INTRODUCTION
The Dallas Area Rapid Transit (DART) Agency is currently in the preliminary design phase for the Dallas Central Business District (CBD) Second Light Rail Alignment, commonly referred to as D2, which includes the development of urban design guidelines, preliminary engineering and environmental documentation.

The D2 subway is a substantial project within Dallas’ urban core. Completion of the D2 project will provide another layer of mobility options to residents and employees living and working in the Downtown Dallas CBD. Based on the locally preferred alternative (LPA), Commerce via Victory and Swiss, this mobility option and access to transportation throughout the DART service area could be within easy walking distance from almost anywhere in the CBD. This improves the quality of life for those working or living in Downtown Dallas by providing a convenient and cost-effective way to travel without relying on private automobiles, while also facilitating access to jobs and residential opportunities for those outside of the CBD. Combining the D2 subway with DART’s existing light rail, bus service and streetcar system supports Dallas’ desire to activate a more pedestrian and bike-friendly street environment, and integrate a multi-modal Complete Streets transportation system.

The D2 subway will also improve light rail transit service through the CBD by reducing congestion on the existing rail lines. Moving the Orange and Green Line trains to the new D2 subway will improve system capacity by allowing additional Red and Blue Line trains to run in time slots previously allocated to Green and Orange Line trains. This also improves redundancy and system reliability by providing an alternative route through the CBD.

The D2 subway offers a rare opportunity to establish a new urban architectural vernacular for subway stations and pedestrian portals in downtown. The purpose of this report is to outline the process for D2 Urban Design and show its development through open and informative stakeholder engagement.

Good urban design has the potential to encourage ridership, maximize the project purpose, enhance the livability of downtown and create long-term value. For this reason, DART is conducting a comprehensive urban design approach to consider feedback from stakeholders, riders, agencies and the City of Dallas before implementing design decisions. How well D2 fits within its urban context will ultimately impact customer perceptions and influence their decisions whether or not to ride the train as an alternative transportation mode.

This report provides an overview of the Urban Design Approach. It will highlight existing policy that has been adopted by The City of Dallas, DART and participating agencies and provides the ‘starting point’ for D2 design.

The report also outlines other documents supported by Dallas stakeholders and future studies being conducted by other agencies that require a level of coordination in the preliminary design considerations for D2. The D2 Subway LPA Map is provided along with corresponding text and a description or definition of Urban Design Elements. Finally the report reviews the stakeholder engagement, guiding principles for design, and the design factors established through stakeholder input.

URBAN DESIGN APPROACH

Focus Areas Meetings
At the time of this draft, DART and the Urban Design team facilitated a series of five (5) Focus Area Meetings with DART staff, partner agencies and stakeholders to obtain input and explore a variety of ideas related to the station and portal configurations and locations. The Focus Areas are as follows:

- Victory - Perot Focus Area
- Metro Center Focus Area
- Commerce Focus Area
- CBD East Focus Area
- Deep Ellum Focus Area

The meetings were structured to encourage a spirit of collaboration and cooperation in attaining a common vision for the development of the D2 project that is integral to the fabric of the CBD. The input provided in these meetings builds upon the guiding principles. Focused stakeholder input in these meetings developed an overall comprehensive urban design direction for the project specific to these focus areas. Design goals and objectives established in these meetings will be translated into a physical design form through the design process and will be used to inform architectural design and engineering decisions related to enhance access, public safety and security, recognition and wayfinding, quality of life, experience and context sensitivity.
DALLAS POLICY

As DART moves forward in the Project Development Phase for D2, there is a responsibility to support the policy decisions that affect urban design direction. The following documents all contain key design information created through stakeholder involvement and adopted, as policy, by agencies and the City of Dallas. The urban design process began with an understanding of these documents.

D2 Subway

The D2 Subway project is a future second light rail line through downtown Dallas. DART began planning for D2 in 2007. Since then, several studies and planning efforts have been completed including the move of D2 from an at-grade alignment into a subway in 2016. The most recent efforts resulted in both the Dallas City Council and the DART Board of Directors approving the D2 Subway LPA in September 2017. The D2 Subway LPA (Commerce via Victory-Swiss) extends from Victory Park to Deep Ellum, primarily below Commerce Street through the heart of downtown Dallas.

Urban Transit Design Guidelines

Adopted by Dallas City Council in April of 2017, the impetus for the Urban Transit Design Guidelines arose from Downtown stakeholders’ desire for well-designed integration of D2 Light Rail and Central Dallas Streetcar projects into the urban fabric. Drafted by City staff in partnership with the Downtown Dallas Inc. (DDI) Mobility Committee with input from DART staff, the Urban Transit Design Guidelines were developed based on best practices in consultation with:

- Downtown Dallas 360 Plan
- Dallas Complete Street Design Manual
- Dallas Area Rapid Transit Light Rail Project Design Criteria
- City of Dallas Tax Increment Financing Districts Urban Design Guidelines
- National Association of City Transportation Officials (NACTO) Transit Street Design Guide

The Urban Transit Design Guidelines are intended to apply to all future DART operated transit projects in and around Downtown, and address City of Dallas and DART rights-of-way for the full length of transit project corridors within this geography. They are intended to be advisory in nature and to supplement existing DART Design Criteria through a review process that focuses on quality of the public realm, comfort and experience of pedestrians and transit passengers, and compatibility with adjacent development that adds to a vibrant downtown.

The 360 Plan – A Complete and Connected City Center

Adopted by Dallas City Council in December of 2017, The 360 Plan is a strategic document that sets a clear, cohesive vision of Downtown Dallas and its surrounding neighborhoods, guiding the City Center to continued long-term success. Building upon the strategies found in the original plan, adopted in 2011, the 360 Plan is organized around the idea of creating a complete and connected City Center that provides an enriching urban experience for area residents, workers and visitors. The public-private planning process coalesced into a unified vision and three transformative strategies to:

- Advance urban mobility
- Build complete neighborhoods, and
- Promote great placemaking

A primary charge of The 360 Plan is to focus public investment – whether in streetscape improvements, new infrastructure, housing subsidies, or other initiatives – in a manner that garners the most significant and transformative impacts from private development. Building from the overall vision, The 360 Plan presents six major Catalytic Development Areas and three Corridors of Interest to prioritize physical, economic, and other improvements in order to synergize public and private development opportunities and achieve coordinated success over time.
DOWNTOWN DALLAS CONTEXT

D2, the Urban Transit Design Guidelines and The 360 Plan outline design decisions that affect the context of the downtown environment. CityMAP and the recently begun Texas Department of Transportation (TxDOT) Interstate 345 (I-345) Feasibility Study also play a big role recommending agency coordination and project considerations for the benefit of downtown commuters, business owners, developers and residents and the overall success on the east side of Downtown Dallas and Deep Ellum.

CityMAP

The City Center Master Assessment Process or -- CityMAP, conducted by TxDOT, is an assessment of the challenges, opportunities and the redesign options for the aging interstate corridors and adjacent neighborhoods in and around Downtown Dallas, completed in September 2016. TxDOT funded, City of Dallas supported and stakeholder driven, the process began in early 2015 to understand how congestion relief and city design can be considered comprehensively as the major highway system converging in and around Downtown Dallas is improved.

The assessment provides different yet related scenarios for each of the corridors that demonstrate a level of balance between mobility, livability and economics as defined by local stakeholders. Each scenario studies these three vital factors as part of the overall improvement of the corridor.

The D2 Subway alignment interacts with both Spur 366 (Woodall Rodgers) to the north and I-345 to the east. DART recognizes the importance of CityMAP to its stakeholders and to the City of Dallas. For this reason, with a good understanding of the I-345 scenarios and by closely coordinating with TxDOT through this preliminary design process, DART will be making design decisions based on key stakeholder feedback that does not preclude any of the CityMAP scenarios. DART will also coordinate the Museum Way Station, tracks and north tunnel portal design adjacent to and under Woodall Rodgers.

TxDOT I-345 Feasibility Study

I-345 is located on the east side of Downtown Dallas and carries traffic traveling north from I-30 and U.S. 75/I-45 to Woodall Rodgers and other regions north of the City Center. TxDOT is continuing its effort for I-345 where Dallas CityMAP concluded. TxDOT is studying the design feasibility for this corridor based on the various scenarios developed in CityMAP. TxDOT will look at traffic data, land use and economic development studies to develop potential options for the freeway.

D2 Subway LPA - Commerce via Victory/Swiss

As shown on the graphic map on the following page, the Commerce alignment begins south of Victory Station. It moves through a switch off the existing alignment and then proceeds in a southeasterly direction within DART-owned right-of-way (ROW) in the center of Museum Way and through the parking lot adjacent to the Perot Museum of Nature and Science. Adjacent to the Perot Museum will be an at-grade light rail station (Museum Way Station). After leaving the station, the alignment crosses under Woodall Rodgers Freeway at street level, and then begins its transition underground. The alignment enters a property currently occupied by a parking lot and descends into a tunnel. The alignment remains underground until I-345. After passing under Hord Street near the Dallas World Aquarium, the alignment turns under Griffin Street. Between San Jacinto Avenue and Elm Street would be an underground station (Metro Center Subway Station). This station would provide the ability to transfer to the West Transfer Center and the West End and Akard light rail stations. The Metro Center Station is envisioned as a major transit hub in the future.

After crossing under Main Street, the alignment would turn east under Belo Garden and follow under Commerce Street. While under Commerce another underground station is planned approximately between Akard and Ervay (Commerce Subway Station). At the time the focus area meetings were held, the LPA turned northeast under Main Street Garden Park and ran diagonally under one of two garages bound by Main Street, Harwood Street, Elm Street and Pearl Street. Due to the challenges of placing a station in this location, the alignment was refined and shifted east to the next block. After passing under Harwood Street and as it approaches Pearl Street, the alignment now turns north traveling under Pearl Street and the next subway station, CBD East, sits roughly between Main Street and Elm Street. This station would provide opportunities to transfer to buses at the East Transfer Center.

After passing under Cesar Chavez Boulevard the alignment would begin the transition back to the surface. This transition would be under I-345 and parallel to Swiss Avenue either to the north or to the south of the street. Immediately after getting back to the surface the alignment would come to a switch that would allow trains to move either north or south along rebuilt Good Latimer tracks. Track alignment on Good Latimer is under review both to the west side of Good Latimer consolidating the north and southbound vehicular traffic and in the center of Good Latimer similar to the existing condition.
Urban Design Elements

Tunnel Portals – D2 proposes tunnel portals on the north and east ends of the alignment. Urban design concepts will address how each of these portals meshes with the fabric of existing streets, sidewalks, parks and buildings to minimize impacts on existing or future facilities. The design will also study potential screening and/or buffering techniques to minimize visual impacts and enhance public safety and explore options and configurations for vehicular, bicycle, pedestrian traffic signalization and rail interface.

Station Locations – D2 proposes to create four new station locations. The Museum Way at-grade station and the Metro Center, Commerce and CBD East subway stations. Just like any other public space, the urban design approach for the stations recognizes that these spaces accommodate social interaction and should respond to the passengers needs for safety, security, lighting and access.

Station Configurations – The exact and final location of each station continues to be refined. In this regard, partner agency, stakeholder and passenger feedback will help to determine preferred station locations and configurations that offer desired access while minimizing potential negative impacts to current and future infrastructure and citizens daily lives. Input gathered from this interaction will also inform final station architectural design and engineering.

Station Pedestrian Portal Access – These portals provide users direct access into the subway stations. They offer the opportunity for a unique and positive first impression of the station facilities and should introduce a consistent brand identity while integrating with the context of public infrastructure and private development. Similar to the Station Configuration section above, stakeholder feedback will help determine preferred portal locations and configurations that offer desired access while minimizing potential negative impacts to current and future infrastructure and citizens daily lives. Portals will require compliance with local public safety, visibility and accessibility requirements, and will likely include combinations of elevators, escalators and stairs at each location.
Public and Agency Involvement
As with every project, DART has a robust public involvement plan for D2 including public meetings, stakeholder meetings, agency meetings, technical committee meetings, and one-on-ones. The graphic below captures the multiple engagement opportunities. As part of the urban design for D2, Focus Area meetings were established to engage smaller groups of invested stakeholders for intimate and candid conversations about downtown and D2.

Guiding Principles
As mentioned previously, City of Dallas staff in partnership with the DDI Mobility Committee and participation from DART staff developed the Urban Transit Design Guidelines for the City of Dallas. Adopted by City Council in April of 2017, this document outlines the key principles that DART used as its starting point to define the urban design direction for D2. The four key principles are as follows:

- Creation of pedestrian friendly stations that are accessible, safe, encourage transit ridership and contribute to the public realm through street-level activation and high quality materials and detailing
- Contribution to a sustainable urban environment that follows low impact development standards and incorporates appropriate native landscaping
- Integration of streetscapes that enhance and encourage pedestrian activity while safely accommodating all other modes of transportation
- Enhancement of economic development potential along transit corridors and transit-oriented development around station

Review Process
The review process associated with the Urban Transit Design Guidelines is integrated into DART’s project development process by introducing a series of reviews by the City of Dallas Urban Design Peer Review Panel. The Urban Design Peer Review Panel’s role is to provide ongoing urban design review at key stages through project development and engineering to facilitate a desirable urban design outcome. The Urban Design Peer Review Panel has five years of experience with providing urban design review for private projects receiving City incentives. The Urban Transit Design Guidelines will serve as the basis for this review. The guidelines and review process are not intended to replace the need for stakeholder input for individual projects. City of Dallas and DART are responsible for timely review of all project submittals and active engagement of appropriate stakeholders.
Precedents
Precedent image boards were created to generate reactions and encourage conversation at focus area meetings. Their intent was to provide built or imagined examples around the world to convey different design approaches to elements of a subway or a transit system.

The boards were often referred to in focus area meetings to aid in explaining or defining design elements. Some of the images focus specifically on the creation of social space in, around or sometimes over a system. The relationship of public space and transit activity is important.

These precedent boards will continue to be used as part of public involvement. The team is responsible to listen to stakeholder feedback and preferred imagery and capture input regarding supported design ideas and direction.
PRECEDENTS

BUS TRANSFER CENTERS

BUS SHELTERS

BIKE PARKING & FACILITIES

TUNNEL PORTALS & CONNECTIONS

PEDESTRIAN CROSSINGS

ELEVATED CONNECTIONS

Bike Parking & Facilities

Bus Transfer Centers

Bus Shelters

Bike Repair Stations

Bike Garden Bike Rack

Bike Share Station - Los Angeles, CA

Bike Repair Station

Triangle Hanger Bike Rack

Cyber City, TX

Cycle Parking Facility Access via Ramp - Cambridge, England

Vaughan, ON, Canada

Eglinton Crosstown LRT, Toronto

Queens Quay - Toronto, ON, Canada

Yorkshire and the Humber, England

Los Angeles, CA

Melbourne, Australia

San Jose, CA

Yorkshire and the Humber, England

Cologne, Germany

Memphis, TN

Bodegraven, Netherlands

Sydney, Australia

Rio de Janeiro, Brazil

Portland-Milwaukie

Sydney, Australia

Paris, France

Vinge Train Station, Denmark

Yuhang Railway Station, China

Seoullo 2017 (Seoul Skygarden), Korea

Buckhead Park over GA400
Victory-Perot Focus Area Meeting (August 2018)
The following captures ideas, messages or considerations from the focus area meeting that received group consensus. Full meeting summary notes, meeting details including the presentation, attendees and other corresponding materials can be found at www.DART.org/D2.

- Stakeholders asked about the cross-section for museum way with the 35 feet DART right-of-way, and wondered if there will be mid-block access for parking garages. DART indicated this can be looked into as part of design. The cross-section will need to be coordinated with the City – it could potentially be modified from the two lanes and median parking today to one lane each direction with bike lanes, etc.

- Noise and vibration will be a concern for residential/hotels. The group discussed that speeds would be 10-15 mph max through this area, but noise can still be a concern where the alignment curves. DART will be doing a noise and vibration analysis in the area.

- Pedestrian access should be accommodated in all directions at the Woodall Rodgers/Field intersection to provide linkages to north and south, towards Klyde Warren Park and along Broom/McKinney to the west.

- The group discussed the potential for development over the portal or even a raised access over it. DART indicated that the portal can be integrated with development over it.

- Keeping Hord Street open south of the portal is important. DART indicated that it will likely be feasible since the alignment will be deeper at that location.

- Wayfinding to help people get from the stations to attractions in the area will be key.
STAKEHOLDER COMMENTS (AUGUST 2018)

1. Stakeholders indicated potential redevelopments north of the Perot Museum with River Street being an important connector. Traffic signalization would be proposed at River Street and Hall Street. It would be accessible for River Street to cross the tracks north of the DART Museum Way Station in this location.

2. 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 head street connection south of the Tunnel Portal. Based on this stakeholder feedback, DART will look at the possibility of maintaining this important grid connection.

3. Noise is a stakeholder concern where the tram tracks curve near Victory Park Residential Buildings.

4. Based on the vision of the Dallas 2020 Plan for the area, pedestrian connections along Beach Street and McKinney Avenue adjacent to Woodruff Rodgers and along Fossil Street could see future improvements.

5. 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.

6. DART tracks will run in the center of Museum Way within the 75 feet of DART issued ROW. DART will work with stakeholders on the cross section of the new Museum Way condition to include vehicle and transit lanes, a possible bike lane, on-street parking, and a pedestrian zone. Stakeholder discussion included maintaining service and garage access points that exit mid-block along Museum Way. See Existing Museum Way photos.
Victory-Perot Focus Area Coordination

Multiple coordination meetings have been held with various property owners, developers, boards, other agencies and interested parties. Through workshop style meetings in small groups or in a one-on-one setting meant to provide both candid and open communication in a design workshop setting, the urban design plan for the Victory-Perot Focus Area has been developed to consider the following.

River Street has been identified by stakeholders as an important cross connection improved city grid street. The Museum Way Station has been modified to shorten the platform length to an acceptable standard to allow a connection of River Street to the north of the station. South of the station, reconfiguration of Broom Street to provide a wider pedestrian edge to the Perot Museum and adjacent destinations is seen as a positive to all stakeholders. Depressing the tracks at the station may also allow for D2 to pass under Woodall Rodgers without any reconstruction of the on-ramp west of the Field Street intersection. This may also shorten the length of the tunnel portal in order to maintain Hord Street as a cross connection. Maintaining a strong pedestrian connection either side of the tunnel portal north and south connecting both sides of Woodall Rodgers is important and will be a part of D2.

DART is open to plans for future expansion of the museum over the station and future development over the tunnel portal. The design, by others, would be subject to review and coordination with DART. DART recognizes the potential that future development has for unifying this area of Downtown and Uptown to all modes of travel and experience.

Victory-Perot Focus Area Communication

D2 communication includes but is not limited to the following:

- City of Dallas
- Downtown Dallas Inc. (DDI)
- Gensler
- Hines Real Estate
- Hunt Consolidated
- Hunt / Perot Small Group Meetings
- Perot Museum of Nature and Science Small Group Meeting
- The Real Estate Council (TREC)
- TxDOT Dallas District meeting
- Victory-Perot Focus Area Meeting
Museum Way Section

Google Earth - Museum Way

DART maintains open communication with stakeholders to define the new cross section of Museum Way. DART owns and will use 35'-0" in width down the center of Museum Way to transition D2 at grade from the existing Victory Station to the proposed Museum Way station west of the Perot Museum. The remainder of that cross section with regard to vehicular lanes, bicycle and pedestrian access remains flexible so as to achieve a mutually preferred cross section among stakeholders. The cross section shown here is preliminary only. The Google street view image is added to orient the reader with the existing condition at Museum Way.

Proposed Typical Section - Looking East
Metro Center Focus Area Meeting (August 2018)
The following captures ideas, messages or considerations from the focus area meeting that received group consensus. Full meeting summary of notes, meeting details including the presentation, attendees and other corresponding materials can be found at www.DART.org/D2.

- Stakeholders supported the potential sites identified in the presentation such as West Transfer Center (WTC) and the parking lot east of WTC, Rosa Parks Plaza, and the sunken plaza west of the Westin Hotel. Stakeholders agree that tying into the existing pedestrian tunnel network in this area should be considered.

- Stakeholders discussed the potential for possibly re-imagining the WTC to include a potential multi-story transit center. Stakeholders indicated that the block north of the existing transfer center may be needed as part of this potential development plan.

- Stakeholders agreed on several potential sites either side of Griffin Street and at either end of the station. The portal suggested directly across from the transfer center on the east side of Griffin Street at the corner of existing at grade parking could be built with the flexibility to complement future multi-story development. This portal 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.

- The group discussed pedestrian portal size. DART will be following the Urban Design Technical Guidelines recommendations for portal placement and will design portals based on available space and accessibility requirements. The stakeholders shared their vision to prioritize the streetscape and pedestrian experience in downtown. The majority of the portals could be kept to a minimum size / minimum obstruction designed to support the vision of a vibrant and active pedestrian zone along the downtown streets and fit into the urban context.

- Stakeholders can envision a successful larger portal opportunity at the sunken plaza west of the Westin Hotel / One Main Place that better connects from the street level to existing subsurface and future restaurant and retail. This location would require thought for security and access as it connects multiple towers, buildings and public spaces.
STAKEHOLDER COMMENTS (AUGUST 2018)

1. Stakeholders agreed on several potential sites either side of Griffin Street and at either end of the station, including a proposed multi-use transit center that would serve as a focal point for the area and the site that currently serves as the West Transfer Center. Throwing out ideas, stakeholders felt that the block south of the existing transfer center may be treated as part of the potential development plan. See Example 3 photo.

2. A second portal is suggested directly across from the transfer center on the west side of Griffin Street at the corner of walking at grade parking. A portal located in this area would allow for the flexibility to complement future multi-use development. 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 the destination or access to the West End facilities or Station to continue their travel. See Example 2 photo.

3. The DART-owned Blue Peter 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 portal in urban plaza areas and vice versa. See Example 2 photo.

4. Designing the station plaza directly west of the Westin Dallas Galleria Hotel is another potential site for a subway pedestrian portal. Stairs or escalators and integration around this space with this possibility, this space has the potential to allow direct grade pedestrian access on all sides into the plaza. The design guideline recommends to keep the space unified and active, take full advantage of leaking and future restaurant and retail services, connect where appropriate to the exiting tunnel system in this location and provide direct subway portal access. See Example 3 photo.

5. An additional portal provides direct access south of Bank of America at the corner of existing surface parking. This portal location is based with the flexibility to complement future multi-use development without the parking. This could also be the most southern walking portal for the subway and provides access to multiple destinations, employment and education areas. See Example 4 photos.

FOCUS AREA SUMMARY

LEGEND
- Park/Plaza
- Potential Access by Subway
- Existing Pedestrian Tunnel
- Closed Pedestrian Tunnel
- Potential Station
- D2 Subway Routes
- Potential Subway Portal Access Routes

NOT TO SCALE
**Metro Center Station - Pedestrian Portals**

Based on feedback received after the Focus Area meeting held August 23, 2018, a few pedestrian portal areas originally perceived by stakeholders as opportunities have been ruled out for various reasons.

The design team is proceeding with considerations for a larger point of access (not yet shown) at the northwest corner of Griffin Street and Pacific Avenue at DART’s WTC. It is unknown at this time how much area will be needed for tunnel construction and where that area is, however, the transfer facility could see a reduction in size or be relocated if some or all is deemed necessary for construction. The future of the site could be ideal for subway to existing light-rail station to bus transfer in the future and serve as a fully integrated multi-modal center.

The public ROW across the street on the east side of Griffin Street between Patterson Street and Pacific Avenue could potentially be a location to serve riders with a smaller scale pedestrian access staircase connecting them from the subway to the at-grade Akard Station.

Rosa Parks Plaza is also being considered. It would allow access to the West End pedestrian traffic and serve Bank of America Tower, across the street to the south, and surrounding destinations.

The Urban Design team is working with the Architecture team to develop concepts for the connections from surface to mezzanine/concourse level and then to station platform level. The three locations mentioned above would provide access to the north end of the station platform.

Potential pedestrian access is also under review at the northeast corner of Griffin Street and Elm Street. The Urban Design Plan on this page shows options for stair and elevator access on Elm Street in a proposed curb bump-out segment. The lower photos depict a conceptual progression from the existing condition in front of the Homewood Suites garage entry to a potential pedestrian station portal.

This sketch simulation is provided to show scale spatially only and does not reflect portal or elevator design or materials as this is currently being developed.
**Metro Center Station - Pedestrian Portals**
The Urban Design Plan on this page relocates the stair and elevator access from Elm Street to Griffin Street in a proposed street segment realignment. It is undetermined if this condition is acceptable. It is provided for consideration and review. Additional photos provide a conceptual progression from the existing condition to the side of Homewood Suites to a potential portal.

This sketch concept simulation is provided to show scale spatially only and does not reflect portal or elevator design or materials as this is currently being considered.

Not shown, but also under design and consideration, is the northwest corner of Griffin Street and Elm Street within the ROW.

**Metro Center Focus Area Communication**
D2 communication includes but is not limited to the following:

- City of Dallas
- Downtown Dallas Inc. (DDI)
- Homewood Suites
- Metro Center Focus Area Meeting
- One Main (Stream Realty)
- Renaissance Tower (CBRE)
- The Real Estate Council (TREC)
COMMERCE

Commerce Focus Area Meeting (August 2018)
The following captures ideas, messages or considerations from the focus area meeting that received group consensus. Full meeting summary of notes, meeting details including the presentation, attendees and other corresponding materials can be found at www.DART.org/D2.

- The stakeholders discussed the project construction. The construction start date is anticipated late 2020. The specific construction sequencing has not been determined. Vehicular lanes along Commerce Street are anticipated to be temporarily closed, however, the majority of construction should be happening underground with the exception of pedestrian portals and other necessary points of access. Survey is being completed to locate utilities in the area and minimize impacts during construction.

- Stakeholders like the idea of Browder Street Mall and Pegasus Plaza for a pedestrian portal and agree it would be positive to activate these spaces. The City indicated support for the possibility of a pedestrian portal at both of these locations. DART will work with the City when determining a final location.

- The stakeholders suggested shifting the Commerce subway station east to be equidistant to Akard and Ervay Streets in order to anchor north-south connections. The City indicated that Akard is the most comfortable street for walk access to City Hall. This path would be through the AT&T Discovery District that is currently under construction and will be open to the public. In addition to the DalPark garage, stakeholders selected a second potential option for a portal that would provide direct access to Ervay, south of the DalPark garage in the open parking lot area, which could be built with the flexibility to complement future multi-story development.

- The group discussed design of the pedestrian portals and referenced the Portal Precedents display board. The City noted that consistency is important with respect to symbols, signage and wayfinding. New York City was suggested as a good reference as all the signs are banded and consistent, but noted portal design there is different.

- Stakeholders agree that portal design should reflect the area and complement the urban fabric around it. Design should consider combining vent shafts with portals where possible to integrate, hide or minimize visual and space disruptions.
Stakeholders suggest shifting the Commerce Station to the east and position it equidistant from Pezziga and Main Street. Proposal pedestrian grade to help bridge the divide between these areas is strong pedestrian connection 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 pedestrian from the existing Brewer Street Mall across Commerce Street and connect Pezziga Plaza and Main Street. Stakeholders indicate an opportunity to strengthen this connection by incorporating a multi-directional path in this space.

A second portal location within Pezziga Plaza, at the foot of the Magnolia Hotel was suggested in the area that a quick study of the location to correspondence to the portal above indicates some opportunity for pedestrian connection to both Main Street and the Brewer Street Mall, positively activating the plaza and complementing the area parking plaza experience and surrounding venues.

A third access point in the vicinity of the Brewer 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 aesthetics of the smaller space and complement the scale of services like ground floor retail and nearby parking.

Stakeholders indicated the potential for a portal in the at-grade parking currently bound by Jackson, Curry and Wood Streets and the Hermitage Building Apartments. This portal would be located in the northeast corner at Jackson and Curry Streets and provide pedestrian connection to the north and south. Stakeholders felt a portal location in this area with the flexibility to complement future mixed-use 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 bound by Lute, Commerce, Jackson and Emily Streets. This, and the Brewer Street Mall portal, would provide riders access to Harman Marcus and other commercial and business destinations.
Commerce Station - Pedestrian Portals

Based on feedback received since the Focus Area meeting held August 22, 2018, multiple stakeholders feel a pedestrian portal could be located in or near Pegasus Plaza (north and west of the Commerce Subway Station) and Browder Street Mall (south and west of the Commerce Subway Station). The portal location at Pegasus Plaza would likely be larger containing multiple access points and means of egress and ingress while the Browder Street Mall portal could be a smaller point of access with or without elevator access.

The lower photo and sketches provide one conceptual idea for the existing condition at Browder Street Mall. The image depicts a portal with multi-level development potential. This sketch simulation is provided to show scale spatially only and does not reflect portal or elevator design or materials as this is currently being considered.

Minimizing spatial and visual dominance of key components required for subway stations such as ventilation shafts are under design and coordination of their location is being communicated with key stakeholders. Elements like this will be designed in such a manner that it will not be visually seen or clutter the pedestrian and urban environment.

Architecture Study - West Portal Entry (December 5, 2018 - Subject to Change)
Commerce Station - Pedestrian Portals

To the east end of the Subway Station the pedestrian portal access is currently being explored on the south side of Commerce Street both west and east of Ervay Street. Pedestrian portals in this area are currently under review but would likely be a smaller stair access located parallel to Commerce Street and within the ROW. One or more elevators would accompany the stair for accessibility. There would likely be two points of stair access with one or more elevator access points. Final locations to be determined.

The lower photo and sketches provide a simulation from the existing condition southwest of the Commerce Street and Ervay Street intersection to a potential portal. This sketch simulation is provided to show scale spatially only and does not reflect portal or elevator design or materials as this is currently being considered.

Commerce Focus Area Communication

D2 communication includes but is not limited to the following:

- AT&T
- City of Dallas
- Commerce Focus Area Meeting
- Downtown Dallas Inc. (DDI)
- Hamilton Properties
- Homewood Suites
- Neiman Marcus
- Parks for Downtown Dallas
- Statler Hotel
- The Real Estate Council (TREC)
CBD East Focus Area Meeting (August 2018)
The following captures ideas, messages or considerations from the focus area meeting that received group consensus. Full meeting summary of notes, meeting details including the presentation, attendees and other corresponding materials can be found at www.DART.org/D2.

- Stakeholders supported the potential sites identified in the presentation such as the East Transfer Center (ETC), adjacent to Main Street Garden Park, and the open space and plaza spaces south of Elm Street between St. Paul Street and Harwood Street. Stakeholders indicated their desire to access the portals in urban spaces, plaza areas and near parks. When locating potential portals in open lot or at-grade parking, stakeholders preferred a design that could be integrated into future development on that site.

- Stakeholders discussed impacts to parks and specifically Carpenter Park. The City indicated that construction design plans for Carpenter Park will be done in mid-2019 and construction is set to begin the following fall. D2 cut and cover sections indicated in the LPA would have impacted the park. However, as noted earlier, a refinement to move the alignment out from underneath one of the garages and east one block indicates that D2 will avoid impacts to Carpenter Park. DART will continue ongoing City coordination to inform staff as D2 design development progresses.

- The group discussed the I-345 scenarios outlined in CityMAP. DART indicated that the D2 project is being designed to not preclude any of the CityMAP scenarios. DART continues to coordinate with TxDOT and noted that TxDOT is currently conducting a feasibility study to evaluate options for I-345.
STAKEHOLDER COMMENTS (AUGUST 2018)

Focus Area Summary

1. Stakeholders have indicated their desire to access the portals in urban spaces, plaza areas and near parks. Main Street Gardens, being located close to this station, provides the opportunity to see the subway in public space. The exact location of the portal is still under-determined and coordinated with the City of Dallas Parks and Recreation Department and other partnering agencies would yield a supported opportunity—like 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.

2. Additionalplaza and open space exists along Elan Street at the corner of Harwood Street and further west in mid-downtown. Both of these spaces could be viewed as potential sites 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 Majors. See Example 2 photo.

3. Stakeholders support potential re-development of the exiting East Transfer Center to include multiple stories, ground floor amenities, ground floor or above grade four-meter drop off and pick up solutions with support for multi-modal transportation. A potential site to accommodate future transportation needs, economic development or taking advantage of the proximity to Carpenter Park or providing a portal along Pearl Street. See Example 3 photo.
CBD East Station
The LPA showing the CBD East Subway Station under the Elm Street Garage has been refined. The refined alignment moves the station east to the next block, out from under the garage. A Focus Area meeting for this new location is potentially planned for March 2019. This will include a conversation possibly with new stakeholders and a discussion about different points of access than previously reviewed in the CBD East Focus Area Meeting held August 21, 2018. However, the input from stakeholders with regard to pedestrian portal access, issues of safety or security, activating underutilized space, proximity to destinations and potential redevelopment of the existing DART ETC likely remains important even with the alignment shift and current subway station location.

CBD East Focus Area Communication
D2 communication includes but is not limited to the following:

- City of Dallas
- Commerce Focus Area Meeting
- Downtown Dallas Inc. (DDI)
- Hamilton Properties
- M-M Properties
- Parks for Downtown Dallas
- Statler Hotel
- The Real Estate Council (TREC)
- Todd Interests

Urban Design Study
The following captures ideas, messages or considerations from the focus area meeting that received group consensus. Full meeting summary of notes, meeting details including the presentation, attendees and other corresponding materials can be found at www.DART.org/D2.

- Stakeholders discussed the current and proposed cross section for Good Latimer. Stakeholders support the proposed modification of Good Latimer to move the rails from the center of the north and south bound travel lanes and place the tracks to one side (west side) of the street. This provides a shorter pedestrian crossing distance. Stakeholders believe it will provide better flow and noted that it is the primary entrance to the Deep Ellum neighborhood from the north. Good Latimer presents a complete street opportunity.

- Stakeholders indicated their desire to access the pedestrian portals in urban spaces, plaza areas and near parks. With the loss of the Deep Ellum Station, stakeholders would like to maintain some level of connectivity to the nearest subway station by including a pedestrian portal that would come up near or at Carpenter Park.

- The stakeholders discussed the tunnel portal location. Stakeholders indicated Cesar Chavez as a critical connection that cannot be permanently closed. Short term closures during construction are understandable. Closing the N. Central Expressway frontage road, east of I-345 is recognizably unavoidable and acceptable to the majority of stakeholders.

- Stakeholders discussed the tunnel portal design and design of the tracks and the wye. Stakeholders encourage a design to minimize or cover the portal and minimize or design elevated public space at the wye. Design features that would better accommodate pedestrians should be considered.
Stakeholders overwhelmingly support the reconstruction of Good Lerner from North Central Expressway (I-345 frontage road) to the north to Elv Trader to the south. North and southbound lanes of traffic on Good Lerner would beeful adjacent to one another. Delaying DART tracks would be removed from the center of Good Lerner and placed to the west. This will provide a shorter crossing distance for pedestrians. DART will propose Complete Street cross sections of Good Lerner in this area for further discussion 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 Ginger Avenue during construction is very important to stakeholders. Stakeholders understand there will be short-term impacts to the downtown grid in various locations through the cut and cover construction process.
- Temporary construction easements on Casa Chavez to be undisturbed for stakeholders, but the connection north and southbound on Casa Chavez must be maintained for long-term. Stakeholders understand the tunnel portal location will forever disconnect the North Central Expressway frontage road east of I-345 at Casa Avenue.
- Based on the vision of the Dallas 360 Plan for this Central Breakthrough Area, stakeholders support very strong pedestrian connections adjacent to the tunnel portal. This would connect Vista Avenue east of Good Lerner to Carpenter Park west of Casa Chavez, continuing on to Pacific Pkwy.
- With the loss of the Deep Ellum Station, DART should consider improvements at the existing Baylor Station. Improved security measures and a desire of stakeholders as well as improved access into Deep Ellum in proximity to the south from the existing Baylor Station to facilitate reanimating the station “Baylor/Deep Ellum” so as to provide more vehicular/land transportation 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.

Example 1: Collected, Ohio
Deep Ellum Focus Area Coordination

A series of meetings and workshops have been held with stakeholders in this focus area. The Deep Ellum Focus Area Meeting kicked off with urban design communication on August 8, 2018. Since then, multiple one-on-one and small stakeholder meetings and agency meetings have been held.

The Deep Ellum Foundation formed a Good Latimer Committee to review design in greater detail with regards to multi-modal connections and to assist the D2 Team with conceptual development of the pedestrian and street connections and ultimate configuration of Good Latimer.

The Swiss Avenue area for the tunnel portal placement and wye track remains the preferred location by majority consensus. The DART Board of directors and Dallas City Council approved resolutions to support the LPA that shows the tunnel portal south of Swiss Avenue. Urban Design Plans (following page) were developed to show potential city street grid connections, pedestrian access and future development (as guided by the Dallas 360 Plan).

Keeping the stakeholders’ desires in mind to maintain Good Latimer traffic flow north and south, plans were developed that show the D2 tracks in the center of Good Latimer and on the west side of Good Latimer. Maintaining the tracks in the center of Good Latimer and separating northbound and southbound Good Latimer as it exists today was seen by some stakeholders as beneficial based on southbound right turn connections to private properties to the west. This center-running option however, increases the number of track crossings, which would in turn affect signalization at intersections and automobile queuing.

In contrast, moving the tracks to the west would consolidate the northbound and southbound lanes of Good Latimer with fewer track crossings but may eliminate connections to developments to the west or make them more difficult. In this condition, providing access from Good Latimer across the tracks to developments to the west via Miranda Street, Swiss Avenue or Florence Street continues to be reviewed by DART operationally.

Based on stakeholder feedback, DART explored an alignment that placed the tunnel portal north of Swiss Avenue. DART prepared a series of Urban Design Plans also indicated below, to show potential city street grid connections, pedestrian access and future development. Plans were developed that show the D2 tracks in the center of Good Latimer and on the west side of Good Latimer. Both options have similar opportunities and constraints as indicated above.

Through several internal staff workshops, DART noticed challenges to the north of Swiss Avenue alignment that would potentially have traffic impacts at major street intersections. Moving the wye further north, lessens the length in which to store a train between the proposed junction and the existing junction to the north. In this condition, there would be the potential for a train to block major street intersections like Live Oak Street. Stakeholders prefer fewer future rail operation impacts to the current street grid.

Deep Ellum Focus Area Communication

D2 communication includes but is not limited to the following:

- Baylor Hospital
- Bottled Blonde Business Owners
- City of Dallas
- Deep Ellum Focus Area Meeting
- Deep Ellum Foundation (DEF)
- DEF Good Latimer Committee Meetings
- Downtown Dallas Inc. (DDI)
- Greenway Investment Co.
- The Real Estate Council (TREC)
- TxDOT Dallas District
- Westdale Real Estate
East Tunnel Portal - LPA

The conceptual urban design plans below depict various scenarios for track alignment south of Swiss Avenue with both west and center track alignments at Good Latimer.
East Tunnel Portal - LPA Design Modification 1

The conceptual urban design plans below depict various scenarios for track alignment north of Swiss Avenue with both west and center track alignments at Good Latimer.
Good Latimer Cross Sections

CONCEPTUAL ONLY
FEBRUARY 26, 2019

CONCEPTUAL ONLY
FEBRUARY 26, 2019

CONCEPTUAL ONLY
FEBRUARY 26, 2019
Urban Design Factors
In order to deliver a D2 project reflecting the broad range of goals and objectives from multiple partner agencies and stakeholders, the Urban Design team is using the information gathered in the Focus Area Meetings and stakeholder communication to develop a list of Urban Design Factors for use in evaluating station design and pedestrian portal access. The following factors are outlined as follows and a brief description is provided:

Increase & Ease of Service
Increase and ease of service across the transit system is important to stakeholders. Urban design can support these needs through appropriate signage, wayfinding and location of access points.

Transfer Options
Transfer options should be a consideration during design. Location of a subway station or pedestrian portal and the proximity to change trains or connect to bus, streetcar or other mode should be considered.

Improved Transit Centers
Stakeholders support the possibility of improved transit centers that combine multiple transit options and consider multi-story and mixed-use opportunities.

Last Mile Connection
Last mile connection options, be they bus, streetcar, scooter, bike or pedestrian, should be considered.

Link to Pedestrian Zones
Connecting to major north-south or east-west streets that carry higher volumes of pedestrian traffic and connecting to plaza and communal spaces should be considered. The existing pedestrian tunnel and skybridge system should also be considered but not at the expense of prominent, street level portals.

Parks & Green Space
Stakeholders have expressed the desire to access and exit pedestrian portals in urban spaces, open areas and near parks.

Streets
Pedestrian portal location should be considered with street typology. Maintaining city grid connections is important.

Trails
Connections to pedestrian and bike trails should be considered.

Accessibility
Each station will have a minimum of two (2) pedestrian portals for access with as many as possibly four (4) being considered based on opportunities around the station. A combination of stairs, escalators and elevators will be determined further into design and based on accessibility requirements.

Enhanced Pedestrian Experience
Enhancing the pedestrian experience may include design considerations that accommodate a higher volume of pedestrian traffic located in and around urban spaces.

Equity
Provide all riders equitable advantage to move around the city from places of residence to employment and entertainment destinations.

Residential Proximity
Pedestrian portals locations should consider residential adjacency.

Civic/Entertainment
Pedestrian portals should take advantage of and accommodate traffic to civic and entertainment districts.

Noise
Noise should be considered in residential areas and near hotels and communal spaces.

Safety & Security
Pedestrian safety is a priority with events, field trips, linkages between activity centers and existing/new developments, and vehicular and pedestrian track crossing. Integrated security and lighting design will be important at all portal locations.

Signage & Wayfinding
Consider wayfinding as a means to aid users to connect from stations to local attractions and destinations and signage to provide recognition at pedestrian portal locations. Stakeholders agree portals should have wayfinding and signage standards that are intuitive, but overall design could respond to the urban fabric of area.

User Experience
Consider ticketing, secured access, standing and waiting area experience when determining design.

Technology
Stakeholders desire for technology enhancements to assist in route planning, arrival and departure times and continuous wireless capabilities that enable a ride and work experience.

Construction Activities
Minimize to the extent possible, lane closures, traffic impacts, utility conflicts and patron disruptions during construction.

Service Disruptions
Consider higher volumes of traffic during event times, evacuation procedures and emergency issues.

Employment & Economic Centers
Locate pedestrian portals to accommodate employment and economic centers.

Local Context
Stakeholders agree that portal design should reflect the area and complement the urban fabric around it. Design should consider combining vent shafts with portals where possible to integrate, hide or minimize visual and space disruptions.

Development
Allow for development to occur over tunnel portals. The design of D2 should not preclude vertical development. Tunnel and pedestrian portals considered in existing open areas should be built with the flexibility to complement future development.

Cultural Centers
There should be coordination where the alignment runs near cultural centers. Bus route planning, signage, wayfinding and appropriate pedestrian zones and crossings should be considered by multiple partners.

Government Institutions
Design pedestrian portals appropriately for access to government institutions.