About the Foothill Gold Line
Board of Directors
Construction Authority

• Construction Authority was created by state legislation in 1998 to plan, design and build the Metro Gold Line from Union Station east to Montclair (updated in 2011)
• Construction Authority is a separate agency from LA Metro & Metrolink
• Enabling legislation provides all necessary powers to complete the project
• Construction Authority is overseen by board of directors
• Board of directors receives feedback from all corridor cities through Joint Powers Authority and Technical Advisory Committee
• Construction Authority works closely with Metro:
  • Roles and responsibilities formalized in Master Cooperative Agreement
  • Construction Authority builds the project per Metro’s design and safety specifications
  • Both agencies play a role in project safety, planning and education
Foothill Gold Line Project History

• 1999: Foothill Gold Line Construction Authority becomes operational
• 2003: LA to Pasadena segment completed on-time, under-budget; Alternatives Analysis initiated for Foothill Gold Line segments
• 2005: Board selected Locally Preferred Alternative for Foothill Gold Line
  – Pasadena to Azusa & Glendora to Montclair
• 2007: Foothill Gold Line Final EIR completed; Final EIR for only Pasadena to Azusa segment certified
• 2008: Measure R approved, fully funding Pasadena to Azusa segment; Residual funds available for Glendora to Montclair
• 2010: Pasadena to Azusa segment broke ground; Environmental process initiated for Glendora to Montclair segment
• 2013: Final EIR certified and Locally Preferred Alternative approved for Glendora to Montclair segment
• 2014: Advanced Engineering began for Glendora to Montclair segment
• 2015: Pasadena to Azusa segment completed on-time & under-budget
• 2016: Draft Advanced Engineering complete for Glendora to Montclair
• 2017: Funding Secured; Glendora to Montclair groundbreaking
Gold Line’s 3 Phases = $3 Billion Investment

  - 13.7 Miles, 3 Cities, 13 Stations
- **Pasadena to Azusa** – Completed On Time/Under Budget (2015)
  - 11.5 Miles, 5 Cities, 6 Stations
- **Glendora to Montclair** – Breaking Ground October 21, 2017
  - 12.3 Miles, 6 Cities, 6 Stations
Part of LA County’s Growing Rail Network

County Rail and Busway Network with Measure M Transit Projects

Source: LA Metro
Ridership Exceeding Expectations

- Ridership is at historic highs (as of January 2017)
  - More than 53,600 boardings each weekday (58,000+ on weekends)
  - More than 1.4 million boardings (traveled 8.5 million miles)
- Most riders are new to the Metro system and are traveling to Pasadena
- Nearly all riders are choice riders
Los Angeles County’s population will grow by 5.9% to 10.7 million by 2024.

During that same period, the San Gabriel Valley will grow by 7.6% to more than 1.5 million; taking on 18% of the county’s expected growth.
Majority of SGV Growth in FGL Corridor

Foothill Gold Line Cities:
Population Growth = 51,000+ people
Employment Growth = 15,000+ jobs

2014-2024 Growth

San Gabriel Valley
Foothill Gold Line Cities
Glendora to Montclair Project Overview
Five major phases:

- **Alternatives Analysis**
  - Completed 2003

- **Environmental (EIR)/Select LPA**
  - Completed 2013

- **Advanced Conceptual Engineering 30%**
  - Completed 2014 - 2017

- **Final Design 2017-2020 --- Construction 2020-2026**
  - * 2017-2026

- **Transit Service**

*Completed during this phase:

- Funding Agreement and Master Cooperative Agreement between Construction Authority & Metro
- Master Cooperative Agreements between Cities & Construction Authority

*Where We Are Now*
Light Rail

- Passenger rail cars operate on steel tracks
- Trains are electrically-powered by overhead wire
- Vehicles may operate in single-car or multi-car trains/stations are planned to handle three-car trains
- Top speeds - 55 miles per hour
- Three-car trains hold up to 200 passengers per car (sitting and standing)

Different than Metrolink - Commuter/Heavy Rail System

Metro Gold Line - Light Rail

Foothill Gold Line
Developing Project Understanding

Corridor cities continue to be involved at every step of the process, as scope gets better defined.
Glendora to Montclair Work Plan

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>Ground Breaking – October 2017</td>
</tr>
<tr>
<td></td>
<td>Utility Relocation Contract</td>
</tr>
<tr>
<td>2018</td>
<td>Alignment Contract – October 2018</td>
</tr>
<tr>
<td>2019</td>
<td>Alignment Contract</td>
</tr>
<tr>
<td>2020</td>
<td>Final Engineering</td>
</tr>
<tr>
<td></td>
<td>Project 1: Freight/Metrolink Relocation Construction</td>
</tr>
<tr>
<td></td>
<td>Project 2: Light Rail Construction</td>
</tr>
<tr>
<td>2021</td>
<td>Substantial Completion</td>
</tr>
</tbody>
</table>

Foothill Gold Line
# Project Funding Status ($ in Millions)

<table>
<thead>
<tr>
<th>Funding Sources</th>
<th>Los Angeles County (Glendora to Claremont)</th>
<th>San Bernardino County (Claremont to Montclair)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measure M</td>
<td>$1,019</td>
<td>$0</td>
<td>$1,019</td>
</tr>
<tr>
<td>Measure R</td>
<td>$96</td>
<td>$0</td>
<td>$96</td>
</tr>
<tr>
<td>Other</td>
<td>$42</td>
<td>$0</td>
<td>$42</td>
</tr>
<tr>
<td>SBCTA</td>
<td>$0</td>
<td>$38</td>
<td>$38</td>
</tr>
<tr>
<td>Montclair</td>
<td>$0</td>
<td>$2</td>
<td>$2</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>$1,157</strong></td>
<td><strong>$40</strong></td>
<td><strong>$1,197</strong></td>
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<tr>
<td><strong>2017 Project Est. Cost</strong></td>
<td><strong>$1,406</strong></td>
<td><strong>$70</strong></td>
<td><strong>$1,476</strong></td>
</tr>
<tr>
<td><strong>Additional Funds Needed</strong></td>
<td><strong>$249</strong></td>
<td><strong>$30</strong></td>
<td><strong>$279</strong></td>
</tr>
</tbody>
</table>

June 28, 2017

NOTE: Final project costs will be known when Alignment Design-Build Contractor has been selected.
Project Elements (Overview)

- 12.3 miles of light rail at-grade track
- Track is generally within existing, owned right of way
- Overhead electric wires above tracks power trains
- Rail corridor is 100% shared with BNSF and Metrolink (tracks and stations are NOT shared)
- Six new stations; each with intermodal parking facilities
- 28 at-grade (street level) crossings
- 23 New/Renovated Bridges
- 11 Traction Power Supply Substations within or adjacent to the right of way, located 1.0 to 1.5 miles apart
- Pedestrian crossings at every station (under or over the tracks)
100% Shared Corridor

East of Cambridge Ave, Claremont:
1. Relocate Metrolink & BNSF
2. Install Light-Rail

West of Cambridge Ave, Claremont:
1. Relocate BNSF
2. Install Light-Rail

Approx. 10.4 Miles
Approx. 1.9 Miles

NOTE: The Gold Line will be built within a shared rail corridor, but will NOT share tracks or stations.
## Multi-Modal Parking Facilities at Stations

<table>
<thead>
<tr>
<th>Future Station</th>
<th>Parking Spaces</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glendora</td>
<td>420 (new structure)</td>
</tr>
<tr>
<td>San Dimas</td>
<td>450 (new structure)</td>
</tr>
<tr>
<td>La Verne</td>
<td>600 (new structure)</td>
</tr>
<tr>
<td>Pomona</td>
<td>850 (new structure) * Spaces Shared with Metrolink</td>
</tr>
<tr>
<td>Claremont</td>
<td>1,260 (new structure) * Spaces Shared with Metrolink</td>
</tr>
<tr>
<td>Montclair</td>
<td>1,600 existing (surface lot) * Spaces Shared with Metrolink</td>
</tr>
</tbody>
</table>

To promote multi-modal access, each station is being designed to include more bike parking and lockers, shuttle and drop off areas, bus stop interfaces and pedestrian access from all sides.

- Metro is currently studying impact of new paid parking policy – impact on demand and phased parking implementation.
### Estimated Future Travel Times

<table>
<thead>
<tr>
<th>Boarding Station</th>
<th>Travel Time to APU/Citrus College Station - Azusa</th>
<th>Travel Time to Sierra Madre Villa Station - Pasadena (+19 minutes)</th>
<th>Travel Time to Union Station - Los Angeles (+29 minutes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glendora</td>
<td>3 minutes</td>
<td>22 minutes</td>
<td>51 minutes</td>
</tr>
<tr>
<td>San Dimas</td>
<td>8 minutes</td>
<td>27 minutes</td>
<td>56 minutes</td>
</tr>
<tr>
<td>La Verne</td>
<td>12 minutes</td>
<td>31 minutes</td>
<td>60 minutes</td>
</tr>
<tr>
<td>Pomona</td>
<td>14 minutes</td>
<td>33 minutes</td>
<td>62 minutes</td>
</tr>
<tr>
<td>Claremont</td>
<td>17 minutes</td>
<td>36 minutes</td>
<td>65 minutes</td>
</tr>
<tr>
<td>Montclair</td>
<td>19 minutes</td>
<td>38 minutes</td>
<td>67 minutes</td>
</tr>
</tbody>
</table>

Times are estimated. Metro Operations will decide as segment goes on-line for passenger service.
Station Elements

Station Features

Safety Elements

Ticket Vending Area

Systems Equipment
Soundwalls

- Project follows the Federal Transit Administration (FTA) methodology to determine where soundwalls are required (currently underway)
- Soundwalls are generally located where a sensitive receptor (such as a residence and school) is adjacent to the light rail alignment
- The height of the walls will vary depending on topography and other factors, but are generally between 8 and 12 feet tall – measured from top of rail (some may be shorter or taller)
  - For safety, soundwall heights at grade crossings are 3’7” for a length of 250 feet
Safety Equipment at Shared At-Grade Crossings:

- Exit Gates (Quad Gates) for vehicles and pedestrians
- Raised Medians (approximately 100 feet on either side of tracks)
- New Red Curbs (approximately 100 feet on all curbs)
- Turn restrictions from driveways within 100 feet of tracks
- Look Both Ways-LED signals
<table>
<thead>
<tr>
<th>Item</th>
<th>Roadway Name</th>
<th>City</th>
<th>Item</th>
<th>Roadway Name</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Barranca Ave</td>
<td>Glendora</td>
<td>24</td>
<td>San Dimas Canyon Rd</td>
<td>San Dimas</td>
</tr>
<tr>
<td>2</td>
<td>Foothill Blvd / Grand Ave</td>
<td>Glendora</td>
<td>25</td>
<td>Wheeler Ave</td>
<td>La Verne</td>
</tr>
<tr>
<td>3</td>
<td>Vermont Ave</td>
<td>Glendora</td>
<td>26</td>
<td>A Street</td>
<td>La Verne</td>
</tr>
<tr>
<td>4</td>
<td>Glendora Station Ped Access</td>
<td>Glendora</td>
<td>27</td>
<td>D Street</td>
<td>La Verne</td>
</tr>
<tr>
<td>5</td>
<td>Glendora Ave</td>
<td>Glendora</td>
<td>28</td>
<td>E Street</td>
<td>La Verne</td>
</tr>
<tr>
<td>6</td>
<td>Pasadena Ave</td>
<td>Glendora</td>
<td>29</td>
<td>La Verne Station Ped Access</td>
<td>La Verne</td>
</tr>
<tr>
<td>7</td>
<td>Glenwood Ave</td>
<td>Glendora</td>
<td>30</td>
<td>White Ave</td>
<td>La Verne</td>
</tr>
<tr>
<td>8</td>
<td>Elwood Ave</td>
<td>Glendora</td>
<td>31</td>
<td>Fulton Road (LRT, FRT, Metrolink)</td>
<td>Pomona</td>
</tr>
<tr>
<td>9</td>
<td>Loraine Ave</td>
<td>Glendora</td>
<td>32</td>
<td>Pomona Station Ped Access (West)</td>
<td>Pomona</td>
</tr>
<tr>
<td>10</td>
<td>Route 66 (Formerly Alosta Ave)</td>
<td>Glendora</td>
<td>33</td>
<td>Pomona Station Ped Access (East)</td>
<td>Pomona</td>
</tr>
<tr>
<td>11</td>
<td>I-210 West On-Ramp</td>
<td>Glendora</td>
<td>34</td>
<td>Garey Ave (LRT)</td>
<td>Pomona</td>
</tr>
<tr>
<td>12</td>
<td>I-210 Freeway</td>
<td>Glendora</td>
<td>35</td>
<td>Garey Ave (FRT)</td>
<td>Pomona</td>
</tr>
<tr>
<td>13</td>
<td>Lone Hill Ave Off-Ramp</td>
<td>Glendora</td>
<td>36</td>
<td>Towne Ave (LRT)</td>
<td>Pomona</td>
</tr>
<tr>
<td>14</td>
<td>Lone Hill Ave (LRT)</td>
<td>Glendora</td>
<td>37</td>
<td>Towne Ave (FRT)</td>
<td>Pomona</td>
</tr>
<tr>
<td>15</td>
<td>Lone Hill Ave (FRT)</td>
<td>Glendora</td>
<td>38</td>
<td>Cambridge Ave</td>
<td>Claremont</td>
</tr>
<tr>
<td>16</td>
<td>Gladstone Ave</td>
<td>San Dimas</td>
<td>39</td>
<td>Indian Hill Boulevard</td>
<td>Claremont</td>
</tr>
<tr>
<td>17</td>
<td>SR-57 Freeway</td>
<td>San Dimas</td>
<td>40</td>
<td>Claremont LRT Station Ped Access</td>
<td>Claremont</td>
</tr>
<tr>
<td>18</td>
<td>Eucla Ave</td>
<td>San Dimas</td>
<td>41</td>
<td>Claremont Metrolink Station Ped Access</td>
<td>Claremont</td>
</tr>
<tr>
<td>19</td>
<td>Bonita Ave / Cataract Ave</td>
<td>San Dimas</td>
<td>42</td>
<td>College Ave</td>
<td>Claremont</td>
</tr>
<tr>
<td>20</td>
<td>Monte Vista St</td>
<td>San Dimas</td>
<td>43</td>
<td>Claremont Blvd</td>
<td>Claremont</td>
</tr>
<tr>
<td>21</td>
<td>San Dimas Ave</td>
<td>San Dimas</td>
<td>44</td>
<td>Monte Vista Ave</td>
<td>Montclair</td>
</tr>
<tr>
<td>22</td>
<td>San Dimas Station Ped Access</td>
<td>San Dimas</td>
<td>45</td>
<td>Montclair Station Ped Access (West)</td>
<td>Montclair</td>
</tr>
<tr>
<td>23</td>
<td>Walnut Ave</td>
<td>San Dimas</td>
<td>46</td>
<td>Montclair Station Ped Access (East)</td>
<td>Montclair</td>
</tr>
</tbody>
</table>
Grade Crossings Types

- Grade Crossings
  - Types
    - At-grade crossing: tracks intersect with streets/roads
    - Grade separated crossing: tracks do not intersect with streets/roads
    - Pedestrian crossings: points at which pedestrians cross tracks
  - Grade crossings are governed by the California Public Utility Commission (CPUC)
Grade (Street Level) Crossings

- Glendora to Montclair segment contains 48 total crossings
  - 28 at-grade crossings
  - 10 pedestrian crossings (for station access)
  - 10 grade separated crossings
- Three (3) at-grade crossings currently under review for grade separation
  - Bonita / Cataract, San Dimas
  - Indian Hill, Claremont
  - White Ave, La Verne
- One (1) pedestrian crossings currently under review for grade separation
  - San Dimas station pedestrian crossing
At-Grade Crossings – Street Changes

New Medians; Red Curbing; Turn Restrictions (within 100 ft.)

- New restrictions are required by the CPUC for safety
- All crossings are uniquely designed, but will include similar measures
Bridges/Structures

• Glendora to Montclair segment has approximately 23 bridges to accommodate light rail or freight tracks.
• Of these structures:
  – 18 will be new bridges
  – Three (3) will be modifications of existing bridges for freight
  – Two (2) will be total replacements
• No bridges will be built for Metrolink
### New Bridges/Structures

<table>
<thead>
<tr>
<th>Major Structures</th>
<th>Minor Structures (washes &amp; creeks)</th>
</tr>
</thead>
<tbody>
<tr>
<td>➢ Foothill &amp; Grand Grade Separation</td>
<td>➢ Big Dalton Wash Channel (FRT)</td>
</tr>
<tr>
<td>➢ Route 66 Grade Separation (LRT)</td>
<td>➢ San Dimas Wash Channel Bridge (LRT)</td>
</tr>
<tr>
<td>➢ Retaining Walls - East Glendora Overhead at Route 210</td>
<td>➢ San Dimas Wash Park Roadway Bridge</td>
</tr>
<tr>
<td>➢ Lone Hill Ave Flyover (LRT)</td>
<td>➢ Puddingstone Channel Bridge (LRT)</td>
</tr>
<tr>
<td>➢ Retaining Wall - Gladstone Overhead at State Route 57</td>
<td>➢ Marshall Creek Bridge (FRT)</td>
</tr>
<tr>
<td>➢ Towne Avenue Flyover (LRT)</td>
<td>➢ Live Oak Wash Channel Bridge (LRT)</td>
</tr>
<tr>
<td>➢ Garey Avenue Grade Separation (LRT)</td>
<td>➢ Live Oak Wash Channel Bridge (FRT)</td>
</tr>
<tr>
<td>➢ Monte Vista Bridge (LRT)</td>
<td>➢ Thompson Creek Channel Bridge (FRT)</td>
</tr>
<tr>
<td>• No Metrolink tracks will be grade separated as part of the project</td>
<td>➢ San Antonio Wash Channel Bridge (LRT)</td>
</tr>
</tbody>
</table>

On-going analysis may result in the need to separate the light rail tracks at Bonita/Cataract (San Dimas), White Ave (La Verne) and Indian Hill Ave (Claremont)
What to Expect During Construction
What to Expect First Few Years – 2017 to 2020

- Utility Relocation
  - Majority of the work will be within rail corridor
  - 11 sites identified for relocation or protection
  - Limited work in public right of way, with minimal impact to traffic/roads
  - Affected neighbors will be notified of work and potential impacts

- Site investigations to support Design-Build contract documents will continue:
  - Utility potholes
  - Geotechnical investigation
  - Environmental soil sampling
Temporary Changes (during construction)

• Examples of Construction Impacts:
  – Extended Grade Crossing Street Closures
  – Construction Work within Rail Corridor (utility relocation, track relocation and construction, wall and fence construction, etc.)
  – Construction Noise (mostly from large construction equipment and moving of material; No pile driving is used)
  – Other Street Work – short-term lane & street closures may be needed

• Community Notification of Construction Impacts:
  – Construction follows all city rules and regulations
  – Community notification is required for all impactful activities; and is coordinated by design-builder with Construction Authority and cities

• Impactful work is not expected until late-2019 at the earliest
Known Unknowns

- Street Crossings
  - Elwood Ave or Glenwood Ave (Glendora) – Possible Closure
  - Grade Separations:
    - Bonita/Cataract (San Dimas)
    - White Ave (La Verne)
    - Indian Hill Ave (Claremont)
- Location of San Dimas and Pomona Station Parking Facilities
- Impact of Metro’s Paid Parking Policy
- Soundwall Locations & Dimensions
- Project Aesthetics
- Property Issues (encroachments and land acquisition)
Encroachments & Land Acquisition

- **Encroachments** (50 identified to date throughout 12.3-mile corridor)
  - The Construction Authority attempts to design around encroachments whenever possible
  - If not, design-build team works with property owner on removing encroachment

- **Land Acquisition** (starting mid-2018)
  - The Construction Authority owns the vast majority of land needed for the project
  - Additional land may be needed for the station parking facilities, grade crossing equipment and other project elements
  - Additional land needs are not yet known and will likely not be known for several years
  - Once identified, the Construction Authority will approach land owners and offer fair market value
Permanent Changes (after construction)

• Street Closures/Changes
  – West Ada Ave (Glendora) - New Street Closure/Cul-de-sac
  – Elwood Ave or Glenwood Ave (Glendora) – Possible Closure
  – Fulton Ave (Pomona) – Possible Turn Restrictions

• Train Trips Per Day
  – Today, two freight train trips occur in the rail corridor each day & about 50 Metrolink train trips from White Ave (La Verne) east
  – The Gold Line will add more than 200 train trips per day in the corridor

• At-Grade Crossing Safety Enhancements (within 100 feet of rail corridor)

• Freight & Metrolink Track Relocation to Southern Half of Rail Corridor (except between Lone Hill Ave [Glendora] and Towne Ave [Pomona] where it will be relocated to northern half)
Freight & Metrolink Track Relocation (Between Lone Hill and Towne Ave Ave)

Rail Corridor Today

- 100-feet-wide rail corridor (on average)
- Freight Track in Center of Corridor (about 50-ft. from right of way line)

Future Rail Corridor

- 100-feet-wide rail corridor (on average)
- Light Rail Tracks in Northern Half of Rail Corridor (between 23-ft. to 32-ft. from right of way line)
- Freight Tracks Relocated to Southern Half of Corridor (between 21-ft. to 30-ft. from right of way line)

• Freight tracks will be relocated to Northern Half of corridor between Lone Hill Ave (Glendora) and Towne Ave (Pomona) only
Outreach
Outreach & Construction Safety Awareness

• **Leading Up to Construction** – Construction Authority
  – Community Open Houses and Presentations
  – Speakers Bureau and Newsletter Network – Cities, Local Business Organizations, Civic Organizations
  – Advertising through Local and Regional Media Outlets and USDs
  – Outreach during Community Events and at Activity Centers

• **During Construction** – Construction Authority & Contractor
  – Above activities continue, plus:
    • Construction Notices and Project Updates to Impacted Stakeholders
    • Public & School Safety Education Program
    • Elected Official Briefings and City Coordination Meetings
    • On-line Construction and Project Status Updates

• **Nearing Operation** – Metro Outreach Effort to Schools and Community
Outreach Activities

• Community Hotline
• Construction Notices, distributed:
  - E-Alerts
  - Text Alerts
  - Community walks
  - City websites
  - Authority website
• E-News Updates
• Twitter, Facebook and Blog Updates
• Community-Accessible Offices
• Construction Safety Program for Schools and Community
• Gold Line Tours

Sign Up to Stay Connected –
www.foothillgoldline.org
# Community Open Houses: Summer 2017

<table>
<thead>
<tr>
<th>City</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>San Dimas</td>
<td>July 13, 2017 @ 5:30 pm</td>
</tr>
<tr>
<td>Senior Center</td>
<td></td>
</tr>
<tr>
<td>Pomona</td>
<td>July 18, 2017 @ 5:30 pm</td>
</tr>
<tr>
<td>Palomares Park</td>
<td></td>
</tr>
<tr>
<td>Montclair</td>
<td>July 19, 2017 @ 5:30 pm</td>
</tr>
<tr>
<td>Senior Center</td>
<td></td>
</tr>
<tr>
<td>Claremont</td>
<td>July 24, 2017 @ 5:30 pm</td>
</tr>
<tr>
<td>Hughes Center</td>
<td></td>
</tr>
<tr>
<td>La Verne</td>
<td>August 3, 2017 @ 5:30 pm</td>
</tr>
<tr>
<td>Hillcrest Senior Community</td>
<td></td>
</tr>
<tr>
<td>Glendora</td>
<td>August 7, 2017 @ 5:30 pm</td>
</tr>
<tr>
<td>Glendora Library, Bidwell Forum</td>
<td></td>
</tr>
</tbody>
</table>