



# Next stop: exploring alternatives to the 405.

## SEPULVEDA TRANSIT CORRIDOR PROJECT

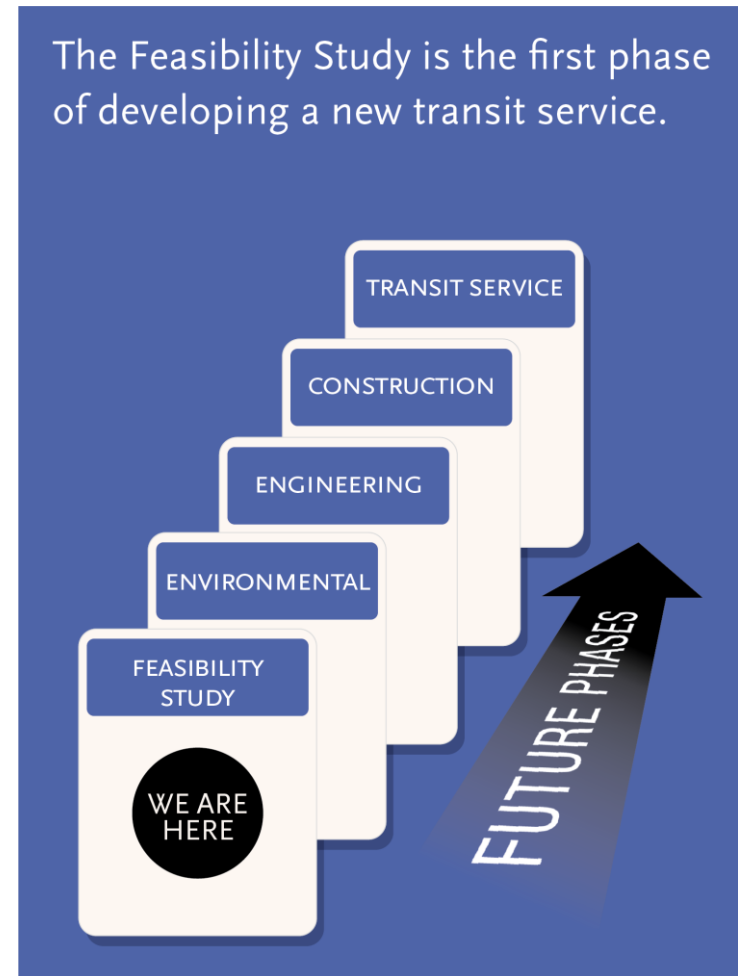


Metro®

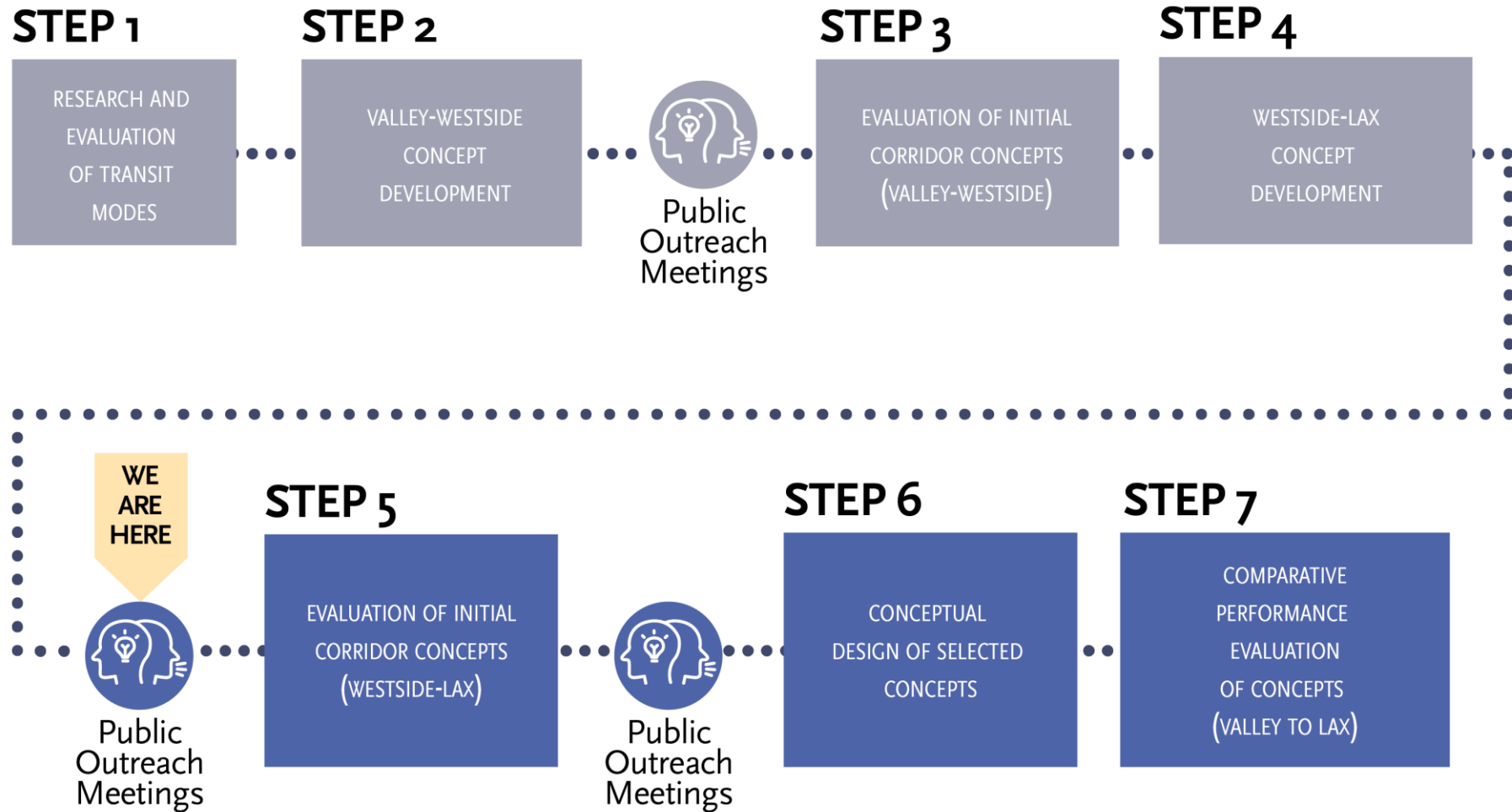
Community Meetings  
January/February 2019

# Purpose of Meeting

- Present evaluation of Valley-Westside concepts
- Present initial Westside-LAX concepts
- Gather community feedback



# Study Process





# Overview: I-405 Corridor History

- > **2008:** Measure R provides \$1 billion for I-405 corridor (2039 opening year)
- > **2014:** I-405 Sepulveda Pass Widening Project opened to traffic
- > **2016:** Measure M provides over \$9 billion for I-405 transit improvements
  - \$260 million for ExpressLanes on I-405 (opening year 2026)
  - \$5.7 billion for Valley-Westside transit (opening year 2033)
  - \$3.8 billion for Westside-LAX transit (opening year 2057)
- > **2018:** Valley-Westside Section of the project is identified as eligible for acceleration for 2028 Olympic and Paralympic Games
- > **Ongoing:** Project Feasibility Study underway and Project being evaluated for a public-private partnership

# Project Study Area

- > Approximately 22 miles long
- > Generally follows Interstate 405
- > Primarily within the City of Los Angeles, but also portions of:
  - City of Santa Monica
  - Culver City
  - City of Inglewood
  - Unincorporated Los Angeles County





# Scope of Feasibility Study

- > Study Area divided into two sections:
  - Valley-Westside
  - Westside-LAX
- > Rail transit concepts between the San Fernando Valley and LAX.
- > Connections to existing/planned transit corridors.
- > Alignments and station locations, including Park & Ride.
- > Maintenance facility requirements.



# Projects in Planning or Construction





# East San Fernando Valley Transit Corridor

- At-grade LRT with 14 Stations
  - 6.7 Miles on Van Nuys Boulevard
  - 2.5 Miles on railroad right-of-way along San Fernando Road
- Approved by Metro Board in June 2018
  - Groundbreaking in 2022
  - Opening in 2028



East San Fernando Valley Transit Corridor



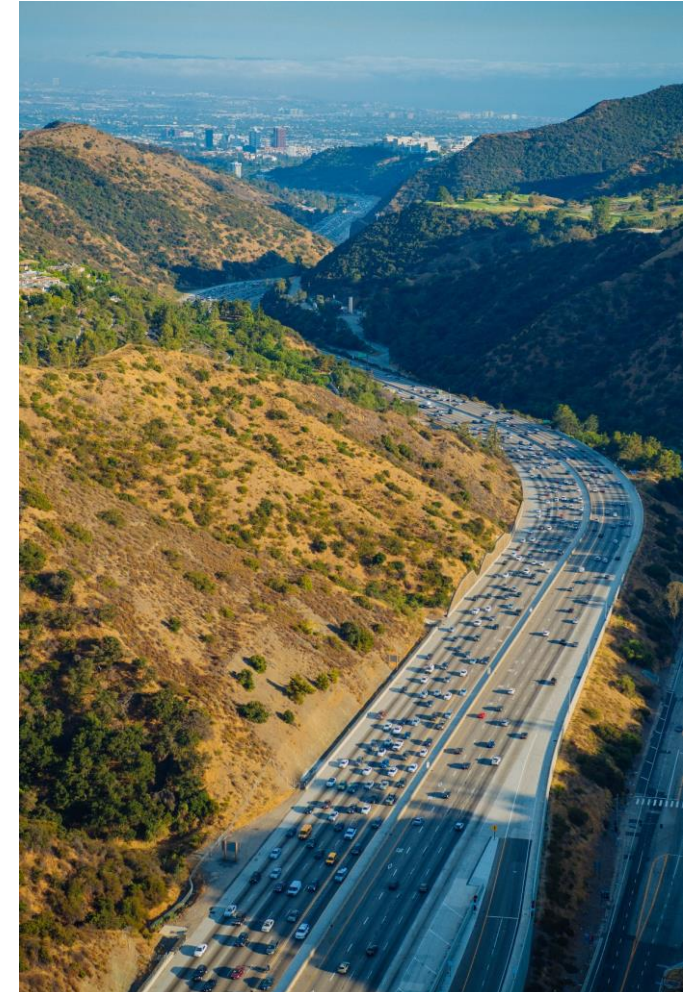
1. Sylmar/San Fernando Metrolink Station
2. Maclay Station
3. Paxton Station
4. Van Nuys/San Fernando Station
5. Laurel Canyon Station
6. Arleta Station
7. Woodman Station
8. Nordhoff Station
9. Roscoe Station
10. Van Nuys Metrolink Station
11. Sherman Way Station
12. Vanowen Station
13. Victory Station
14. Metro Orange Line Van Nuys Station



# Project Purpose and Need

Provide a **high-quality transit service** that effectively serves a **large and growing travel market** between the San Fernando Valley and the Westside, including the LAX area.

For transit to be a **competitive travel option** that attracts new riders, there is a need to **increase the speed, frequency, capacity and reliability of transit service** and provide **convenient connections** to existing and planned transit corridors.



# Evaluation Criteria



Community Input



Potential Environmental Effects



Compatibility with Local and Regional Plans



Reliability



Cost



Ridership



Cost-Effectiveness



Sustainability



Travel Time Savings



# Transit Modes Under Consideration



- > High speed (up to 65 mph)
- > Typical capacity of 4,800 passengers per hour per direction
- > Can share track with planned Metro LRT lines
- > Currently in use by Metro



- > High speed (up to 70 mph)
- > Typical capacity of 12,000 passengers per hour per direction
- > Currently in use by Metro



- > Can operate on the surface over the steep inclines through the Sepulveda Pass
- > Typical capacity of 7,500 passengers per hour per direction for monorail or 15,000 for rubber tire

## Notes:

All capacities are approximate and depend on vehicle and system design.

LRT based on 3-car trains at 5-minute frequency. HRT based on 6-car trains at 4-minute frequency.

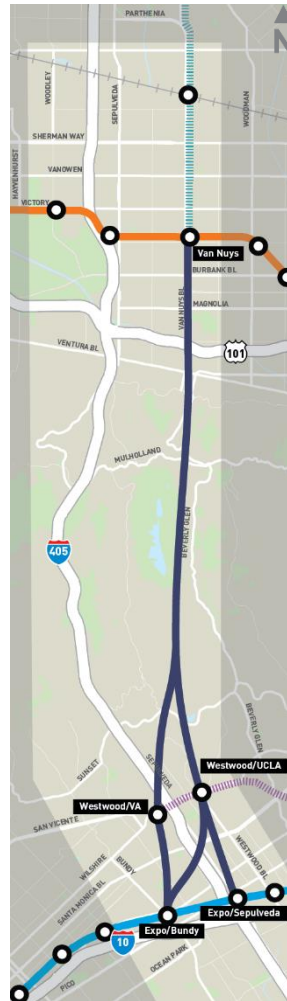
Monorail based on 3-car trains at 4-minute frequency. Rubber tire based on 8-car trains at 4-minute frequency.

# Initial Valley-Westside Transit Concepts

(All concepts planned to allow extension to LAX)

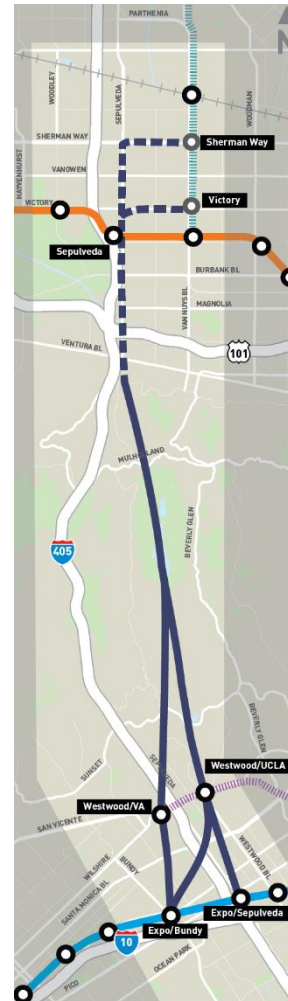
## HRT Concepts

### Concept 1



119,000

### Concept 2



134,000

### Concept 3



134,000

## LRT Concepts

### Concept 4



137,000

## MRT Concept

### Concept 5



110,000

## Purple Line Extension

### Concept 6



108,000

#### Sepulveda Transit Corridor Project (alignment options)

- Aerial
- Aerial and Underground
- Aerial or At Grade
- Underground

#### Existing Service

- Existing Metro Expo Line & Station
- Existing Metro Orange Line & Station
- Amtrak/Metrolink & Station

#### Pre-Construction

- Purple Line Extension & Station (Section 3)
- East San Fernando Valley Transit Corridor & Station

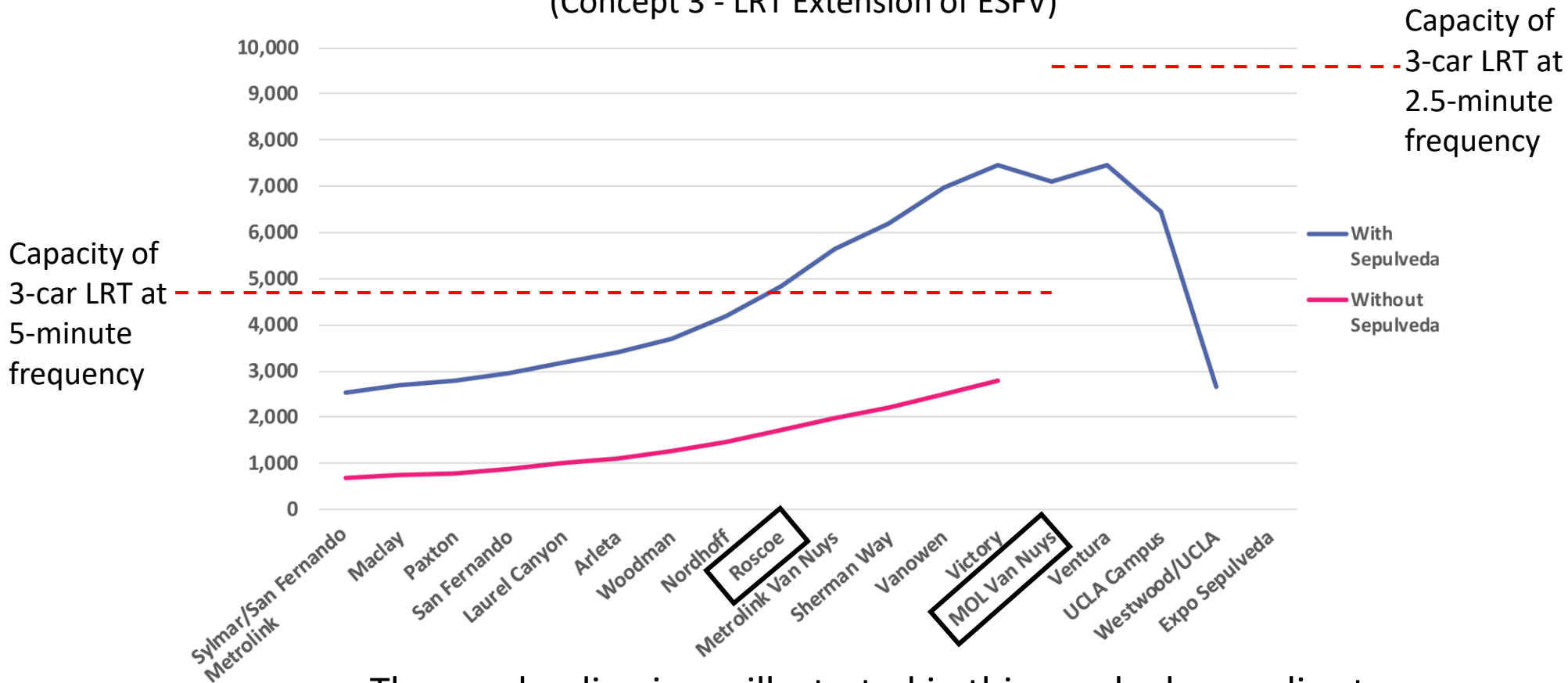
Note: Ridership forecasts reflect train frequency but are not constrained by train capacity.

Daily Project Trips



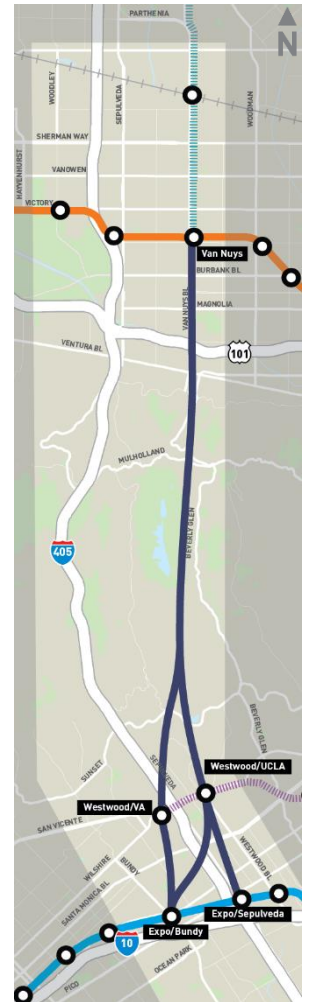
# Demand Exceeds Capacity on ESFV

ESFV Load, Southbound Trains, AM Peak Hour, 2042  
(Concept 3 - LRT Extension of ESFV)



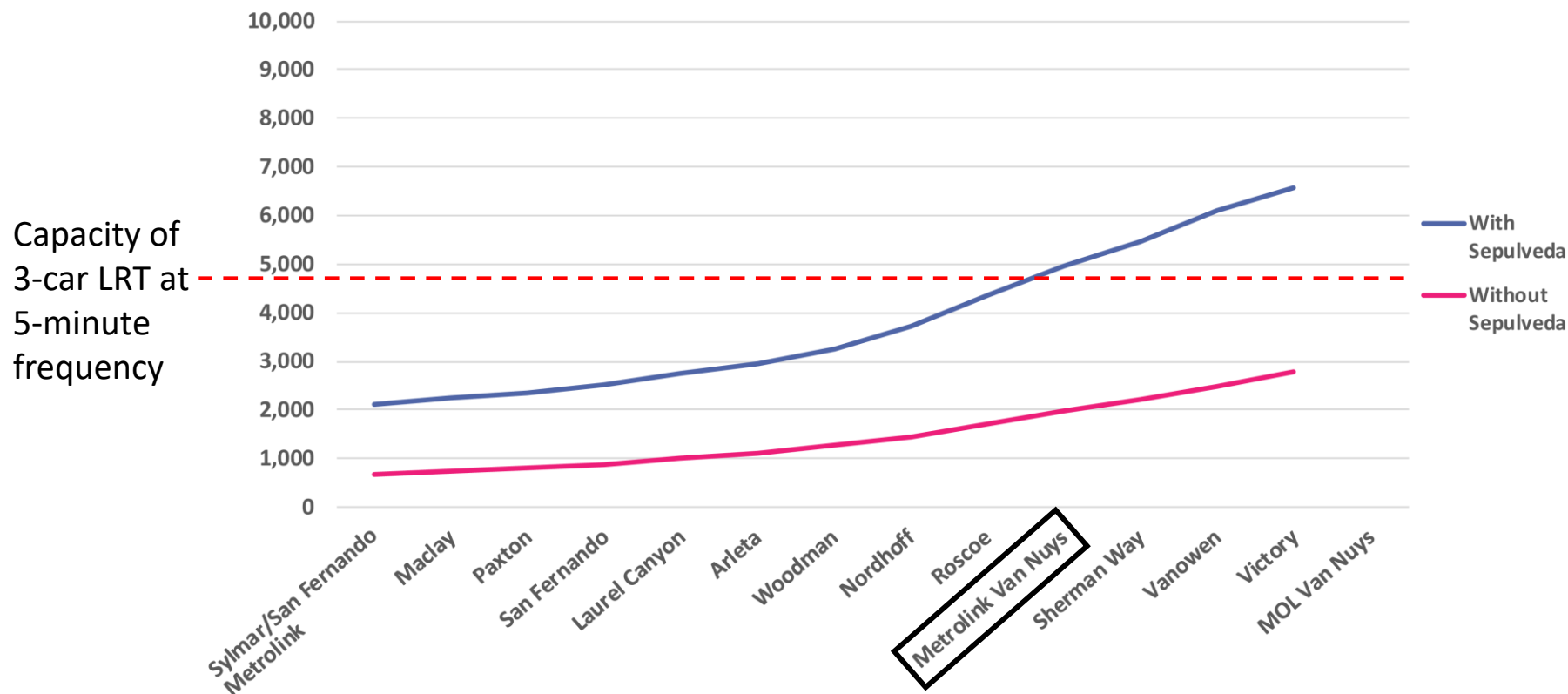
- > The overloading issue illustrated in this graph also applies to the other LRT concept (Concept 4).

Concept 3



# Demand Exceeds Capacity on ESFV

ESFV Load, Southbound Trains, AM Peak Hour, 2042  
(Concept 1 - HRT connecting at MOL/Van Nuys)



- > The overloading issue illustrated in this graph also applies to the other HRT and MRT concepts (Concepts 2, 3, 5, and 6).

Note: Ridership forecasts reflect demand and are not constrained by capacity.

Concept 1

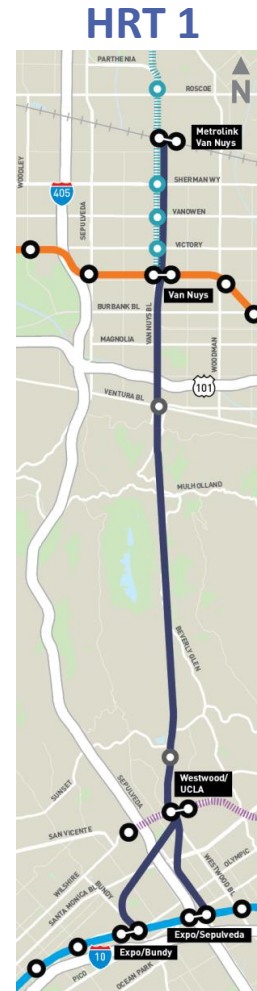
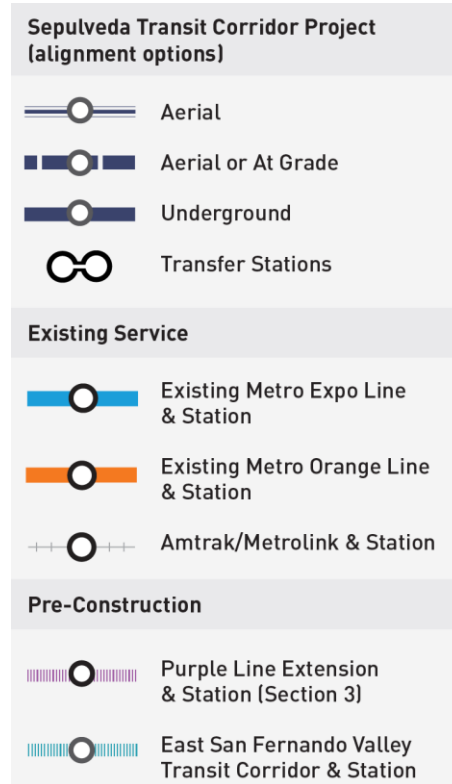




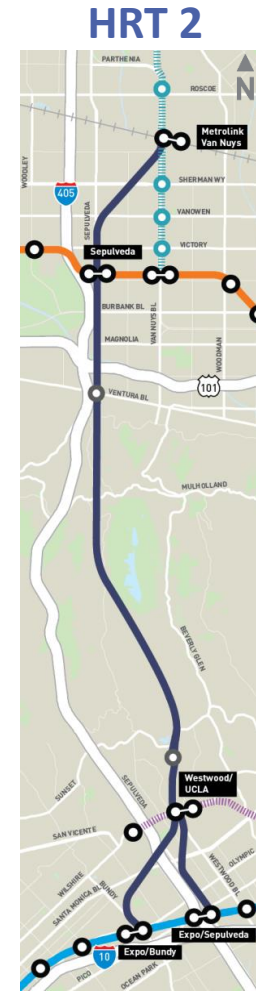
# Response to Ridership of Initial Concepts

- > Eliminate LRT concepts from consideration – insufficient capacity along ESFV corridor for one-seat ride
- > Refine the initial MRT and HRT concepts to extend farther north – intercept demand on ESFV
- > Eliminate other lower performing concepts/options:
  - Purple Line Extension – lowest performer
  - Connection at Westwood/VA – low ridership

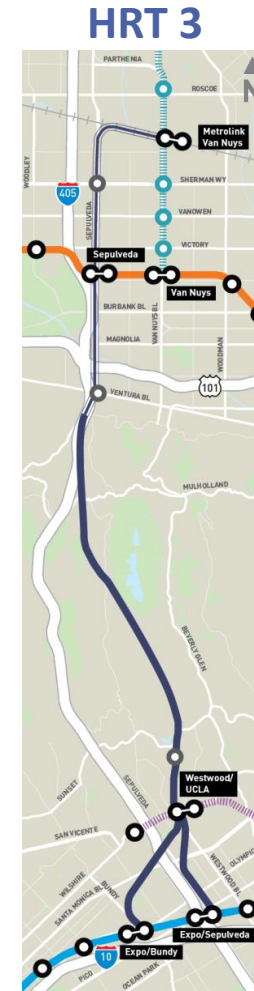
# Refined Valley-Westside Transit Concepts



123,000



120,000



133,000












105,000

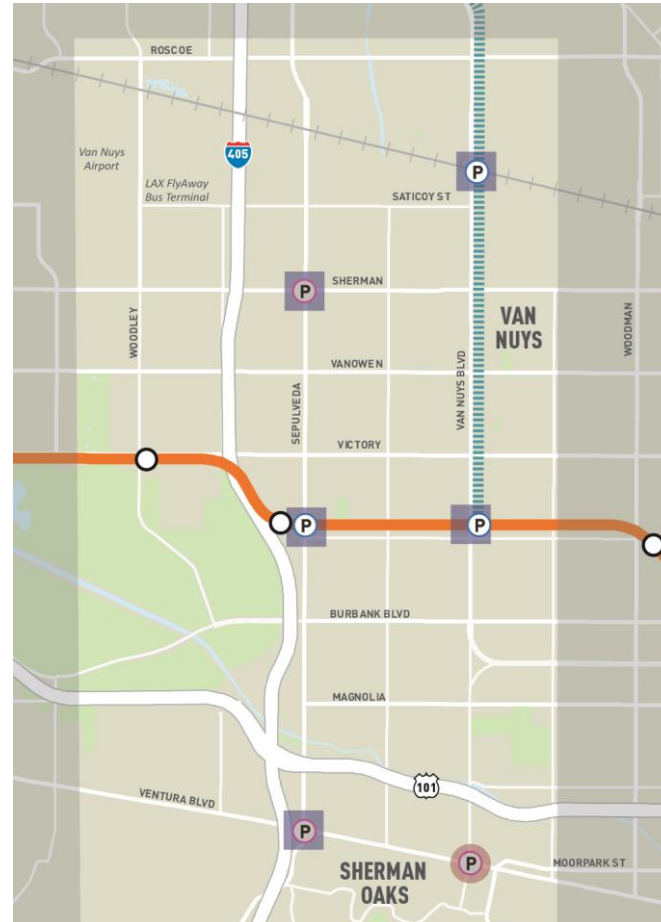
**Daily Project Trips**



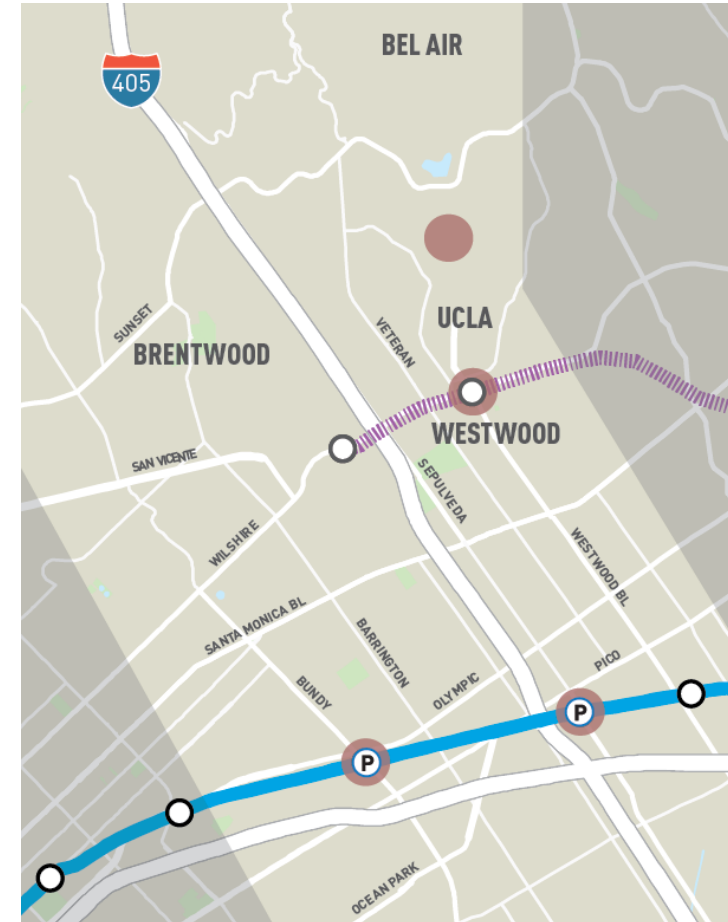
# Valley-Westside Stations and Access

Sepulveda Transit Corridor Project (station and Park & Ride options)	
	On underground alignment
	On underground or aerial alignment
	Park & Ride Opportunity
Existing Service	
	Existing Metro Orange Line & Station
	Existing Metro Expo Line
	Amtrak/Metrolink & Station
	Existing Park & Ride
Pre-Construction	
	East San Fernando Valley Transit Corridor
	Purple Line Extension & Station (Section 3)

Valley

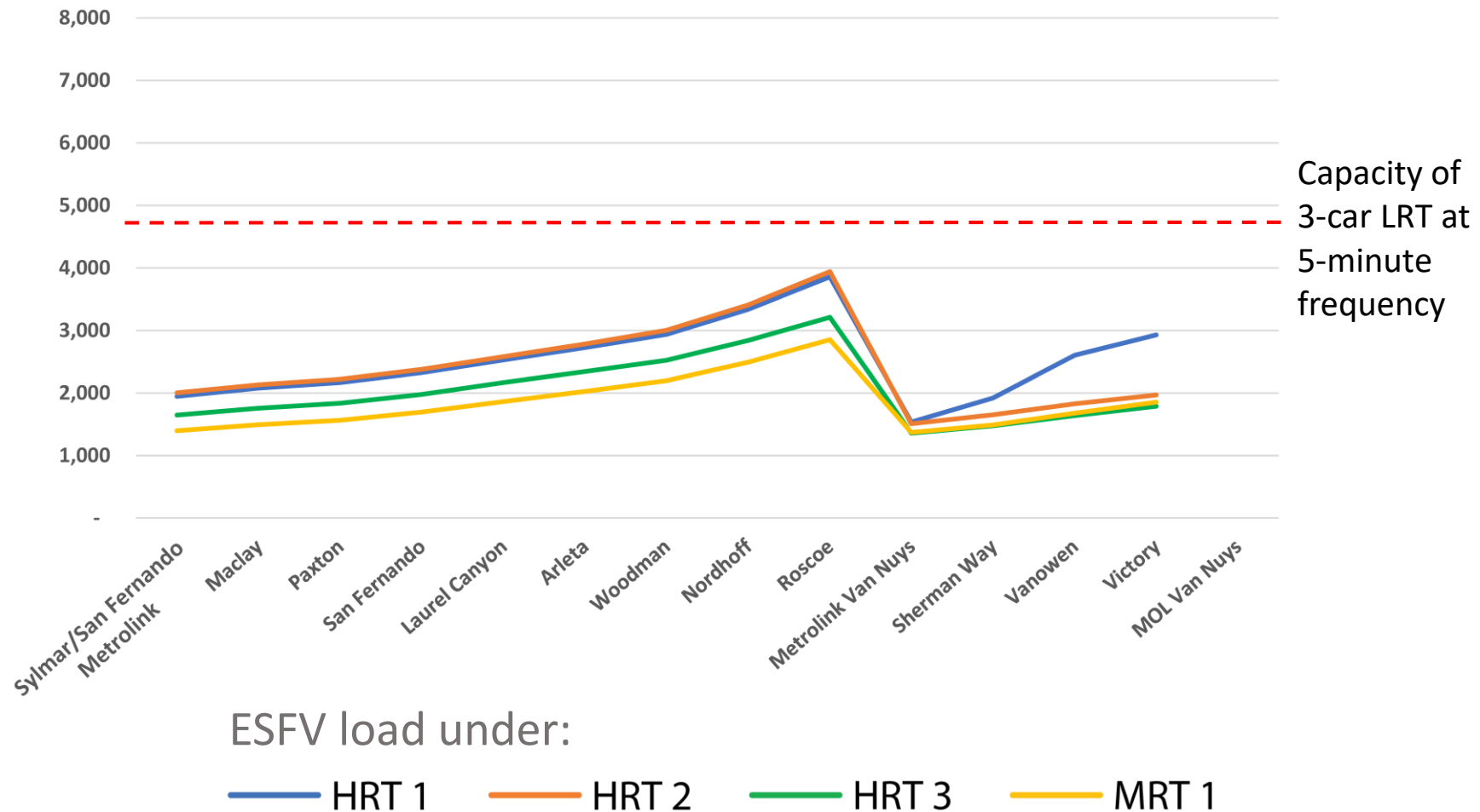


Westside



# Demand Within Capacity on ESFV

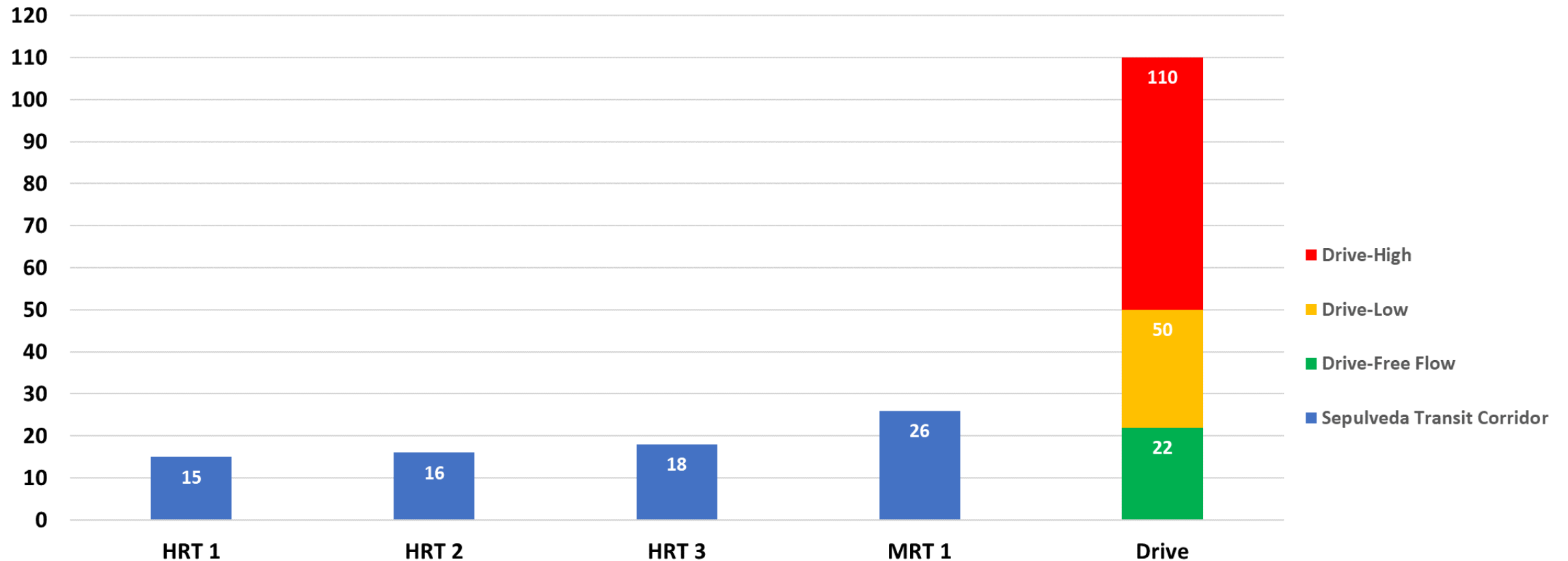
ESFV Load, Southbound Trains, AM Peak Hour, 2042  
(Per Each Refined Concept)



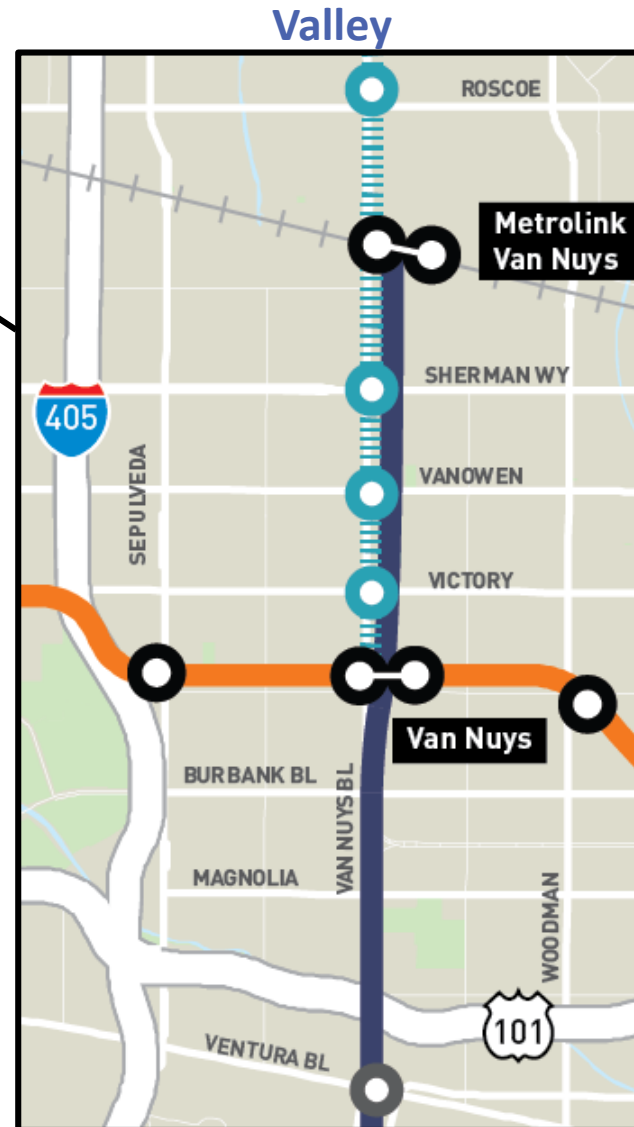


# Travel Times By Mode – Refined Concepts

Travel Time from Van Nuys Metrolink to Expo Line (AM Peak, in minutes)



# Refined Concepts – HRT 1



## Sepulveda Transit Corridor Project (alignment options)

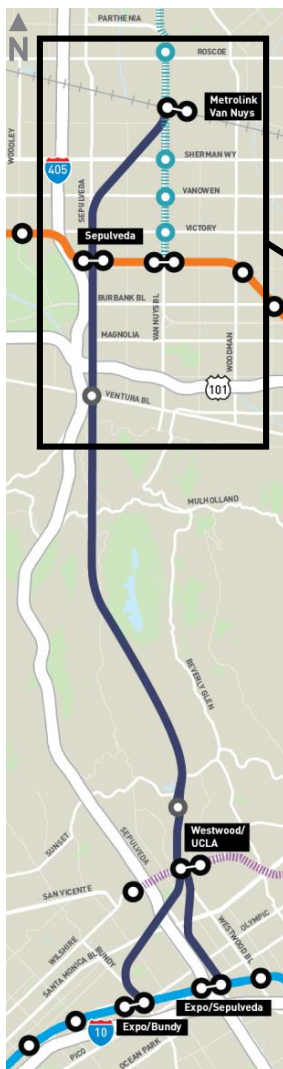
- Underground
- Transfer Station
- Existing Service
- Existing Metro Expo Line & Station
- Existing Metro Orange Line & Station
- Amtrak/Metrolink & Station

## Pre-Construction



- Purple Line Extension & Station (Section 3)
- East San Fernando Valley Transit Corridor & Station




# Refined Concepts – HRT 2





## Sepulveda Transit Corridor Project (alignment options)

-  Underground
-  Transfer Station

## Existing Service

-  Existing Metro Expo Line & Station
-  Existing Metro Orange Line & Station
-  Amtrak/Metrolink & Station

## Pre-Construction

-  Purple Line Extension & Station (Section 3)
-  East San Fernando Valley Transit Corridor & Station

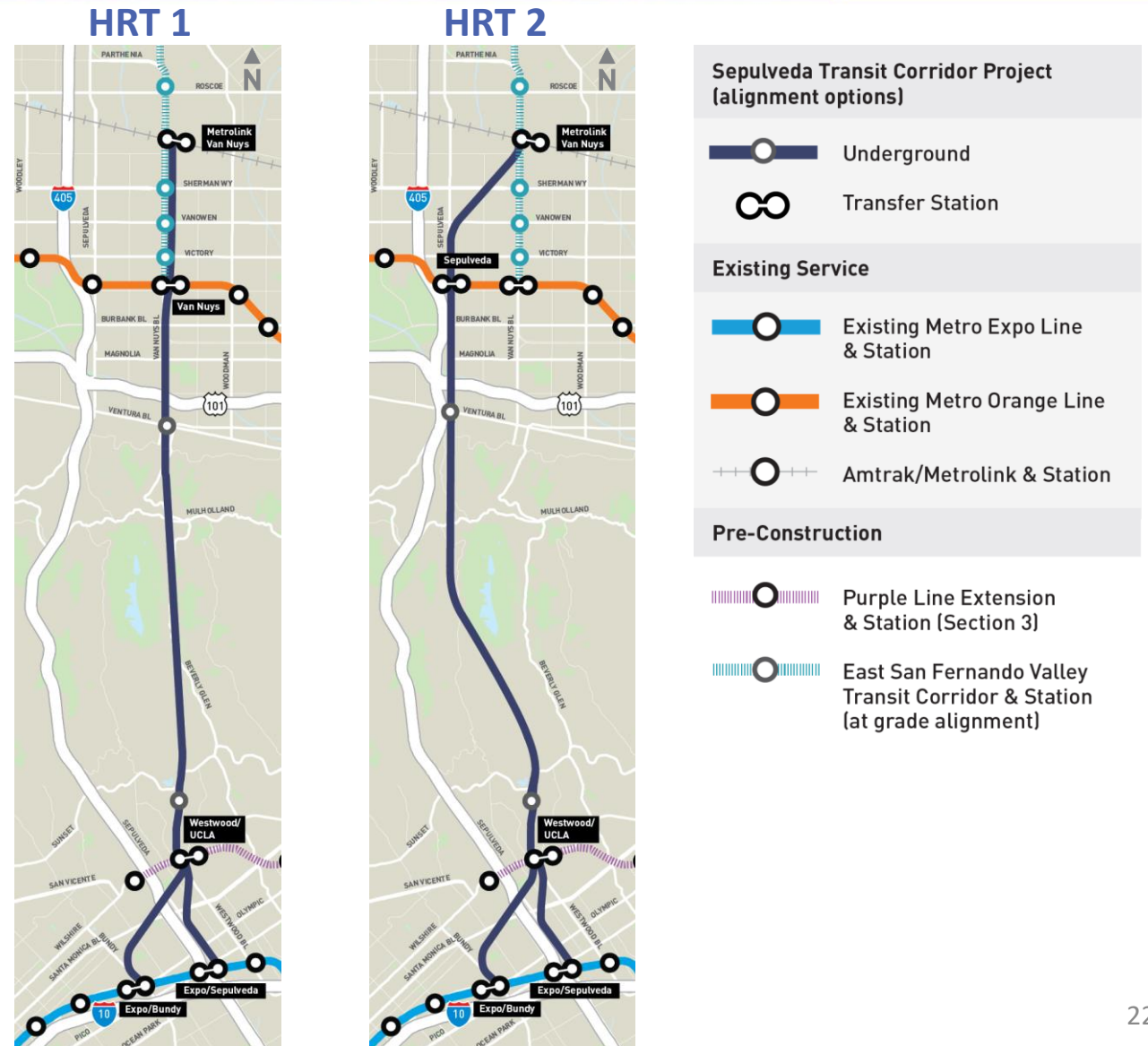
# HRT 1, HRT 2 : Key Strengths and Challenges

## > Strengths

- Excess capacity to serve growth
- Fastest travel time
- Fewer property impacts due to underground alignment

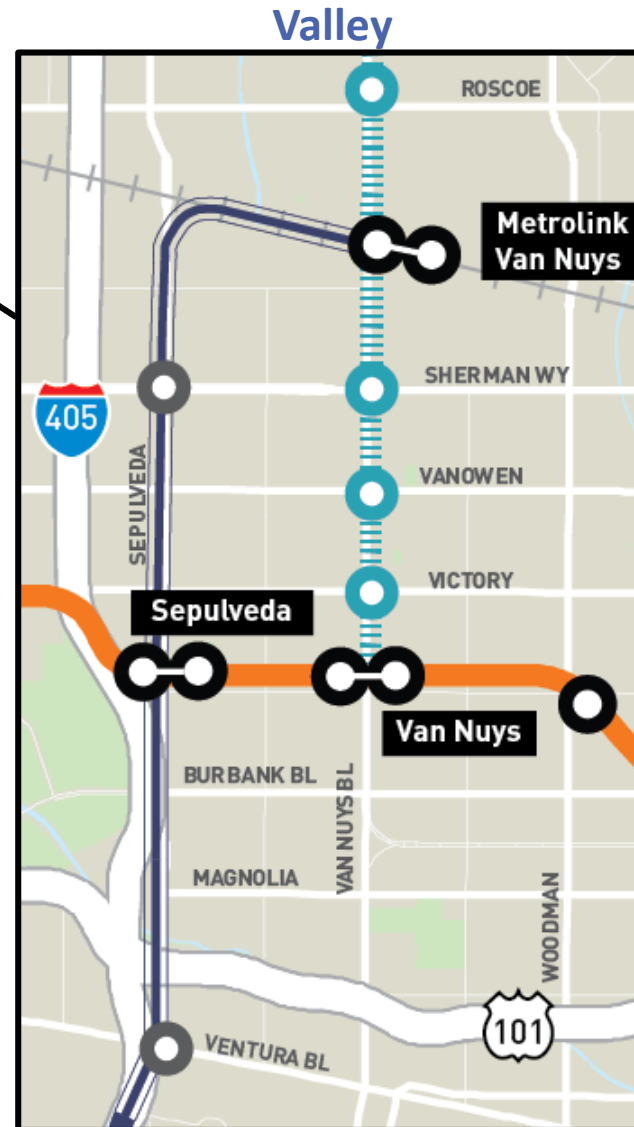
## > Challenges

- Major water main & storm drains
- Tunneling underneath ESFV





# Refined Concepts – HRT 3






Heavy Rail Transit (HRT)



## Sepulveda Transit Corridor Project (alignment options)

-  Aerial
-  Underground
-  Transfer Station

## Existing Service

-  Existing Metro Expo Line & Station
-  Existing Metro Orange Line & Station
-  Amtrak/Metrolink & Station

## Pre-Construction

-  Purple Line Extension & Station (Section 3)
-  East San Fernando Valley Transit Corridor & Station

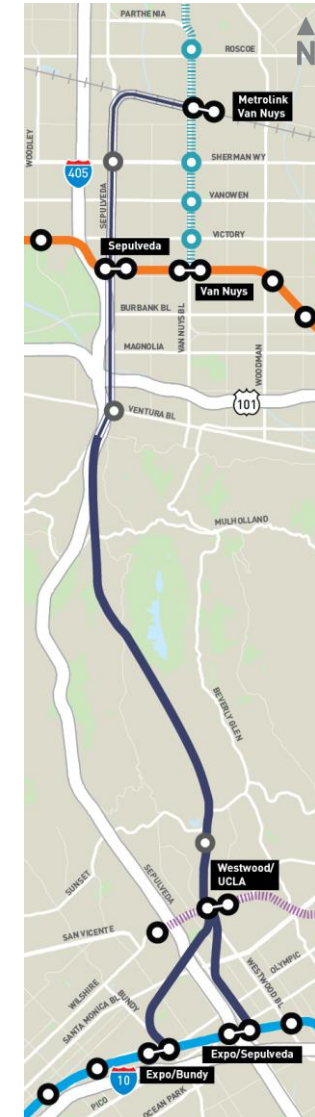
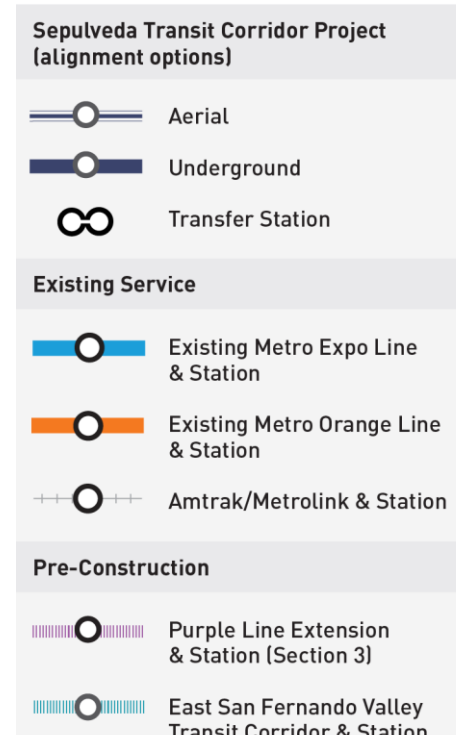
# HRT 3: Key Strengths and Challenges

## > Strengths

- Excess capacity to serve growth
- Potential construction cost savings (with aerial section)
- Faster travel times
- Sherman Way station provides Park & Ride opportunity

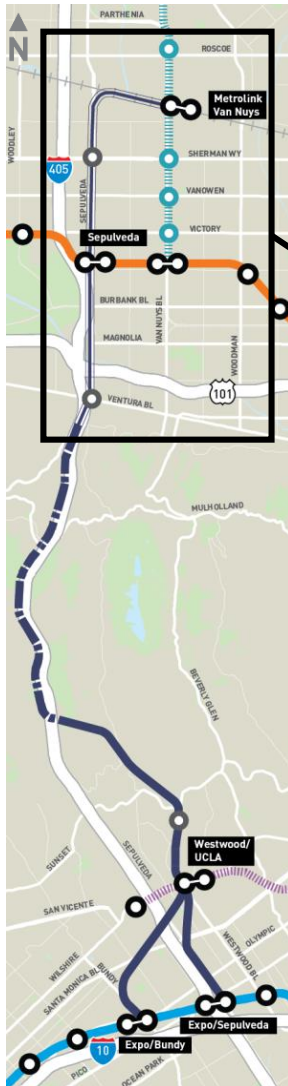
## > Challenges

- Major water main & storm drains
- Greater property impacts along aerial sections
- Loss of parking on Sepulveda Boulevard





# Refined Concepts – MRT 1





## Sepulveda Transit Corridor Project (alignment options)

-  Aerial
-  Aerial and At Grade
-  Underground
-  Transfer Station

## Existing Service

-  Existing Metro Expo Line & Station
-  Existing Metro Orange Line & Station
-  Amtrak/Metrolink & Station

## Pre-Construction

-  Purple Line Extension & Station (Section 3)
-  East San Fernando Valley Transit Corridor & Station

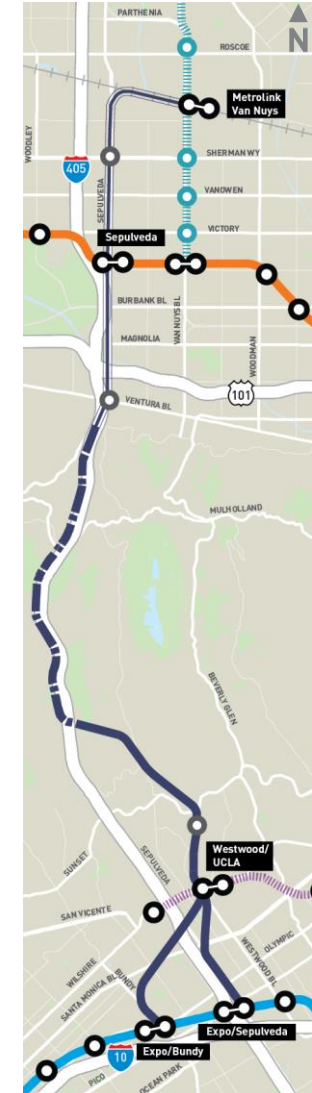
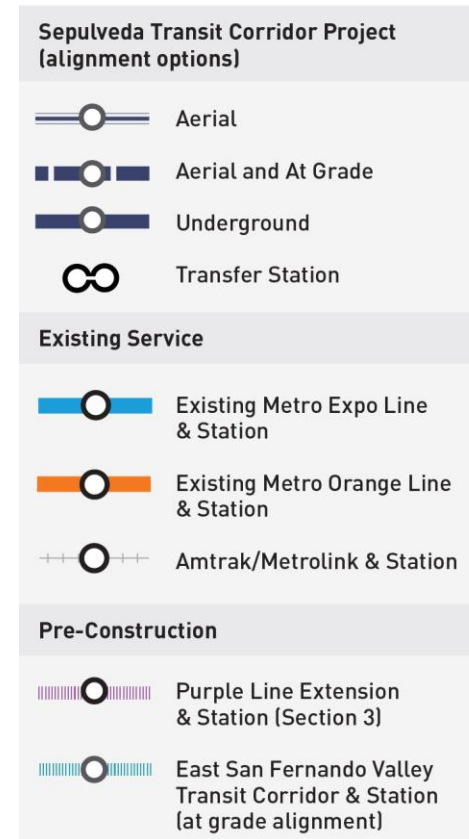
# MRT 1: Key Strengths and Challenges

## > Strengths













- Potential construction cost savings
- Operates on steep grades
- Excess capacity to serve growth






## > Challenges

- Slow average speed
- Open space, wildlife crossings, and streams in Sepulveda Pass
- Major water main & storm drains
- Greater property impacts along aerial sections
- Loss of parking on Sepulveda Boulevard



# Summary of Refined Concepts

	HRT 1	HRT 2	HRT 3	MRT 1
Ridership (daily)	123,000	120,000	133,000	105,000
Travel Time (Metrolink to Expo Line, in minutes)	15	16	18	26
Connectivity				
Capacity				
Fewer Environmental and Community Impacts				

Low  
(does not meet goal)
High  
(meets goal)



# Development of Initial Westside-LAX Concepts

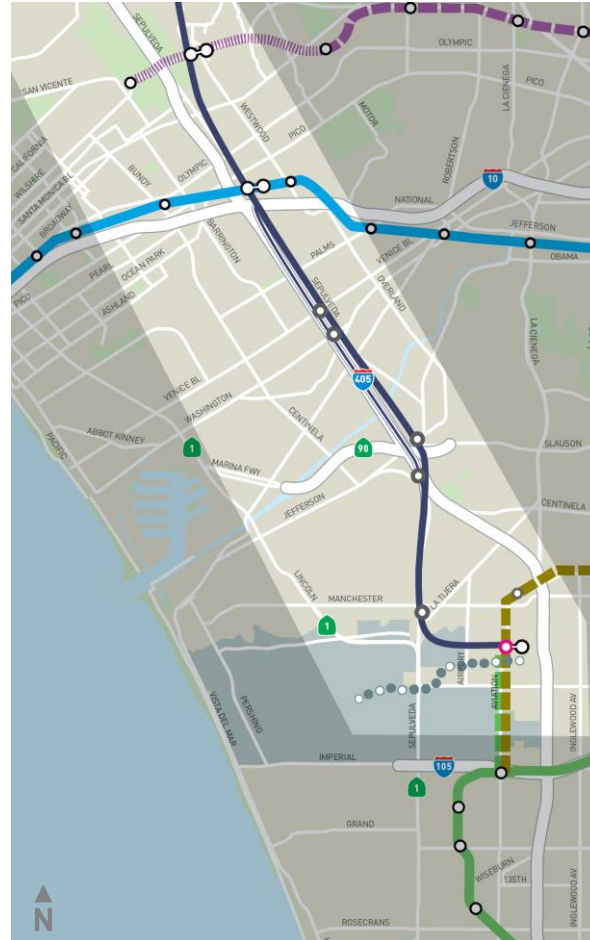
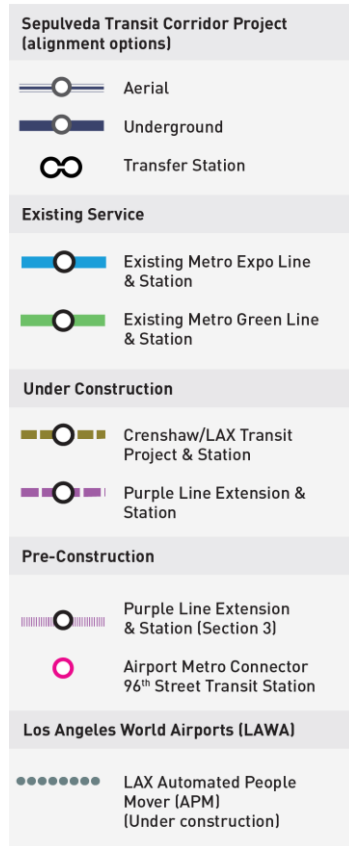
> Goal is to evaluate alignments and identify major feasibility issues:

- Preserve the ability to extend to LAX from Expo/Sepulveda or Expo/Bundy
- Connect major activity centers
- Use existing transportation corridors

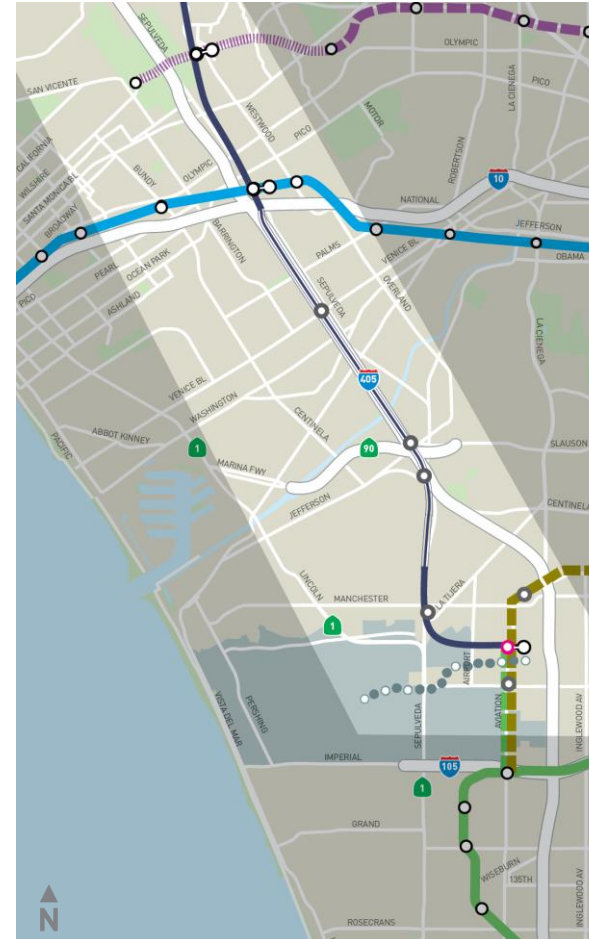


# Sepulveda/I-405 Concepts

## HRT



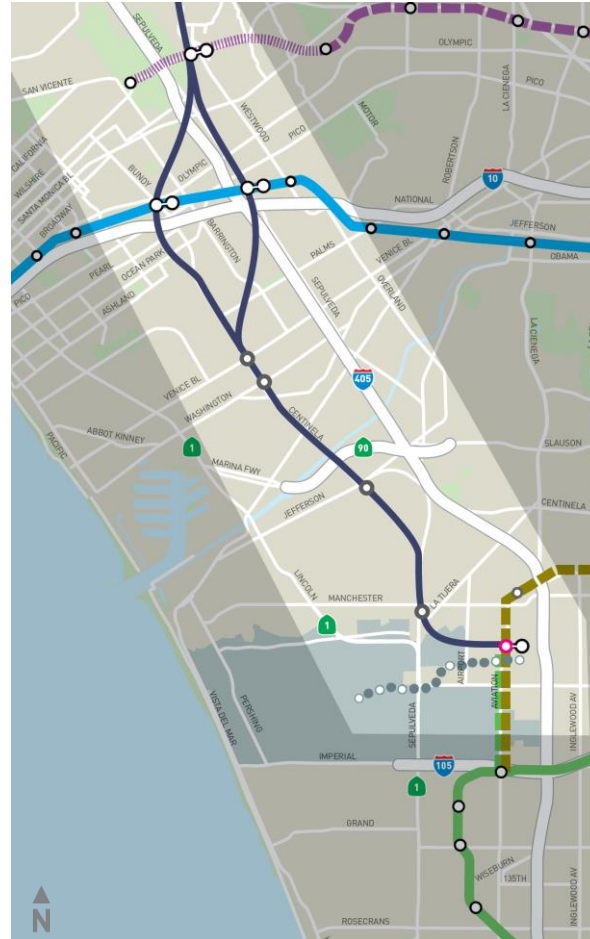
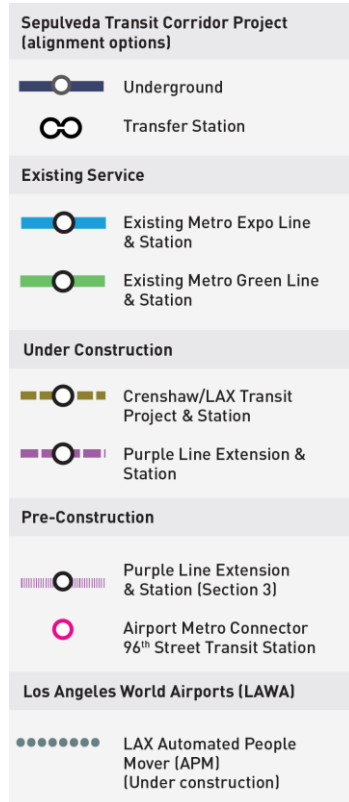
## Monorail/Rubber Tire



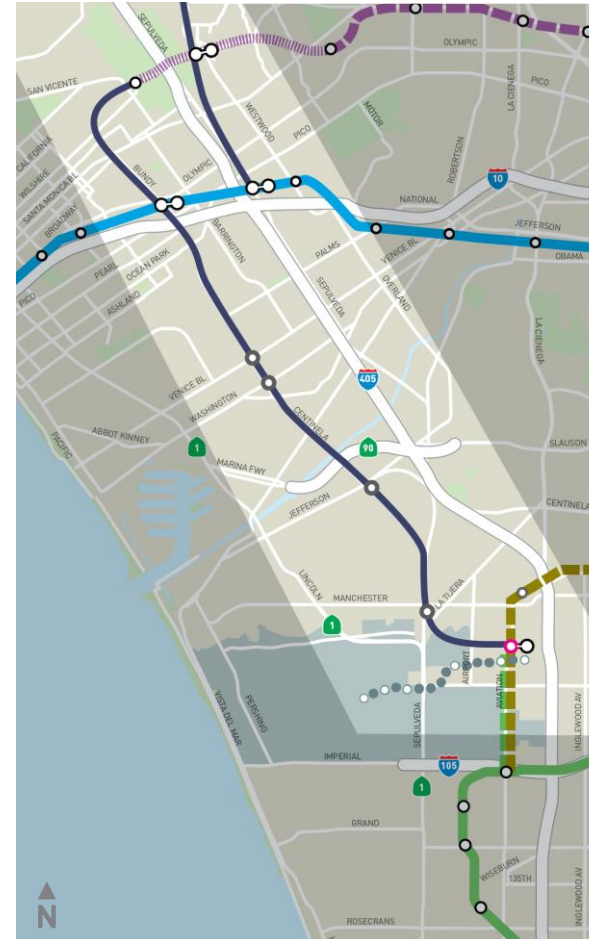


# Centinela Concepts

## HRT

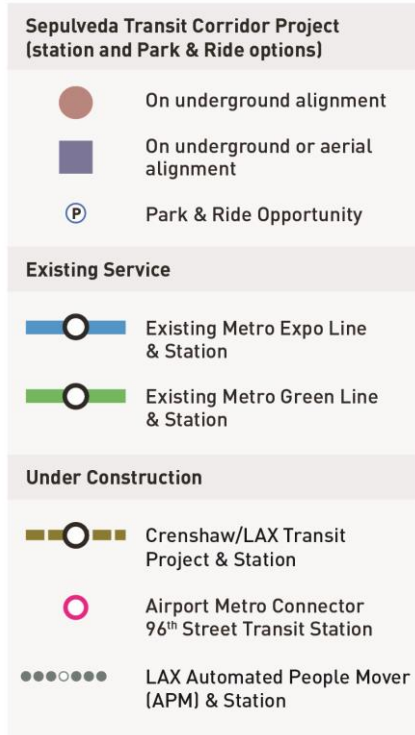


## Purple Line Extension

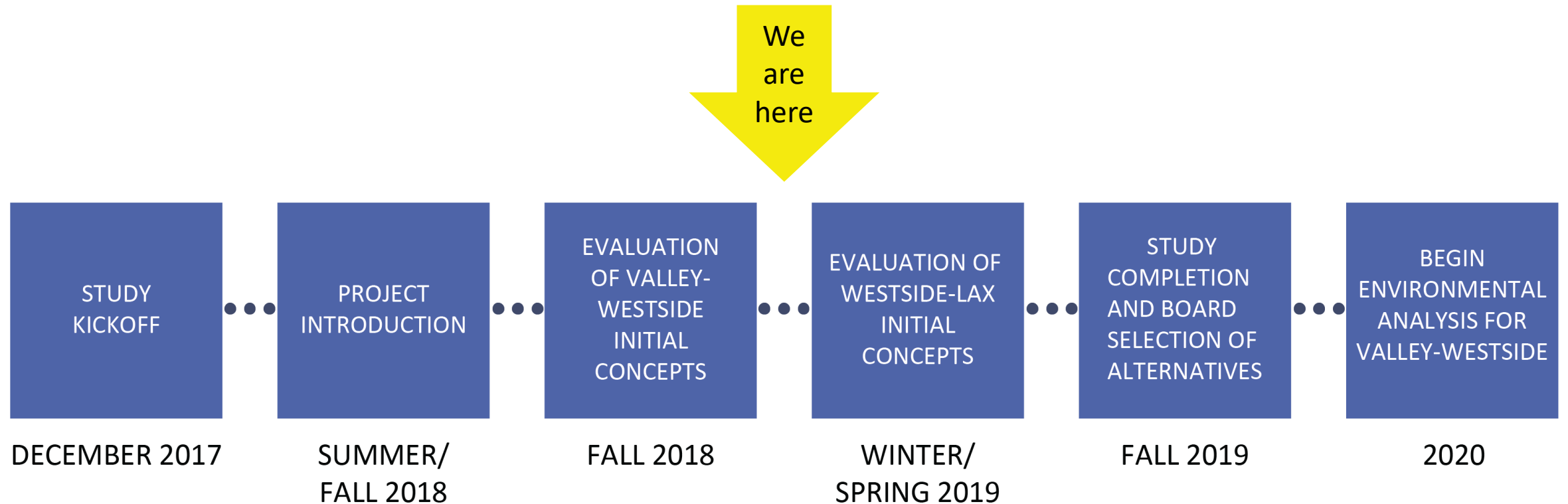




# Westside-LAX Stations and Access



# Feasibility Study Schedule





# Community Meeting Schedule

> This is the second of three rounds of community meetings for the Feasibility Study:

- **Wednesday, January 30, 2019 – 6-8pm – Westwood Presbyterian Church**
- Saturday, February 2, 2019 – 10am-12pm – Marvin Braude Constituent Service Center
- Tuesday, February 5, 2019 – 6-8pm – Proud Bird Restaurant

# How to Provide Input



**Cory Zelmer, Project Manager**

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# Thank You

> Q&A