### PROPOSED NOVEMBER 2019 TIP MODIFICATIONS FOR RTC MEETING

<table>
<thead>
<tr>
<th>TIP Code:</th>
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<tr>
<td>20261</td>
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<td>MGR BIKEWAY FROM JUPITER &amp; APOLLO</td>
<td>2019-0526</td>
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<tr>
<th>Implementing Agency:</th>
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<tr>
<td>GARLAND</td>
<td>CAMPBELL RD</td>
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<table>
<thead>
<tr>
<th>County:</th>
<th>CSJ:</th>
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<tbody>
<tr>
<td>DALLAS</td>
<td>0918-47-064</td>
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<table>
<thead>
<tr>
<th>City:</th>
<th>Desc:</th>
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<tbody>
<tr>
<td>GARLAND</td>
<td>TRAIL CONNECTOR ACROSS IH 30 &amp; DUCK CREEK, GUTHRIE TRAIL CONNECTOR, DUCK CREEK GREENBELT/GLENBROOK DR CONNECTOR, SPRING CREEK CONNECTOR, ON-STREET BIKE ROUTE, &amp; BRAND RD TO FIREWHEEL TOWN CENTER CONNECTOR, BIKE ROUTE &amp; LINK TO VELOWEB</td>
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<table>
<thead>
<tr>
<th>Request:</th>
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<tbody>
<tr>
<td>REVISE LIMITS TO MGR BIKEWAY FROM JUPITER &amp; APOLLO TO SOUTH CITY LIMITS AT DUCK CREEK; REVISE SCOPE TO CONSTRUCT BIKEWAY/TRAIL CONNECTING MESQUITE AND RICHARDSON, BRIDGE OVER DUCK CREEK, TRAIL CONNECTOR UNDER IH 30, DUCK CREEK GREENBELT, DUCK CREEK BRIDGE ADJACENT TO CENTERVILLE, ON/OFF STREET GLENBROOK/KINGSBRIDGE/APOLLO CONNECTOR, LINKS TO VELOWEB; INCREASE FUNDING FOR ENGINEERING PHASE IN FY2012; DECREASE FUNDING FOR CONSTRUCTION IN FY2020, CHANGE SOURCE OF CONSTRUCTION PHASE TO RTR 121-DA2, AND TRANSFER $500,000 RTR 121-DA2 TOTAL ($400,000 REGIONAL AND $100,000 LOCAL) TO MESQUITE FOR THEIR PORTION OF PROJECT (TIP 20261.2/CSJ 0918-47-297)</td>
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<table>
<thead>
<tr>
<th>Comment:</th>
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<tr>
<td>LOCAL MATCH AND LOCAL CONTRIBUTION PAID 50/50% BY THE CITY OF GARLAND AND DALLAS COUNTY</td>
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### CURRENTLY APPROVED:

<table>
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<tr>
<th>FY</th>
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<th>Regional</th>
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<th>Local Cont.</th>
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<tbody>
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**Grand Total:** $0, $0, $2,844,000, $711,000, $0, $3,555,000

### STTC APPROVED:

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<tbody>
<tr>
<td>2012</td>
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**Phase Subtotal:** $0, $0, $1,782,202, $455,551, $0, $2,792,838

**Grand Total:** $0, $0, $2,444,000, $621,001, $0, $3,620,086

### REVISION REQUESTED:

<table>
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<tr>
<th>FY</th>
<th>Phase</th>
<th>CSJ</th>
<th>Funding Source</th>
<th>Federal</th>
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<tbody>
<tr>
<td>2012</td>
<td>ENG</td>
<td>0918-47-064</td>
<td>Cat 3 - RTR 121 - DA1:</td>
<td>$0</td>
<td>$0</td>
<td>$661,798</td>
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<tr>
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**Phase Subtotal:** $0, $0, $1,782,202, $611,000, $0, $2,958,288

**Grand Total:** $0, $0, $2,444,000, $611,000, $0, $3,620,086

**Revisions since STTC Meeting:** PROJECT FUNDING SHARES ADJUSTED TO REFLECT LOCAL MATCH TO RTR FUNDING FOR ENGINEERING PHASE CONSOLIDATED WITH LOCAL MATCH FOR CONSTRUCTION PHASE. TOTAL LOCAL MATCH EQUALS 20% OF TOTAL RTR FUNDING FOR THE PROJECT.
October 8, 2019

Mr. T.C. Broadnax  
City Manager  
City of Dallas  
1500 Marilla Street  
Room 4E North  
Dallas, TX 75201

Mr. Mohamed “Mo” Bur, P.E.  
Dallas District Engineer  
Texas Department of Transportation  
4777 E. Highway 80  
Mesquite, TX 75150-6643

Mr. Michael Morris  
Director of Transportation  
North Central Texas Council of Governments  
616 Six Flags Drive  
Arlington, TX

Dear Messrs. Broadnax, Bur, and Morris:

Subject: DART D2 Subway Interface at IH 345

As you know, DART is advancing the D2 Subway project through Project Development based on resolutions by both the Dallas City Council and DART Board of Directors in September 2017 to advance the Victory via Commerce/Swiss alignment (see Attachment 1) as the Locally Preferred Alternative (LPA). DART is currently working with Federal Transit Administration (FTA) as the lead agency to advance 20% preliminary engineering and a Supplemental Draft Environmental Impact Statement (SDEIS) by Spring 2020. This would be followed by a Final EIS/Record of Decision in Fall 2020. The D2 Subway project is funded within the DART 20-Year Financial Plan and contained in the Metropolitan Transportation Plan (MTP).

We continue to work with FTA to advance the project through the FTA Capital Investment Grant (CIG) program as a Core Capacity project. Maintaining our project schedule is critical to ensuring eligibility for a future grant. We are focused on obtaining entry in the FTA Engineering phase by early 2021, which would allow DART to lock in a Full Funding Grant Agreement (FFGA) amount and issue contracts for design and construction. The project has consistently rated as Medium-High under FTA criteria and we are in a good position to obtain a grant.

Furthermore, in response to downtown development trends, DART is working with FTA to obtain approval for early acquisition of properties for corridor preservation purposes.
We have broad support from stakeholders on the LPA alignment after evaluating numerous options during 2016 and 2017 with both agency staff and downtown stakeholders. At the time of the D2 Subway alignment approval in September 2017, there was a general understanding that the D2 alignment would accommodate the range of options that may be contemplated by the Texas Department of Transportation (TxDOT) for IH 345 based on their CityMAP effort, whether it 1) remain elevated, 2) be removed and rely on an improved arterial system, or 3) be placed below-grade in a depressed or open cut configuration. Without designs for either IH 345 or D2 at that time, it was understood that further coordination would be needed as design progressed.

Since our tunnel portal is partially located under the existing freeway to allow the train to transition back to grade near Swiss and Good Latimer to connect with the Green Line, it will affect the design depth of any future IH 345 below-grade option. To date, TxDOT has understandably expressed their desire to maintain maximum flexibility, especially related to ramp access. TxDOT has suggested that DART put the project on hold pending completion of their feasibility study, which could take 2 to 3 years.

Our main concerns with putting D2 on hold is three-fold: 1) Missing the Core Capacity grant opportunity, 2) losing the opportunity to preserve the corridor in downtown and adding uncertainty to near-term development plans along the alignment, and 3) the uncertainty of when TxDOT will make a decision, including environmental clearance, for a preferred option. The D2 Subway is an important regional project that will sustain our light rail system into the future and allow us to accommodate strong regional growth. Without the project, we will continue to be limited to at-grade operations through downtown and be constrained to our current service headways without the ability to add more trains or new service patterns.

Given the importance of this issue, DART has participated in nine coordination meetings from April through September 2019 with City of Dallas, TxDOT and North Central Texas Council of Governments (NCTCOG) staff related to the interface of the D2 Subway at IH 345. Meetings have focused on the following topics:

- Review and refinements to the current 10% D2 Subway design at IH 345
- Understanding of the TxDOT IH 345 Feasibility Study schedule
- Review of potential D2 Subway options that remove the portal from under IH 345 and instead provide an at-grade or deeper crossing at the same or a different location
- Possible agency agreement outlining mitigation opportunities to support a TxDOT permit approval for D2, including drainage and added construction costs, should a below-grade IH 345 option be selected in the future

The current 10% D2 Subway plan and profile design at this location is included as Attachment 2. As shown, DART is currently assuming that our portal be constructed as a below-grade bridge-type structure to minimize the cover needed for any future IH 345 facility below the portal. The profile includes a concept location for a 12-lane, below-grade IH 345 facility with required 18.5 feet clearances at a depth of 44 feet below-grade. Prior D2 configurations assumed more cover below the D2 portal, which would have forced IH 345 about 10-15 feet deeper.
We have reviewed other options, including an option that would place D2 at-grade along Swiss Avenue under IH 345 and move the portal west of IH 345 into the city street grid. That option has significant impacts to the major city streets including Elm, Main, Pearl, Pacific, and Cesar Chavez. These impacts would either close some streets or modify their elevation between 2 and 18 feet, affecting property access and future development opportunities. City staff input was not favorable. We also reviewed options for moving the portal further south along Commerce Street or keeping D2 deeper to be below a possible depressed IH 345. Both also present issues and are not recommended. A summary of these other options is in Attachment 3.

It is critical that the D2 Subway project continue to advance. We do not want to eliminate or unreasonably constrain possible IH 345 configurations since that is also an important future project. At our September 16, 2019 coordination meeting, TxDOT stated that the D2 Subway as designed does not eliminate a below-grade IH 345 option but will affect ramp feasibility in the central area and increase cost. However, prior stakeholder comments and information in both CityMAP and the council-approved Dallas 360 Plan emphasize limited ramp access in this area so that the neighborhoods on either side of IH 345 can be re-stitched together in a more pedestrian friendly fashion and economic development opportunities can be enhanced.

We are committed to working with all parties to ensure that both projects can continue to advance on their separate timelines. We are confident there is a solution that keeps the D2 Subway project on schedule and can still meet the objectives of the City in this part of downtown Dallas, while also allowing TxDOT to advance a variety of configurations through their feasibility study.

Thank you and please feel free to contact me if you have any questions at (214)749-2544 or by email at gthomas@dart.org.

Sincerely,

Gary C. Thomas
President/Executive Director

Attachments

c: Majed Al-Ghafry, Dallas Assistant City Manager
    Michael Rogers, Dallas Director of Transportation
    Timothy H. McKay, DART EVP Growth and Regional Development
    Steve Salin, DART VP Capital Planning
    Ceason Clemens, TxDOT Deputy District Engineer
    Kevin Feldt, NCTCOG
D2 Subway 11x17 Plan and Profile
Swiss At-Grade Crossing under IH 345 (Switch portal and station)
Swiss At-Grade Crossing under IH 345 (Switch portal and station)

- Maintains horizontal LPA alignment and modifies vertical profile by switching locations of station and portal to allow-at-grade condition at IH 345
- Generally consistent with LPA but effects on city street grid would likely need City Council committee briefing and action to modify project
- Key observations:
  - Main Street elevation increases by 2-3 feet
  - Elm Street elevation increases by 18-20 feet requiring modification to all connecting streets including Cesar Chavez and Pearl, OR close/reroute Elm
    - Property access impacts could affect economic development and viability of existing uses
  - Cesar Chavez profile at Pacific decreases by approximately 2-3 feet
  - End of Commerce Station to start of portal is at absolute maximum 6% grade
    - Precludes use of TBM as tunneling method (maximum grade for TBM operation = 5%)
  - Deep Ellum Station replaced by Swiss Avenue Station
  - Station under IH 345 not desirable short-term, or long-term if freeway stays elevated
  - Lack of station in CBD East area to serve existing and future development, including growing East Quarter
  - Inconsistent with City Council resolution which states, “alternative locations of the transition from at grade to below grade rail will be examined to optimize development potential on adjacent property, and to minimize street closures.”
**Commerce At-Grade Crossing Under IH 345**

- Continues D2 in below-grade configuration and places portal along Commerce Street between Cesar Chavez and IH345 to allow at-grade condition at IH 345
- Modification would require City Council and DART Board action
- Retains Deep Ellum Station at current location
- Key observations:
  - Constrained ROW results in Commerce reduced to 1-2 lanes at portal
  - Cut and cover along Commerce in new East Quarter area
  - Opportunity for mined station under Commerce at Harwood; would require nearby property for construction access/headhouse to minimize cut-and-cover on Commerce.
  - Station is further from East Transfer Center site.
  - Introduces at-grade crossings along short blocks at Elm-Main-Commerce in Deep Ellum
  - Good Latimer right-of-way constraints between Green Line junction and Main may result in property impacts in Deep Ellum
  - Anticipate significant stakeholder opposition as seen in 2016-2017 which was what led to current LPA decision
  - City of Dallas staff input during 2017 subway refinement indicated only a below grade option at this location would be acceptable.
**Commerce Deep Profile with 2-portals**

- Continues D2 in deep profile to allow for TxDOT below-grade option to be one level down with D2 two levels down.
- Modification would require City Council and DART Board action.
- This alternative was reviewed with DART Board Committee and City Council Mobility Committee Chair and City staff. Policy direction was to continue with current LPA due to service, cost, schedule impacts associated with this option.
- Key observations:
  - Green line service shutdown to allow for two-portal/junction construction
  - Additional cost results in schedule delay of at least 7 years, and would add about $900 M (YOE$)
  - Significant cut-and-cover construction at Deep Ellum “front door” and along most of Good Latimer where new Epic development is located
  - Depth at IH 345 and portal location precludes a subway station along Good Latimer so there would be no station in this area
  - Allows for Farmers Market/CBD East station under Commerce to be mined; would require nearby property for construction access/headhouse to minimize cut-and-cover on Commerce
  - Station along Commerce is further from East Transfer Center site