EXISTING DART RAIL OPERATIONS

- Terminate near East TC and turnback to DFW
- Continue existing service pattern to Parker Road Station
- Add service to Baylor

Orange Line Options (3):

D2 OPERATING CONCEPT

DART RAIL OPERATIONS WITH D2 SUBWAY

LEGEND

- DART LRT
- Trinity Rail Express
- Existing Stations
- D2 Stations
NOISE & VIBRATION ASSESSMENT PROCESS

1. DOCUMENT EXISTING NOISE AND VIBRATION PROPENSITY AT REPRESENTATIVE SENSITIVE LAND USE LOCATIONS

2. ESTIMATE NOISE AND VIBRATION LEVELS WITH THE PROJECT
   • OPERATING PLAN
   • VEHICLE SPECIFICATIONS

3. IDENTIFY IMPACTS AND PROPOSE MITIGATION CONSISTENT WITH FTA AND DART GUIDANCE

WHAT KINDS OF LAND USES ARE CONSIDERED SENSITIVE?

- LAND WHERE QUIET IS ESSENTIAL TO PURPOSE
  - Amphitheater
  - Recording Studios
  - Some Historic Properties

- PLACES WHERE PEOPLE SLEEP
  - Homes
  - Apartments
  - Hotels
  - Hospitals

- INSTITUTIONAL USES WITH DAYTIME/EVENING USE
  - Churches
  - Libraries
  - Schools
  - Theaters
  - Cemeteries
  - Museums
  - Historic Sites
  - Parks

TYPES OF MITIGATION

NOISE MITIGATION
Mitigation for noise impacts may involve treatment:

1. At the Noise Source
2. Along the Source-to-Receiver Propagation Path, or
3. At the Receiver

Typical Noise Mitigation Techniques Include:

- Stringent transit vehicle and equipment specifications
- Rail vehicle treatments
- Track treatments (e.g. moveable-point frogs and wayside rail lubricators)
- Bell Shrouds
- Enhanced maintenance
- Restricted vehicle speeds or operating hours
- Alignment adjustments
- Insulation of affected buildings

VIBRATION MITIGATION
Vibration mitigation measures are similar to those listed for noise, but can also include:

- Track treatments (e.g. resilient rail fasteners, ballast mats, resiliently-supported ties and floating track slabs).
- Building vibration isolation (for new construction)
- Vibration mitigation for historic buildings (especially during construction)
Noise levels at Long-Term (LT) measurement sites represent 24-48 hour Ldn values. Noise levels at Short-Term (ST) measurement sites represent one-hour Leq values.

- Noise Measurement Site
- Vibration Propagation Testing Site
Historic Resources*

*Not a complete list of resources. A comprehensive survey of resources is underway.

1704 N. Griffin St. Crown Plaza Hotel Federal Building Santa Fe Building Adolphus Hotel Magnolia Building DP&L

1 Vaughn Mercantile Continental Building Statler Hotel Lizard Lounge 2615 Elm St. Uptown Luna Prep
Potential impacts to parklands will be assessed in accordance with US DOT Section 4(f) and TPWD Chapter 26.

Potential impacts may be related to noise, access, visual, right-of-way acquisition, or passing underneath.
Stakeholders indicated potential development north of the Perot Museum with River Street being an important connector. Traffic signalization would be proposed at River Street and Field Street. It would be desirable for River Street to cross the tracks north of the DART Museum Way Station in this location.

Just as it is important to allow for vehicles and pedestrians to cross the tracks at River Street north of the Museum Way Station, it is also important to maintain the existing Hord Street connection south of the Tunnel Portal. Based on this stakeholder feedback, DART will look at the possibility of maintaining this important grid connection.

Noise is a stakeholder concern where the train tracks curve near Victory Park residential buildings.

Based on the vision of the Dallas 360 Plan for this area, pedestrian connections along Broom Street and McKinney Avenue adjacent to Woodall Rodgers and along Field Street could see future improvements. Stakeholders propose additional pedestrian connections along either side of the tunnel portal and Museum Way Station in this area. See Examples 1, 2 and 3 photos.

DART tracks will exist in the center of Museum Way within the 35 feet of DART owned ROW. DART will work with stakeholders on the cross section of the new Museum Way condition to include vehicular travel lanes, a possible bike lane, on street parking and a pedestrian area. Stakeholder discussion included maintaining service and garage access points that exist mid-block along Museum Way. See Existing Museum Way photo.

See Examples 1, 2 and 3 photos.
Stakeholders agreed on several potential sites either side of Griffin Street and at either end of the station, including a potential multi-story transit center that completely reimagines the space that currently serves as the West Transfer Center. Thinking big, stakeholders felt that the block north of the existing transfer center may be needed as part of this potential development plan. See Example 1 photo.

A second portal is suggested directly across from the transfer center on the east side of Griffin Street at the corner of existing at grade parking. A portal location in this area built with the flexibility to complement future multi-story development would be encouraged. This would also allow subway users to decide which side of Griffin Street they wish to access before coming to the surface. Their choice would be based on destination or access to the West End Facilities or Akard Station to continue their travel. See Example 2 photo.

The DART owned Rosa Parks Plaza is also a potential space for a portal location. The portal would reach west and provide direct access to Lamar Street. Many stakeholders have indicated their desire to access the portals in urban plaza areas and near parks. See Example 3 photo.

Reimagining the sunken plaza directly west of the Westin Dallas Downtown Hotel is another potential site for a subway pedestrian portal. National precedents and projects around the world show the possibility this space has if redesigned to allow direct at grade pedestrian access on all three sides into the plaza. The design could be accomplished to keep the space vibrant and active, take full advantage of existing and future restaurant and retail services, connect where appropriate to the existing tunnel system in this location and provide direct subway portal access. See Example 1 photo.

An additional potential portal is indicated directly south of Bank of America at the corner of existing surface parking. A portal location in this area built with the flexibility to complement future multi-story development would be encouraged. This would also be the most southern reaching portal for this subway and provides access to multiple destinations, employment and education areas. See Example 4 photo.
• Stakeholders suggest shifting the Commerce Station to the east and position it equidistant from Ervay and Akard Streets. Providing pedestrian portals to these streets allow riders direct access to strong pedestrian connections at grade to the north into the heart of downtown and south to important employment areas and the public library and city hall.

• The Magnolia Pass Through is a proposed connection to move pedestrians from the existing Browder Street Mall across Commerce Street and connect Pegasus Plaza and Main Street. Stakeholders indicate an opportunity to strengthen this connection by also incorporating a multi-directional portal in this space.

• A second portal location within Pegasus Plaza, at the ‘back’ of the Magnolia Hotel was suggested in the event that a quick study of the location in comparison to the portal above indicates better opportunity for pedestrian connection to both Akard Street and the Browder Street Mall, positively activating the plaza and complementing the area patio dining experience and surrounding services.

• A third access point in the vicinity of the Browder Street Mall could provide an additional entry into the subway. The design would consider a smaller footprint and possibly incorporate needed tunnel ventilation all designed to keep within the aesthetic of the smaller space and complement the scale of services like ground floor retail and restaurant dining surrounding it.

• Stakeholders indicated the potential for a portal in the at grade parking currently bound by Jackson, Ervay and Wood Streets and the Interurban Building Apartments. This portal would be located in the northeast corner at Jackson and Ervay Streets and provide important pedestrian connection to the north and south. Stakeholders felt a portal location in this area built with the flexibility to complement future multi-story development would be encouraged.

• Secondary to the portal listed above, stakeholders discussed the possibility of an integral portal entry at the first floor of the existing garage bounded by Lane, Commerce, Jackson and Ervay Streets. This, and the Browder Street Mall portal, would provide riders access to Neiman Marcus and other commercial and business destinations.
Stakeholders have indicated their desire to access the portals in urban spaces, plaza areas and near parks. Main Street Garden, being located close to this station, provides the opportunity to exit the subway into public space. The exact location of the portal is left undetermined and coordination with the City of Dallas, Park and Recreation Department and other partnering agencies would solidify a supported opportunity—be it in the park, at the edge or along the street. This decision would also indicate size and accommodation for the portal. See Example 1 photo.

Additional plaza and open space exists along Elm Street at the corner of Harwood Street and further west at mid-block. Both of these spaces could be viewed as underutilized and stakeholders identified them as possible opportunities for portal locations because of their adjacency to the UNT System Administration, UNT Dallas College of Law and Municipal Courthouse and direct proximity to destinations such as the Majestic. See Example 2 photo.

Stakeholders support potential redevelopment of the existing East Transfer Center to include multiple stories, ground floor services, ground floor or below grade bus transfer, drop-off and pick-up capabilities with adjacency to future streets. A portal could be located to allow for an experience accessing the heart of the development or taking advantage of its proximity to Carpenter Park or providing a portal along Pearl Street. See Example 3 photo.

Example 1 - San Francisco, CA
Example 2 - Tokyo, Japan
Example 3 - Boston, Massachusetts
DEEP ELLUM FOCUS AREA

FOCUS AREA SUMMARY

• Stakeholders support the reconstruction of Good Latimer from North Central Expressway (I-345 frontage road) to the north to Elm Street to the south. North and south bound lanes of traffic on Good Latimer would be rebuilt adjacent to one another. Existing DART tracks would be removed from the center of Good Latimer and placed to the west. This will provide a shorter crossing distance for pedestrians. DART will prepare Complete Street cross sections of Good Latimer in this area for review and stakeholder feedback.

• Stakeholders overwhelmingly support the placement of pedestrian access portals in or near the edge of Carpenter Park. See Example 1 photo.

• Maintaining access to Pacific Avenue and Gaston Avenue during construction is very important to stakeholders. Stakeholders understand there will be short term impacts to the downtown grid in several locations through the cut and cover construction process.

• Temporary construction closures at Cesar Chavez is understandable for stakeholders, but the connection north and south bound on Cesar Chavez must be maintained long term. Stakeholders understand the tunnel portal location will forever disconnect the North Central Expressway frontage road east of I-345 at Swiss Avenue.

• Based on the vision of the Dallas 360 Plan for this Catalytic Development Area, stakeholders support very strong pedestrian connections adjacent to the tunnel portal. This would create a Swiss Avenue sized of Good Latimer to Carpenter Park west of Cesar Chavez, continuing on to Pacific Plaza.

• With the loss of the Deep Ellum Station, DART should consider improvements at the existing Baylor Station. Improved security measures are a desire of stakeholders as well as improved access into Deep Ellum streets to the south from the existing Baylor Station. Possibly renaming the station ‘Baylor/Deep Ellum’ so as to provide intuitive arrival/destination information should be considered.

• Engineering design of the D2 Subway in Deep Ellum shall not preclude any of the CityMAP Scenarios for I-345 from happening.

STAKEHOLDER COMMENTS (AUGUST 2018)

Example 1 - Cincinnati, Ohio
The Dallas City Council approved Elm-Commerce as the Locally Preferred Alternative in September 2017, but requested that Main and Young/Harwood continue to be evaluated.