

Regional Mobility Initiatives

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A Regional Approach to

SUSTAINABLE DEVELOPMENT



Overview

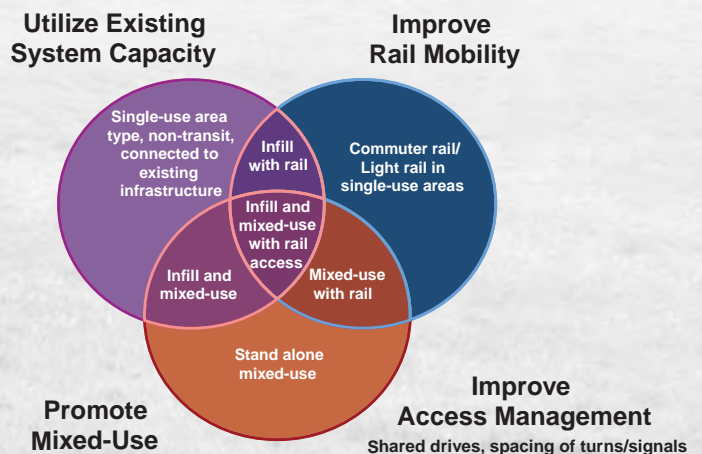
Dallas-Fort Worth is one of the fastest growing metropolitan areas in the country with increasing transportation demands on an already congested roadway system. According to estimates by the North Central Texas Council of Governments (NCTCOG), the population in the 12-county Dallas-Fort Worth Metropolitan Planning Area (MPA) is projected to grow from 6.7 million in 2014 to 10.5 million by 2040. Additional transportation capacity is needed to accommodate this growth and maintain a high quality of life. However, considering the financial constraints associated with funding new transportation facilities, using only traditional solutions will not work. The Sustainable Development Funding Program was created in 2001 by the Regional Transportation Council (RTC) to support non-traditional, compact developments, which can encourage other viable, efficient, and affordable alternative modes of transportation to meet the region's future mobility needs.

Sustainable Development Policy

Mobility 2035: The Metropolitan Transportation Plan for North Central Texas – 2014 Update is the defining vision for the multimodal transportation system in the Dallas-Fort Worth metropolitan area. The Regional Transportation Council's Sustainable Development Policy included in the Plan supports mixed-use, infill, and transit-oriented developments that utilize system capacity, reduce vehicle miles of travel, and improve air quality through improved rail mobility and access management strategies.

Exhibit 1 visually illustrates RTC's Sustainable Development Policy.

Exhibit 1



Sustainable Development Program Goals

The promotion of healthy communities has become a principal goal of the North Central Texas region, and is achieved through the interconnection and balance between land use, transportation, economics, environmental quality, and equity and their effects on the long-term growth and economic vitality of the region. In order to help the region develop more sustainably, NCTCOG's Sustainable Development Program established the following goals:

- Land use and transportation (LUTR) practices that promote economic development while efficiently using limited resources.
- Transportation decision making based on its

effect on land use, congestion, vehicle miles traveled (VMT), and the viability of alternative transportation modes.

- Planning efforts that seek to balance access, finance, mobility, affordability, community cohesiveness, and environmental quality.

Sustainable Development Call for Projects (SDCFP)

Exhibits 2 and 3 display the net funding and the number of projects underway, in development, or completed through the 2001, 2005-2006, and 2009-2010 Sustainable Development Call for Projects (SDCFP). The Program has completed or is implementing 81 sustainable development projects with net funding of \$144.7 million, which includes \$28.9 million of leveraged local match.

Exhibit 2

Sustainable Development Funding Program – Net Funding Summary by SDCFP

Net Funding (in Millions) by Type of Project				
Project Type	2001 LUTR Joint Venture	2005-2006 SDCFP	2009-2010 SDCFP	Total Funding
Infrastructure	\$42.0	\$39.9	\$53.0	\$134.9
Planning	\$3.6	\$3.8	\$1.0	\$8.4
Landbanking	\$0.0	\$1.4	0	\$1.4
Total Funding	\$45.6	\$45.1	\$54.0	\$144.7

Funding Source	CMAQ, STP-MM, and Local Match	RTC Local, Local Match	RTR, CMAQ, STP-MM, RTC Local, and Local Match

CMAQ: Congestion Mitigation and Air Quality Funds
 STP-MM: Surface Transportation Program - Metropolitan Mobility Funds
 RTR: Regional Toll Revenue Funds
 RTC Local: Regional Transportation Council Local Funds

Net Funding = (RTC Award + Local Match – Canceled Funds – Cost Underruns)

Exhibit 3

Sustainable Development Funding Program – Number of Net Funded Projects

Project Type	2001	2005 - 2006	2009 - 2010	Total Number of Projects
Infrastructure	13	20	26	59
Planning	2	11	7	20
Landbanking	0	2	0	2
Total Number of Projects	15	33	33	81

Sustainable Development Areas of Interest

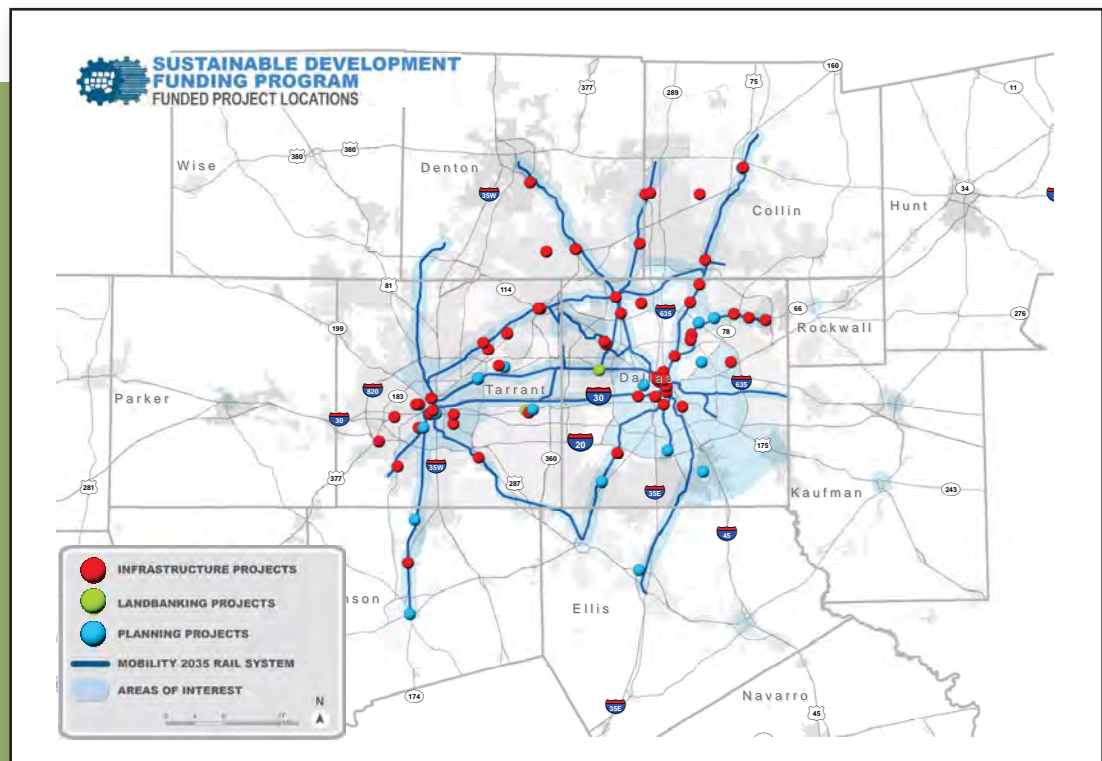
The Sustainable Development Funding Program has for the last two cycles required funded sites to be located in one of the following Areas of Interest: Existing or Future Rail Station, Infill, or a Main Street/Historic District, shown in blue in **Exhibit 4**. The map not only illustrates the Sustainable Development Funding Program's Areas of Interest that were used in the selection criteria for projects funded through the 2005-2006 and 2009-2010 Call for Projects, but the funded project locations for all three Call for Projects. Some of the funded projects fall outside the blue zones and those were selected in the 2001 Call for Projects before the areas of interest map was utilized and criteria had been further refined.

Eligible projects in the last two SDCFPs received priority if they were located:

- Within walking distance to an existing or potential future rail station;
- In areas with concentrations of unemployed people;
- In areas with high-emitting vehicles;
- In areas with higher concentrations of low-income households; and/or
- In historic downtowns with multiple contiguous street blocks of pedestrian-oriented developments.

Exhibit 4

Sustainable Development Areas of Interest and Funded Project Locations



The funded projects are located in five counties: Collin, Dallas, Denton, Ellis, and Tarrant. Projects may qualify for multiple classifications, as a project could have met more than one goal by being an infill or TOD in a historic downtown.

The percentage of projects meeting each classification were as follows:

- Transit-oriented development – 65 percent
- Infill – 63 percent
- Main Street/historic districts – 37 percent

Case Study

College Town, City of Arlington

Creating a College Town Mixed-Use District

The Arlington College Town Project is an award-winning mixed-use development project located on the southeast border of the University of Texas at Arlington (UTA) campus on Center Street between UTA Boulevard and West Mitchell Street. The Green at College Park, a component of the College Town Sustainable Development Infrastructure Project, was among the first three projects in the world to receive the Sustainable Sites Initiatives (SITES) Certification for landscape site development. Additionally, the project received the Texas Chapter of the American Society of Landscape Architects (ASLA) Honor Award for improving the livability of a Texas community.

College Town is anchored by UTA's College Park and College Park Center developments. College Park, an \$80 million mixed-use residential development, provides 392 housing units and 35,000 square feet of retail on the ground floor. The \$78 million College Park Center is a 7,000-seat special-events arena. A \$2.3 million public infrastructure component of the project was funded through the 2005-2006 Sustainable Development Call for Projects and utilizes low-impact development strategies such as a green bioswale, pedestrian amenities, and landscaping to not only mitigate an area traditionally prone to flooding, but to also create a viable pedestrian environment that links the UTA campus to downtown Arlington.

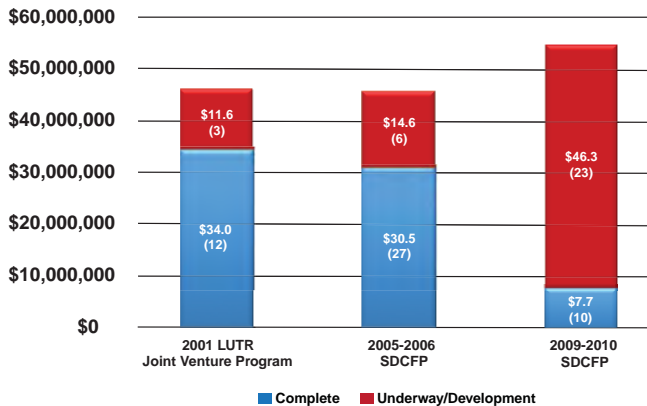


Project Implementation Status

- Out of \$144.7 million of net funding award plus local match for projects implemented, underway, or in development, \$72.2 million (50 percent) has been expended, and \$72.5 million (50 percent) is underway (spending funds) or in project development. **Exhibit 5** illustrates the implementation status of projects by total project cost and by funding cycle.
- Out of projects in the three calls for projects, 49 are complete, and 32 are underway or in development.
- Twelve out of 15 projects (80 percent) funded through the 2001 SDCFP were completed in 14 years, using CMAQ and STP-MM funds, compared to 27 out of 33 projects (82 percent) completed in nine years using RTC Local funds in 2005-2006 SDCFP. Use of RTC local funds for the program, and NCTCOG's contracting and implementation have expedited the implementation process.
- Approximately 10,900 residential units and 3.5 million square feet of commercial space have been constructed in the mixed-use developments supported by the program's infrastructure funding. Even more development is planned in future phases.

Exhibit 5

SDCFP Implementation Status by Total Project Cost*



* Chart includes Total Project cost (Number of Projects). Total Project cost includes local match. Status as of January 2015.

Awards to Sustainable Development Funding Program

This Sustainable Development Funding Program has received the following local and national recognition:

- The American Association of State Highway and Transportation Officials (AASHTO) selected the program for the Best Award for the “Smart Moves: Transportation Strategies for Smart Growth Competition” in 2002.
- The American Planning Association (APA) Midwest Section selected the program for a Planning Excellence Award in 2009.
- The Association of the Metropolitan Planning Organizations (AMPO) selected the program for the Outstanding Overall Achievement Award in 2012.

Case Study

Downtown Garland TOD, City of Garland

Redevelopment of Downtown to TOD



The City of Garland opened its first mixed-use transit-oriented development in 2009 just south of the Downtown Garland Dallas Area Rapid Transit (DART) light rail station called 5th Street Crossing. The multi-story development has approximately 190 apartments, 13,500 square feet of retail space, and a parking garage on one city block. Under the 2005-2006 Sustainable Development Call for Projects, NCTCOG funded \$1.8 million with the City of Garland providing additional funding for pedestrian infrastructure in the area. NCTCOG funded infrastructure improvements including pedestrian amenities; signalization; street construction at Walnut St., Sixth St., and the DART rail tracks connecting downtown Garland and the 5th Street Crossing development to the DART light rail station and a workforce training center to the north of the tracks. The Center was developed through a partnership of the City and Richland College, an affiliate of the Dallas County Community College District.

The Downtown Garland area had started to gain new life with the opening of a DART light rail station serving the Blue Line in 2002. In 2003, the Patty Granville Arts Center completed an expansion that added an atrium and a banquet facility across the street from the station.

Transit-Oriented Development (TOD)

TOD is a style of land planning and building orientation that is geared toward encouraging pedestrian activity that results from a passenger rail station. The boundary of a TOD can extend from a quarter- to half-mile radius around the passenger rail station, depending on the walkability of the area. The main forms of development in the boundary are ideally mixed-use and designed to

encourage people to bike or walk from the station and surrounding area to the development. A network of roadways, bike lanes, and sidewalks ideally connects the developments to the station. The density of the development may be moderate to high relative to each community, though some stations are currently found in lower-density single family residential areas. **Exhibit 6** shows the locations of the existing TOD projects in the region funded through the Sustainable Development Funding Program.

Exhibit 6
Locations of Funded
TOD Projects

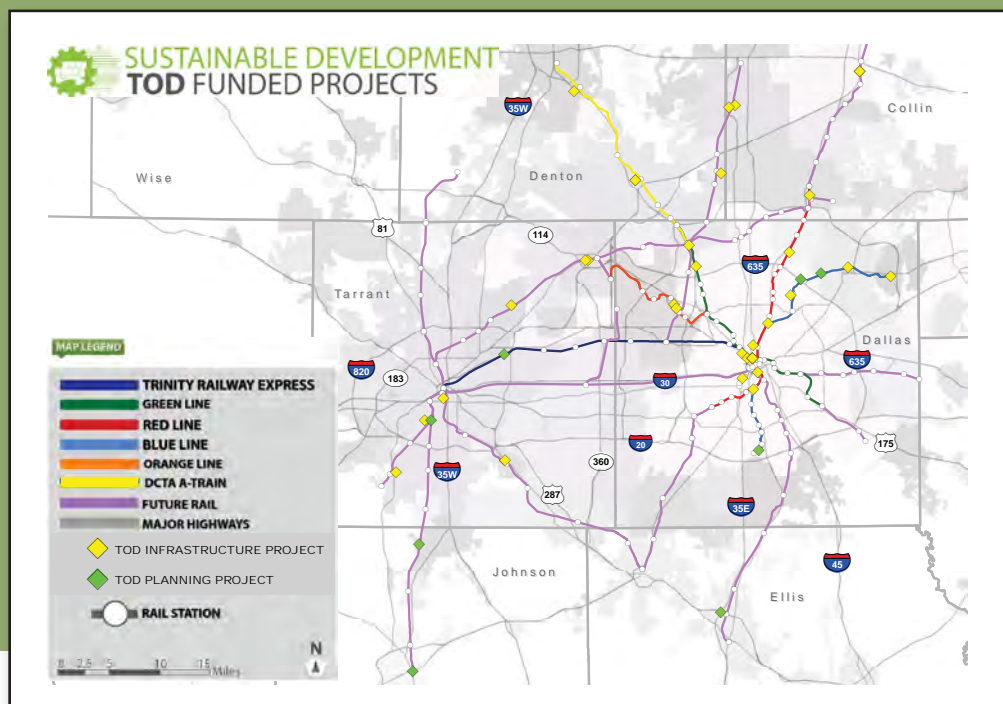


Exhibit 7 shows the summary of funding for TOD projects funded through three Sustainable Development Call for Projects. TOD projects range from infrastructure improvements to planning for future stations or redevelopment of existing stations and their surrounding land use. The region's transit agencies (Dallas Area Rapid Transit, Denton County Transportation Authority and the Fort Worth Transportation Authority) are strongly engaged in the program.

Transit-Oriented Development Tiers

TOD Tier 1 includes sustainable development projects within a quarter-mile of an existing station or station under construction. TOD Tier 2 indicates that the project was within a half-mile of an existing station or a planned but unfunded future station. Of the total funding provided to sustainable development projects, \$95 million, or 66 percent, was provided to TOD projects. Of the total funding provided to the sustainable development projects, 28 percent was provided to TOD Tier 1 projects, and 38 percent to TOD Tier 2 projects. Funding in **Exhibit 7** includes total dollars of both the RTC funded amount (80 percent) and the required city's local match of at least 20 percent.

Exhibit 7
Funding for TOD Projects
by SDCFP and TOD Tier

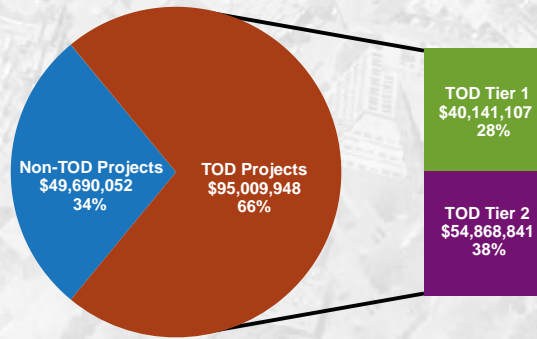
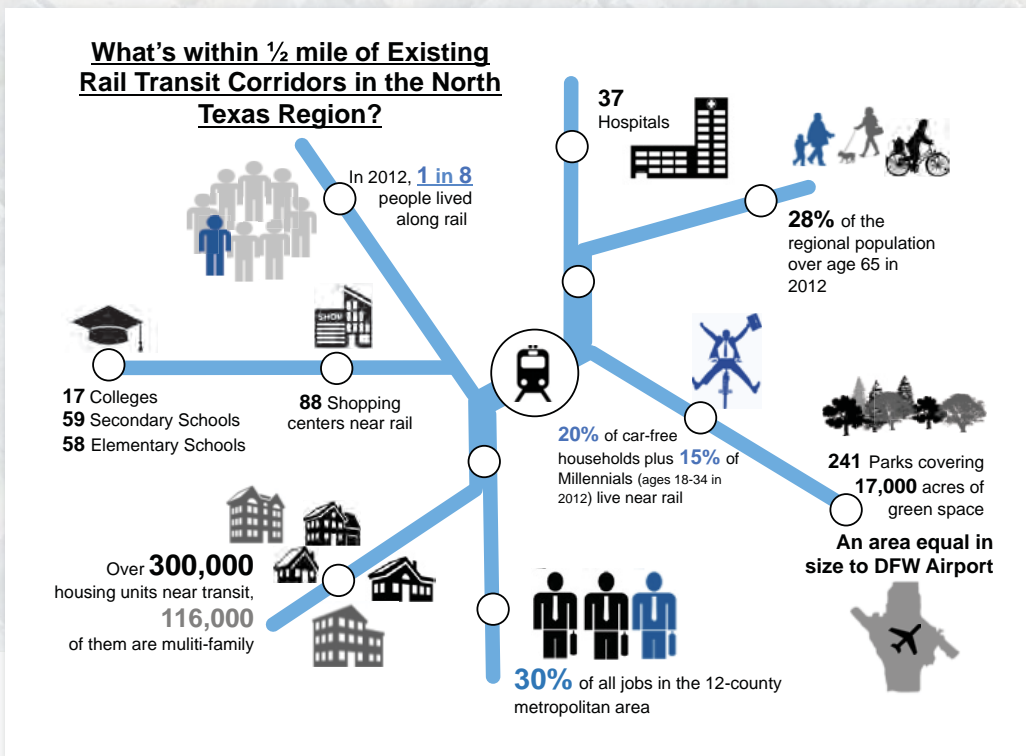


Exhibit 8



The TOD Infographic in **Exhibit 8** shows demographic and development characteristics within half-mile of existing rail transit corridors in the 12-County Metropolitan Planning Area. The demographic data was based on the U.S. Census Bureau's 2008-2012 American Community Survey data and NCTCOG datasets.

Exhibit 9

Exhibit 9 provides a summary of various types of rail lines, maximum vehicle capacity, peak frequency, and the number of stations operated by the three transit agencies in the region.

Rail Lines	Transit Agency	Rail Type	Number of Stations	Route Length (miles)	Max Vehicle Capacity *	Peak Frequency
Red, Blue, Green, Orange	DART	Light Rail Transit	59**	85	Medium (175)	Higher (7.5 minutes)
TRE	The T/DART	Commuter Rail	10	34	High (428)	Moderate (20 minutes)
A – Train	DCTA	Commuter Rail	6	21	Medium (200)	Moderate (20 minutes)

* Maximum Vehicle Capacity includes seating and standing
 ** Two stations shared with TRE and one station shared with DCTA

Sources: DART, DCTA, The T, and NCTCOG

Benefits of Sustainable Development Projects

- **Air Quality Benefits** – The mixed-use developments supported by infrastructure funding through the program included 10,900 residential housing units as of May 2013. These developments reduced VMT by approximately 151,000 miles, **which is the equivalent of circling the earth six times!** The reduction in VMT reduced nitrogen oxide (NOx) emissions by an average of 109 million

pounds and volatile organic compound (VOC) emissions by an average of 159 million pounds per day. This weight is about as much as 100 airplanes.

- **Job Growth** – The commercial space within the mixed-use developments supported by the program is estimated to accommodate approximately 10,300 jobs at full occupancy. The infrastructure investment funded through the program was estimated to create about 1,800 jobs.

Case Study

Richardson Eastside Mixed-Use Development, City of Richardson

Development of Livable Communities Near Employment Centers

Eastside is a TOD in Richardson, at the southeast corner of North Central Expressway and Campbell Road that was completed in 2009. The project added approximately 435 apartments and 100,000 square feet of retail to an existing 189,000 square foot office building and parking garage on a compact 15-acre site.

NCTCOG provided \$2 million of RTC Local Funds with \$3 million matching funds from the city to this project through the 2005-2006 Sustainable Development Call for Projects to construct local streets, pedestrian amenities and landscaping. These improvements also had an impact on transportation safety in the project area. Since the project completion, the number of traffic incidents within a half-mile of the project have decreased 15 percent. The development adds housing and retail to a large employment center known as the Telecom Corridor, which can reduce commutes and improve air quality as people are able to work, live, and shop in the same general vicinity.

The development is located between the Galatyn Park and Arapaho Center DART Stations. Both stations are on the Red Line and connected to Eastside by the North Duck Creek bicycle and pedestrian trail, which runs parallel to the DART line. According to NCTCOG's Mobility 2035 — 2014 Update, there are long-term plans to connect this trail with the Cotton Belt and Preston Ridge trails as part of the Regional Veloweb network.



Case Study

Design District, City of Dallas



Transforming an Industrial District to a Mixed-use Neighborhood

The Design District in Dallas is a light industrial district that is transforming into a dense urban mixed-use neighborhood. The district, located northwest of downtown Dallas, between Stemmons Freeway (Interstate Highway 35E) and the Trinity River, gets its name from the 350 showrooms and artist studios that call the area home. NCTCOG initially provided approximately \$830,000 through the 2005-2006 SDCFP for a streetscape project on Hi Line Drive, one of the main thoroughfares in the district. The mixed-use developments constructed in the initial phase built 550 residential units and 200,000 square feet of office and retail space, with a total private investment of approximately \$30 million.

NCTCOG funded an additional \$1.2 million through the 2009-2010 Sustainable Development Call for Projects for a streetscape project on Edison Street, additional work on Hi Line Drive, and underpass improvements at IH 35E and Hi Line Drive to connect the Design District to the Katy Trail, Victory Station, and American Airlines Center. Additional mixed-use developments added approximately 300 residential units and 145,000 square feet of retail space, with a total private investment of \$63 million. Through a separate effort, NCTCOG provided \$4.5 million of Regional Toll Revenue funds for the first phase of the Trinity Strand Trail that will run through the center of the Design District, connecting Victory Park and the Katy Trail to the Trinity River Corridor trail system. The City of Dallas also created a Tax Increment Financing (TIF) District to help pay for continued improvements such as upgrading streets, rebuilding utility lines, and adding additional parks and trails.

- **Location Efficiency** – Below is a snapshot of the number of key land uses and community amenities located **within a half-mile** of a funded Sustainable Development project:
 - 42 projects near a transit station
 - 47 projects near a school
 - 52 projects near a major employer (100+ employees)
 - 57 projects near a major shopping center
- **Public-Private Partnerships** – The Sustainable Development Funding Program funds and implements projects through successful public-private partnerships. Since 2005, one of the qualifying criteria to receive sustainable development infrastructure funding is to have a mixed-use development connected to the funded improvements, and to have a developer as a project sponsor partnering with the applicant city government.

Through the program, NCTCOG partnered with city governments and cities contracted with developers to implement sustainable development infrastructure projects. On the sustainable development landbanking and planning projects, NCTCOG partnered with local governments; the participation of a private-sector partner was optional, but often included community groups, neighborhood associations, universities, and non-profit organizations.

All public and private sector partners are to be commended for their participation and contributions to Sustainable Development Funding Program and helping to transform Dallas-Fort Worth metropolitan area into a livable region. More information on some of the performance measures and success stories of the program is available at http://www.nctcog.org/trans/sustdev/funding_program.asp

Case Study

Museum Place, City of Fort Worth

Developing Pedestrian-Oriented Mixed-Use in the Arts District



Museum Place is a walkable mixed-use development across the street from the Kimball Art Museum and the Modern Art Museum in the Fort Worth Museum District. The \$200 million development opened in 2008 with approximately 173,000 square feet of retail space, 130,000 square feet of office space, and 500 apartments on an 11-acre site. The development consists of several blocks of mid-rise buildings with retail on the ground floor and office or residential uses above.

NCTCOG awarded the City of Fort Worth \$3 million through the 2005-2006 Sustainable Development Call for Projects to add pedestrian amenities to several streets serving and connecting Museum Place along Camp Bowie Boulevard in front of the Modern Art Museum. These improvements included wide landscaped sidewalks, benches, street lights, and intersection improvements.

Case Study

Garland Road Vision Study, City of Dallas

Creating a Land Use-Transportation Vision for the Corridor

NCTCOG and the City of Dallas coordinated on a planning study to assess the possibilities available for the Garland Road (State Highway 78) corridor from the spillway to IH 635 to create greater character, meaning, and livability within the City of Dallas. Key Study elements included neighborhood preservation, the advancement of attractive and inviting retail establishments, corridor beautification, and the incorporation of pedestrian-friendly amenities.

The Dallas-Garland Road Vision Study produced the following components:

- 1) A circulation vision for the Garland Road corridor that provides guidance for future thoroughfare planning and context sensitive design of transportation networks in the study area.
- 2) A future land use development vision that provides policy guidelines for land use patterns in the study area and provides a quantitative basis for future transportation, housing, infrastructure, and economic development in the study area.
- 3) A strategic opportunity vision that identifies viable areas that may serve as catalysts for infill development.



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What Is NCTCOG?

The North Central Texas Council of Governments (NCTCOG) is a voluntary association of local governments within the 16-county North Central Texas region. The agency was established in 1966 to assist local governments in planning for common needs, cooperating for mutual benefit and coordinating for sound regional development. North Central Texas is a 16-county region with a population of 6.6 million and an area of approximately 12,800 square miles. NCTCOG has 238 member governments, including all 16 counties, 169 cities, 22 independent school districts and 31 special districts.

Since 1974, NCTCOG has served as the Metropolitan Planning Organization (MPO) for transportation in the Dallas-Fort Worth Metropolitan Area. The Regional Transportation Council (RTC) is the policy body for the MPO. The RTC consists of 43 members, predominantly local elected officials, overseeing the regional transportation planning process. NCTCOG's Transportation Department is responsible for support and staff assistance to the RTC and its technical committees, which comprise the MPO policy-making structure.

We would like your comments. . .

If you have questions or comments regarding the transportation and air quality programs of the North Central Texas Council of Governments and the Regional Transportation Council or need additional information, please contact the NCTCOG Transportation Department at **817-695-9240**, by **fax** at **817-640-3028**, via email: transinfo@nctcog.org, or visit our website at www.nctcog.org/trans.

Regional Mobility Initiatives Issues

Advanced Transportation Management, *March 1996*
Air Quality, *July 1996*
Traffic Congestion, *October 1996*
Multimodal Solutions in the North Central Corridor, *July 1997*
Toll Roads, *February 1998*
Major Investment Studies, *August 1998*
The Transportation Equity Act for the 21st Century, *October 1998*
High Occupancy Vehicle (HOV) Lanes, *December 1998*
Travel Demand Forecasting Procedures, *June 1999*
Commuter Traffic, *December 2000*
Pedestrian Transportation, *August 2002*
Metropolitan Planning Organization, *November 2002*
Rail Station Access, *February 2003*
Traffic Congestion, *October 2004*
Regional Rail, *October 2005*
Goods Movement, *January 2006*
North Texas Regional ITS Architecture, *December 2006*
SAFETEA-LU, *May 2007*
Metropolitan Planning Organization, *August 2007*
Air Quality, *September 2007*
The Congestion Management Process, *April 2008*
Traffic Congestion, *December 2008*
General Aviation, *March 2011*
Metropolitan Planning Organization, *February 2012*

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 views or policies of the Federal Highway Administration, the Federal Transit Administration, or the Texas Department of Transportation. This document was prepared in cooperation with the Texas Department of Transportation and the U.S. Department of Transportation, Federal Highway Administration, and Federal Transit Administration.