

APPENDIX D: Crosswalk Improvement Selection Tables



DART Last Mile Connections Project - Unsignalized Crosswalk Evaluations - City of Dallas - July 2020

Unsignalized Crosswalk Improvement Legend

1	Crosswalk Signs, Markings & Lighting	5	Curb Extension
2	Raised Crosswalk	6	Ped. Refuge Island
3	Advance "Yield Here" Sign	7	RRFB
4	In-Street Pedestrian Crossing	8	Road Diet
		9	Ped. Hybrid Beacon

Signalized Crosswalk Improvement Legend

10	Add Marked Crosswalks & Provide Countdown, Accessible Pedestrian Signals
11	Traffic Signal

Legend: Strength of Consideration to be Given to Improvement

#	Signifies that the countermeasure is a candidate treatment at a marked uncontrolled crossing location.
#	Signifies that the countermeasure should always be considered, but not mandated or required, based upon engineering judgment at a marked uncontrolled crossing location.
#	Signifies that crosswalk visibility enhancements should always occur in conjunction with other identified countermeasures.

Station ID	Station Name	Street Crossed	At/Between	Posted/ Prevailing Speed of Street Crossed	Number of Lanes Crossed	Median Present? ¹	AADT from Count Map	AADT Street Name	Source	Land Use (legend below) ²	2-Min. Traffic Count ²		Hourly Traffic Estimate	AADT Estimate	Assumed AADT	Improvements (See Legends Above)									Notes
											Time	Volume				Options					Recommended				
3C	LBJ Central	Markville Dr	DART Station/Texas Instruments sidewalk connector	30	4	Y	2,500	Markville Dr	TxDOT 2014 Sat. Counts	-	-	-	-	-	2,500	1	3	5	7	8	9	1, 3, 7	Add pedestrian warning signs to this existing marked and lit crosswalk. Add yield lines and "Yield Here to Pedestrians" signing for each approach to mitigate risk of dual threat situation for pedestrians. Add a pedestrian ramp at the south end of the crosswalk. Consider adding pedestrian-actuated RRFB's.		
3C	LBJ Central	Markville Dr	Vantage Point Dr	30	4	N	2,500	Markville Dr	TxDOT 2014 Sat. Counts	-	-	-	-	-	2,500	1	3	5	6	7	8	9	1, 3, 6, 7	If sidewalk cannot be built on the south side of Markville Dr between the station and Vantage Point Dr, consider installing a crosswalk across Markville Dr on the southeast side of its intersection with Vantage Point Dr. Add pedestrian warning signs, striping, lighting, and a median refuge area. Reconstruct pedestrian ramps as needed to align with new median refuge area. Add yield lines and "Yield Here to Pedestrians" signing for each approach to mitigate risk of dual threat situation for pedestrians. Consider adding pedestrian-actuated RRFB's, including on the median refuge island.	
3C	LBJ Central	TI Blvd	Regional Veloweb	35	4	N	8,700	TI Blvd	TxDOT 2014 Sat. Counts	-	-	-	-	-	8,700	1	3	5	6	7	8	9	1, 3, 6, 7, 8	If the future Regional Veloweb shared use path currently planned along the west side of the DART tracks is built here, add a new signed, marked and lit crosswalk with advance warning signs, advance yield lines, and "Yield Here to Pedestrians" signing. Install pedestrian-actuated RRFB's in conjunction with a road diet and/or pedestrian refuge island to allow for easier crossing movements.	
3D	Forest Lane	Coit Road	U.S. 75 SBFR	40	3	N	18,700	Coit Rd	TxDOT 2014 Sat. Counts	-	-	-	-	-	18,700	1	3	5	6		9	1, 3, 9	Add a new marked, signed, and lit crosswalk with advance yield lines and "Yield Here to Pedestrians" signing. Consider adding a pedestrian hybrid beacon.		
3D	Forest Lane	Forest Lane	Schroeder Rd & TI Blvd (future Veloweb crossing)	40	6	Y	36,500	Forest Lane	TxDOT 2014 Sat. Counts	-	-	-	-	-	36,500	1	3	5			8	9	1, 3, 9	Consider a grade separated pedestrian crossing over Forest Lane if possible during planning of Regional Veloweb extension. It is unrealistic to expect that all shared use path users will travel out of their way to cross Forest Lane at signalized crosswalks at Schroeder Rd or TI Blvd/Stults Rd, which are 500-800 feet away from the existing/planned trail alignment. If a pedestrian overpass is not feasible, consider a marked and signed crosswalk with advance yield lines, "Yield Here to Pedestrians Signing", and a pedestrian hybrid beacon. If a pedestrian hybrid beacon is not constructed, add aesthetic, anti-climb median fencing to discourage unassisted at-grade crossings and channelize trail users to cross at the Schroeder Rd signalized crosswalk.	



¹ with sufficient 6' width for ped. refuge?
² if AADT Estimate is not available.

Land Use Code Legend

R	Residential	S	Shopping
O	Office	M	Mix

Based on FHWA's "Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations", July 2018, Table 1:
Application of pedestrian crash countermeasures by roadway feature



DART Last Mile Connections Project - Unsignalized Crosswalk Evaluations - City of Dallas - July 2020

Unsignalized Crosswalk Improvement Legend

1	Crosswalk Signs, Markings & Lighting	5	Curb Extension
2	Raised Crosswalk	6	Ped. Refuge Island
3	Advance "Yield Here" Sign	7	RRFB
4	In-Street Pedestrian Crossing	8	Road Diet
		9	Ped. Hybrid Beacon

Signalized Crosswalk Improvement Legend

10	Add Marked Crosswalks & Provide Countdown, Accessible Pedestrian Signals
11	Traffic Signal

Legend: Strength of Consideration to be Given to Improvement

#	Signifies that the countermeasure is a candidate treatment at a marked uncontrolled crossing location.
#	Signifies that the countermeasure should always be considered, but not mandated or required, based upon engineering judgment at a marked uncontrolled crossing location.
#	Signifies that crosswalk visibility enhancements should always occur in conjunction with other identified countermeasures.

Station ID	Station Name	Street Crossed	At/Between	Posted/Prevailing Speed of Street Crossed	Number of Lanes Crossed	Median Present? ¹	AADT from Count Map	AADT Street Name	Source	Land Use (legend below) ²	2-Min. Traffic Count ²		Hourly Traffic Estimate	AADT Estimate	Assumed AADT	Improvements (See Legends Above)									Notes				
											Time	Volume				Options					Recommended								
3D	Forest Lane	U.S. 75 Northbound Frontage Rd	Pedestrian Underpass south of White Rock Creek	40	2	N				M	10:00	15	450	8,800	8,800	1						5	6	7	9	1, 3, 7	Add crosswalk striping for existing signed crosswalk with pedestrian ramps. Add advance yield lines, "Yield Here to Pedestrians Signing", and pedestrian-actuated rectangular rapid flashing beacons (RRFB's).		
4B	Park Lane	Park Lane	Under DART tracks	30	6	Y	21,200	Park Ln	TxDOT 2015 Sat. Counts	M	-	-	-	-	21,200	1	3								7	8	9	1, 3, 9	Road diet can be implemented by reducing 3 westbound lanes to 2 further east of where the existing taper is located, creating more space for a wider median refuge. The pedestrian hybrid beacon can then be timed to handle crossings of eastbound and westbound traffic separately to avoid impacts to signal progression.
4B	Park Lane	Blackwell St	Park Lane North	30	2	Y				M	8:45	23	690	15,700	15,700	1			4	5	6	7	9			None	Signs and markings already in place.		
4C	Lovers Lane	Matilda St	Milton St	30	2	N				R	8:50	14	420	8,600	8,600	1	2		4	5	6					5	Consider curb extensions into parking lanes. Signs and markings already in place.		
4C	Lovers Lane	Amesbury Dr	Milton St	30	2	N				R	10:10	2	60	1,300	1,300	1	2		4	5	6					1, 5	Add signs, markings, consider curb extensions into parking lanes.		
4C	Lovers Lane	Amesbury Dr	Birchbrook Dr	30	2	N				R	10:00	11	330	7,500	7,500	1	2		4	5	6					1, 5	Add signs, markings, consider curb extensions into parking lanes.		
4C	Lovers Lane	University Blvd	Matilda St	30	4	N	9,300	University Blvd	TxDOT 2015 Sat. Counts	R	8:16	37	1,110	19,500	19,500	1	3									3, 6, 7	Signs and markings already in place. Add advance "Yield Here" signs, consider RRFB & pedestrian refuge island. Existing ROW appears wide enough for adding median refuge.		
4D	Mockingbird	SMU Blvd	Prentice St	30	4	Y	9,600	SMU Blvd	TxDOT 2015 Sat. Counts	M	-	-	-	-		1	3									3	Crosswalk markings and median refuge already in place. Pedestrian warning signs at crosswalk temporarily missing. Add advance yield lines and "Yield Here to Pedestrians" signing in advance of the crosswalk.		
4D	Mockingbird	SMU Blvd	Worcola St	30	4	Y	9,600	SMU Blvd	TxDOT 2015 Sat. Counts	M	-	-	-	-		1	3									3	Crosswalk signing, markings already in place across east and west legs of the intersection. Pushbutton-activated RRFB's in place for the east leg crosswalk. Add advance yield lines and "Yield Here to Pedestrians" signing in advance of the intersection in each direction.		
4D	Mockingbird	Twin Sixties Dr	University Crossing Trail	30	2	N	4,100	Twin Sixties Dr	TxDOT 2015 Sat. Counts	M	-	-	-	-		1	2		4	5	6					1			
4E	LBJ Skillman	Audelia Rd	Valmarie Dr	35	6	Y				R	12:00	20	600	11,000	11,000	1	3									1, 11	Add crosswalk markings, signing, and lighting. Construct full signal instead of RRFB or pedestrian hybrid beacon due to adjacency to railroad crossing gates and potential confusion with alternative meanings of flashing red lights. Advance warning for the signal should be provided for southbound traffic around the horizontal curve.		



¹ with sufficient 6' width for ped. refuge?
² if AADT Estimate is not available.

Land Use Code Legend

R	Residential	S	Shopping
O	Office	M	Mix



DART Last Mile Connections Project - Unsignalized Crosswalk Evaluations - City of Dallas - July 2020

Unsignalized Crosswalk Improvement Legend

1	Crosswalk Signs, Markings & Lighting	5	Curb Extension
2	Raised Crosswalk	6	Ped. Refuge Island
3	Advance "Yield Here" Sign	7	RRFB
4	In-Street Pedestrian Crossing	8	Road Diet
		9	Ped. Hybrid Beacon

Signalized Crosswalk Improvement Legend

10	Add Marked Crosswalks & Provide Countdown, Accessible Pedestrian Signals
11	Traffic Signal

Legend: Strength of Consideration to be Given to Improvement

#	Signifies that the countermeasure is a candidate treatment at a marked uncontrolled crossing location.
#	Signifies that the countermeasure should always be considered, but not mandated or required, based upon engineering judgment at a marked uncontrolled crossing location.
#	Signifies that crosswalk visibility enhancements should always occur in conjunction with other identified countermeasures.

Station ID	Station Name	Street Crossed	At/Between	Posted/ Prevailing Speed of Street Crossed	Number of Lanes Crossed	Median Present? ¹	AADT from Count Map	AADT Street Name	Source	Land Use (legend below) ²	2-Min. Traffic Count ²		Hourly Traffic Estimate	AADT Estimate	Assumed AADT	Improvements (See Legends Above)					Notes			
											Time	Volume				Options						Recommended		
4E	LBJ Skillman	Miller Rd	Markison Rd	40	6	N				M	9:35	49	1,470	29,400	29,400	1	3	5	6	8	9	3, 9	Consider adding advance yield lines, "Yield Here to Pedestrians" signing, and pedestrian hybrid beacon at existing marked & signed crosswalk.	
4F	White Rock	Lawther Dr	Mockingbird Ln WB Ramps	40	4	Y	5,200	Lawther Dr	TxDOT 2015 Sat. Counts	M	-	-	-	-	5,200	1	3	5	8	9	1, 3, 8, 9	Add marked crosswalk with advance pedestrian warning signs, advance yield lines, "Yield Here to Pedestrians" signing at the yield lines, and pedestrian warning signs at the crosswalk. Consider road diet so pedestrians only cross one lane of traffic in each direction (ADT ~5,000 veh/day does not need 4 lanes). Consider a pedestrian hybrid beacon, particularly if not implementing road diet.		
5A	Eighth & Corinth	Eighth St	Denley Dr	30	4	N	15,700	Eighth St	TxDOT 2014 Sat. Counts	R	9:16	22	660	16,100	16,100	1	3	5	6	7	8	9	1, 3, 6, 7, 8, 9	Add lighting and additional signing to this existing marked school crosswalk. Add advance yield lines and "Yield Here to Pedestrians" signing at the yield lines, and pedestrian warning signs at the crosswalk. Consider road diet so pedestrians only cross one lane of traffic in each direction and so a median refuge island can be constructed. Consider adding pedestrian-actuated rectangular rapid flashing beacons (RRFB's), especially in conjunction with a road diet and median refuge area. Consider a pedestrian hybrid beacon, particularly if not implementing a road diet.
5A	Eighth & Corinth	Eighth St	Santa Fe Trestle Trail	30	4	Y				R	16:32	30	900	10,200	10,200	1	3	5	7	8	9	1, 3, 7	Add advance yield lines and "Yield Here to Pedestrians" signing at the existing crosswalk across Eighth Street. Update pedestrian warning sign in eastbound direction to be fluorescent yellow with diagonal arrow panel pointing to crosswalk. Add pedestrian warning signs in the median refuge island. Relocate "Stop Here on Red" sign on westbound approach below new upstream "Yield Here to Pedestrians" sign. Prevent buses from stopping just upstream of the crosswalk. Consider pushbutton activated rectangular rapid flashing beacons (RRFB's) attached to the pedestrian warning sign assemblies. See Station Improvement 5A-EC-ST-08.	



¹ with sufficient 6' width for ped. refuge?
² if AADT Estimate is not available.

Land Use Code Legend

R	Residential	S	Shopping
O	Office	M	Mix



DART Last Mile Connections Project - Unsignalized Crosswalk Evaluations - City of Dallas - July 2020

Unsignalized Crosswalk Improvement Legend

1	Crosswalk Signs, Markings & Lighting	5	Curb Extension
2	Raised Crosswalk	6	Ped. Refuge Island
3	Advance "Yield Here" Sign	7	RRFB
4	In-Street Pedestrian Crossing	8	Road Diet
		9	Ped. Hybrid Beacon

Signalized Crosswalk Improvement Legend

10	Add Marked Crosswalks & Provide Countdown, Accessible Pedestrian Signals
11	Traffic Signal

Legend: Strength of Consideration to be Given to Improvement

#	Signifies that the countermeasure is a candidate treatment at a marked uncontrolled crossing location.
#	Signifies that the countermeasure should always be considered, but not mandated or required, based upon engineering judgment at a marked uncontrolled crossing location.
#	Signifies that crosswalk visibility enhancements should always occur in conjunction with other identified countermeasures.

Station ID	Station Name	Street Crossed	At/Between	Posted/ Prevailing Speed of Street Crossed	Number of Lanes Crossed	Median Present? ¹	AADT from Count Map	AADT Street Name	Source	Land Use (legend below) ²	2-Min. Traffic Count ²		Hourly Traffic Estimate	AADT Estimate	Assumed AADT	Improvements (See Legends Above)									Notes
											Time	Volume				Options					Recommended				
5A	Eighth & Corinth	Corinth St Rd	Avenue B	40	6	N	14,300	Corinth St Rd	TxDOT 2014 Sat. Counts	R	16:07	42	1,260	14,000	14,300	1	3	5	6	8	9	1, 3, 6, 9	Add crosswalk pavement markings and advance warning signs to these existing signed and lit but unmarked school crosswalks. A reduced speed 20 MPH school zone is in effect during school hours (compared to the normal 35 mph speed limit). A DART bus stop is also located at this intersection. Add advance yield lines and "Yield Here to Pedestrians" signing for each approach to mitigate risk of dual threat situation for pedestrians. Consider a road diet from six lanes to four, which would still be easily sufficient to accommodate the average daily traffic of around 14,000 vehicles/day. A road diet would allow construction of a median refuge island for easier crossing. Consider a pedestrian hybrid beacon to further enhance visibility of crossing pedestrians, particularly if no school crossing guard is present, study indicates pedestrian crossing demand outside school arrival/dismissal hours, or a road diet and median refuge island are not implemented.		
5B	Dallas Zoo	E 12th St	S Storey St	30	2	N				M	15:36	12	360	4,200	4,200	1	2	4	5	6			---	Signed, marked crosswalk already in place.	
5B	Dallas Zoo	E 12th St	S Crawford St	30	2	N				M	15:39	11	330	3,800	3,800	1	2	4	5	6			---	Signed, marked crosswalk already in place.	
5B	Dallas Zoo	Clarendon Dr	Station/Zoo	35	4	Y	5,700	Clarendon Dr	TxDOT 2014 Sat. Counts	R	-	-	-	-	5,700	1	3	5	7	8	9	1, 3, 7	Add pedestrian warning signs to this existing marked and lit crosswalk. Add yield lines and "Yield Here to Pedestrians" signing for each approach to mitigate risk of dual threat situation for pedestrians. Add a pedestrian ramp at the south end of the crosswalk. Consider adding pedestrian-actuated RRFB's.		
5C	Morrell	Morrell Ave	Hutchins Rd	30	4	N	5,000	Morrell Ave	TxDOT 2014 Sat. Counts	-	-	-	-	-	5,000	1	3	5	6	7	8	9	1, 3, 5, 6, 7	Add school crossing signs at this existing marked and lit crosswalk, which is located within a signed school reduced speed zone for Franklin D. Roosevelt High School. Add advance yield lines and "Yield Here to Pedestrians" signing due to high width of two lane roadway (~40 feet). Consider constructing a median refuge island and/or curb extensions and adding pedestrian-actuated RRFB's.	
5C	Morrell	Morrell Ave	S Moore St	30	2	N	4,700	Morrell Ave	TxDOT 2014 Sat. Counts	R	7:30	16	480	6,800	6,800	1	2	4	5	6			1, 6	Install signed and marked crosswalk across Morrell Ave to station. Include new streetlighting, and consider modifying median to provide pedestrian refuge area. See Station Improvement 5C-ML-ST-03.	



¹ with sufficient 6' width for ped. refuge?
² if AADT Estimate is not available.

Land Use Code Legend

R	Residential	S	Shopping
O	Office	M	Mix



DART Last Mile Connections Project - Unsignalized Crosswalk Evaluations - City of Dallas - July 2020

Unsignalized Crosswalk Improvement Legend	
1	Crosswalk Signs, Markings & Lighting
2	Raised Crosswalk
3	Advance "Yield Here" Sign
4	In-Street Pedestrian Crossing

5	Curb Extension
6	Ped. Refuge Island
7	RRFB
8	Road Diet
9	Ped. Hybrid Beacon

Signalized Crosswalk Improvement Legend	
10	Add Marked Crosswalks & Provide Countdown, Accessible Pedestrian Signals
11	Traffic Signal

Legend: Strength of Consideration to be Given to Improvement	
#	Signifies that the countermeasure is a candidate treatment at a marked uncontrolled crossing location.
#	Signifies that the countermeasure should always be considered, but not mandated or required, based upon engineering judgment at a marked uncontrolled crossing location.
#	Signifies that crosswalk visibility enhancements should always occur in conjunction with other identified countermeasures.

Station ID	Station Name	Street Crossed	At/Between	Posted/ Prevailing Speed of Street Crossed	Number of Lanes Crossed	Median Present? ¹	AADT from Count Map	AADT Street Name	Source	Land Use (legend below) ²	2-Min. Traffic Count ²		Hourly Traffic Estimate	AADT Estimate	Assumed AADT	Improvements (See Legends Above)									Notes
											Time	Volume				Options						Recommended			
5C	Morrell	Morrell Ave	Woodbine Ave	30	2	N	4,700	Morrell Ave	TxDOT 2014 Sat. Counts	R	7:30	16	480	6,800	6,800	1	2	4	5	6	1, 6	Install signed and marked crosswalk across Morrell Ave to station. Consider modifying median to provide pedestrian refuge area. Streetlighting is already in place. See Station Improvement 5C-ML-ST-04.			
5C	Morrell	S Corinth St Rd	High Hill Blvd	40	6	N	12,500	S Corinth St	TxDOT 2014 Sat. Counts	R	-	-	-	-	12,500	1	3	5	6	8	9	1, 3, 6, 8, 9	At this location where pedestrian warning signs are already mounted in the median, DART bus stops are present on both sides of the six-lane divided roadway, and a pedestrian connection over Little Cedar Creek to the west provides a slightly shorter walking distance to the station, re-stripe the existing but faded crosswalk and install additional warning signs, advance yield lines, and "Yield Here to Pedestrians" signing. Give strong consideration to a road diet from six lanes to four in order to provide a median refuge area, as traffic volumes are well below the capacity of a four-lane roadway. Also consider a pedestrian hybrid beacon, which should especially be installed if a road diet is not implemented.		
6A	Tyler Vernon	Polk St Cutoff	Buckalew St	40	3	N	6,900	Polk St	TxDOT 2014 Sat. Counts	-	-	-	-	-	6,900	1	3	5	6	9	1, 3, 5, 8, 9	Add high visibility crosswalk markings and lighting to this existing signed but unmarked school crosswalk across a three-lane, one-way street in a 20 mph reduced speed school zone. Add advance yield lines and "Yield Here to Pedestrians" signing on the approach to mitigate risk of dual threat situation for pedestrians. Consider a road diet to implement a curb extension, since two lanes would be more than sufficient for the ~7,000 average daily traffic. Consider a pedestrian hybrid beacon, especially if a road diet is not implemented or if a study indicates significant pedestrian demand outside school arrival and dismissal hours. A DART bus stop is located on the east side of the street near this crosswalk.			



¹ with sufficient 6' width for ped. refuge?
² if AADT Estimate is not available.

Land Use Code Legend			
R	Residential	S	Shopping
O	Office	M	Mix

Based on FHWA's "Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations", July 2018, Table 1:
Application of pedestrian crash countermeasures by roadway feature



DART Last Mile Connections Project - Unsignalized Crosswalk Evaluations - City of Dallas - July 2020

Unsignalized Crosswalk Improvement Legend

1	Crosswalk Signs, Markings & Lighting	5	Curb Extension
2	Raised Crosswalk	6	Ped. Refuge Island
3	Advance "Yield Here" Sign	7	RRFB
4	In-Street Pedestrian Crossing	8	Road Diet
		9	Ped. Hybrid Beacon

Signalized Crosswalk Improvement Legend

10	Add Marked Crosswalks & Provide Countdown, Accessible Pedestrian Signals
11	Traffic Signal

Legend: Strength of Consideration to be Given to Improvement

#	Signifies that the countermeasure is a candidate treatment at a marked uncontrolled crossing location.
#	Signifies that the countermeasure should always be considered, but not mandated or required, based upon engineering judgment at a marked uncontrolled crossing location.
#	Signifies that crosswalk visibility enhancements should always occur in conjunction with other identified countermeasures.

Station ID	Station Name	Street Crossed	At/Between	Posted/Prevailing Speed of Street Crossed	Number of Lanes Crossed	Median Present? ¹	AADT from Count Map	AADT Street Name	Source	Land Use (legend below) ²	2-Min. Traffic Count ²		Hourly Traffic Estimate	AADT Estimate	Assumed AADT	Improvements (See Legends Above)									Notes
											Time	Volume				Options					Recommended				
6A	Tyler Vernon	S Tyler St	Page Ave	40	3	N	7,800	Tyler St	TxDOT 2014 Sat. Counts	-	-	-	-	-	7,800	1	3	5	6	9	1, 3, 5, 8, 9	Add high visibility crosswalk markings to this existing signed but unmarked school crosswalk across a three-lane, one-way street in a 20 mph reduced speed school zone. Add advance yield lines and "Yield Here to Pedestrians" signing on the approach to mitigate risk of dual threat situation for pedestrians. Consider a road diet to implement a curb extension, since two lanes would be more than sufficient for the ~8,000 average daily traffic. Consider a pedestrian hybrid beacon, especially if a road diet is not implemented or if a study indicates significant pedestrian demand outside school arrival and dismissal hours. A DART bus stop is located on the west side of the street near this crosswalk.			
6A	Tyler Vernon	S Tyler St	Burlington Blvd/Delaware Ave	40	7	N	14,800	Tyler St	TxDOT 2014 Sat. Counts	-	-	-	-	-	14,800	1	3	5	6	8	9	1, 3, 6, 8, 9	Add high visibility crosswalk markings and lighting to this existing signed but unmarked school crosswalk that crosses a six-lane divided arterial but which is not in a reduced speed school zone. Add advance yield lines and "Yield Here to Pedestrians" signing on each approach to mitigate risk of dual threat situation for pedestrians. Consider a road diet to implement a median refuge, since four lanes would be more than sufficient for the ~15,000 average daily traffic. Consider a pedestrian hybrid beacon, especially if a road diet is not implemented or if a study indicates significant pedestrian demand outside school arrival and dismissal hours. DART bus stops are located on either side of Tyler St at this location.		
6A	Tyler Vernon	Burlington Blvd	Clinton Ave	35	2	Y	1,400	Burlington B	TxDOT 2014 Sat. Counts	-	-	-	-	-	1,400	1		5	6	7	9	1	Consider signed and marked crosswalks across Burlington Blvd at this location due to its extra width and subsequent potential for higher speeds. Streetlighting is already in place.		
6A	Tyler Vernon	Burlington Blvd	Willomet Ave	35	2	Y	1,400	Burlington Blvd	TxDOT 2014 Sat. Counts	-	-	-	-	-	1,400	1		5	6	7	9	1	Construct cut-through sidewalk / refuge areas in the median of Burlington Blvd, which is not open to left turns to and from Willomet Ave. Consider signed and marked crosswalks across Burlington Blvd at this location due to its extra width and subsequent potential for higher speeds. Add streetlighting for the crosswalks.		
6A	Tyler Vernon	Burlington Blvd	Polk St	35	2	Y	1,400	Burlington Blvd	TxDOT 2014 Sat. Counts	-	-	-	-	-	1,400	1		5	6	7	9	1	Consider signed and marked crosswalks across Burlington Blvd at this location due to its extra width and subsequent potential for higher speeds. Add streetlighting for the crosswalks.		



¹ with sufficient 6' width for ped. refuge?
² if AADT Estimate is not available.

Land Use Code Legend

R	Residential	S	Shopping
O	Office	M	Mix

Based on FHWA's "Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations", July 2018, Table 1: Application of pedestrian crash countermeasures by roadway feature



DART Last Mile Connections Project - Unsignalized Crosswalk Evaluations - City of Dallas - July 2020

Unsignalized Crosswalk Improvement Legend

1	Crosswalk Signs, Markings & Lighting	5	Curb Extension
2	Raised Crosswalk	6	Ped. Refuge Island
3	Advance "Yield Here" Sign	7	RRFB
4	In-Street Pedestrian Crossing	8	Road Diet
		9	Ped. Hybrid Beacon

Signalized Crosswalk Improvement Legend

10	Add Marked Crosswalks & Provide Countdown, Accessible Pedestrian Signals
11	Traffic Signal

Legend: Strength of Consideration to be Given to Improvement

#	Signifies that the countermeasure is a candidate treatment at a marked uncontrolled crossing location.
#	Signifies that the countermeasure should always be considered, but not mandated or required, based upon engineering judgment at a marked uncontrolled crossing location.
#	Signifies that crosswalk visibility enhancements should always occur in conjunction with other identified countermeasures.

Station ID	Station Name	Street Crossed	At/Between	Posted/ Prevailing Speed of Street Crossed	Number of Lanes Crossed	Median Present? ¹	AADT from Count Map	AADT Street Name	Source	Land Use (legend below) ²	2-Min. Traffic Count ²		Hourly Traffic Estimate	AADT Estimate	Assumed AADT	Improvements (See Legends Above)									Notes		
											Time	Volume				Options						Recommended					
6A	Tyler Vernon	Clarendon Dr	Windomere Ave	30	2	N	9,700	Clarendon Dr	TxDOT 2014 Sat. Counts	R	13:44	15	450	7,300	9,700	1				4	5	6				5, 6	Consider constructing curb extensions and/or a median refuge island for added protection for this existing marked and signed school crosswalk in a 20 mph reduced speed school zone. The existing roadway width is 40 feet with only one lane in each direction.
6A	Tyler Vernon	Edgefield Ave	Nolte Dr	30	2	N	4,200	Edgefield Ave	TxDOT 2014 Sat. Counts	R	15:57	21	630	7,100	7,100	1	2			4	5	6				1	Add additional pedestrian warning signs at existing school crosswalk in reduced speed school zone. Double-sided signs should be posted on each corner of the intersection at the end of the crosswalk. Consider streetlighting over the north leg crosswalk instead of over the south leg only.
6A	Tyler Vernon	Polk St	Lebanon Ave	30	2	N	4,200	Edgefield Ave	Rough estimate from parallel, similar street	-	-	-	-	-	4,200	1	2		4	5	6				1, 6	Add a signed, high-visibility crosswalk across the south leg of the intersection between Lebanon Ave and the DART tracks immediately adjacent to the DART station. Consider building a pedestrian refuge island by reducing the existing 14-foot wide lanes to 10 or 11 feet wide.	
6A	Tyler Vernon	Tyler St	South of DART Tracks	40	6	N	14,100	Tyler St	TxDOT 2014 Sat. Counts	R	16:13	30	900	10,000	14,100	1		3			5	6		8	9	1, 6, 11	Add pedestrian warning signs at existing marked crosswalk across six-lane divided roadway immediately adjacent to DART station. Construct a full traffic signal selected in lieu of a pedestrian hybrid beacon due to adjacency to railroad crossing gates and potential confusion with alternative meanings of flashing red lights.
6A	Tyler Vernon	S Vernon Ave	Ferndale Ave	40	6	N	13,100	Vernon Ave	TxDOT 2014 Sat. Counts	R	17:00	51	1,530	17,400	17,400	1		3			5	6		8	9	1, 3, 6, 8, 9	Consider adding a signed and marked high-visibility crosswalk. Streetlighting is already present on the north leg of the intersection. Though a crosswalk is not needed for walking trips to the station, DART bus stops with modest ridership are present on both sides of the six-lane divided roadway here. A shopping center just outside the study area to the southeast may also contribute to pedestrian crossing demand near this location. If a crosswalk is installed, it must be accompanied by other measures, such as advance yield lines and "Yield Here to Pedestrians" signing at the yield lines. Preferably, a road diet from six lanes to four lanes and a median refuge area would also be implemented. A pedestrian hybrid beacon could also be considered, particularly if not implementing a road diet.



¹ with sufficient 6' width for ped. refuge?
² if AADT Estimate is not available.

Land Use Code Legend

R	Residential	S	Shopping
O	Office	M	Mix



DART Last Mile Connections Project - Unsignalized Crosswalk Evaluations - City of Dallas - July 2020

Unsignalized Crosswalk Improvement Legend

1	Crosswalk Signs, Markings & Lighting	5	Curb Extension
2	Raised Crosswalk	6	Ped. Refuge Island
3	Advance "Yield Here" Sign	7	RRFB
4	In-Street Pedestrian Crossing	8	Road Diet
		9	Ped. Hybrid Beacon

Signalized Crosswalk Improvement Legend

10	Add Marked Crosswalks & Provide Countdown, Accessible Pedestrian Signals
11	Traffic Signal

Legend: Strength of Consideration to be Given to Improvement

#	Signifies that the countermeasure is a candidate treatment at a marked uncontrolled crossing location.
#	Signifies that the countermeasure should always be considered, but not mandated or required, based upon engineering judgment at a marked uncontrolled crossing location.
#	Signifies that crosswalk visibility enhancements should always occur in conjunction with other identified countermeasures.

Station ID	Station Name	Street Crossed	At/Between	Posted/ Prevailing Speed of Street Crossed	Number of Lanes Crossed	Median Present? ¹	AADT from Count Map	AADT Street Name	Source	Land Use (legend below) ²	2-Min. Traffic Count ²		Hourly Traffic Estimate	AADT Estimate	Assumed AADT	Improvements (See Legends Above)									Notes
											Time	Volume				Options						Recommended			
6A	Tyler Vernon	Lansford Ave	Elmwood Blvd	30	2	N	500	N/A	Rough estimate	R	-	-	-	-	500	1	2	4	5	6	1	Add a signed, high-visibility crosswalk across Lansford Ave with streetlighting and pedestrian ramps (need contingent on the construction of the Regional Veloweb shared use path along the Elmwood Branch creek).			
6A	Tyler Vernon	Edgefield Ave	Elmwood Blvd	30	2	N	4,200	Edgefield Ave	TxDOT 2014 Sat. Counts	R	15:57	21	630	7,100	7,100	1	2	4	5	6	1	Add a signed, high-visibility crosswalk across Edgefield Ave (need contingent on the construction of the Regional Veloweb shared use path along the Elmwood Branch creek). Streetlighting is already present, but a pedestrian ramp will be needed on the west side of the street.			
6B	Hampton	Wright St	Hollywood Ave	35	2	N		Wright St		R	15:07	17	510	7,100	7,100	1		5	6	7	9	1, 6	Add a signed and marked, high-visibility crosswalk immediately adjacent to the DART Station. Streetlighting is already present. Provide pedestrian ramps on the south side of Wright St to connect the new crosswalks to the existing sidewalk that is set back from the street by a grass strip. Some tree root damage may occur. Make crosswalk improvements in conjunction with DART improvements to provide gaps in the decorative fencing around the station and short sidewalk connections to the station platform. See station improvements 6B-HA-ST-05 and 6B-HA-ST-06. Additionally, consider constructing a median refuge by narrowing the existing 17-ft lanes on Wright St to 12 feet in each direction.		
6B	Hampton	Wright St	Montreal Ave	35	2	N		Wright St		R	15:23	11	330	4,300	4,300	1		5	6	7	9	1, 6	Add a signed and marked, high-visibility crosswalk immediately adjacent to the DART Station. Streetlighting is already present. Provide pedestrian ramps on the south side of Wright St to connect the new crosswalks to the existing sidewalk. Additionally, consider constructing a median refuge by narrowing the existing 17-ft lanes on Wright St to 12 feet in each direction.		
6B	Hampton	Hampton Rd	Elmwood Blvd	40	6	Y	28,100	Hampton Rd	TxDOT 2014 Sat. Counts	R	9:10	41	1,230	28,700	28,700	1	3	5		8	9	3, 9	Marked, signed, and lit school crosswalk already in place near Moreno Elementary School in an existing 20 mph reduced speed school zone. DART bus stops with modest ridership are present on either side of Hampton Rd here. Add advance yield lines and "Yield Here to Pedestrians" signing at the yield lines. Give strong consideration to a pedestrian hybrid beacon due to the number of lanes crossed, high traffic volumes, potential for high speeds, and the benefit to pedestrians crossing outside of school arrival/dismissal times.		



¹ with sufficient 6' width for ped. refuge?
² if AADT Estimate is not available.

Land Use Code Legend

R	Residential	S	Shopping
O	Office	M	Mix



DART Last Mile Connections Project - Unsignalized Crosswalk Evaluations - City of Dallas - July 2020

Unsignalized Crosswalk Improvement Legend

1	Crosswalk Signs, Markings & Lighting	5	Curb Extension
2	Raised Crosswalk	6	Ped. Refuge Island
3	Advance "Yield Here" Sign	7	RRFB
4	In-Street Pedestrian Crossing	8	Road Diet
		9	Ped. Hybrid Beacon

Signalized Crosswalk Improvement Legend

10	Add Marked Crosswalks & Provide Countdown, Accessible Pedestrian Signals
11	Traffic Signal

Legend: Strength of Consideration to be Given to Improvement

#	Signifies that the countermeasure is a candidate treatment at a marked uncontrolled crossing location.
#	Signifies that the countermeasure should always be considered, but not mandated or required, based upon engineering judgment at a marked uncontrolled crossing location.
#	Signifies that crosswalk visibility enhancements should always occur in conjunction with other identified countermeasures.

Station ID	Station Name	Street Crossed	At/Between	Posted/ Prevailing Speed of Street Crossed	Number of Lanes Crossed	Median Present? ¹	AADT from Count Map	AADT Street Name	Source	Land Use (legend below) ²	2-Min. Traffic Count ²		Hourly Traffic Estimate	AADT Estimate	Assumed AADT	Improvements (See Legends Above)									Notes
											Time	Volume				Options						Recommended			
6B	Hampton	Waverly Dr	Melbourne Ave	30	2	N	1,500	N/A	Rough estimate	R	8:45	2	60	1,300	1,500	1	2	4	5	6	1	Add high-visibility crosswalk markings and pedestrian ramps to this existing signed but unmarked school crosswalk. Streetlighting is already present.			
6B	Hampton	Illinois Ave	Hollywood Ave	40	6	N	32,500	Illinois Ave	TxDOT 2014 Sat. Counts	M	-	-	-	-	32,500	1	3	5	6	8	9	1, 3, 9	Consider installing a signed and marked crosswalk with advance yield lines, "Yield Here to Pedestrians" signing, and a pedestrian hybrid beacon across Illinois Ave, due to the presence of moderate ridership bus stops and retail land use on both sides of the street, combined with high traffic volumes and the potential for high speeds. However, first consider if bus stops can be consolidated closer to those at Hampton Rd approximately 350 feet to the west, where a signalized crosswalk is already present. In particular, take care that a pedestrian hybrid beacon would not create turning conflicts with motorists using the gaps it creates in through traffic to turn to and from the adjacent shopping center across the crosswalks. Note that none of these improvements would be expected to impact walking trips to the station.		
6B	Hampton	Hampton Rd	South of Illinois Ave	40	6	N	27,600	Hampton Rd	TxDOT 2014 Sat. Counts	-	-	-	-	-	27,600	1	3	5	6	8	9	1, 3, 9	Install additional warning signs for this existing marked crosswalk. Add advance yield lines, "Yield Here to Pedestrians" signing, and consider installing a pedestrian hybrid beacon, due to the presence of retail land use on both sides of the street, combined with high traffic volumes and the potential for high speeds. Alternatively, consider if bus stops can be consolidated closer to those at Illinois Ave approximately 350 feet to the north, where a signalized crosswalk is already present. In particular, take care that a pedestrian hybrid beacon would not create turning conflicts with motorists using the gaps it creates in through traffic to turn to and from the adjacent shopping center across the crosswalks. Note that none of these improvements would be expected to impact walking trips to the station.		



¹ with sufficient 6' width for ped. refuge?
² if AADT Estimate is not available.

Land Use Code Legend

R	Residential	S	Shopping
O	Office	M	Mix

Based on FHWA's "Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations", July 2018, Table 1: Application of pedestrian crash countermeasures by roadway feature



DART Last Mile Connections Project - Unsignalized Crosswalk Evaluations - City of Dallas - July 2020

Unsignalized Crosswalk Improvement Legend

1	Crosswalk Signs, Markings & Lighting	5	Curb Extension
2	Raised Crosswalk	6	Ped. Refuge Island
3	Advance "Yield Here" Sign	7	RRFB
4	In-Street Pedestrian Crossing	8	Road Diet
		9	Ped. Hybrid Beacon

Signalized Crosswalk Improvement Legend

10	Add Marked Crosswalks & Provide Countdown, Accessible Pedestrian Signals
11	Traffic Signal

Legend: Strength of Consideration to be Given to Improvement

#	Signifies that the countermeasure is a candidate treatment at a marked uncontrolled crossing location.
#	Signifies that the countermeasure should always be considered, but not mandated or required, based upon engineering judgment at a marked uncontrolled crossing location.
#	Signifies that crosswalk visibility enhancements should always occur in conjunction with other identified countermeasures.

Station ID	Station Name	Street Crossed	At/Between	Posted/Prevailing Speed of Street Crossed	Number of Lanes Crossed	Median Present? ¹	AADT from Count Map	AADT Street Name	Source	Land Use (legend below) ²	2-Min. Traffic Count ²		Hourly Traffic Estimate	AADT Estimate	Assumed AADT	Improvements (See Legends Above)									Notes
											Time	Volume				Options					Recommended				
6C	Westmoreland	Ravinia Dr	Texas Dr	30	4	N				R	10:56	5	150	2,900	2,900	1	3	5	6	7	8	9	1, 3, 5, 6, 7, 8	Install additional warning signs for this existing signed, marked and lit school crosswalk in a reduced speed 20 mph school zone. Add advance yield lines, "Yield Here to Pedestrians" signing, and consider installing pedestrian-actuated rectangular rapid flashing beacons (RRFB's). Also consider a road diet to reduce Ravinia Dr from four lanes to three so that curb extensions and/or a median refuge island can be installed. Four lanes is likely well above required capacity for this lightly traveled street, though it may be desirable to retain a parking or auxiliary lane in the northbound direction depending on school arrival and dismissal circulation patterns and vehicular storage capacity.	
6C	Westmoreland	Ravinia Dr	Rockford Dr	30	4	N				R	12:36	3	90	1,600	1,600	1	3	5	6	7	8	9	1, 3, 5, 6, 7, 8	Install additional warning signs for this existing signed, marked and lit school crosswalk in a reduced speed 20 mph school zone. Add advance yield lines, "Yield Here to Pedestrians" signing, and consider installing pedestrian-actuated rectangular rapid flashing beacons (RRFB's). Also consider a road diet to reduce Ravinia Dr from four lanes to three so that curb extensions and/or a median refuge island can be installed. Four lanes is likely well above required capacity for this lightly traveled street, though it may be desirable to retain a parking or auxiliary lane in the northbound direction depending on school arrival and dismissal circulation patterns and vehicular storage capacity.	
6C	Westmoreland	Ravinia Dr	Rolinda Dr	30	4	N				R	12:36	3	90	1,600	1,600	1	3	5	6	7	8	9	1, 3, 5, 6, 7, 8	Install additional warning signs for this existing signed, marked and lit school crosswalk in a reduced speed 20 mph school zone. Add advance yield lines, "Yield Here to Pedestrians" signing, and consider installing pedestrian-actuated rectangular rapid flashing beacons (RRFB's). Also consider a road diet to reduce Ravinia Dr from four lanes to three so that curb extensions and/or a median refuge island can be installed. Four lanes is likely well above required capacity for this lightly traveled street, though it may be desirable to retain a parking or auxiliary lane in the northbound direction depending on school arrival and dismissal circulation patterns and vehicular storage capacity.	

¹ with sufficient 6' width for ped. refuge?
² if AADT Estimate is not available.

Land Use Code Legend

R	Residential	S	Shopping
O	Office	M	Mix

Based on FHWA's "Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations", July 2018, Table 1:
 Application of pedestrian crash countermeasures by roadway feature



DART Last Mile Connections Project - Unsignalized Crosswalk Evaluations - City of Dallas - July 2020

Unsignalized Crosswalk Improvement Legend

1	Crosswalk Signs, Markings & Lighting	5	Curb Extension
2	Raised Crosswalk	6	Ped. Refuge Island
3	Advance "Yield Here" Sign	7	RRFB
4	In-Street Pedestrian Crossing	8	Road Diet
		9	Ped. Hybrid Beacon

Signalized Crosswalk Improvement Legend

10	Add Marked Crosswalks & Provide Countdown, Accessible Pedestrian Signals
11	Traffic Signal

Legend: Strength of Consideration to be Given to Improvement

#	Signifies that the countermeasure is a candidate treatment at a marked uncontrolled crossing location.
#	Signifies that the countermeasure should always be considered, but not mandated or required, based upon engineering judgment at a marked uncontrolled crossing location.
#	Signifies that crosswalk visibility enhancements should always occur in conjunction with other identified countermeasures.

Station ID	Station Name	Street Crossed	At/Between	Posted/ Prevailing Speed of Street Crossed	Number of Lanes Crossed	Median Present? ¹	AADT from Count Map	AADT Street Name	Source	Land Use (legend below) ²	2-Min. Traffic Count ²		Hourly Traffic Estimate	AADT Estimate	Assumed AADT	Improvements (See Legends Above)									Notes
											Time	Volume				Options					Recommended				
6C	Westmoreland	Westmoreland Rd	Rockford Dr	40	6	Y	29,600	Westmoreland Rd	TxDOT 2014 Sat. Counts	M	17:11	101	3,030	31,900	31,900	1	3	5	8	9	1, 3, 9	Consider adding a signed and marked crosswalk with pedestrian hybrid beacon due to modest bus ridership at stops on either side of six-lane roadway with high traffic volumes and potential for high speeds. Streetlighting is already in place. Add advance yield lines and "Yield Here to Pedestrians" signing at the yield lines.			
6C	Westmoreland	Westmoreland Rd	Texas Dr	40	6	Y	29,600	Westmoreland Rd	TxDOT 2014 Sat. Counts	M	17:11	101	3,030	31,900	31,900	1	3	5	8	9	1, 3, 9	Refresh pavement markings and give strong consideration to adding a pedestrian hybrid beacon at this existing signed crosswalk across the south leg of Westmoreland Rd at Texas Dr, a six-lane crossing with high traffic volumes and potential for high speeds. Consider adding new crosswalk markings across the north leg of the same intersection, where pedestrian warning signs are already in place. Streetlighting is already in place. Add advance yield lines and "Yield Here to Pedestrians" signing at the yield lines.			
6C	Westmoreland	Illinois Ave	Coombs Creek Dr	40	6	Y	37,000	Illinois Ave	TxDOT 2014 Sat. Counts	M	11:25	51	1,530	19,700	37,000	1	3	5	8	9	3, 9	Add advance yield lines and "Yield Here to Pedestrians" signing at the yield lines at this existing signed and marked school crosswalk in a 20 mph reduced speed school zone. Also, give strong consideration to adding a pedestrian hybrid beacon. A PHB should be considered based on modest bus ridership at stops on either side of the six-lane roadway with high traffic volumes and potential for high speeds. Streetlighting is already in place.			
6C	Westmoreland	Illinois Ave	Barnett Ave	40	6	Y	37,000	Illinois Ave	TxDOT 2014 Sat. Counts	-	-	-	-	-	37,000	1	3	5	8	9	None	Adding pedestrian hybrid beacon less than 300 feet to the east crossing Illinois Ave at DART station driveway, so opted to omit additional improvements at this location.			
6C	Westmoreland	Illinois Ave	DART Station driveway	40	6	Y	37,000	Illinois Ave	TxDOT 2014 Sat. Counts	M	14:32	46	1,380	18,000	37,000	1	3	5	8	9	1, 3, 9	Add a signed and marked crosswalk with pedestrian hybrid beacon immediately adjacent to the DART station. The beacon will also serve travel to a bus stop on the north side of Illinois Ave at Barnett Ave less than 300 feet to the west. Streetlighting is already in place. Include advance yield lines and "Yield Here to Pedestrians" signing at the yield lines.			
6C	Westmoreland	Wright Ave	Ravinia Dr	35	2	N	9,400	Wright Ave	TxDOT 2014 Sat. Counts	-	-	-	-	-	9,400	1		5	6	7	9	1, 7	Add additional pedestrian warning signs at existing marked school crosswalk in 20 mph reduced speed school zone. Double-sided signs should be posted on each corner of the intersection at the end of the crosswalk. Streetlighting is already in place. Consider adding pedestrian actuated rectangular rapid flashing beacons (RRFB's) for increased yielding compliance by drivers.		



¹ with sufficient 6' width for ped. refuge?

² if AADT Estimate is not available.

Land Use Code Legend

R	Residential	S	Shopping
O	Office	M	Mix



DART Last Mile Connections Project - Unsignalized Crosswalk Evaluations - City of Dallas - July 2020

Unsignalized Crosswalk Improvement Legend

1	Crosswalk Signs, Markings & Lighting	5	Curb Extension
2	Raised Crosswalk	6	Ped. Refuge Island
3	Advance "Yield Here" Sign	7	RRFB
4	In-Street Pedestrian Crossing	8	Road Diet
		9	Ped. Hybrid Beacon

Signalized Crosswalk Improvement Legend

10	Add Marked Crosswalks & Provide Countdown, Accessible Pedestrian Signals
11	Traffic Signal

Legend: Strength of Consideration to be Given to Improvement

#	Signifies that the countermeasure is a candidate treatment at a marked uncontrolled crossing location.
#	Signifies that the countermeasure should always be considered, but not mandated or required, based upon engineering judgment at a marked uncontrolled crossing location.
#	Signifies that crosswalk visibility enhancements should always occur in conjunction with other identified countermeasures.

Station ID	Station Name	Street Crossed	At/Between	Posted/ Prevailing Speed of Street Crossed	Number of Lanes Crossed	Median Present? ¹	AADT from Count Map	AADT Street Name	Source	Land Use (legend below) ²	2-Min. Traffic Count ²		Hourly Traffic Estimate	AADT Estimate	Assumed AADT	Improvements (See Legends Above)									Notes
											Time	Volume				Options						Recommended			
6C	Westmoreland	Westmoreland Rd	DART Station Entrance/Future Regional Veloweb	40	6	N	29,600	Westmoreland Rd	TxDOT 2014 Sat. Counts	M	17:11	101	3,030	31,900	31,900	1	3	5	6	8	9	1, 3, 9	Add a signed and marked crosswalk with pedestrian hybrid beacon immediately adjacent to the DART station and connecting to a funded segment of the Regional Veloweb. Streetlighting is already in place. Include advance yield lines and "Yield Here to Pedestrians" signing at the yield lines.		
6C	Westmoreland	Westmoreland Rd	Banning St	40	6	Y	24,900	Westmoreland Rd	TxDOT 2014 Sat. Counts	-	-	-	-	-	24,900	1	3	5	8	9	1, 3, 9	Consider adding a signed and marked crosswalk with pedestrian hybrid beacon due to modest bus ridership at stops on either side of six-lane roadway with high traffic volumes and potential for high speeds. Streetlighting is already in place. Add advance yield lines and "Yield Here to Pedestrians" signing at the yield lines.			
7A	Illinois	Edgemont Ave	Regional Veloweb	30	2	N	2,000		Rough Estimate	-	-	-	-	-	2,000	1	2	4	5	6	1	Add a signed and marked crosswalk for the Regional Veloweb crossing of Edgemont Ave. Need for improvement is contingent on Veloweb construction. Streetlighting is already present.			
7A	Illinois	Stella Ave	Regional Veloweb	30	2	N	1,800	Stella Ave	TxDOT 2014 Sat. Counts	-	-	-	-	-	1,800	1	2	4	5	6	1	Add a signed and marked crosswalk for the Regional Veloweb crossing of Stella Ave. Need for improvement is contingent on Veloweb construction. Streetlighting is already present.			
7A	Illinois	Ewing Ave	Stella Ave	30	2	N	4,900	Ewing Ave	TxDOT 2014 Sat. Counts	-	-	-	-	-	4,900	1	2	4	5	6	None	Signed marked, and lit crosswalk already in place.			
7A	Illinois	Ewing Ave	Vermont Ave	30	2	N	4,900	Ewing Ave	TxDOT 2014 Sat. Counts	-	-	-	-	-	4,900	1	2	4	5	6	None	Too close to school crosswalk at Stella Ave and south end of school reduced speed zone to warrant the potential confusion of another crosswalk, given relatively low speed and moderate traffic volumes.			
7A	Illinois	Ewing Ave	Georgia Ave	30	2	N	4,900	Ewing Ave	TxDOT 2014 Sat. Counts	-	-	-	-	-	4,900	1	2	4	5	6	1	Add high visibility pavement markings to existing signed crosswalk. Streetlighting is already present. A large church, a small restaurant, and two DART bus stops are located on different corners of this intersection.			
7A	Illinois	Ewing Ave	Louisiana Ave	30	2	N	4,900	Ewing Ave	TxDOT 2014 Sat. Counts	-	-	-	-	-	4,900	1	2	4	5	6	1	Add high visibility pavement markings to existing signed crosswalk. Street lighting is already in place.			
7A	Illinois	Denley Dr	Louisiana Ave	30	2	N	4,500	Denley Dr	TxDOT 2014 Sat. Counts	-	-	-	-	-	4,500	1	2	4	5	6	1	Add a high visibility marked crosswalk with pedestrian warning signs. Street lighting is already in place.			



¹ with sufficient 6' width for ped. refuge?
² if AADT Estimate is not available.

Land Use Code Legend

R	Residential	S	Shopping
O	Office	M	Mix

Based on FHWA's "Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations", July 2018, Table 1:
Application of pedestrian crash countermeasures by roadway feature



DART Last Mile Connections Project - Unsignalized Crosswalk Evaluations - City of Dallas - July 2020

Unsignalized Crosswalk Improvement Legend

1	Crosswalk Signs, Markings & Lighting	5	Curb Extension
2	Raised Crosswalk	6	Ped. Refuge Island
3	Advance "Yield Here" Sign	7	RRFB
4	In-Street Pedestrian Crossing	8	Road Diet
		9	Ped. Hybrid Beacon

Signalized Crosswalk Improvement Legend

10	Add Marked Crosswalks & Provide Countdown, Accessible Pedestrian Signals
11	Traffic Signal

Legend: Strength of Consideration to be Given to Improvement

#	Signifies that the countermeasure is a candidate treatment at a marked uncontrolled crossing location.
#	Signifies that the countermeasure should always be considered, but not mandated or required, based upon engineering judgment at a marked uncontrolled crossing location.
#	Signifies that crosswalk visibility enhancements should always occur in conjunction with other identified countermeasures.

Station ID	Station Name	Street Crossed	At/Between	Posted/ Prevailing Speed of Street Crossed	Number of Lanes Crossed	Median Present? ¹	AADT from Count Map	AADT Street Name	Source	Land Use (legend below) ²	2-Min. Traffic Count ²		Hourly Traffic Estimate	AADT Estimate	Assumed AADT	Improvements (See Legends Above)									Notes
											Time	Volume				Options						Recommended			
7A	Illinois	S Corinth St Rd	Louisiana Ave	40	6	N	14,600	S Corinth St Rd	TxDOT 2014 Sat. Counts	-	-	-	-	-	14,600	1	3	5	6	8	9	1, 3, 6, 8, 9	Consider adding a a pedestrian hybrid beacon with high visibility crosswalk markings, pedestrian warning signs, advance yield lines and "Yield Here to Pedestrians" signing on each approach to mitigate risk of dual threat situation for pedestrians. While this crossing is about 600 feet north of the existing traffic signal at the DART station entrance, pedestrians traveling to and from the northeast of the station may be unlikely to walk over 1,000 feet out of their way to use that signal. Street lighting is already present at the intersection. Also consider a road diet to implement a median refuge, since four lanes would be more than sufficient for the ~15,000 average daily traffic. DART bus stops are located on either side of Tyler St at this location.		
7A	Illinois	S Corinth St Rd (Southbound)	Lancaster Rd	40	2	N	5,550	S Corinth St Rd	TxDOT 2014 Sat. Counts	-	-	-	-	-	5,550	1		5	6	7	9	1, 3, 7	Add a high visibility marked crosswalk with pedestrian warning signs, new street lighting, advance yield lines, "Yield Here to Pedestrians" signing to mitigate risk of dual threat situation for pedestrians, and pedestrian-actuated rectangular rapid flashing beacons (RRFB's) mounted on the warning signs.		
7A	Illinois	S Corinth St Rd (Northbound)	Lancaster Rd	40	2	N	5,550	S Corinth St Rd	TxDOT 2014 Sat. Counts	-	-	-	-	-	5,550	1		5	6	7	9	1, 3, 7	Add a high visibility marked crosswalk with pedestrian warning signs, new street lighting, advance yield lines, "Yield Here to Pedestrians" signing to mitigate risk of dual threat situation for pedestrians, and pedestrian-actuated rectangular rapid flashing beacons (RRFB's) mounted on the warning signs. Care should be taken to maximize sight distance between pedestrians and drivers around horizontal curve while making crosswalk as perpendicular to S Corinth St Rd as possible to minimize crossing distance. Consider geometric changes to median island for improved sight distance and reduced speed northbound right turns.		
7A	Illinois	S Lancaster Rd	Ohio Ave/S Corinth St Rd	35	4	Y	1,300	S Lancaster Rd	TxDOT 2014 Sat. Counts	-	-	-	-	-	1,300	1	3	5	7	8	9	1	Add a high visibility marked crosswalk at stop-controlled approach to intersection with unusual geometry for added pedestrian conspicuity.		
7A	Illinois	Ewing Ave	Woodin Blvd	30	2	N	4,900	Ewing Ave	TxDOT 2014 Sat. Counts	-	-	-	-	-	4,900	1	2	4	5	6		None	Signed, marked and lit crosswalk already in place. No additional recommendations.		



¹ with sufficient 6' width for ped. refuge?
² if AADT Estimate is not available.

Land Use Code Legend

R	Residential	S	Shopping
O	Office	M	Mix



DART Last Mile Connections Project - Unsignalized Crosswalk Evaluations - City of Dallas - July 2020

Unsignalized Crosswalk Improvement Legend

1	Crosswalk Signs, Markings & Lighting	5	Curb Extension
2	Raised Crosswalk	6	Ped. Refuge Island
3	Advance "Yield Here" Sign	7	RRFB
4	In-Street Pedestrian Crossing	8	Road Diet
		9	Ped. Hybrid Beacon

Signalized Crosswalk Improvement Legend

10	Add Marked Crosswalks & Provide Countdown, Accessible Pedestrian Signals
11	Traffic Signal

Legend: Strength of Consideration to be Given to Improvement

#	Signifies that the countermeasure is a candidate treatment at a marked uncontrolled crossing location.
#	Signifies that the countermeasure should always be considered, but not mandated or required, based upon engineering judgment at a marked uncontrolled crossing location.
#	Signifies that crosswalk visibility enhancements should always occur in conjunction with other identified countermeasures.

Station ID	Station Name	Street Crossed	At/Between	Posted/ Prevailing Speed of Street Crossed	Number of Lanes Crossed	Median Present? ¹	AADT from Count Map	AADT Street Name	Source	Land Use (legend below) ²	2-Min. Traffic Count ²		Hourly Traffic Estimate	AADT Estimate	Assumed AADT	Improvements (See Legends Above)									Notes
											Time	Volume				Options						Recommended			
7A	Illinois	Denley Dr	Woodin Blvd	30	2	N	4,500	Denley Dr	TxDOT 2014 Sat. Counts	-	-	-	-	-	4,500	1	2	4	5	6	1	Add pedestrian warning signs at existing marked crosswalk directly across from station platform. Upgrade basic crosswalk markings to high-visibility markings (i.e. add rungs to ladder pattern). Street lighting is already present at the intersection. Consider adding a second marked and signed crosswalk across the south leg of the intersection which connects more directly with the station platform without having to cross the bus loop/driveway just northeast of the intersection, as a worn path in the grass indicates many pedestrians do.			
7A	Illinois	Illinois Ave	Regional Veloweb	40	6	Y	21,200	Illinois Ave	TxDOT 2014 Sat. Counts	M	17:05	51	1,530	16,200	21,200	1	3	5	8	9	1, 3, 8, 9	Install a pedestrian hybrid beacon and marked crosswalk with advance pedestrian warning signs, advance yield lines, "Yield Here to Pedestrians" signing at the yield lines, and pedestrian warning signs at the crosswalk, all contingent on construction of the Regional Veloweb shared use path crossing. Consider a road diet so pedestrians only cross two lanes of traffic in each direction (ADT ~20,000 veh/day may be adequately accommodated by 4 rather than 6 lanes).			
7B	Kiest	Kiest Blvd	Easter Ave	40	6	N	12,000	Kiest Blvd	TxDOT 2014 Sat. Counts	M	8:15	30	900	17,700	17,700	1	3	5	6	8	9	3, 6, 8, 9	Add advance yield lines and "Yield Here to Pedestrians" signing on each approach to mitigate risk of dual threat situation for pedestrians for this existing signed and marked school crosswalk that crosses a six-lane divided arterial and is in a 20 mph reduced speed school zone. Consider a road diet to implement a median refuge, since four lanes would be more than sufficient for the estimated ~12,000-18,000 average daily traffic. Give strong consideration to a pedestrian hybrid beacon, especially if a road diet is not implemented or if a study indicates significant pedestrian demand outside school arrival and dismissal hours.		



¹ with sufficient 6' width for ped. refuge?
² if AADT Estimate is not available.

Land Use Code Legend

R	Residential	S	Shopping
O	Office	M	Mix



DART Last Mile Connections Project - Unsignalized Crosswalk Evaluations - City of Dallas - July 2020

Unsignalized Crosswalk Improvement Legend

1	Crosswalk Signs, Markings & Lighting	5	Curb Extension
2	Raised Crosswalk	6	Ped. Refuge Island
3	Advance "Yield Here" Sign	7	RRFB
4	In-Street Pedestrian Crossing	8	Road Diet
		9	Ped. Hybrid Beacon

Signalized Crosswalk Improvement Legend

10	Add Marked Crosswalks & Provide Countdown, Accessible Pedestrian Signals
11	Traffic Signal

Legend: Strength of Consideration to be Given to Improvement

#	Signifies that the countermeasure is a candidate treatment at a marked uncontrolled crossing location.
#	Signifies that the countermeasure should always be considered, but not mandated or required, based upon engineering judgment at a marked uncontrolled crossing location.
#	Signifies that crosswalk visibility enhancements should always occur in conjunction with other identified countermeasures.

Station ID	Station Name	Street Crossed	At/Between	Posted/ Prevailing Speed of Street Crossed	Number of Lanes Crossed	Median Present? ¹	AADT from Count Map	AADT Street Name	Source	Land Use (legend below) ²	2-Min. Traffic Count ²		Hourly Traffic Estimate	AADT Estimate	Assumed AADT	Improvements (See Legends Above)					Notes			
											Time	Volume				Options						Recommended		
7B	Kiest	Kiest Blvd	Frio Dr/Ramona Ave/Regional Veloweb	40	6	N	16,000	Kiest Blvd	TxDOT 2014 Sat. Counts	M	16:00	60	1,800	19,100	19,100	1	3	5	6	8	9	1, 3, 6, 8, 9	Add missing signs, advance yield lines and "Yield Here to Pedestrians" signing on each approach to mitigate risk of dual threat situation for pedestrians for this existing signed and marked school crosswalk that crosses a six-lane divided arterial but is not a reduced speed school zone. Street lighting is already in place. The Cedar Crest Trail Regional Veloweb link was recently constructed (completed after field visit) on either side of Kiest Blvd to cross at this crosswalk. It is unclear if additional pedestrian crossing improvements have been made in conjunction with the trail construction. Consider a road diet to implement a median refuge, since four lanes would be more than sufficient for the estimated ~16,000-19,000 average daily traffic. Give strong consideration to a pedestrian hybrid beacon, especially if a road diet is not implemented.	
7B	Kiest	Overton Road	Easter Ave	35	4	N	6,900	Overton Rd	TxDOT 2014 Sat. Counts	M	9:15	19	570	12,600	12,600	1	3	5	6	7	8	9	1, 3, 6, 7, 8	Add pedestrian warning signs to this existing marked and lit crosswalk. Add yield lines and "Yield Here to Pedestrians" signing for each approach to mitigate risk of dual threat situation for pedestrians. Though Overton Rd has recently been widened from 2 to 4 lanes, no median or left turn lanes have been provided for pedestrian refuge at this crossing. Consider a road diet to allow for a median refuge island and/or bike lanes, consistent with the City's bicycle master plan for on-street bike lanes. Add pedestrian-actuated rectangular rapid-flashing beacons (RRFB's) mounted below the pedestrian warning signs.



¹ with sufficient 6' width for ped. refuge?
² if AADT Estimate is not available.

Land Use Code Legend

R	Residential	S	Shopping
O	Office	M	Mix



DART Last Mile Connections Project - Unsignalized Crosswalk Evaluations - City of Dallas - July 2020

Unsignalized Crosswalk Improvement Legend

1	Crosswalk Signs, Markings & Lighting	5	Curb Extension
2	Raised Crosswalk	6	Ped. Refuge Island
3	Advance "Yield Here" Sign	7	RRFB
4	In-Street Pedestrian Crossing	8	Road Diet
		9	Ped. Hybrid Beacon

Signalized Crosswalk Improvement Legend

10	Add Marked Crosswalks & Provide Countdown, Accessible Pedestrian Signals
11	Traffic Signal

Legend: Strength of Consideration to be Given to Improvement

#	Signifies that the countermeasure is a candidate treatment at a marked uncontrolled crossing location.
#	Signifies that the countermeasure should always be considered, but not mandated or required, based upon engineering judgment at a marked uncontrolled crossing location.
#	Signifies that crosswalk visibility enhancements should always occur in conjunction with other identified countermeasures.

Station ID	Station Name	Street Crossed	At/Between	Posted/ Prevailing Speed of Street Crossed	Number of Lanes Crossed	Median Present? ¹	AADT from Count Map	AADT Street Name	Source	Land Use (legend below) ²	2-Min. Traffic Count ²		Hourly Traffic Estimate	AADT Estimate	Assumed AADT	Improvements (See Legends Above)									Notes
											Time	Volume				Options									
7C	VA Medical Center Station	Ann Arbor Ave	Fernwood Ave	35	4	N	5,900	Ann Arbor Ave	TxDOT 2014 Sat. Counts	R	10:05	11	330	6,900	6,900	1	3	5	6	7	8	9	1, 3, 5, 6, 7, 8	Add high-visibility crosswalk markings and pedestrian ramps to this existing signed but unmarked crosswalk between a church and its parking lot on the opposite side of a 4-lane undivided roadway. Streetlighting is already present. Consider a road diet to reduce the street width to one lane in each direction, with curb extensions adjacent to on-street parallel parking for the church. A road diet would also be consistent with the City's plans to implement local on-street bicycle lanes along Ann Arbor Ave, but the bike lanes may require removal of on-street parking. In this case, a median refuge island may be more advantageous than curb extensions. If four travel lanes are to remain, add advance yield lines and "Yield Here to Pedestrians" signing at the yield lines to avoid a dual threat situation for pedestrians. Also consider providing pedestrian-actuated rectangular rapid-flashing beacons (RRFB's).	
7C	VA Medical Center Station	Ann Arbor Ave	Denley Dr (West)	35	4	N	5,900	Ann Arbor Ave	TxDOT 2014 Sat. Counts	R	10:05	11	330	6,900	6,900	1	3	5	6	7	8	9	3, 5, 6, 7, 8	Consider upgrades to this existing signed and marked school crosswalk across a 4-lane undivided roadway in a reduced speed 20 mph school zone. Streetlighting is already present. Consider a road diet to reduce the street width to one lane in each direction, with curb extensions adjacent to on-street parallel parking near a church and day care center on opposite sides of the street. A road diet would also be consistent with the City's plans to implement local on-street bicycle lanes along Ann Arbor Ave, but the bike lanes may require removal of on-street parking. In this case, a median refuge island may be more advantageous than curb extensions. Coordination with Holland Elementary School should occur to ensure sufficient space for vehicular queues during school arrival and dismissal times are maintained. If four travel lanes are to remain, add advance yield lines and "Yield Here to Pedestrians" signing at the yield lines to avoid a dual threat situation for pedestrians. Also consider providing pedestrian-actuated rectangular rapid-flashing beacons (RRFB's).	



¹ with sufficient 6' width for ped. refuge?
² if AADT Estimate is not available.

Land Use Code Legend

R	Residential	S	Shopping
O	Office	M	Mix

Based on FHWA's "Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations", July 2018, Table 1: Application of pedestrian crash countermeasures by roadway feature



DART Last Mile Connections Project - Unsignalized Crosswalk Evaluations - City of Dallas - July 2020

Unsignalized Crosswalk Improvement Legend

1	Crosswalk Signs, Markings & Lighting	5	Curb Extension
2	Raised Crosswalk	6	Ped. Refuge Island
3	Advance "Yield Here" Sign	7	RRFB
4	In-Street Pedestrian Crossing	8	Road Diet
		9	Ped. Hybrid Beacon

Signalized Crosswalk Improvement Legend

10	Add Marked Crosswalks & Provide Countdown, Accessible Pedestrian Signals
11	Traffic Signal

Legend: Strength of Consideration to be Given to Improvement

#	Signifies that the countermeasure is a candidate treatment at a marked uncontrolled crossing location.
#	Signifies that the countermeasure should always be considered, but not mandated or required, based upon engineering judgment at a marked uncontrolled crossing location.
#	Signifies that crosswalk visibility enhancements should always occur in conjunction with other identified countermeasures.

Station ID	Station Name	Street Crossed	At/Between	Posted/ Prevailing Speed of Street Crossed	Number of Lanes Crossed	Median Present? ¹	AADT from Count Map	AADT Street Name	Source	Land Use (legend below) ²	2-Min. Traffic Count ²		Hourly Traffic Estimate	AADT Estimate	Assumed AADT	Improvements (See Legends Above)									Notes
											Time	Volume				Options					Recommended				
7C	VA Medical Center Station	Ann Arbor Ave	Denley Dr (East)	35	4	N	5,900	Ann Arbor Ave	TxDOT 2014 Sat. Counts	R	10:05	11	330	6,900	6,900	1	3	5	6	7	8	9	3, 5, 6, 7, 8	Consider upgrades to this existing signed and marked school crosswalk across a 4-lane undivided roadway in a reduced speed 20 mph school zone. Streetlighting is already present. Consider a road diet to reduce the street width to one lane in each direction, with curb extensions or a median refuge area provided to shorten the crossing distance. A road diet would also be consistent with the City's plans to implement local on-street bicycle lanes along Ann Arbor Ave, but the bike lanes may require removal of on-street standing areas adjacent to school property. With bike lanes, a median refuge island may be more advantageous than curb extensions. Coordination with Holland Elementary School should occur to ensure sufficient space for vehicular queues during school arrival and dismissal times are maintained. If four travel lanes are to remain, add advance yield lines and "Yield Here to Pedestrians" signing at the yield lines to avoid a dual threat situation for pedestrians. Also consider providing pedestrian-actuated rectangular rapid-flashing beacons (RRFB's).	
8A	CityPlace	Cole Ave	Haskell Ave	30	3	N	6,300	Cole Ave	TxDOT 2014 Sat. Counts	R	17:14	25	750	8,600	8,600	1	2	3	4	5	6	7	9	1, 3, 5, 7	Marked and signed crosswalk already in place across 3-lane, one-way street near North Dallas High School. Add advance yield lines and "Yield Here to Pedestrians" signing at the yield lines. Consider curb extensions and pedestrian-actuated RRFB's. Note that this section of Cole Avenue will be converting from one-way operation to two-way operation as part of a City project in the near future, so it may be possible to incorporate such changes into that project. The new lane configuration will be two lanes southbound and one lane northbound. Warning signs for northbound traffic at this crosswalk should be incorporated into the design.
8A	CityPlace	Peak St	Cabell Dr	30	3	N	10,100	Peak St	TxDOT 2014 Sat. Counts	M	-	-	-	-	10,100	1	3	4	5	6	7	9	1, 3, 5, 7, 8	Add markings to signed crosswalk already in place across three-lane, one-way street. Add advance yield lines and "Yield Here to Pedestrians" signing at the yield lines. Consider curb extensions, pedestrian-actuated RRFB's and/or road diet to enhance pedestrian visibility and reduce crossing distance.	



¹ with sufficient 6' width for ped. refuge?
² if AADT Estimate is not available.

Land Use Code Legend

R	Residential	S	Shopping
O	Office	M	Mix



DART Last Mile Connections Project - Unsignalized Crosswalk Evaluations - City of Dallas - July 2020

Unsignalized Crosswalk Improvement Legend

1	Crosswalk Signs, Markings & Lighting	5	Curb Extension
2	Raised Crosswalk	6	Ped. Refuge Island
3	Advance "Yield Here" Sign	7	RRFB
4	In-Street Pedestrian Crossing	8	Road Diet
		9	Ped. Hybrid Beacon

Signalized Crosswalk Improvement Legend

10	Add Marked Crosswalks & Provide Countdown, Accessible Pedestrian Signals
11	Traffic Signal

Legend: Strength of Consideration to be Given to Improvement

#	Signifies that the countermeasure is a candidate treatment at a marked uncontrolled crossing location.
#	Signifies that the countermeasure should always be considered, but not mandated or required, based upon engineering judgment at a marked uncontrolled crossing location.
#	Signifies that crosswalk visibility enhancements should always occur in conjunction with other identified countermeasures.

Station ID	Station Name	Street Crossed	At/Between	Posted/ Prevailing Speed of Street Crossed	Number of Lanes Crossed	Median Present? ¹	AADT from Count Map	AADT Street Name	Source	Land Use (legend below) ²	2-Min. Traffic Count ²		Hourly Traffic Estimate	AADT Estimate	Assumed AADT	Improvements (See Legends Above)									Notes
											Time	Volume				Options					Recommended				
8A	CityPlace	Haskell Ave	LA Fitness Driveway	30	6	Y	25,700	Haskell Ave	TxDOT 2015 Sat. Counts	M	16:33	52	1,560	15,700	25,700	1	3	5	7	8	9	1, 3, 5, 7	Add crosswalk signing and markings to crossing which already includes pedestrian ramps and brick paving in the median. Add advance yield lines and "Yield Here to Pedestrians" signing at the yield lines. Restrict parking blocking the pedestrian ramp on the southwest side of the street and build a curb extension to reduce the crossing distance and improve sight distance between pedestrians and southeast-bound traffic around parked cars. Consider pedestrian-actuated RRFB's to further enhance visibility of crossing pedestrians.		
8A	CityPlace	Haskell Ave	Weldon St	30	6	Y	25,700	Haskell Ave	TxDOT 2015 Sat. Counts	M	16:33	52	1,560	15,700	25,700	1	3	5	7	8	9	1, 3, 7	Add crosswalk signing and markings to crossing which already includes pedestrian ramps and brick paving in the median. Add advance yield lines and "Yield Here to Pedestrians" signing at the yield lines. Consider pedestrian-actuated RRFB's to further enhance visibility of crossing pedestrians.		
8A	CityPlace	Haskell Ave	Munger Ave	30	4	N	14,000	Haskell Ave	TxDOT 2015 Sat. Counts	M	14:57	30	900	11,600	14,000	1	3	5	6	7	8	9	3, 7, 9	Add advance yield lines and "Yield Here to Pedestrians" signing at the yield lines for existing signed and marked school crosswalk. Consider pedestrian-actuated RRFB's or pedestrian hybrid beacon to further enhance visibility of crossing pedestrians particularly if no school crossing guard is present or study indicates pedestrian crossing demand outside school arrival/dismissal hours.	
8A	CityPlace	Blackburn St	Travis St	30	4	Y	19,600	Blackburn St	TxDOT 2015 Sat. Counts	R	-	-	-	-	19,600	1	3	5	7	8	9	1, 3, 7	Add pedestrian warning signs and white pavement marking lines outside of existing brickwork that may appear to casual observers to represent crosswalks. White edge lines as traffic control devices are required to make crosswalks legally enforceable. Add advance yield lines and "Yield Here to Pedestrians" signing. Consider pedestrian-actuated RRFB's to further enhance visibility of crossing pedestrians.		
8A	CityPlace	Lemmon Ave (E)	Howell St	35	4	N	29,600	Lemmon Ave (E)	TxDOT 2015 Sat. Counts	M	16:40	79	2,370	23,800	29,600	1	3	5	6	8	9	1, 3, 9	Add marked crosswalk with advance pedestrian warning signs, advance yield lines, "Yield Here to Pedestrians" signing at the yield lines, and pedestrian warning signs at the crosswalk. Construct a pedestrian hybrid beacon to accommodate pedestrian crossings across four lanes of one-way traffic.		



¹ with sufficient 6' width for ped. refuge?
² if AADT Estimate is not available.

Land Use Code Legend

R	Residential	S	Shopping
O	Office	M	Mix



DART Last Mile Connections Project - Unsignalized Crosswalk Evaluations - City of Dallas - July 2020

Unsignalized Crosswalk Improvement Legend

1	Crosswalk Signs, Markings & Lighting	5	Curb Extension
2	Raised Crosswalk	6	Ped. Refuge Island
3	Advance "Yield Here" Sign	7	RRFB
4	In-Street Pedestrian Crossing	8	Road Diet
		9	Ped. Hybrid Beacon

Signalized Crosswalk Improvement Legend

10	Add Marked Crosswalks & Provide Countdown, Accessible Pedestrian Signals
11	Traffic Signal

Legend: Strength of Consideration to be Given to Improvement

#	Signifies that the countermeasure is a candidate treatment at a marked uncontrolled crossing location.
#	Signifies that the countermeasure should always be considered, but not mandated or required, based upon engineering judgment at a marked uncontrolled crossing location.
#	Signifies that crosswalk visibility enhancements should always occur in conjunction with other identified countermeasures.

Station ID	Station Name	Street Crossed	At/Between	Posted/Prevaling Speed of Street Crossed	Number of Lanes Crossed	Median Present? ¹	AADT from Count Map	AADT Street Name	Source	Land Use (legend below) ²	2-Min. Traffic Count ²		Hourly Traffic Estimate	AADT Estimate	Assumed AADT	Improvements (See Legends Above)									Notes
											Time	Volume				Options					Recommended				
8A	CityPlace	Lemmon Ave	Thomas Ave/ Caddo St	30	6	N				M	16:36	42	1,260	12,700	12,700	1	3	5	6	7	8	9	3, 7, 9	Add advance yield lines and "Yield Here to Pedestrians" signing at the yield lines for existing signed and marked school crosswalk. Consider pedestrian-actuated RRFB's or pedestrian hybrid beacon to further enhance visibility of crossing pedestrians particularly if no school crossing guard is present or study indicates pedestrian crossing demand outside school arrival/dismissal hours.	
8A	CityPlace	Lemmon Ave (W)	Oak Grove Ave	35	4	N				M	7:32	58	1,740	27,200	27,200	1	3	5	6	8	9	3, 9	Add advance yield lines and "Yield Here to Pedestrians" signing at the yield lines for existing signed and marked crosswalk. Add pedestrian hybrid beacon to further enhance visibility of crossing pedestrians.		
8A	CityPlace	Hall St	Duff St	30	2	N	5,000	Hall St	Very rough estimate based on land use and 7,965 2015 TxDOT ADT on east side of U.S. 75	R	-	-	-	-	5,000	1	2	4	5	6			Signed, marked and lit crosswalk already in place. No additional recommendations.		
8A	CityPlace	Washington Ave	Thomas Ave	30	2	N				R	16:40	17	510	5,800	5,800	1	2	4	5	6			Signed, marked and lit crosswalk already in place. No additional recommendations.		
8A	CityPlace	Washington Ave	Cochran St	30	2	N				R	16:40	17	510	5,800	5,800	1	2	4	5	6			Signed, marked and lit crosswalk already in place. No additional recommendations.		
8B	Convention Center	Ramp from Canton St to WB IH 30	Akard St & Griffin St	40	2	N	3,000	Canton St	Very rough estimate based on Canton St ADT of 4,290 east of Akard, Akard ADTs of 5,005 and 6,316 just to north and south.	M	-	-	-	-	3,000	1			5	6	7	9	8 or 9	Canton Street functions as the westbound frontage road for IH-30, so sidewalk on the southeast side adjacent to the freeway would be unlikely to serve much if any pedestrian demand with parallel sidewalk existing on the northwest side adjacent to active land uses. Strong consideration should be given to realign the Veloweb to the northwest side of Canton St to avoid the conflict across the two-lane on-ramp to IH 30 westbound. A road diet from three one-way lanes to two one-way lanes on Cantron St would likely be feasible given modest traffic volumes to make way for a shared use path on the north side. Otherwise, consider a pedestrian hybrid beacon for the south-side crosswalk that is coordinated with the adjacent traffic signal at Canton St and Akard St.	
8B	Convention Center	Canton St	Browder St (S)	30	3	N	4,800	Canton St	TxDOT 2014 Sat. Counts	M	-	-	-	-	4,800	1	2	3	4	5	6	7	9	3, 5, 7, 8	Add advance yield line and "Yield Here to Pedestrians" signing for existing signed and marked crosswalk across 3-lane, 1-way street. Add curb extension to prevent parking in left-hand lane too close to crosswalk. Add pushbutton-actuated rectangular rapid flashing beacons (RRFB's) and consider a road diet from three to two lanes for a shorter crossing distance.



¹ with sufficient 6' width for ped. refuge?
² if AADT Estimate is not available.

Land Use Code Legend

R	Residential	S	Shopping
O	Office	M	Mix



DART Last Mile Connections Project - Unsignalized Crosswalk Evaluations - City of Dallas - July 2020

Unsignalized Crosswalk Improvement Legend

1	Crosswalk Signs, Markings & Lighting	5	Curb Extension
2	Raised Crosswalk	6	Ped. Refuge Island
3	Advance "Yield Here" Sign	7	RRFB
4	In-Street Pedestrian Crossing	8	Road Diet
		9	Ped. Hybrid Beacon

Signalized Crosswalk Improvement Legend

10	Add Marked Crosswalks & Provide Countdown, Accessible Pedestrian Signals
11	Traffic Signal

Legend: Strength of Consideration to be Given to Improvement

#	Signifies that the countermeasure is a candidate treatment at a marked uncontrolled crossing location.
#	Signifies that the countermeasure should always be considered, but not mandated or required, based upon engineering judgment at a marked uncontrolled crossing location.
#	Signifies that crosswalk visibility enhancements should always occur in conjunction with other identified countermeasures.

Station ID	Station Name	Street Crossed	At/Between	Posted/Prevailing Speed of Street Crossed	Number of Lanes Crossed	Median Present? ¹	AADT from Count Map	AADT Street Name	Source	Land Use (legend below) ²	2-Min. Traffic Count ²		Hourly Traffic Estimate	AADT Estimate	Assumed AADT	Improvements (See Legends Above)									Notes
											Time	Volume				Options					Recommended				
8B	Convention Center	Marilla St	Convention Center entrance	30	4	N	3,000		Guesstimate for ADT; no counts available	M	-	-	-	-	3,000	1	3	5	6	7	8	9	3, 6, 7, 8	Add advance yield line and "Yield Here to Pedestrians" signing for existing signed and marked crosswalk. Add pushbutton-actuated rectangular rapid flashing beacons (RRFB's) and consider a road diet from four lanes to two lanes for a shorter crossing distance and median refuge island.	
8B	Convention Center	Akard St	Marilla St	30	5	Y	5,600	Akard St	TxDOT 2014 Sat. Counts	M	-	-	-	-	5,600	1	3	5	7	8	9	3, 7, 9	Add advance yield line and "Yield Here to Pedestrians" signing for existing signed and marked crosswalk. Consider adding pushbutton-actuated rectangular rapid flashing beacons (RRFB's) or a pedestrian hybrid beacon, coordinated with adjacent traffic signals.		
8B	Convention Center	Hotel St	IH 30 NB Frontage Rd/Regional Veloweb crossing	30	4	N	1,000		Guesstimate for ADT; no counts available	-	-	-	-	-	1,000	1	3	5	6	7	8	9	1, 3	Add marked crosswalk with lighting, advance pedestrian warning signs, advance yield lines, "Yield Here to Pedestrians" signing at the yield lines, and pedestrian warning signs at the crosswalk (need contingent on construction of Regional Veloweb shared use path).	
8C	Cedars	Bellevue St	DART Station	30	2	N				R	14:10	7	210	3,200	3,200	1	2	4	5	6			1	Add pedestrian ramps and crosswalk markings, signing, and lighting.	
8C	Cedars	S Saint Paul St	North of IH 30	30	3	N	4,500	St Paul St	TxDOT 2014 Sat. Counts	-	-	-	-	-	4,500	1	2	3	4	5	6	7	9	1, 3, 7, 9	In conjunction with the future Regional Veloweb shared use path currently planned at this location, add a new signed and marked crosswalk with advance yield line and "Yield Here to Pedestrians" signing. Also add pushbutton-actuated rectangular rapid flashing beacons (RRFB's) or a pedestrian hybrid beacon, coordinated with adjacent traffic signals.
8C	Cedars	Ervay St	Corsicana St (NW leg)	30	4	N	3,900	Ervay St	TxDOT 2014 Sat. Counts	-	-	-	-	-	3,900	1	3	5	6	7	8	9	3, 7, 9	Add advance yield line and "Yield Here to Pedestrians" signing for existing signed and marked school crosswalk. Consider adding pushbutton-actuated rectangular rapid flashing beacons (RRFB's) or a pedestrian hybrid beacon, coordinated with adjacent traffic signals. Give extra consideration to a pedestrian hybrid beacon if this intersection becomes a crossing for the future Regional Veloweb shared use path as currently planned.	



¹ with sufficient 6' width for ped. refuge?
² if AADT Estimate is not available.

Land Use Code Legend

R	Residential	S	Shopping
O	Office	M	Mix



DART Last Mile Connections Project - Unsignalized Crosswalk Evaluations - City of Dallas - July 2020

Unsignalized Crosswalk Improvement Legend

1	Crosswalk Signs, Markings & Lighting	5	Curb Extension
2	Raised Crosswalk	6	Ped. Refuge Island
3	Advance "Yield Here" Sign	7	RRFB
4	In-Street Pedestrian Crossing	8	Road Diet
		9	Ped. Hybrid Beacon

Signalized Crosswalk Improvement Legend

10	Add Marked Crosswalks & Provide Countdown, Accessible Pedestrian Signals
11	Traffic Signal

Legend: Strength of Consideration to be Given to Improvement

#	Signifies that the countermeasure is a candidate treatment at a marked uncontrolled crossing location.
#	Signifies that the countermeasure should always be considered, but not mandated or required, based upon engineering judgment at a marked uncontrolled crossing location.
#	Signifies that crosswalk visibility enhancements should always occur in conjunction with other identified countermeasures.

Station ID	Station Name	Street Crossed	At/Between	Posted/Prevailing Speed of Street Crossed	Number of Lanes Crossed	Median Present? ¹	AADT from Count Map	AADT Street Name	Source	Land Use (legend below) ²	2-Min. Traffic Count ²		Hourly Traffic Estimate	AADT Estimate	Assumed AADT	Improvements (See Legends Above)									Notes
											Time	Volume				Options						Recommended			
8C	Cedars	Ervey St	Corsicana St (SE leg)	30	4	N	3,900	Ervey St	TxDOT 2014 Sat. Counts	-	-	-	-	-	3,900	1	3	5	6	7	8	9	1, 3, 7, 9	If the future Regional Veloweb shared use path currently planned along Corsicana Street crosses Ervey Street on the southwest leg of this intersection, add a new signed and marked crosswalk with advance yield line and "Yield Here to Pedestrians" signing. Also add pushbutton-actuated rectangular rapid flashing beacons (RRFB's) or a pedestrian hybrid beacon, coordinated with adjacent traffic signals. Note, however, that adjacent constraints may make it difficult to construct sidewalk or shared use path on the south side of Corsicana St, in which case this leg of the intersection may remain without a crosswalk.	
8C	Cedars	Ervey St	Gano St	30	4	N	5,400	Ervey St	TxDOT 2014 Sat. Counts	M	13:48	3	90	1,200	5,400	1	3	5	6	7	8	9	3, 6, 8	Add advance yield line and "Yield Here to Pedestrians" signing for existing signed and marked school crosswalk.	
8C	Cedars	Ervey St	McKee St	30	4	N	5,400	Ervey St	TxDOT 2014 Sat. Counts	M	-	-	-	-	5,400	1	3	5	6	7	8	9	1, 3, 6, 8	Consider road diet from four lanes to three lanes and median refuge island, consistent with City-funded project to add on-street bike lanes along Ervey St. If remaining as four lanes, consider adding new signed and marked crosswalk with advance yield lines and "Yield Here to Pedestrians" signing.	
8C	Cedars	Ervey St	Beaumont St	30	4	N	5,400	Ervey St	TxDOT 2014 Sat. Counts	M	-	-	-	-	5,400	1	3	5	6	7	8	9	1, 3, 6, 8	Consider road diet from four lanes to three lanes and median refuge island, consistent with City-funded project to add on-street bike lanes along Ervey St. If remaining as four lanes, consider adding new signed and marked crosswalk with advance yield lines and "Yield Here to Pedestrians" signing.	
8C	Cedars	Lamar St	McKee St	30	5	N	14,300	Lamar St	TxDOT 2014 Sat. Counts	M	14:40	35	1,050	13,700	14,300	1	3	5	6	7	8	9	3, 7, 9	Add advance yield line and "Yield Here to Pedestrians" signing for existing signed and marked crosswalk with existing overhead warning sign and flashing yellow beacons. Consider upgrading beacon to rectangular rapid flashing beacon on overhead display or pedestrian hybrid beacon.	
8C	Cedars	Lamar St	Powhattan St	30	5	N	14,300	Lamar St	TxDOT 2014 Sat. Counts	M	-	-	-	-	14,300	1	3	5	6	7	8	9	3, 7, 9	Add advance yield line and "Yield Here to Pedestrians" signing for existing signed and marked crosswalk. Consider upgrading with rectangular rapid flashing beacon on overhead display or pedestrian hybrid beacon.	
8C	Cedars	Cockrell Ave	McKee St	30	2	N				M	14:45	4	120	1,600	1,600	1	2	4	5	6			1	Add signed and marked crosswalk across Cockrell Ave at McKee St. Existing brick work across Cockrell Ave has appearance of a crosswalk, but lacks legal standing without parallel white edge lines.	
8C	Cedars	Akard St	Bellevue St	30	4	N	7,000	Akard St	TxDOT 2014 Sat. Counts	M	14:30	12	360	4,700	7,000	1	3	5	6	7	8	9	1, 3, 6, 8	Add new signed and marked crosswalks. Consider road diet from four lanes to three lanes and median refuge island, consistent with City-funded project to add on-street bike lanes along Akard St. If remaining as four lanes, add advance yield lines and "Yield Here to Pedestrians" signing.	
8C	Cedars	Akard St	Sullivan Dr (S)	30			7,000	Akard St	TxDOT 2014 Sat. Counts	M	14:30	12	360	4,700	7,000	1	3	5	6	7	8	9	1, 3, 6, 8	Add new signed and marked crosswalks. Consider road diet from four lanes to three lanes and median refuge island, consistent with City-funded project to add on-street bike lanes along Akard St. If remaining as four lanes, add advance yield lines and "Yield Here to Pedestrians" signing.	
8C	Cedars	Wall St	Sullivan Dr	30	2	N				M	14:17	1	30	400	400	1	2	4	5	6			1	Add signed and marked crosswalk across Wall St at Sullivan Dr. Lighting already in place.	
8C	Cedars	Wall St	Gano St	30	2	N				M	14:17	1	30	400	400	1	2	4	5	6			1	Add signed and marked crosswalk across Wall St at Gano St. Lighting already in place.	



¹ with sufficient 6' width for ped. refuge?
² if AADT Estimate is not available.

Land Use Code Legend

R	Residential	S	Shopping
O	Office	M	Mix

Based on FHWA's "Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations", July 2018, Table 1:
 Application of pedestrian crash countermeasures by roadway feature

