

Project Development and Environment (PD&E) Study SR 9/SR 817/NW 27th Avenue Rapid Transit Study







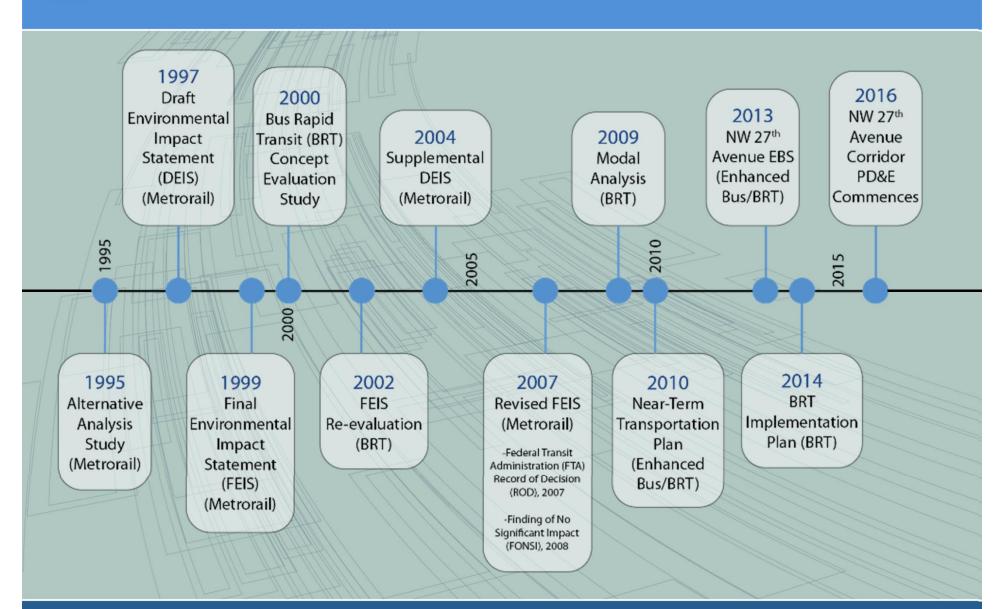




April 2018

FDOT

Project History Timeline



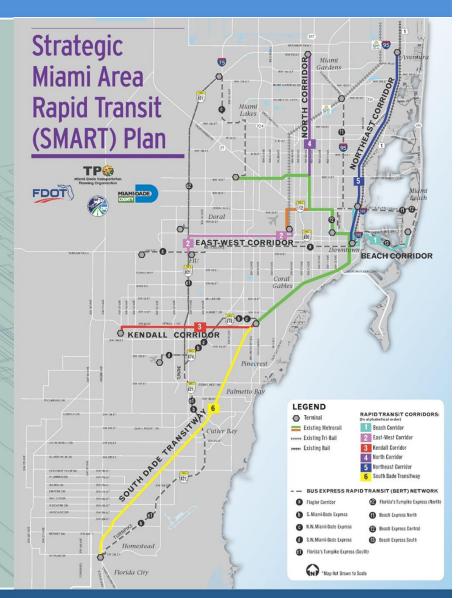


Strategic Miami Area Rapid Transit (SMART) Plan

The SMART Plan identifies the development of six rapid transit corridors that directly support the mobility of our future population and employment growth

MPO Resolution #26-16

Resolution endorsing the SMART plan and directing the MPO Executive Director to work with the Metropolitan Planning organization fiscal priorities committee to determine the costs and potential sources of funding for Project Development and Environment study for said projects.





A Project Development and Environment (PD&E) Study is a part of the process for complying with the National

Environmental Policy Act (NEPA) of 1969 as mandated by the U.S. Environmental Protection Agency (EPA) in addition to Federal and State laws and regulations.

- The PD&E Process is the State of Florida process for complying with NEPA requirements.
- Evaluation criteria allows the project to be eligible for federal and state funding.
- Public outreach is a vital component to the study process.



PD&E Study Elements



Public Involvement Continuous outreach and coordination with community and stakeholders.



Data Collection

Review of existing conditions.



Engineering Analysis Develop and evaluate alternatives that meet the project goals. Identify infrastructure as well as analysis of traffic, utilities, safety, drainage.



Environmental Evaluations

Identify potential impacts to natural, social and physical environments.



NW 27th Avenue Study Overview

Study Limits

- Miami Intermodal Center (MIC) via NW 27th Avenue and SR 112 to NW 215th Street (Unity Station)
- 13-mile urbanized corridor

Rapid Transit Modes

- Bus Rapid Transit (BRT)
- Heavy Rail Transit (HRT)

Corridor Alignment

 Alternatives will utilize existing right-of-way to the greatest extent possible

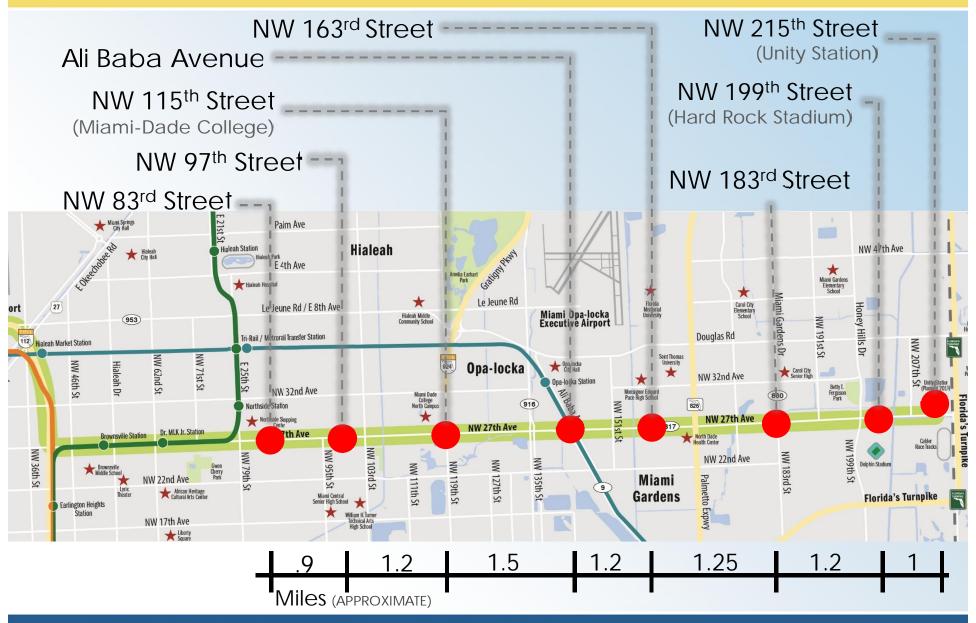
Station Stop Locations

- On-street, near or far-side of major intersections
- Multimodal connections
- Mode dependent





Proposed Station Locations





Project Alternatives

Alternative	Roadway Configuration	Transit Improvement	Service Frequency
No-Build	No change to existing configuration	No change to Route 27 or to 297 MAX	Route 27 15 min. peak 20 min off-peak 297 MAX 15 min peak 30 min off-peak
Transportation Systems Management and Operations (TSMO)	No change to existing configuration	Upgrade station stops	297 MAX Increase to 10 min. peak 15 min. off-peak

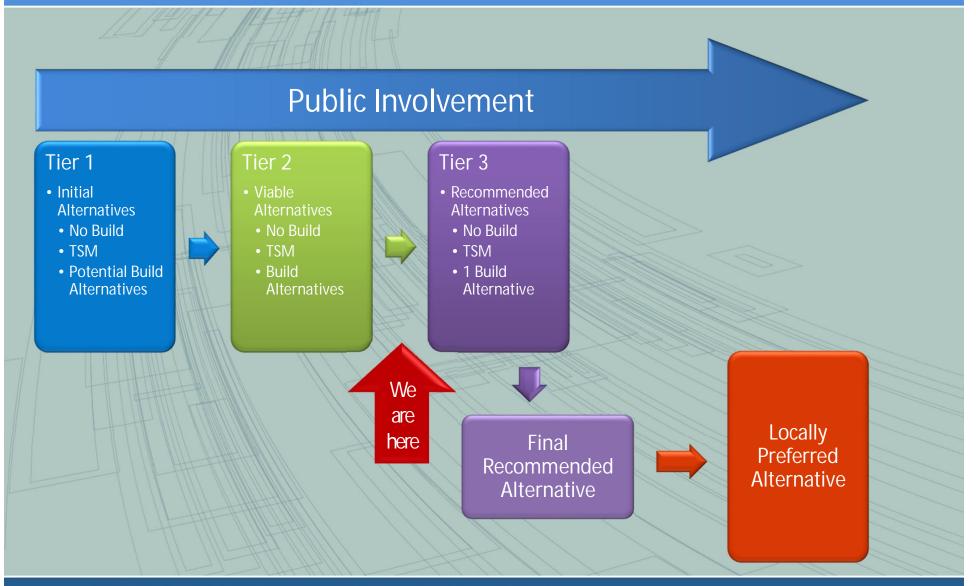


Build Alternatives

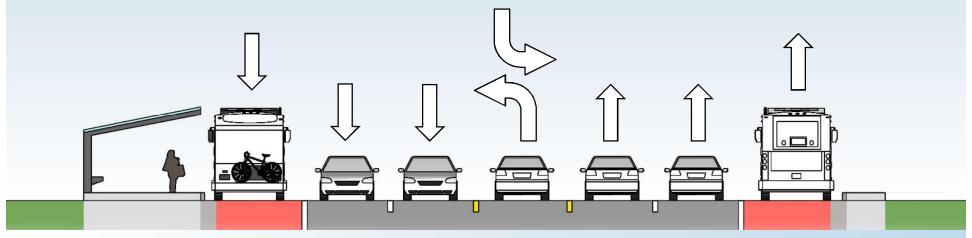
Alternative	Roadway Configuration	Transit Improvement	Service Frequency
Alternative 1 Curbside BRT	Repurpose curbside lane in each direction to a bus lane that allows right-turning vehicles	Dedicated Bus Lane New Stations	BRT service 8 min. peak 15 min. off-peak
Alternative 2 Elevated Metrorail Extension	Utilize median for column supports of elevated structure and station platforms	Elevated Metrorail with 8 stations	Rail service 9 min. peak 15 min. off-peak
Alternative 3 At-Grade Median Rail	Convert median and adjacent travel lanes to exclusive rail guideway. Lane reduction in each direction north of NW 103 rd Street. Minimize left turns	At-Grade Rail with 8 stations	Rail service 9 min. peak 15 min. off-peak

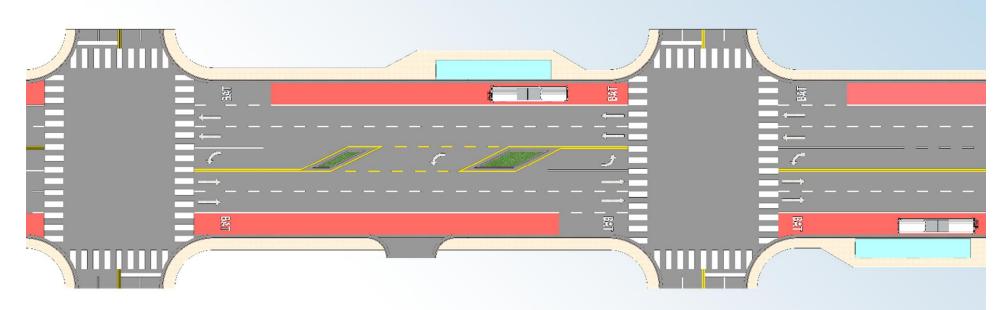


Crafting the Solution - Evaluation Process



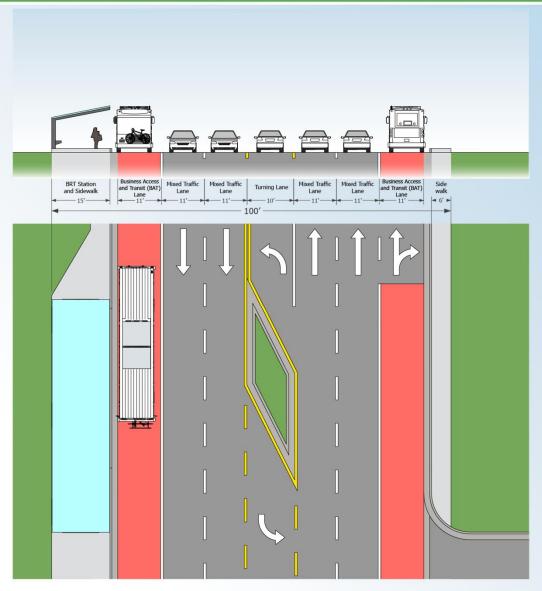
Build Alternative #1: Curbside Bus Rapid Transit (BRT)





Illustrative purposes only. Drawings may not be to scale

Build Alternative #1: Curbside Bus Rapid Transit (BRT)





Operational Impacts Build Alternative #1 - Curbside BRT

§ Repurpose curbside travel lane

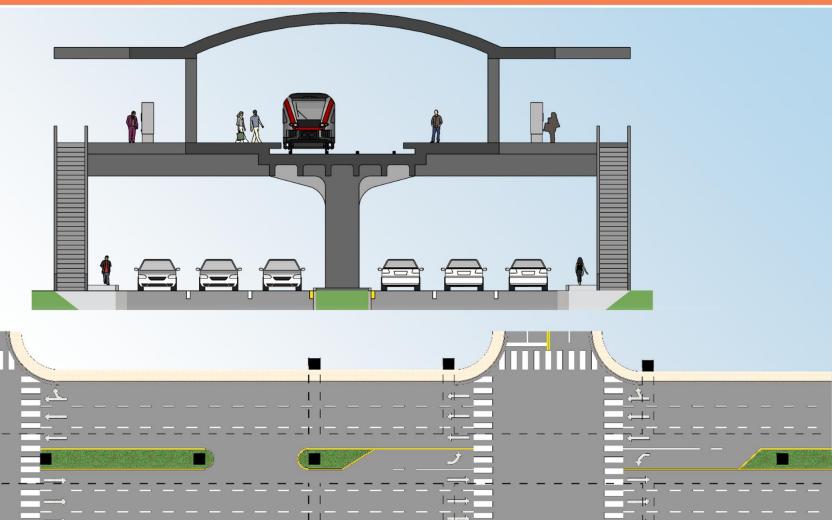
- One northbound, one southbound
- Bus Rapid Transit
- Local Bus
- Enable access to adjacent development
- § Loss of roadway capacity/lane elimination
- § Traffic diversion to local streets
- § Requires traffic enforcement
- § Safety issues side street vehicle conflicts
- § Access management impacts
- § Implementation of TSP and Queue Jumps at intersections



SW 1st Street Bus Only Lane Pilot Project in Downtown Miami

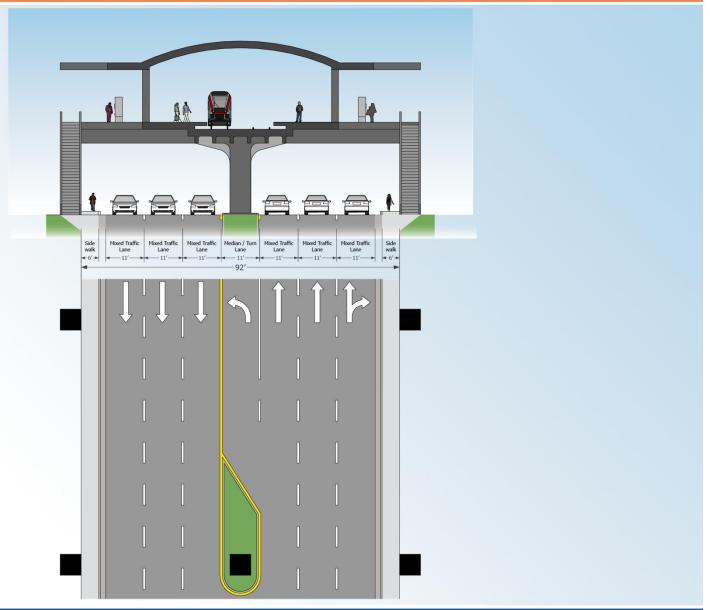


Elevated Metrorail Extension



Illustrative purposes only. Drawings may not be to scale

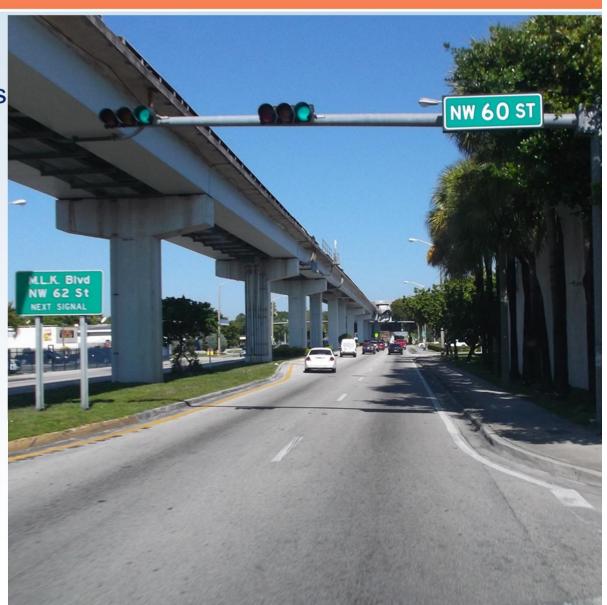




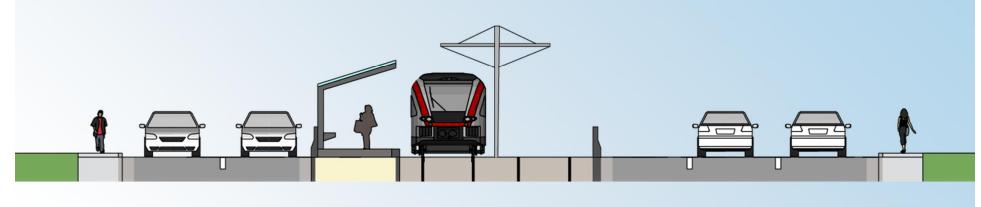


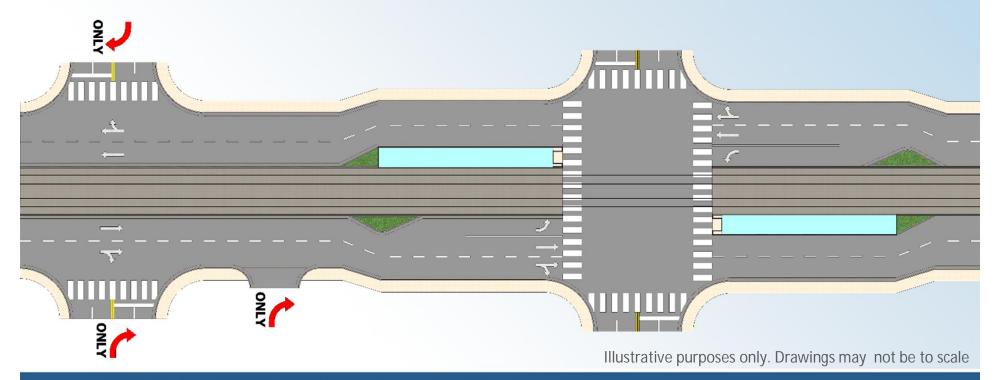
Operational Impacts Build Alternative #2: Elevated Metrorail Extension

- Implement support columns in the roadway median
 - These can impede visibility for turning vehicles
- May disrupt left turns at various median openings
- Potential closure of some cross streets
- Access management impacts

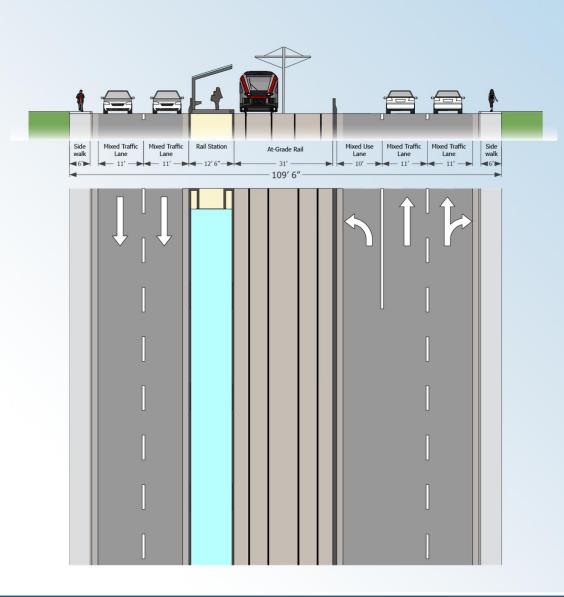






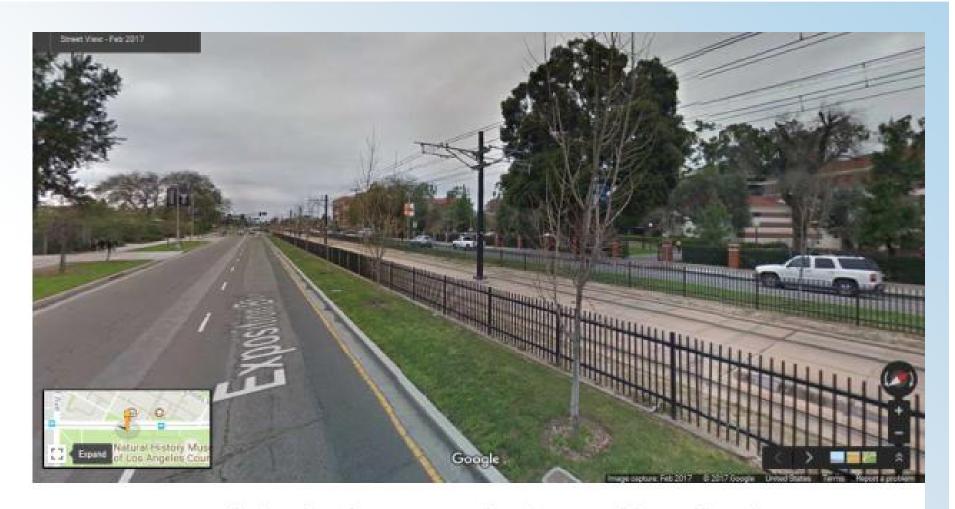


Build Alternative #3: Median At-grade Rail





Median At-grade Rail - Barrier Protection Example



Typical Section of In-Street Running Along Exposition Boulevard



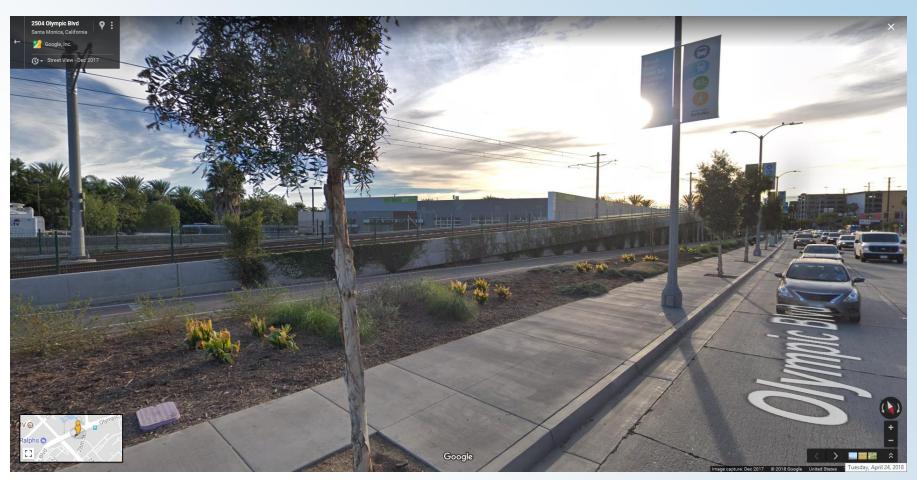
Median At-grade Rail - Barrier Protection Example



Typical Section of In-Street Running Along Exposition Boulevard



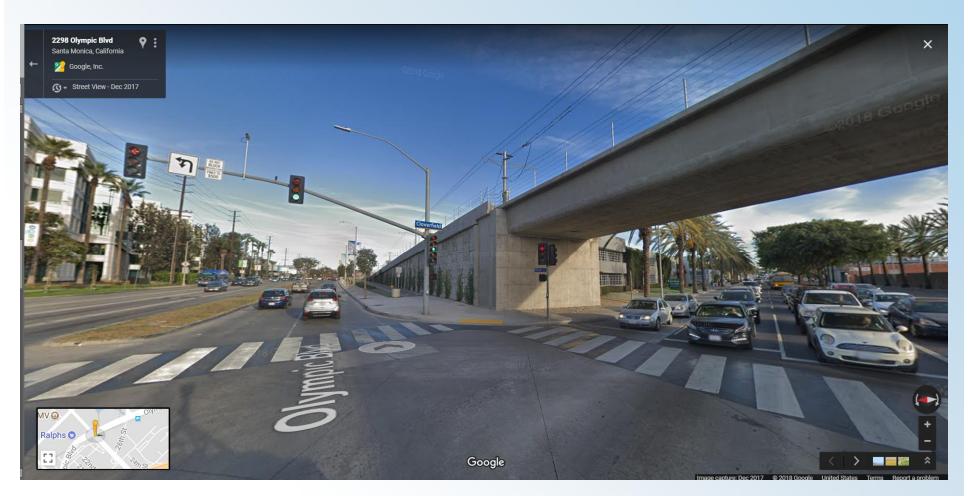
Median At-grade Rail - Elevated at Intersection Example



Elevated Segment along Olympic Boulevard



Median At-grade Rail - Elevated at Intersection Example

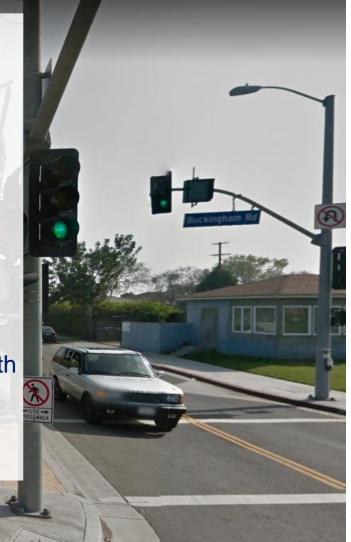


Elevated Segment along Olympic Boulevard



Operational Impacts Build Alternative #3: At-Grade Median Rail

- § Repurposes two travel lanes and the median; converted to exclusive guideway
- § Diversion of traffic to local streets
- § Reduces road capacity
- § Potential intersection closures
 - 3 of 41 signalized
 - 80 unsignalized
- § Limits left turns throughout entire corridor
- § Closure of all median openings
- § Assess safety risks between at-grade rail conflicts with automobiles, pedestrians, and bicyclists
- § Access management impacts



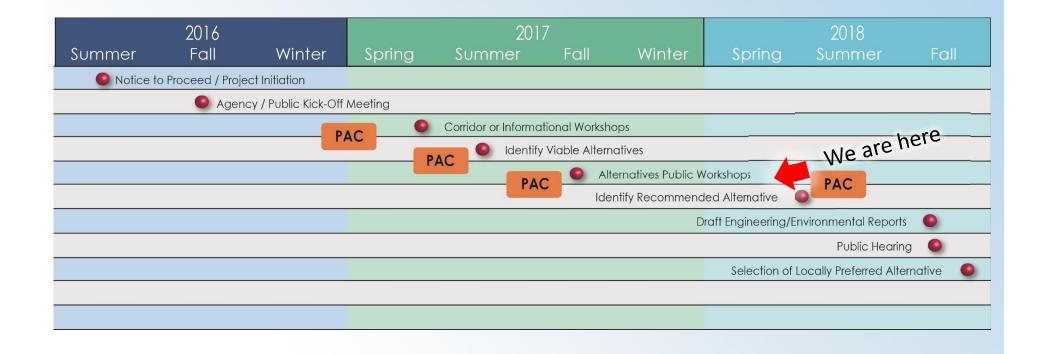
Los Angeles Expo Line, an at-grade median rail system. Google Street View image captured at the intersection of West Exposition Boulevard and Buckingham Road. Image for illustration purposes only

Ongoing Public Involvement

- Community Meetings
 - May 2018 through July 2018
- Complete Alternatives Evaluation (Tier 2)
 - Refine alternatives and finalize concept plans
 - Complete Draft documentation
- Identify Recommended Alternative



Project Milestone Schedule





Provide Input

- Comment forms are available to obtain your input
- Complete and drop them in the comment box before you exit





Staying Informed and Engaged

Stay Informed:

Project Website: www.fdotmiamidade.com/27thAvenueRapidTransit

Get Involved:

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