need to educate the public that a rail system in conjunction with a bus system is the way to a cleaner and more efficient transportation.

No

I feel if Collin County could be one of the first places to use the Google cars it would be amazing. I would even use them for my family, in order to get places. This technology is so economically efficient and less traffic.

I think McKinney needs to connect to DART rail and CCART expanded for local transport. I have always felt that the public that depends on public transportation needs to live where it is available. I chose to live here because we don't have a system such as DART and the T.

I have not lived here very long but knowing the public transportation options would be helpful. Perhaps a mailing to new home owners/drivers/community service accounts for example with a list of transportation resources. Most of what I know came from my realtor. I travel from McKinney to the airports once a week and would love to leave my car in McKinney.

Yes, I would use DART rail or commuter bus service to and from work every day. Our city is now too large to rely solely on community bus service, such as C Cart, which does not travel anywhere I need to be for work or shopping. I work in Richardson, not far from a DART rail stop, and it would work well for me to have the option to use dart rail or a commuter bus to and from McKinney and work in Richardson. It is long overdue for this transportation study.

Our city is too large to rely on a small community bus service like C Cart, which does not travel anywhere I work or live. I live in McKinney and work in Plano, about 3 blocks from one of the DART rail stops. I would like to have the choice to use public transportation to and from work. This study for public transportation is very important and long overdue. is very important and long overdue.

It would be nice to have a DART system from McKinney to Richardson.

It would be great if the DART Rail came all the way north to McKinney. If I want to ride the train to downtown Dallas, I have to drive to the Parker station in Plano. It's just as easy to drive the entire way.

I agree with the senior help with individuals getting to doctors appt/senior center, etc... I agree with a cab/taxi type service. I disagree with public transportation, it brings crime and undesirables who decrease home values.

Would love it if the DART rail included McKinney!

Having public transportation would serve the community and add revenue to our county.

DART to airports: DFW, Love and McKinney

I wish we had public transportation from McKinney, Tx. to Dallas/Fort Worth and Love Field.

I drive a company vehicle and cannot use public transportation. My wife commutes more than 10 miles to work and public transportation would not be an option for her.

I would love for DART Rail to come into McKinney. It's the easiest way to get downtown Dallas.

I don't personally use public transportation but think it is important for a large, growing city to offer it. Occasionally, my daughter needs rides and, if I felt she would be safe, would consider public transportation. Our church used C-Cart to transport elderly who no longer drive to church. However, C-Cart stopped the service. It appears that public transportation is degrading, not improving, in McKinney.

McKinney could benefit by implementing public transit and could ease congestion on 75 by working with DART, or another transit agency, to provide services to connect with DART in Plano.

Would like to have public transportation in Sachse and Wylie.

I wish there were transportation for handicapped people who are MR and have communication problems to have a safe way to get transported to family members houses for visits. This would allow more connection with families and their family members who live in group homes.

I am a bike rider. I use CCART bus frequently and dial a ride. My problem with the current service is 1. No bus stop near my home. 2. Very limited bus routes.

CCART needs a route to and from the Wysong Campus. 24 hour service is need in McKinney 7 days a week. Not just on Monday thru Friday.

There should be bus transportation between the cities in North Texas to make commutes to and from work and shopping easier and to improve our environment. Traffic is too crowded and because there are so many stop lights that (due to heavy traffic) it takes a long time.

Would love to have a DART rail line established out here in McKinney to downtown Dallas.

We would love public transportation to go to and from McKinney and Dallas to get to the DART rail.

I would like to see the DART have train service all the way to McKinney. Central (highway 75) is getting very crowded.

Congestion in McKinney appears to be getting worse. Streets do not manage traffic flow well. Commuters still have to travel from McKinney to Plano for DART Rail. Congestion on 75 has increased in Allen, between Plano and McKinney.

McKinney needs DART rail - serving commuters that go into Dallas etc would drastically lessen congestion on roadways.

I feel that public transportation would be acceptable is if ran on a LIMITED schedule, and only to and from main points within Collin County (i.e. Courthouses, colleges, libraries, LIMITED/designated stops on main thoroughfares like 380, etc.) I am against spending money on transit.

Would like to see DART rail expand to McKinney and then have DART bus service all over McKinney.

Would love to see Collin allow the DART Rail service to come to McKinney. Tracks are already in place and I think MANY would use the service. It would not only allow folks to travel from McKinney (Collin) but would give access to others to McKinney.

I would like to see a DART Train station and bus routes to connect it in Frisco, TX.

I would like to have it as we get older, so there is a need here!

I think Public Transportation is key to a progressive city such as Frisco. I have always used public transportation where ever I lived. But in Frisco I have to drive to Parker in Plano to catch the train to get to Dallas. YES, PLEASE do your best to improve transit.

If I had a long commute I would definitely consider public transportation.

I believe a viable transportation system is essential to the prosperity of Collin County merchants and essential to the well-being of our county's senior citizens.

Every community needs public transportation.

I think I will always drive myself or catch a ride from family.

We need a public transportation serves our McKinney.

Would LOVE to have public transport available between McKinney and both DFW and Love Field airports.

County-wide transit would be great with connecting points to DART... but the reality is DART cities may feel burdened to support DART through sales tax and also a North Texas program. So, perhaps DART cities would be exempt and only non-DART cities pay for service?

Why doesn't DART get to McKinney?

I would like see DART Rail service in Murphy, not so much the buses. I prefer not to have to transfer, etc.

Bring the light rail line to McKinney.

My family would use public transit recreationally to go to Dallas for events such as the State Fair if it were available.

Traffic on the toll way and 75 is so bad but many people in Frisco/Collin co work in Dallas so to be able to more easily access the DART would be fantastic. As it is, to drive to a bus stop or DART station takes so much time already I just end up driving the whole way rather than stopping.

It is getting more and more expensive to park at DART stations and take the DART that it is almost easier to drive myself to work.

A DART rail or bus line would be nice from McKinney to downtown Dallas, Fort Worth, airport etc.

I would LOVE to see DART extend to McKinney! I work with college students who do not have cars or transportation and understand the hardships in getting to classes or around town (McKinney). If we had more CCART routes, it would serve our students, the elderly, and the community better. (Yes, I know about CCART and the cuts to their routes.)

Why isn't the DART Light Rail in McKinney already?

I used to drive to Parker Rd and ride the DART rail when I worked in Downtown Dallas, I now work at the intersection of the Dallas North Tollway & I635 and there are no good public transportation options. Congestion & traffic has steadily gotten worse in the last five years. I would love to be able to take the train to work.

Yes, we need public transport very badly so we can go to work on time without depend on ride, or worried about losing job. We cannot afford car and gas for each household for their daily activities. If we get public transportation in McKinney ASAP it will be very helpful for citizens and enviornment.

After visiting Europe, I'm a big believer in strong public transportation, especially trains/trams/light rail.

Public transport should become something everyone is comfortable to use, not just the underprivileged.

I am 89 yrs. old and won't be able to drive much longer. It would be nice to have public transportation so that I could make my Drs. Appointments and other necessary visits.

I am against public transportation due to the exorbitant cost of implementation and operation, the increase in crime that follows, and the inevitable taxes it will bring. Having lived in Dallas, Fort Worth, Phoenix AZ, and Washington D.C., and having been an observer of the negative effects that public transportation has on the taxes, crime rates, and efficiency of each of those cities, I assuredly state that further bureaucracy needed to run a leviathan like public transportation will only detrimentally and indefinitely harm our county's future.

Public Transportation (PT) increases taxes, this increased tax burden is not necessary within Collin County. PT will increase traffic congestion, accidents, crime, pollution, community degradation, etc. Additional expenses necessary for the placement of secure stops, PT hubs, PT and road maintenance issues, security, driver training, parking areas, ticket prices, etc. will also cost Collin County residents more that the return investment will produce.

n/a

The ideal system, although very costly, would include local bus or trolley service with bus or trolley designated lanes. This would avoid traffic issues.

Joining DART a bad idea. Rail too limited and too expensive. Keep local transit dollars under local control.

I'd love to see the DFW area establish a lot more commuter rail and bus service throughout the Metroplex. The Collin County area, I feel, is greatly underserved compared to other similarly sized, and even smaller cities in the US. There needs to be a marketing campaign, started with elementary age children, if attitudes are going to be changed about public transportation, and how it's use can be better in the long run for our crowded cities/roads and helping the environment. Kids are a good place to start, so that they grow up with the positive attitude and expectation to use public transport. I wish you would use the Finch CCART stop again. It's in front of my house and I use the CCART several times a week and I have asthma and it's hard to walk to the old court house stop.

We had a friend that relied on the CCART service but she said it was canceled for her...I think McKinney should have some form of public transportation, it's grown to a city now and not all of them are able to afford their own vehicle(s).

It would be truly wonderful if there was a service in McKinney that would come to my home, pick me up and take me to other destinations in McKinney. A reliable, timely service that I could call with confidence to pick me up again and take me home. An example would be if I wanted to go grocery shopping or to the beauty shop. Thank you for this survey.

McKinney needs public transport.... in all directions.

A much needed service to the community. You should also think about a service to high schools for those students who have no means of transportation.

Fixed routes in Frisco and Allen would help senior citizens/people with disabilities and people without cars to better access shopping areas.

The down side to the current rail service is the lack of express service between downtown Dallas and the last few stops (Bush, Plano, and Parker for red line). With a high percentage of riders going to those stops it is inconvenient and time consuming to stop so often.

We have used DART rail from Plano to Dallas, and would definitely use it from McKinney or Allen, if available. Would also consider commuting to work, if service was available, and times were right.

Need better availability to the disabled and elderly in our community. Many are unaware of CCART unless they have access to a social worker or healthcare provider that provides info by word of mouth.

I love Public transportation; it save energy and less pollution.

I would love to see the DART rail extend from Plano into McKinney. We often don't leave the McKinney area because of having to drive to Dallas. We enjoy going out but do not want to drink and drive. If DART were in McKinney we would certainly use it regularly.

More transit open locally would entice me to utilize for work and weekend. Safer, less drunk driving if late night services offered.

Would ride commuter bus from McKinney to Lewisville at least 5 days a week.

Thank you for the new bicycle lane use signage! I seem to be feeling less pressure and intimidation practices from automobile drivers.

We need transportation within McKinney. One should be able to get to the shopping centers and the hospitals.

There is existing rail and presumable right-of-way that the DART line could be extended to McKinney through N. Plano and Allen. I would certainly take the train and ride my bike more often if I could use this. As it stands, my office is at the end of the line so it is no use to me.

I like the idea of public transportation. I believe many people in McKinney would also be on board with this as well.

It would really be great to have public transportation, especially for short trips around town like to the grocery store, mall or other shopping locations. This would require night and weekend regular service routes. I don't want to have to wait an hour at a bus stop for the next bus with groceries and kids.

Safety on any public transportation is a HUGE concern especially for young women who may have to travel alone.

Was hoping the DART to Downtown Dallas would reach up to McKinney someday.

Convenient and affordable public transportation would definitely have a positive impact in diminishing the pollution from so many personal vehicles on the road.

Although our family does not currently use public transportation, I do think it is important for each city to have it. There are certainly those who rely on it, and the easier/more convenient it is for them to use, the better.

McKinney needs rail service to cities south of McKinney.

Need transportation on weekends/evenings. Need better communication to public.

DFW should embrace the opportunities public transportation offers to enhance its reputation as a convenient conference location, an easy-to-access city for locals and tourists, and an environmental champion. By extending DART Rail to outlying communities such as Celina and Prosper to the west and McKinney, Melissa and Sherman to the east, DFW would become a true metropolis and serve its citizens and its environment in the most positive way.

We used public transportation in Europe--mostly the underground. Both of us were raised traveling by bus and subway. We have a long way to go in Texas.

My parents hate to drive...but depend on me to drive them. Would be wonderful for them! They are both 84.

Would like train service to downtown Dallas.

Would ride DART Rail if it came through McKinney.

I wish there were a way to encourage employers to be more accommodating to bicycle commuters (bike racks, access to showers/lockers).

I would need to question the value of adding public transportation vs. the cost of it to determine if it is worthwhile.

A bike path near Central Expressway between McKinney and Allen would be nice.

Get Rid of toll roads, they are way too expensive!

DART rail service to other cities would be beneficial to the community.

First priority: McKinney to DART rail

I moved here from San Diego, which has a lot of public transportation. I was shocked to find out how little is available in McKinney. I was a heavy bus/train user in San Diego. I would definitely use those if they were more available around here.

I live in east of HWY 5 in McKinney and there are several low income families and senior citizens that do not have transportation for either them or their children.

Add DART, add more CCART stops including stops to more businesses AND schools!

Some bus service or rapid rail system to Collin county cities such as Allen and McKinney is very important to the overall growth to the area. Most of the cities in Collin County are growing rapidly, and it appears that the Texas transportation system is behind and not keeping up with the growth. If nothing improves, with the cost of fuel, it's only going to get worse. It would be wise to invest in rapid public transportation in Collin County now. There are other areas around the country that have had a system in place for years. North Texas cannot continue to rely on automobile transportation forever.

We travel in Europe and elsewhere and public transit is so important. Often we don't rent a car to tour/travel and only use trains, buses, etc. The USA is really missing out on good public transit.

It would be wonderful if DART could be extended to McKinney. Service to DFW or Love Field would be terrific, too.

Feeder lines needed to the DART Terminal in Plano.

I would gladly pay up to \$5/day to ride public transportation from my home to my office in Farmers branch/Addison.

Very needed in this area

Please extend DART rail service into McKinney and/or Along Dallas North Tollway.

We really need safe, economical, & safe transportation for our teens and young adults. With the costs of personal vehicles, insurance, and gas they need other options to get to jobs, school, and entertainment without having to rely on parents or friends for transportation.

With the rising expense of private vehicle transportation, both in fuel and highway construction costs, the need for public transportation is evident. Projects like the Sam Rayburn Tollway would have benefitted from light rail construction in the center median to serve communities between Hwy.75 and DFW Airport. And, if light rail had been extended from the Parker Road terminus to McKinney, the ability of the traveling public to move freely across Northern Collin County to Dallas and DFW would have been possible. And, at a time when Collin County is in non-attainment with federal air quality standards, the main contributor, the private vehicle, should be curtailed wherever and whenever possible. Finally, I find the continuing efforts, by some, to bring additional federal/local tax dollars to the McKinney Airport for prospective commercial usage contrary both to feasibility

studies contracted by McKinney itself and objectionable to the concept of McKinney and surrounding communities as residential neighborhood locales. The tens of millions of tax dollars dedicated to that facility have not, and will not, improve the public transportation requirements of our area, and could have been productively spent on light rail projects to actually serve our traveling/commuting citizenry. I have no quarrel with the airport as a center for fixed base operators and light industry, but the notion that our area needs additional airport capacity for commercial service is not logical. We need to have visionary decision-makers to look beyond immediate transportation needs, i.e. more roads, and parochial political concerns, and work toward a comprehensive, public transportation network for North Texas.

Any light rail systems being considered?

DART would need to be built closer to 121 and 75. DART rail would need to the north side of McKinney. Then DART buses would need to cross-connect east and west of 75 to meet the DART rail line that would go thru the center of town along the old InterUrban railway.

Keep government out of it. Allow private transportation to compete.

We are concerned if DART comes to Fairview what kind of people it will bring in.

A bus route to Plano DART line would be great...

An express from McKinney to/from Parker Road station.

DART rail need to come to McKinney so I can catch the train to work in Dallas. I work at the Dallas VA and it would be nice to catch the train in McKinney instead of driving to the rail at in Plano at Park Rd.

We rarely use the DART rail anymore because we have had bad experiences with young middle school kids harass us on the trains and we never see any DART police on the trains. We like the rail but just don't feel safe especially at night when we go to downtown Dallas.

Not being from TX, we're kind of amazed that there is no public transportation at all in McKinney. Our family would probably not use it right now, but I bet there are other people that would.

I think the area needs more access to the DART rail.

With the cost of EVERYTHING (except our pay checks) getting more expensive, especially gas and groceries we (the public) need alternatives to getting about in a safe manner. Hopefully this would also add new jobs for the public.

I would love to have a bus or rail system here.

DART rail should be extended to McKinney.

DART sub to Allen and Plano. My husband is blind so DART sub and bus would be great.

Would love to have access to DART Rail. Would love to go downtown Dallas more often but don't want to drive.

Rail service to DFW and Dallas Love Field is sorely needed. The need to drive a car to those airports is no efficient nor in the best interests of the environment.

Work at home

Having a rail system which parallels all highways (like 121) would get people between cities. The problem is getting off the rail and to your final destination if it is more than 4-5 blocks from the station are the problem.

Would like transportation available for my teenager to get around in the city and have transportation to malls in area and to Allen shopping district.

I would love to use a DART rail line, but I travel down the DNT, where there is no DART line. So, the DART is completely useless to me.

I am a believer in public transportation where it makes sense (urban and heavily populated areas), but not sure one way or the other if it makes sense for all of the McKinney area.

I believe it is much more important to have DART Rail coming to Allen and McKinney.

We need high speed rail.

I would have to feel safe.

DART rail from McKinney to the airport would be most useful. The current ticketing system to DART encourages free loaders since there is no gated access system.

I travel to the airport every week & DART train service would be useful to avoid parking fees.

Would definitely use the DART Rail or any transportation to get to the rail.

I find that transportation that matches the highways helps a lot matching the pathways we already take. For example major bus routes could run down the DNT or 121. Minor or local buses could take us to our destinations. Sidewalks would help.

I have tried to access information on line about bus service available in McKinney, but could not read the bus schedule. Still have no idea if the bus makes stops within the neighborhoods to pick up and drop off passengers or only stops at the pickup and destination stops.

It would be great to have DART rail north to McKinney or even Allen.

Please make sure that transportation is equipped for handicapped.

Gas is high, so it would be nice if public transportation was more baby/toddler friendly. Maybe targeting tourists more. Also a trolley that took people from neighborhood pickups to popular shopping malls (like the Craig Ranch Trolley) would be nice!

We do not need transit in McKinney.

Please bring DART Rail to McKinney or Allen.

I strongly suggest a DART bus connecting Frisco to DFW Airport. This will surely help for people like who are travelling every week and will save substantial money in either parking our cars at the airport or paying for a ride (to & fro).

DART Rail to McKinney should be encouraged to help retail merchants.

I won't benefit for any of the offerings due to my job I have to drive to work and drive, that my job. But for others I do believe buses, CCART, DART need to be more accessible for those with no transportation at all due to whatever reasons and age.

We like the convenience and it helps when the gas prices go up.

McKinney should not be considered nonresidential for the DART rail. We should get the same rates as Plano.

DART needs to come closer to McKinney than Plano, too far. By the time you drive there, you might as well drive all the way downtown.

Seriously need rail service to go into Dallas for major attractions, State Fair, museums, Dallas Zoo, etc.

Please do not allow the light rail system to be extended to McKinney.

I was a regular user of DART for over 3 years whilst working in the city of Dallas. It was a pleasant experience and would like to see DART up in McKinney.

We need light rail and more highways to get around.

Extend DART rail to serve City of McKinney with a DART rail stop at The Village at Fairview Mall area. This would be ideal as many shoppers and event participating crowd can use to come to Allen Outlet Mall and The Village at Fairview.

Even taking transportation, it leaves you at a station and not always near your destination. That's where it is lacking to us.

I think commuter buses to DART rail would be valuable but also stops within the community that made minor trips around town by bus possible.

I know Prosper is not currently in favor of DART light rail (I have been at all the town hall meetings). But I know we are keeping our options open, and frankly with the toll way and growth we will see - it may just make sense to put a light rail right up the tollway. (Else we will end up driving to Plano(now) or McKinney(future) to access the light rail) Most trips would be to Downtown Dallas to DFW airport.

Would prefer none

Bring DART Rail to McKinney ASAP!!!

We need Commuter Rail in Collin County to McKinney, Frisco, Prosper, and Celina. It needs to connect to Dallas, Ft. Worth, DFW Airport, Love Field, and Denton.

McKinney should have a light rail that connects directly to the Plano station. This would make the massive congestion on 75 in the morning decrease from everyone coming from north of McKinney.

Liked the idea of a commuter bus to the Parker DART station.

We do not need public transportation in Prosper.

Texas communities are spread out so the cost associated with increasing public transit rarely equal the benefits.

Having Bus lanes on 75 to parker or bush station would ease commuting schedule or having a direct train line to DART station access would be benefit if I could park in McKinney. Having gas or 7-11/dunkin donuts/post box avail near commuter train would be plus too.

ANY SCHEDULED BUS SERVICE FROM MCKINNEY AND/OR ALLEN TO DART'S PARKER ROAD STATION WOULD BE A QUICK IMMEDIATE EASY BENIFIT TO M-F WORK COMMUTOR'S NOW!! TIMES COULD BE ONLY MORNINGS AND EVENINGS TO CORRESPOND TO NORMAL START -STOP WORK HRS. WHAT IS TAKING YOU SO LONG????

I wouldn't be opposed to a DART Rail Station in McKinney, I would be concerned about rif raft riding up and causing potential crime. I don't ride DART except to attend special events (FAIR, American Airlines, and other Festivals). It could possibly help bring in more tourist for the Historic Downtown area events in McKinney. Safety and policing is a big challenge right now for DART. Not to mention, non-documented workers hanging out at the bus and train stations looking for work. Many are hard working, but there is a criminal element too!

People who can't afford a car should live closer to their job: More public transportation will diminish the quality of life in McKinney by attracting more poor people.

I would love to be able to bike to a DART rail station and ride the train to work. Too many cars on the roads and too much pollution in the air.

If the DART rail ran to McKinney I would use it much more often.

I think getting the information out is the most important.

Stop trying to waste my tax dollars on public transportation.

Need rail service along Sam Rayburn Tollway from McKinney to DFW Airport.

I would be more interested in having rail service closer to where I live than a bus service.

I think if more people had access to the DART train, there would be less traffic and it would help to preserve our environment. I would use the train or bus if there was a route that went near my home and work.

Public rail transportation is extremely expensive to build and is a burden to those who pay taxes. I do not believe it is feasible for Collin County.

In the past, Collin County hasn't considered public transportation, or even walking as a viable alternative to private vehicles. This needs to change. The demographics of Collin County have changed over the past few years. It is apparent that there are far more people than there used to be that need this service. Either they cannot afford to run a private vehicle, or are unable to do so for other reasons. Has it ever been considered how many people are on public assistance or unemployment for the simple reason that they cannot job search or obtain a job, because of commuting issues?

I would love the overground rail to come further North.

McKinney, Texas does not need DART to come into town. DART Rail and Bussing brings crime and all the Rife Raff Crap into town a lot easier from Dallas to include robbery's etc. into the community. Look what DART did to Plano, Texas. Crime rate went up after the completion of the DART Rail into Plano Texas / Collin County.

Rail service from McKinney connecting to DART and down the 121 Corridor to DFW.

I would consider if DART rail came up to McKinney...it's already by my office in Plano.

DART from McKinney/Allen to DFW would be great.

Light rail access north of Parker Road would be great.

I would love to see DART move north.... A McKinney Location would be amazing!

Transportation is need for people who live in CC and work downtown Dallas.

Really do need good information on what is available, possible a tri-fold, and in the future, connections to the airport. Used the Rapid Transit system in Cleveland, OH and it was wonderful to take it to the airport.

Not at this time

I would like to see a plan that also integrates bike lanes/commuting with other transit offerings.

I have a lawn business so public transportation would not serve me directly, but would be great to lessen traffic while I am driving around working. I would support any reasonable tax increases to go towards bus/rail.

Would like to be able to get to DFW airport on public transportation.

DART will definitely help to travel and to save money.

I own a commercial building at 108 S. Church Street in McKinney with several employees that live in surrounding areas, i.e., Van Alosty, Melissa, Anna, west side of McKinney, Garland, & others. This would give them options on whether to drive or use public transportation.

The rail system to go to Dallas would be great.

I think rail service will be important one day to other communities south and also west of McKinney. Something like the A train would be wonderful to all parts of the area. This should be started sooner rather than later.

I work in the health care field and working with the elderly or disabled a broader of choices would really benefit the people who don't have transportation to and from medical appts or errands.

I do not want to have sales tax dollars diverted from economic development to DART rail or other public transportation projects, unless road/highway expansion. I do not want further toll ways in Collin County either.

Since I lost the vision in one eye, I have limited the hours I drive and so much wish I had access to go more to different places and more often. I personally believe mass transportation would be a wonderful thing here. I used it a lot in Kansas City even though I was young and healthy and had a car. Just so much easier....especially for women. Yes, Yes, Yes...

Not being a native of Texas. You have to ask questions from your neighbors and many times they don't know the answers since they are from different states also or has a vehicle and not interested in other transportation.

Transit in DFW is currently inconvenient and unsafe. Transit works in areas of high density, which you see in some parts of Dallas. Collin County just does not have the density to justify a full transit system. I think your best approach is to offer dial-a-ride for the few who need transit. Our biggest untapped resource in Collin County are the empty seats in personal vehicles that travel from the suburbs to the inner city each day. We should be looking into services that match drivers with empty seats to people who are willing to catch a ride.

Eliminate the HOV lane on 75 from Allen to Plano because of the number of people using it illegally. This doesn't happen in Richardson where they enforce it.

I would love to have a fast rail service nearby that would allow us a faster and easier ride to downtown Dallas for example.

Public transit needs to serve the airports and other events in the Metroplex.

Would like transportation between cities, such as light rail.

I currently live in Craig Ranch community in McKinney. Previously, trolley service was in use but now, they don't exist anymore. If they could bring that back, it would be great!

DO NOT IMPLEMENT PUBLIC TRANSPORTATION IN CITY OF MCKINNEY.

If DART light rail gave service to McKinney, it would be a very applicable form of transportation for me. I would probably use it at least 4 out of 5 days a week.-Please consider this.

McKinney needs a better bike plan; Needs to become more bike-friendly. I'd much rather ride my bike to work and would if the city was more bike-friendly.

I'd like to see the rail extended further north than the current location.

A comprehensive rail system throughout the county would be ideal.

I am a disabled individual who needs transportation to and from my day center and work. In Wylie we do not have services available.

Consider streetcar or bus routes from neighborhoods to serve express (not slow DART) rail service to downtown/inner suburbs. If it's more than a 2 seat ride nobody will use it. If it's more than an hour nobody will use it.

I LIVE IN MCKINNEY OFF of 380 AND LAKE FOREST IF MY CAR BREAKS DOWN I HAVE NO WAY TO GET AROUND EXCEPT TO CALL A CAB WHICH CAN BE EXPENSIVE. I AM 64 YRS OLD RETIRED AND DONOT

HAVE A LOT OF MONEY LEFT AFTER I PAY BILLS AND BUY FOOD. A TRANSIT SYSTEM WOULD BE VERY IMPORTANT TO THIS AREA AND TO BAYLOR HOSPITAL THAT OPENED A FEW MONTHS AGO.

Would probably use to attend events or venues in Dallas if it were available, could come and go within reasonable time intervals and it was safe. Maybe I just need more information about what is available.

Public transportation should only be used in the poorest of neighborhoods... It is a drain on public funds; for every dollar in fares that DART receives, there are ten dollars in operating expenses.

Many people in McKinney work daily in Plano, Richardson, and Dallas. It would be beneficial to have the DART Rail extend into McKinney so that people could park in McKinney and ride the DART Rail into these cities.

I wish the DART went up to McKinney so it was easier to catch and use to go downtown or to DFW. If it did, then I would use it more often.

We use DART Rail for attending major events in Dallas such as the symphony, the zoo, musicals or museum district.

Bring the rail to McKinney.

I see a lot of people walking on Custer and Virginia and Eldorado area. I think maybe they could use rides. I would prob. use it if it was available just so I wouldn't have to drive in traffic!

If light rail was available and convenient and ran parallel to 635 I would use the service every day. But to drive to Plano to take it is not feasible, especially when the network does not cover a major business stretch like 635.

Would like to see more bus service, and also DART train service for the area.

I live in McKinney. I would like to have better access to the DART rail, maybe a park and commute to DART stop would be nice.

It would be great to have a trolley system or some sort of high speed rail.

More light rail.

I would really like to see better transportation offerings for mass transit to other parts of the Metroplex. Currently there is no viable option for me to use mass transit to get to work in Lewisville from McKinney. Even to get downtown I have to drive 15 miles to the closest DART Rail station, the next closest and safer option is 21 miles away. DART Rail along 121 would be the best and I think would get used as the community in northern Collin County grows. At the very least a bus route along 121 to the airport would be a great start. I travel from time to time and it would be nice to be able to at least catch a bus to the Rail station and utilize the new DART service to the airport.

Public transportation is ultimately subsidized by town residents and turns into a significant burden on the many for the benefit of a few. If you wish to work downtown, I suggest you buy a home or rent an apartment nearby and leave our community alone.

Public transportation is an important service. While it might not fit my individual needs there are many individuals it works well for. I have taken the DART rail to the state fair and this is a GREAT way to travel to the fair.

Public transportation, particularly in the suburbs, is a scam whereby the many subsidize infrastructure that benefits the few.

I believe that McKinney was dead wrong in voting down DART to come north. McKinney needs to wake up to can better serve our community.

Extend DART farther north.

Because I am almost 80 yrs old, I base my opinions on the fact that I don't know how much longer I will be able to drive. I may need city transit for transportation in the near future.

Create an underground rail that is safe and accessible to all routes for all communities.

Additional bike routes (separated from auto traffic) need to be added to provide safe passage for riders between their homes and local shopping sites.

Would be a waste of money in McKinney. Period.

We have used the DART rail to get downtown and for Stars games previously. However the last returning trains are too early in order to enjoy a night on the town and creates undue stress worrying that we'll miss the last train. Also the later it gets the worse the crowd is, reasons why my wife doesn't like to ride without other couples traveling with us for safety reasons. I have also considered using Dart Rail to get to the airport from McKinney and forget it, too long of a commute, too pricey and too many transfers. Lastly, the nearest Rail station is in Plano and we must drive 15-20 minutes when if we just drove from the house we could get downtown in as little as 30-35 minutes. I work in Plano and having the Rail station in Plano doesn't help me.

Several people in my area work at the same hospital in Plano that both my spouse and I work at. It would be nice if we could get a Van Pool going but with ALL the different shifts it would be impossible, but a scheduled route at specific times would be nice!

Public transportation should be 100% self-sufficient. If it requires taxpayer subsidies or diversion of gasoline excise taxes, then I am against it. If there were heavy rail service from Collin County to Saint Louis and the price were less than driving and it took no more than 11 hours (and no taxpayer subsidies), I would use it.

Some sort of commuter rail or bus system to Bonham, TX. There are a large number of VA employees that commute from Frisco, McKinney, Allen, and Carrollton out to Bonham. There is a ride share option, but there's a wait list and not always convenient to everyone. Plus employees work shifts 24/7; Rideshare is only Mon-Fri.

It would be nice if the DART rail would come to McKinney. I would use this every week day to come to work.

A public transportation option from McKinney to Dallas or to the DART rail service in Plano should be considered. I would consider taking public transportation from McKinney to Dallas if there were an express rail line. Is DART considering extending the rail line to McKinney?

Aunque trabajo desde la oficina en mi casa, tambien viajo a muchisimas ciudades dentro del DFW Metroplex y casi todos los dias a las 8 am deseo que hubiese transporte publico desde McKinney a cualquier otra ciudad (Flower Mound, Fort Worth, Waxahachie, Rowlett). [Although I work from the office in my house, I also travel to a lot of other cities in the DFW Metroplex and and almost everyday at 8:00 AM I would like to see public transit leave from McKinney to another city (Flower Mound, Fort Worth, Waxahachie, Rowlett)]

COMMENTS FROM PAPER SURVEYS

Monthly passes availability.

If prices wouldn't keep getting higher and have a route that went to Garland on weekends for my job I would have to ride bus.

Would love to see DART paratransit-ADA to all of Collin County. Especially McKinney from Plano. Have all paratransit and other transportation with a lift on all vehicles. More sidewalks would be great. Would like for them to be wheelchair accessible.

The DART paratransit driver said I can only have 2 bags but it is difficult to keep up with the limit especially when I go grocery shopping.

I don't like it that mostly taxi drivers type into their GPS while driving I think it's dangerous.

It would be nice to have public transportation on weekends and be able to commute to other cities.

I can't ride anything but curb service I am not able to walk to any city bus stops so far away I have a driver's permit with CCART.

DART on call Plano. There are 2 active senior homes.

Connect Plano Pkwy/Independence Pkwy with Preston Rd route; serve regularly and often to allow keeping medical appts. Shop at major grocery etc.

Just need to go doctor visit.

I wish the CCART buses still ran until 9:00 pm. I wish they stopped directly in front of destination instead of having us walk and the cost should be cheaper.

Since McKinney is expanding in population and more senior citizens are moving into the city it is essential that mass transit is available in our city.

There should be a transit that you can ride from McKinney to Dallas with having to transfer from one bus to another. Takes too long waiting on transit.

There should be a train running through McKinney Allen and the other cities because that's important transportation.

So glad we have CCART the driver like John Vince and Mary also the operator so professional and courteous never late for work.

No

I have enjoyed CCART in the past but find it's more difficult to schedule during the day now.

None that aren't addressed previously.

Wish there was access to the transportation more readily available i.e. Plano to Frisco and Frisco to Plano.

Yes buses should be accessible to all, including residential neighbor hoods.

It needs to be safer keep bus driver aware of safety and change during daily routes.

Fast drivers better drivers quit changing 360 drivers better supervisor of drivers.

At the corner of resource and Jupiter the corner sidewalks traffic lights and street have caused dangerous environments DART has not provided safe boarding and exit for most of the past year.

I think bus stops should be safer example construction alerts notice of changes regarding stops.

Bus stops often blocked due to construction making transit unsafe.

Lack of mobility leads to extinction of the species.

Yes please consider the options of availability for senior citizen to have the convenience of venturing out of Collin County to the big city of Dallas.

A growing city needs larger buses, like leaving the smaller buses for special needs.

Me gustara que pusieran de bus lo mas pronto posible de McKinney para Allen. [I would like implementation of bus service from McKinney to Allen as soon as possible]

Plano, Garland, Richard, Dallas.

I need to get to Plano for school can you help!

I am paralyzed from waist down and need regular transportation assistance during the week and on the weekends to get to work and go shopping.

McKinney is growing needs some kind of transportation that you could get same day service That you don't have to call at 6:30 am and hope they have openings both ways there a big problem here.

Need more drivers Dispatchers newer Vehicles Less wait time on phone/ at stops.

I wish we had transportation that runs every 30 min on the hour. Every hour and runs Saturday and Sunday.

More bus stops and run more frequently.

Service stop NW Plano; Allen has many job opportunities that are inaccessible. More central / West Plano routes will help also.

It has been a life saver for me. It's my transportation to and from work with only one car at this time.

CCART needs more stops on their routes and need more routes available.

As senior I need bus on DART on call up to my residence.

Residents gone 7am-5pm I am alone during day 5 day per week unable to drive or walk far Need to use cart dial.

Transportation to McKinney hospital from Plano.

CCART needs bus stops at public parks. Bus stops at major grocery stores should not be more than 50 ft from entrance.

It's OK.

More bus stops near housing for people to access Transport.

Easier access to DART.

The route from Spring Creek to Legacy is nonexistent. Public restrooms are needed.

I think CCART is very good; when it's just 1 or 2 riding wouldn't it be most cost-efficient to use a smaller vehicle rather than a huge bus?

We live in Murphy and must drive to ADA paratransit in Richardson to ride to anywhere in Plano or Richardson.

None.

It would truly be a blessing to have CCART back on all the routes. My son and daughter have to walk to work sometimes.

You can't get anywhere without proper transportation and the current monopoly doesn't offer any proper options.

I live with my brother and his wife. They both work so occasionally they give me rides to I do not know their income.

Better transport in McKinney, Plano for DART.

More better availability for curb to curb service.

If a bus line was close I would use it to get to DART rail or around town. I would give up the car.

Allen needs public transportation. CCART is not always available. Changing destinations.

Currently working with DARS to get employment challenge bus fare.

If the waiting time can be reduce from 1hr 20 to 30 mins or less that will help, if the bus can service other local area that will help if the operating period is extended that will help from 4 am to 11 pm that will be good and weekends.

We need transportation and cheap for those who are on a fixed budget can afford it and assistance w/ grocery carry on and drop.

Bus essential for doctor appointments in Plano.

More youth would prefer riding the bus to get back and forth to different schools and activities.

I prefer riding bus if bus would pass every 20 to 30 mins everyday bus going to Dallas only Plano only etc. From McKinney don't have to make many stops.

Not at this time.

The phone hangs up on you and you lose place in queue!! Sometimes it can take an hour to get through.

It's too hard to arrange a ride.

Better management of committee on aging funds and scheduling of CCART vans and buses.

Taxi Service.

Information is not easy to access would love transport from Frisco to Plano for work.

Need publicity about using the local bus system. Few in McKinney even know about the CCART bus or its schedules.

The Allen city council the mayor should be throw out of office they can afford a 52 m civic center 60 m football stadium but can't afford DART.

I would ride CCART more often if I could get ride in the times and routes I need more budget. Difficult to qualify as disabled with part.

McKinney needs weekend service for more buses to be put on the routes.

Improve or offer rides that are less bumpy.

Difficult to schedule appts. For doctors calling four days in advance and waiting for timely pick-ups.

Buses will bring people who don't live in our neighborhoods and contribute or worsen safety issues we already have. It makes our streets less safe. I moved from Dallas.

I need CCART or other public transportation so I can run my errands because I cannot drive.

As of right now all effects to do the right things are being done.

Keep up with the wonderful and terrific job!!!

Wheel chair accessible transportation so my husband and I can go out to stores and activities together.

More transportation wheel chair accessible for my wife so we can go to activities together and to the store.

We need paratransit even if DART bus or train can't come to McKinney not enough CCART's to service community needs for wheel chair accessible people. Willing to pay higher fare for the service.

No just wish something was available.

No, but I do wish that there were more transportation opportunities out there for the Collin county region.

I can drive short distance light travel due to recovering from car accident used to use CCART but never available when I need it.

I need dial-a-ride because I have Down syndrome.

Public transportation is a necessity and a great service.

Bus routes between cities that stop late ran around 9 pm would be great.

I would like DART rail to McKinney.

I really would love for CCART to start running again on the weekends especially Sunday!

More buses locally and more available times into Plano.

Availability hard to get out of stores for short stays usually have to wait one or two rounds.

El transporte actual de CCART is muy malo; no tienen suficiente drivers. [CCART Transit is very poor; they don't have enough drivers.]

Need pm and weekends to obtain a job. Being off at 5:00 pm means I walk home from the terminal. It's not safe and weather can be harsh.

Trenes y buses para diferentes localidades. [Trains and buses for different cities]

Que sea a tiempo, seguro, limpio, los conductores available, las paradas alumina en caso de ser noche, servicio los fines de semanas. Viviendo aqui para nieve es una fortuna a auto y transporte. {That it is on time, safe, clean, drivers are available, bus stops are lit at night, service operates on the weekends. I've lived here from some time and it's expensive to have a car and use transit.]

CCART buses are empty most of time and so hard to get reservation. So far in advance need trips to DFW even if more.

My son Nicholas has used CCART for about 2- yrs now. Great people, Great service. Sincerely appreciate the job they do for Collin County. Bryon Hardin.

Need bus stop at Middy Cove and Alma to catch train. Never been on bus or train since coming to Texas In 2008. Stops not close enough for me to get to (62 yrs, have scooter, disabled).

Es necesario que en McKinney haya transporte publico porque no hay y no es conveniente para los residentes. [The City of McKinney needs to have public transit because there isn't much and it's not convenient for the residents].

To be able to get ride in a fair times and want fast time doctor appointments at 8.00 am no pick up till 1 pm. Ride on van for 1 1/2 to get home sometimes.

We need bus service in Allen, Texas.

C-cart has been a god send to seniors. Most drivers are very courteous and helpful. People scheduling aren't very friendly or professional.

Been consistently on lines I don't have to walk more than 2-3 blocks to use. Drivers aware that elderly are slower!

More transportation more vans a lot of times it is not available for appointment.

Keep up your good work. It's appreciated.

Keep up the good work. It's very much appreciated. Thank You All.

Commuter specials to get people closer to jobs.

I wish we have metro system like New York, London UK.

C-Card needs more customer service representatives to answer calls and plan trips. It takes so long to get someone on the phone and there are never any available routes.

Easily set up with one day notice and pick up promptly.

Need transit in Princeton that doesn't have to be planned ahead of time.

None.

I'll like very much to have the rail here in McKinney. I've to drive parker station. I hope soon we can have in McKinney a new station of rail DART.

More training on tie down on equipment. Scheduling too long on bus and routes not scheduled correctly. Please call more information.

Only one wish that warp provided this service to seniors that need this.

Used public transportation in previous city also.

Repeating: am closer to Greenville than McKinney

Why not travel there even though another city? I thought federal aid could do so.

Good ones.

When I call for a ride I don't want to be on the phone for 30 minutes.

The DART train is ok to pick up Plano but would be nice to pick up in McKinney.

None love all CCART.

Not on the phone for 30 minute when calling for an appointment.

Se necesitan mas paradas. Carino zo basta laparada con mi espoja enterme. Major ztemcio's telefonica en CCART. McKinney esta aisla do de Plano , Dallas eu transporte pulico rge tren o bus de . [Need more bus stops. I have to walk enough to the bus stop with my sick wife. Need better telephone assistance for CCART. McKinney is isolated from Plano. Dallas' public transit train or bus...]

McKinney esta aislado jrgante tran a Dallas , Plano eulace. Nas paradas del cc drt y njor sericio telefo nico espdaol. [McKinney is isolated. Extend the train from Dallas. Plano is far away. More bus stops for CCART and DART. Need better Spanish language telephone service.]

Be on time or not on the phone for 30 minute when calling for appointment.

Be on time.

Am handicap and cannot walk to local CCART and too hard to get appt.

Be on time

It's needed to help those who don't drive and need to remain active, and support local businesses and meet their own needs.

Be on time. Care for our safely. Not on the phone for 30 minute, when calling for an appointment.

I appreciate having CCART available when I am not able to drive myself to a medical procedure.

APPENDIX G

Evaluation Matrix

Rural Communities

SERVICE ALTERNATIVES	COMMUNITY	TRANSPORTATION BENEFITS	FINANCIAL	IMPLEMENTATION	Average	Symbol
Volunteer Driver Program	Works well in close-knit communities. Rank: 5	Service frequency can be limited. Rank: 2	Milage reimbursement programs available. Rank: 5	Relatively fast implementation after background and insurance checks, but requires effective recruitment strategy. Rank: 4	4.0	●
Cost Sharing Opportunities	Community would likely be supportive of agencies sharing the costs of service, particularly for-profits such as dialysis clinics (but not if this would impact their service). Rank: 2	<i>No significant change to transportation benefits.</i> Rank: 1	Could have small to medium financial benefit depending on the share of paratransit trips that are provided to other agencies willing to enter into cost sharing agreements. Rank: 2	Challenging to secure agreement from agencies/entities that have already been receiving service without having to make any contributions. Rank: 2	1.8	○
Subsidized Taxi Program	<i>High-cost taxi trips unlikely to be well-supported.</i> Rank: 1	<i>Few taxis in rural communities.</i> Rank: 1	Not economically viable for users or operators, except as part of compliance with ADA paratransit requirements, which has limited application. Rank: 2	<i>Unlikely until population increases.</i> Rank: 1	1.3	○
Carpool	Low cost, and builds community. Rank: 4	Can form quickly, but works best for daily commutes. Rank: 3	Costs absorbed by the participants themselves. Rank: 5	Ridematching programs already exist in the region. Rank: 5	4.3	●
Vanpool	Sufficient number of commuters with similar commute needed. Rank: 2	Well suited for recurring commute trips but less so for occasional or periodic trips. Rank: 2	Costs shared by participants and a sponsoring agency. Rank: 4	Vanpool programs already exist in the region. Rank: 5	3.3	◐
ADA Paratransit / Eligibility-Based Dial-A-Ride	Well-understood community service. Rank: 4	Serves relatively small number of residents, but with few other options. Rank: 3	Requires small fleet. State and Federal funding assistance available. Cost per trip is high. Rank: 3	Small operation can be implemented quickly. Eligibility process and registration base must be established. Rank: 4	3.5	◐
General Public Dial-A-Ride	High level of support for mobility in rural area of Collin County; communities accustomed to dial-a-ride service Rank: 4	Ability to serve a large geographic area with small fleet. Rank: 4	Cost per passenger quite high in low-density environment. Rank: 3	Small operation can be implemented quickly. No eligibility list needed. Rank: 5	4.0	●
Community Shuttle	Well-understood lifeline service. Rank: 5	Good solution for life-line coverage, but lacks ability to serve daily commuters. Rank: 3	Costs can be shared by several communities that receive service on alternating days, but per trip costs still high. Rank: 4	Small operation can be implemented quickly. Some planning needed to determine level of service for each community. Rank: 4	4.0	●
Express Bus / Park & Ride Service	<i>Requires a relatively large number of commuters with similar commuting patterns.</i> Rank: 1	<i>Well suited for regional and commute trips but not for local service trips.</i> Rank: 1	<i>Relatively high capital and operating costs due to vehicle type, trip lengths, and need for supporting infrastructure (park & ride lots).</i> Rank: 1	Vehicle acquisition and facilities construction or leasing can slow implementation. Rank: 3	1.5	○

SERVICE ALTERNATIVES	COMMUNITY	TRANSPORTATION BENEFITS	FINANCIAL	IMPLEMENTATION	Average	Symbol
Volunteer Driver Program	5	2	5	4	4.0	●
Coordination and Cost Sharing Opportunities	2	1	2	2	1.8	○
Subsidized Taxi Program	1	1	2	1	1.3	○
Carpool	4	3	5	5	4.3	●
Vanpool	2	2	4	5	3.3	◐
ADA Paratransit / Eligibility-Based Dial-A-Ride	4	3	3	4	3.5	◐
General Public Dial-A-Ride	4	4	3	5	4.0	●
Community Shuttle	5	3	4	4	4.0	●
Express Bus / Park & Ride Service	1	1	1	3	1.5	○

Rural Communities

SERVICE ALTERNATIVES	COMMUNITY	TRANSPORTATION BENEFITS	FINANCIAL	IMPLEMENTATION	Average	Symbol
Limited-Stop Bus Service	Broader ridership base than Express Bus service by serving multiple regional destinations. Rank: 4	Connects a community to regional hubs and destinations, but connecting services needed for local circulation. Rank: 2	Usually serves transit centers and includes all-day service. May require somewhat high operating and capital costs. Rank: 2	May involve transit center construction. Planning process needed to coordinate service with various connecting services. Rank: 2	2.5	◐
Point Deviation Service	Flexible enough to attract wide range of users, but schedule tends to be slow. Rank: 3	<i>Service productivity depends on population density.</i> Rank: 1	Small fleet requirement. Dispatch staff less busy than dial-a-ride and can contribute to other tasks. Rank: 4	Small operation can be implemented quickly. Route planning software and training may be needed. Rank: 4	3.0	◐
Route Deviation Service	Flexible but less so than Point Deviation. Higher deviation denial rate. Rank: 2	<i>Smaller capture area than Point Deviation service.</i> Rank: 1	Operating cost is primarily a function of service frequency. Ranks: 4	Small operation can be implemented quickly. Planning process needed for route. Rank: 4	2.8	◐
Feeder/Connector Service to Fixed-Route	Can take on the most appropriate form for a community (fixed-route, demand-responsive, etc.) Rank: 4	<i>Depends on access to an existing regional transit network.</i> Rank: 1	Operating costs can be high if trips to connect to regional network are long. Rank: 2	Small operation can be implemented quickly. Some planning needed to determine appropriate service design. Rank: 4	2.8	◐
Site-Specific Shuttle	High level of support if associated with major job provider in the community. Rank: 4	<i>Provides "last mile" connection. Requires regional transit center and major employment destination in close proximity.</i> Rank: 1	<i>Usually requires major employer to cover part of operating cost.</i> Rank: 1	Simple routing can be very quickly implemented. Rank: 5	2.8	◐
Local Fixed-Route Bus Service	<i>Low ridership potential in low-density environment may result in low community support.</i> Rank: 1	<i>Access may require very long walk distances in rural environment.</i> Rank: 1	<i>Low density environment would require multiple routes to reach dispersed population, resulting in high operating costs.</i> Rank: 1	Requires planning process for routing, schedule, and supporting elements design and installation (signs, benches, shelters) . Rank: 3	1.5	○

SERVICE ALTERNATIVES	COMMUNITY	TRANSPORTATION BENEFITS	FINANCIAL	IMPLEMENTATION	Average	Symbol
Limited-Stop Bus Service	4	2	2	2	2.5	◐
Point Deviation Service	3	1	4	4	3.0	◐
Route Deviation	2	1	4	4	2.8	◐
Feeder/Connector Service to Fixed-Route	4	1	2	4	2.8	◐
Site-Specific Shuttle	4	1	1	5	2.8	◐
Local Fixed-Route Bus Service	1	1	1	3	1.5	○

Ranking Key

- 1: Low Ranking (1)
- 2: Medium Ranking (2 or 3)
- 3: High Ranking (4 or 5)

Suburban / Employment Base

SERVICE ALTERNATIVES	COMMUNITY	TRANSPORTATION BENEFITS	FINANCIAL	IMPLEMENTATION	Average	Symbol
Volunteer Driver Program	Requires Available Pool of Volunteers. Rank: 4	Service frequency can be limited. Rank: 2	Milage reimbursement programs available. Rank: 4	Relatively fast implementation after background and insurance checks, but requires effective recruitment strategy. Rank: 4	3.5	◐
Mobility Management/Coordination	Limited variety of transportation options available, but some potential for mobility management Rank: 2	Limited Rank: 2	Relatively inexpensive to implement Rank: 4	Relatively straight-forward to implement Rank: 4	3.0	◐
Cost Sharing Opportunities	Community would likely be supportive of agencies sharing the costs of service, particularly for-profits such as dialysis clinics (but not if this would impact their service). Rank: 2	Limited Rank: 2	Relatively inexpensive to implement Rank: 4	Challenging to secure agreement from agencies/entities that have already been receiving service without having to make any contributions. Rank: 2	2.5	○
Subsidized Taxi Program	Works well in close proximity to urban environment where taxis are plentiful. Rank: 2	Flexible solution, but sometimes unpredictable level of service. Rank: 3	Shared cost with users, and only pay for what you use approach. Rank: 5	Fast implementation after taxis are vetted and subsidy process is established. Rank: 4	3.5	◐
Carpool	Low cost, and builds community. Rank: 5	Can form quickly, but works best for daily commutes. Rank: 3	Costs absorbed by the participants themselves. Rank: 5	Ridematching programs already exist in the region. Rank: 5	4.5	●
Vanpool	Sufficient number of commuters with similar commute needed. Rank: 5	Well suited for recurring commute trips but less so for occasional or periodic trips. Rank: 2	Costs shared by participants and a sponsoring agency. Rank: 5	Vanpool programs already exist in the region. Rank: 5	4.3	●
ADA Paratransit / Eligibility-Based Dial-A-Ride	Well-understood community service. Rank: 4	Serves relatively small number of residents, but with few other options. Rank: 3	Requires small fleet. State and Federal funding assistance available. Rank: 4	May require ride-matching software training. Eligibility list must be established. Rank: 4	3.8	◐
General Public Dial-A-Ride	General public sometimes unwilling to reserve service in advance; effectively addresses demand for local mobility. Rank: 4	Ability to serve a large geographic area with small fleet Rank: 4	Lower cost than fixed-route as one vehicle can cover large service area. Rank: 4	May require ride-matching software training. No eligibility list needed. Rank: 4	4.0	●
Community Shuttle	Provides access to important destinations. May require schedule flexibility by riders. Rank: 4	Provides life-line coverage, but lacks ability to serve daily commuters. Rank: 3	Costs can be shared by several communities that receive service on alternating days. Rank: 5	Advertising and educational campaign needed to spread awareness of new serve. Rank: 4	4.0	●
Express Bus / Park & Ride Service	Requires a relatively large number of commuters with similar commuting patterns. Rank: 5	May be popular with forward and reverse commuters if "last mile" connecting service available. Rank: 5	Potential for high productivity if attracting forward and reverse commuters Rank: 4	Vehicle acquisition and facilities construction or leasing can slow implementation. Rank: 3	4.3	●
Limited-Stop Bus Service	Broader ridership base than Express Bus service by serving multiple regional destinations. Rank: 5	May bring high ridership into community if major employers are directly served. Rank: 5	Usually serves transit centers and includes all-day service. May require somewhat high operating and capital costs. Rank: 3	May involve transit center construction. Planning process needed to coordinate service with various connecting services. Rank: 3	4.0	◐

SERVICE ALTERNATIVES	COMMUNITY	TRANSPORTATION BENEFITS	FINANCIAL	IMPLEMENTATION	Average	Symbol
Volunteer Driver Program	4	2	4	4	3.5	◐
Mobility Management	2	2	4	4	3.0	◐
Coordination and Cost Sharing Opportunities	2	2	4	2	2.5	◐
Subsidized Taxi Program	2	3	5	4	3.5	◐
Carpool	5	3	5	5	4.5	●
Vanpool	5	2	5	5	4.3	●
ADA Paratransit / Eligibility-Based Dial-A-Ride	4	3	4	4	3.8	◐
General Public Dial-A-Ride	4	4	4	4	4.0	●
Community Shuttle	4	3	5	4	4.0	●
Express Bus / Park & Ride Service	5	5	4	3	4.3	●
Limited-Stop Bus Service	5	5	3	3	4.0	◐

Suburban / Employment Base

SERVICE ALTERNATIVES	COMMUNITY	TRANSPORTATION BENEFITS	FINANCIAL	IMPLEMENTATION	Average	Symbol
Point Deviation Service	Flexible enough to attract wide range of users, but schedule tends to be slow. Rank: 2	Major employers could provide natural time-points. Rank: 3	Significant cost savings compared to combination of fixed-route and paratransit service. Rank: 5	Route planning software and training may be needed. Rank: 4	3.5	◐
Route Deviation Service	Good fit for a community that's almost ready for fixed-route service. Rank: 4	If limits are placed on number of deviations, can provide reasonably attractive travel times. Rank: 4	Operating cost is primarily a function of service frequency. Meets ADA requirements. Ranks: 4	Planning process needed for fixed-route component of service. Rank: 4	4.0	●
Feeder/Connector Service to Fixed-Route	Can take on the most appropriate form for a community (fixed-route, demand-responsive, etc.) Rank: 4	Depends on access to an existing regional transit network. Rank: 4	Operating costs depend on distance to regional transit center. Rank: 4	Can be implemented quickly. Some planning needed to determine appropriate service design. Rank: 4	4.0	◐
Site-Specific Shuttle	High level of support if associated with major job provider in the community. Rank: 5	Provides "last mile" connection. Requires regional transit center and major employment destination in close proximity. Rank: 5	Usually requires major employer to cover part of operating cost. Rank: 5	Simple routing can be very quickly implemented. Rank: 5	5.0	●
Local Fixed-Route Bus Service	Community support tied to success. More likely in a mixed-use environment; existing service in Plano Rank: 4	Pedestrian environment may not be ideal to support access in a suburban environment; will be effective only in key corridors Rank: 3	ADA complementary paratransit requirement would increase cost. Rank: 3	Planning process needed, but stakeholder support helpful. Rank: 3	3.3	◐

SERVICE ALTERNATIVES	COMMUNITY	TRANSPORTATION BENEFITS	FINANCIAL	IMPLEMENTATION	Average	Symbol
Point Deviation Service	2	3	5	4	3.5	◐
Route Deviation	4	4	4	4	4.0	●
Feeder/Connector Service to Fixed-Route	4	4	4	4	4.0	◐
Site-Specific Shuttle	5	5	5	5	5.0	●
Local Fixed-Route Bus Service	4	3	3	3	3.3	◐

Ranking Key

- 1: Low Ranking (1)
- 2: Medium Ranking (2 or 3)
- 3: High Ranking (4 or 5)

Suburban / Bedroom Communities

SERVICE ALTERNATIVES	COMMUNITY	TRANSPORTATION BENEFITS	FINANCIAL	IMPLEMENTATION	Average	Symbol
Volunteer Driver Program	Requires Available Pool of Volunteers. Rank: 4	Service frequency can be limited. Rank: 2	Milage reimbursement programs available. Rank: 4	Relatively fast implementation after background and insurance checks, but requires effective recruitment strategy. Rank: 4	3.5	◐
Mobility Management/Coordination	Limited variety of transportation options available, but some potential for mobility management Rank: 2	Limited Rank: 2	Relatively inexpensive to implement Rank: 4	Relatively straight-forward to implement Rank: 4	3.0	◐
Cost Sharing Opportunities	Community would likely be supportive of agencies sharing the costs of service, particularly for-profits such as dialysis clinics (but not if this would impact their service). Rank: 2	Limited Rank: 2	Relatively inexpensive to implement Rank: 4	Challenging to secure agreement from agencies/entities that have already been receiving service without having to make any contributions. Rank: 2	2.5	◐
Subsidized Taxi Program	Works well in close proximity to urban environment where taxis are plentiful. Rank: 2	Flexible solution, but sometimes unpredictable level of service. Rank: 3	Shared cost with users, and only pay for what you use approach. Rank: 5	Fast implementation after taxis are vetted and subsidy process is established. Rank: 4	3.5	◐
Carpool	Low cost, and builds community. Rank: 5	Can form quickly, but works best for daily commutes. Rank: 3	Costs absorbed by the participants themselves. Rank: 5	Ridematching programs already exist in the region. Rank: 5	4.5	●
Vanpool	Sufficient number of commuters with similar commute needed. Rank: 5	Well suited for recurring commute trips but less so for occasional or periodic trips. Rank: 2	Costs shared by participants and a sponsoring agency. Rank: 5	Vanpool programs already exist in the region. Rank: 5	4.3	●
ADA Paratransit / Eligibility-Based Dial-A-Ride	Well-understood community service. Rank: 4	Serves relatively small number of residents, but with few other options. Rank: 3	Requires small fleet. State and Federal funding assistance available. Rank: 4	May require ride-matching software training. Eligibility list must be established. Rank: 4	3.8	◐
General Public Dial-A-Ride	General public sometimes unwilling to reserve service in advance; effectively addresses demand for local mobility. Rank: 4	Ability to serve a large geographic area with small fleet Rank: 4	Lower cost than fixed-route as one vehicle can cover large service area. Rank: 4	May require ride-matching software training. No eligibility list needed. Rank: 4	4.0	●
Community Shuttle	Provides access to important destinations. May require schedule flexibility by riders. Rank: 4	Provides lifeline coverage, but lacks ability to serve daily commuters. Rank: 3	Costs can be shared by several communities that receive service on alternating days. Rank: 5	Advertising and educational campaign needed to spread awareness of new serve. Rank: 4	4.0	●
Express Bus / Park & Ride Service	Requires a relatively large number of commuters with similar commuting patterns. Rank: 5	Well suited for regional and commute trips but not for local service trips. Rank: 2	Relatively high capital and operating costs due to vehicle type, trip lengths, and need for supporting infrastructure (park & ride lots). Rank: 2	Vehicle acquisition and facilities construction or leasing can slow implementation. Rank: 3	3.0	◐
Limited-Stop Bus Service	Broader ridership base than Express Bus service by serving multiple regional destinations. Rank: 5	Connects a community to regional hubs and destinations, but connecting services needed for local circulation. Rank: 3	Usually serves transit centers and includes all-day service. May require somewhat high operating and capital costs. Rank: 2	May involve transit center construction. Planning process needed to coordinate service with various connecting services. Rank: 2	3.0	◐

SERVICE ALTERNATIVES	COMMUNITY	TRANSPORTATION BENEFITS	FINANCIAL	IMPLEMENTATION	Average	Symbol
Volunteer Driver Program	4	2	4	4	3.5	◐
Mobility Management	2	2	4	4	3.0	◐
Coordination and Cost Sharing Opportunities	2	2	4	2	2.5	◐
Subsidized Taxi Program	2	3	5	4	3.5	◐
Carpool	5	3	5	5	4.5	●
Vanpool	5	2	5	5	4.3	●
ADA Paratransit / Eligibility-Based Dial-A-Ride	4	3	4	4	3.8	◐
General Public Dial-A-Ride	4	4	4	4	4.0	●
Community Shuttle	4	3	5	4	4.0	●
Express Bus / Park & Ride Service	5	2	2	3	3.0	◐
Limited-Stop Bus Service	5	3	2	2	3.0	◐

Suburban / Bedroom Communities

SERVICE ALTERNATIVES	COMMUNITY	TRANSPORTATION BENEFITS	FINANCIAL	IMPLEMENTATION	Average	Symbol
Point Deviation Service	Flexible enough to attract wide range of users, but schedule tends to be slow. Rank: 2	Provides scheduled service without the requirement for ADA paratransit service. Rank: 3	Significant cost savings compared to combination of fixed-route and paratransit service. Rank: 5	Route planning software and training may be needed. Rank: 4	3.5	◐
Route Deviation Service	Good fit for a community that's almost ready for fixed-route service. Rank: 3	If limits are placed on number of deviations, can provide reasonably attractive travel times. Rank: 4	Operating cost is primarily a function of service frequency. Meets ADA requirements. Ranks: 4	Planning process needed for fixed-route component of service. Rank: 4	3.8	◐
Feeder/Connector Service to Fixed-Route	Can take on the most appropriate form for a community (fixed-route, demand-responsive, etc.) Rank: 4	Depends on access to an existing regional transit network. Rank: 3	Operating costs depend on distance to regional transit center. Rank: 3	Can be implemented quickly. Some planning needed to determine appropriate service design. Rank: 4	3.5	◐
Site-Specific Shuttle	High level of support if associated with major job provider in the community. Rank: 4	Provides "last mile" connection. Requires regional transit center and major employment destination in close proximity. Rank: 3	Usually requires major employer to cover part of operating cost. Rank: 3	Simple routing can be very quickly implemented. Rank: 4	3.5	◐
Local Fixed-Route Bus Service	Community support tied to success. Neither may exist right away. Rank: 2	Pedestrian environment may not be ideal to support access in a suburban environment. Rank: 2	ADA complementary paratransit requirement would increase cost. Rank: 2	Planning process could be contentious. Rank: 2	1.8	○

SERVICE ALTERNATIVES	COMMUNITY	TRANSPORTATION BENEFITS	FINANCIAL	IMPLEMENTATION	Average	Symbol
Point Deviation Service	2	3	5	4	3.5	◐
Route Deviation	3	4	4	4	3.8	◐
Feeder/Connector Service to Fixed-Route	4	3	3	4	3.5	◐
Site-Specific Shuttle	4	3	3	4	3.5	◐
Local Fixed-Route Bus Service	2	2	1	2	1.8	○

Ranking Key

- 1: Low Ranking (1)
- 2: Medium Ranking (2 or 3)
- 3: High Ranking (4 or 5)

Small Urban Communities

SERVICE ALTERNATIVES	COMMUNITY	TRANSPORTATION BENEFITS	FINANCIAL	IMPLEMENTATION	Average	Symbol
Volunteer Driver Program	Requires Available Pool of Volunteers. Rank: 4	Service frequency can be limited. Rank: 2	Milage reimbursement programs available. Rank: 4	Relatively fast implementation after background and insurance checks, but requires effective recruitment strategy. Recruitment and retention can be difficult. Rank: 3	3.3	◐
Mobility Management/Coordination	Limited variety of transportation options available, but some potential for mobility management Rank: 2	Limited Rank: 2	Relatively inexpensive to implement Rank: 4	Relatively straight-forward to implement Rank: 4	3.0	◐
Cost Sharing Opportunities	Community would likely be supportive of agencies sharing the costs of service, particularly for-profits such as dialysis clinics (but not if this would impact their service). Rank: 2	Limited Rank: 2	Relatively inexpensive to implement Rank: 4	Challenging to secure agreement from agencies/entities that have already been receiving service without having to make any contributions. Rank: 2	2.5	◐
Subsidized Taxi Program	Can help support local taxi services if they exist. Rank: 3	Flexible solution, but sometimes unpredictable level of service. Rank: 3	Shared cost with users, and only pay for what you use approach. Rank: 5	Fast implementation after taxis are vetted and subsidy process is established. Rank: 4	3.8	◐
Carpool	Low cost, and builds community. Rank: 5	Can form quickly, but works best for daily commutes. Rank: 3	Costs absorbed by the participants themselves. Rank: 5	Ridematching programs already exist in the region. Rank: 5	4.5	●
Vanpool	Sufficient number of commuters with similar commute needed. Rank: 4	Well suited for recurring commute trips but less so for occasional or periodic trips. Rank: 2	Costs shared by participants and a sponsoring agency. Rank: 5	Vanpool programs already exist in the region. Rank: 5	4.0	◐
ADA Paratransit / Eligibility-Based Dial-A-Ride	Well-understood community service. May be necessary to support fixed route. Rank: 4	Serves relatively small number of residents, but with few other options. Rank: 3	Requires small fleet. State and Federal funding assistance available. Rank: 4	May require ride-matching software training. Eligibility list must be established. Rank: 4	3.8	◐
General Public Dial-A-Ride	If serving just one city, can generate local pride. Rank: 4	Ability to serve entire small city with small fleet Rank: 5	Lower cost than fixed-route as one vehicle can cover large service area. Rank: 5	May require ride-matching software training. No eligibility list needed. Rank: 4	4.5	●
Community Shuttle	Demand may be too high in a small urban environment to share service with other communities. Rank: 1	Provides life-line coverage, but lacks ability to serve daily commuters. Rank: 2	Cost and service sharing with other communities may not be practice. Rank: 2	Having to choose which days to provide service may be problematic. Demand may be too high. Rank: 2	1.8	○
Express Bus / Park & Ride Service	Requires a relatively large number of commuters with similar commuting patterns. Rank: 5	May be popular with forward and reverse commuters if "last mile" connecting service available. Rank: 5	Potential for high productivity if attracting forward and reverse commuters; will require new park-and-ride facilities Rank: 4	Vehicle acquisition and facilities construction or leasing can slow implementation. Rank: 3	4.0	●

SERVICE ALTERNATIVES	COMMUNITY	TRANSPORTATION BENEFITS	FINANCIAL	IMPLEMENTATION	Average	Symbol
Volunteer Driver Program	4	2	4	3	3.3	◐
Mobility Management	2	2	4	4	3.0	◐
Coordination and Cost Sharing Opportunities	2	2	4	2	2.5	◐
Subsidized Taxi Program	3	3	5	4	3.8	◐
Carpool	5	3	5	5	4.5	●
Vanpool	4	2	5	5	4.0	●
ADA Paratransit / Eligibility-Based Dial-A-Ride	4	3	4	4	3.8	◐
General Public Dial-A-Ride	4	5	5	4	4.5	●
Community Shuttle	1	2	2	2	1.8	○
Express Bus / Park & Ride Service	5	4	4	3	4.0	●

Small Urban Communities

SERVICE ALTERNATIVES	COMMUNITY	TRANSPORTATION BENEFITS	FINANCIAL	IMPLEMENTATION	Average	Symbol
Limited-Stop Bus Service	Broader ridership base than Express Bus service by serving multiple regional destinations. Rank: 4	Connects a community to regional hubs and destinations, but connecting services needed for local circulation. Rank: 3	Usually serves transit centers and includes all-day service. May require somewhat high operating and capital costs. Rank: 2	May involve transit center construction. Planning process needed to coordinate service with various connecting services. Rank: 2	3.0	◐
Point Deviation Service	Flexible enough to attract wide range of users, but schedule tends to be slow. Rank: 2	Provides scheduled service without the requirement for ADA paratransit service. Rank: 3	Significant cost savings compared to combination of fixed-route and paratransit service. Rank: 5	Route planning software and training may be needed. Rank: 4	3.5	◐
Route Deviation Service	Can work well in small urban environment, especially if economy is localized. Rank: 5	If limits are placed on number of deviations, can provide reasonably attractive travel times. Rank: 5	Operating cost is primarily a function of service frequency. Meets ADA requirements. Ranks: 5	Planning process needed for fixed-route component of service. Rank: 4	4.8	●
Feeder/Connector Service to Fixed-Route	Can take on the most appropriate form for a community (fixed-route, demand-responsive, etc.) Rank: 4	Depends on access to an existing regional transit network. Rank: 2	Operating costs depend on distance to regional transit center. Rank: 2	Can be implemented quickly. Some planning needed to determine appropriate service design. Rank: 3	2.8	◐
Site-Specific Shuttle	High level of support if associated with major job provider in the community. Rank: 4	Provides "last mile" connection. Requires regional transit center and major employment destination in close proximity. Rank: 2	Usually requires major employer to cover part of operating cost. Rank: 2	Simple routing can be very quickly implemented. Rank: 4	3.0	◐
Local Fixed-Route Bus Service	If serving just one city, can generate local pride. Can work well if city has mix of residential, retail, and commercial activity. Rank: 4	Can serve small urban environment well if city is relatively compact with decent pedestrian connections. Rank: 4	ADA complementary paratransit requirement would increase cost. Rank: 3	Requires planning process for routing, schedule, and supporting elements design and installation (signs, benches, shelters) . Already exists in McKinney. Rank:5	4.0	●

SERVICE ALTERNATIVES	COMMUNITY	TRANSPORTATION BENEFITS	FINANCIAL	IMPLEMENTATION	Average	Symbol
Limited-Stop Bus Service	5	3	2	2	3.0	◐
Point Deviation Service	2	3	5	4	3.5	◐
Route Deviation	5	5	5	4	4.8	●
Feeder/Connector Service to Fixed-Route	4	2	2	3	2.8	◐
Site-Specific Shuttle	4	2	2	4	3.0	◐
Local Fixed-Route Bus Service	4	4	3	5	4.0	●

Ranking Key

- 1: Low Ranking (1)
- 2: Medium Ranking (2 or 3)
- 3: High Ranking (4 or 5)

Countywide Programs

SERVICE ALTERNATIVES	COMMUNITY	TRANSPORTATION BENEFITS	FINANCIAL	IMPLEMENTATION	Average	Symbol
Volunteer Driver Program	Requires Available Pool of Volunteers. Rank: 4	Service frequency can be limited. Rank: 2	Milage reimbursement programs available. Rank: 4	Relatively fast implementation after background and insurance checks, but requires effective recruitment strategy. Rank: 4	3.5	◐
Mobility Management/Coordination	Limited variety of transportation options available, but some potential for mobility management Rank: 3	Limited, but woud address transportation needs of people with the fewest options Rank: 3	Given the limited transportation resources in Collin County, it would be costly to implement Rank: 3	Relatively straight-forward to implement Rank: 5	3.5	◐
Cost Sharing Opportunities	Community would likely be supportive of agencies sharing the costs of service, particularly for-profits such as dialysis clinics (but not if this would impact their service). Rank: 2	Limited Rank: 2	Could have small to medium financial benefit depending on the share of paratransit trips that are provided to other agencies willing to enter into cost sharing agreements. Rank: 2	Challenging to secure agreement from agencies/entities that have already been receiving service without having to make any contributions. Rank: 2	2.0	○
Subsidized Taxi Program	High-cost taxi trips unlikely to be well-supported. Rank: 1	Few taxis in rural communities. Rank: 1	Shared cost with users, and only pay for what you use approach would work in many Collin County communities Rank: 4	Requires countywide oversight, vetting of taxis to implement program, not all taxis will serve all parts of county Rank: 3	2.3	○
Carpool	Low cost, and provides a way for people living the county to work collaboratively to reach destinations Rank: 4	Can form quickly, but works best for daily commutes. Rank: 2	Costs absorbed by the participants themselves. A ridematching service would be inexpensive to operate. Rank: 5	Ridematching programs already exist in the region. Rank: 5	4.0	●
Vanpool	Sufficient number of commuters with similar commute needed. Will not serve the needs of most seniors and people with disabilities. Rank: 3	Well suited for recurring commute trips but less so for occasional or periodic trips. Rank: 2	Costs shared by participants and a sponsoring agency. Rank: 4	Vanpool programs already exist in the region. Rank: 5	3.5	◐
ADA Paratransit / Eligibility-Based Dial-A-Ride	Well-understood community service. Rank: 4	Serves relatively small number of residents, but with few other options. Rank: 3	Requires small fleet. State and Federal funding assistance available. Cost per trip is high. Rank: 3	Small operation can be implemented quickly. Eligibility process and registration base must be established. Rank: 4	3.5	◐
General Public Dial-A-Ride	Can suffer from an "empty bus" perception. Rank: 2	Ability to serve a large geographic area with small fleet. Rank: 4	Cost per passenger quite high in low-density environment. Rank: 3	Small operation can be implemented quickly. No eligibility list needed. Rank: 5	3.5	◐
Community Shuttle	Well-understood lifeline service. Rank: 5	Good solution for lifeline coverage, but lacks ability to serve daily commuters. Can serve larger communities as well as smaller ones Rank: 4	Costs can be shared by several communities that receive service on alternating days, but per trip costs still high. Rank: 4	Small operation can be implemented quickly. Some planning needed to determine level of service for each community. Rank: 4	4.3	●

SERVICE ALTERNATIVES	COMMUNITY	TRANSPORTATION BENEFITS	FINANCIAL	IMPLEMENTATION	Average	Symbol
Volunteer Driver Program	4	2	4	4	3.5	◐
Mobility Management	3	3	3	5	3.5	◐
Coordination and Cost Sharing Opportunities	2	2	2	2	2.0	○
Subsidized Taxi Program	1	1	4	3	2.3	○
Carpool	4	2	5	5	4.0	●
Vanpool	3	2	4	5	3.5	◐
ADA Paratransit / Eligibility-Based Dial-A-Ride	4	3	3	4	3.5	◐
General Public Dial-A-Ride	2	4	3	5	3.5	◐
Community Shuttle	5	4	4	4	4.3	●

Countywide Programs

SERVICE ALTERNATIVES	COMMUNITY	TRANSPORTATION BENEFITS	FINANCIAL	IMPLEMENTATION	Average	Symbol
Express Bus / Park & Ride Service	Requires a relatively large number of commuters with similar commuting patterns. Rank: 4	Well suited for regional and commute trips but not for local service trips. Rank: 2	Relatively high capital and operating costs due to vehicle type, trip lengths, and need for supporting infrastructure (park & ride lots). Rank: 2	Vehicle acquisition and facilities construction or leasing can slow implementation. Rank: 3	2.8	◐
Limited-Stop Bus Service	Broader ridership base than Express Bus service by serving multiple regional destinations. Rank: 4	Connects a community to regional hubs and destinations, but connecting services are needed for local circulation. Rank: 2	Usually serves transit centers and includes all-day service. May require somewhat high operating and capital costs. Rank: 2	May involve transit center construction. Planning process needed to coordinate service with various connecting services. Rank: 2	2.5	◐
Point Deviation Service	Flexible enough to attract wide range of users, but schedule tends to be slow. Rank: 3	Provides scheduled service without the requirement for ADA paratransit service. Rank: 3	Small fleet requirement. Dispatch staff less busy than dial-a-ride and can contribute to other tasks. Rank: 4	Small operation can be implemented quickly. Route planning software and training may be needed. Rank: 4	3.5	◐
Route Deviation Service	Flexible enough to attract wide range of users, but schedule tends to be slow. Rank: 3	Provides scheduled service without the requirement for ADA paratransit service. Rank: 3	Operating cost is primarily a function of service frequency. Ranks: 4	Small operation can be implemented quickly. Planning process needed for route. Rank: 4	3.5	◐
Feeder/Connector Service to Fixed-Route	Limited service applications for countywide mobility Rank:3	<i>Depends on access to an existing regional transit network.</i> <i>Rank: 1</i>	Operating costs can be high if trips to connect to regional network are long. Rank: 2	Small operation can be implemented quickly. Some planning needed to determine appropriate service design. Rank: 4	2.5	◐
Site-Specific Shuttle	<i>Provides little community benefit at the countywide level.</i> <i>Rank:1</i>	<i>Provides "last mile" connection. Requires regional transit center and major employment destination in close proximity.</i> <i>Rank: 1</i>	<i>Usually requires major employer to cover part of operating cost.</i> <i>Rank: 1</i>	Can be very quickly implemented, but countywide routing would be untenable Rank: 3	1.5	○
Local Fixed-Route Bus Service	<i>Low ridership potential in low-density environment may result in low community support.</i> <i>Rank: 1</i>	<i>Access may require very long walk distances in rural environment.</i> <i>Rank: 1</i>	<i>Low density environment would require multiple routes to reach dispersed population, resulting in high operating costs.</i> <i>Rank: 1</i>	Requires planning process for routing, schedule, and supporting elements design and installation (signs, benches, shelters) . Rank: 3	1.5	○

SERVICE ALTERNATIVES	COMMUNITY	TRANSPORTATION BENEFITS	FINANCIAL	IMPLEMENTATION	Average	Symbol
Express Bus / Park & Ride Service	4	2	2	3	2.8	◐
Limited-Stop Bus Service	4	2	2	2	2.5	◐
Point Deviation Service	3	3	4	4	3.5	◐
Route Deviation	3	3	4	4	3.5	◐
Feeder/Connector Service to Fixed-Route	3	1	2	4	2.5	◐
Site-Specific Shuttle	1	1	1	3	1.5	○
Local Fixed-Route Bus Service	1	1	1	3	1.5	○

Ranking Key

- 1: Low Ranking (1)
- 2: Medium Ranking (2 or 3)
- 3: High Ranking (4 or 5)