

MRT 2

An Affordable Alternative Valley-to-LAX Monorail Route Through the Sepulveda Pass

*Because Metro Cannot Afford Any of Their Four Concepts
With Currently Available Measure M Funding*

Bel Air Beverly Crest Neighborhood Council Transportation Committee

April 11, 2019

Bob Anderson

Board Member and Chair, Transportation Committee
BobHillsideOrdinance@roadrunner.com



Sherman Oaks
Homeowners Association

Jeffrey Kalban

Board Member and Chair, PLUM Committee
jeff.kalban.sonc@gmail.com



Sherman Oaks
Neighborhood Council

Metro's Four Concepts

HRT 1



**Heavy Rail
Fully Underground**

HRT 2



**Heavy Rail
Fully Underground**

HRT 3



**Heavy Rail
Valley Elevated**

MRT 1



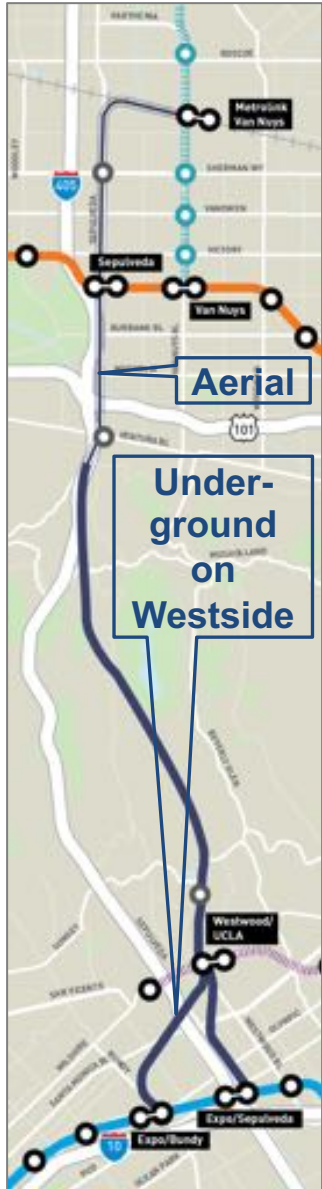
**Monorail
Pass & Valley Elevated**

Sepulveda Pass Funding Dilemma

- ◆ SOHA and SONC **strongly support** HRT 1 and HRT 2
 - Both fully underground heavy rail in Valley and Westside
 - Highest capacity, shortest travel times, and least invasive
 - **Not affordable** under available Measure M funding
- ◆ SOHA and SONC **strongly oppose** HRT 3
 - Heavy rail elevated above Sepulveda Boulevard in Valley
 - Inequitable – Elevated in Valley – Underground on Westside
 - **Not affordable** under available Measure M funding
- ◆ SOHA and SONC **strongly oppose** MRT 1
 - Monorail elevated in Pass and above Sepulveda Boulevard in Valley
 - Inequitable – Elevated in Valley – Underground on Westside
 - **Not affordable** under available Measure M funding

**Valley Getting the Short End of the Stick – As Usual
We Need Equitable and Affordable Alternative to MRT 1**

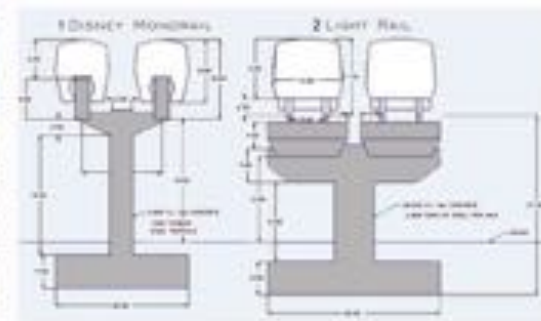
Why Isn't HRT 3 Concept Viable?



- ◆ Operates elevated above Sepulveda Boulevard for five miles
- ◆ Encroaches on Valley residents, businesses, streets, drivers, and pedestrians
- ◆ Destroys community's light, air, and privacy
- ◆ Eliminates lanes and increases traffic congestion on Sepulveda Boulevard
- ◆ Reduces street parking on Sepulveda Blvd
- ◆ Construction nightmare for years and years
- ◆ High potential for legal battles and delays
- ◆ Inequitably underground on the Westside
- ◆ Higher cost and longer schedule to build underground Westside tunnels and stations

Metro Needs a Better, Equitable Alternative

HRT 3 – Aerial on Sepulveda in Valley



TRAINS CAN NEGOTIATE A 5.8% GRADE
20' DROP = 345' LENGTH, 40' = 690'

**HRT 3 Transitions
from Underground to
Aerial near Valley
Vista Boulevard**

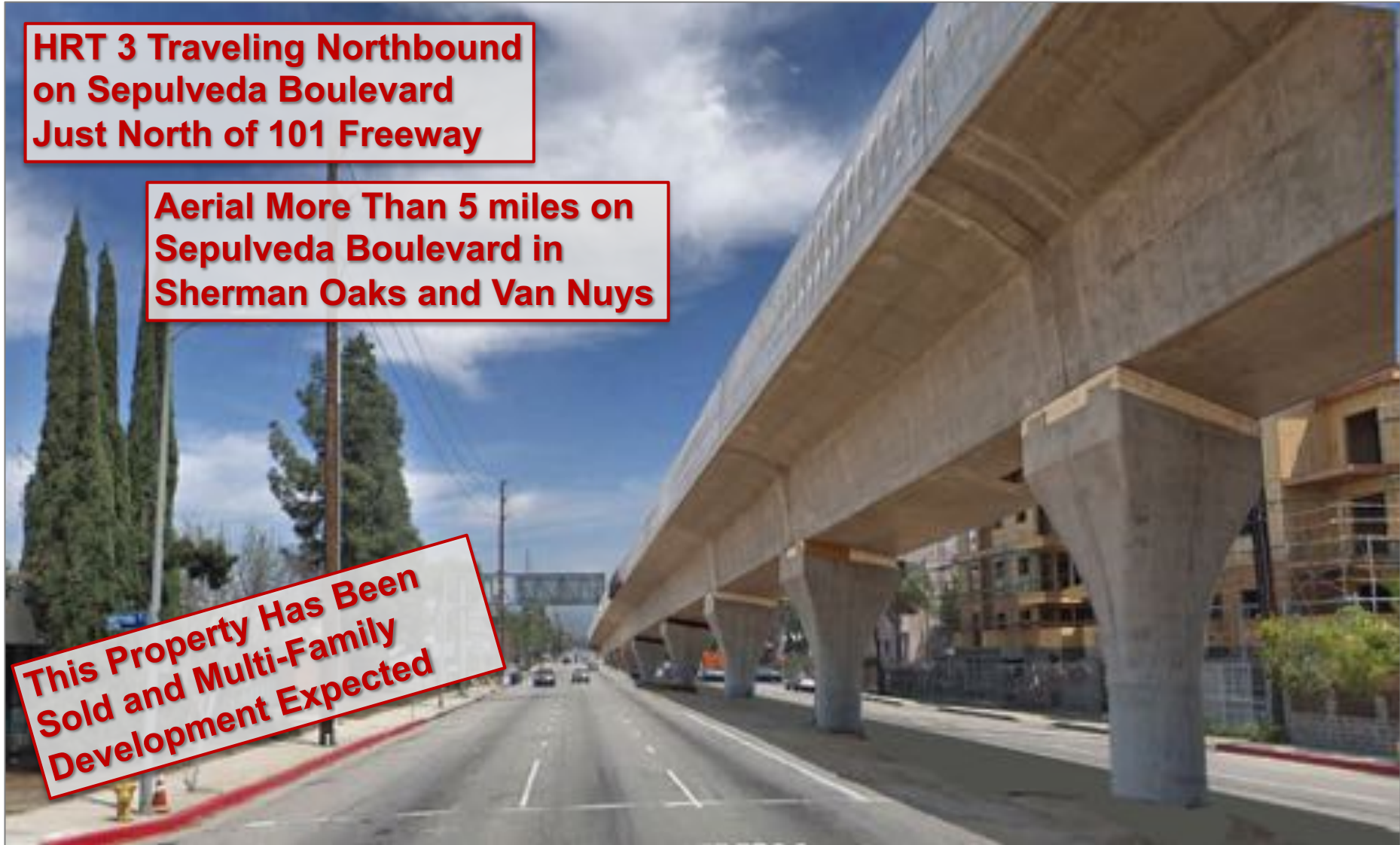
- Aerial on Sepulveda Boulevard
- Transition from underground to aerial

HRT 3 – Very Intrusive Valley Operation

**HRT 3 Traveling Northbound
on Sepulveda Boulevard
Just North of 101 Freeway**

**Aerial More Than 5 miles on
Sepulveda Boulevard in
Sherman Oaks and Van Nuys**

**This Property Has Been
Sold and Multi-Family
Development Expected**



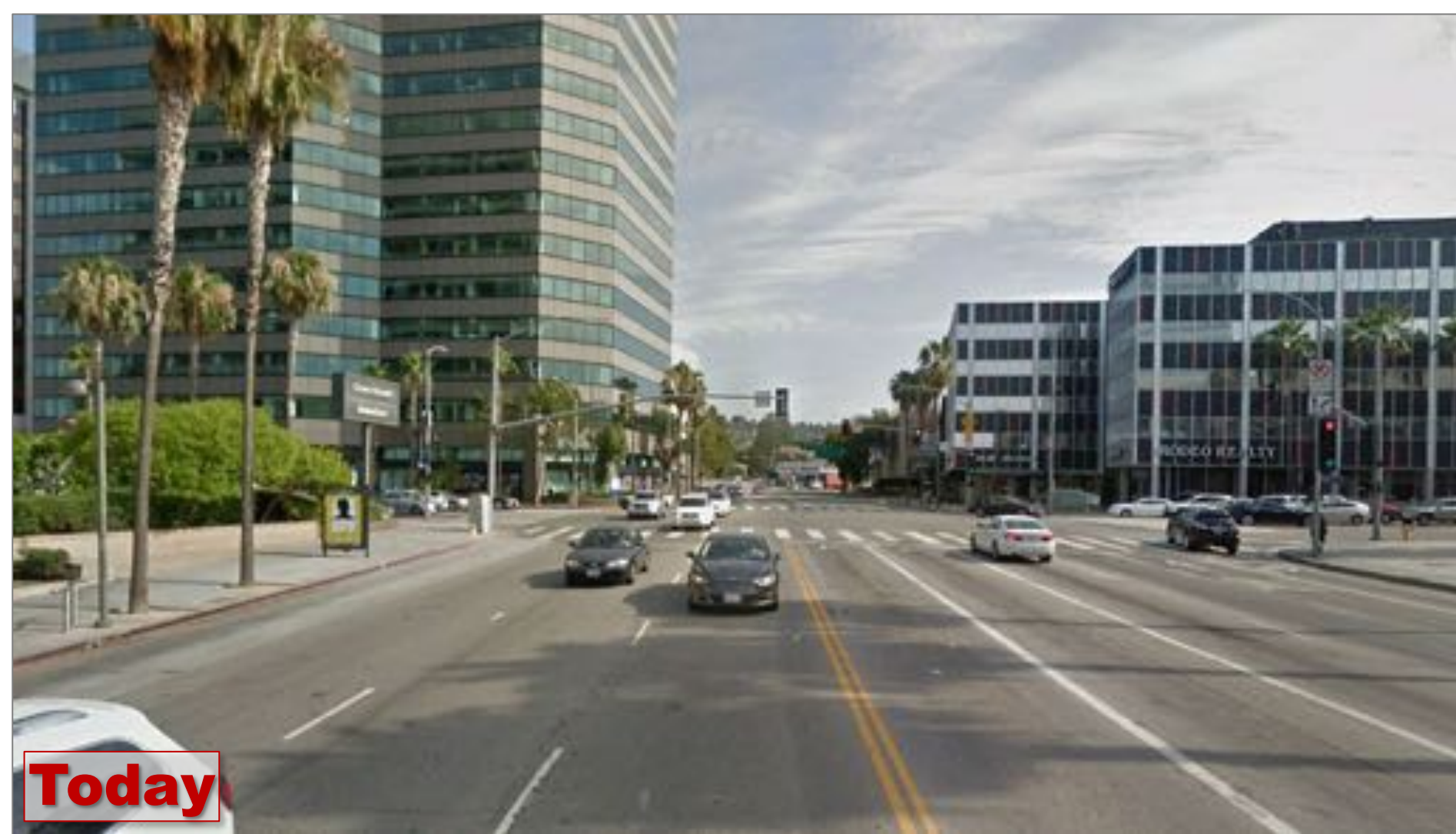
Sepulveda at Morrison Looking East



Sepulveda at Morrison Looking East



Sepulveda at Ventura Looking South



Sepulveda at Ventura Looking South



Ventura at Sepulveda Looking East



Ventura at Sepulveda Looking East



Sepulveda at Greenleaf Looking West



Sepulveda at Greenleaf Looking West



Sepulveda at Sutton Looking South



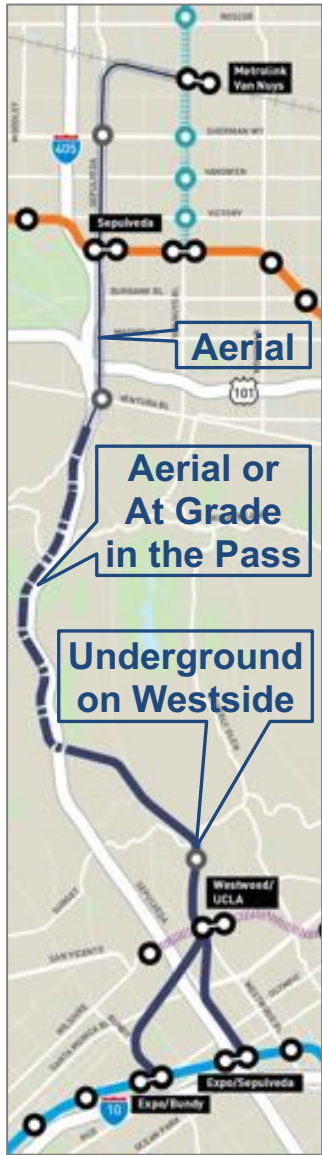
Sepulveda at Sutton Looking South

**More Than 100 Apartments and Condos
Demolished To Allow HRT 3 To Go Underground**

With HRT 3



Why Isn't MRT 1 Concept Viable?



- ◆ Operates elevated above Sepulveda Boulevard for five miles
- ◆ Encroaches on Valley residents, businesses, streets, drivers, and pedestrians
- ◆ Destroys community's light, air, and privacy
- ◆ Eliminates lanes and increases traffic congestion on Sepulveda Boulevard
- ◆ Reduces street parking on Sepulveda Blvd
- ◆ Construction nightmare for years and years
- ◆ High potential for legal battles and delays
- ◆ Inequitably underground on the Westside
- ◆ Higher cost and longer schedule to build underground Westside tunnels and stations

Metro Needs a Better, Equitable Monorail Alternative

MRT 1 – Aerial on Sepulveda in Valley



MRT 1 – Intrusive Valley Operation



**MRT 1 Traveling Northbound
Above Sepulveda Boulevard
Near Valley Vista Boulevard**

**Aerial Above Sepulveda
Boulevard for 5 miles in
Sherman Oaks and Van Nuys**

Measure M Funding Is Not Enough

Measure M Funding for Sepulveda Transit Corridor Project (in \$2015 billions)

Metro Subregion	Measure M Funding	Local, State, Federal, & Other Funding	TOTAL
San Fernando Valley	\$1.270	\$1.567	\$2.837
Westside	\$1.270	\$1.567	\$2.837
TOTAL (Phase 2)	\$2.540	\$3.134	\$5.674

Average U.S. inflation rate of 3.4 percent per year optimistically applied over four years

At Most \$6.5 billion Currently Available from Measure M (\$2019)

HRT 1 and 2 Construction Cost Per Mile

- ◆ **Metro Purple Line Extension is best for cost comparison**
 - Ongoing heavy rail subway construction under Wilshire Boulevard
 - 9.07 miles, 7 stations (every 1-1/2 mile), and no maintenance facility
 - \$9.35 billion forecast cost (per Metro Program Management Dashboard)
 - \$1.03 billion per mile (\$1.43 billion per mile for last section)
- ◆ **HRT 1 and 2 same heavy rail subway but fewer stations**
 - 14 miles, 6 or 7 stations (every 2 miles), and maintenance facility
 - \$0.8 billion per mile lowest possible – Less stations but extra facility
- ◆ **Lowest to highest possible HRT 1 and 2 construction cost**
 - 14 miles at \$0.8 billion per mile = **\$11.2 billion – Optimistic**
 - 14 miles at \$1.0 billion per mile = **\$14.0 billion – Probable**
 - 14 miles at \$1.2 billion per mile = **\$16.8 billion – Probable**
 - 14 miles at \$1.4 billion per mile = **\$19.6 billion – Pessimistic**

HRT 1 and HRT 2 Will Cost \$11 Billion To Build – Probably More

Metro's Severe Funding Gap

- ◆ Measure M provides at most **\$6.5 billion** (\$2019)
 - 28x28 Olympics initiative \$8.6 billion not available because none of Metro concepts can meet 2028 deadline
 - Congestion pricing and mobility fees insufficient to fill gap
 - Public Private Partnership (P3) possible through Metro Office of Extraordinary Innovation if financially sensible
- ◆ Concepts HRT 1 and HRT 2 cost **\$11 to \$17 billion**
 - Not affordable – 14 miles of tunneling
- ◆ Concept HRT 3 costs **\$9 to \$13 billion**
 - Not affordable – 9 miles of tunneling in Westside and Pass
- ◆ Concept MRT 1 costs **\$7 to \$11 billion**
 - Not affordable – 6 miles of tunneling on Westside

**Huge Funding Gaps May Force Metro to Select
Then Downgrade MRT 1 Monorail Concept**

Metro Needs Better, Affordable Monorail Alternative

Meet MRT 2 – A Monorail on the I-405



- ◆ Futuristic look and appeal
- ◆ Aerial above 405 freeway median
- ◆ Dual tracks on streamlined single support structure
- ◆ Similar stations to MRT 1 monorail
- ◆ Equitably elevated in Valley, Westside, and LAX regions
- ◆ Almost zero impacts to communities and streets – Even during construction
- ◆ Minimal potential for legal actions
- ◆ Shortest schedule – No tunneling
- ◆ Possibility of Valley to LAX by 2028
- ◆ Lowest cost – \$6 to \$7 billion to LAX

Better Concept That Metro Should Adopt

MRT 2 – Minimal Community Impact



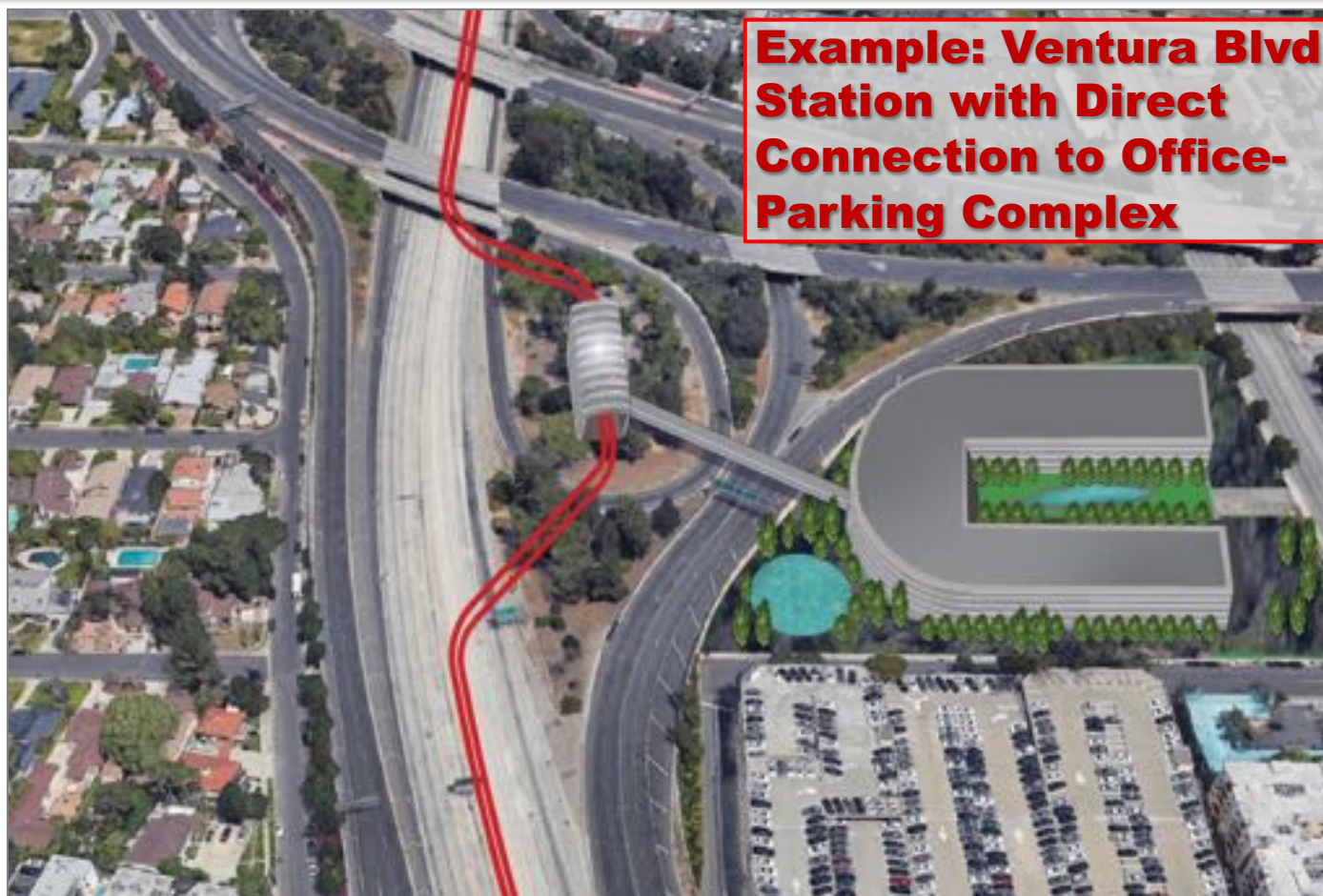
- ◆ Dual-track monorail operates above freeway median in both directions
- ◆ Safe and quiet operation
- ◆ No interference with freeway traffic
- ◆ Easy evacuation path between tracks if emergency

Easy Ride Over the Sepulveda Pass



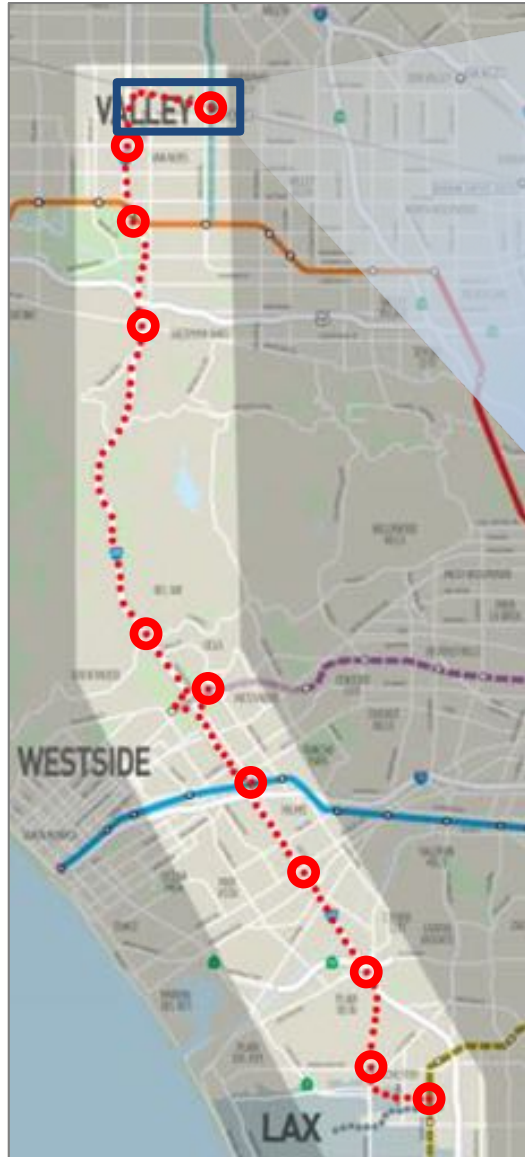
- ◆ MRT 2 travels under the Mulholland Bridge
- ◆ Travels over smaller bridges and overpasses
 - Skirball and Sunset Bridges, Orange Line, and Burbank Boulevard
- ◆ Travels over or around major freeway interchanges
 - Ventura (101), Santa Monica (10), and Marina (90) freeways

Many Station Options Available



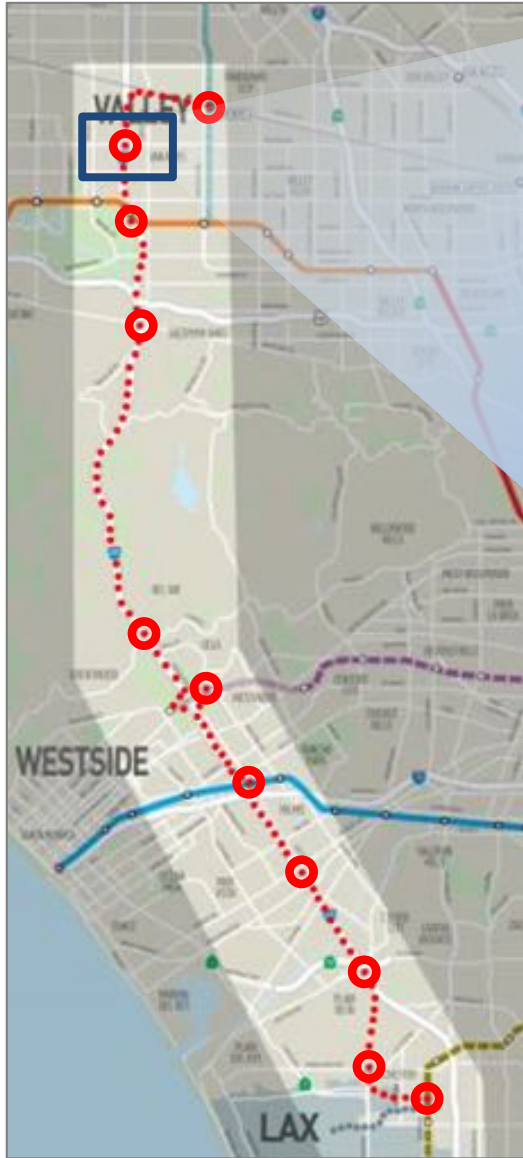
- ◆ Stations can be located next to freeway on dogleg track
- ◆ Stations can be located above freeway median with moving sidewalk to terminal, parking, offices, and more

MRT 2 Van Nuys Metrolink Station



- ◆ Northern terminus at Van Nuys Metrolink station – Easy connection
- ◆ Runs aerial and parallel to Metrolink tracks before turning above I-405 freeway median
- ◆ Additional parking for east Valley possible at station

MRT 2 Sherman Way Parking Station



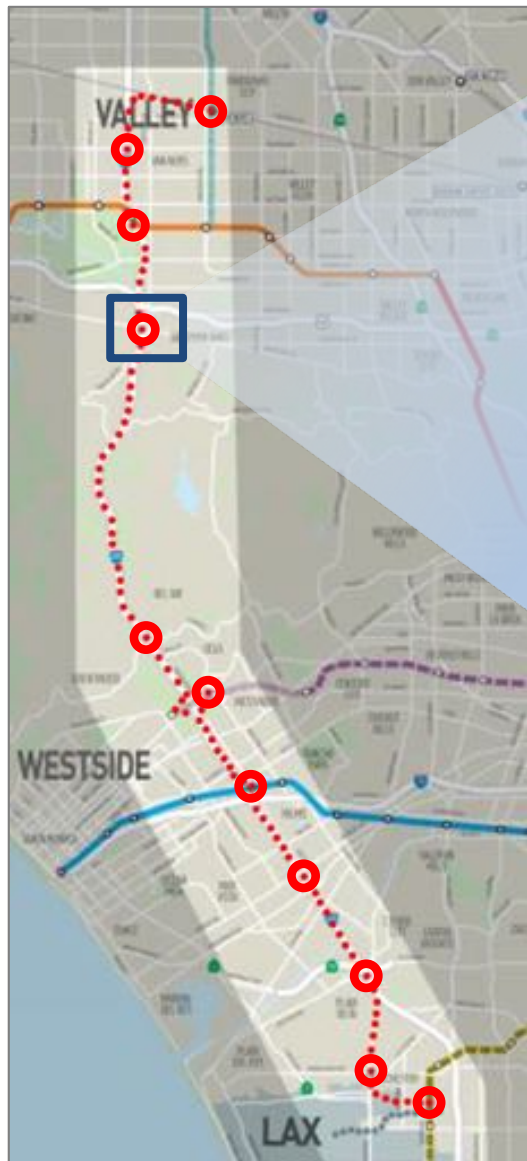
- ◆ Major driver access from north Valley, North County, Metrolink, and more
- ◆ Huge 10,000-car parking structure at Sherman Way with easy access to/from 405 freeway
- ◆ Station inside parking structure on dogleg track

MRT 2 Orange Line Parking Station



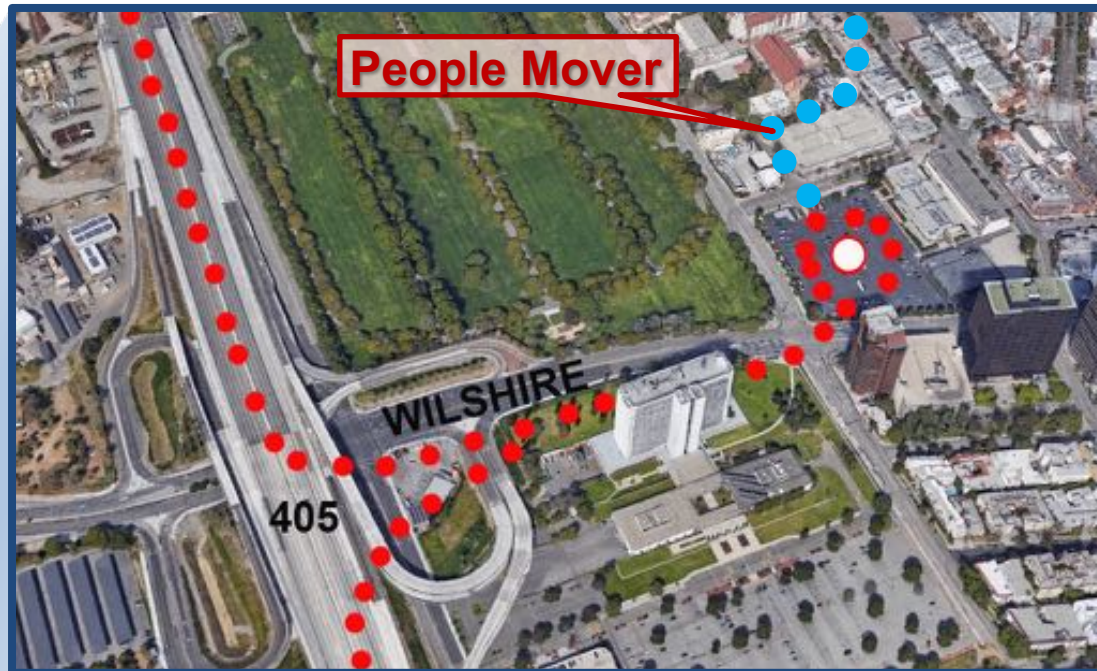
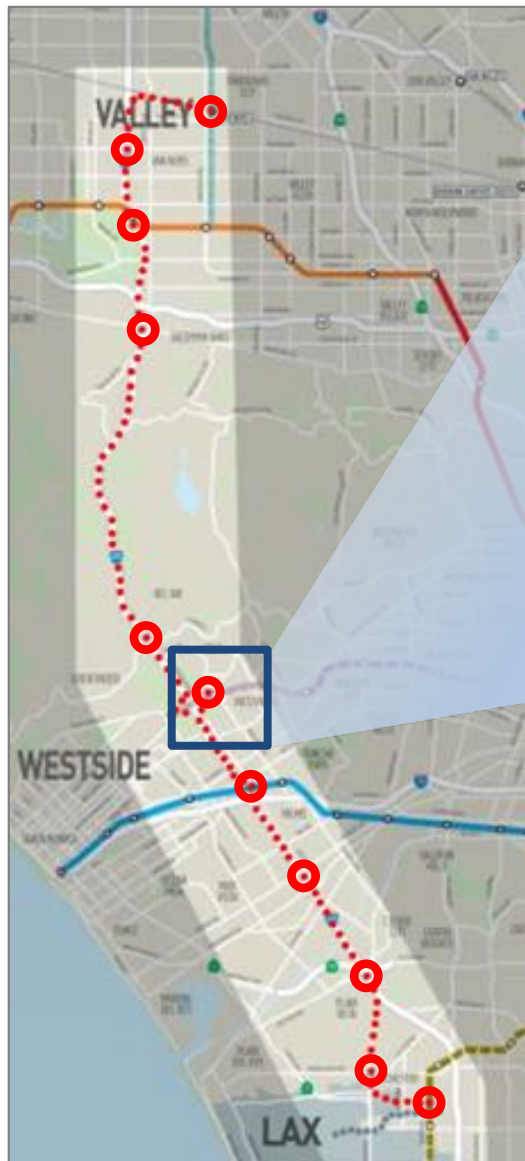
- ◆ Major driver access from north Valley, south Valley, Orange Line, and more
- ◆ Large parking structure on existing Orange Line parking lot with easy access to/from Sepulveda Boulevard
- ◆ Station inside parking structure on dogleg track
- ◆ People mover to Orange Line station

MRT 2 Ventura Boulevard Station



- ◆ Easy access to Sepulveda and Ventura Boulevard transit
- ◆ Station adjacent to freeway on dogleg track with people mover to parking
- ◆ Station could be closer to Ventura Boulevard if desirable

MRT 2 Wilshire Boulevard Station



- ◆ Easy access to/from 405 freeway, Wilshire Boulevard, and UCLA
- ◆ Large UCLA on-campus parking structure with station on dogleg track
- ◆ People mover onto UCLA campus
- ◆ Direct connection to Purple Line on Wilshire Boulevard

MRT 2 Expo Line Station



- ◆ Direct connection to Expo Line for either Santa Monica or downtown Los Angeles
- ◆ Station adjacent to 405 and 10 freeways on dogleg track
- ◆ Monorail continues south to further stations and LAX terminus

Monorail Performance Underestimated?

- ◆ **Metro heavy rail performance estimates – HRT 1, 2, and 3**
 - Six cars per train traveling at up to 70 mph
 - 12,000 passengers per hour at four minutes between trains
 - 15 to 16 minutes from Van Nuys Metrolink to Expo Line
- ◆ **Metro monorail performance estimates – MRT 1**
 - Three cars per train traveling at up to 50 mph
 - 7,500 passengers per hour at four minutes between trains
 - 26 minutes from Van Nuys Metrolink to Expo Line
- ◆ **Today's monorail performance estimates much better**
 - Six cars per train traveling at up to 75 mph
 - 14,000 passengers per hour at two minutes between trains
 - 20 minutes from Van Nuys Metrolink to Expo Line

**Monorail Performance Is At Least As Good As Heavy Rail
Better, Faster, Equitable, Quickest To Build, and Least Costly**

Toll Lanes Cannot Preclude MRT 2

- ◆ Metro planning four 405 ExpressLanes through Pass
 - One HOV lane and one toll lane in each direction
 - Measure M, Attachment A, footnote f “includes early delivery of highway ExpressLane”
- ◆ ExpressLanes must not preclude MRT 2 monorail above 405 median through Sepulveda Pass
 - One part of Metro says four ExpressLanes excludes MRT 2
 - Another part of Metro says ExpressLanes and MRT 2 compatible
 - Toll ExpressLanes also penalize low-income drivers
- ◆ Metro must ensure compatibility of toll lanes and MRT 2
 - And stop considering unacceptable elevated tracks above Sherman Oaks and Van Nuys streets

Don't Preclude Best, Quickest-To-Build, Actually Affordable, Median-Running Monorail Route for Short-Term Toll Lanes

Public-Private Partnership Concepts

- ◆ Metro also soliciting Public-Private Partnership (P3) concepts for Sepulveda Transit Corridor Project
- ◆ Commercial organizations propose innovative concepts
 - Combined rail-auto tunnels?
 - Alternative monorail routes?
 - Other?
- ◆ Metro evaluates proposed P3 concepts in 2019
- ◆ Metro Board selects P3 concepts to continue through environmental impact analysis
 - Selected P3 concepts evaluated alongside selected Metro concepts

**Public-Private Partnership Proposals from Commercial Organizations
May Offer Additional Innovative and Affordable Concepts
Metro Must Provide Additional Transparency Into P3 Process**

MRT 2 Monorail – A Better Alternative

- **Heavy Rail Subways HRT 1 and 2 Are Terrific But Unaffordable**
- **HRT 3 and MRT 1 Are Inequitable To Valley, Unaffordable, and Destroy Van Nuys and Sherman Oaks**
- **MRT 2 Monorail Above 405 Median Is Only Affordable and Equitable Concept Operating by '28 Olympics**
- **Let's Make MRT 2 a Reality!**

Please Send Comments To Metro

- ◆ Please send comments to Metro about the Sepulveda Transit corridor Project
 - Opposition against elevated tracks in Valley
 - Support for MRT 2 monorail above 405 freeway
 - Other?
- ◆ Email comments to:
 - sepulvedatransit@metro.net
 - Cory Zelmer, Metro Project Manager, zelmerc@metro.net
 - Joshua Schank, Metro Chief Innovation Officer, schankj@metro.net
 - Karen Swift, Metro Valley Communications, swiftk@metro.net
- ◆ Mail comments to:
 - Cory Zelmer, Metro Project Manager
Metro, One Gateway Plaza, M/S 99-22-5, Los Angeles, CA, 90012
- ◆ Thank you