

## APPENDIX I: Half-Mile Area Recommendation Details & Detailed Improvement Mapping

Figures 3C-3 through 8C-4 on the following pages of this appendix identify existing conditions and recommended improvements for the half-mile areas around each station in Dallas. The first figure in each set indicates existing conditions and the second figure indicates the recommended improvements. Additional figures are provided for some stations to zoom into areas with dense concentrations of improvements for greater clarity.

In each figure, existing sidewalks are shown in light blue, as well as Regional Veloweb shared use paths (bright green) and local shared use paths (dark green). Existing shared use paths are shown with solid lines, while proposed shared use paths are shown in dashed lines.

The density of individual parcels' population plus employment totals are shown in a multi-color scale on the existing conditions figure. The population and employment density is shown in grayscale on the recommended improvements figure to allow the improvements to stand out more clearly.

Sidewalk and crosswalk gaps are shown in red on the existing conditions figures, and in multiple colors on the recommended improvements figures, according to the priority assigned to the gap: red for high-priority, orange for medium-priority, and light pink for low-priority. Gaps to remain are shown in dark pink. For more details on these gap categories, refer to Appendix F.

Each high- medium- and low-priority improvement, along with all gaps to remain, are indicated by the boxed number labels near each improvement location. The lower right corner of each recommended improvements figure includes a legend that describes the abbreviations in the improvement ID codes, which can be used to cross-reference the improvement matrices that appear in Appendix J.

For solid red, orange, or light pink lines, the recommended improvement for a sidewalk gap is either a new or repaired 5-foot wide sidewalk along the length shown. Repairs are noted in the matrix notes for each improvement in Appendix J, and assume full removal of damaged, existing sidewalk prior to replacement.

Note that in some places dashed green lines for planned shared use paths appear on top of other colored lines. Where dashed green lines appear on top of light blue lines, this indicates that a sidewalk of adequate width exists for basic pedestrian connectivity, and that a wider shared use path is also planned in the future. Such "sidewalk widening" improvements were not considered essential to provide multi-modal connectivity to transit for the purposes of this project, and as such were not listed as numbered improvements or included in any cost estimation of high-priority improvements. They are shown on the map figures for informational purposes only.

Other dashed green lines in the existing conditions and recommended improvements figures appear on top of red, orange, or light pink lines. On the existing conditions figures, dashed green over red indicates a gap where no current sidewalk or shared use path exists but a future local or regional shared use path is planned. On the recommended improvements figures, dashed green over red, orange, or light pink also indicates a gap (of the priority indicated by the non-green color) where no current sidewalk or shared use path exists but a future local or regional shared use path is planned. In these cases, 10'-wide shared use paths were considered essential as high-priority

improvements (dashed green over red) to provide multi-modal connectivity to transit, and as such were listed as numbered improvements and included in the cost estimates that follow.

For crosswalk gaps, the type of improvement recommended is shown with numbered dark blue circles located near each crosswalk. The numbers in the blue circles correspond to the legend of possible pedestrian safety countermeasures appearing at the upper right of the figure. The first nine items in this legend correspond to the standard nine items in Table 1 of FHWA's publication, "Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations," referenced earlier in Section 2.6, Appendix C, and Appendix D. Treatments recommended somewhere on a particular figure have a red box around them in the legend for easier reference.

The right-hand side of each existing and recommended improvements figure includes a legend for "Primary Routes." These are street segments identified by NCTCOG as candidates for further evaluation during preliminary analyses that preceded the subject project by the consultant team. Primary Routes are denoted with a darkened black street centerline and a letter designation matching a street name indicated in the legend. Comparing the primary routes with high priority gaps on the recommended improvements figures illustrates differences between the results of this preliminary methodology with the final methodology.

The "Half Mile Area Improvements Matrices" appearing in Appendix J for each station list for each improvement the owner, improvement type, location, length, notes, priority score, and (in the case of high priority improvements not built by others) the opinion of probable construction cost. A matrix for sidewalks and shared use paths appears first, followed by a second matrix for crosswalks sorted separately. Each of the matrices is sorted by ownership and then by ID number.

The notes discuss any observations from the field visits deemed relevant, as well as challenging conditions the City and other agencies may want to consider when advancing recommended projects to design and/or construction. This type of information captured in the notes was a primary component of developing the quantities that form the basis for the opinions of probable construction cost. Also included in the notes (where provided) is feedback received from the City about upcoming projects or development that may construct the improvement. The absence of a note indicates that the sidewalk improvement appears to be relatively straightforward without obvious challenges.

In some cases, ownership of or responsibility for improvements was assumed to be shared among agencies, such as for a crosswalk from DART property across an adjacent City street. Such mixed ownership cases appear at the end of each listing with separate OPCC subtotals. In these cases, the OPCC for individual improvements or groups of improvements was split equally among each agency in the summary tables that follow in the main body of the report.



## LBJ Central Station

Figure 3C-3 illustrates the existing conditions in the half-mile area around the LBJ Central Station. IH-635 forms a significant barrier to multi-modal travel to and from the north that is exacerbated by the lack of sidewalk along the west side of TI Blvd and narrow sidewalk along the east side. The station has good sidewalk access to one newer apartment complex directly to its east and to the Texas Instruments campus to the south. However, connectivity to other apartment buildings along Markville Drive to the southeast and to the single family residential neighborhood to the west suffers due to sidewalk gaps. TI Blvd south of the station is also without bicycle or pedestrian facilities, but there are no developed land uses along this stretch that are not closer to Forest Lane Station.

Figure 3C-4 shows the recommended improvements in the half-mile area around the LBJ Central Station.

A new Regional Veloweb shared use path is proposed to widen the existing sidewalk under the IH-635 bridges on the east side of TI Blvd. South of the station, the Veloweb alignment would continue in DART right-of-way along the west side of the tracks (3C-LC-VW-V03 and 3C-LC-VW-V04 in Figure 3C-4). Separately, the City of Dallas intends to construct sidewalk along both sides of the meandering alignment of TI Blvd south of the station (3C-LC-SW-037 and 3C-LC-SW-040 in Figure 3C-4), though without access points to adjacent land uses such as the Texas Instruments campus on the other side of the Floyd Branch creek, it's unclear this sidewalk will receive significant use where it meanders more than the direct alignment of the parallel Veloweb shared use path.

A new crosswalk with a pedestrian refuge island (or at a minimum, advanced yield signing and striping) and rectangular rapid flashing beacons (RRFB's) is recommended to serve users of the Veloweb shared use path where it will cross TI Blvd southwest of the station. A road diet along this section of TI Blvd would further facilitate construction of the refuge island, as the traffic volumes along this 4-lane undivided segment of TI Blvd appear to be below the capacity of a two-lane roadway.

Similar enhanced crosswalks with advanced yield lines and signing as well as RRFB's are recommended for crossing Markville Drive immediately south of the station (where a median refuge is already present) and at Vantage Point Drive (where the median nose should be extended with a pedestrian cut-through to provide better refuge).

Sidewalk improvements along the south side of Markville Road will allow more comfortable pedestrian access to and from the station for apartment residents.

Location 3C-LC-SW-055 on Figure 3C-4 is shown as a gap to remain, representing a locked gate at the east boundary of the station property that is accessible to residents of the adjacent apartment complex only. This location is considered a gap for other pedestrians with origins or destinations farther east that will need to remain. Walking and biking routes for these destinations will need to continue to loop to the south via Vantage Point Drive and Markville Drive or north along the IH-635 frontage road to reach the station.

Additional details about other improvements recommended in Figure 3C-4, as well as challenges associated with the recommended gaps to remain, are included in the matrix notes for LBJ Central Station that can be found in Appendix J.

## Forest Lane Station

Figure 3D-3 illustrates the existing conditions in the half-mile area around the Forest Lane Station. Multimodal access to this station is generally as good as the connectivity of the surrounding street network will support. The Cottonwood Creek Trail passes in close proximity west of the station, with future plans to widen existing sidewalk for a wider connection to the station platform. This trail connects south to the White Rock Creek Trail and several other existing and planned multi-use trails also converge south of the station's half-mile area.

Figure 3D-4 shows the recommended improvements in the half-mile area around the Forest Lane Station. Recommended improvements include construction of a new Regional Veloweb shared use path in DART right-of-way along the west side of the tracks (3D-FL-VW-V01 and 3D-FL-VW-V02 in Figure 3D-4). The shared use path will intersect Forest Lane over 600 feet from the nearest signalized crosswalk in either direction, and many pedestrians and cyclists are likely to avoid this extra travel distance. Therefore, strong consideration should be given to an enhanced crosswalk with a pedestrian hybrid beacon at this location. Pedestrian hybrid beacons should also be considered for mid-block crossings of the U.S. 75 frontage roads near the western limits of the half-mile area boundary.

Each of the crosswalk locations mentioned should have advance "Yield Here to Pedestrians" signing and yield line striping (Item #3 in the "Possible Pedestrian Safety Countermeasures" legend). Located 20-50 feet in advance of a crosswalk (depending on approach speeds), the yield line and associated signs help mitigate the risk of the dual threat situation for pedestrians on multi-lane crosswalk approaches by providing adequate sight distance between the pedestrian and approaching traffic when a vehicle yielding too close to the crosswalk might otherwise obscure drivers' lines of sight.

Other improvements include sidewalk along both sides of the Forest Central Drive business park roadway and both sides of TI Blvd, both north and south of Forest Lane. Marked crosswalks and countdown, accessible pedestrian signals should be provided at the intersection of Forest Lane and TI Blvd.

Additional details about other improvements recommended in Figure 3D-4, as well as challenges associated with the recommended gaps to remain, are included in the matrix notes for Forest Lane Station that can be found in Appendix J.



# FTA DART Stations Last Mile Connections LBJ Central Station August 2020

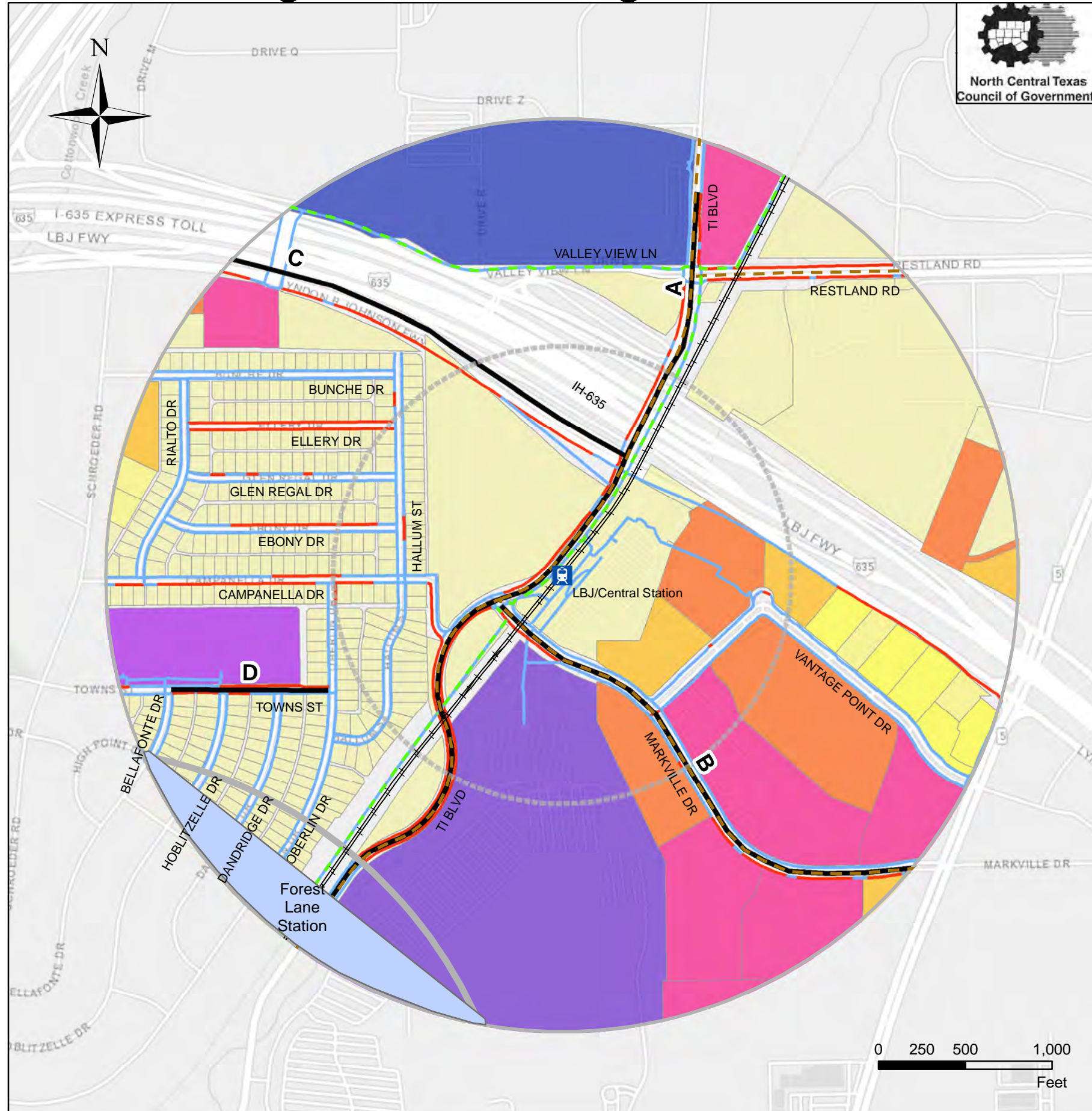


## Figure 3C-3 Existing Conditions



**Legend**

- DART Rail Station
- Railroad Track
- Segment Category**
  - Existing Sidewalk/Crosswalk
  - Sidewalk/Crosswalk Gap
- Regional Veloweb (Mobility 2045)**
  - Regional Existing
  - Regional Funded
  - Regional Planned
- Local Shared Use Paths**
  - Local Existing
  - Local Funded
  - Local Planned
- Local On-Street Bikeways**
  - Local Existing Bicycle Facilities
  - Local Funded Bicycle Facilities
  - Local Planned Bicycle Facilities
- DISPLAY**
  - 0.5 Mile Buffer
  - 0.25 Mile Buffer
  - Primary Routes



**Existing Residential and Employment Population (Number of People)**

- 0 - 10
- 11 - 50
- 51 - 100
- 101 - 250
- 251 - 578
- 579 - 1000
- 1001 - 1500
- 1501 - 2500
- 2501 - 5000
- 5001 - 24170

### Primary Routes

| Route | Street               |
|-------|----------------------|
| A     | TI Blvd              |
| B     | Markville Dr         |
| C     | IH-635 EB Service Rd |
| D     | Towns St             |

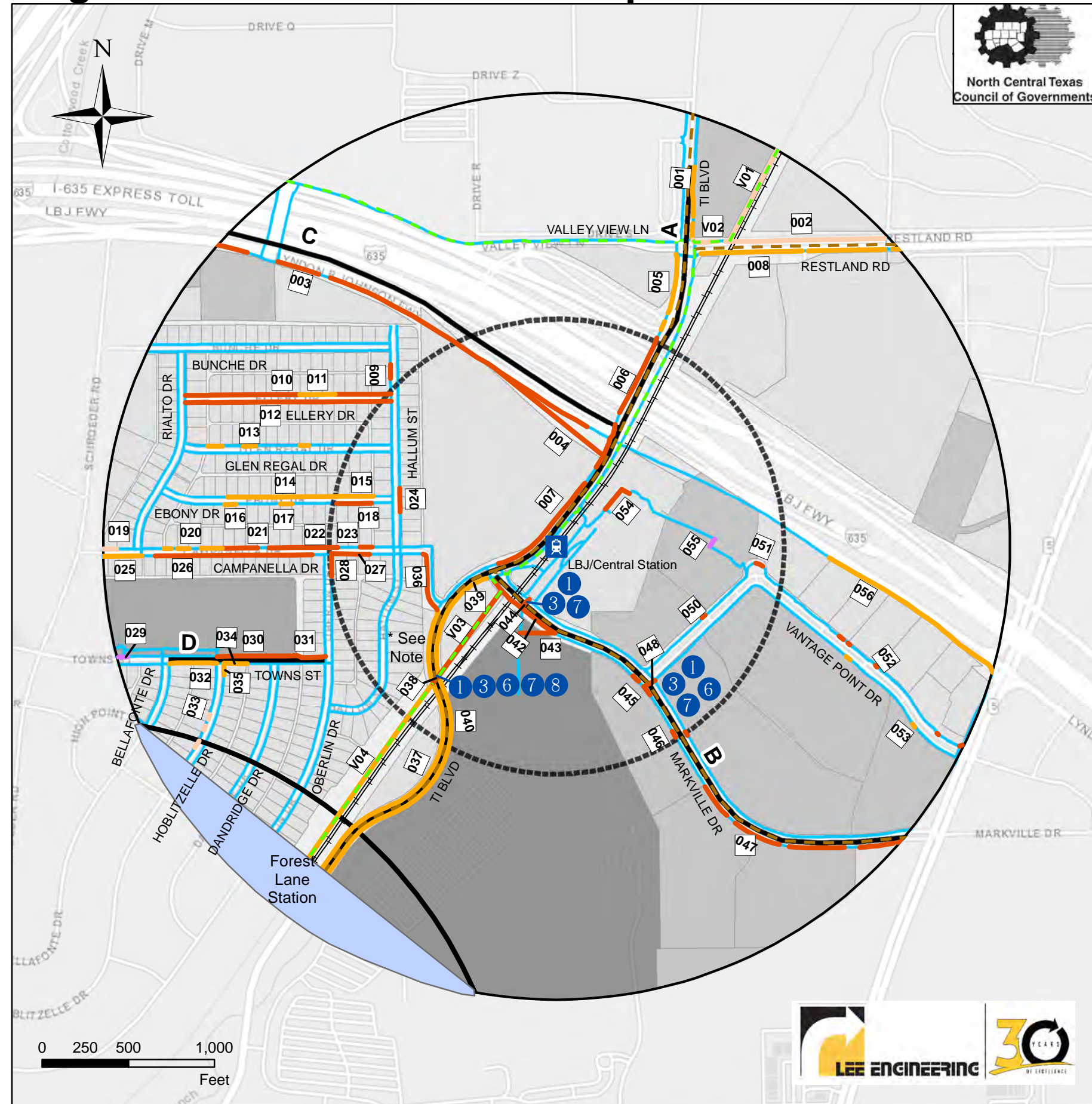
# FTA DART Stations Last Mile Connections LBJ Central Station August 2020



## Figure 3C-4 Recommended Improvements

### Legend

- DART Rail Station
- Railroad Track
- Sidewalk**
- Existing Sidewalk/Crosswalk
- Proposed Sidewalk/Crosswalk by Priority** 1
- High
- Medium
- Low
- Gap to Remain
- Regional Veloweb (Mobility 2045)**
- Regional Existing
- Regional Funded
- Regional Planned
- Local Shared Use Paths**
- Local Existing
- Local Funded
- Local Planned
- Local On-Street Bikeways**
- Local Existing Bicycle Facilities
- Local Funded Bicycle Facilities
- Local Planned Bicycle Facilities
- Buffers**
- 0.5 Mile Buffer
- 0.25 Mile Buffer
- Primary Routes
- Existing Residential and Employment Population (Number of People)**
- Ppl**
- 0 - 234
- 235 - 1049
- 1050 - 2586
- 2587 - 5364
- 5365 - 10339



### Possible Pedestrian Safety Countermeasures

#### Unsignalized Crosswalk Improvements

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

#### Signalized Crosswalk Improvements

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

### Primary Routes

| Route | Street               |
|-------|----------------------|
| A     | TI Blvd              |
| B     | Markville Dr         |
| C     | IH-635 EB Service Rd |
| D     | Towns St             |

Improvement Code Legend (See Matrix)

3C-LC-SW-01

3C ← Station Number

LC ← Station Abbreviation

SW ← Sidewalk (or CW for Crosswalk)

01 ← Improvement Number (Matches 1 on Map)

\*Crosswalk improvement contingent on construction of Regional Veloweb shared use path.



# FTA DART Stations Last Mile Connections Forest Lane Station August 2020

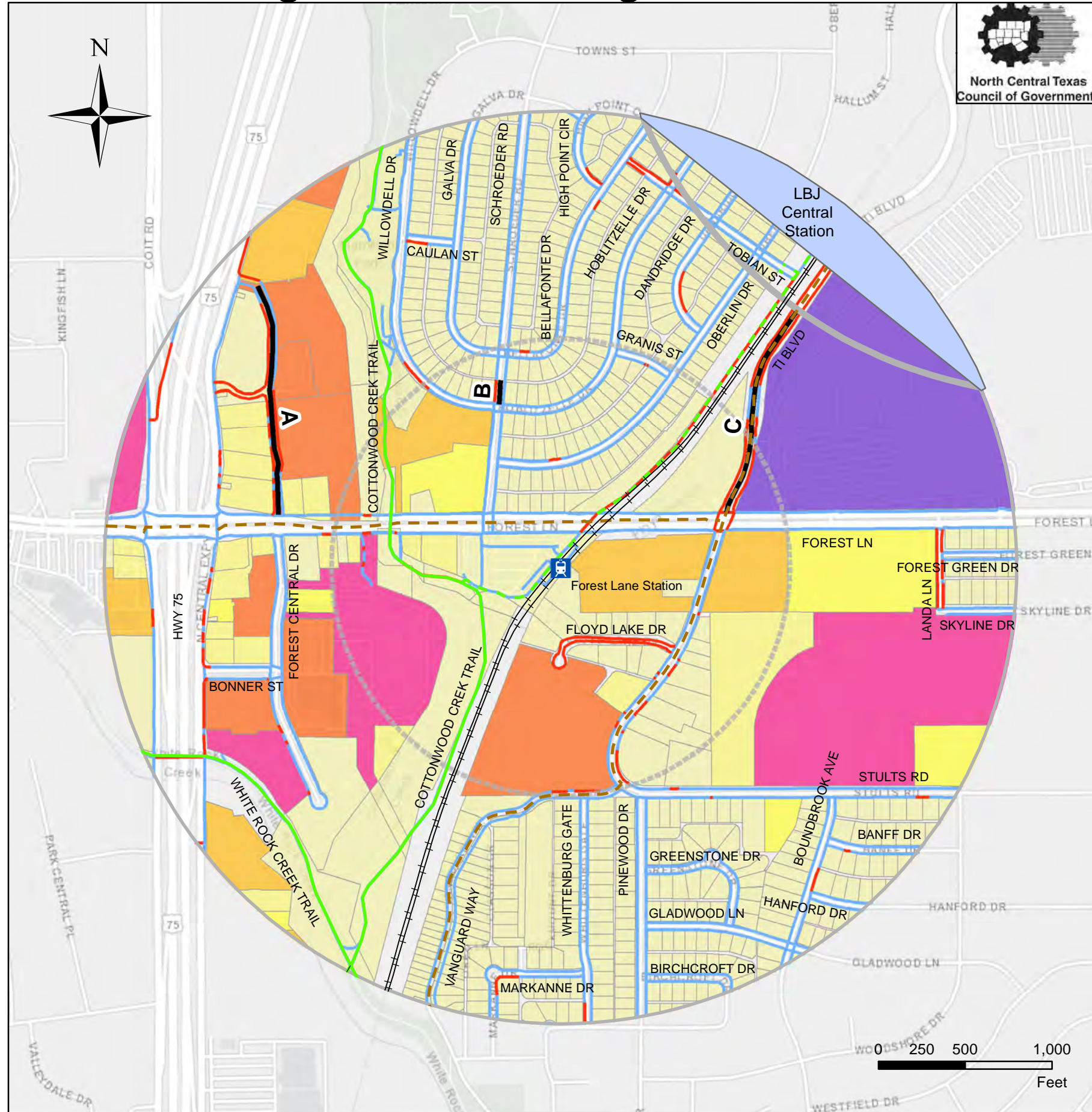


## Figure 3D-3 Existing Conditions



**Legend**

- DART Rail Station
- Railroad Track
- Regional Veloweb (Mobility 2045)**
  - Regional Existing
  - Regional Funded
  - Regional Planned
- Local Shared Use Paths**
  - Local Existing
  - Local Funded
  - Local Planned
- Local On-Street Bikeways**
  - Local Existing Bicycle Facilities
  - Local Funded Bicycle Facilities
  - Local Planned Bicycle Facilities
- DISPLAY**
  - 0.5 Mile Buffer
  - 0.25 Mile Buffer
  - Primary Routes
- Segment Category**
  - Existing Sidewalk/Crosswalk
  - Sidewalk/Crosswalk Gap



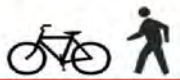
**Existing Residential and Employment Population (Number of People)**

- 0 - 10
- 11 - 50
- 51 - 100
- 101 - 250
- 251 - 578
- 579 - 1000
- 1001 - 1500
- 1501 - 2500
- 2501 - 5000
- 5001 - 24170

### Primary Routes

| Route | Street            |
|-------|-------------------|
| A     | Forest Central Dr |
| B     | Schroeder Rd      |
| C     | TI Blvd           |

# FTA DART Stations Last Mile Connections Forest Lane Station August 2020



## Figure 3D-4 Recommended Improvements

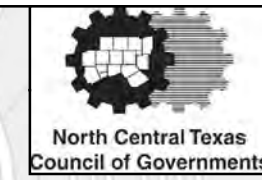
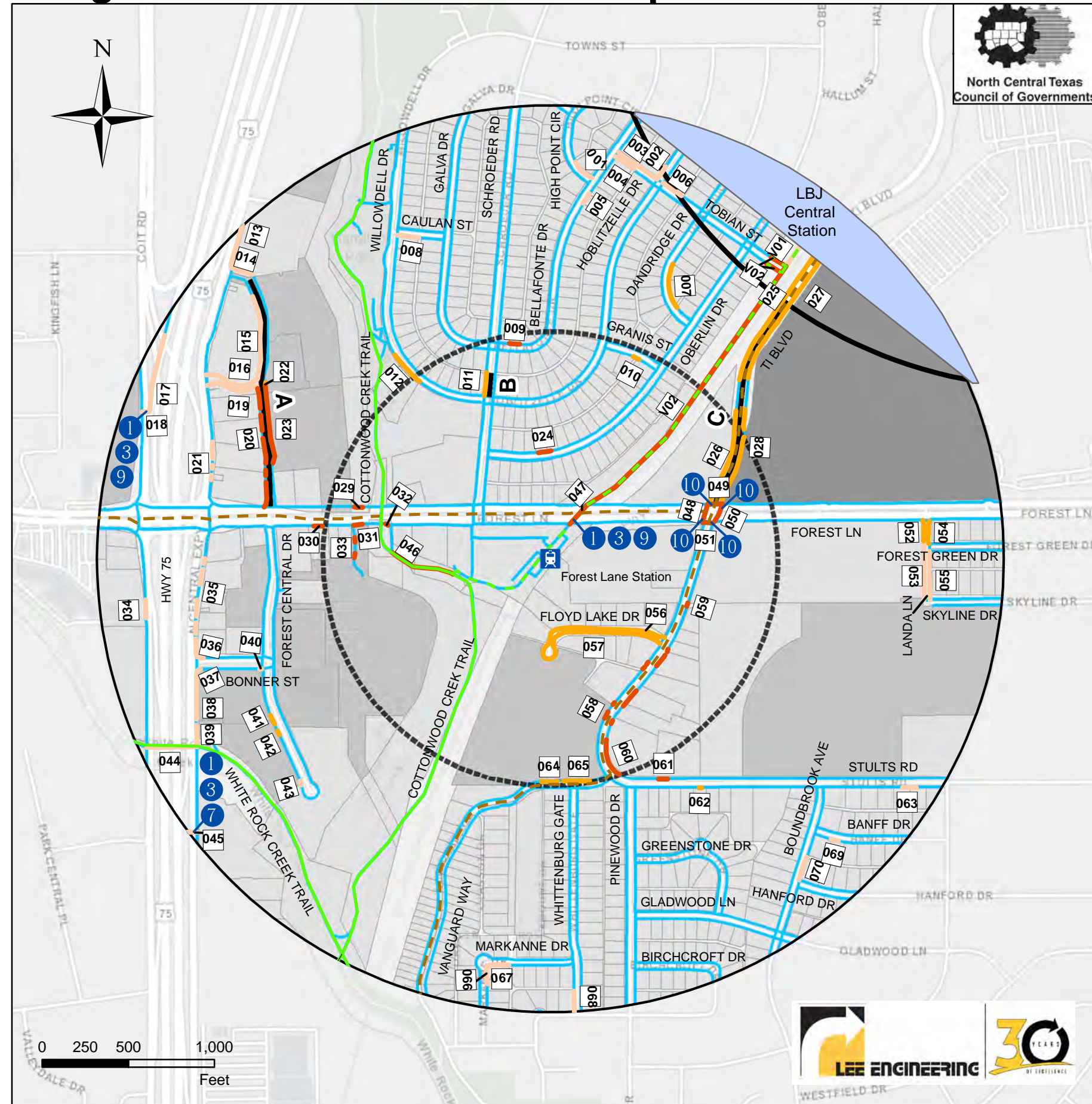
### Legend

- DART Rail Station
- Railroad Track
- Sidewalk**
  - Existing Sidewalk/Crosswalk
  - Proposed Sidewalk/Crosswalk by Priority**
    - High
    - Medium
    - Low
    - Gap to Remain
- Regional Veloweb (Mobility 2045)**
  - Regional Existing
  - Regional Funded
  - Regional Planned
- Local Shared Use Paths**
  - Local Existing
  - Local Funded
  - Local Planned
- Local On-Street Bikeways**
  - Local Existing Bicycle Facilities
  - Local Funded Bicycle Facilities
  - Local Planned Bicycle Facilities
- Buffers**
  - 0.5 Mile Buffer
  - 0.25 Mile Buffer
  - Primary Routes
- Existing Residential and Employment Population (Number of People)**

Ppl

  - 0 - 234
  - 235 - 1049
  - 1050 - 2586
  - 2587 - 5364
  - 5365 - 10339

\*Note: Need for improvement contingent on construction of local shared use-path.



### Possible Pedestrian Safety Countermeasures

#### Unsignalized Crosswalk Improvements

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

#### Signalized Crosswalk Improvements

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

### Primary Routes

| Route | Street            |
|-------|-------------------|
| A     | Forest Central Dr |
| B     | Schroeder Rd      |
| C     | TI Blvd           |

Improvement Code Legend (See Matrix)

3D-FL-SW-01

3D ← Station Number  
 FL ← Station Abbreviation  
 SW ← Sidewalk (or CW for Crosswalk)  
 01 ← Improvement Number (Matches 1 on Map)



### Walnut Hill Station

Figure 4A-3 illustrates the existing conditions in the half-mile area around the Walnut Hill Station. The station is relatively well connected to the surrounding area for pedestrians and bicyclists. However, notable sidewalk gaps exist along Walnut Hill Lane east of the station and within the campus of Texas Health Presbyterian Hospital Dallas to the south.

Figure 4A-4 shows the recommended improvements in the half-mile area around the Walnut Hill Station, which include new sidewalk to fill the gaps mentioned above. The City of Dallas will need to coordinate with Presbyterian Hospital Dallas to help facilitate sidewalk improvements on their property to the south of the station.

An spur of the Union Pacific Trail is programmed and funded by the City of Dallas as part of the Regional Veloweb along the west side of the DART tracks east of Manderville Lane to connect the station to points north. This is shown as improvement 4A-WH-VW-V01 and 4A-WH-VW-V02 on Figure 4A-4. The City has other shared use paths planned in the vicinity that will either widen existing sidewalk or fill sidewalk gaps along Walnut Hill Lane and Greenville Ave, with additional on-street bicycle facilities planned for Meadow Road, Rambler Road, Perot Lane, and Pineland Drive.

The City of Dallas will need to coordinate with DART on a recommendation to improve access to the station. The recommendation is for DART to provide gaps in the decorative fence posts between the sidewalk and stairways to the elevated station platform for more direct pedestrian and bicyclist access. However, since this may increase the number of pedestrians who would otherwise attempt to cross Walnut Hill Lane at-grade and mid-block under the elevated station platform, it is also recommended to provide anti-climb median fencing in the median. This will discourage pedestrian crossings except via the overhead station platform or at the signalized crosswalk at Glen Lakes Drive 350 feet to the east. The City will need to coordinate with DART for construction of the anti-climb median fencing. See Section 3.1.3 on page 8 and station area improvement 4A-WH-ST-10 on Figures 4A-1.1, 4A-1.3 and 4A-1.4 (pages 15, 17 & 18) for more details.

Other improvements of note include adding marked crosswalks, pedestrian ramps, and countdown accessible pedestrian signals at the intersection of Walnut Hill Lane and Rambler Road at the signalized northern entrance to the hospital, and providing an RRFB for more conspicuous pedestrian crossings of Glen Lakes Drive at its intersection with Walnut Hill Lane, where the right "turn" from Walnut Hill Lane has the geometry of a through movement at potentially higher speeds.

Additional details about other improvements recommended in Figure 4A-4, as well as challenges associated with the recommended gaps to remain, are included in the matrix notes for Walnut Hill Station that can be found in Appendix J.

### Park Lane Station

Figure 4B-3 illustrates the existing conditions in the half-mile area around the Park Lane Station. The station is somewhat connected to the surrounding area for pedestrians and bicyclists. However, notable sidewalk gaps exist along Greenville Avenue and Twin Hills Avenue to the north and south, as well as within and around the private Caruth Plaza and North Park shopping centers and the Glen America business park to the west. Park Lane is itself a barrier to access for some multi-modal trips arriving to and from the south, since the overhead station platform bridges over the roadway but is only accessed from the north side.

Figure 4B-4 shows the recommended improvements in the half-mile area around the Park Lane Station. Two improvements straddling the station property and adjacent City of private right-of-way will need to be coordinated between the City, DART, and the Caruth Plaza property owner. One of these improvements would be a sidewalk connection from the station property west across the Caruth Plaza parking lot to the shopping center building. Other sidewalks on private property to connect through or around the Caruth Plaza shopping center, North Park Center shopping center and Glen America business park would also require cooperation by private property owners to complete.

The other improvement straddling DART property would be an enhanced crosswalk with pedestrian hybrid beacon across Park Lane beneath the overhead rail bridge. See Section 3.1.4 on page 20 for more details.

The City of Dallas is planning a shared use path along Greenville Avenue north of the station and Park Lane east of the station. Also planned are on-street bike facilities along Park Lane west of the station and Fair Oaks Avenue to the east.

Other improvements include filling sidewalk gaps along the roadways mentioned above (among others) and adding marked crosswalks and countdown, accessible pedestrian signals at the intersection of Greenville Avenue and Blackwell Street.

Additional details about other improvements recommended in Figure 4B-4, as well as challenges associated with the recommended gaps to remain, are included in the matrix notes for Park Lane Station that can be found in Appendix J.

### Lovers Lane Station

Figure 4C-3 illustrates the existing conditions in the half-mile area around the Lovers Lane Station. Central Expressway (U.S. 75) poses a boundary to multi-modal access to the station from the western low-density neighborhoods in Dallas and University Park. Otherwise, multi-modal access is fairly complete along the existing street grid, with a few sidewalk gaps on Greenville Avenue, Northway Drive and one small gap on Milton Street just east of the station being notable exceptions. The City of Dallas recently completed the Matilda Trail along the west side of Matilda Street from Lovers Lane to Sandhurst Lane.

Figure 4C-4 shows the recommended improvements in the half-mile area around the Lovers Lane Station. The improvements highlighted in yellow along Milton Street and Northway Drive were selected by NCTCOG for 15% sidewalk design by the consultant team. The aforementioned sidewalk gaps would be filled, and marked crosswalks with curb extensions would be built to shorten pedestrian crossing distances across Amesbury Drive at Milton Street and Birchbrook Drive, as well as for crossing Matilda Street at Milton Street.

The City of Dallas is planning shared use paths along Lovers Lane from the north end of the Matilda Trail to Willard Drive west of U.S. 75. On-street bikeways are planned along Lovers Lane east of the Matilda Trail and along University Blvd east of U.S. 75.

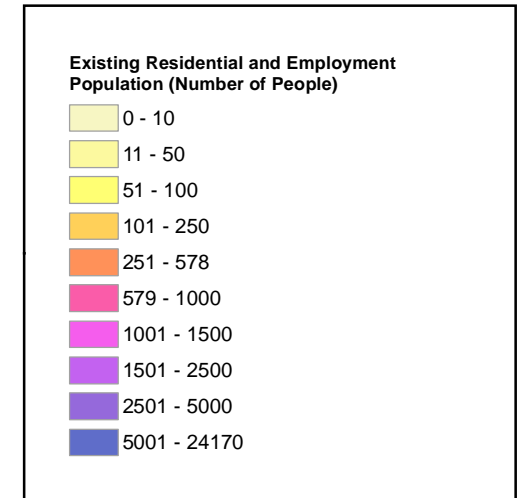
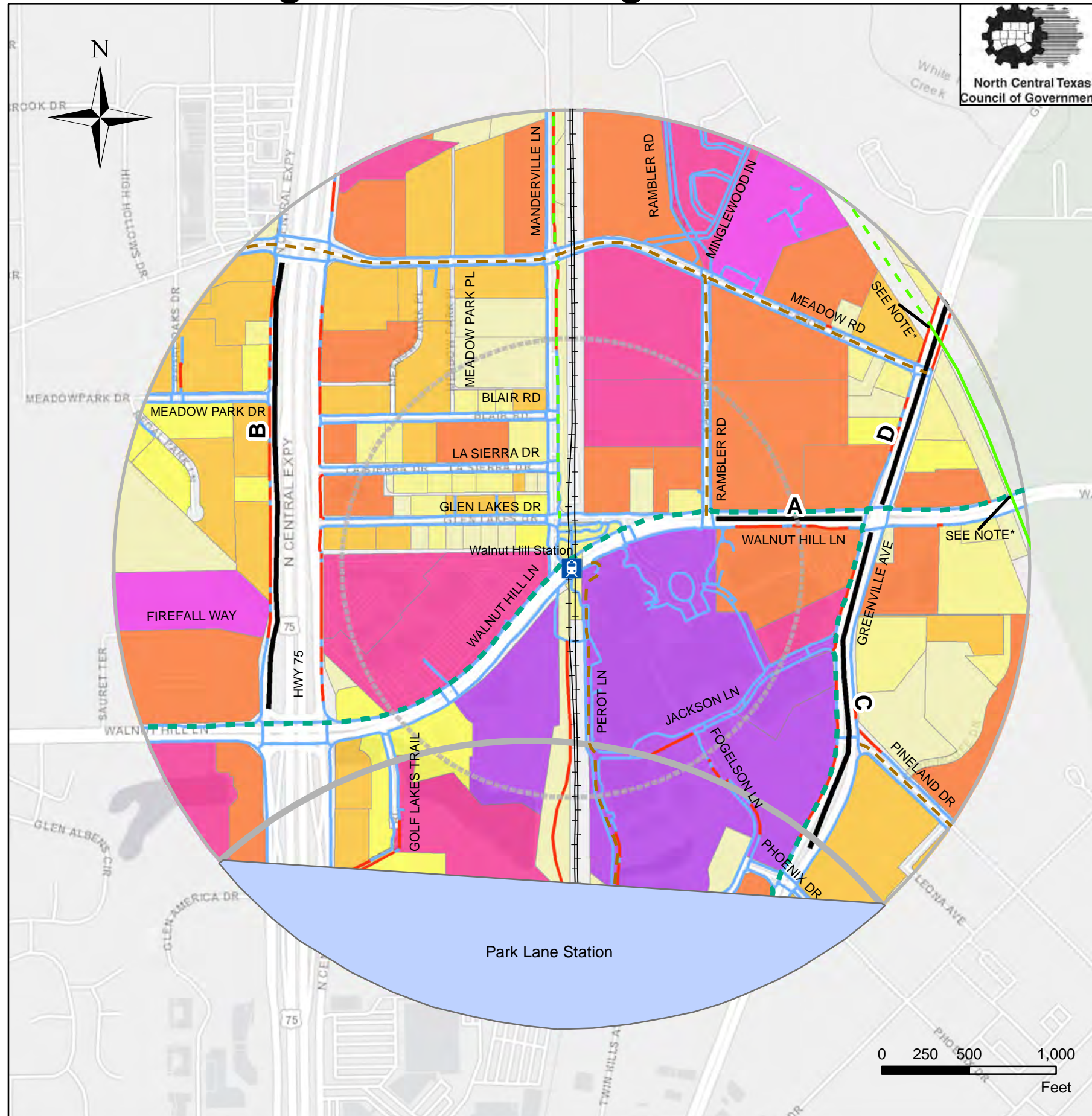
Additional details about other improvements recommended in Figure 4C-4, as well as challenges associated with the recommended gaps to remain, are included in the matrix notes for Lovers Lane Station that can be found in Appendix J.



**FTA DART Stations  
Last Mile Connections  
Walnut Hill  
Station  
August 2020**



**Figure 4A-3 Existing Conditions**



**Primary Routes**

| Route | Street             |
|-------|--------------------|
| A     | Walnut Hill Ln     |
| B     | Cntrl Expwy Access |
| C     | Greenville Ave     |
| D     | Greenville Ave     |

**Legend**

- DART Rail Station
- Railroad Track
- Segment Category
  - Existing Sidewalk/Crosswalk
  - Sidewalk/Crosswalk Gap; Sidewalk Repair
- Regional Veloweb (Mobility 2045)
  - Regional Existing
  - Regional Funded
  - Regional Planned
- Local Shared Use Paths
  - Local Existing
  - Local Funded
  - Local Planned
- Local On-Street Bikeways
  - Local Existing Bicycle Facilities
  - Local Funded Bicycle Facilities
  - Local Planned Bicycle Facilities
- DISPLAY
  - 0.5 Mile Buffer
  - 0.25 Mile Buffer
  - Primary Routes

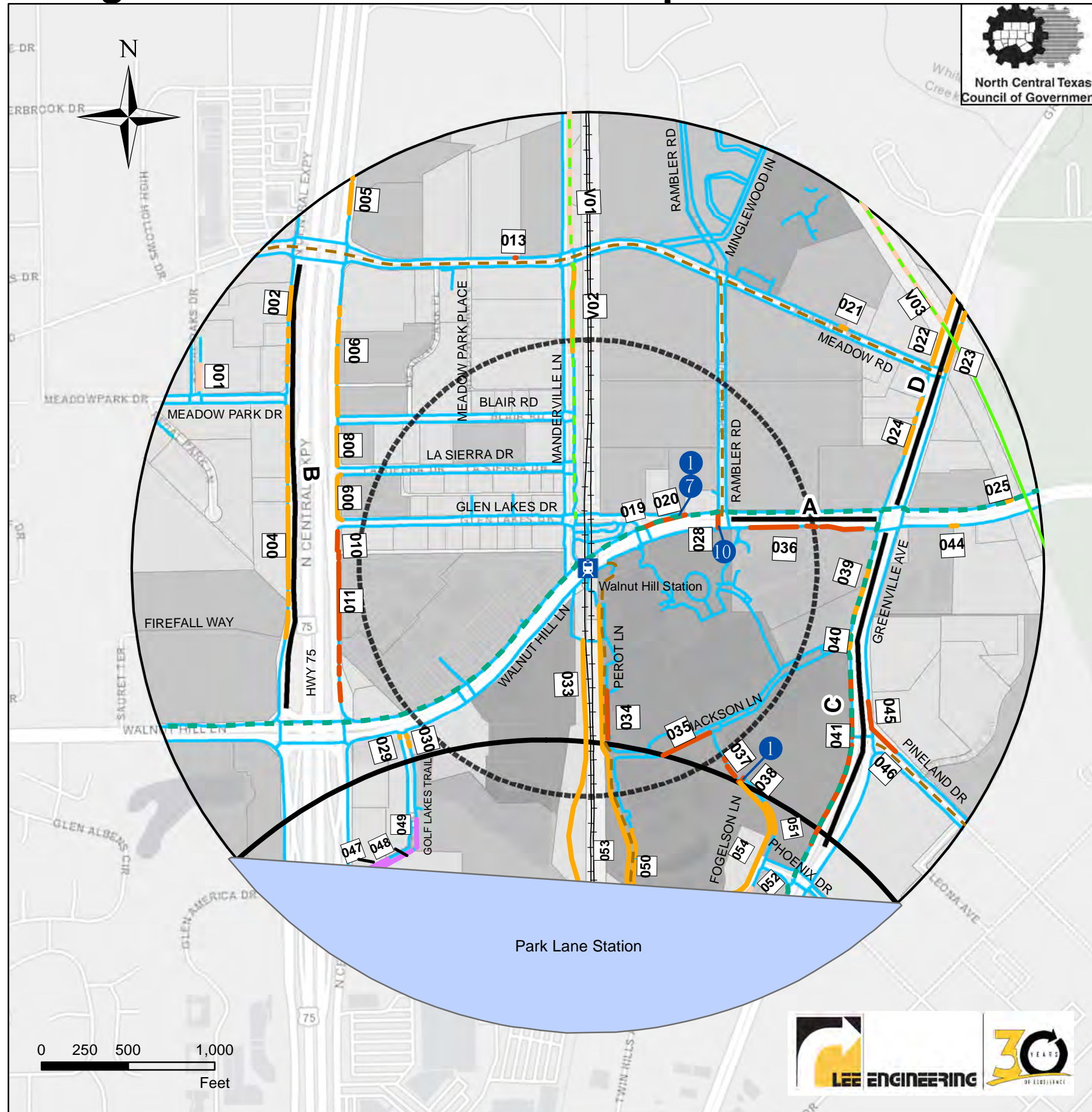
NOTE: NO CONNECTION IS PROVIDED BETWEEN EXISTING VELOWEB TRAIL OVERPASS AND SIDEWALK ALONG STREET BELOW



**FTA DART Stations  
Last Mile Connections  
Walnut Hill  
Station  
August 2020**



**Figure 4A-4 Recommended Improvements**



**Legend**

- DART Rail Station
- Railroad Track
- Sidewalk**
- Existing Sidewalk/Crosswalk
- Proposed Sidewalk/Crosswalk by Priority 1**
- High
- Medium
- Low
- Gap to Remain
- Regional Veloweb (Mobility 2045)**
- Regional Existing
- Regional Funded
- Regional Planned
- Local Shared Use Paths**
- Local Existing
- Local Funded
- Local Planned
- Local On-Street Bikeways**
- Local Existing Bicycle Facilities
- Local Funded Bicycle Facilities
- Local Planned Bicycle Facilities
- Buffers**
- 0.5 Mile Buffer
- 0.25 Mile Buffer
- Primary Routes

**Existing Residential and Employment Population (Number of People)**

- Ppl**
- 0 - 234
  - 235 - 1049
  - 1050 - 2586
  - 2587 - 5364
  - 5365 - 10339

**Possible Pedestrian Safety Countermeasures**

**Unsignalized Crosswalk Improvements**

- Crosswalk Signs, Markings & Lighting
- Raised Crosswalk
- Advance "Yield Here" Sign
- In-Street Pedestrian Crossing
- Curb Extension
- Pedestrian Refuge Island
- Rectangular Rapid Flashing Beacon
- Road Diet
- Pedestrian Hybrid Beacon

**Signalized Crosswalk Improvements**

- Add Marked Crosswalks, Pedestrian Ramps & Countdown, Accessible Pedestrian Signals
- Traffic Signal

**Primary Routes**

| Route | Street             |
|-------|--------------------|
| A     | Walnut Hill Ln     |
| B     | Cntrl Expwy Access |
| C     | Greenville Ave     |
| D     | Greenville Ave     |

**Improvement Code Legend (See Matrix)**

4A-WH-SW-01

4A ← Station Number  
 WH ← Station Abbreviation  
 SW ← Sidewalk (or CW for Crosswalk)  
 01 ← Improvement Number (Matches 1 on Map)



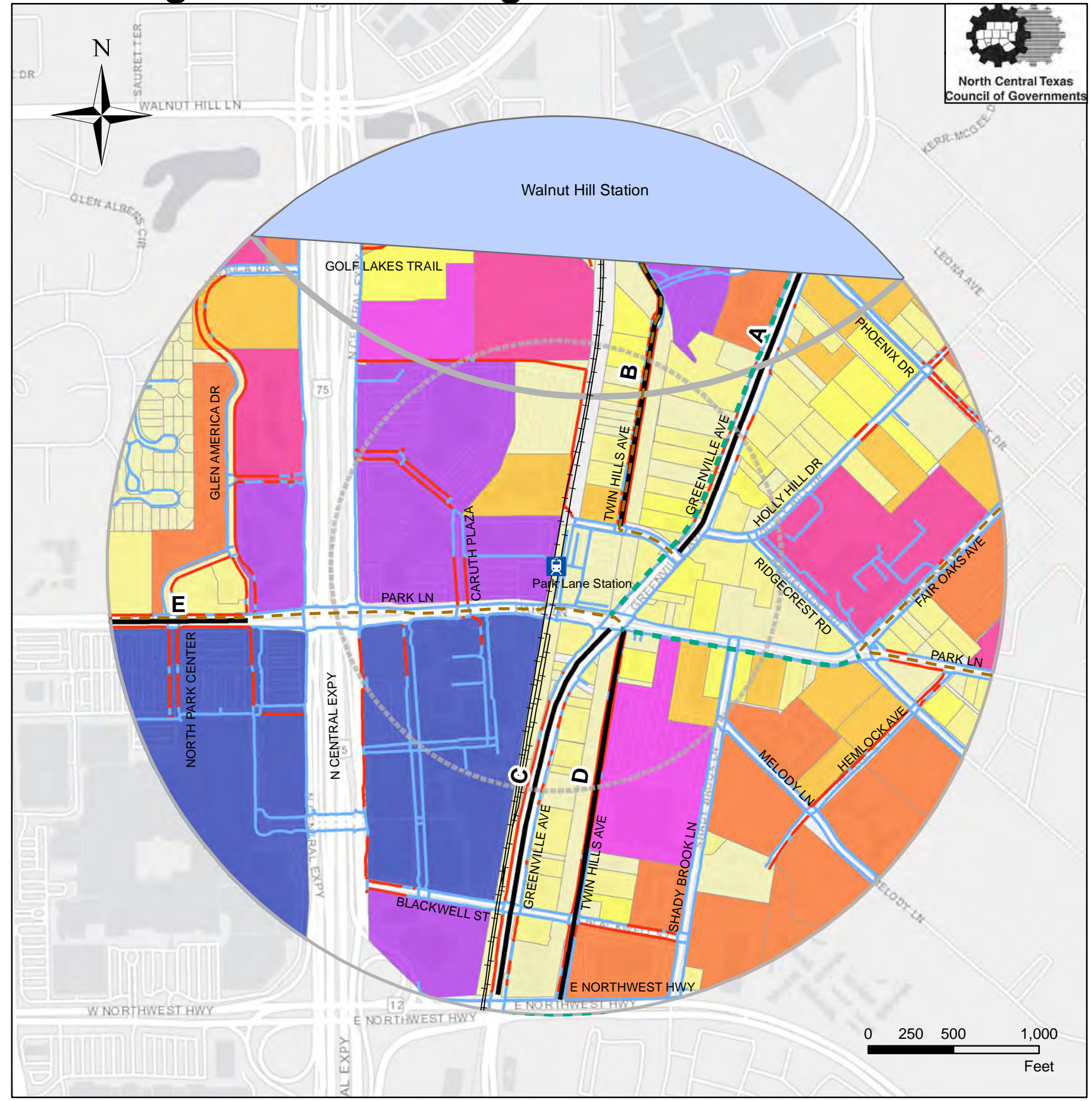
FTA DART Stations  
Last Mile Connections  
**Park Lane**  
Station  
August 2020



**Legend**

- DART Rail Station
- Railroad Track
- Segment Category**
  - Existing Sidewalk/Crosswalk
  - Sidewalk/Crosswalk Gap
- Regional Veloweb (Mobility 2045)**
  - Regional Existing
  - Regional Funded
  - Regional Planned
- Local Shared Use Paths**
  - Local Existing
  - Local Funded
  - Local Planned
- Local On-Street Bikeways**
  - Local Existing Bicycle Facilities
  - Local Funded Bicycle Facilities
  - Local Planned Bicycle Facilities
- DISPLAY**
  - 0.5 Mile Buffer
  - 0.25 Mile Buffer
  - Primary Routes

**Figure 4B-3 Existing Conditions**



**Existing Residential and Employment Population (Number of People)**

- 0 - 10
- 11 - 50
- 51 - 100
- 101 - 250
- 251 - 578
- 579 - 1000
- 1001 - 1500
- 1501 - 2500
- 2501 - 5000
- 5001 - 24170

**Primary Routes**

| Route | Street         |
|-------|----------------|
| A     | Greenville Ave |
| B     | Twin Hills Ave |
| C     | Greenville Ave |
| D     | Twin Hills Ave |
| E     | Park Ln        |

# FTA DART Stations Last Mile Connections Park Lane Station August 2020



## Figure 4B-4 Recommended Improvements

### Legend

- DART Rail Station
- Railroad Track

### Sidewalk

- Existing Sidewalk/Crosswalk

### Proposed Sidewalk/Crosswalk by Priority 1

- High
- Medium
- Low
- Gap to Remain

### Regional Veloweb (Mobility 2045)

- Regional Existing
- Regional Funded
- Regional Planned

### Local Shared Use Paths

- Local Existing
- Local Funded
- Local Planned

### Local On-Street Bikeways

- Local Existing Bicycle Facilities
- Local Funded Bicycle Facilities
- Local Planned Bicycle Facilities

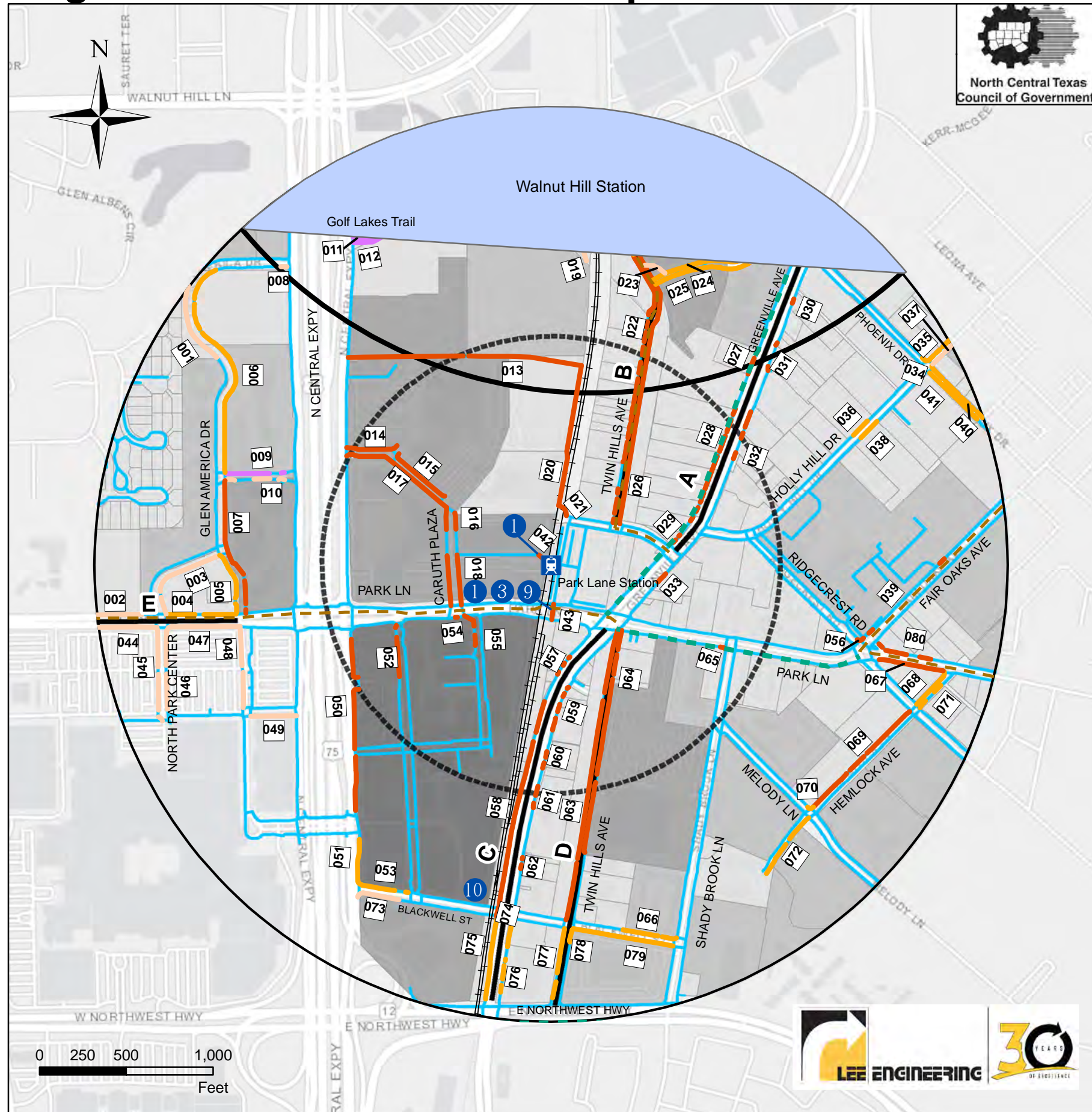
### Buffers

- 0.5 Mile Buffer
- 0.25 Mile Buffer
- Primary Routes

### Existing Residential and Employment Population (Number of People)

Ppl

- 0 - 234
- 235 - 1049
- 1050 - 2586
- 2587 - 5364
- 5365 - 10339



### Possible Pedestrian Safety Countermeasures

#### Unsignalized Crosswalk Improvements

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

#### Signalized Crosswalk Improvements

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

### Primary Routes

| Route | Street         |
|-------|----------------|
| A     | Greenville Ave |
| B     | Twin Hills Ave |
| C     | Greenville Ave |
| D     | Twin Hills Ave |
| E     | Park Ln        |

Improvement Code Legend (See Matrix)

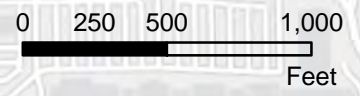
4B-PL-SW-01

4B ← Station Number

PL ← Station Abbreviation

SW ← Sidewalk (or CW for Crosswalk)

01 ← Improvement Number (Matches 1 on Map)



# FTA DART Stations Last Mile Connections Lovers Lane Station August 2020

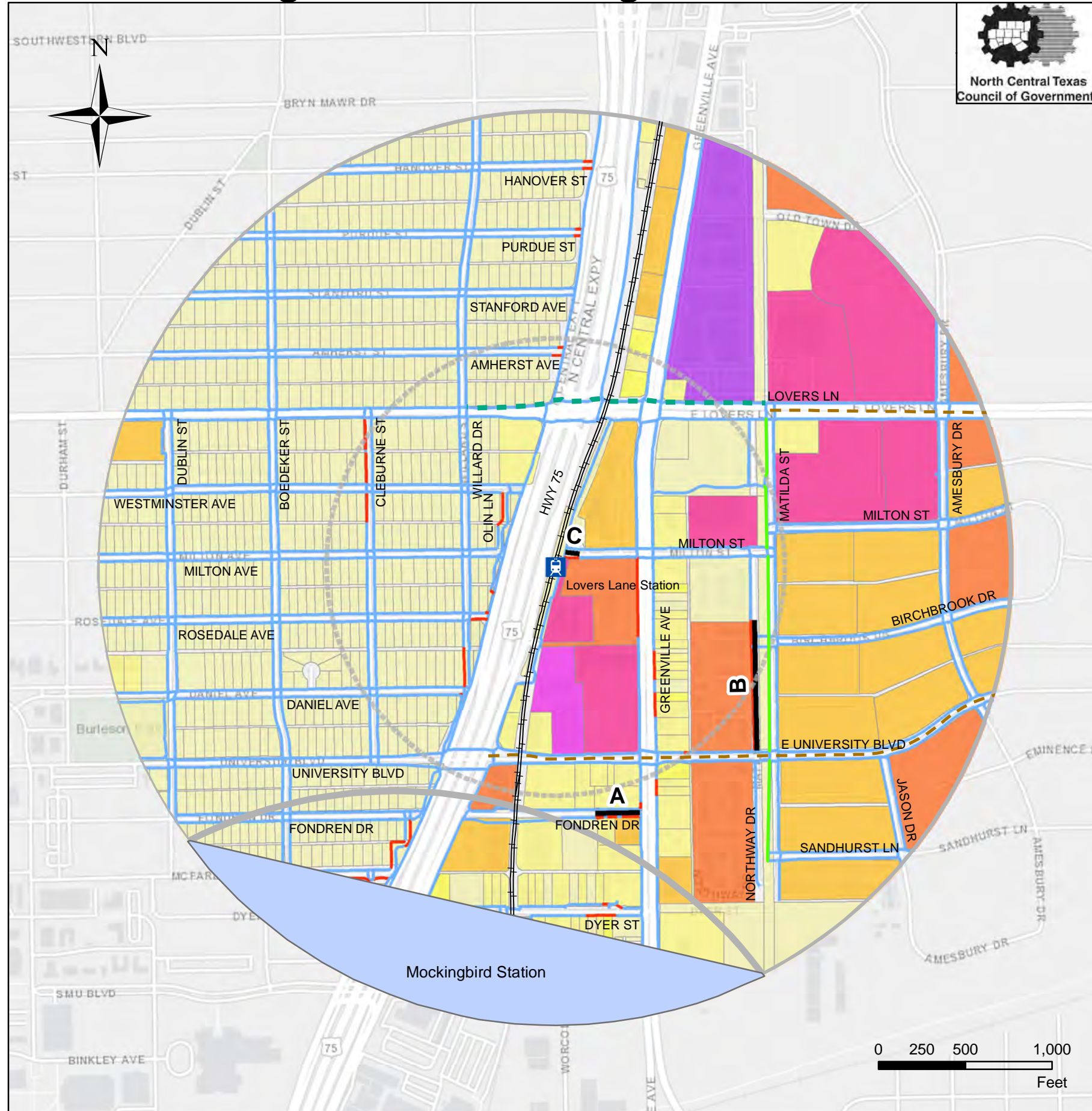


## Figure 4C-3 Existing Conditions



**Legend**

- DART Rail Station
- Railroad Track
- Segment Category**
  - Existing Sidewalk/Crosswalk
  - Sidewalk/Crosswalk Gap
- Regional Veloweb (Mobility 2045)**
  - Regional Existing
  - Regional Funded
  - Regional Planned
- Local Shared Use Paths**
  - Local Existing
  - Local Funded
  - Local Planned
- Local On-Street Bikeways**
  - Local Existing Bicycle Facilities
  - Local Funded Bicycle Facilities
  - Local Planned Bicycle Facilities
- DISPLAY**
  - 0.5 Mile Buffer
  - 0.25 Mile Buffer
  - Primary Routes



**Existing Residential and Employment Population (Number of People)**

- 0 - 10
- 11 - 50
- 51 - 100
- 101 - 250
- 251 - 578
- 579 - 1000
- 1001 - 1500
- 1501 - 2500
- 2501 - 5000
- 5001 - 24170

### Primary Routes

| Route | Street      |
|-------|-------------|
| A     | Fondren Dr  |
| B     | Northway Dr |
| C     | Milton St   |

# FTA DART Stations Last Mile Connections Lovers Lane

Station  
August 2020



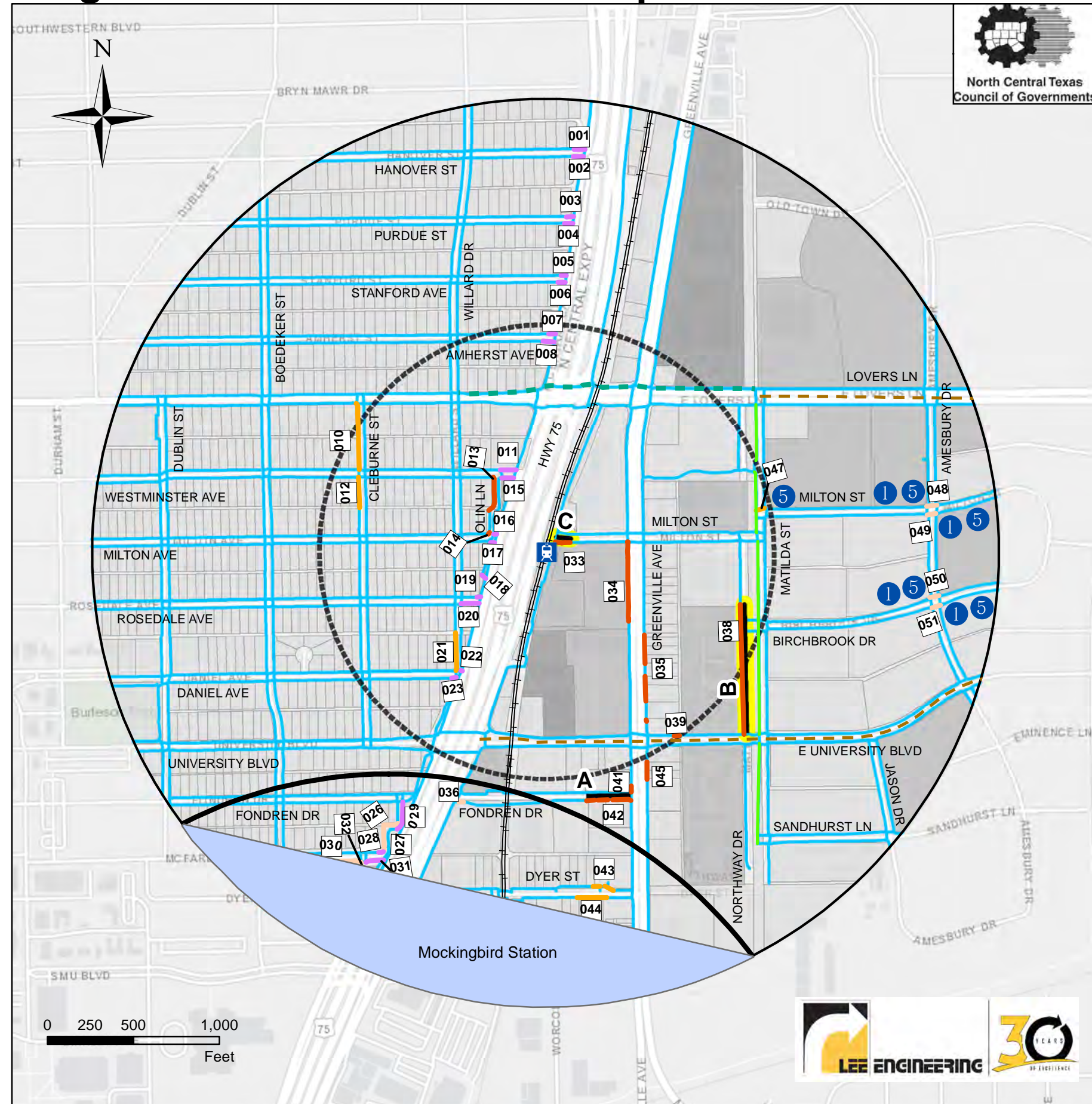
## Figure 4C-4 Recommended Improvements

### Legend

- DART Rail Station
- Railroad Track
- Sidewalk**
- Existing Sidewalk/Crosswalk
- Proposed Sidewalk/Crosswalk by Priority** 1
- High
- Medium
- Low
- Gap to Remain
- Regional Veloweb (Mobility 2045)**
- Regional Existing
- Regional Funded
- Regional Planned
- Local Shared Use Paths**
- Local Existing
- Local Funded
- Local Planned
- Local On-Street Bikeways**
- Local Existing Bicycle Facilities
- Local Funded Bicycle Facilities
- Local Planned Bicycle Facilities
- Buffers**
- 0.5 Mile Buffer
- 0.25 Mile Buffer
- Primary Routes
- 15% Design Corridors

### Existing Residential and Employment Population (Number of People)

- Ppl
- 0 - 234
  - 235 - 1049
  - 1050 - 2586
  - 2587 - 5364
  - 5365 - 10339



### Possible Pedestrian Safety Countermeasures

#### Unsignalized Crosswalk Improvements

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

#### Signalized Crosswalk Improvements

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

| Primary Routes              |                    |
|-----------------------------|--------------------|
| <b>15% Design Corridors</b> |                    |
| Route                       | Street             |
| A                           | Fondren Dr         |
| <b>B</b>                    | <b>Northway Dr</b> |
| <b>C</b>                    | <b>Milton St</b>   |

| Improvement Code Legend (See Matrix) |   |
|--------------------------------------|---|
| 4C-LL-SW-01                          |   |
| 4C                                   | ← Station Number  |
| LL                                   | ← Station Abbreviation  |
| SW                                   | ← Sidewalk (or CW for Crosswalk)  |
| 01                                   | ← Improvement Number (Matches <span style="border: 1px solid black; padding: 2px;">1</span> on Map) |



### Mockingbird Station

Figure 4D-3 illustrates the existing conditions in the half-mile area around the Mockingbird Station. Multi-modal access is good in this area, particularly along pedestrian desire lines to the highest density residential and business land uses. Some sidewalk gaps exist, though typically only where sidewalk is available on the opposite side of the same street. U.S. 75 forms a boundary that makes trips to and from the Southern Methodist University campus more indirect.

The Ridgewood Trail was recently constructed to connect the station to the Katy Trail to the southwest and to the SoPac Trail and White Rock Lake to the east. SMU Blvd, Matilda Street, and Ellsworth Avenue have existing on-street bikeways, and more bike lanes are planned for Greenville Avenue, McMillan Avenue and Matilda Bridge.

Figure 4D-4 shows the recommended improvements in the half-mile area around the Mockingbird Station. Sidewalk should be constructed to fill gaps on the south side of Mockingbird Lane and the north side of Twin Sixties Drive. Advanced yield lines and **“Yield Here to Pedestrians”** signing should be added to the existing multi-lane crossings of SMU Blvd at Prentice Street and Worcola Street. Located 20-50 feet in advance of a crosswalk (depending on approach speeds), the yield line and associated signs help mitigate the risk of the dual threat situation for pedestrians on multi-lane crosswalk approaches by providing adequate sight distance between the pedestrian and approaching traffic when a vehicle yielding too close to the crosswalk might otherwise obscure **drivers’ lines** of sight.

Additional details about other improvements recommended in Figure 4D-4, as well as challenges associated with the recommended gaps to remain, are included in the matrix notes for Mockingbird Station that can be found in Appendix J.

### LBJ Skillman Station

Figure 4E-3 illustrates the existing conditions in the half-mile area around the LBJ Skillman Station. The station is fairly poorly connected to the surrounding land uses, with continuous sidewalk being the exception rather than the rule along area streets.

Figure 4E-4 shows the recommended improvements in the half-mile area around the LBJ Skillman Station. Many sidewalks will be constructed by upcoming projects. In one project, the City of Dallas will reconstruct the intersection of Skillman Street and Audelia Road, with new sidewalk on both sides of each reconfigured approach street.

TxDOT will construct continuous sidewalk along the outside of the IH-635 frontage roads, which will offer many more opportunities for bicycle and pedestrian trips to the station. Note, however, that on the west side of IH-635, TxDOT’s **plan does not currently** call for a connection between the sidewalk along the frontage road and the pedestrian bridge paralleling the DART rail bridge over IH-635. DART and the City of Dallas should work with TxDOT to add design and construction of a sidewalk ramp to connect the two facilities, as illustrated by improvement 4E-LS-SW-055 on Figure 4E-4.

The City of Dallas and DART should coordinate with the owners of adjacent apartment complexes to add short sidewalk connections to their properties (see improvements 4E-LS-SW-056 and 4E-LS-SW-059 on Figure 4E-4) to significantly reduce the walking distance to the station for apartment residents.

Worn paths in the grass were observed on the undeveloped DART property north of the station platform, indicating existing pedestrian demand to the apartments located along Adleta Blvd. DART has communicated that proposals have been made for development of the vacant portion of the this property. As these proposals move into design, right-of-way or easements should be preserved. The sidewalk connections represented as improvements 4E-LS-SW-035 and 4E-LS-SW-037 should be built together with the development construction (if not sooner).

New sidewalk is also proposed along both sides of Miller Road south of the station and in the industrial areas to the east accessed by Pagemill Road, Dilworth Road, Sandhill Road, and Rockwall Road to provide more access to employment. Improvement 4E-LS-SW-039, which would be built in the DART right-of-way north of the tracks to connect to Dilworth Road, in particular would provide multi-modal access to employment centers that are otherwise **“landlocked”** by the adjacent rail lines.

The City of Dallas has planned a shared use path along the south side of Miller Road and the north side of Skillman Street through the study area for this station. On-street bikeways are also planned for Audelia Road and Ferndale Road.

A pedestrian traffic signal should be considered for crossing Audelia Road to Valmarie Drive west of the existing sidewalk that parallels the north side of the DART tracks and connects to the bridge over IH-635 to the station platform. A pedestrian hybrid beacon should be considered at the existing crosswalk across Miller Road at Markson Road for better access to the industrial employment centers on the south side of the intersection.

Additional details about other improvements recommended in Figure 4E-4, as well as challenges associated with the recommended gaps to remain, are included in the matrix notes for LBJ Skillman Station that can be found in Appendix J.



**FTA DART Stations  
Last Mile Connections  
Mockingbird  
Station  
August 2020**



**Legend**

- DART Rail Station
- Railroad Track
- Segment Category**
  - Existing Sidewalk/Crosswalk
  - Sidewalk/Crosswalk Gap
- Regional Veloweb (Mobility 2045)**
  - Regional Existing
  - Regional Funded
  - Regional Planned
- Local Shared Use Paths**
  - Local Existing
  - Local Funded
  - Local Planned
- Local On-Street Bikeways**
  - Local Existing Bicycle Facilities
  - Local Funded Bicycle Facilities
  - Local Planned Bicycle Facilities
- DISPLAY**
  - 0.5 Mile Buffer
  - 0.25 Mile Buffer
  - Primary Routes

**Figure 4D-3 Existing Conditions**

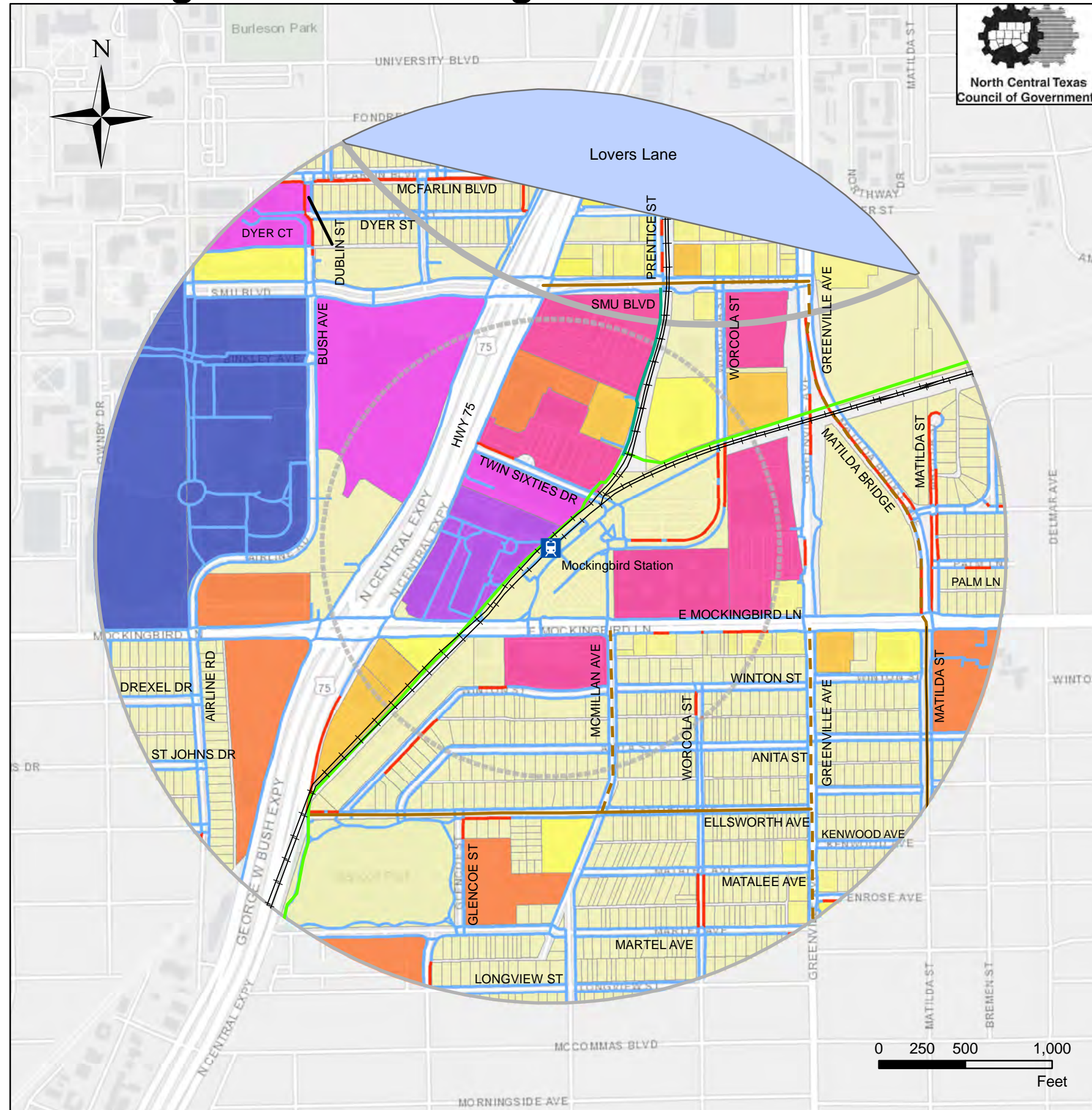


**Existing Residential and Employment Population (Number of People)**

- 0 - 10
- 11 - 50
- 51 - 100
- 101 - 250
- 251 - 578
- 579 - 1000
- 1001 - 1500
- 1501 - 2500
- 2501 - 5000
- 5001 - 24170

**Primary Routes**

None for this station area



# FTA DART Stations Last Mile Connections Mockingbird Station August 2020



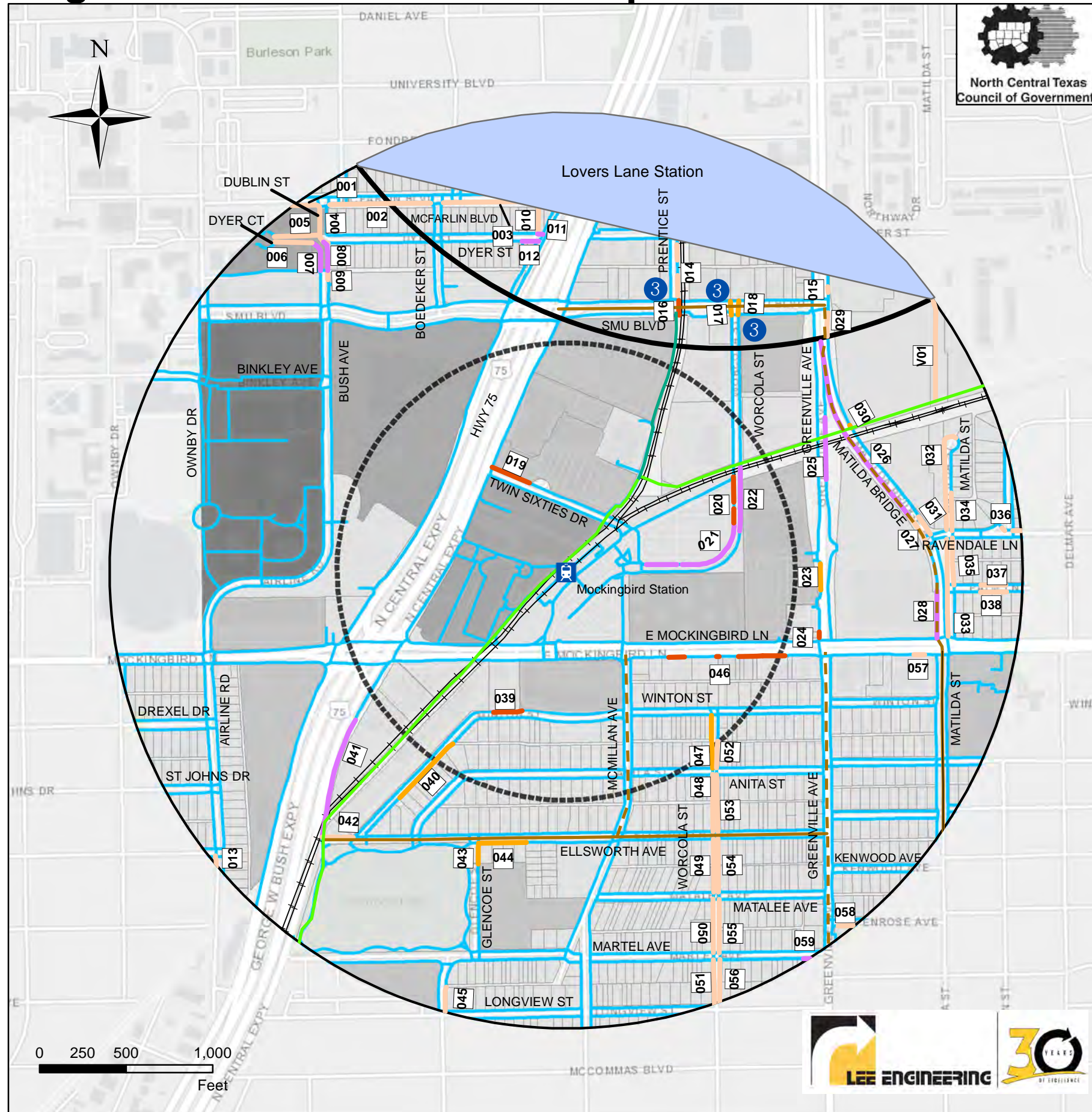
## Figure 4D-4 Recommended Improvements

### Legend

- DART Rail Station
- Railroad Track
- Sidewalk**
  - Existing Sidewalk/Crosswalk
  - Proposed Sidewalk/ Crosswalk by Priority**
    - High
    - Medium
    - Low
    - Gap to Remain
- Regional Veloweb (Mobility 2045)**
  - Regional Existing
  - Regional Funded
  - Regional Planned
- Local Shared Use Paths**
  - Local Existing
  - Local Funded
  - Local Planned
- Local On-Street Bikeways**
  - Local Existing Bicycle Facilities
  - Local Funded Bicycle Facilities
  - Local Planned Bicycle Facilities
- Buffers**
  - 0.5 Mile Buffer
  - 0.25 Mile Buffer
  - Primary Routes
- Existing Residential and Employment Population (Number of People)**

Ppl

  - 0 - 234
  - 235 - 1049
  - 1050 - 2586
  - 2587 - 5364
  - 5365 - 10339



### Possible Pedestrian Safety Countermeasures

#### Unsignalized Crosswalk Improvements

- Crosswalk Signs, Markings & Lighting
- Raised Crosswalk
- Advance "Yield Here" Sign**
- In-Street Pedestrian Crossing
- Curb Extension
- Pedestrian Refuge Island
- Rectangular Rapid Flashing Beacon
- Road Diet
- Pedestrian Hybrid Beacon

#### Signalized Crosswalk Improvements

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

### Primary Routes

None for this station area

| Improvement Code Legend (See Matrix) |  |
|--------------------------------------|--|
| 4D                                   | ← Station Number                               |
| MB                                   | ← Station Abbreviation                         |
| SW                                   | ← Sidewalk (or CW for Crosswalk)               |
| 01                                   | ← Improvement Number (Matches <b>1</b> on Map) |





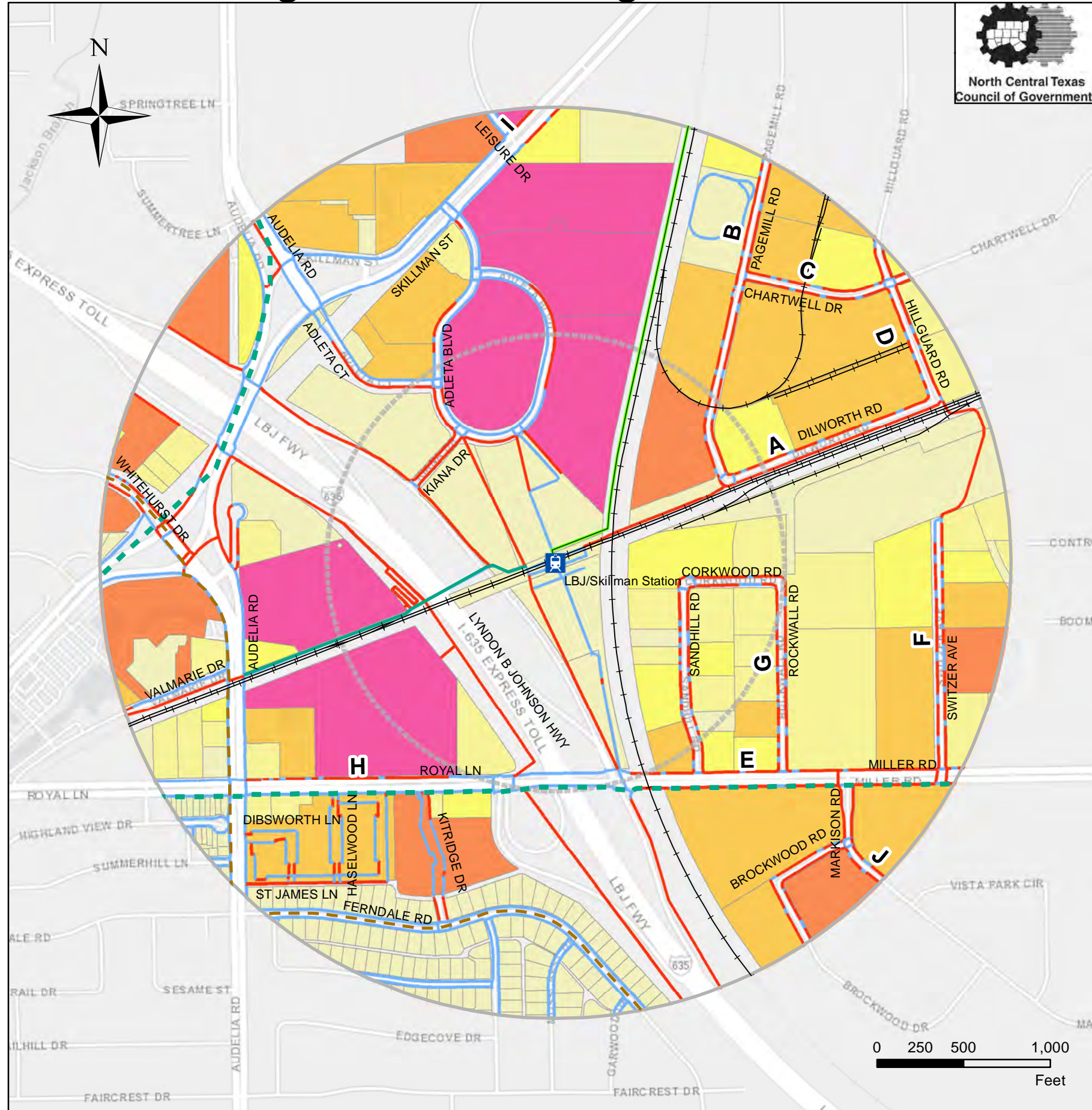
# FTA DART Stations Last Mile Connections LBJ Skillman Station August 2020



**Legend**

- DART Rail Station
- Railroad Track
- Segment Category**
  - Existing Sidewalk/Crosswalk
  - Sidewalk/Crosswalk Gap
- Regional Veloweb (Mobility 2045)**
  - Regional Existing
  - Regional Funded
  - Regional Planned
- Local Shared Use Paths**
  - Local Existing
  - Local Funded
  - Local Planned
- Local On-Street Bikeways**
  - Local Existing Bicycle Facilities
  - Local Funded Bicycle Facilities
  - Local Planned Bicycle Facilities
- DISPLAY**
  - 0.5 Mile Buffer
  - 0.25 Mile Buffer

## Figure 4E-3 Existing Conditions



**Existing Residential and Employment Population (Number of People)**

- 0 - 10
- 11 - 50
- 51 - 100
- 101 - 250
- 251 - 578
- 579 - 1000
- 1001 - 1500
- 1501 - 2500
- 2501 - 5000
- 5001 - 24170

### Primary Routes

| Route | Street                     |
|-------|----------------------------|
| A     | Dilworth Rd                |
| B     | Pagemill Rd                |
| C     | Chartwell Dr               |
| D     | Hillguard Rd               |
| E     | Miller Rd                  |
| F     | Switzer Ave                |
| G     | Rockwall Corkwood Sandhill |
| H     | Royal Rd                   |
| I     | Skillman St                |
| J     | Markison Rd                |

# FTA DART Stations Last Mile Connections LBJ/Skillman

Station  
August 2020



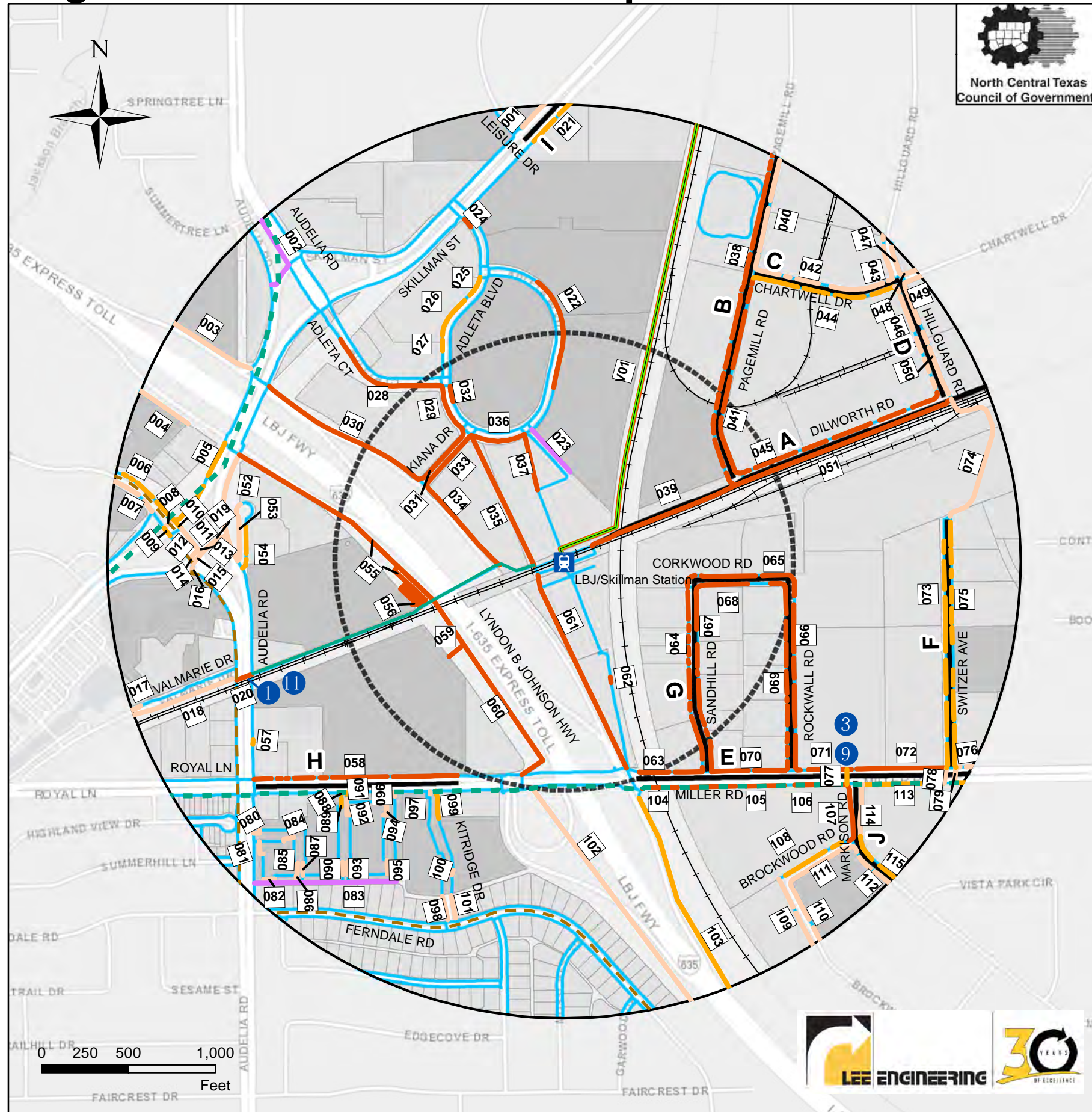
## Figure 4E-4 Recommended Improvements

### Legend

- DART Rail Station
- Railroad Track
- Sidewalk**
- Existing Sidewalk/Crosswalk
- Proposed Sidewalk/Crosswalk by Priority** 1
- High
- Medium
- Low
- Gap to Remain
- Regional Veloweb (Mobility 2045)**
- Regional Existing
- Regional Funded
- Regional Planned
- Local Shared Use Paths**
- Local Existing
- Local Funded
- Local Planned
- Local On-Street Bikeways**
- Local Existing Bicycle Facilities
- Local Funded Bicycle Facilities
- Local Planned Bicycle Facilities
- Buffers**
- 0.5 Mile Buffer
- 0.25 Mile Buffer
- Primary Routes

### Existing Residential and Employment Population (Number of People)

- Ppl
- 0 - 234
  - 235 - 1049
  - 1050 - 2586
  - 2587 - 5364
  - 5365 - 10339



### Possible Pedestrian Safety Countermeasures

#### Unsignalized Crosswalk Improvements

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

#### Signalized Crosswalk Improvements

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

### Primary Routes

| Route | Street                     |
|-------|----------------------------|
| A     | Dilworth Rd                |
| B     | Pagemill Rd                |
| C     | Chartwell Dr               |
| D     | Hillguard Rd               |
| E     | Miller Rd                  |
| F     | Switzer Ave                |
| G     | Rockwall Corkwood Sandhill |
| H     | Royal Rd                   |
| I     | Skillman St                |
| J     | Markison Rd                |

Improvement Code Legend (See Matrix)

4E-LS-SW-01

4E ← Station Number  
 LS ← Station Abbreviation  
 SW ← Sidewalk (or CW for Crosswalk)  
 01 ← Improvement Number (Matches 1 on Map)



## White Rock Station

Figure 4F-3 illustrates the existing conditions in the half-mile area around the White Rock Station. Good multi-modal connections exist to apartments east and south of the station. The single-family home neighborhoods to the west and southwest lack sidewalk in many cases. The residents along Walling Lane and other parts of the neighborhood northwest of the station must exit their neighborhood and travel along Northwest Highway to reach the station, adding up to a half mile to their trip. Much of the area east of the station is in the flood plain for White Rock Creek, which does not support existing or future development. A shared use path exists on the north side of Northwest Highway, with connections to the White Rock Creek Trail and White Rock Lake Loop Trail providing access to points beyond the half-mile area.

Figure 4F-4 shows the recommended improvements in the half-mile area around the White Rock Station. Improvements 4F-WR-SW-41 through 4F-WR-SW-43 show the location of a recommended sidewalk connection to Walling Circle, Walling Lane, and the neighborhood west of the station where Walling Circle's sidewalk currently dead ends at the fence surrounding the DART property. The City of Dallas DART should consider working together with DART to provide a pedestrian break in the fencing to connect to new sidewalk recommended on DART property connecting to the station platform. The City may also decide to build sidewalk along the west side of Walling Circle (see improvement 4F-WR-SW-40). See Section 3.1.8 for more details.

While this recommended improvement would shorten the walking distance between the station and many homes, care should be taken not to incentivize park and ride patrons from parking along Walling Lane or Walling Circle, since this may be closer than available spaces in the station's rider parking lot. The City may therefore need to consider implementing a parking management program to restrict parking along some portions of Walling Lane unless a residential parking permit is displayed in the vehicle.

The City of Dallas is planning a shared use path along the south side of Northwest Highway from Walling Lane to the west. On-street bikeways are planned along Northwest Highway east of Walling Lane and along Mockingbird Lane.

Other improvements further distant from the station mainly include sidewalk on several neighborhood residential streets, as well as along the north side of Mockingbird Lane. Enhanced crosswalks should be provided at the intersection of Lawther Drive with the westbound ramps for Mockingbird Lane at their grade-separated interchange. Enhanced crosswalks with advance yield lines and a pedestrian hybrid beacon are recommended at this intersection due to vehicular traffic speeds and the likely significant volumes of foot and bike traffic crossing to access the White Rock Creek Trail that runs along the east side of Lawther Road.

Additional details about other improvements recommended in Figure 4F-4, as well as challenges associated with the recommended gaps to remain, are included in the matrix notes for White Rock Station that can be found in Appendix J.

## Eighth & Corinth Station

Figure 5A-3 illustrates the existing conditions in the half-mile area around the Eighth & Corinth Station. Existing sidewalk connectivity is good along primary streets in the vicinity of the station, with Clarendon Drive west of 10<sup>th</sup> Street and 11<sup>th</sup> Street east of Eighth Street/Bonnie View Road being two exceptions. Many neighborhood streets lack sidewalk or have heavily damaged sidewalk on

one or both sides. Much of the area northeast of the station is in the flood plain for the Trinity River, which does not support existing or future development but provides access to the station to and from points further afield via the Trinity Skyline and Santa Fe Trestle Trails.

Figure 5A-4.1 shows the recommended improvements in the half-mile area around the Eighth & Corinth Station. Figure 5A-4.2 provides a zoomed-in view of a portion of the station area with a dense concentration of improvements. In addition to providing or replacing sidewalks along streets where necessary, the recommendations include a shared use path along the north side of the DART tracks from the station platform west to Moore Street (improvement 5A-EC-VW-V01 and 5A-EC-VW-V02 on Figure 5A-4.1).

Where this shared use path crosses N Corinth Street Road (improvement 5A-EC-CW-084), the need for an at-grade pedestrian crossing of S Corinth St Rd at this location is contingent on the construction of the Regional Veloweb shared use path on the north side of the DART tracks and the nature of the path's crossing over Cedar Creek immediately to the west. If the crossing of Cedar Creek can be built to a sufficient elevation to also span directly over S Corinth St Rd, this would be preferred. A ramp or stairs up to this bridge would shorten the walking distance to the station for some residents to the southwest.

If the bridge over Cedar Creek can only connect to the west side of S Corinth St Rd at street level, then aesthetic, non-climbable fencing should be built in the median of S Corinth St Rd to discourage mid-block pedestrian crossings and channelize them instead 300 feet to the north to the signalized crosswalk at the intersection with E Clarendon Dr. A worn path in the grass west of the station across Oncor property indicates existing pedestrian demand for more direct travel to areas south and west of the station. The estimated cost for this improvement assumes construction of median fencing in lieu of the pedestrian bridge.

Enhanced crosswalks should be provided at three locations:

1. Across Eighth Street from the east end of the station platform to connect to the Santa Fe Trestle Trail (improvement 5A-EC-CW-136). Here, advance yield lines and "Yield Here to Pedestrians" signing should be added at the existing crosswalk and pedestrian warning signs should be relocated and added for compliance and improved driver awareness. The bus stop just upstream of the crosswalk should be relocated.

The City should consider pushbutton activated rectangular rapid flashing beacons (RRFB's) attached to the pedestrian warning sign assemblies. The City of Dallas should coordinate with DART on these improvements, since some may lie on station right-of-way. See Station Improvement 5A-EC-ST-08 and Section 3.1.9 for more details.

2. Across Eighth Street at Denley Drive (improvement 5A-EC-CW-038), 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. The City of Dallas should consider a road diet so pedestrians only cross one lane of traffic in each direction and so a median refuge island can be constructed. Pedestrian-actuated rectangular rapid flashing beacons (RRFB's) could be added, especially in conjunction with a road diet and median refuge area. Or, a pedestrian hybrid beacon could also be considered, particularly if not implementing a road diet.



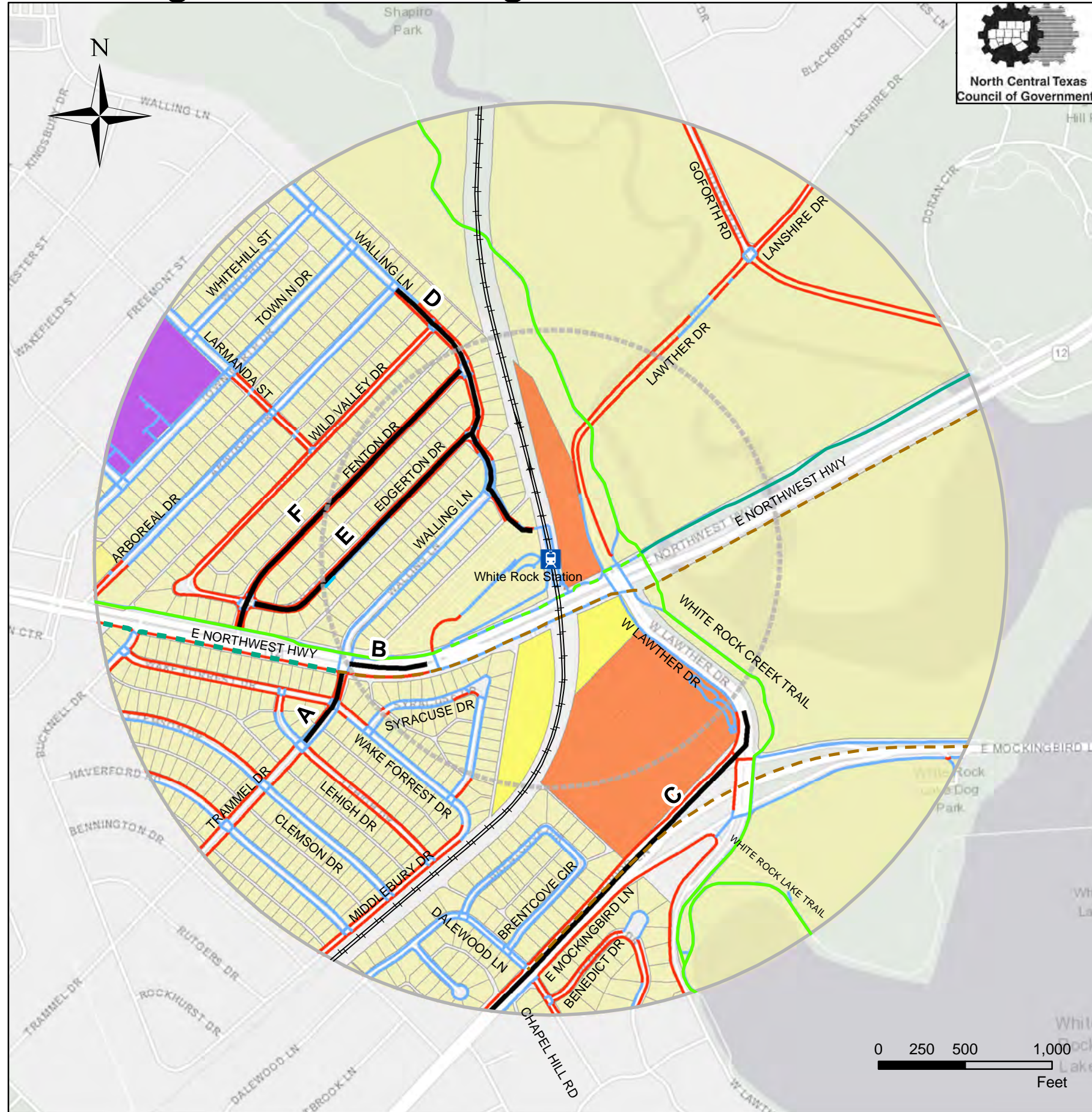
# FTA DART Stations Last Mile Connections White Rock Station August 2020



**Legend**

- DART Rail Station
- Railroad Track
- Segment Category**
  - Existing Sidewalk/Crosswalk
  - Sidewalk/Crosswalk Gap
- Regional Veloweb (Mobility 2045)**
  - Regional Existing
  - Regional Funded
  - Regional Planned
- Local Shared Use Paths**
  - Local Existing
  - Local Funded
  - Local Planned
- Local On-Street Bikeways**
  - Local Existing Bicycle Facilities
  - Local Funded Bicycle Facilities
  - Local Planned Bicycle Facilities
- DISPLAY**
  - 0.5 Mile Buffer
  - 0.25 Mile Buffer
  - Primary Routes

## Figure 4F-3 Existing Conditions



**Existing Residential and Employment Population (Number of People)**

- 0 - 10
- 11 - 50
- 51 - 100
- 101 - 250
- 251 - 578
- 579 - 1000
- 1001 - 1500
- 1501 - 2500
- 2501 - 5000
- 5001 - 24170

### Primary Routes

| Route | Street           |
|-------|------------------|
| A     | Trammel Dr       |
| B     | E Northwest Hwy  |
| C     | E Mockingbird Ln |
| D     | Walling Ln       |
| E     | Edgerton Der     |
| F     | Fenton Dr        |

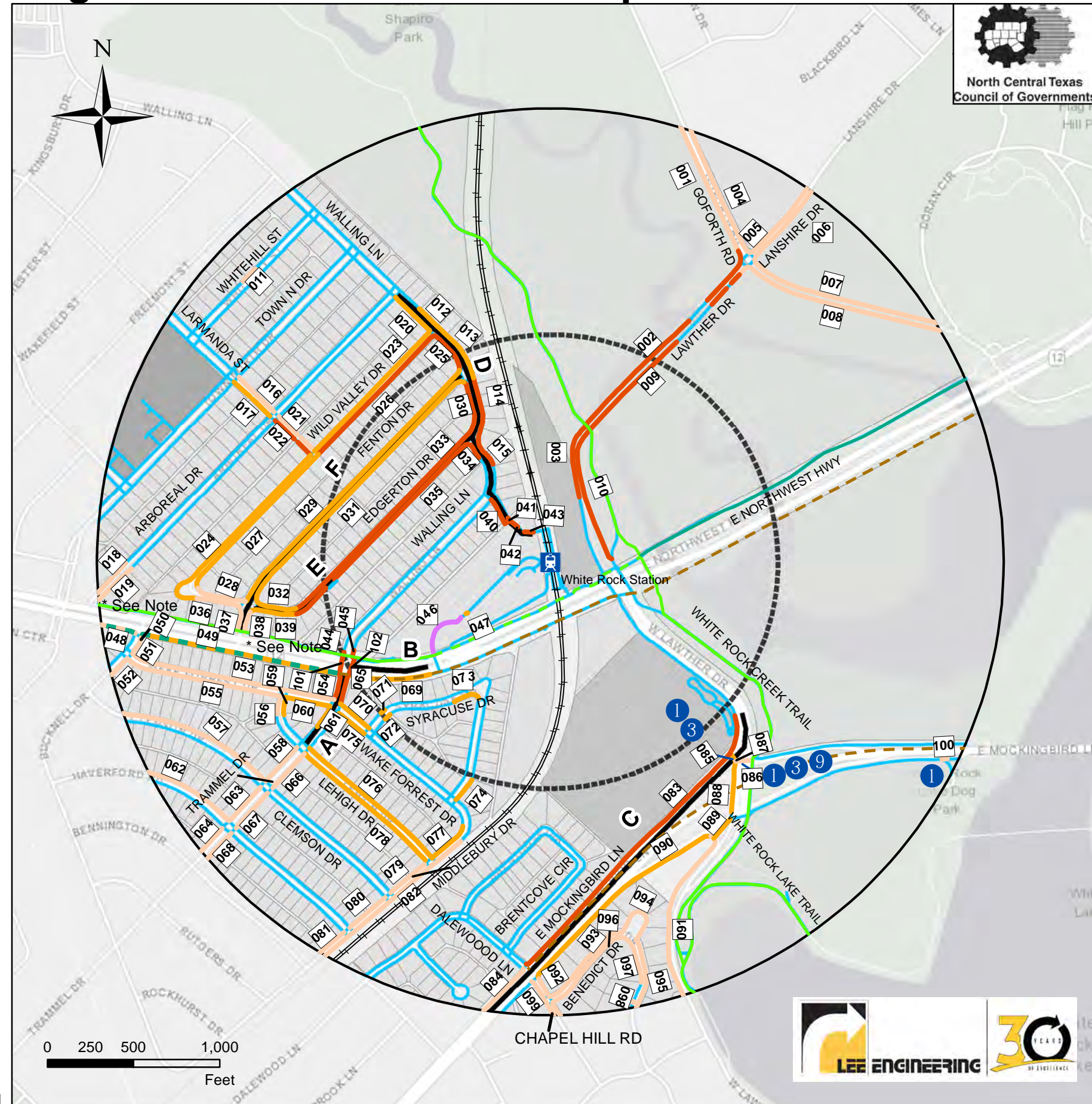
# FTA DART Stations Last Mile Connections White Rock Station August 2020



## Figure 4F-4 Recommended Improvements

### Legend

- DART Rail Station
- Railroad Track
- Sidewalk**
- Existing Sidewalk/Crosswalk
- Proposed Sidewalk/Crosswalk by Priority** 1
- High
- Medium
- Low
- Gap to Remain
- Regional Veloweb (Mobility 2045)**
- Regional Existing
- Regional Funded
- Regional Planned
- Local Shared Use Paths**
- Local Existing
- Local Funded
- Local Planned
- Local On-Street Bikeways**
- Local Existing Bicycle Facilities
- Local Funded Bicycle Facilities
- Local Planned Bicycle Facilities
- Buffers**
- 0.5 Mile Buffer
- 0.25 Mile Buffer
- Primary Routes
- Existing Residential and Employment Population (Number of People)**
- Ppl**
- 0 - 234
- 235 - 1049
- 1050 - 2586
- 2587 - 5364
- 5365 - 10339



### Possible Pedestrian Safety Countermeasures

#### Unsignalized Crosswalk Improvements

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

#### Signalized Crosswalk Improvements

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

### Primary Routes

| Route | Street           |
|-------|------------------|
| A     | Trammel Dr       |
| B     | E Northwest Hwy  |
| C     | E Mockingbird Ln |
| D     | Walling Ln       |
| E     | Edgerton Dr      |
| F     | Fenton Dr        |

### Improvement Code Legend (See Matrix)

4F-WR-SW-01

4F ← Station Number  
 WR ← Station Abbreviation  
 SW ← Sidewalk (or CW for Crosswalk)  
 01 ← Improvement Number (Matches 1 on Map)

\* Relocate stop sign north of shared use path next to stop bar. Street name signs for Fenton Dr, Arboreal Dr, and Northwest Hwy should remain south of shared use path.



# FTA DART Stations Last Mile Connections Eight and Corinth Station August 2020



**Legend**

- DART Rail Station
- Railroad Track
- Regional Veloweb (Mobility 2045)**
  - Regional Existing
  - Regional Funded
  - Regional Planned
- Local Shared Use Paths**
  - Local Existing
  - Local Funded
  - Local Planned
- Local On-Street Bikeways**
  - Local Existing Bicycle Facilities
  - Local Funded Bicycle Facilities
  - Local Planned Bicycle Facilities
- DISPLAY**
  - 0.5 Mile Buffer
  - 0.25 Mile Buffer
  - Primary Routes
- Segment Category**
  - Existing Sidewalk/Crosswalk
  - Sidewalk/Crosswalk Gap

## Figure 5A-3 Existing Conditions

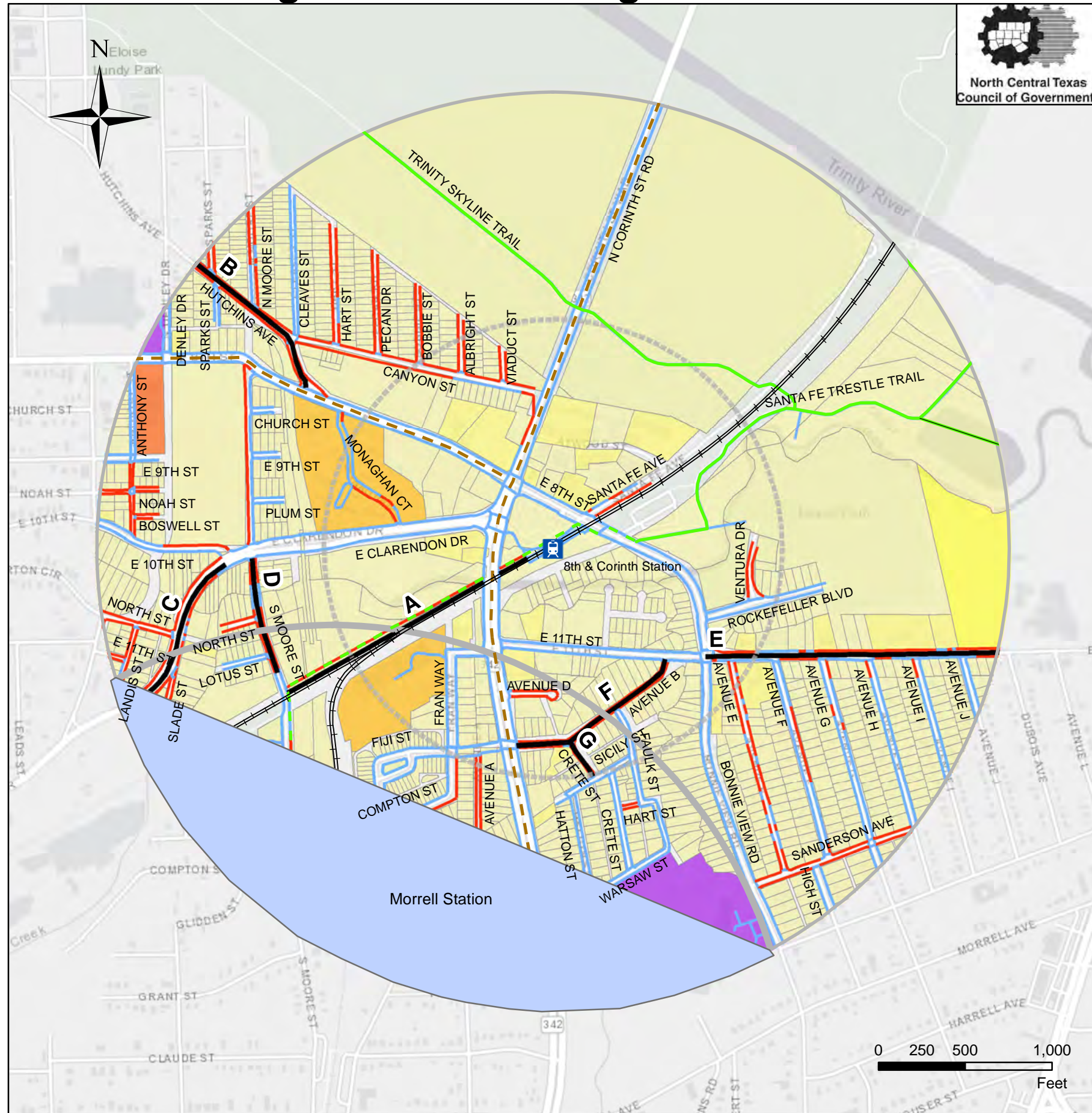


**Existing Residential and Employment Population (Number of People)**

- 0 - 10
- 11 - 50
- 51 - 100
- 101 - 250
- 251 - 578
- 579 - 1000
- 1001 - 1500
- 1501 - 2500
- 2501 - 5000
- 5001 - 24170

### Primary Routes

| Route | Street         |
|-------|----------------|
| A     | DART Tracks    |
| B     | Hutchins Ave   |
| C     | E Clarendon Dr |
| D     | S Moore St     |
| E     | E 11th St      |
| F     | Avenue B       |
| G     | Crete St       |



# FTA DART Stations Last Mile Connections 8th and Corinth Station August 2020



## Figure 5A-4.1 Recommended Improvements

### Legend

- DART Rail Station
- Railroad Track
- Sidewalk**
- Existing Sidewalk/Crosswalk
- Proposed Sidewalk/Crosswalk by Priority** 1
- High
- Medium
- Low
- Gap to Remain
- Regional Veloweb (Mobility 2045)**
- Regional Existing
- Regional Funded
- Regional Planned
- Local Shared Use Paths**
- Local Existing
- Local Funded
- Local Planned
- Local On-Street Bikeways**
- Local Existing Bicycle Facilities
- Local Funded Bicycle Facilities
- Local Planned Bicycle Facilities
- Buffers**
- 0.5 Mile Buffer
- 0.25 Mile Buffer
- Primary Routes

**Existing Residential and Employment Population (Number of People)**

Ppl

- 0 - 234
- 235 - 1049
- 1050 - 2586
- 2587 - 5364
- 5365 - 10339



### Possible Pedestrian Safety Countermeasures

- Unsignalized Crosswalk Improvements**
- 1 Crosswalk Signs, Markings & Lighting
  - 2 Raised Crosswalk
  - 3 Advance "Yield Here" Sign
  - 4 In-Street Pedestrian Crossing
  - 5 Curb Extension
  - 6 Pedestrian Refuge Island
  - 7 Rectangular Rapid Flashing Beacon
  - 8 Road Diet
  - 9 Pedestrian Hybrid Beacon
- Signalized Crosswalk Improvements**
- 10 Add Marked Crosswalks & Provide Countdown, Accessible Pedestrian Signals
  - 11 Traffic Signal

### Primary Routes

| Route | Street         |
|-------|----------------|
| A     | DART Tracks    |
| B     | Hutchins Ave   |
| C     | E Clarendon Dr |
| D     | S Moore St     |
| E     | E 11th St      |
| F     | Avenue B       |
| G     | Crete St       |

Improvement Code Legend (See Matrix)

5A-EC-SW-01

5A ← Station Number  
 EC ← Station Abbreviation  
 SW ← Sidewalk (or CW for Crosswalk)  
 01 ← Improvement Number (Matches 1 on Map)



# FTA DART Stations Last Mile Connections 8th and Corinth Station August 2020



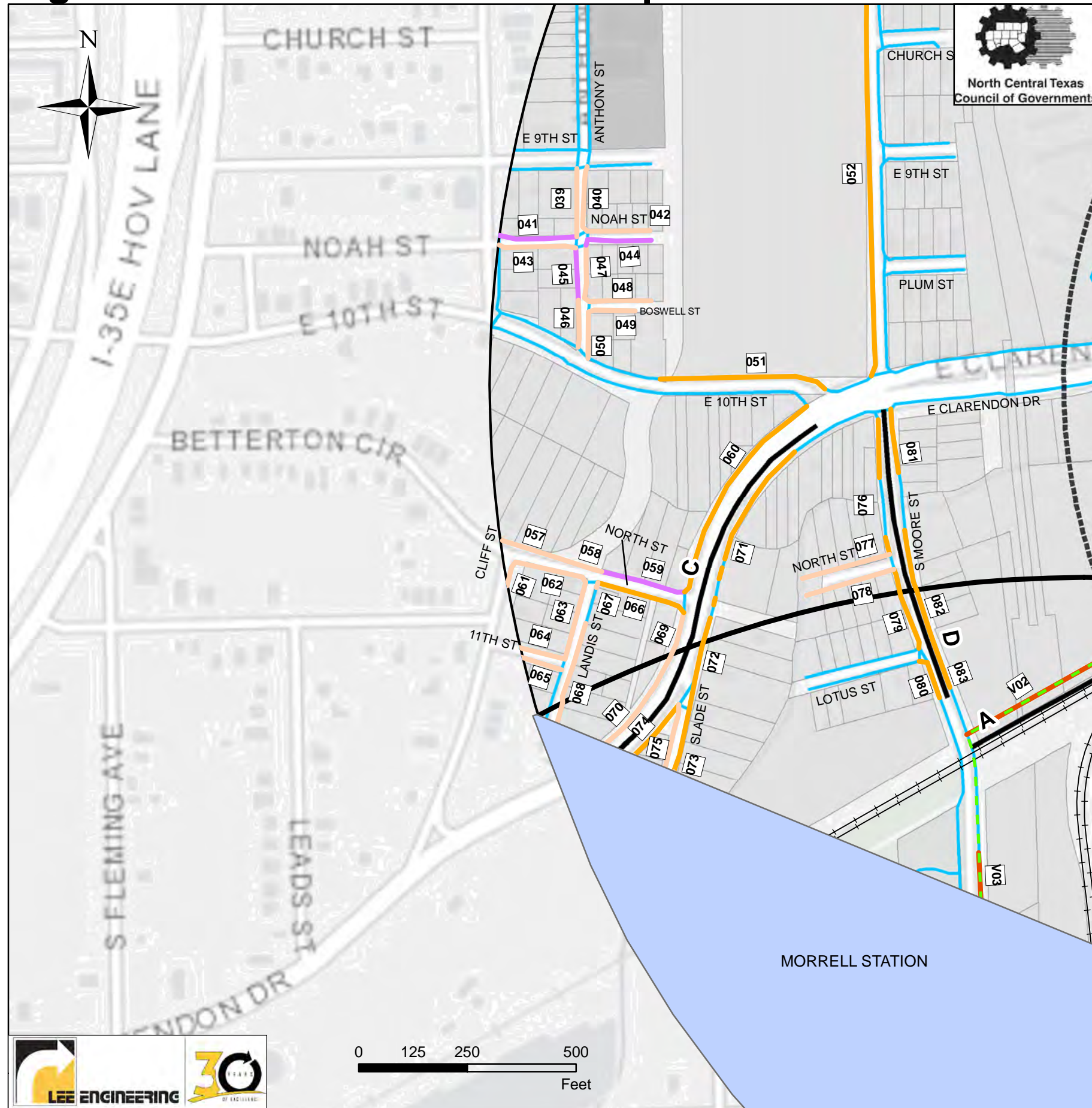
## Figure 5A-4.2 Recommended Improvements Inset Detail

### Legend

- DART Rail Station
- Railroad Track
- Sidewalk**
- Existing Sidewalk/Crosswalk
- Proposed Sidewalk/Crosswalk by Priority** 1
- High
- Medium
- Low
- Gap to Remain
- Regional Veloweb (Mobility 2045)**
- Regional Existing
- Regional Funded
- Regional Planned
- Local Shared Use Paths**
- Local Existing
- Local Funded
- Local Planned
- Local On-Street Bikeways**
- Local Existing Bicycle Facilities
- Local Funded Bicycle Facilities
- Local Planned Bicycle Facilities
- Buffers**
- 0.5 Mile Buffer
- 0.25 Mile Buffer
- Primary Routes

### Existing Residential and Employment Population (Number of People)

- Ppl**
- 0 - 234
  - 235 - 1049
  - 1050 - 2586
  - 2587 - 5364
  - 5365 - 10339



### Possible Pedestrian Safety Countermeasures

#### Unsignalized Crosswalk Improvements

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

#### Signalized Crosswalk Improvements

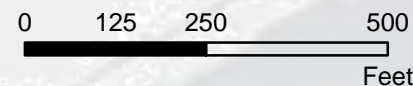
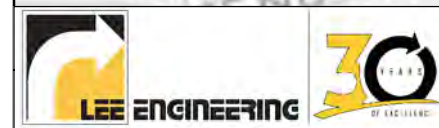
- 10 Add Marked Crosswalks & Provide Countdown, Accessible Pedestrian Signals
  - 11 Traffic Signal
- Light Gray Canvas Base

### Primary Routes

| Route | Street         |
|-------|----------------|
| A     | DART Tracks    |
| B     | Hutchins Ave   |
| C     | E Clarendon Dr |
| D     | S Moore St     |
| E     | E 11th St      |
| F     | Avenue B       |
| G     | Crete St       |

#### Improvement Code Legend (See Matrix)

- 5A-EC-SW-01
- 5A ← Station Number
  - EC ← Station Abbreviation
  - SW ← Sidewalk (or CW for Crosswalk)
  - 01 ← Improvement Number (Matches 1 on Map)





3. Across N Corinth Street Rd at Avenue B (improvements 5A-EC-CW-089 and 5A-EC-CW-090), the City should 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. Advance yield lines and "Yield Here to Pedestrians" signing should be added for each approach to mitigate risk of dual threat situation for pedestrians.

The City should also 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. Finally, the City should consider a pedestrian hybrid beacon to further enhance visibility of crossing pedestrians, particularly if no school crossing guard is present, a traffic study indicates pedestrian crossing demand outside school arrival/dismissal hours, or a road diet and median refuge island are not implemented.

Additional details about other improvements recommended in Figure 5A-4.1 and 5A-4.2, as well as challenges associated with the recommended gaps to remain, are included in the matrix notes for Eighth & Corinth Station that can be found in Appendix J.

#### Dallas Zoo Station

Figure 5B-3 illustrates the existing conditions in the half-mile area around the Dallas Zoo Station. The station is highly disconnected from sidewalks in surrounding neighborhoods. The Dallas Zoo itself and Marsalis Avenue along its eastern boundary form a barrier which impedes more direct multi-modal travel between the station and neighborhoods on the opposite side of the zoo. Long sidewalk gaps on the south side of IH-35E also contribute to the problem.

Though Marsalis Avenue has sidewalks along both sides to the north of the station, a gap exists on the east side, and no connections are provided from the overpass bridge above to Clarendon Drive or the station platform below. To the south, there is no sidewalk on either side of Marsalis Avenue, and roughly half of the neighborhood streets lack existing sidewalk in good condition. There are no existing shared use path or bicycle facilities in the area.

Figure 5B-4.1 shows the recommended improvements in the half-mile area around the Dallas Zoo Station. Figure 5B-4.2 provides a zoomed-in view of a portion of the station area with a dense concentration of improvements. The improvements highlighted in yellow along Marsalis Avenue, Clarendon Drive, Ewing Avenue, Morrell Avenue, Strickland Street, and Galloway Avenue were selected by NCTCOG for 15% sidewalk design by the consultant team.

Several improvements along the IH-35E frontage roads will be included as part of TxDOT's widening of the highway which is currently under construction.

Near the station platform, the City of Dallas should coordinate with DART to add pedestrian warning signs to the existing marked and lit crosswalk from the station platform across Clarendon Drive to the zoo entrance. Refer to improvement 5B-DZ-CW-085 on Figure 5B-4.1. This should include adding yield lines and "Yield Here to Pedestrians" signing for each approach to mitigate risk of dual threat situation for pedestrians. A pedestrian ramp is also needed at the south end of the crosswalk. The City should consider adding pedestrian-actuated RRFB's. See Section 3.1.10 for more information.

Constructing an elevator and stairway connection between sidewalk on the Marsalis Ave bridge above and Clarendon Dr beneath near the station platform could significantly reduce walking distances to the station for many destinations west of the zoo and/or north of IH-35E, since they would no longer need to travel east out of the way via Ewing Ave. However, estimated construction cost for this improvement would require preliminary structural design outside this scope of work.

The City of Dallas is planning on-street bikeways along Ewing Avenue, Clarendon Drive, Jefferson Boulevard, and Morrell Avenue in the vicinity.

Additional details about other improvements recommended in Figure 5B-4.1 and 5B-4.2, as well as challenges associated with the recommended gaps to remain, are included in the matrix notes for Dallas Zoo Station that can be found in Appendix J.

#### Morrell Station

Figure 5C-3 illustrates the existing conditions in the half-mile area around the Morrell Station. This station is surrounded by mostly single-family homes. Many of the residential streets have sidewalk in fair to good condition. However, on many other streets sidewalk is almost entirely absent or deteriorated. A short section of shared use pathway that will ultimately become part of a longer trail connects the north end of the station platform to the corner of Fayette Street and Gilroy Street to the north.

Figure 5C-4.1 shows the recommended improvements in the half-mile area around the Morrell Station. Figure 5C-4.2 provides a zoomed-in view of a portion of the station area with a dense concentration of improvements. The City of Dallas is planning a Regional Veloweb shared use path along Moore St and Gilroy Street north of the station. South of the station, the alignment would be along a widened existing sidewalk already in the DART right-of-way on the east side of the tracks next to Woodbine Avenue.

Across Morrell Avenue immediately south of the station, the City should coordinate with DART to install signed and marked crosswalks (see improvements 5C-MO-CW-66 through 5C-MO-CW-69). These should include new streetlighting, and consideration should be given to constructing a raised pedestrian refuge island in the median. See Section 3.1.11 and station improvements 5C-MO-ST-03 and 5C-MO-ST-04.

To the east along Morrell Avenue at its intersection with Hutchins Road (see improvements 5C-MO-CW-71 and 5C-MO-CW-72), the City should 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. The improvement should include adding advance yield lines and "Yield Here to Pedestrians" signing due to the high width of the two lane roadway (~40 feet). Consideration should also be given to constructing a median refuge island and/or curb extensions and adding pedestrian-actuated RRFB's.

A worn path in the grass east of Renner Road indicates existing pedestrian demand leading to a pedestrian bridge over Little Cedar Creek and stairs up to S Corinth Street Road, where a DART bus stop is present (see improvement 5C-MO-SW-107). Sidewalk to fill this gap should be constructed in conjunction with enhanced crosswalks across S Corinth Street Road (at locations 5C-MO-CW-108 and 5C-MO-CW-135 described in the following paragraphs) to allow DART riders to safely and comfortably access the bus stops on either side of the six-lane divided arterial.



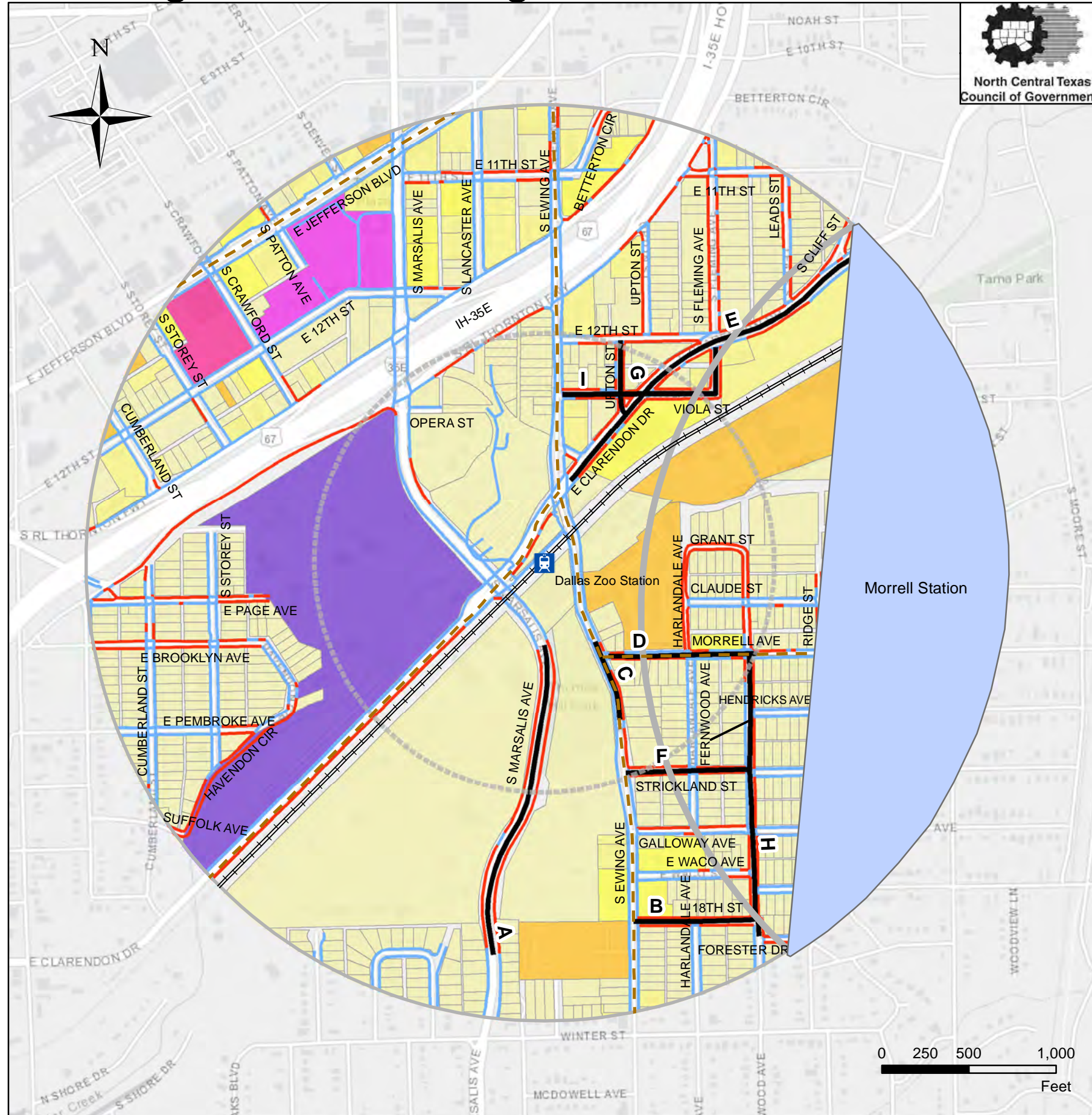
# FTA DART Stations Last Mile Connections Dallas Zoo Station August 2020



## Figure 5B-3 Existing Conditions

**Legend**

- DART Rail Station
- Railroad Track
- Regional Veloweb (Mobility 2045)**
  - Regional Existing
  - Regional Funded
  - Regional Planned
- Local Shared Use Paths**
  - Local Existing
  - Local Funded
  - Local Planned
- Local On-Street Bikeways**
  - Local Existing Bicycle Facilities
  - Local Funded Bicycle Facilities
  - Local Planned Bicycle Facilities
- DISPLAY**
  - 0.5 Mile Buffer
  - 0.25 Mile Buffer
  - Primary Routes
- Segment Category**
  - Existing Sidewalk/Crosswalk
  - Sidewalk/Crosswalk Gap



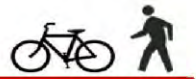
**Existing Residential and Employment Population (Number of People)**

- 0 - 10
- 11 - 50
- 51 - 100
- 101 - 250
- 251 - 578
- 579 - 1000
- 1001 - 1500
- 1501 - 2500
- 2501 - 5000
- 5001 - 24170

### Primary Routes

| Route | Street         |
|-------|----------------|
| A     | S Marsalis Ave |
| B     | 18th St        |
| C     | S Ewing Ave    |
| D     | Morrell Ave    |
| E     | E Clarendon Dr |
| F     | Strickland St  |
| G     | Upton St       |
| H     | Fernwood Ave   |
| I     | Viola St       |

**FTA DART Stations  
Last Mile Connections  
Dallas Zoo  
Station  
August, 2020**



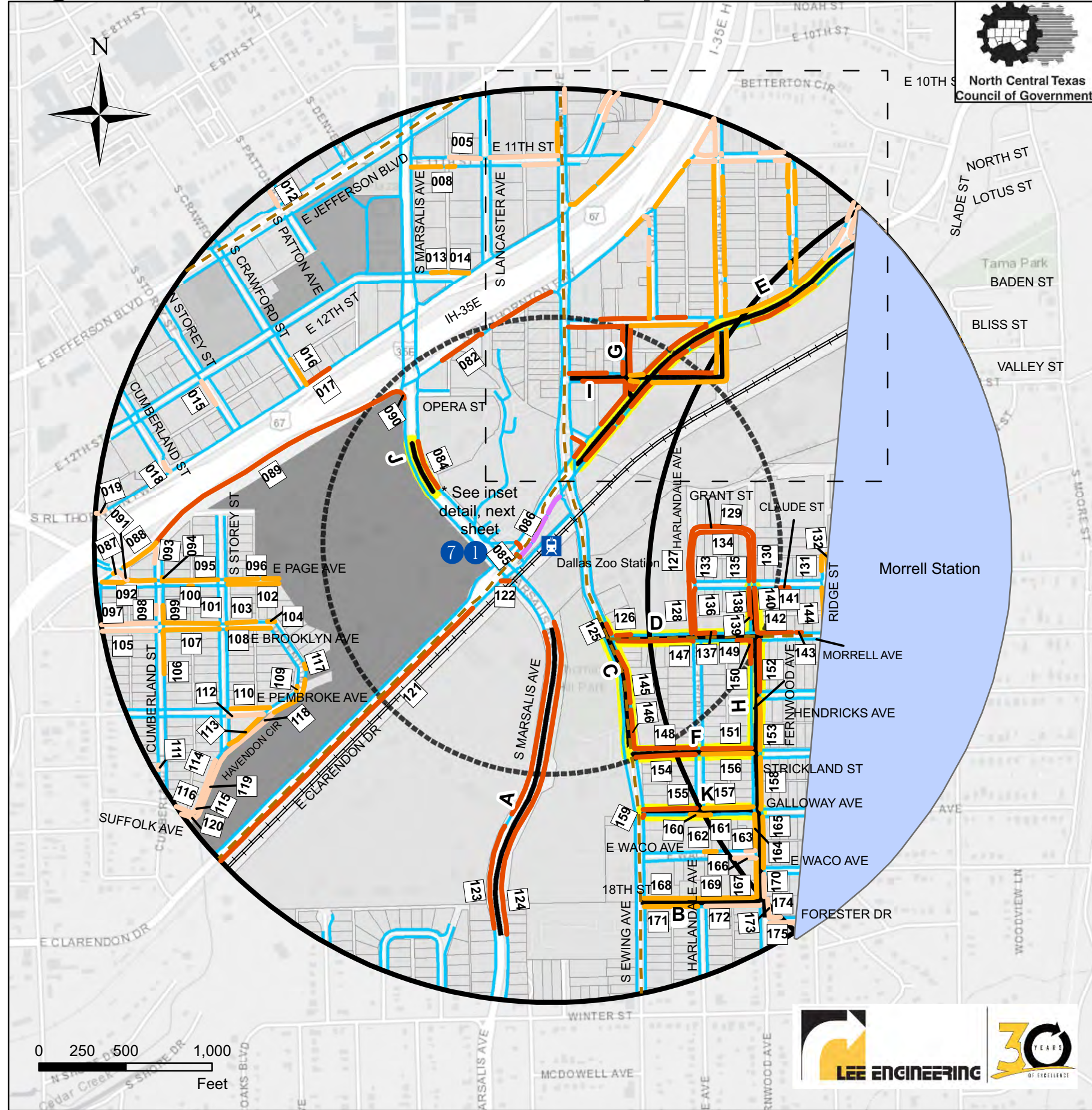
**Figure 5B-4.1 Recommended Improvements**

**Legend**

- DART Rail Station
- Railroad Track
- Existing Sidewalk/Crosswalk
- Proposed Sidewalk/Crosswalk by Priority**
  - High
  - Medium
  - Low
  - Gap to Remain
- Regional Veloweb (Mobility 2045)**
  - Regional Existing
  - Regional Funded
  - Regional Planned
- Local Shared Use Paths**
  - Local Existing
  - Local Funded
  - Local Planned
- Local On-Street Bikeways**
  - Local Existing Bicycle Facilities
  - Local Funded Bicycle Facilities
  - Local Planned Bicycle Facilities
- Buffers**
  - 0.5 Mile Buffer
  - 0.25 Mile Buffer
  - Primary Routes
  - 15% Design Corridors
- Existing Residential and Employment Population (Number of People)**

Ppl

  - 0 - 234
  - 235 - 1049
  - 1050 - 2586
  - 2587 - 5364
  - 5365 - 10339



**Possible Pedestrian Safety Countermeasures**

**Unsignalized Crosswalk Improvements**

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

**Signalized Crosswalk Improvements**

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

| Primary Routes              |                |
|-----------------------------|----------------|
| Route                       | Street         |
| <b>15% Design Corridors</b> |                |
| A                           | S Marsalis Ave |
| B                           | 18th St        |
| C                           | S Ewing Ave    |
| D                           | Morrell Ave    |
| E                           | E Clarendon Dr |
| F                           | Strickland St  |
| G                           | Upton St       |
| H                           | Fernwood Ave   |
| I                           | Viola St       |
| J                           | S Marsalis Ave |
| K                           | Galloway Ave   |

**Improvement Code Legend (See Matrix)**

5B-DZ-SW-01

5B ← Station Number  
 DZ ← Station Abbreviation  
 SW ← Sidewalk (or CW for Crosswalk)  
 01 ← Improvement Number (Matches 1 on Map)



**FTA DART Stations  
Last Mile Connections  
Dallas Zoo  
Station  
August 2020**

**Figure 5B-4.2  
Recommended Improvements Inset Detail**



**Legend**

- DART Rail Station
- Railroad Track
- Sidewalk**
  - Existing Sidewalk/Crosswalk
- Proposed Sidewalk/Crosswalk by Priority** 1
  - High
  - Medium
  - Low
  - Gap to Remain
- Regional Veloweb (Mobility 2045)**
  - Regional Existing
  - Regional Funded
  - Regional Planned
- Local Shared Use Paths**
  - Local Existing
  - Local Funded
  - Local Planned
- Local On-Street Bikeways**
  - Local Existing Bicycle Facilities
  - Local Funded Bicycle Facilities
  - Local Planned Bicycle Facilities
- Buffers**
  - 0.5 Mile Buffer
  - 0.25 Mile Buffer
  - Primary Routes
  - 15% Design Corridors

**Existing Residential and Employment Population (Number of People)**

Ppl

|  |              |
|--|--------------|
|  | 0 - 234      |
|  | 235 - 1049   |
|  | 1050 - 2586  |
|  | 2587 - 5364  |
|  | 5365 - 10339 |



**Possible Pedestrian Safety Countermeasures**

**Unsignalized Crosswalk Improvements**

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

**Signalized Crosswalk Improvements**

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

| Primary Routes       |                       |
|----------------------|-----------------------|
| 15% Design Corridors |                       |
| Route                | Street                |
| A                    | S Marsalis Ave        |
| B                    | 18th St               |
| C                    | S Ewing Ave           |
| D                    | Morrell Ave           |
| <b>E</b>             | <b>E Clarendon Dr</b> |
| F                    | Strickland St         |
| G                    | Upton St              |
| H                    | Fernwood Ave          |
| I                    | Viola St              |
| J                    | S Marsalis Ave        |
| K                    | Galloway Ave          |

**Improvement Code Legend (See Matrix)**

5B-DZ-SW-01

5B ← Station Number  
DZ ← Station Abbreviation  
SW ← Sidewalk (or CW for Crosswalk)  
01 ← Improvement Number (Matches 1 on Map)

# FTA DART Stations Last Mile Connections Morrell Station

August 2020

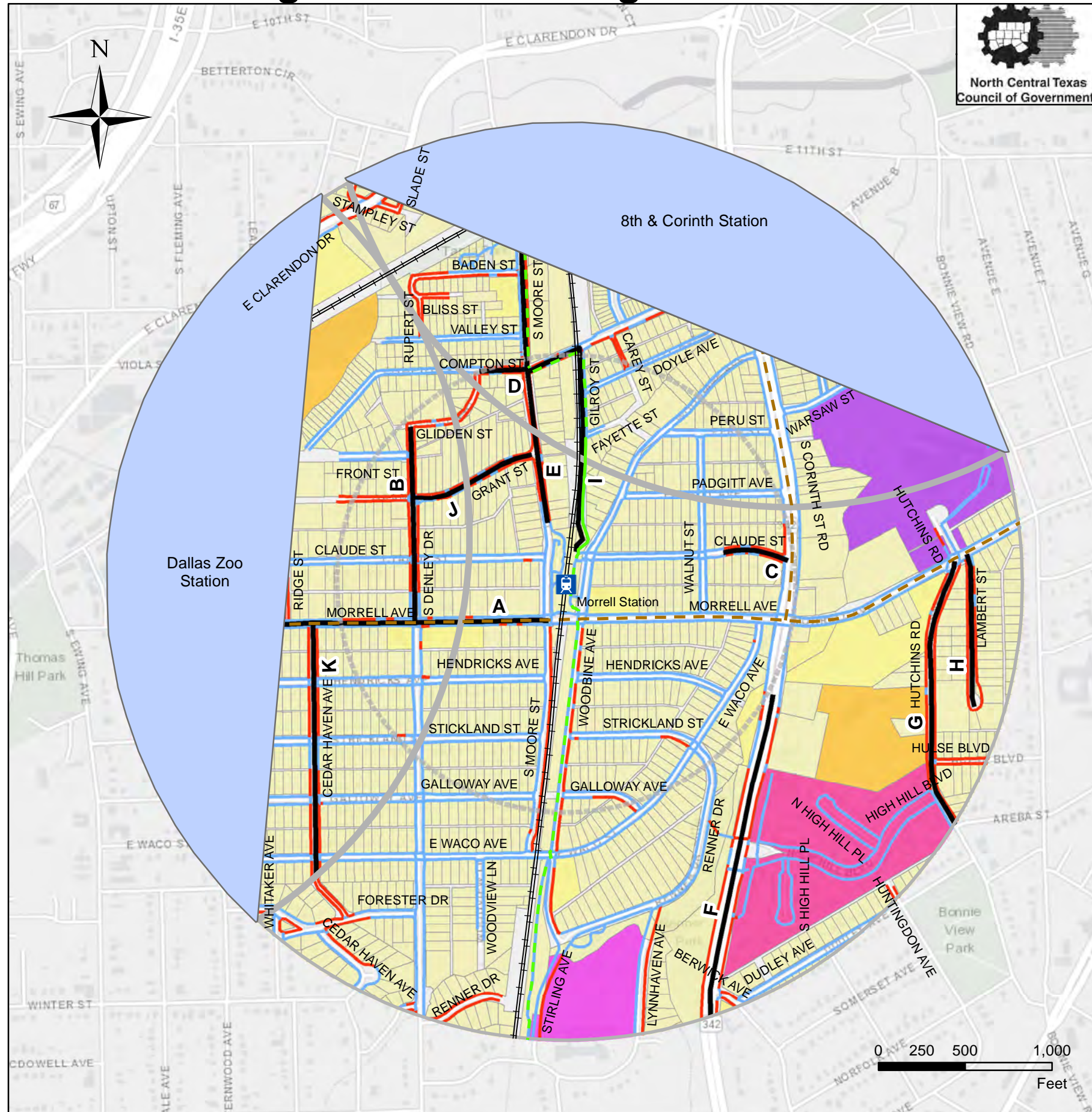


## Figure 5C-3 Existing Conditions



**Legend**

- DART Rail Station
- Railroad Track
- Regional Veloweb (Mobility 2045)**
  - Regional Existing
  - Regional Funded
  - Regional Planned
- Local Shared Use Paths**
  - Local Existing
  - Local Funded
  - Local Planned
- Local On-Street Bikeways**
  - Local Existing Bicycle Facilities
  - Local Funded Bicycle Facilities
  - Local Planned Bicycle Facilities
- DISPLAY**
  - 0.5 Mile Buffer
  - 0.25 Mile Buffer
  - Primary Routes
- Segment Category**
  - Existing Sidewalk/Crosswalk
  - Sidewalk/Crosswalk Gap



**Existing Residential and Employment Population (Number of People)**

- 0 - 10
- 11 - 50
- 51 - 100
- 101 - 250
- 251 - 578
- 579 - 1000
- 1001 - 1500
- 1501 - 2500
- 2501 - 5000
- 5001 - 24170

### Primary Routes

| Route | Street               |
|-------|----------------------|
| A     | Morrell Ave          |
| B     | S Denley Dr          |
| C     | Claude St            |
| D     | Compton St           |
| E     | S Moore St           |
| F     | S Corinth St Rd      |
| G     | Hutchins Rd          |
| H     | Lambert St           |
| I     | Compton St/Gilroy St |
| J     | Grant St             |
| K     | Cedar Haven Ave      |



# FTA DART Stations Last Mile Connections Morrell Station

August 2020



## Figure 5C-4.1 Recommended Improvements

### Legend

- DART Rail Station
- Railroad Track
- Sidewalk**
- Existing Sidewalk/Crosswalk
- Proposed Sidewalk/Crosswalk by Priority** 1
- High
- Medium
- Low
- Gap to Remain
- Regional Veloweb (Mobility 2045)**
- Regional Existing
- Regional Funded
- Regional Planned
- Local Shared Use Paths**
- Local Existing
- Local Funded
- Local Planned
- Local On-Street Bikeways**
- Local Existing Bicycle Facilities
- Local Funded Bicycle Facilities
- Local Planned Bicycle Facilities
- Buffers**
- 0.5 Mile Buffer
- 0.25 Mile Buffer
- Primary Routes

### Existing Residential and Employment Population (Number of People)

- Ppl
- 0 - 234
  - 235 - 1049
  - 1050 - 2586
  - 2587 - 5364
  - 5365 - 10339



### Possible Pedestrian Safety Countermeasures

- Unsignalized Crosswalk Improvements**
- 1 Crosswalk Signs, Markings & Lighting
  - 2 Raised Crosswalk
  - 3 Advance "Yield Here" Sign
  - 4 In-Street Pedestrian Crossing
  - 5 Curb Extension
  - 6 Pedestrian Refuge Island
  - 7 Rectangular Rapid Flashing Beacon
  - 8 Road Diet
  - 9 Pedestrian Hybrid Beacon
- Signalized Crosswalk Improvements**
- 10 Add Marked Crosswalks & Provide Countdown, Accessible Pedestrian Signals
  - 11 Traffic Signal

### Primary Routes

| Route | Street               |
|-------|----------------------|
| A     | Morrell Ave          |
| B     | S Denley Dr          |
| C     | Claude St            |
| D     | Compton St           |
| E     | S Moore St           |
| F     | S Corinth St Rd      |
| G     | Hutchins Rd          |
| H     | Lambert St           |
| I     | Compton St/Gilroy St |
| J     | Grant St             |
| K     | Cedar Haven Ave      |

### Improvement Code Legend (See Matrix)

- 5C-MO-SW-01
- 5C ← Station Number
  - MO ← Station Abbreviation
  - SW ← Sidewalk (or CW for Crosswalk)
  - 01 ← Improvement Number (Matches 1 on Map)



# FTA DART Stations Last Mile Connections Morrell Station

August 2020



## Figure 5C-4.2 Recommended Improvements Inset Detail

### Legend

- DART Rail Station
- Railroad Track
- Sidewalk**
- Existing Sidewalk/Crosswalk
- Proposed Sidewalk/Crosswalk by Priority** 1
- High
- Medium
- Low
- Gap to Remain
- Regional Veloweb (Mobility 2045)**
- Regional Existing
- Regional Funded
- Regional Planned
- Local Shared Use Paths**
- Local Existing
- Local Funded
- Local Planned
- Local On-Street Bikeways**
- Local Existing Bicycle Facilities
- Local Funded Bicycle Facilities
- Local Planned Bicycle Facilities
- Buffers**
- 0.5 Mile Buffer
- 0.25 Mile Buffer
- Primary Routes

### Existing Residential and Employment Population (Number of People)

- Ppl
- 0 - 234
  - 235 - 1049
  - 1050 - 2586
  - 2587 - 5364
  - 5365 - 10339



### Possible Pedestrian Safety Countermeasures

#### Unsignalized Crosswalk Improvements

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

#### Signalized Crosswalk Improvements

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

### Primary Routes

| Route | Street               |
|-------|----------------------|
| A     | Morrell Ave          |
| B     | S Denley Dr          |
| C     | Claude St            |
| D     | Compton St           |
| E     | S Moore St           |
| F     | S Corinth Rd         |
| G     | Hutchins Rd          |
| H     | Lambert St           |
| I     | Compton St/Gilroy St |
| J     | Grant St             |
| K     | Cedar Haven Ave      |

#### Improvement Code Legend (See Matrix)

- 5C-MO-SW-01
- 5C ← Station Number
  - MO ← Station Abbreviation
  - SW ← Sidewalk (or CW for Crosswalk)
  - 01 ← Improvement Number (Matches 1 on Map)

Improvement locations 5C-MO-CW-108 and 5C-MO-CW-135 are located across the north and south legs, respectively, of the wide intersection of High Hill Boulevard and Corinth Street Road. High Hill Boulevard has a wide landscaped median that separates the eastbound and westbound lanes near the intersection by about 100 feet.

The southern leg of the intersection has an existing marked but faded crosswalk with pedestrian warning signs mounted in the median. The pavement markings should be refreshed, and additional warning signs, advance yield lines, and "Yield Here to Pedestrians" signing should be installed. The City should give strong consideration to implementing a road diet from six lanes to four in order to provide a wider median refuge area, as traffic volumes are well below the capacity of a four-lane roadway. Also, strong consideration should be given to a pedestrian hybrid beacon, which should especially be installed if a road diet is not implemented.

If a road diet and/or pedestrian hybrid beacon is implemented at the south leg of the intersection, a crosswalk across the north leg of the intersection should also be considered for more direct connection to the pedestrian bridge over Little Cedar Creek to the west. This bridge provides a slightly shorter walking distance to the station for some homes nearby. If marking the north leg with a crosswalk, additional warning signs, advance yield lines, and "Yield Here to Pedestrians" signing should be added for the north leg as well as for the south leg.

The City should coordinate with DART to ensure that the crosswalk design meets DART's needs for locating the bus stops, with bus stops downstream of the crosswalks for better sight lines if possible.

The City of Dallas is also planning on-street bikeways along Morrell Avenue and S Corinth Street Road north of Morrell Avenue.

Additional details about other improvements recommended in Figure 5C-4.1 and 5C-4.2, as well as challenges associated with the recommended gaps to remain, are included in the matrix notes for Morrell Station that can be found in Appendix J.

#### Tyler Vernon Station

Figure 6A-3 illustrates the existing conditions in the half-mile area around the Tyler Vernon Station. This station serves a mostly residential area. A largely connected rectangular grid street system partially compensates for the lack of sidewalk on many streets north and southwest of the station, though Clarendon Drive and the creek to the north of it are a barrier to linear travel for the neighborhood to their north. To the southeast of the station, sidewalks are completely absent from the lower density residential neighborhood tributary to Monssen Drive and Manus Drive. There are no existing shared use paths or on-street bikeways in the area.

Figure 6A-4.1 shows the recommended improvements in the half-mile area around the Tyler Vernon Station. Figures 6A-4.2 and 6A-4.3 provide zoomed-in views of two portions of the station area with dense concentrations of improvements. Significant segments of sidewalk are proposed along Leganon Avenue, adjacent to the station, as well as along Nolte Drive, Polk Street, Tyler Street, and Vernon Avenue as well as along many neighborhood streets.

Enhanced crosswalks are proposed at several locations. Among the most notable are:

- Across Tyler Street adjacent to the east end of the station platform, where a pedestrian traffic signal and median refuge island are recommended. The City should coordinate with DART at this location since some features of the improvement may be in their right-of-way.
- Across the Polk Street Cutoff at Buckalew Street, where the City should add high visibility markings and lighting to this existing signed but unmarked school crosswalk across a three-lane, one-way street. Advance yield lines and "Yield Here to Pedestrians" signing should be added on the approach to mitigate the risk of a dual threat situation for pedestrians. The City should consider a road diet to implement a curb extension, since two lanes would be more than sufficient for the ~7,000 average daily traffic. A pedestrian hybrid beacon should also be considered, 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.
- Across Tyler Street at Page Avenue, where the City should add high visibility markings to this existing signed but unmarked school crosswalk across a three-lane, one-way street in a 20 mph reduced speed school zone. The improvement should include adding advance yield lines and "Yield Here to Pedestrians" signing on the approach to mitigate risk of dual threat situation for pedestrians. A road diet should be considered to implement a curb extension, since two lanes would be more than sufficient for the ~8,000 average daily traffic. A pedestrian hybrid beacon should also be considered, 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.
- Across Tyler Street at Burlington Avenue, where the City should add high visibility 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. The improvement should include adding advance yield lines and signing. A road diet should be considered to implement a median refuge, since four lanes would be more than sufficient for the ~15,000 average daily traffic. A pedestrian hybrid beacon should also be considered, especially if a road diet is not implemented or if a study indicates significant pedestrian demand outside school hours. DART bus stops are located on either side of Tyler St at this location.
- Across Vernon Avenue at Ferndale Avenue, where DART bus stops with modest ridership are present on both sides of the six-lane divided roadway here. 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.

The City of Dallas is planning a shared use path as part of the Regional Veloweb that will extend west from the station in a greenway north of Elmwood Boulevard. The City of Dallas has funded an on-street bikeway for Edgefield Avenue, which runs north-south through the area about 0.25 mile west of the station. Additional on-street bikeways are planned for Tyler Street, Vernon Avenue, the Polk Street Cutoff, Clarendon Drive, and Ferndale Avenue.

Additional details about other improvements recommended in Figure 6A-4.1, 6A-4.2 and 6A-4.3, as well as challenges associated with the recommended gaps to remain, are included in the matrix notes for Tyler Vernon Station that can be found in Appendix J.



# FTA DART Stations Last Mile Connections Tyler Vernon

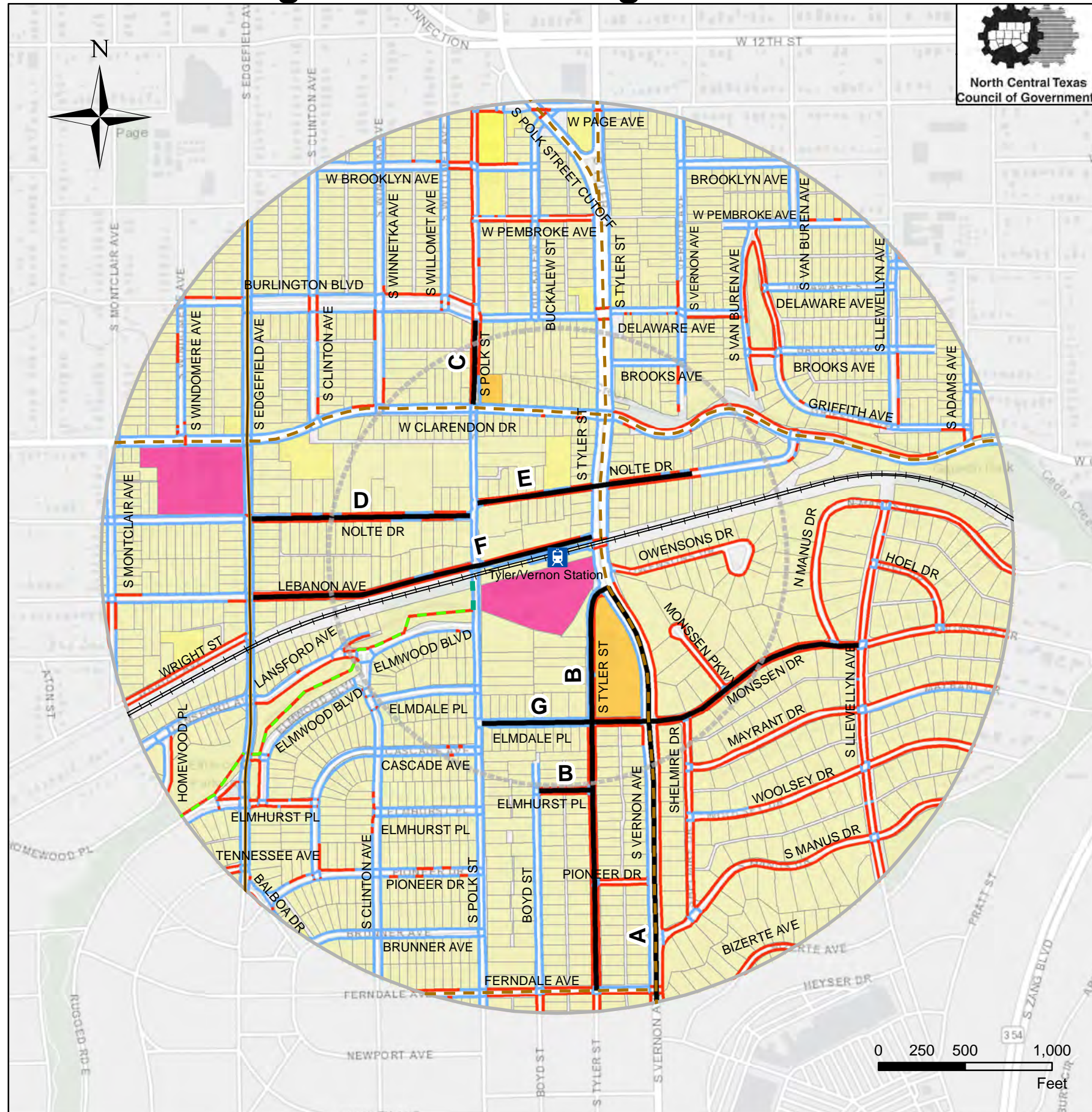
Station  
August 2020



## Figure 6A-3 Existing Conditions

**Legend**

- DART Rail Station
- Railroad Track
- Regional Veloweb (Mobility 2045)**
  - Regional Existing
  - Regional Funded
  - Regional Planned
- Local Shared Use Paths**
  - Local Existing
  - Local Funded
  - Local Planned
- Local On-Street Bikeways**
  - Local Existing Bicycle Facilities
  - Local Funded Bicycle Facilities
  - Local Planned Bicycle Facilities
- DISPLAY**
  - 0.5 Mile Buffer
  - 0.25 Mile Buffer
  - Primary Routes
- Segment Category**
  - Existing Sidewalk/Crosswalk
  - Sidewalk/Crosswalk Gap



**Existing Residential and Employment Population (Number of People)**

- 0 - 10
- 11 - 50
- 51 - 100
- 101 - 250
- 251 - 578
- 579 - 1000
- 1001 - 1500
- 1501 - 2500
- 2501 - 5000
- 5001 - 24170

### Primary Routes

| Route | Street                   |
|-------|--------------------------|
| A     | S Vernon Ave             |
| B     | Elmhurst Pl / S Tyler St |
| C     | S Polk St                |
| D     | Nolte Dr                 |
| E     | Nolte Dr                 |
| F     | Lebanon Ave              |
| G     | Elmdale Pl / Monssen Dr  |

# FTA DART Stations Last Mile Connections Tyler/Vernon

Station  
August 2020



## Figure 6A-4.1 Recommended Improvements

### Legend

- DART Rail Station
- Railroad Track

### Sidewalk

- Existing Sidewalk/Crosswalk

### Proposed Sidewalk/Crosswalk by Priority 1

- High
- Medium
- Low
- Gap to Remain

### Regional Veloweb (Mobility 2045)

- Regional Existing
- Regional Funded
- Regional Planned

### Local Shared Use Paths

- Local Existing
- Local Funded
- Local Planned

### Local On-Street Bikeways

- Local Existing Bicycle Facilities
- Local Funded Bicycle Facilities
- Local Planned Bicycle Facilities

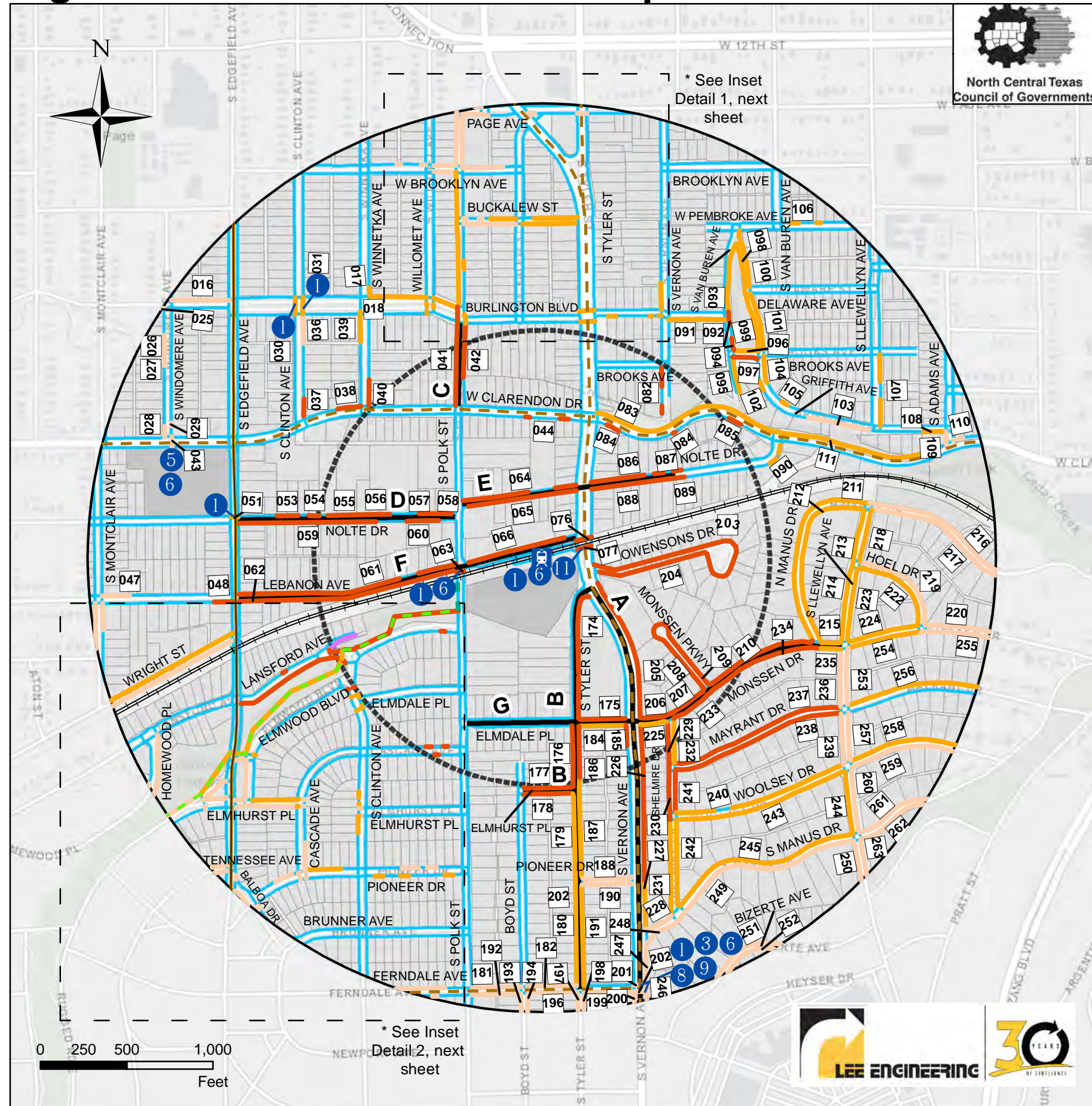
### Buffers

- 0.5 Mile Buffer
- 0.25 Mile Buffer
- Primary Routes

### Existing Residential and Employment Population (Number of People)

Ppl

- 0 - 234
- 235 - 1049
- 1050 - 2586
- 2587 - 5364
- 5365 - 10339



### Possible Pedestrian Safety Countermeasures

- #### Unsignalized Crosswalk Improvements
- 1 Crosswalk Signs, Markings & Lighting
  - 2 Raised Crosswalk
  - 3 Advance "Yield Here" Sign
  - 4 In-Street Pedestrian Crossing
  - 5 Curb Extension
  - 6 Pedestrian Refuge Island
  - 7 Rectangular Rapid Flashing Beacon
  - 8 Road Diet
  - 9 Pedestrian Hybrid Beacon
- #### Signalized Crosswalk Improvements
- 10 Add Marked Crosswalks & Provide Countdown, Accessible Pedestrian Signals
  - 11 Traffic Signal

### Primary Routes

| Route | Street                   |
|-------|--------------------------|
| A     | S Vernon Ave             |
| B     | Elmhurst Pl / S Tyler St |
| C     | S Polk St                |
| D     | Nolte Dr                 |
| E     | Nolte Dr                 |
| F     | Lebanon Ave              |
| G     | Elmdale Pl / Monssen Dr  |

#### Improvement Code Legend (See Matrix)

6A-TV-SW-01

- 6A ← Station Number
- TV ← Station Abbreviation
- SW ← Sidewalk (or CW for Crosswalk)
- 01 ← Improvement Number (Matches 1 on Map)



**FTA DART Stations  
Last Mile Connections  
Tyler/Vernon  
Station  
August 2020**

**Figure 6A-4.2  
Recommended Improvements Inset Detail 1**



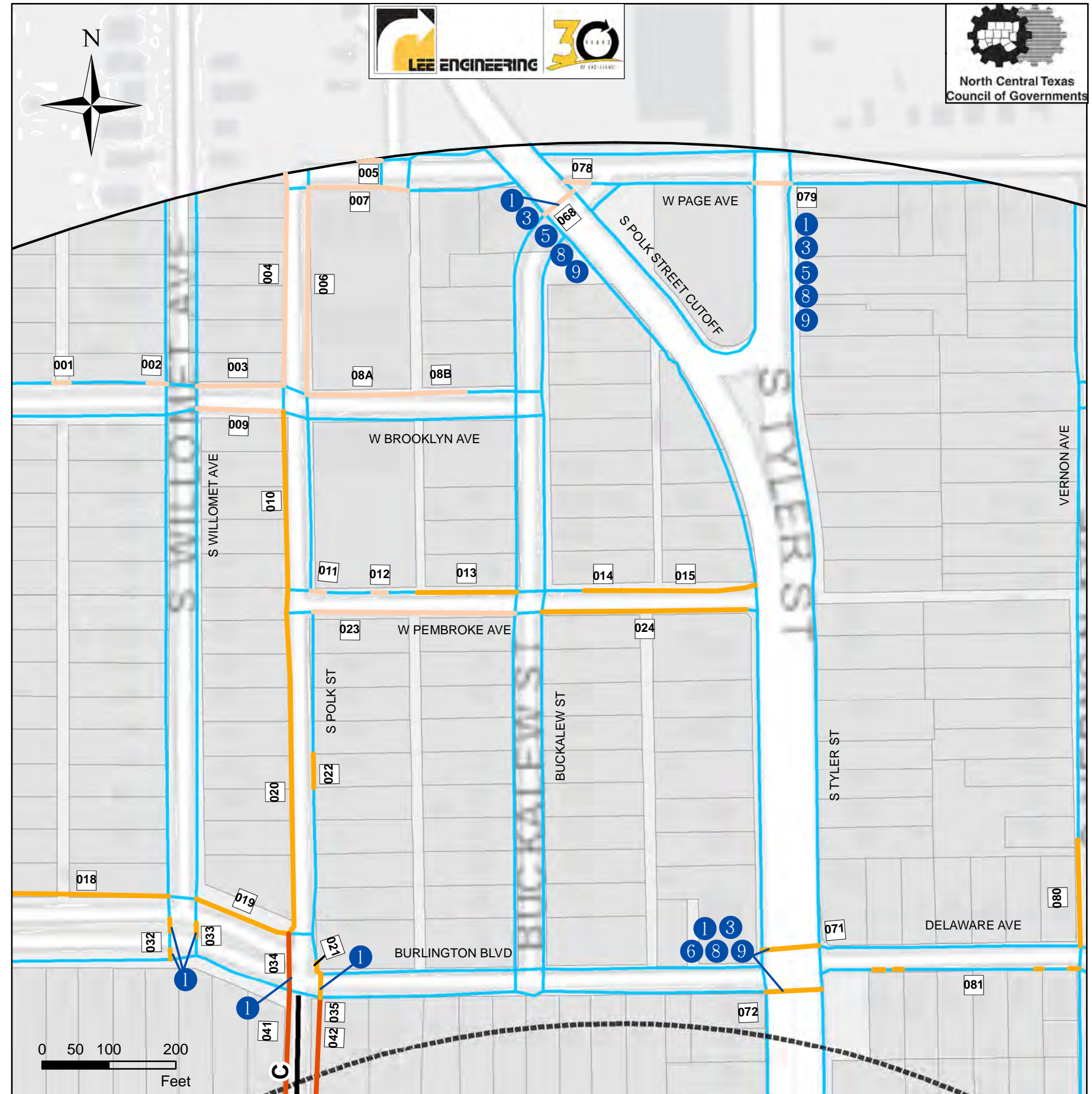
**Legend**

- DART Rail Station
- Railroad Track
- Sidewalk**
- Existing Sidewalk/Crosswalk
- Proposed Sidewalk/Crosswalk by Priority 1**
- High
- Medium
- Low
- Built by Others
- Gap to Remain
- Buffers**
- 0.5 Mile Buffer
- 0.25 Mile Buffer
- Primary Routes

**Existing Residential and Employment Population (Number of People)**

Ppl

- 0 - 234
- 235 - 1049
- 1050 - 2586
- 2587 - 5364
- 5365 - 10339



**Possible Pedestrian Safety Countermeasures**

**Unsignalized Crosswalk Improvements**

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

**Signalized Crosswalk Improvements**

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

**Primary Routes**

| Route | Street                   |
|-------|--------------------------|
| A     | S Vernon Ave             |
| B     | Elmhurst PL / S Tyler St |
| C     | S Polk St                |
| D     | Nolte Dr                 |
| E     | Nolte Dr                 |
| F     | Lebanon Ave              |
| G     | Elmdale Pl / Monssen Dr  |

**Improvement Code Legend (See Matrix)**

6A-TV-SW-01

- 6A ← Station Number
- TV ← Station Abbreviation
- SW ← Sidewalk (or CW for Crosswalk)
- 01 ← Improvement Number (Matches 1 on Map)

# FTA DART Stations Last Mile Connections Tyler/Vernon Station August 2020

## Figure 6A-4.3 Recommended Improvements Inset Detail 2



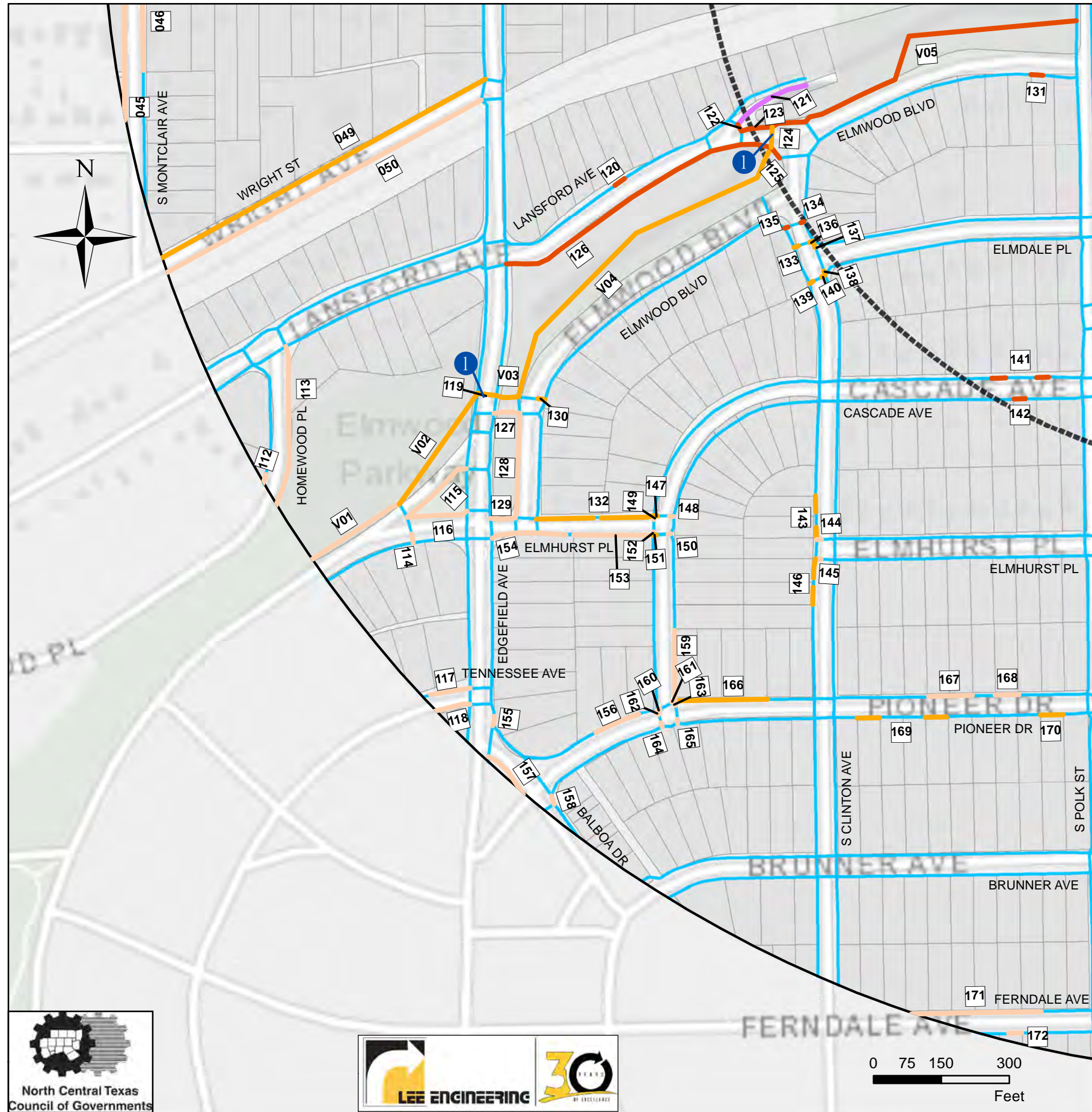
### Legend

- DART Rail Station
- Railroad Track
- Sidewalk**
- Existing Sidewalk/Crosswalk
- Proposed Sidewalk/Crosswalk by Priority 1**
- High
- Medium
- Low
- Built by Others
- Gap to Remain
- Buffers**
- 0.5 Mile Buffer
- 0.25 Mile Buffer
- Primary Routes

### Existing Residential and Employment Population (Number of People)

Ppl

- 0 - 234
- 235 - 1049
- 1050 - 2586
- 2587 - 5364
- 5365 - 10339



### Possible Pedestrian Safety Countermeasures

#### Unsignalized Crosswalk Improvements

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

#### Signalized Crosswalk Improvements

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

### Primary Routes

| Route | Street                   |
|-------|--------------------------|
| A     | S Vernon Ave             |
| B     | Elmhurst Pl / S Tyler St |
| C     | S Polk St                |
| D     | Nolte Dr                 |
| E     | Nolte Dr                 |
| F     | Lebanon Ave              |
| G     | Elmdale Pl / Monssen Dr  |

#### Improvement Code Legend (See Matrix)

6A-TV-SW-01

- 6A ← Station Number
- TV ← Station Abbreviation
- SW ← Sidewalk (or CW for Crosswalk)
- 01 ← Improvement Number (Matches 1 on Map)



## Hampton Station

Figure 6B-3 illustrates the existing conditions in the half-mile area around the Hampton Station. Sidewalk connectivity is good for some streets but poor or nonexistent for others. The lack of sidewalk on the west side of Hampton Road north of the station is a significant barrier to pedestrian travel since there are no other signalized crossings of the street north of Wright Street. Both sides of Wright Street east of the station are also without sidewalk, leaving many residential streets with circuitous walking routes to access transit.

No bicycle facilities are currently located particularly near the station. A shared use path on the Regional Veloweb is present near Rugged Drive at the east boundary of the station area, but this is at greater than a half mile travel distance due to the curvature of Elmwood Boulevard, its adjacency to the Elmwood Branch creek, and the lack of creek crossings south or east of Hampton Road.

Figure 6B-4.1 shows the recommended improvements in the half-mile area around the Hampton Station. In addition to filling the sidewalk gaps on the streets mentioned above and others, enhanced crosswalks are recommended at the following locations:

- For crossing Wright Street at Hollywood Avenue (improvements 6B-HA-CW-90 and 6B-HA-CW-91), the City of Dallas should coordinate with DART to 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 Street to 12 feet in each direction.
- For crossing Wright Street at Montreal Avenue (improvement 6B-HA-CW-92), the City should coordinate with DART to 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 Street to connect the new crosswalks to the existing sidewalk. Additionally, consider constructing a median refuge by narrowing the existing 17-ft lanes on Wright Street to 12 feet in each direction.
- At the signalized intersection of Hampton Road and Wright Street (improvements 6B-HA-CW-87 through 89 and 6B-HA-CW-105), the City should add parallel white edge lines to the existing brick crosswalk. Though an unmarked legal crosswalk by default exists at the signalized intersection, similar architectural brick work (recommended for removal or modification by DART in Section 3.1.13) is present in the adjacent station area in places that may temporarily confuse distracted pedestrians. A design for crosswalks in the area that is consistent, legal, and distinct from architectural flourishes is recommended for proper emphasis of correct pedestrian crossing locations. See Station area improvements 6B-HA-ST-01 and 6B-HA-ST-02 for reference.
- At the intersection of Hampton Road and Elmwood Boulevard (improvement 6B-HA-CW-133), a marked, signed, and lit school crosswalk is 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 Road here. The City should add advance yield lines and "Yield Here to Pedestrians" signing at the yield lines. The City should 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.

- For crossing Hampton Road south of Illinois Avenue (improvement 6B-HA-CW-134), the City should install additional warning signs for this existing marked crosswalk. The improvement should include adding advance yield lines, "Yield Here to Pedestrians" signing, and possibly 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, the City and DART may consider if bus stops can be consolidated closer to those at Illinois Avenue approximately 350 feet to the north, where a signalized crosswalk is already present. In particular, care should be taken 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 but would affect the safety of DART riders using these bus stops.

- For crossing Illinois Avenue at Hollywood Avenue (improvements 6B-HA-CW-204 and 205), the City should consider installing a signed and marked crosswalk with advance yield lines, "Yield Here to Pedestrians" signing, and a pedestrian hybrid beacon, 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, the City and DART might first consider if bus stops can be consolidated closer to those at Hampton Road approximately 350 feet to the west, where a signalized crosswalk is already present. In particular, care should be taken 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 but would affect the safety of DART riders using these bus stops.
- For crossing Waverly Drive at Melbourne Avenue (improvements 6B-HA-CW-193 and 194), the City should add high-visibility crosswalk markings and pedestrian ramps to this existing signed but unmarked school crosswalk. Streetlighting is already present.

Additional details about other improvements recommended in Figure 6B-4, as well as challenges associated with the recommended gaps to remain, are included in the matrix notes for Hampton Station that can be found in Appendix J.



# FTA DART Stations Last Mile Connections Hampton Station

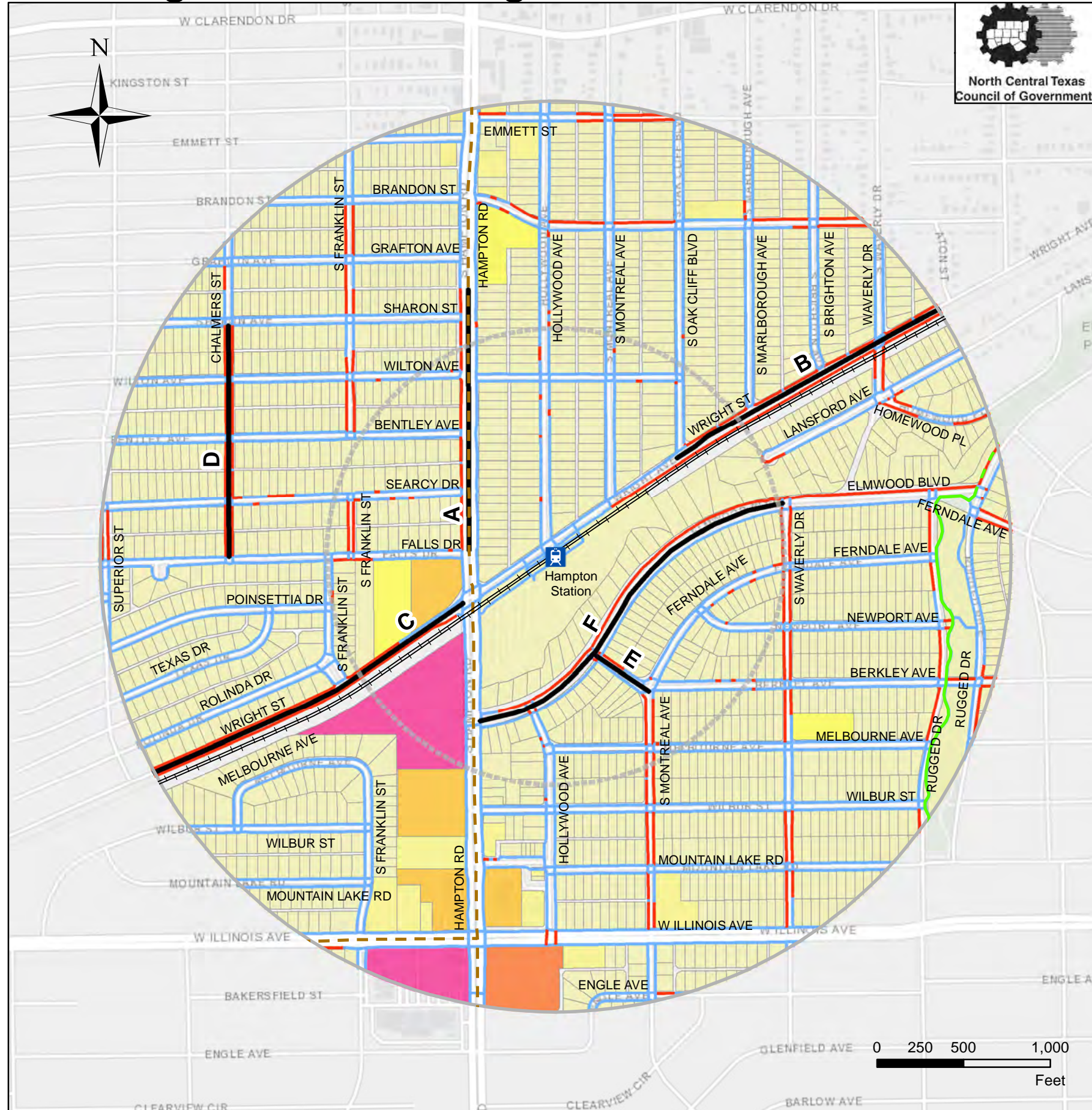
August 2020



## Figure 6B-3 Existing Conditions

**Legend**

- DART Rail Station
- Railroad Track
- Regional Veloweb (Mobility 2045)**
  - Regional Existing
  - Regional Funded
  - Regional Planned
- Local Shared Use Paths**
  - Local Existing
  - Local Funded
  - Local Planned
- Local On-Street Bikeways**
  - Local Existing Bicycle Facilities
  - Local Funded Bicycle Facilities
  - Local Planned Bicycle Facilities
- DISPLAY**
  - 0.5 Mile Buffer
  - 0.25 Mile Buffer
  - Primary Routes
- Segment Category**
  - Existing Sidewalk/Crosswalk
  - Sidewalk/Crosswalk Gap



**Existing Residential and Employment Population (Number of People)**

- 0 - 10
- 11 - 50
- 51 - 100
- 101 - 250
- 251 - 578
- 579 - 1000
- 1001 - 1500
- 1501 - 2500
- 2501 - 5000
- 5001 - 24170

### Primary Routes

| Route | Street       |
|-------|--------------|
| A     | Hampton Rd   |
| B     | Wright St    |
| C     | Wright St    |
| D     | Chalmers St  |
| E     | Berkley Ave  |
| F     | Elmwood Blvd |

# FTA DART Stations Last Mile Connections Hampton Station

August 2020



## Figure 6B-4 Recommended Improvements

### Legend

- DART Rail Station
- Railroad Track

### Sidewalk

- Existing Sidewalk/Crosswalk

### Proposed Sidewalk/Crosswalk by Priority 1

- High
- Medium
- Low
- Gap to Remain

### Regional Veloweb (Mobility 2045)

- Regional Existing
- Regional Funded
- Regional Planned

### Local Shared Use Paths

- Local Existing
- Local Funded
- Local Planned

### Local On-Street Bikeways

- Local Existing Bicycle Facilities
- Local Funded Bicycle Facilities
- Local Planned Bicycle Facilities

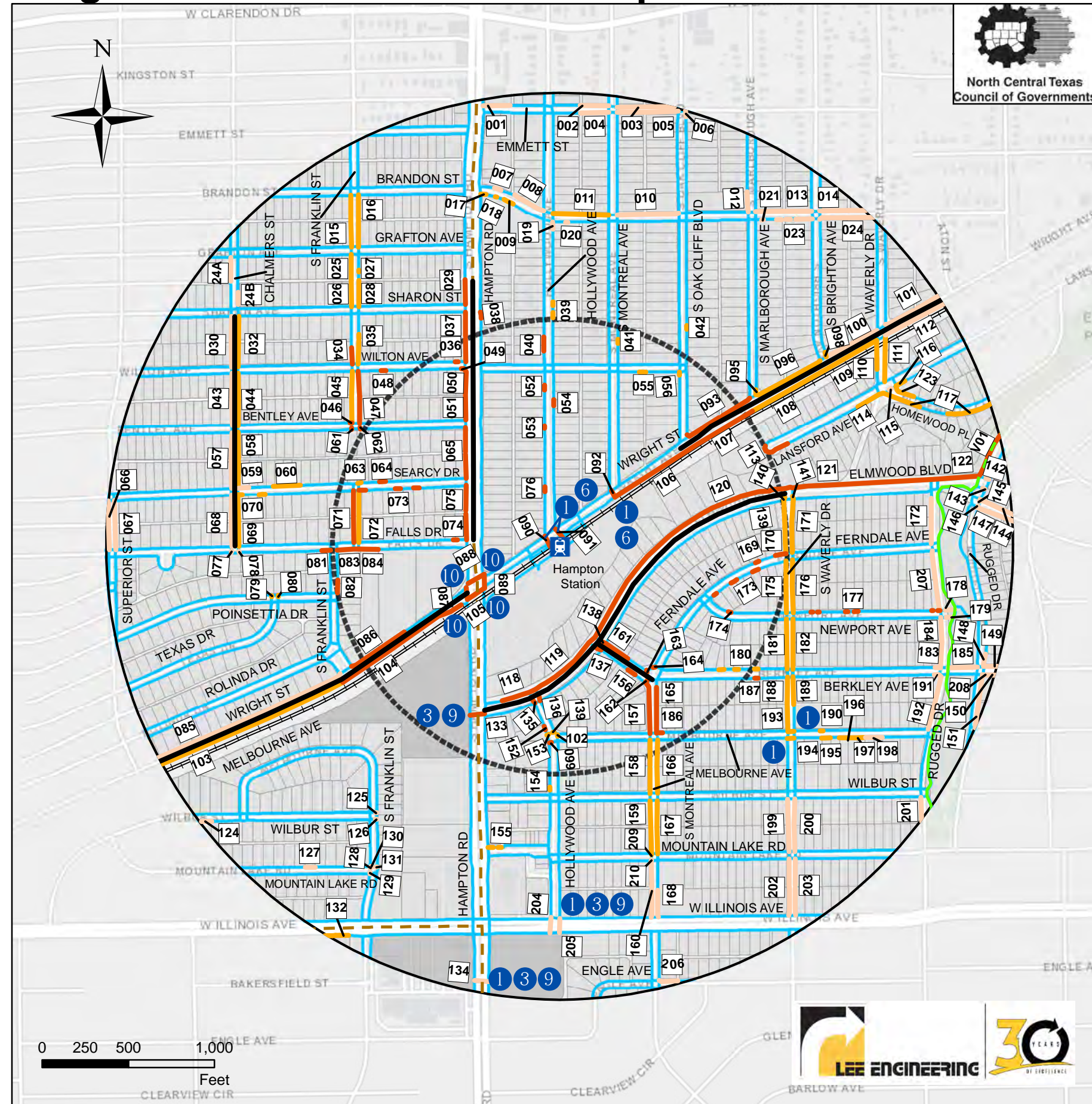
### Buffers

- 0.5 Mile Buffer
- 0.25 Mile Buffer
- Primary Routes

### Existing Residential and Employment Population (Number of People)

Ppl

- 0 - 234
- 235 - 1049
- 1050 - 2586
- 2587 - 5364
- 5365 - 10339



### Possible Pedestrian Safety Countermeasures

- #### Unsignalized Crosswalk Improvements
- Crosswalk Signs, Markings & Lighting
  - Raised Crosswalk
  - Advance "Yield Here" Sign
  - In-Street Pedestrian Crossing
  - Curb Extension
  - Pedestrian Refuge Island
  - Rectangular Rapid Flashing Beacon
  - Road Diet
  - Pedestrian Hybrid Beacon
- #### Signalized Crosswalk Improvements
- Add Marked Crosswalks
  - Traffic Signal

### Primary Routes

| Route | Street       |
|-------|--------------|
| A     | Hampton Rd   |
| B     | Wright St    |
| C     | Wright St    |
| D     | Chalmers St  |
| E     | Berkley Ave  |
| F     | Elmwood Blvd |

#### Improvement Code Legend (See Matrix)

6B-HA-SW-01

- 6B ← Station Number
- HA ← Station Abbreviation
- SW ← Sidewalk (or CW for Crosswalk)
- 01 ← Improvement Number (Matches on Map)



## Westmoreland Station

Figure 6C-3 illustrates the existing conditions in the half-mile area around the Westmoreland Station. This station serves primarily residential land uses to the north and west, plus a large industrial area to the southeast. Multimodal connectivity is relatively poor. Illinois Avenue north of the station and Westmoreland Road to the west are each barriers to pedestrian travel since they each have six lanes of traffic and only one traffic signal where they intersect. The signal is out of the way for many walking and biking trips between the station and adjacent destinations. Significant sidewalk gaps are present along Wright Avenue, Illinois Avenue, and Barnett Avenue in the residential neighborhood and along Glenfield Avenue and Hansboro Avenue in the industrial area. No existing shared use paths or bikeways are present.

Figure 6C-4 shows the recommended improvements in the half-mile area around the Westmoreland Station. In addition to constructing sidewalk to fill gaps, the recommended improvements include:

- For crossing Illinois Avenue at the DART Station driveway (improvements 6C-WM-CW-100 and 101), the City of Dallas should work with DART to add a signed and marked crosswalk with pedestrian hybrid beacon. 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.
- For crossing Westmoreland Avenue west of the DART station (improvements 6C-WM-CW-038, 039), the City should add a signed and marked crosswalk with pedestrian hybrid beacon, connecting to a funded segment of the Regional Veloweb that will extend to the west (improvement 6C-WM-VW-V02). Streetlighting is already in place. Include advance yield lines and "Yield Here to Pedestrians" signing at the yield lines.
- South of the DART station property, the City of Dallas should work together with DART and the adjacent property owner to add a sidewalk connection to the factory and warehousing businesses along Glenfield Ave, approximately following the worn path in the grass that indicates existing pedestrian demand (improvements 6C-WM-SW-118 to 120). An easement for sidewalk across private property would be required, as would a crossing of the abandoned freight rail spur line just south of DART property. The improvement should be coordinated with recommended improvements on DART property to provide continuous sidewalk through the Park & Ride lot to the train platform. See DART Station improvement 6C-WM-ST-13 and Section 3.1.14 for more details.
- The City of Dallas should add a marked crosswalk across Wright Ave at Illinois Ave (improvement 6C-WM-CW-102) due to high skew of the intersection and the resulting long crossing distance and potential for high speed turns conflicting with pedestrians. The improvement should include new sidewalk through the Wright Ave median.

Southwest-bound Wright Ave is posted for stop control, but the crosswalk should be at least one car length to the northeast in advance of the edgeline for Illinois Ave so the crosswalk can cross the roadway at a right angle for a shorter crossing distance. The stop sign should be relocated either in advance of the crosswalk or downstream of it. Pedestrian warning signs with diagonal arrow plaques should be placed on both outside edges of the roadway and at both edges of the Wright Ave median.

In the case of southwest-bound traffic, pedestrian warning signs should be omitted if the stop sign is placed at the crosswalk instead of downstream. Consider adding pedestrian actuated rectangular rapid flashing beacons (RRFB's) in the median and on the northeast side of the intersection to face northeast-bound traffic for increased yielding compliance by drivers.

- At the 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, refresh pavement markings and give strong consideration to adding a pedestrian hybrid beacon (improvement 6C-WM-CW-112). Consider adding new crosswalk markings across the north leg of the same intersection (improvement 6C-WM-CW-040), 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.
- For crossing Westmoreland Road at two additional intersections at Rockford Drive (improvements 6C-WM-CW-036 and 037) and Banning Street (improvements 6C-WM-CW-042 and 043), the City should consider adding signed and marked crosswalks with pedestrian hybrid beacons due to 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. Add advance yield lines and "Yield Here to Pedestrians" signing at the yield lines.
- For crossing Illinois Avenue at Coombs Creek Drive (improvements 6C-WM-CW-016 and 017), the City should 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 DART bus stops on either side of the six-lane roadway with high traffic volumes and potential for high speeds. Streetlighting is already in place.
- For three crossings of Ravinia Drive at Texas Drive (improvement 6C-WM-CW-083), Rockford Drive (6C-WM-CW-085), and Rolinda Drive (6C-WM-CW-087), the City should install additional warning signs for the existing signed, marked and lit school crosswalks 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 median refuge islands can be installed at each crosswalk. 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.

The City of Dallas is planning on-street bike lanes along Illinois Avenue and Barnett Avenue in this area, as well as an off-street shared use path along the west side of Coombs Creek Drive south of Illinois Avenue.

Additional details about other improvements recommended in Figure 6C-4, as well as challenges associated with the recommended gaps to remain, are included in the matrix notes for Westmoreland Station that can be found in Appendix J.





# FTA DART Stations Last Mile Connections Westmoreland

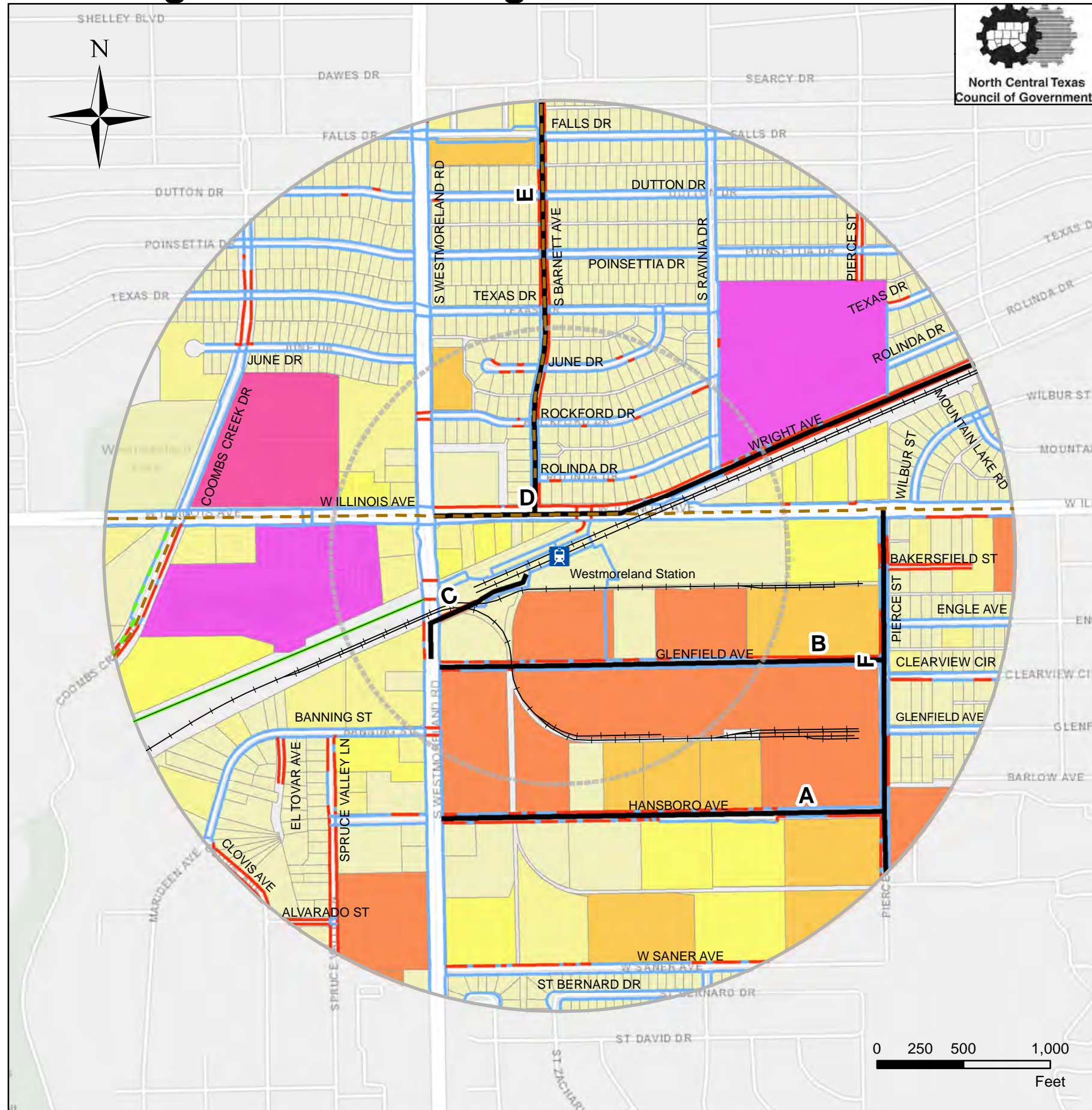
Station  
August 2020



**Legend**

- DART Rail Station
- Railroad Track
- Regional Veloweb (Mobility 2045)**
  - Regional Existing
  - Regional Funded
  - Regional Planned
- Local Shared Use Paths**
  - Local Existing
  - Local Funded
  - Local Planned
- Local On-Street Bikeways**
  - Local Existing Bicycle Facilities
  - Local Funded Bicycle Facilities
  - Local Planned Bicycle Facilities
- DISPLAY**
  - 0.5 Mile Buffer
  - 0.25 Mile Buffer
  - Primary Routes
- Segment Category**
  - Existing Sidewalk/Crosswalk
  - Sidewalk/Crosswalk Gap

## Figure 6C-3 Existing Conditions



**Existing Residential and Employment Population (Number of People)**

- 0 - 10
- 11 - 50
- 51 - 100
- 101 - 250
- 251 - 578
- 579 - 1000
- 1001 - 1500
- 1501 - 2500
- 2501 - 5000
- 5001 - 24170

### Primary Routes

| Route | Street            |
|-------|-------------------|
| A     | Hansboro Ave      |
| B     | Glenfield Ave     |
| C     | S Westmoreland Rd |
| D     | Wright Ave        |
| E     | S Barnett Ave     |
| F     | Pierce St         |

# FTA DART Stations Last Mile Connections Westmoreland Station August 2020



## Figure 6C-4 Recommended Improvements

### Legend

- DART Rail Station
- Railroad Track

### Sidewalk

- Existing Sidewalk/Crosswalk

### Proposed Sidewalk/Crosswalk by Priority 1

- High
- Medium
- Low
- Gap to Remain

### Regional Veloweb (Mobility 2045)

- Regional Existing
- Regional Funded
- Regional Planned

### Local Shared Use Paths

- Local Existing
- Local Funded
- Local Planned

### Local On-Street Bikeways

- Local Existing Bicycle Facilities
- Local Funded Bicycle Facilities
- Local Planned Bicycle Facilities

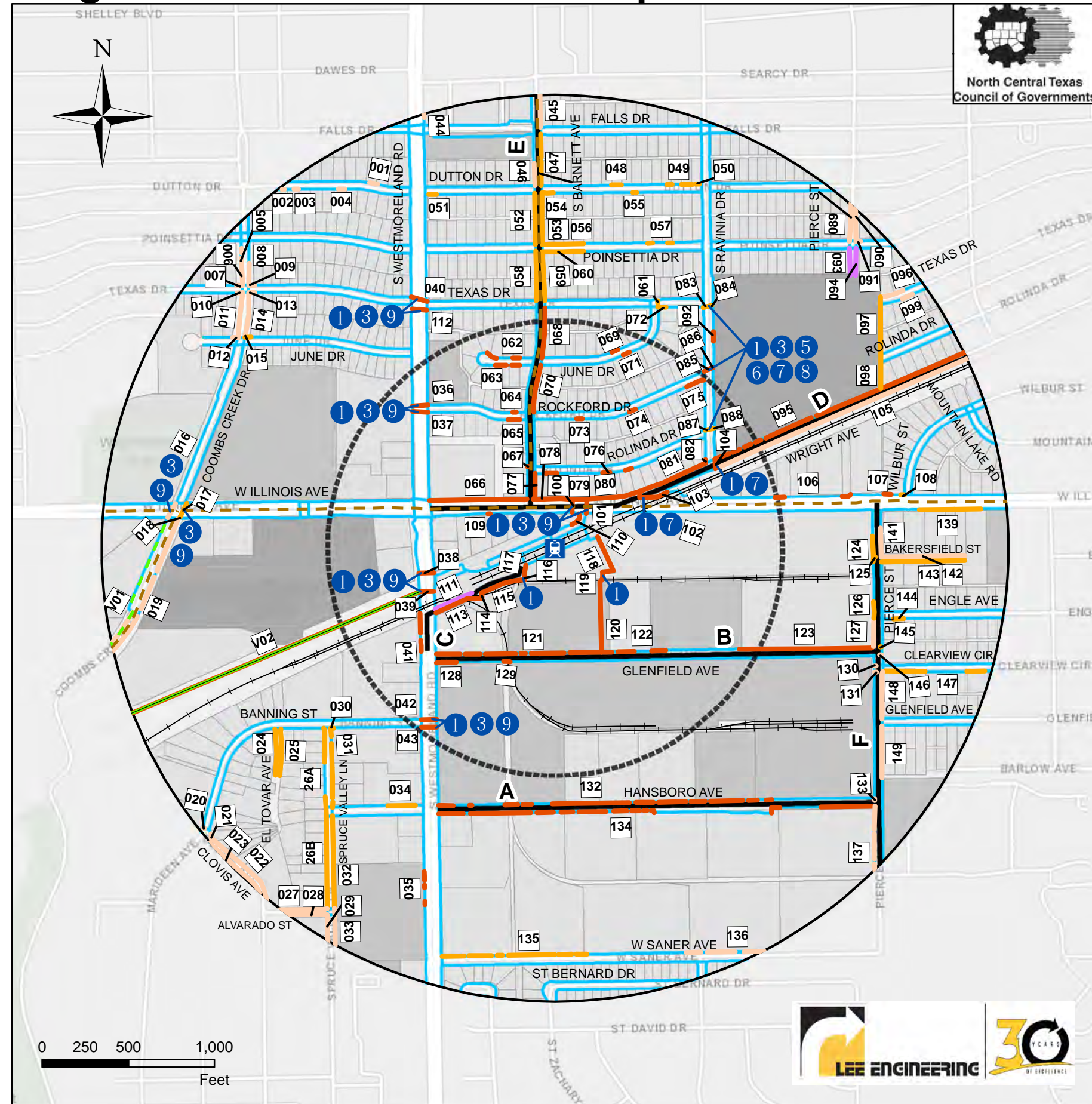
### Buffers

- 0.5 Mile Buffer
- 0.25 Mile Buffer
- Primary Routes

### Existing Residential and Employment Population (Number of People)

Ppl

- 0 - 234
- 235 - 1049
- 1050 - 2586
- 2587 - 5364
- 5365 - 10339



### Possible Pedestrian Safety Countermeasures

- #### Unsignalized Crosswalk Improvements
- Crosswalk Signs, Markings & Lighting
  - Raised Crosswalk
  - Advance "Yield Here" Sign
  - In-Street Pedestrian Crossing
  - Curb Extension
  - Pedestrian Refuge Island
  - Rectangular Rapid Flashing Beacon
  - Road Diet
  - Pedestrian Hybrid Beacon
- #### Signalized Crosswalk Improvements
- Add Marked Crosswalks & Provide Countdown, Accessible Pedestrian Signals
  - Traffic Signal

### Primary Routes

| Route | Street            |
|-------|-------------------|
| A     | Hansboro Ave      |
| B     | Glenfield Ave     |
| C     | S Westmoreland Rd |
| D     | Wright Ave        |
| E     | S Barnett Ave     |
| F     | Pierce St         |

Improvement Code Legend (See Matrix)

6C-WM-SW-01

- 6C ← Station Number
- WM ← Station Abbreviation
- SW ← Sidewalk (or CW for Crosswalk)
- 01 ← Improvement Number (Matches on Map)



## Illinois Station

Figure 7A-3 illustrates the existing conditions in the half-mile area around the Illinois Station. Sidewalk connectivity is very poor in this area. Most streets lack sidewalk on either side, though Illinois Avenue and Denley Drive, two critical links, do have sidewalk along most of their length. S Corinth Street Road is a significant barrier to east-west multi-modal travel due to its width, high speeds, and lack of sidewalk.

Shared use paths on the Regional Veloweb have recently been constructed in Onco right-of-way south of Illinois Avenue and along the north side of Illinois Avenue east of S Corinth Street Road.

Figure 7A-4.1 shows the recommended improvements in the half-mile area around the Illinois Station. Figures 7A-4.2 and 7A-4.3 provide zoomed-in views of two portions of the station area with dense concentrations of improvements. In addition to filling the many sidewalk gaps, the more notable recommended improvements include:

- At the intersection of S Corinth Street Road and Louisiana Avenue just northeast of the station, (improvements 7A-IL-CW-309 and 312), the City of Dallas should consider adding 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 improve crossing safety and convenience. 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 from six lanes to four to implement a median refuge area, since four lanes should be more than sufficient for the ~15,000 average daily traffic. DART bus stops are located on either side of S Corinth St Rd at this location.
- At the signalized intersection of S Corinth Street Road and the DART Station entrance (improvement 7A-IL-CW-319) the City of Dallas should add a marked crosswalk. The traffic signal already includes pedestrian signals and pushbuttons. Because the traffic signal poles on the northeast and southeast corners of the intersection sit in the middle of a narrow 5' grass strip between the curb and a sloped concrete retaining wall, the east side of the T-intersection would not be accessible even after adding sidewalk without changes to the traffic signal design. If the sloped retaining wall cannot be modified to allow for sidewalk to bypass the poles, consider replacing the two signal poles with a twin mast arm pole mounted in the north median of the intersection. A smaller pedestal pole for a pedestrian signal and pushbutton would still need to be located on the northeast corner, but it may allow the impact to the retaining wall to be minimized.
- At the Illinois Avenue crossing of the planned Regional Veloweb shared use path (improvement 7A-IL-CW-176), 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 recommended work is 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 four rather than six lanes).

- At the intersection of S Corinth Street Road and Illinois Avenue, (improvements 7A-IL-CW-266 and 321), the City should add marked crosswalks at this signalized intersection where pedestrian signals are already present.
- On the north leg of the intersection of Lancaster Road with S Corinth Street Road, (improvements 7A-IL-SW/CW-258 through 260), the City should add a high visibility marked crosswalk at the stop-controlled approach for added pedestrian conspicuity due to the unusual geometry of the intersection. The guardrail protecting the DART rail bridge pier in the median would need to be modified, and structural stone surrounding the pier would need to be regraded to provide sidewalk across the median.
- Across the west leg of the same intersection (improvements 7A-IL-SW/CW-261 and 262), add a signed and marked crosswalk with pedestrian ramps across the yield controlled right turn movement from southbound Corinth St Rd to northbound Lancaster Rd. Adjust the location of the yield sign if necessary. Build sidewalk along a worn path in the grass that indicates existing pedestrian demand along the west edge of the traffic island in this wide intersection.
- Across the east leg of the same intersection (improvements 7A-IL-SW/CW-263 and 265), 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. Build sidewalk along a worn path in the grass that indicates existing pedestrian demand along the west edge of the traffic island in this wide intersection.

Care should be taken to maximize sight distance between pedestrians and drivers around the horizontal curve while making the crosswalk as perpendicular to S Corinth Street Road as possible to minimize the crossing distance. Consider geometric changes to the median island for improved sight distance and reduced speed northbound right turns.

Funding is programmed for continuation of the recently constructed shared use path from the intersection of Illinois Avenue with S Corinth Street Road along the west side of S Corinth Street Road north to the DART station. Further extensions north parallel to the DART tracks and south in the Onco right-of-way to Illinois Avenue also planned. On-street bikeways are planned along Woodin Boulevard west of the station and on Cedar Crest Boulevard and Southerland Avenue near the eastern boundary of the half-mile area.

Additional details about other improvements recommended in Figure 7A-4.1, 7A-4.2 and 7A-4.3, as well as challenges associated with the recommended gaps to remain, are included in the matrix notes for Illinois Station that can be found in Appendix J.



# FTA DART Stations Last Mile Connections Illinois Station

August 2020

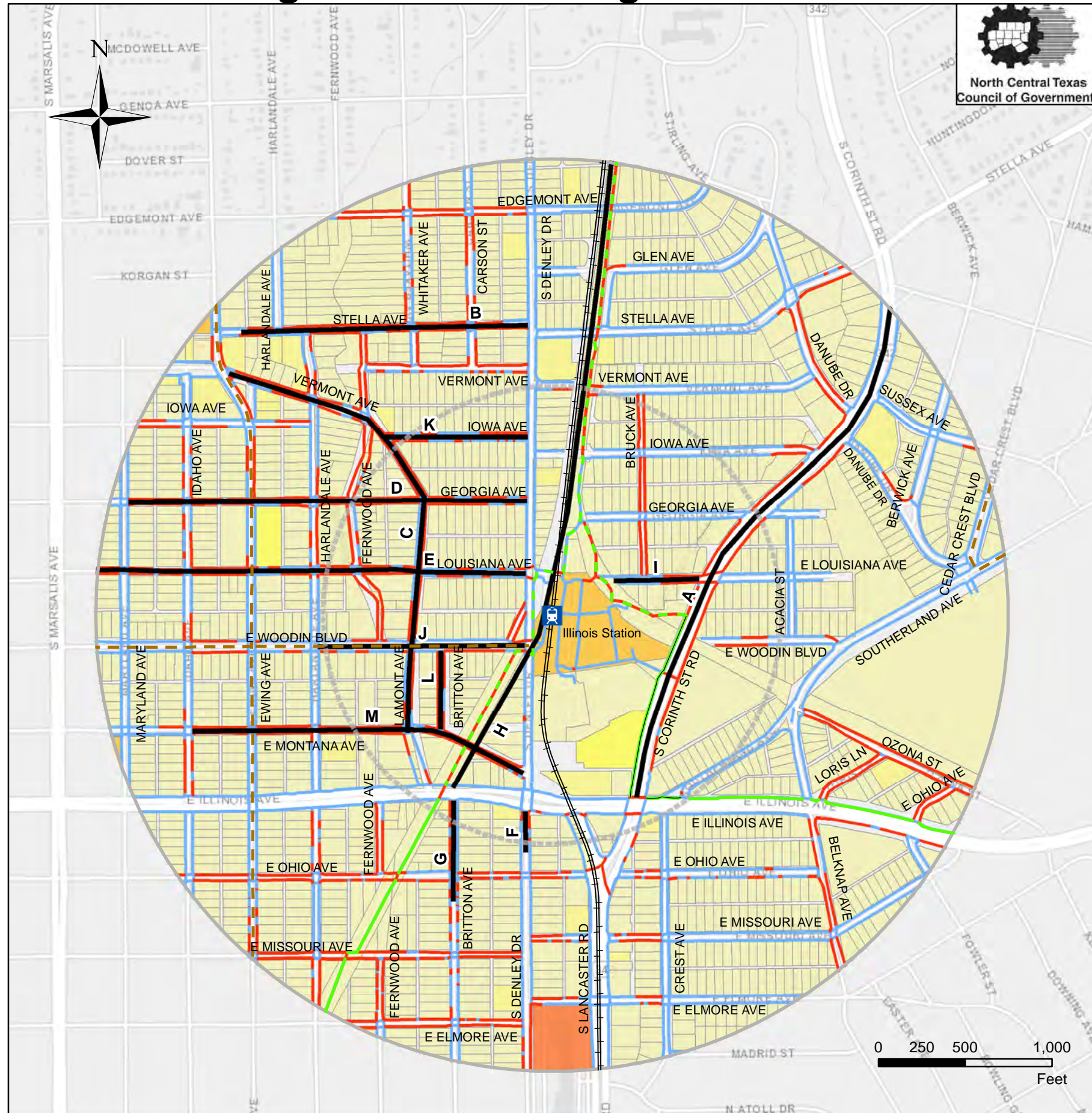


## Figure 7A-3 Existing Conditions



**Legend**

- DART Rail Station
- Railroad Track
- Regional Veloweb (Mobility 2045)**
  - Regional Existing
  - Regional Funded
  - Regional Planned
- Local Shared Use Paths**
  - Local Existing
  - Local Funded
  - Local Planned
- Local On-Street Bikeways**
  - Local Existing Bicycle Facilities
  - Local Funded Bicycle Facilities
  - Local Planned Bicycle Facilities
- DISPLAY**
  - 0.5 Mile Buffer
  - 0.25 Mile Buffer
  - Primary Routes
- Segment Category**
  - Existing Sidewalk/Crosswalk
  - Sidewalk/Crosswalk Gap



**Existing Residential and Employment Population (Number of People)**

- 0 - 10
- 11 - 50
- 51 - 100
- 101 - 250
- 251 - 578
- 579 - 1000
- 1001 - 1500
- 1501 - 2500
- 2501 - 5000
- 5001 - 24170

### Primary Routes

| Route | Street                 |
|-------|------------------------|
| A     | S Corinth St Rd        |
| B     | Stella Ave             |
| C     | Vermont Ave/Lamont Ave |
| D     | Georgia Ave            |
| E     | E Louisiana Ave        |
| F     | S Denley Dr            |
| G     | Britton Ave            |
| H     | DART Tracks/Oncor ROW  |
| I     | E Louisiana Ave        |
| J     | E Woodin Blvd          |
| K     | Iowa Ave               |
| L     | Britton Ave            |
| M     | E Montana Ave          |

# FTA DART Stations Last Mile Connections Illinois Station August 2020



## Figure 7A-4.1 Recommended Improvements

### Legend

- DART Rail Station
- Railroad Track

### Sidewalk

- Existing Sidewalk/Crosswalk

### Proposed Sidewalk/Crosswalk by Priority 1

- High
- Medium
- Low
- Gap to Remain

### Regional Veloweb (Mobility 2045)

- Regional Existing
- Regional Funded
- Regional Planned

### Local Shared Use Paths

- Local Existing
- Local Funded
- Local Planned

### Local On-Street Bikeways

- Local Existing Bicycle Facilities
- Local Funded Bicycle Facilities
- Local Planned Bicycle Facilities

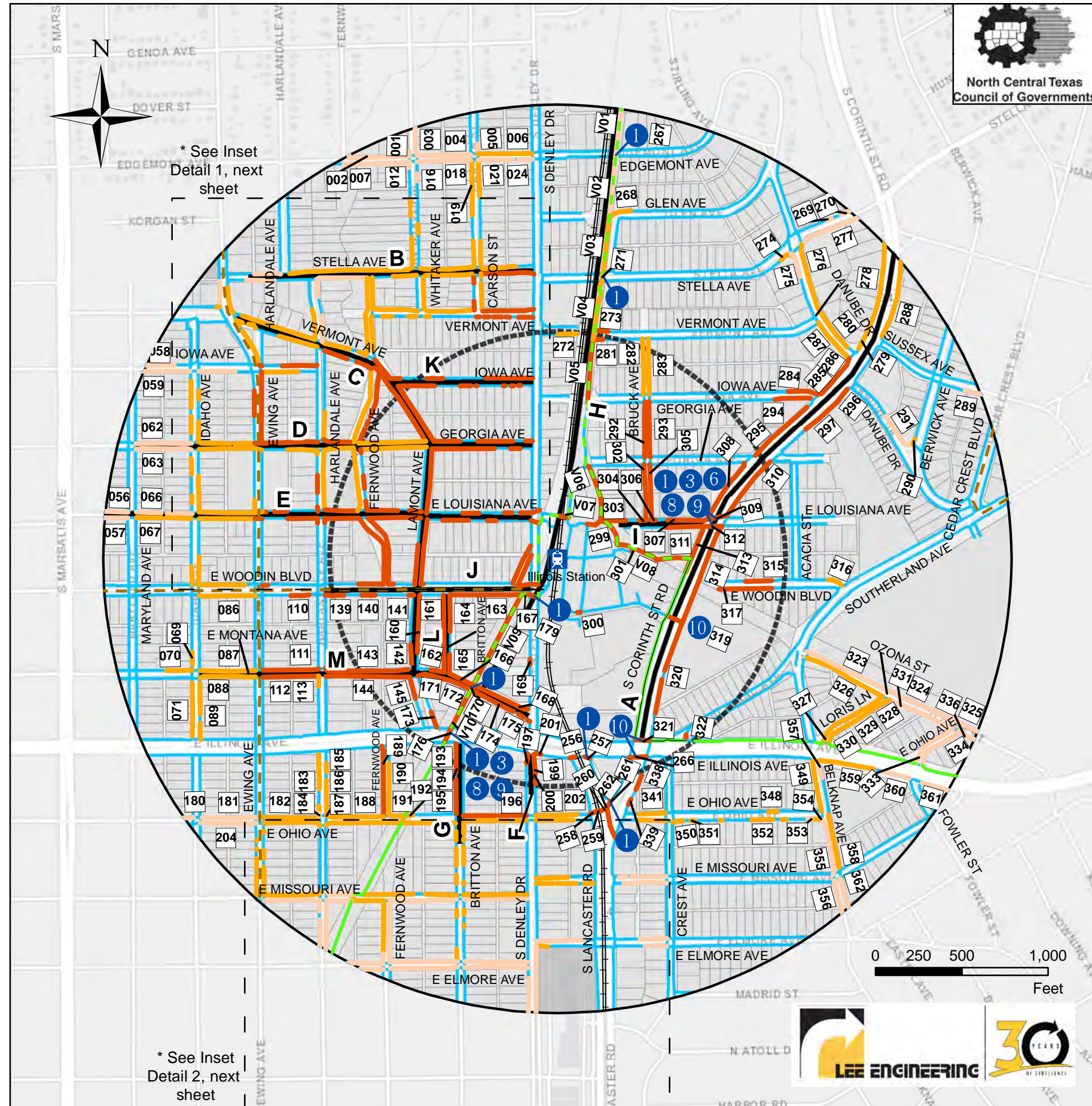
### Buffers

- 0.5 Mile Buffer
- 0.25 Mile Buffer
- Primary Routes

### Existing Residential and Employment Population (Number of People)

Ppl

- 0 - 234
- 235 - 1049
- 1050 - 2586
- 2587 - 5364
- 5365 - 10339



### Possible Pedestrian Safety Countermeasures

- #### Unsignalized Crosswalk Improvements
- Crosswalk Signs, Markings & Lighting
  - Raised Crosswalk
  - Advance "Yield Here" Sign
  - In-Street Pedestrian Crossing
  - Curb Extension
  - Pedestrian Refuge Island
  - Rectangular Rapid Flashing Beacon
  - Road Diet
  - Pedestrian Hybrid Beacon
- #### Signalized Crosswalk Improvements
- Add Marked Crosswalks
  - Traffic Signal

### Primary Routes

| Route | Street                 |
|-------|------------------------|
| A     | S Corinth St Rd        |
| B     | Stella Ave             |
| C     | Vermont Ave/Lamont Ave |
| D     | Georgia Ave            |
| E     | E Louisiana Ave        |
| F     | S Denley Dr            |
| G     | Britton Ave            |
| H     | DART Tracks/Oncor ROW  |
| I     | E Louisiana Ave        |
| J     | E Woodin Blvd          |
| K     | Iowa Ave               |
| L     | Britton Ave            |
| M     | E Montana Ave          |

#### Improvement Code Legend (See Matrix)

7A-IL-SW-01

7A ← Station Number  
 IL ← Station Abbreviation  
 SW ← Sidewalk (or CW for Crosswalk)  
 01 ← Improvement Number (Matches 1 on Map)



\* See Inset Detail 2, next sheet

\* See Inset Detail 1, next sheet

# FTA DART Stations Last Mile Connections Illinois Station August, 2020

## Figure 7A-4.2 Recommended Improvements Inset Detail 1



### Legend

- DART Rail Station
- Railroad Track

### Sidewalk

- Existing Sidewalk/Crosswalk

### Proposed Sidewalk/Crosswalk by Priority

1

- High
- Medium
- Low
- Gap to Remain

### Regional Veloweb (Mobility 2045)

- Regional Existing
- Regional Funded
- Regional Planned

### Local Shared Use Paths

- Local Existing
- Local Funded
- Local Planned

### Local On-Street Bikeways

- Local Existing Bicycle Facilities
- Local Funded Bicycle Facilities
- Local Planned Bicycle Facilities

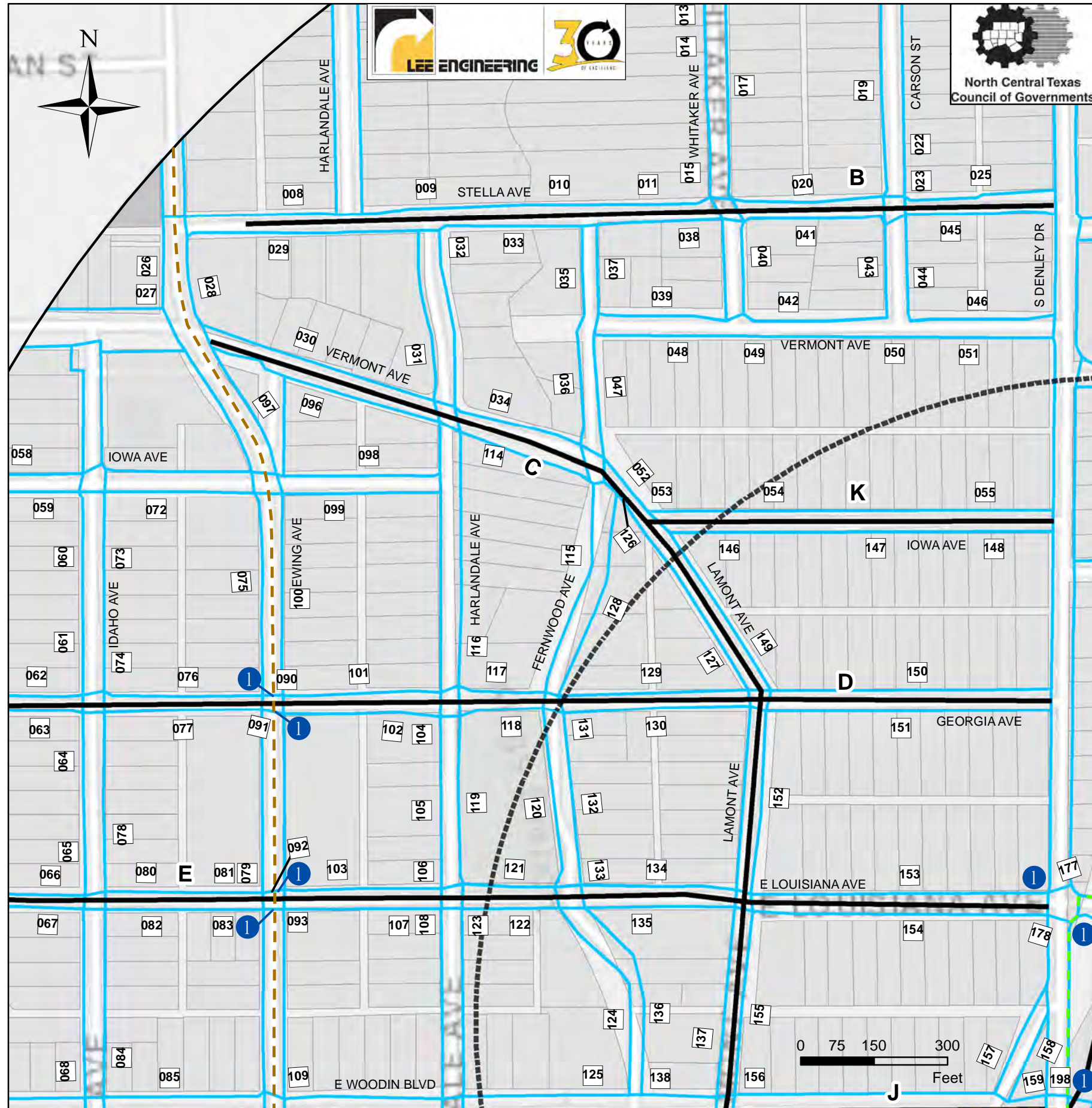
### Buffers

- 0.5 Mile Buffer
- 0.25 Mile Buffer
- Primary Routes

### Existing Residential and Employment Population (Number of People)

Ppl

- 0 - 234
- 235 - 1049
- 1050 - 2586
- 2587 - 5364
- 5365 - 10339



### Possible Pedestrian Safety Countermeasures

#### Unsignalized Crosswalk Improvements

- Crosswalk Signs, Markings & Lighting
- Raised Crosswalk
- Advance "Yield Here" Sign
- In-Street Pedestrian Crossing
- Curb Extension
- Pedestrian Refuge Island
- Rectangular Rapid Flashing Beacon
- Road Diet
- Pedestrian Hybrid Beacon

#### Signalized Crosswalk Improvements

- Add Marked Crosswalks
- Traffic Signal

### Primary Routes

| Route | Street                 |
|-------|------------------------|
| A     | S Corinth St Rd        |
| B     | Stella Ave             |
| C     | Vermont Ave/Lamont Ave |
| D     | Georgia Ave            |
| E     | E Louisiana Ave        |
| F     | S Denley Dr            |
| G     | Britton Ave            |
| H     | DART Tracks/Oncor ROW  |
| I     | E Louisiana Ave        |
| J     | E Woodin Blvd          |
| K     | Iowa Ave               |
| L     | Britton Ave            |
| M     | E Montana Ave          |

### Improvement Code Legend (See Matrix)

7A-IL-SW-01

7A ← Station Number  
 IL ← Station Abbreviation  
 SW ← Sidewalk (or CW for Crosswalk)  
 01 ← Improvement Number (Matches 1 on Map)

# FTA DART Stations Last Mile Connections Illinois Station August 2020



## Figure 7A-4.3 Recommended Improvements Inset Detail 2

### Legend

- DART Rail Station
- Railroad Track
- Sidewalk**
- Existing Sidewalk/Crosswalk
- Proposed Sidewalk/Crosswalk by Priority 1**
- High
- Medium
- Low
- Gap to Remain
- Regional Veloweb (Mobility 2045)**
- Regional Existing
- Regional Funded
- Regional Planned
- Local Shared Use Paths**
- Local Existing
- Local Funded
- Local Planned
- Local On-Street Bikeways**
- Local Existing Bicycle Facilities
- Local Funded Bicycle Facilities
- Local Planned Bicycle Facilities
- Buffers**
- 0.5 Mile Buffer
- 0.25 Mile Buffer
- Primary Routes

**Existing Residential and Employment Population (Number of People)**

Ppl

- 0 - 234
- 235 - 1049
- 1050 - 2586
- 2587 - 5364
- 5365 - 10339



### Possible Pedestrian Safety Countermeasures

#### Unsignalized Crosswalk Improvements

- Crosswalk Signs, Markings & Lighting
- Raised Crosswalk
- Advance "Yield Here" Sign
- In-Street Pedestrian Crossing
- Curb Extension
- Pedestrian Refuge Island
- Rectangular Rapid Flashing Beacon
- Road Diet
- Pedestrian Hybrid Beacon

#### Signalized Crosswalk Improvements

- Add Marked Crosswalks
- Traffic Signal

### Primary Routes

| Route | Street                 |
|-------|------------------------|
| A     | S Corinth St Rd        |
| B     | Stella Ave             |
| C     | Vermont Ave/Lamont Ave |
| D     | Georgia Ave            |
| E     | E Louisiana Ave        |
| F     | S Denley Dr            |
| G     | Britton Ave            |
| H     | DART Tracks/Oncor ROW  |
| I     | E Louisiana Ave        |
| J     | E Woodin Blvd          |
| K     | Iowa Ave               |
| L     | Britton Ave            |
| M     | E Montana Ave          |

Improvement Code Legend (See Matrix)

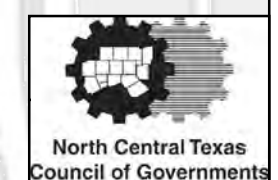
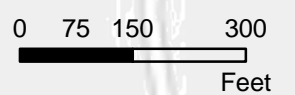
7A-IL-SW-01

7A ← Station Number

IL ← Station Abbreviation

SW ← Sidewalk (or CW for Crosswalk)

01 ← Improvement Number (Matches **1** on Map)



## Kiest Station

Figure 7B-3 illustrates the existing conditions in the half-mile area around the Kiest Station. Sidewalk connectivity to the residential neighborhoods around this station is fair in some places and poor in others. Acceptable connections exist to the shopping center on the east side of Lancaster Road. The Cedar Crest Trail, an existing shared use path on the Regional Veloweb, is present in the western part of the half-mile area parallel to Frio Drive and Maywood Avenue.

Figure 7B-4 shows the recommended improvements in the half-mile area around the Kiest Station. In addition to filling the many sidewalk gaps that exist, recommended improvements include:

- At the intersection of Kiest Boulevard and Frio Drive/Ramona Avenue (improvement 7B-KS-CW-057), the City of Dallas should 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 (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. The horizontal curve in Kiest Boulevard here heightens the need to make crossing pedestrians and cyclists more visible.

- At the intersection of Kiest Boulevard and Easter Avenue (improvement 7B-KS-CW-058), the City should 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 there is significant pedestrian demand outside school hours.
- At the intersection of Overton Road and Easter Avenue (improvement 7B-KS-CW-124 and 125), the City should 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.

The City of Dallas is planning on-street bikeways along Kiest Boulevard, Lancaster Road north of Overton Road, and Overton Road east of Lancaster Road.

Additional details about other improvements recommended in Figure 7B-4, as well as challenges associated with the recommended gaps to remain, are included in the matrix notes for Kiest Station that can be found in Appendix J.

## VA Medical Center Station

Figure 7C-3 illustrates the existing conditions in the half-mile area around the VA Medical Center Station. Multi-modal access to the main part of the Veterans Administration Hospital campus on the east side of Lancaster Road is good, though several crosswalks lack consistently applied, MUTCD-compliant warning signs. Some sidewalk gaps exist along the vehicular access roads internal to the hospital, but these are unlikely to affect access between the station and areas of highest travel demand within the hospital campus. Sidewalk connectivity to the neighborhood west of Lancaster Road is quite poor, with many sidewalks missing or severely damaged.

Figure 7C-4 shows the recommended improvements in the half-mile area around the VA Medical Center Station. The City of Dallas and/or DART should work with the Veterans Administration Hospital to encourage and suggest the illustrated upgrades to crosswalk signing, as well as completion of a few segments of sidewalk. It is understood that these changes will require the participation of the VA Hospital management.

On City of Dallas streets, notable recommendations in addition to filling sidewalk gaps are:

- At the intersection of Ann Arbor Avenue and Fernwood Avenue (improvements 7C-VA-CW-038 and 039), the City of Dallas should 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).

- At the intersection of Ann Arbor Avenue and Denley Drive (improvement 7C-VA-CW-040), the City should consider upgrades to this existing signed and marked school crosswalk across a 4-lane undivided roadway in a reduced speed 20 mph school zone. 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. 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).

The City of Dallas is planning an on-street bikeway along Ann Arbor Avenue and Veterans Drive north of the station.

Additional details about other improvements recommended in Figure 7C-4, as well as challenges associated with the recommended gaps to remain, are included in the matrix notes for VA Medical Center Station that can be found in Appendix J.





# FTA DART Stations Last Mile Connections Kiest Station

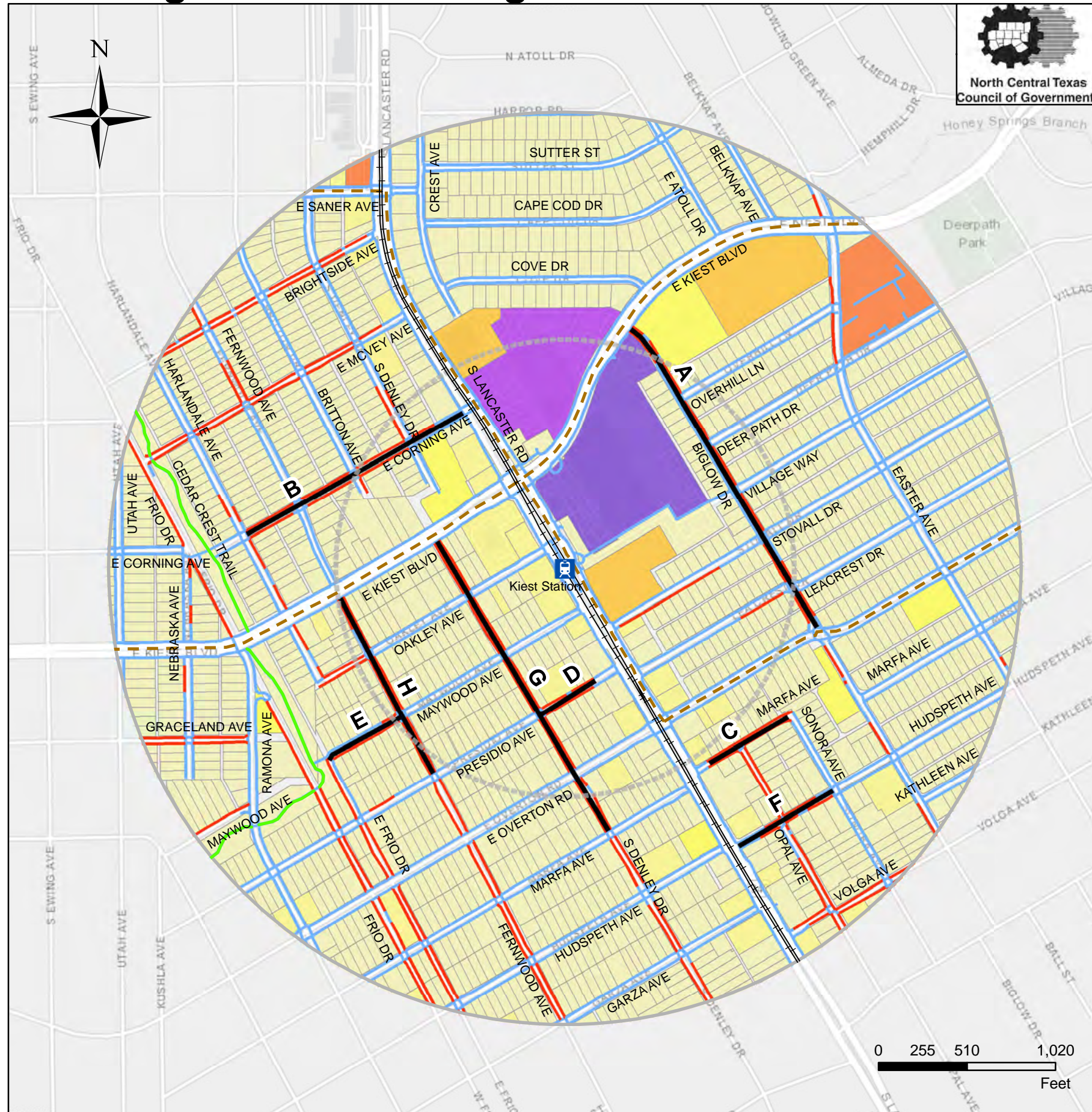
August 2020



## Figure 7B-3 Existing Conditions

**Legend**

- DART Rail Station
- Railroad Track
- Regional Veloweb (Mobility 2045)**
  - Regional Existing
  - Regional Funded
  - Regional Planned
- Local Shared Use Paths**
  - Local Existing
  - Local Funded
  - Local Planned
- Local On-Street Bikeways**
  - Local Existing Bicycle Facilities
  - Local Funded Bicycle Facilities
  - Local Planned Bicycle Facilities
- DISPLAY**
  - 0.5 Mile Buffer
  - 0.25 Mile Buffer
  - Primary Routes
- Segment Category**
  - Existing Sidewalk/Crosswalk
  - Sidewalk/Crosswalk Gap



**Existing Residential and Employment Population (Number of People)**

- 0 - 10
- 11 - 50
- 51 - 100
- 101 - 250
- 251 - 578
- 579 - 1000
- 1001 - 1500
- 1501 - 2500
- 2501 - 5000
- 5001 - 24170

### Primary Routes

| Route | Street        |
|-------|---------------|
| A     | Biglow Dr     |
| B     | E Corning Ave |
| C     | Marfa Ave     |
| D     | Presidio Ave  |
| E     | Maywood Ave   |
| F     | Hudspeth Ave  |
| G     | S Denley Dr   |
| H     | Fernwood Ave  |

# FTA DART Stations Last Mile Connections Kiest Station

August 2020

## Figure 7B-4 Recommended Improvements



### Legend

- DART Rail Station
- Railroad Track

### Sidewalk

- Existing Sidewalk/Crosswalk

### Proposed Sidewalk/Crosswalk by Priority

1

- High
- Medium
- Low
- Gap to Remain

### Regional Veloweb (Mobility 2045)

- Regional Existing
- Regional Funded
- Regional Planned

### Local Shared Use Paths

- Local Existing
- Local Funded
- Local Planned

### Local On-Street Bikeways

- Local Existing Bicycle Facilities
- Local Funded Bicycle Facilities
- Local Planned Bicycle Facilities

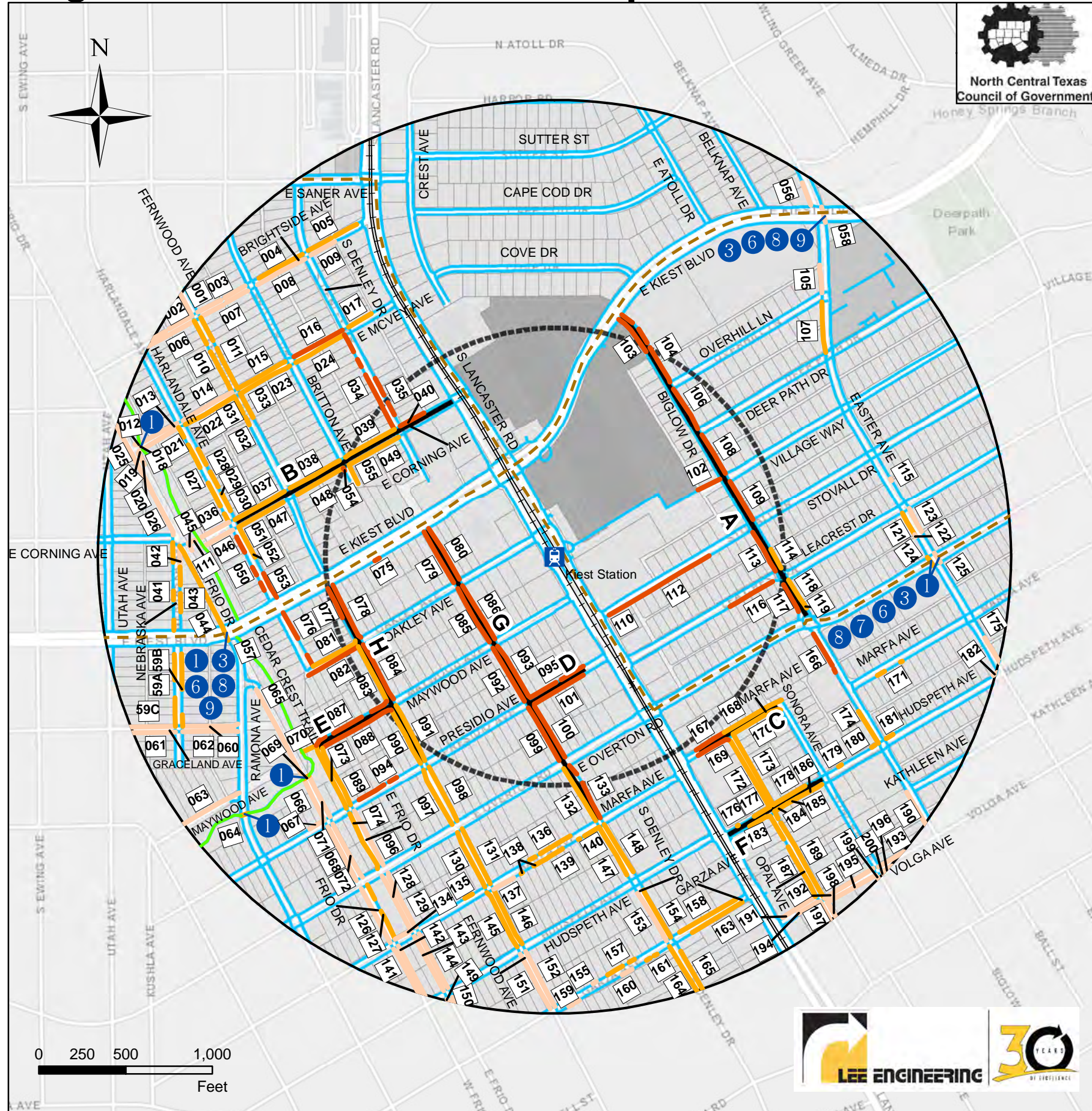
### Buffers

- 0.5 Mile Buffer
- 0.25 Mile Buffer
- Primary Routes

### Existing Residential and Employment Population (Number of People)

Ppl

- 0 - 234
- 235 - 1049
- 1050 - 2586
- 2587 - 5364
- 5365 - 10339



### Possible Pedestrian Safety Countermeasures

#### Unsignalized Crosswalk Improvements

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

#### Signalized Crosswalk Improvements

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

### Primary Routes

| Route | Street        |
|-------|---------------|
| A     | Biglow Dr     |
| B     | E Corning Ave |
| C     | Marfa Ave     |
| D     | Presidio Ave  |
| E     | Maywood Ave   |
| F     | Hudspeth Ave  |
| G     | S Denley Dr   |
| H     | Fernwood Ave  |

#### Improvement Code Legend (See Matrix)

7B-KS-SW-01

- 7B ← Station Number
- KS ← Station Abbreviation
- SW ← Sidewalk (or CW for Crosswalk)
- 01 ← Improvement Number (Matches 1 on Map)



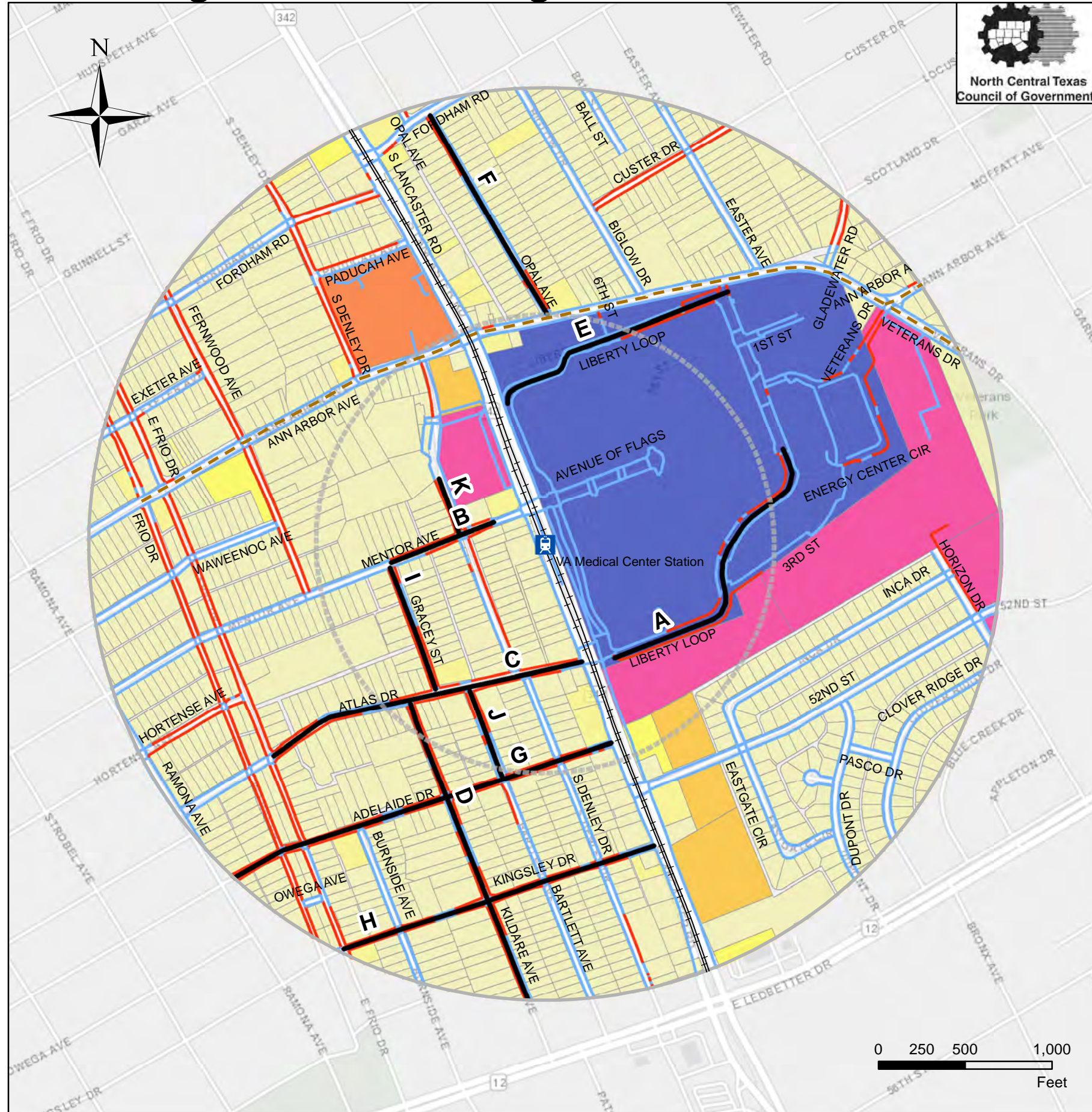
# FTA DART Stations Last Mile Connections VA Medical Center Station August 2020



## Figure 7C-3 Existing Conditions

**Legend**

- DART Rail Station
- Railroad Track
- Segment Category**
  - Existing Sidewalk/Crosswalk
  - Sidewalk/Crosswalk Gap
- Regional Veloweb (Mobility 2045)**
  - Regional Existing
  - Regional Funded
  - Regional Planned
- Local Shared Use Paths**
  - Local Existing
  - Local Funded
  - Local Planned
- Local On-Street Bikeways**
  - Local Existing Bicycle Facilities
  - Local Funded Bicycle Facilities
  - Local Planned Bicycle Facilities
- DISPLAY**
  - 0.5 Mile Buffer
  - 0.25 Mile Buffer
  - Primary Routes



**Existing Residential and Employment Population (Number of People)**

- 0 - 10
- 11 - 50
- 51 - 100
- 101 - 250
- 251 - 578
- 579 - 1000
- 1001 - 1500
- 1501 - 2500
- 2501 - 5000
- 5001 - 24170

### Primary Routes

| Route | Street       |
|-------|--------------|
| A     | Liberty Loop |
| B     | Mentor Ave   |
| C     | Atlas Dr     |
| D     | Kildare Ave  |
| E     | Liberty Loop |
| F     | Opal Ave     |
| G     | Adelaide Dr  |
| H     | Kingsley Dr  |
| I     | Gracey St    |
| J     | Bartlett Ave |
| K     | S Denley Dr  |

# FTA DART Stations Last Mile Connections VA Medical Center Station August 2020



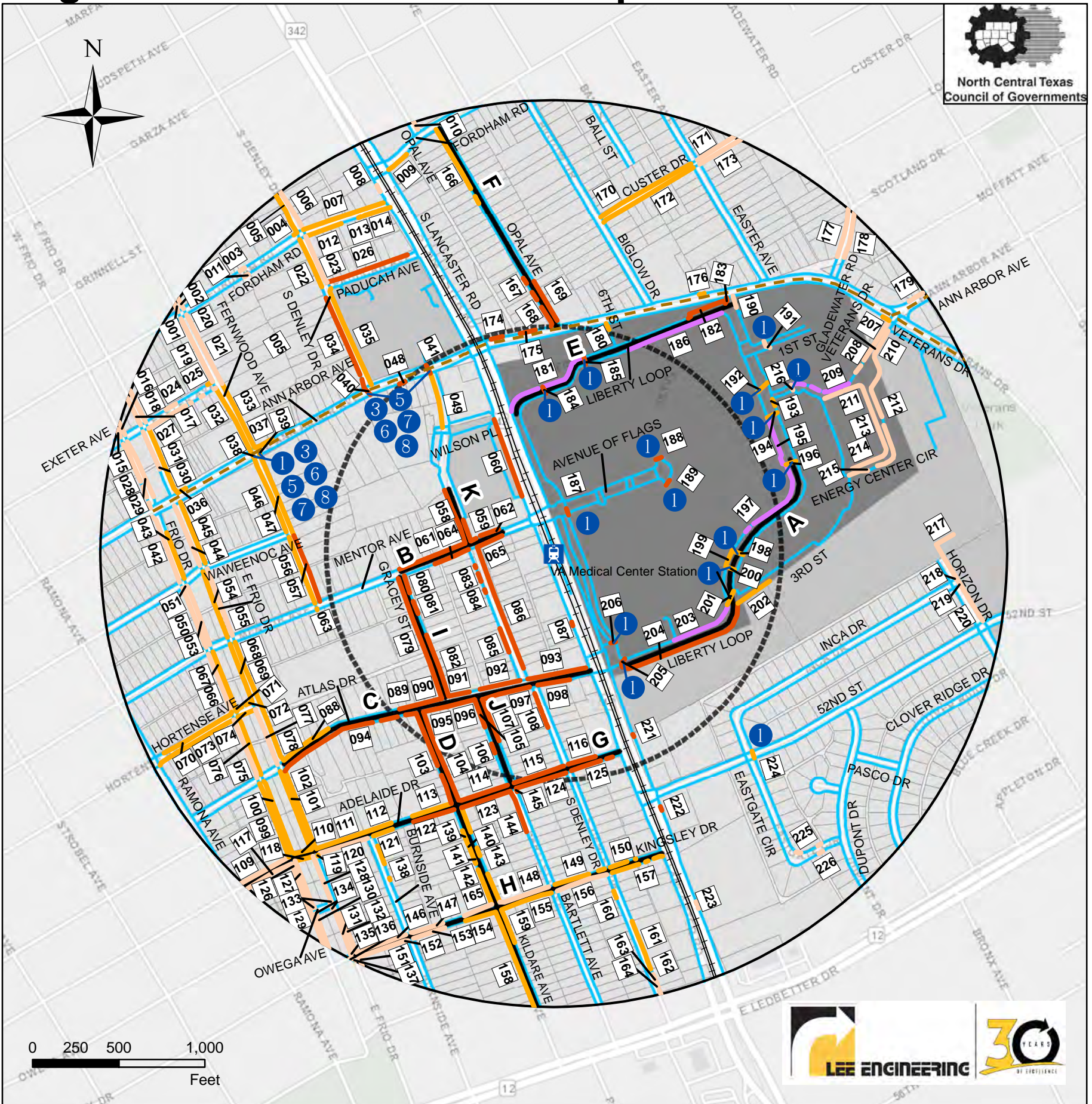
## Figure 7C-4 Recommended Improvements

### Legend

- DART Rail Station
- Railroad Track
- Sidewalk**
  - Existing Sidewalk/Crosswalk
  - Proposed Sidewalk/ Crosswalk by Priority 1**
    - High
    - Medium
    - Low
    - Gap to Remain
- Regional Veloweb (Mobility 2045)**
  - Regional Existing
  - Regional Funded
  - Regional Planned
- Local Shared Use Paths**
  - Local Existing
  - Local Funded
  - Local Planned
- Local On-Street Bikeways**
  - Local Existing Bicycle Facilities
  - Local Funded Bicycle Facilities
  - Local Planned Bicycle Facilities
- Buffers**
  - 0.5 Mile Buffer
  - 0.25 Mile Buffer
  - Primary Routes
- Existing Residential and Employment Population (Number of People)**

Ppl

  - 0 - 234
  - 235 - 1049
  - 1050 - 2586
  - 2587 - 5364
  - 5365 - 10339



### Possible Pedestrian Safety Countermeasures

- #### Unsignalized Crosswalk Improvements
- Crosswalk Signs, Markings & Lighting
  - Raised Crosswalk
  - Advance "Yield Here" Sign
  - In-Street Pedestrian Crossing
  - Curb Extension
  - Pedestrian Refuge Island
  - Rectangular Rapid Flashing Beacon
  - Road Diet
  - Pedestrian Hybrid Beacon
- #### Signalized Crosswalk Improvements
- Add Marked Crosswalks & Provide Countdown, Accessible Pedestrian Signals
  - Traffic Signal

### Primary Routes

| Route | Street       |
|-------|--------------|
| A     | Liberty Loop |
| B     | Mentor Ave   |
| C     | Atlas Dr     |
| D     | Kildare Ave  |
| E     | Liberty Loop |
| F     | Opal Ave     |
| G     | Adelaide Dr  |
| H     | Kingsley Dr  |
| I     | Gracey St    |
| J     | Bartlett Ave |
| K     | S Denley Dr  |

Improvement Code Legend (See Matrix)

7C-VA-SW-01

7C ← Station Number  
VA ← Station Abbreviation  
SW ← Sidewalk (or CW for Crosswalk)  
01 ← Improvement Number (Matches **1** on Map)



## CityPlace/Uptown Station

Figure 8A-3 illustrates the existing conditions in the half-mile area around the CityPlace/Uptown Station. The area is dense, urban, and very well connected for pedestrians and cyclists, with only a limited number of gaps in the sidewalk network. Since the station is underground beneath U.S. 75 (Central Expressway), the highway is removed as a barrier to access from either side. However, heavy traffic along several busy streets can still be an impediment to bicycle and pedestrian travel.

Figure 8A-4 shows the recommended improvements in the half-mile area around the CityPlace/Uptown Station. In addition to filling the limited number of sidewalk gaps, the recommended improvements include:

- For crossing Haskell Avenue at the mid-block location northeast of the station (improvements 8A-CP-CW-031 and 032), the City of Dallas should add crosswalk signing and markings to this crossing location 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.
- For crossing Haskell Avenue at the mid-block location east of the station (improvements 8A-CP-CW-033 and 034), the City of Dallas should add crosswalk signing and markings to this crossing location 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.
- At the intersection of Haskell Avenue at Lemmon Avenue (improvements 8A-CP-CW-037 and 040-043), the City should provide crosswalks and countdown, accessible pedestrian signals for the southwest and southeast legs. Consider geometric changes to the intersection to signalize and/or slow the high-speed double right turn lanes from northeast-bound Lemmon Ave to southwest-bound Haskell Ave. Pedestrian-actuated RRFB's might also be considered for crossing the double right-turn movement if geometric changes are infeasible. New sidewalk along the northwest edge of the channelizing island in the middle of this large intersection should also be built in conjunction with the connecting crosswalks.
- For crossing Haskell Avenue at Munger Avenue (improvement 8A-CP-CW-044), the City should add advance yield lines and "Yield Here to Pedestrians" signing at the yield lines for the existing signed and marked school crosswalk. Consider pedestrian-actuated RRFB's or a pedestrian hybrid beacon to further enhance the visibility of crossing pedestrians, particularly if no school crossing guard is present or study indicates pedestrian crossing demand outside school arrival/dismissal hours.
- For crossing Lemmon Avenue E at Howell Street (improvement 8A-CP-CW-010), the City should add a 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.

- The west leg of Lemmon Avenue at Washington Avenue (improvement 8A-CP-CW-035) has a pedestrian crossing prohibition and lack of crosswalk, presumably due to the northbound double left turn movement from Washington Ave. The City should reconsider if a single left turn would function adequately for the northbound approach and/or explore alternative lane configurations and signal phasing to allow for a west leg crosswalk to operate at separate times than the northbound left turn. If so, add the west leg crosswalk with countdown, accessible pedestrian signals.
- For crossing Lemmon Avenue at Caddo Street (improvement 8A-CP-CW-036), the City should 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 a 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.
- For crossing Lemmon Avenue at Oak Grove Avenue (improvements 8A-CP-CW-008 and 009), the City should add advance yield lines and "Yield Here to Pedestrians" signing at the yield lines for existing signed and marked crosswalk. Add a pedestrian hybrid beacon to further enhance visibility of crossing pedestrians.
- For crossing Blackburn Street at Travis Street (improvements 8A-CP-CW-003 and 004), the City should 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.
- At the crossing of Cole Avenue at Haskell Avenue (improvement 8A-CP-CW-001), a marked and signed crosswalk is already in place across three-lane, one-way street near North Dallas High School. The City should 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.

The City of Dallas is planning on-street bikeways along Cole Avenue, Hall Street, McKinney Avenue, Oak Grove Avenue, Washington Avenue, Capitol Avenue, and Haskell Avenue near the station.

Additional details about other improvements recommended in Figure 8A-4, as well as challenges associated with the recommended gaps to remain, are included in the matrix notes for CityPlace/Uptown Station that can be found in Appendix J.



# FTA DART Stations Last Mile Connections Cityplace/Uptown Station August 2020



**Legend**

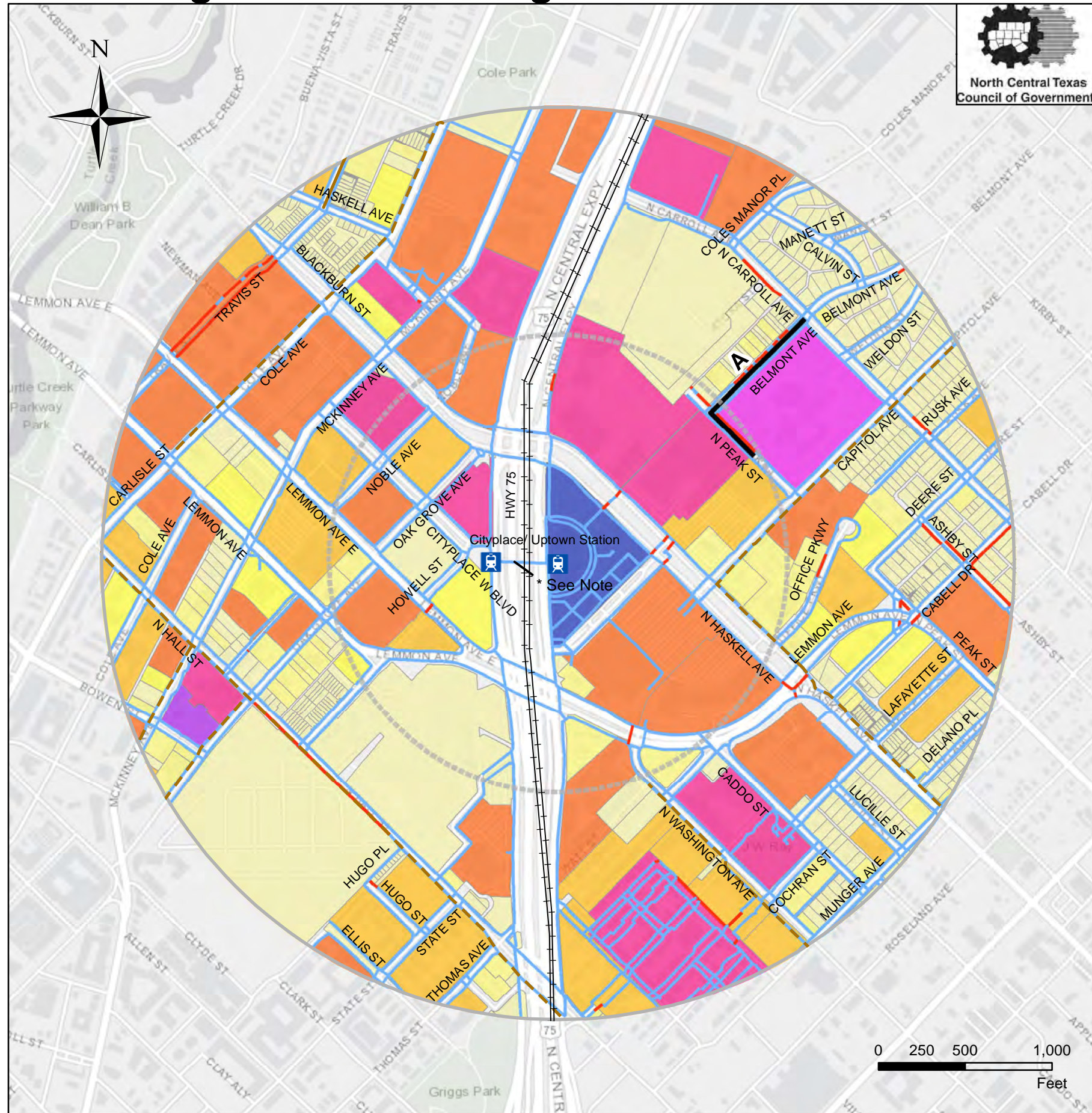
- DART Rail Station
- Railroad Track
- Segment Category**
  - Existing Sidewalk/Crosswalk
  - Sidewalk/Crosswalk Gap
- Regional Veloweb (Mobility 2045)**
  - Regional Existing
  - Regional Funded
  - Regional Planned
- Local Shared Use Paths**
  - Local Existing
  - Local Funded
  - Local Planned
- Local On-Street Bikeways**
  - Local Existing Bicycle Facilities
  - Local Funded Bicycle Facilities
  - Local Planned Bicycle Facilities
- DISPLAY**
  - 0.5 Mile Buffer
  - 0.25 Mile Buffer
  - Primary Routes

## Figure 8A-3 Existing Conditions



**Existing Residential and Employment Population (Number of People)**

- 0 - 10
- 11 - 50
- 51 - 100
- 101 - 250
- 251 - 578
- 579 - 1000
- 1001 - 1500
- 1501 - 2500
- 2501 - 5000
- 5001 - 24170



### Primary Routes

| Route | Street                |
|-------|-----------------------|
| A     | Belmont Ave N Peak St |

\* Escalators/elevators to underground station.

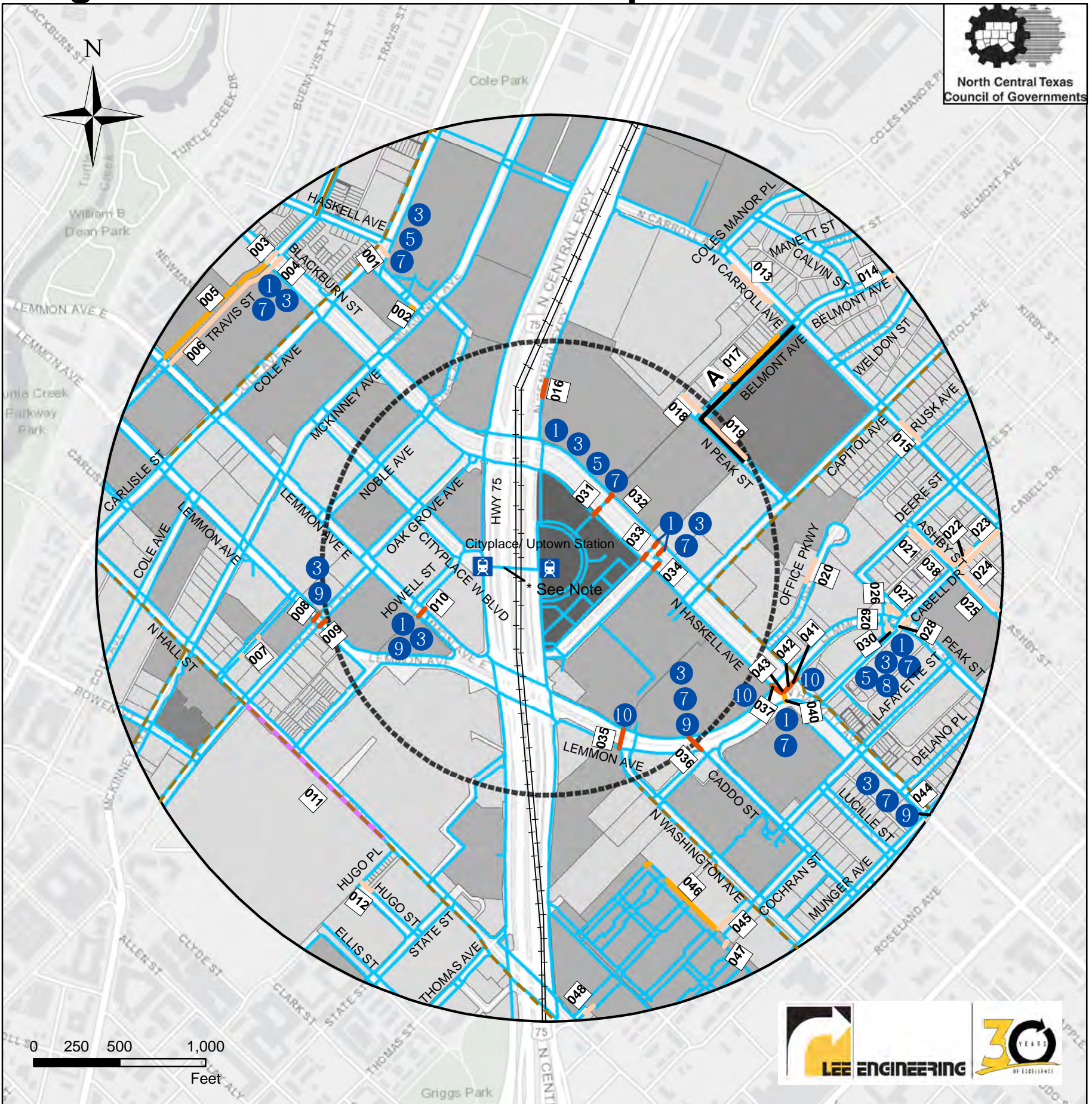
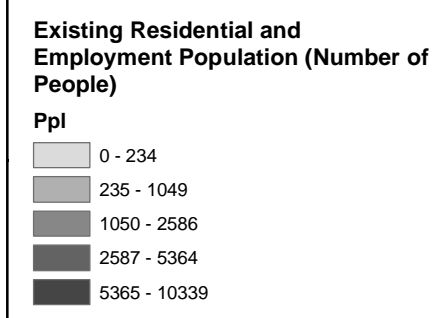
# FTA DART Stations Last Mile Connections Cityplace/Uptown Station August 2020



## Figure 8A-4 Recommended Improvements

### Legend

- DART Rail Station
- Railroad Track
- Sidewalk**
- Existing Sidewalk/Crosswalk
- Proposed Sidewalk/Crosswalk by Priority** 1
- High
- Medium
- Low
- Gap to Remain
- Regional Veloweb (Mobility 2045)**
- Regional Existing
- Regional Funded
- Regional Planned
- Local Shared Use Paths**
- Local Existing
- Local Funded
- Local Planned
- Local On-Street Bikeways**
- Local Existing Bicycle Facilities
- Local Funded Bicycle Facilities
- Local Planned Bicycle Facilities
- Buffers**
- 0.5 Mile Buffer
- 0.25 Mile Buffer
- Primary Routes
- Primary Routes



### Possible Pedestrian Safety Countermeasures

#### Unsignalized Crosswalk Improvements

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

#### Signalized Crosswalk Improvements

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

### Primary Routes

| Route | Street                |
|-------|-----------------------|
| A     | Belmont Ave N Peak St |

\* Escalators/elevators to underground station.

Improvement Code Legend (See Matrix)

8A-CP-SW-01

- 8A ← Station Number
- CP ← Station Abbreviation
- SW ← Sidewalk (or CW for Crosswalk)
- 01 ← Improvement Number (Matches 1 on Map)



## Convention Center Station

Figure 8B-3 illustrates the existing conditions in the half-mile area around the Convention Center Station. The station is well situated for special event-related walking trips to and from the Kay Bailey Hutchison Convention Center in which it is housed. Other downtown areas to the north are also well connected by sidewalk and crosswalks to the station, though many are closer to other existing DART stops. IH-30 and its interchange with IH-35 E form barriers to bicycle and pedestrian travel to and from the south, as do the freight rail lines paralleling Hotel Street.

Figure 8B-4 shows the recommended improvements in the half-mile area around the Convention Center Station. Several new sidewalk and shared use path improvements to fill existing gaps are programmed along Canton Street and Cadiz Street parallel to IH-30 as part of the IH-30 Canyon project that is under design by the City of Dallas and TxDOT.

The City of Dallas is planning a shared use path as part of the Regional Veloweb along the north side of IH-30, south of Sports Street and Canton Street along an alignment that overlaps with the IH-30 Canyon project area. The shared use path turn south at Akard Street.

It is recommended that the certain pedestrian elements be incorporated into the IH-30 Canyon project at the following locations:

- The segment of Regional Veloweb shared use path on the north side of IH-30 between Lamar Street and Hotel Street (improvement 8B-CC-VW-V01) would most likely involve a retaining wall near the top of the existing slope between the westbound IH 30 collector-distributor roadway and a private parking lot. Right-of-way or easement acquisition would be needed to cross the southern corner of the parking lot near an abandoned rail bridge over IH 30.
- For crossing Hotel Street at the Regional Veloweb shared use path (improvement 8B-CC-CW-021), the project should add a 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.
- Along the north side of IH-30 (and south side of Canton Street) between Akard Street and Griffin Street (improvement 8B-CC-VW-V02), street trees and a streetlight pole occupy the narrow space between the Canton Street travel lanes and the retaining wall for the IH 30 mainlanes that would be needed for sidewalk or the regional Veloweb trail planned here.

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 existing pedestrian demand, with parallel sidewalk existing on the northwest side adjacent to active land uses. It may receive use as part of a continuous Veloweb system, but strong consideration should be given to realign the Veloweb to the northwest side of Canton Street 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.

- If the road diet and shared use path realignment described for improvement 8B-CC-VW-V02 above are not feasible, consider a pedestrian hybrid beacon for the south-side crosswalk of the shared use path where it will cross the on-ramp to the IH-30 westbound mainlanes

(improvement 8B-CC-CW-024). The beacon should be coordinated with the adjacent traffic signal at Canton Street and Akard Street.

Elsewhere in the half-mile area for Convention Center Station, recommended improvements include:

- At the mid-block crossing of Marilla Street next to the Convention Center entrance (improvement 8B-CC-CW-001), the City should add advance yield lines and "Yield Here to Pedestrians" signing for the 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 to enable a shorter crossing distance and create space for a median refuge island.
- For crossing the south leg of Akard Street at its intersection with Marilla Street (improvement 8B-CC-CW-016), the City should add advance yield lines and "Yield Here to Pedestrians" signing for the 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.
- For crossing the northeast leg of Canton Street at its intersection with Browder Street (improvement 8B-CC-CW-035), the City should add advance yield lines and "Yield Here to Pedestrians" signing for the existing signed and marked crosswalk across a three-lane, one-way street. Add a curb extension to prevent parking in the left-hand lane too close to the 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.
- For the west leg of the Riverfront Avenue/Cadiz Street intersection (improvement 8B-CC-CW-032), add a marked crosswalk with pedestrian ramps and countdown, accessible pedestrian signals. Remove the pedestrian prohibition against crossing this leg of the intersection. Add protected-only phasing for the left turn from the northbound IH-35E off-ramp to westbound Riverfront Boulevard in conjunction with this change.

Additional details about other improvements recommended in Figure 8B-4, as well as challenges associated with the recommended gaps to remain, are included in the matrix notes for Convention Center Station that can be found in Appendix J.





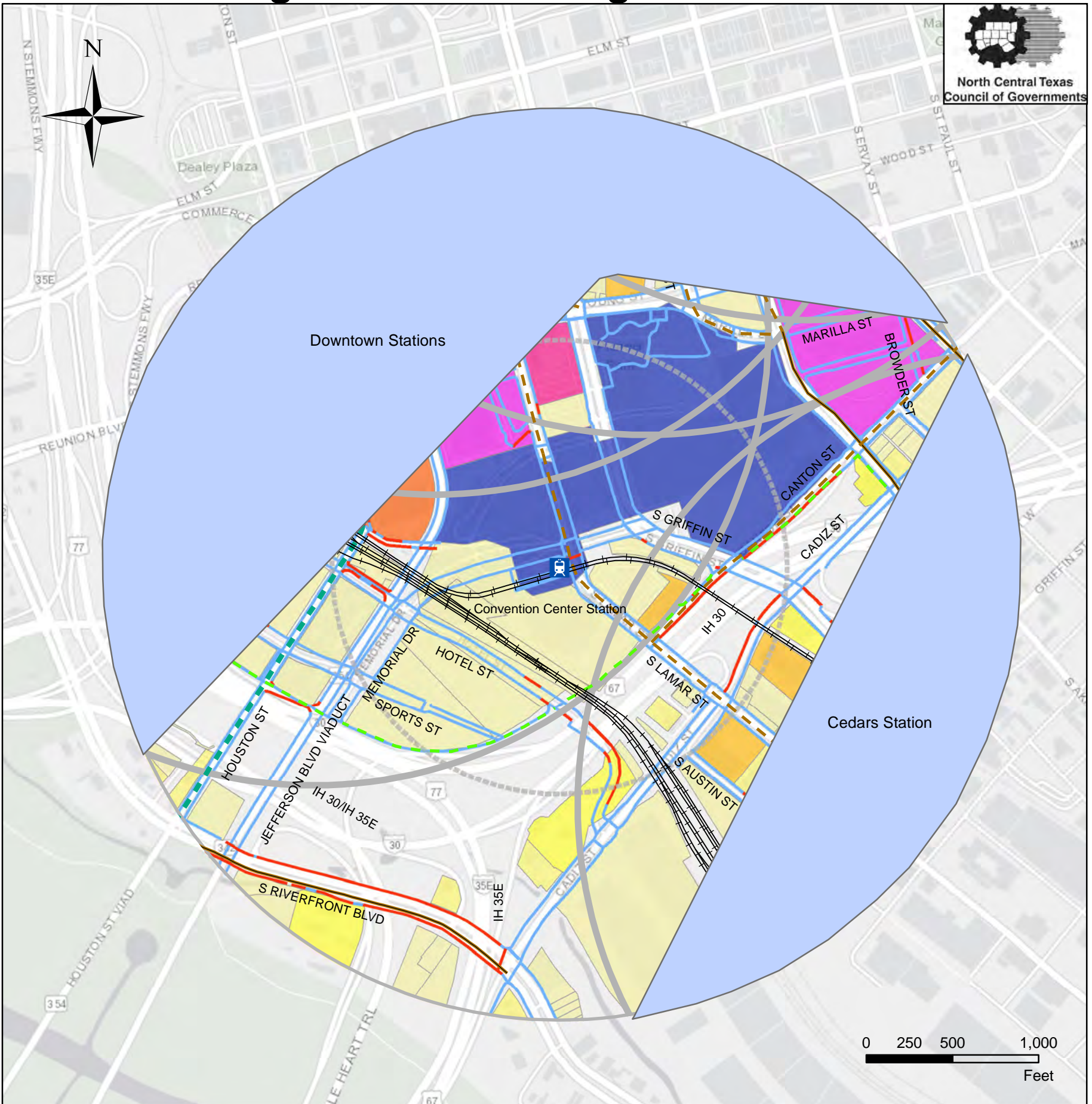
# FTA DART Stations Last Mile Connections Convention Center Station

August 2020



- Legend**
- DART Rail Station
  - Railroad Track
  - Segment Category**
  - Existing Sidewalk/Crosswalk
  - Sidewalk/Crosswalk Gap
  - Regional Veloweb (Mobility 2045)**
  - Regional Existing
  - Regional Funded
  - Regional Planned
  - Local Shared Use Paths**
  - Local Existing
  - Local Funded
  - Local Planned
  - Local On-Street Bikeways**
  - Local Existing Bicycle Facilities
  - Local Funded Bicycle Facilities
  - Local Planned Bicycle Facilities
  - DISPLAY**
  - 0.5 Mile Buffer
  - 0.25 Mile Buffer

## Figure 8B-3 Existing Conditions



**Existing Residential and Employment Population (Number of People)**

|              |
|--------------|
| 0 - 10       |
| 11 - 50      |
| 51 - 100     |
| 101 - 250    |
| 251 - 578    |
| 579 - 1000   |
| 1001 - 1500  |
| 1501 - 2500  |
| 2501 - 5000  |
| 5001 - 24170 |

**Primary Routes**  
None for this station area

# FTA DART Stations Last Mile Connections Convention Center Station August 2020



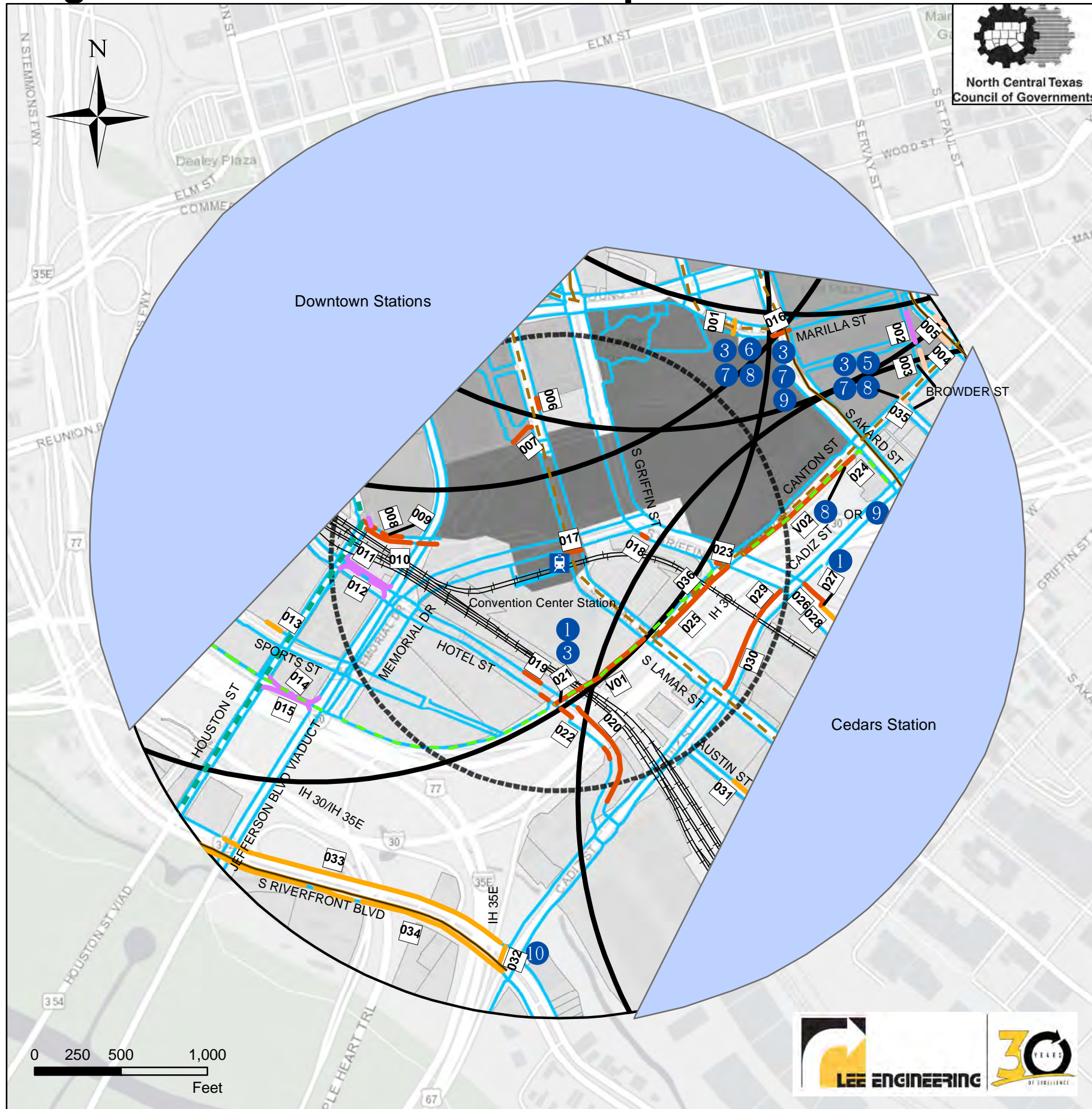
## Figure 8B-4 Recommended Improvements

### Legend

- DART Rail Station
- Railroad Track
- Sidewalk**
- Existing Sidewalk/Crosswalk
- Proposed Sidewalk/Crosswalk by Priority** 1
- High
- Medium
- Low
- Gap to Remain
- Regional Veloweb (Mobility 2045)**
- Regional Existing
- Regional Funded
- Regional Planned
- Local Shared Use Paths**
- Local Existing
- Local Funded
- Local Planned
- Local On-Street Bikeways**
- Local Existing Bicycle Facilities
- Local Funded Bicycle Facilities
- Local Planned Bicycle Facilities
- Buffers**
- 0.5 Mile Buffer
- 0.25 Mile Buffer

### Existing Residential and Employment Population (Number of People)

- Ppl**
- 0 - 234
  - 235 - 1049
  - 1050 - 2586
  - 2587 - 5364
  - 5365 - 10339



### Possible Pedestrian Safety Countermeasures

#### Unsignalized Crosswalk Improvements

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

#### Signalized Crosswalk Improvements

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

### Primary Routes

None for this station area

| Improvement Code Legend (See Matrix) |   |
|--------------------------------------|---|
| 8B-CC-SW-01                          |   |
| 8B                                   | ← Station Number  |
| CC                                   | ← Station Abbreviation  |
| SW                                   | ← Sidewalk (or CW for Crosswalk)  |
| 01                                   | ← Improvement Number (Matches <span style="border: 1px solid black; padding: 2px;">1</span> on Map) |



## Cedars Station

Figure 8C-3 illustrates the existing conditions in the half-mile area around the Cedars Station. This station serves a mix of urban residential, commercial and institutional land uses that are relatively well connected via the sidewalk network, though several streets such as Wall Street, Austin Street, Blakeney Street, and Browder Street have significant sidewalk gaps.

Figure 8C-4.1 shows the recommended improvements in the half-mile area around the Cedars Station. Figure 8C-4.2 provides a zoomed-in view of a portion of the station area with a dense concentration of improvements. Several new sidewalk and shared use path improvements to fill existing gaps are programmed along Corsicana Street and Griffin Street parallel to IH-30 as part of the IH-30 Canyon project that is under design by the City of Dallas and TxDOT.

The City of Dallas is planning a shared use path as part of the Regional Veloweb along the north side of IH-30, south of Corsicana Street along an alignment that overlaps with the IH-30 Canyon project area.

It is recommended that the certain pedestrian elements be incorporated into the IH-30 Canyon project at the following locations:

- The segment of Regional Veloweb shared use path on the north side of IH-30 between Cadiz Street and Ervay Street (improvement 8C-CS-VW-V01 and V02) would most likely involve relocation of parking meters and other appurtenances in the narrow space between the street and the IH-30 retaining wall that would be required for sidewalk or shared use path.
- If the future Regional Veloweb shared use path currently planned along Corsicana Street crosses Ervay Street on the southeast leg of their intersection (improvement 8C-CS-CW-01B), 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 and the crossing may be better suited for the northwest leg of the intersection (improvement 8C-CS-CW-01A).
- In conjunction with the future Regional Veloweb shared use path currently planned to cross St. Paul Street at this location (improvement 8C-CS-CW-002), 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.

Elsewhere in the half-mile area for Cedars Station, recommended improvements include:

- Crossing Wall Street and Belleview Street at four locations immediately adjacent to the station (improvements 8C-CS-CW-081, 082, 085, and 094), the City of Dallas should coordinate with DART to add signed and marked crosswalks with pedestrian ramps, signing, and lighting where not already present.
- At the Akard Street crossings at Belleview Street and Sullivan Drive (improvements 8C-CS-CW-023 and 028), the City of Dallas should add new signed and marked crosswalks.

Consider a road diet from four lanes to three lanes and median refuge islands at each location, consistent with a 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.

- For crossing Lamar Street at Powhattan Street (improvement 8C-CS-CW-092), the City should add advance yield lines and "Yield Here to Pedestrians" signing for the existing signed and marked crosswalk. Consider upgrading with rectangular rapid flashing beacons (RRFB's) on an overhead mast arm or a pedestrian hybrid beacon.
- For crossing Lamar Street at McKee Street (improvements 8C-CS-CW-095 and 096), the City should add advance yield lines and "Yield Here to Pedestrians" signing for the existing signed and marked crosswalk with existing overhead warning sign and flashing yellow beacons. Consider upgrading beacon to rectangular rapid flashing beacons (RRFB's) on the overhead display or a pedestrian hybrid beacon.
- At the Ervay Street crossings at Gano Street, McKee Street, and Beaumont Street (improvements 8C-CS-CW-008, 009, 014), the City should add signed and marked crosswalks where not currently present. The City should also consider a road diet from four lanes to three lanes to build median refuge islands, consistent with City-funded project to add on-street bike lanes along Ervay St. If remaining as four lanes, add advance yield line and "Yield Here to Pedestrians" signing for existing signed and marked school crosswalk.
- At the southwest end of Belleview Street at its intersection with Roe Street, a Regional Veloweb shared use path is planned to connect towards the southwest, bridging over the existing Union Pacific Railroad tracks to Riverfront Blvd and the Trinity River trails south of the study area (improvement 8C-CS-VW-V04). This pathway would also provide access to Texas Central Partners' passenger station for high-speed rail between Dallas and Houston, which is proposed for a vacant parcel near the tracks. The shared use path would require right-of-way acquisition and coordination with the multiple parties involved.

Additional details about other improvements recommended in Figure 8C-4.1 and 8C-4.2, as well as challenges associated with the recommended gaps to remain, are included in the matrix notes for Cedars Station that can be found in Appendix J.



# FTA DART Stations Last Mile Connections Cedars Station

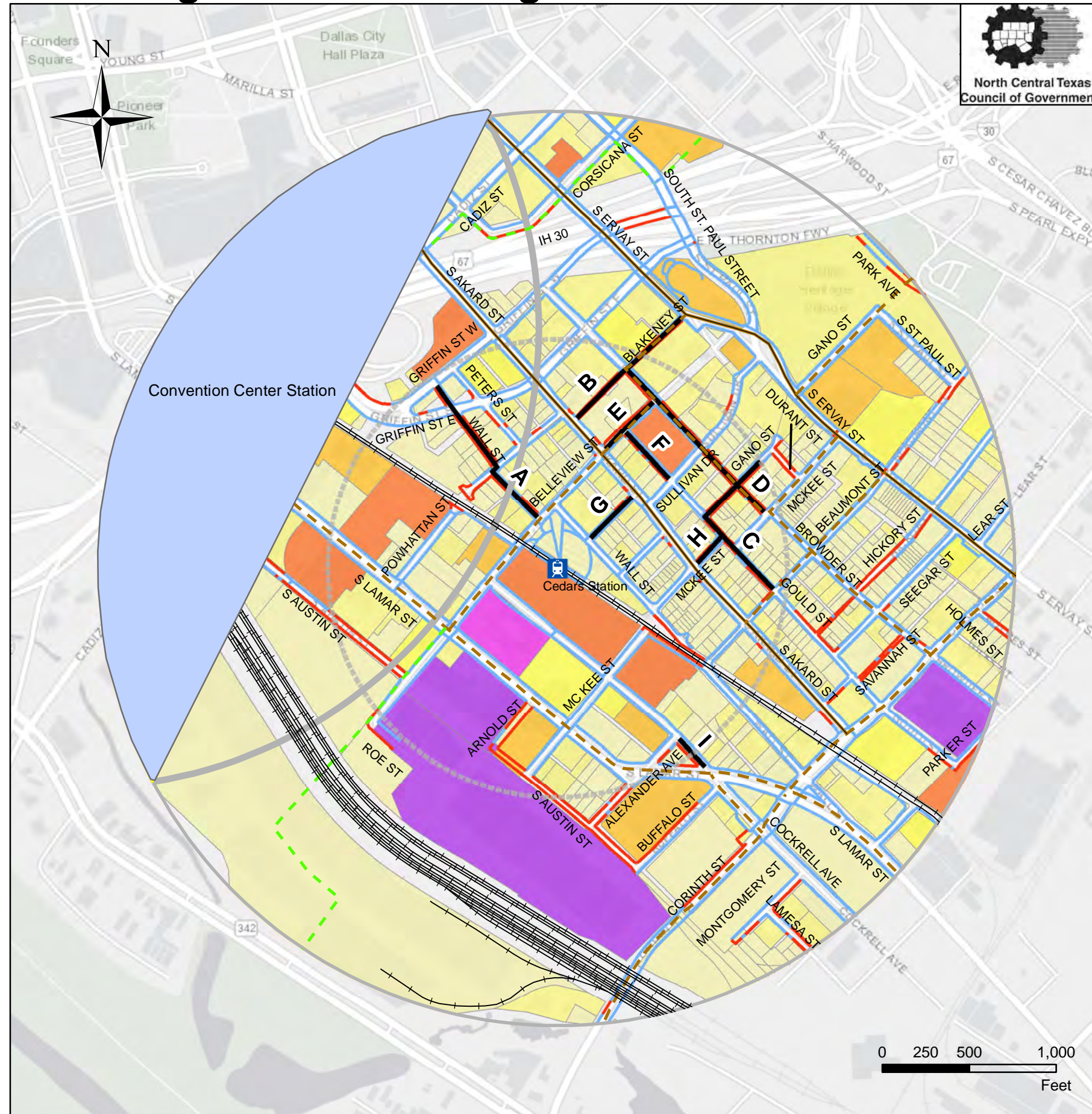
August 2020



**Legend**

- DART Rail Station
- Railroad Track
- Segment Category**
  - Existing Sidewalk/Crosswalk
  - Sidewalk/Crosswalk Gap
- Regional Veloweb (Mobility 2045)**
  - Regional Existing
  - Regional Funded
  - Regional Planned
- Local Shared Use Paths**
  - Local Existing
  - Local Funded
  - Local Planned
- Local On-Street Bikeways**
  - Local Existing Bicycle Facilities
  - Local Funded Bicycle Facilities
  - Local Planned Bicycle Facilities
- DISPLAY**
  - 0.5 Mile Buffer
  - 0.25 Mile Buffer
  - Primary Routes

## Figure 8C-3 Existing Conditions



**Existing Residential and Employment Population (Number of People)**

- 0 - 10
- 11 - 50
- 51 - 100
- 101 - 250
- 251 - 578
- 579 - 1000
- 1001 - 1500
- 1501 - 2500
- 2501 - 5000
- 5001 - 24170

### Primary Routes

| Route | Street           |
|-------|------------------|
| A     | Wall St          |
| B     | Blakeney St      |
| C     | Gould St Gano St |
| D     | Browder St       |
| E     | Belleview St     |
| F     | Gould St         |
| G     | Sullivan Dr      |
| H     | McKee St         |
| I     | Cockrell Ave     |

# FTA DART Stations Last Mile Connections Cedars Station

August 2020



## Figure 8C-4.1 Recommended Improvements

### Legend

- DART Rail Station
- Railroad Track

### Sidewalk

- Existing Sidewalk/Crosswalk

### Proposed Sidewalk/Crosswalk by Priority

1

- High
- Medium
- Low
- Gap to Remain

### Regional Veloweb (Mobility 2045)

- Regional Existing
- Regional Funded
- Regional Planned

### Local Shared Use Paths

- Local Existing
- Local Funded
- Local Planned

### Local On-Street Bikeways

- Local Existing Bicycle Facilities
- Local Funded Bicycle Facilities
- Local Planned Bicycle Facilities

### Buffers

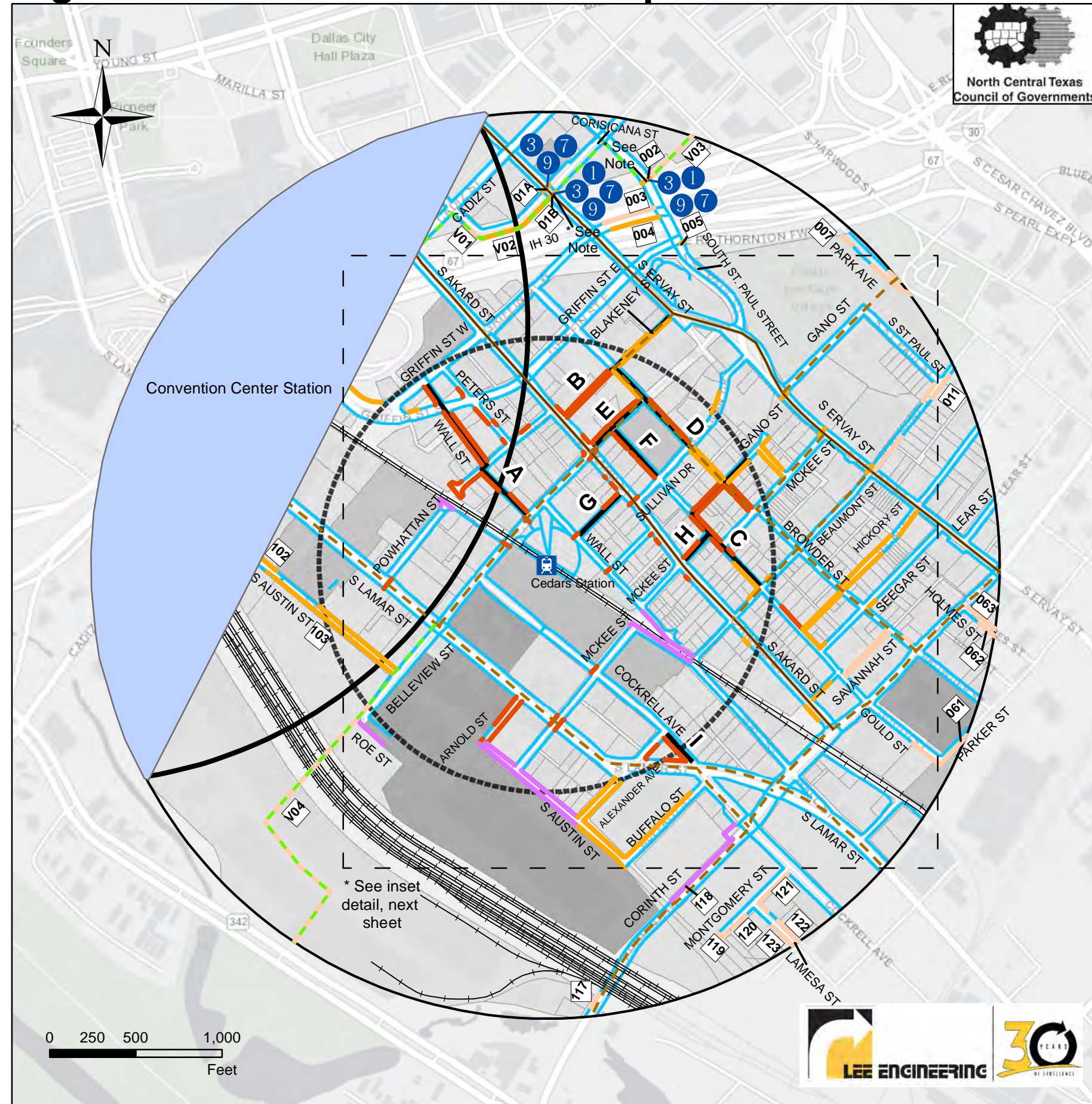
- 0.5 Mile Buffer
- 0.25 Mile Buffer
- Primary Routes

### Existing Residential and Employment Population (Number of People)

Ppl

- 0 - 234
- 235 - 1049
- 1050 - 2586
- 2587 - 5364
- 5365 - 10339

\* Need contingent on construction of Regional Veloweb Shared Use Path.



### Possible Pedestrian Safety Countermeasures

- #### Unsignalized Crosswalk Improvements
- 1 Crosswalk Signs, Markings & Lighting
  - 2 Raised Crosswalk
  - 3 Advance "Yield Here" Sign
  - 4 In-Street Pedestrian Crossing
  - 5 Curb Extension
  - 6 Pedestrian Refuge Island
  - 7 Rectangular Rapid Flashing Beacon
  - 8 Road Diet
  - 9 Pedestrian Hybrid Beacon
- #### Signalized Crosswalk Improvements
- 10 Add Marked Crosswalks & Provide Countdown, Accessible Pedestrian Signals
  - 11 Traffic Signal

### Primary Routes

| Route | Street           |
|-------|------------------|
| A     | Wall St          |
| B     | Blakeney St      |
| C     | Gould St Gano St |
| D     | Browder St       |
| E     | Bellevue St      |
| F     | Gould St         |
| G     | Sullivan Dr      |
| H     | McKee St         |
| I     | Cockrell Ave     |

#### Improvement Code Legend (See Matrix)

8C-CS-SW-01

- 8C ← Station Number
- CS ← Station Abbreviation
- SW ← Sidewalk (or CW for Crosswalk)
- 01 ← Improvement Number (Matches 1 on Map)



# FTA DART Stations Last Mile Connections Cedars Station

August 2020



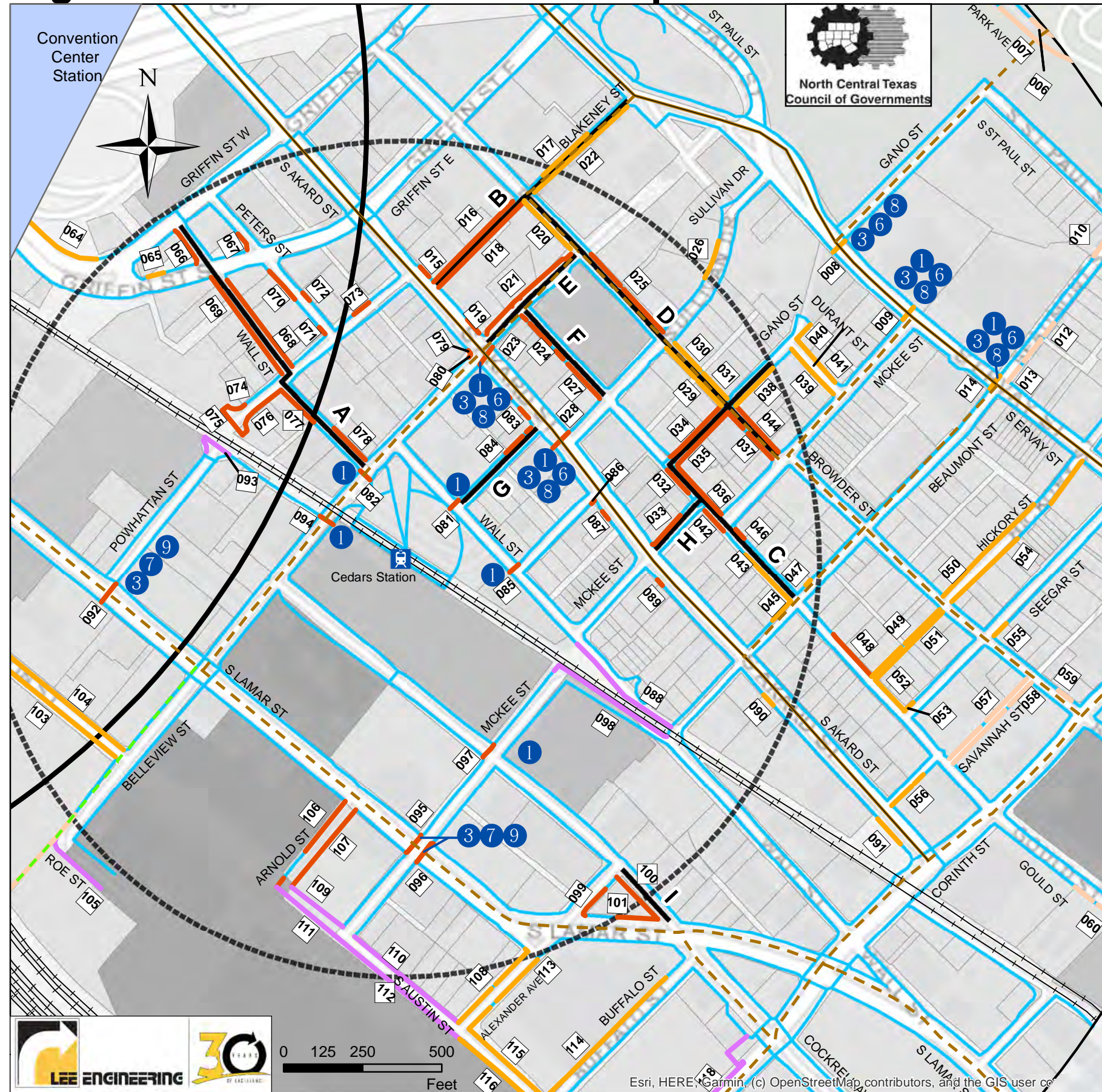
## Figure 8C-4.2 Recommended Improvements Inset Detail

### Legend

- DART Rail Station
- Railroad Track
- Sidewalk**
- Existing Sidewalk/Crosswalk
- Proposed Sidewalk/Crosswalk by Priority** 1
- High
- Medium
- Low
- Gap to Remain
- Regional Veloweb (Mobility 2045)**
- Regional Existing
- Regional Funded
- Regional Planned
- Local Shared Use Paths**
- Local Existing
- Local Funded
- Local Planned
- Local On-Street Bikeways**
- Local Existing Bicycle Facilities
- Local Funded Bicycle Facilities
- Local Planned Bicycle Facilities
- Buffers**
- 0.5 Mile Buffer
- 0.25 Mile Buffer
- Primary Routes

### Existing Residential and Employment Population (Number of People)

- Ppl
- 0 - 234
  - 235 - 1049
  - 1050 - 2586
  - 2587 - 5364
  - 5365 - 10339



### Possible Pedestrian Safety Countermeasures

#### Unsignalized Crosswalk Improvements

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

#### Signalized Crosswalk Improvements

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

### Primary Routes

| Route | Street           |
|-------|------------------|
| A     | Wall St          |
| B     | Blakeney St      |
| C     | Gould St Gano St |
| D     | Browder St       |
| E     | Belleview St     |
| F     | Gould St         |
| G     | Sullivan Dr      |
| H     | McKee St         |
| I     | Cockrell Ave     |

#### Improvement Code Legend (See Matrix)

- 8C- ← Station Number  
CS ← Station Abbreviation  
SW ← Sidewalk (or CW for Crosswalk)  
01 ← Improvement Number (Matches 1 on Map)

