# Next stop: a new kind of bus ride on Vermont.







#### **Vermont Transit Corridor**

vermont AV

SBCCOG Transportation Committee October 14, 2019

#### **Project Overview**

- > Measure M Project
  - Anticipated BRT opening FY28 FY30
  - Potential rail conversion after 2067
- > February 2017 Completed Vermont BRT Technical Study
- > March 2017 Board directed staff to:
  - Proceed with BRT as near-term improvement
  - Initiate study of rail concepts to ensure BRT doesn't preclude future rail conversion
- > April 2019 Completed Vermont Transit Corridor Rail Conversion/Feasibility Study
- > April 2019 Board directed staff to
  - Advance BRT and rail concepts into environmental
  - Include a Feasibility Study of extending corridor to South Bay Silver Line PCH transitway station

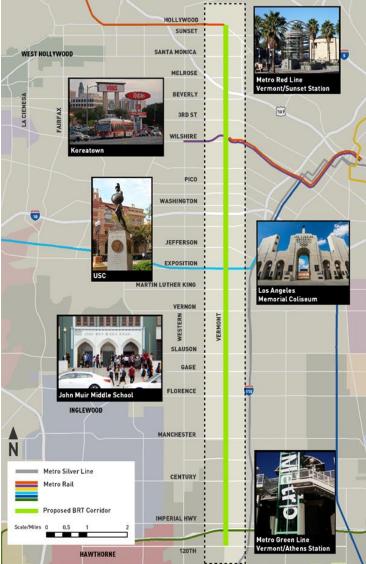




#### **Corridor Overview**

- > 12.4 miles
- > Busiest bus corridor
  - 45,000 daily boardings
- > Connects to 4 Metro Rail lines, several bus routes and key activity centers
- > Heavy traffic resulting in slow service/poor ontime performance
- > ROW as narrow as 80ft. in some segments widens to 200ft. south of Gage Ave (includes sidewalks/medians)
- > ROW is narrowest in segments with highest boarding activity





### **BRT Technical Study**

- > Study identified 4 initial concepts
- > Two determined to be most promising:
  - Improve travel times/customer experience
  - Increase ridership
  - Minimize parking impacts
  - Provide street/community improvements





End-to-end Side Running BRT

**Combination Side/Center Running BRT** 

#### BRT Concept 1 - End-to-End Side-Running

- > 12.4 miles of end-to-end side-running BRT
  - Hollywood to 120<sup>th</sup> St.
- > Converts traffic lanes next to parking to bus lanes







#### BRT Concept 2 – Combination Side/ Center-Running

- > 8.2 miles of side-running north of Gage
- > 4.2 miles of center-running south of Gage
- > Converts two center traffic lanes to bus lanes







## **Rail Conversion/Feasibility Study**

- > February 2019 completed Rail Conversion/Feasibility Study
- > Purpose of study to:
  - Refine BRT concepts not to preclude potential future rail conversion
  - Identify/analyze potential rail concepts





#### **Evaluation of Rail Concepts**

- > Six initial rail concepts identified
  - At-grade, elevated and underground alignments
- > ROW constraints limited at-grade options
- > Most feasible concepts (based on initial screening and community input):
  - High-floor Light Rail
  - Heavy Rail connecting to Red Line
  - Separate Heavy Rail line with transfer at Wilshire/Vermont



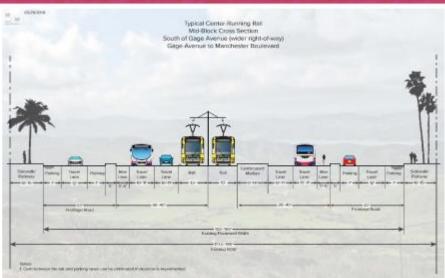
**High-Floor LRT** 





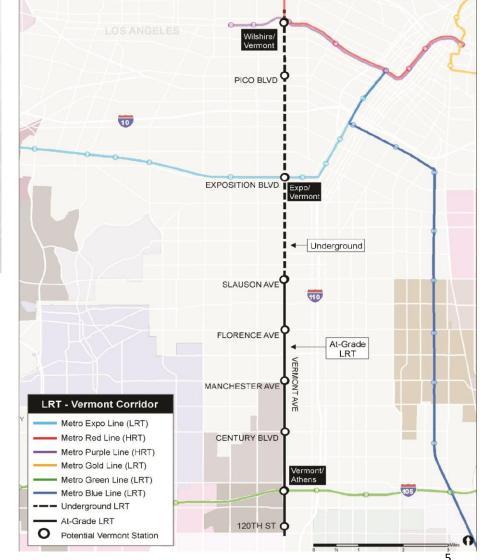
Heavy Rail

### **High-Floor LRT – Center Running**

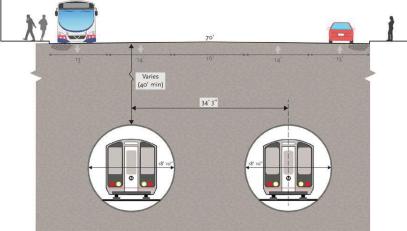


- Lowest cost \$4.4 \$5.2B (2018)
- Lowest daily corridor ridership (2042) 91,000 (44,000 rail)
- Over 50% underground (5.2 miles)
- Remaining 4.6 miles at-grade
- Biggest challenge: identifying site for new maintenance/storage facility



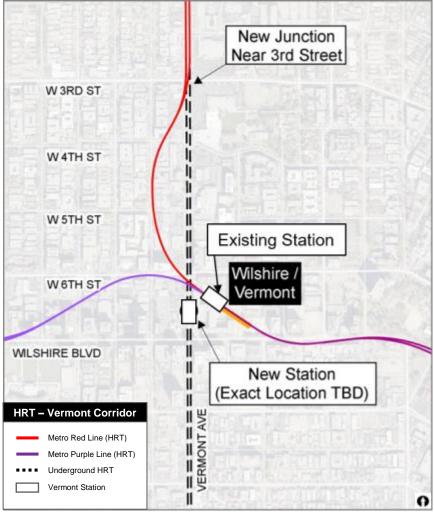


#### Heavy Rail – Connection to Red Line

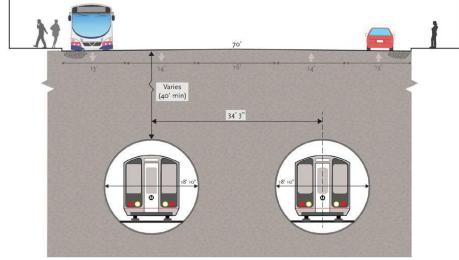


- Highest cost \$7.1 \$8.4B (2018)
- Highest daily corridor ridership (2042) -116,000 - 144,000 (81,000 - 117,000 rail)
- Significant impacts to existing service during construction (up to 2 years)
- 10.3 miles underground
- Biggest challenge: building the junction with Red Line

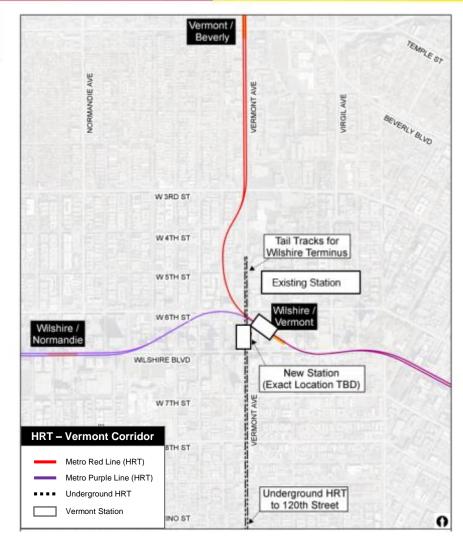




#### Heavy Rail – Stand Alone



- Medium cost \$5.9 \$6.9B (2018)
- Medium daily corridor ridership (2042) -103,000 - 131,000 (51,000 - 83,000 rail)
- 9.8 miles underground
- Biggest challenge: identifying a site for new maintenance facility





#### **Key Study Findings**

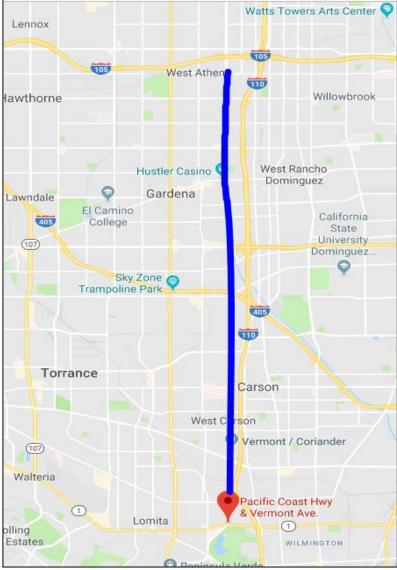
- > Broad support for BRT
- > BRT can provide more immediate improvements at fraction of rail costs (approximately \$310 M)
- > BRT will **<u>not</u>** preclude future rail
- > Little to no physical overlap with LRT (twothirds underground) or HRT options (100% underground)
- Center-running BRT lanes can be used later for LRT south of Gage





### South Bay Feasibility Study

- Evaluate feasibility of extending Vermont Transit corridor to the South Bay Silver Line PCH transitway station
  - BRT and rail alternatives
- > Approximately 10 miles
- > Service currently provided by:
  - Gtrans
  - Torrance Transit
  - Metro
- > Coordinate with Environmental Study





#### **Next Steps**

- Fall 2019 Initiate procurement for environmental review of Vermont Project and South Bay Feasibility Study
- > Spring 2020 Begin Environmental review/public outreach
- > Spring 2020 Begin work on Feasibility Study



