Dallas Area Rapid Transit (DART) Silver Line Project

Quarterly Community Meeting – City of Plano
Tuesday, November 17, 2020
Welcome!
We Will Begin Momentarily

Please submit all questions and comments via the chat room.

If you have called into this meeting and wish to submit questions or comments please email CottonBelt@DART.org.

If we do not respond to your question/comments tonight, it will be responded to within 30 days of receipt. Your question and answer will then be posted on www.DART.org/SilverLine.

Thank You
Notice

Audio and Video Recording in Progress
DART Community Engagement Representative

Chris Walters
CottonBelt@DART.org
214-749-3280
COVID-19 Update

Due to the current pandemic, all public involvement sessions will take place via video conference.

DART urges you to follow the guidelines from the Centers for Disease Control and Prevention (CDC) to keep your family healthy and safe.

Stay up to date by attending public involvement sessions online, signing up for construction alerts, visiting DART.org/SilverLine or calling 214-749-2543.
How To Stay Informed

- Visit [www.DART.org/SilverLine](http://www.DART.org/SilverLine)
- Email [CottonBelt@DART.org](mailto:CottonBelt@DART.org)
- Attend meetings virtually
- Sign up for project alerts at [www.DART.org/SilverLine](http://www.DART.org/SilverLine)
- DART HOTLINE
  972-833-2856
- Mail your Community Engagement Representative
Questions and Answers

Please submit all questions and comments via the chat room. Questions will be reviewed by our Team and a response will be prepared for the end of the presentation.

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Thank You
DART Silver Line Project Facts

- $1.266 Billion Design-Build Project
- 26 Mile alignment servicing the following cities/towns:
  - Addison
  - Carrollton
  - Coppell
  - Dallas
  - Grapevine
  - Plano
  - Richardson
- 10 Rail stations
- 4 Rail connections (Green, Orange, Red Light Rail, TEXRail)
- March 2023 Revenue Service
- The design-build status for Silver Line is 70% complete as of October 22, 2020
- The Silver Line vehicle design is 100% complete as of October 22, 2020
DART Silver Line Segment Map
Design-Build Update
What is Design-Build?

Design–build alternative project delivery method is used in the construction industry. Design-build is a method of project delivery in which an entity (Archer Western Herzog, AWH), works under a single contract with the project owner (Dallas Area Rapid Transit, DART) to provide design and construction services.

- Design Builder – Archer Western Herzog (AWH)
- Owner – Dallas Area Rapid Transit (DART)
# Design-Build Schedule

<table>
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<td>Q4</td>
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- **Design/Build: Overall Final Design and Construction**
- **Design/Build: 30%**
- **Design/Build: 60%**
- **Design/Build: Final Design**
- **Design/Build: Construction**
- **Testing**
- **Revenue Service**

**November 2020**
Design-Build Update
Plano Pkwy. Intersection

Road modification work at E. Plano Pkwy. bridge will go over the road.

LEGEND
1 RR CROSSING GATES
2 RR CANTILEVER WARNING LIGHTS
3 PEDESTRIAN CROSSING GATE
4 8x10 SIGNAL HOUSE
5 BETTERMENT WALL
6 4' FENCE
7 SOUND/NOISE WALL

NOT AN APPROVED DRAWING

let’s go.
Design-Build Update
10th St. Intersection
Design-Build Update
K Avenue Intersection
Design-Build Update
Municipal Avenue Intersection
Design-Build Update
N Avenue Intersection
Design-Build Update

Jupiter Road Intersection

Road modifications: Jupiter Bridge will go over the road.
Design-Build Update
Shiloh Road Intersection
Betterments Program
**Betterments Program**

- Series of community meetings for residential adjacent property owners
- Betterments are project elements above and beyond the standard mitigation measures or design criteria

Thank you to those who participated!
Betterments Program Update
Wall Finish and Color Results

• Neighborhood – Aura One90
  – Wall Height – 15’ Betterment Wall
  – Wall Color – 1004B Natural
  – Wall Finish – Rolled Ashlar
  – Number of Votes – 1 of 1

• Neighborhood – Ezekial Way
  – Wall Height – 15’ Betterment Wall
  – Wall Color – 1004B Natural
  – Wall Finish – Rolled Drystack
  – Number of Votes – 1 of 14
Plano Betterments Program
Aura One90
Plano Betterments Program
Aura One90 - South
Plano Betterments Program
Aura One90 - North
Plano Betterments Program
Alignment Map
Plano Betterments Program
Alignment Map
Plano Betterments Program
Ezekial Way
Plano Betterments Program
Alignment Map
Plano Betterments Program
Alignment Map
Betterments Program Update
Wall Finish and Color Results – Aura One90

- Neighborhood – **Aura One90**
  - Wall Height – 15’ Betterment Wall
  - Wall Color – 1004B Natural
  - Wall Finish – Rolled Ashlar
  - Number of Votes – 1 of 1

Rolled Ashlar

1004B Natural
Betterments Program Update
Wall Finish and Color Results – Aura One90
Betterments Program Update
Wall Finish and Color Results – Ezekial Way

• Neighborhood – Ezekial Way
  – Wall Height – 15’ Betterment Wall
  – Wall Color – 1004B Natural
  – Wall Finish – Rolled Drystack
  – Number of Votes – 1 of 14

Rolled Drystack 1004B Natural
Betterments Program Update
Wall Finish and Color Results – Ezekial Way
Betterments Program Update

Sound Wall Mock-up Viewing Schedule

DART SILVER LINE BETTERMENTS PROGRAM
NOTICE OF BETTERMENTS SOUND WALL Mock-up VIEWING

You are invited to participate in the DART Silver Line Betterments Sound Wall Mock-up Viewing in your city to see in person what the wall color and finish will look like in your neighborhood. The viewing will be available from Friday, November 20, 2020 – Friday, January 22, 2021.

The betterments sound wall color and finish for each neighborhood were voted on by residents and stakeholders through a robust and inclusive community engagement process. All Betterments Sound Wall Mock-up Viewing locations will provide the community an up-close look at the various wall color and finish selections. Attendees will see the Densial Absorptive Wall System that will be used on the road-side of the alignment and the Precast Concrete Reflective Wall to be used on the neighborhood-side of the alignment.

To confirm wall color and finish for your neighborhood, please visit DART.org/SilverLine.

Viewing Location

The locations to view betterment wall mock-ups in your city are as follows:

- **City of Coppell**
  Coppell Town Center
  355 Parlinway Blvd.
  Coppell, Texas 75019

- **City of Carrollton**
  Crosby Recreation Center
  1619 E. Crosby Road
  Carrollton, TX 75006

- **City of Dallas**
  Campbell Green Recreation Center
  10000 Park Hill Drive
  Dallas, TX 75240

- **City of Frisco**
  Frisco Municipal Center
  1520 K Avenue
  Frisco, TX 75034

- **City of Richardson**
  Richardson Civic Center
  411 W. Arapaho Road, Suite 102
  Richardson, TX 75080

For Additional Information: Please visit DART.org/SilverLine or contact DART Community Engagement at 214-749-2543.
DART Station
Art & Design Program
Plano Art & Design Program

12th Street Station

Station Facts
Platform Type: Side
Parking Spaces: 314
Bus Bays: 5
Bus Routes: 1

Projected Daily Ridership:
Opening Day: 200
2040: 370

Mode of Access:
Rail Transfer: 46%
Bus Transfer: 8%
Drive: 32%
Walk: 14%

Station Benefits
• Additional Red Line/Cotton Belt Transfer opportunity
• Part of Plano’s 10-year vision to extend downtown Plano to the south and create pedestrian-oriented development corridor
• Parking serves entire station complex

Key Community Comments
• Supported by the City of Plano
• Envisioned as a development catalyst
• Seen as compliment to planned development
• Seen as multimodal transit hub
Plano Art & Design Program

12th Street Vertical Circulation – SE Platform
Plano Art & Design Program

12th Street Vertical Circulation – SE Platform
Plano Art & Design Program
12th Street Vertical Circulation – NE and NW Platforms
Plano Art & Design Program

12th Street Vertical Circulation – NE and NW Platforms
Plano Art & Design Program
12th Street Vertical Circulation – NE and NW Platforms
Plano Art & Design Program
12th Street Pedestrian Connection
Plano Art & Design Program
12th Street At-grade Station Pedestrian Connection
Plano Art & Design Program

12th Street At-grade Station Pedestrian Connection
Plano Art & Design Program
12th Street At-Grade Station Pedestrian Connection
Plano Art & Design Program
12th Street At-Grade Station Pedestrian Connection
Plano Art & Design Program
12th Street At-grade Station Pedestrian Connection
Plano Art & Design Program
Shiloh Road Station

Station Facts
Platform Type: Center
Parking Spaces: 672
Bus Bays: 2
Bus Routes: 2

Projected Daily Ridership:
Opening Day: 400
2040: 660

Mode of Access:
Drive: 47%
Bus: 13%
Walk: 40%

Station Benefits
• 146,000 Residents within 5 miles of track shed
• End of line commuter park-and-ride
• Access/visibility from major arterial
• Bus connections to industrial employment areas

Key Community Comments
• Supported by the City of Plano
• Support for terminal station parking
• Interest expressed in extending line eastward
Plano Art & Design Program
Shiloh Road Station
Plano Art & Design Program
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Questions and Answers

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Thank You
Hike & Bike Trail
Hike & Bike Trail

- The Hike & Bike Trail is being funded through an Interlocal Agreement with the North Central Texas Council of Governments (NCTCOG)

- NCTCOG is working with participating cities to develop the project

- DART will complete final design of the Cotton Belt/Silver Line Corridor Hike and Bike Trail
Hike & Bike Trail

Typical Cross Section Hike and Bike Trail on One Side
Questions About Hike and Bike Trail

North Central Texas Council of Governments
Kevin Kokes
KKokes@nctcog.org
817-695-9275

City of Plano
Christina Sebastian
ChristinaS@plano.gov
972-941-7151
Silver Line Vehicle Information
Silver Line Vehicle Information

- Automatic Passenger Counters (APC)
- Vehicle Business System (VBS)
- Closed Circuit Television System (CCTV)
- Number of seats per vehicle: 230
Silver Line Vehicle Information
Overview

*Single Vehicle
Silver Line Vehicle Information
Overview - Exterior

HVAC Enclosure
Silver Line Vehicle Information
Overview - Exterior

Wheel Skirts

WHEEL SKIRT EXAMPLE (STILL UNDER DESIGN)
Silver Line Vehicle Information

Overview - Interior

INTERIOR SEATING

ENTRANCE AREA
Silver Line Vehicle Information
Overview - Interior

INTERIOR LIGHTING

OVERHEAD LUGGAGE CARRIERS
Silver Line Vehicle Information
Overview - Interior

WHEELCHAIR ACCOMMODATION

BICYCLE RACKS

*Vehicles are level boarding to accommodate easy access of wheelchairs, bicycles, luggage and etc.
Silver Line Vehicle Information

Vehicle Frequency

- Weekday service is currently scheduled to be from 6:00 a.m. to 9:00 p.m.
- Service hours could be as early as 5:00 a.m. or as late as 11:00 p.m.
- 30-minute peak and 60-minute non-peak
Silver Line Vehicle Information

Carbody Assembly

Vehicle roof and underframe

Vehicle passenger car
Quiet Zones

Sound Mitigation
Quiet Zones

- DART Silver Line crossings in residential areas are proposed to be quiet zones
- Quiet zone mitigations are independent of the sound wall mitigations
- Establishing quiet zones will require cooperative action among the municipalities along the Silver Line, the Federal Railroad Administration (FRA), the freight railroads and DART
- The type of protection will be determined during design of the intersection
## Quiet Zones
### Quiet Zone Crossings - Plano

<table>
<thead>
<tr>
<th>STREET</th>
<th>CITY</th>
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<tbody>
<tr>
<td>President George Bush Turnpike (WB)</td>
<td>Plano</td>
</tr>
<tr>
<td>10th Street (Existing)</td>
<td>Plano</td>
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<tr>
<td>K Avenue</td>
<td>Plano</td>
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<tr>
<td>Municipal Avenue</td>
<td>Plano</td>
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<tr>
<td>N Avenue (Existing)</td>
<td>Plano</td>
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<tr>
<td>Jupiter Road (Existing)</td>
<td>Plano</td>
</tr>
<tr>
<td>Shiloh Road (Existing)</td>
<td>Plano</td>
</tr>
</tbody>
</table>
## Sound Mitigation
### Vehicle Noise Control / Infrastructure and Operational Noise Control Measures

<table>
<thead>
<tr>
<th>FEIS Mitigation Measures:</th>
<th>Additional Noise Reduction Measures:</th>
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<tbody>
<tr>
<td>Precast Concrete Reflective Sound Wall – Track and Neighborhood Side</td>
<td>Durisol Absorptive Sound Wall Enhancement – Track Side Only</td>
</tr>
<tr>
<td>12' Sound Wall</td>
<td>15' Sound Wall / Betterment Wall – 3’ foot increase</td>
</tr>
<tr>
<td>Quiet Zones at Rail Crossings in Residential Areas</td>
<td>Vehicle wheel skirts, HVAC enclosure (Baffler) and variable speed cooling fans</td>
</tr>
<tr>
<td>Directional Electronic Crossing Warning Bells will be at 7 locations (5 in Dallas)</td>
<td>Vehicle is quieter than initially assumed in the noise analysis</td>
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<td>Maximum speed of 45-mile per hour in North Dallas</td>
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<tr>
<td></td>
<td>Directional Electronic Crossing Warning Bells will be used at all at-grade crossings</td>
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<tr>
<td></td>
<td>Betterment walls added in locations that do not meet the warrants for noise mitigation</td>
</tr>
</tbody>
</table>
Construction Update
Construction Update

- Dry utility relocation
- Design survey and surface utility investigation
- Freight rail removal
- Silver Line rail delivery and off loading
- Grubbing and clearing
- Schedule and notification:
  - Lane restrictions
  - Closures
  - Detours

Removal of rail spikes
Construction Update

Boring testing along Belt Line Road
Construction Update

Backfilling new pipe installation
Construction Update

Excavating for a bore pit
Construction Update

Future infrastructure excavating new trench for Sprint fiber
Construction Update

Future infrastructure setting bore tracks
Construction Update

Bobcat installing pipe in open trench
Upcoming Construction Activity

Construction Equipment

- Front-end Loader
- Trackhoe Excavator
- Bobcat
- Motor Grader
- Track Loader
- Backhoe
- Crane

*NOT AN ALL-INCLUSIVE LIST*
Upcoming Construction Activity

Public Access

• Maintain business access
• Maintain home and community access
• Maintain access for emergency vehicles
• Maintain pedestrian access
Upcoming Construction Activity

Maintenance of Traffic

- Schedules and notification deadlines
- Lane restrictions
- Closures
- Detours
Construction Notifications

- Construction Activity Notifications (Doorhangers, Emails, Social Media, etc.)
- DART and Archer Western Herzog Project Websites
- DART Silver Line Project Newsletters
- DART Silver Line Project At-A-Glance Fact Sheets
- Quarterly Design and Construction Community Meetings
- Stakeholder Meetings with Businesses and Residents
- Project Hotline: 972-833-2856
Construction Notifications

- DART Silver Line Fact Sheets
  - DFW International Airport / City of Grapevine
  - City of Dallas / Coppell
  - City of Carrollton
  - Town of Addison
  - City of Richardson
  - City of Plano
Construction Safety

10 Construction Safety Tips

With construction about to begin on the Silver Line Project along the historic Cotton Belt Regional Rail Corridor, DART reminds everyone that construction areas can be very dangerous. Play it safe by following these 10 tips:

1. STOP, LOOK AND LISTEN
   Phones, video games and other electronic devices can be distracting.

2. REMOVE EARBUD OR TURN VOLUME DOWN
   Headphones can keep you from hearing approaching bulldozers, dump trucks and other construction vehicles.

3. AVOID DANGERS
   Do not walk, ride, run, hang out or play in construction zones or work areas; heavy machinery and debris pose dangers.

4. OBEY SIGNALS
   Always obey all traffic signs and signals; never assume you have the right-of-way - and look both ways before crossing.

5. USE CROSSWALKS
   Use sidewalks and cross only at designated crosswalks, as construction vehicles make sudden stops and wide turns.

6. SEE AND BE SEEN
   Make eye contact with construction vehicles before crossing.

7. WATCH OUT
   Observe all construction signs and warnings.

8. KEEP AWAY
   Keep away from construction fencing and traffic cones - they’re there to protect you.

9. BE ON THE LOOKOUT
   Watch out for falling objects, moving vehicles and other hazards.

10. START TALKING
    Safety begins with you. Talk to your family.
Construction School Safety

School Districts

- Plano ISD
  - All schools
# Construction 90-Day Schedule

<table>
<thead>
<tr>
<th>CITY OF PLANO</th>
<th>NOVEMBER 2020</th>
<th>DECEMBER 2020</th>
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<td>Explorer Pipeline Midway Rd.</td>
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School Outreach Update
School Outreach Update – Plano ISD

- Communicate construction updates and safety information directly with Plano ISD staff.
- Work with Plano ISD, and City of Plano staff to help manage safe traffic flow along rail crossings, especially for pickup and drop-off schedules for students and parents where relevant.
- Participate in school and community events with Plano ISD to promote transit safety and awareness campaigns.
- Provide transit education material, resources, and programs to students, parents, and staff at Plano ISD through online curriculums, virtual presentations, and virtual tours of the DART System.
School Outreach Update – Plano ISD

- Offer interactive and virtual Career Day Programs to Plano ISD students and teachers, focusing on Science, Tech, and Math (STEM) careers, educational background, and skills required for a career in public transportation.
- Work to ensure each school building has pertinent DART/AWH contact information.
- Establish proactive and conducive relationships with area school administrators to enhance communication flow.
How To Stay Informed
How To Stay Informed

- Visit [www.DART.org/SilverLine](http://www.DART.org/SilverLine)
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