

Traffic Analysis Overview

Objective – Determine an optimal Del Monte Blvd streetscape design to achieve the vision and goals of downtown Marina

- 1. Traffic Volumes
- 2. Del Monte Blvd Layout Alternatives
- 3. Traffic Results & Simulations
- 4. Summary & Recommendations

Operations Summary

 Signal at Reservation/Del Monte operates at acceptable LOS for all scenarios

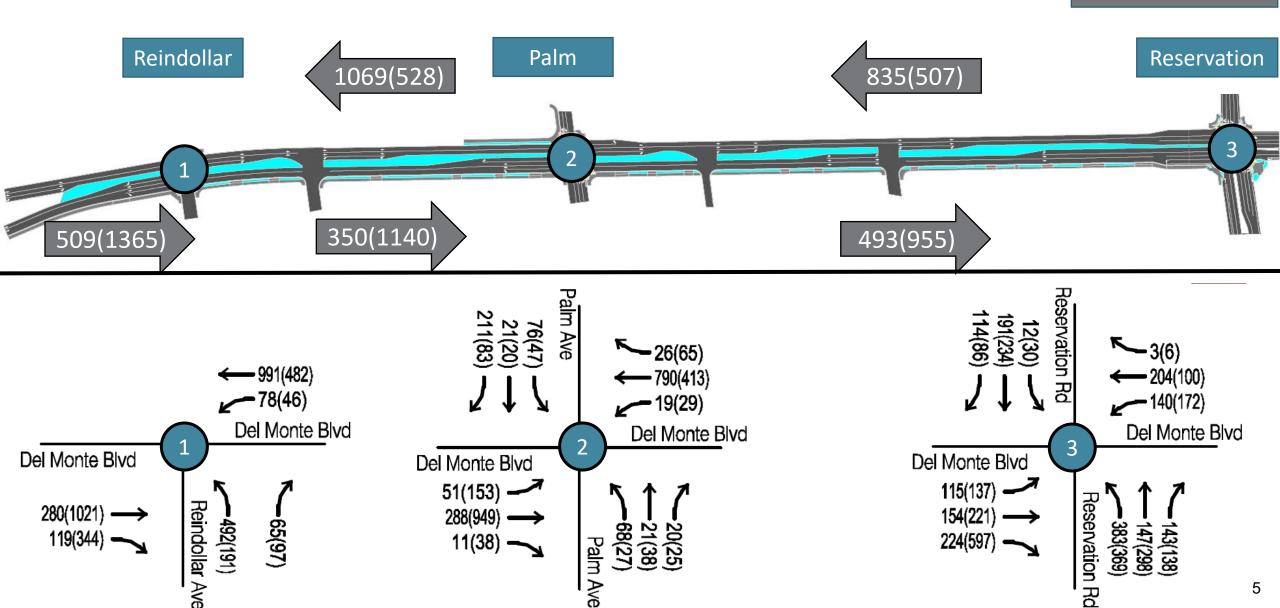
- Signal Layout
 - 2-Lane Road Diet operates with NB congestion & queues in PM
 - Improved operations for Road Diet with 2 NB lanes to Palm
- Roundabout Layout
 - Requires multi-lane design and Road Diet with 2 NB lanes to Palm
 - Reindollar 2-lane NB, 2-lane SB
 - Palm 2-lane NB, 1-lane SB

Traffic Volumes

- 2018 Traffic Counts (Pre-COVID)
 - Volumes are 2% higher than 2023 counts
- 2040 Traffic forecasts from AMBAG Travel Demand Model
 - Volumes are 20% higher than 2018 counts
 - Used in traffic analysis
 - Includes traffic and travel pattern changes from
 - Marina Downtown Plan
 - Regional growth and roadway improvements

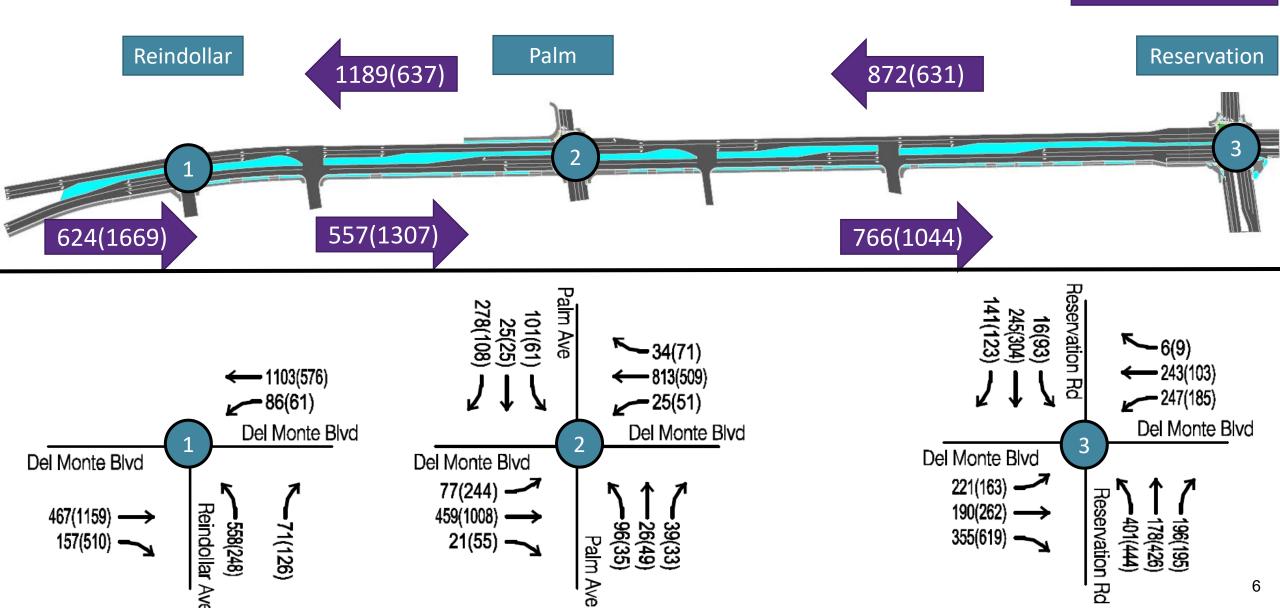
Year 2018 Traffic Volumes

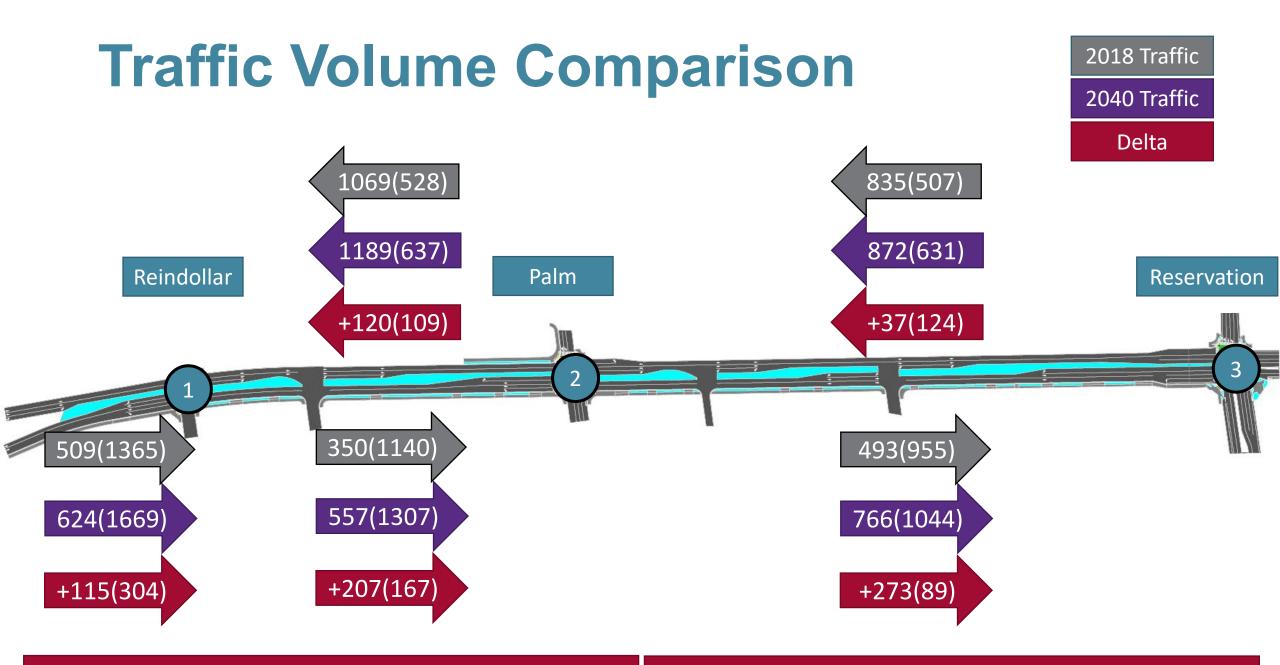
XX – AM Volume (XX) – PM Volume



Year 2040 Traffic Volumes

XX – AM Volume (XX) – PM Volume

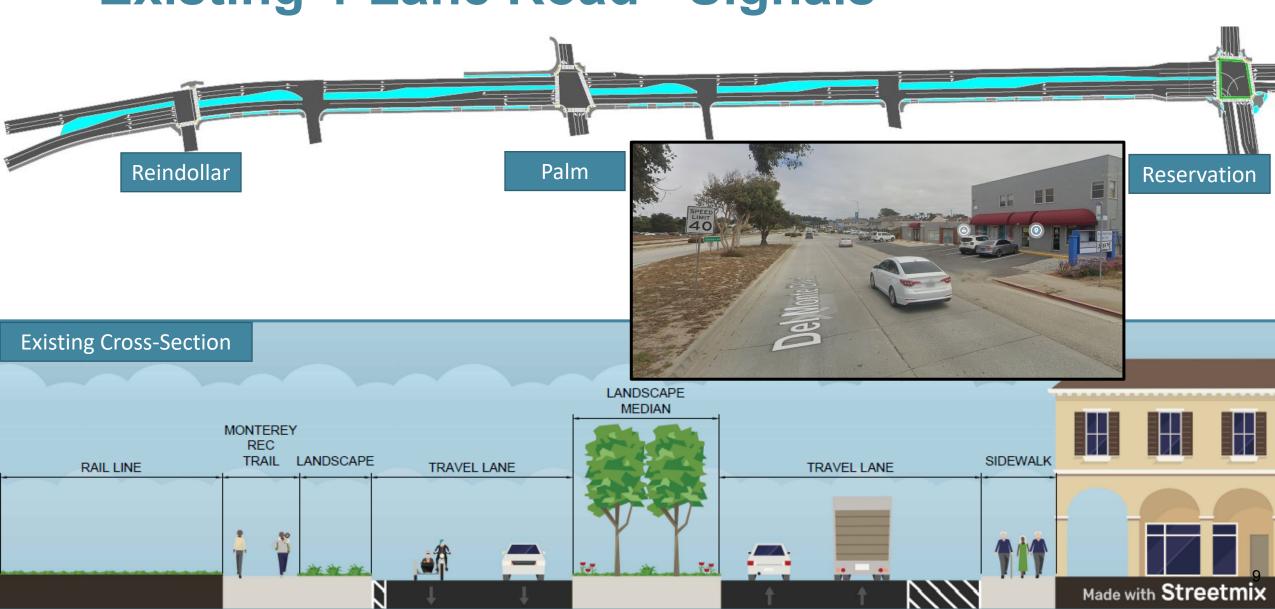




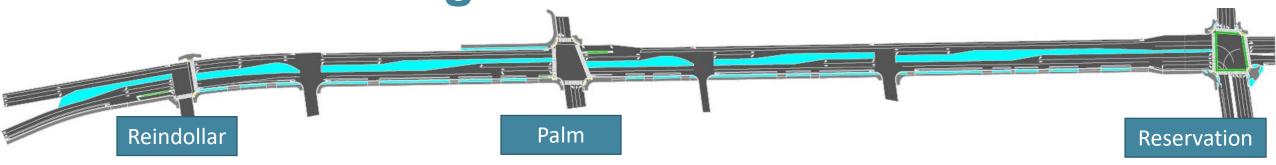
Del Monte Blvd Layout Alternatives

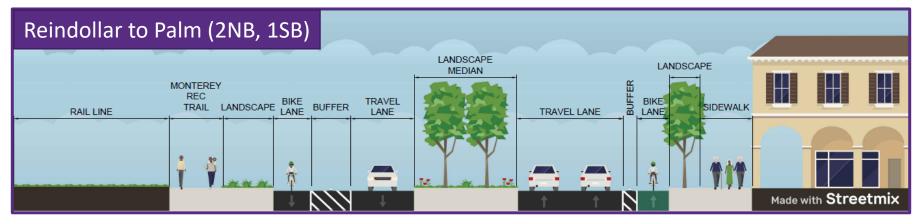
- 1. Existing 4-Lane Road with Signals
- 2. Road Diet with Signals
 - 2 NB Lanes from Reindollar to Palm, 1 SB Lane
- 3. Road Diet with Multi-lane Roundabouts
 - 2 NB Lanes from Reindollar to Palm, 1 SB Lane
- 1 NB lane has congestion & queues during PM peak

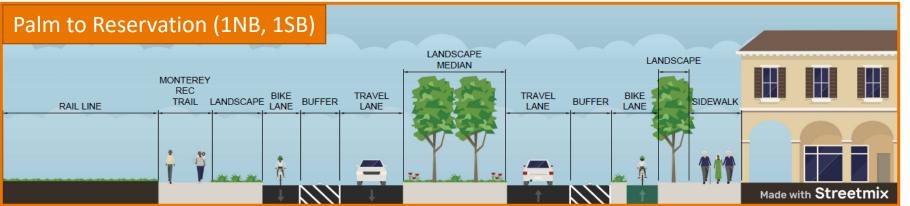
Del Monte Layout Existing 4-Lane Road - Signals



Del Monte Layout Road Diet - Signals

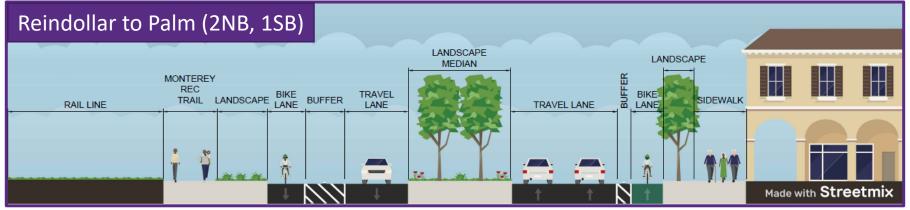


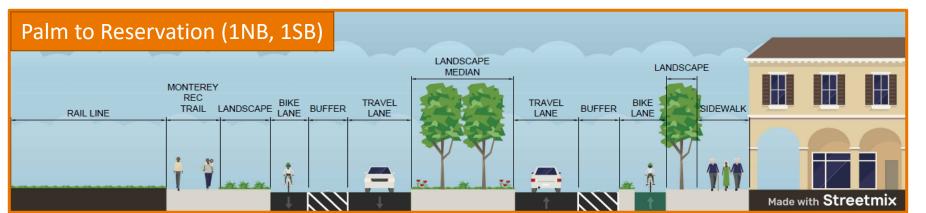




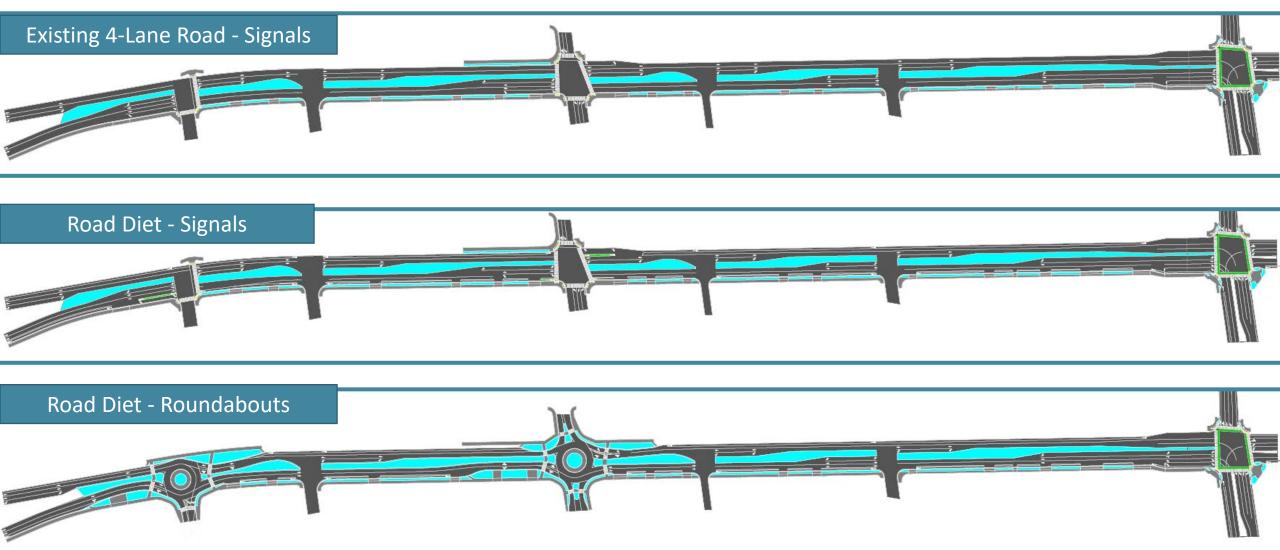
Del Monte Layout Road Diet - Roundabouts



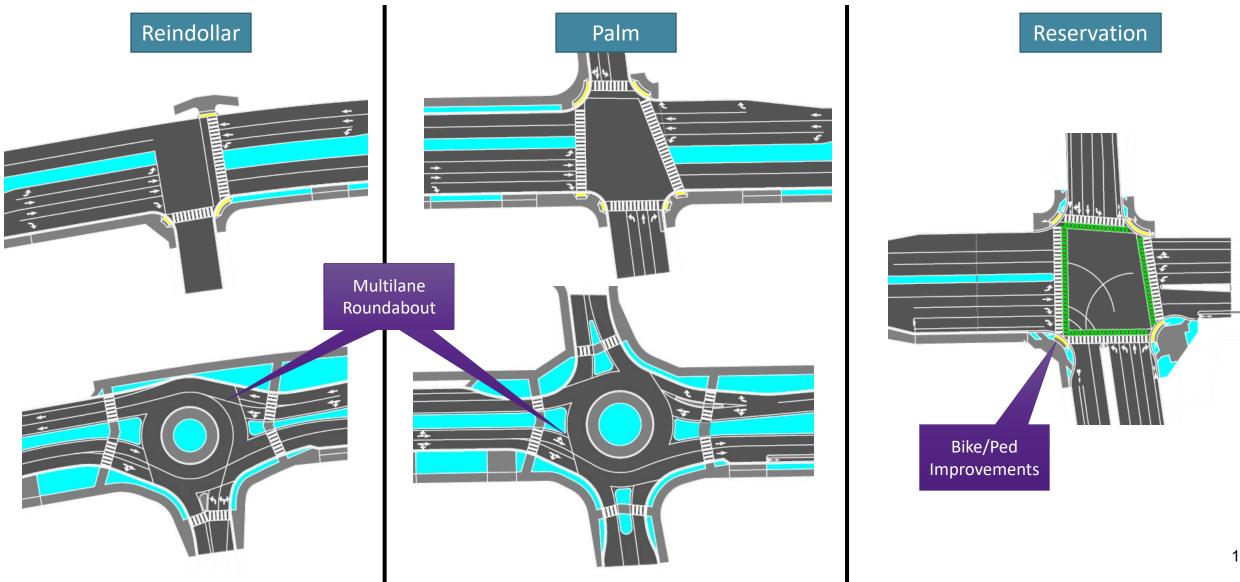




Del Monte Layout Comparison



Del Monte Layout Comparison

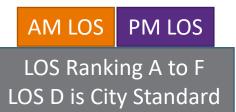


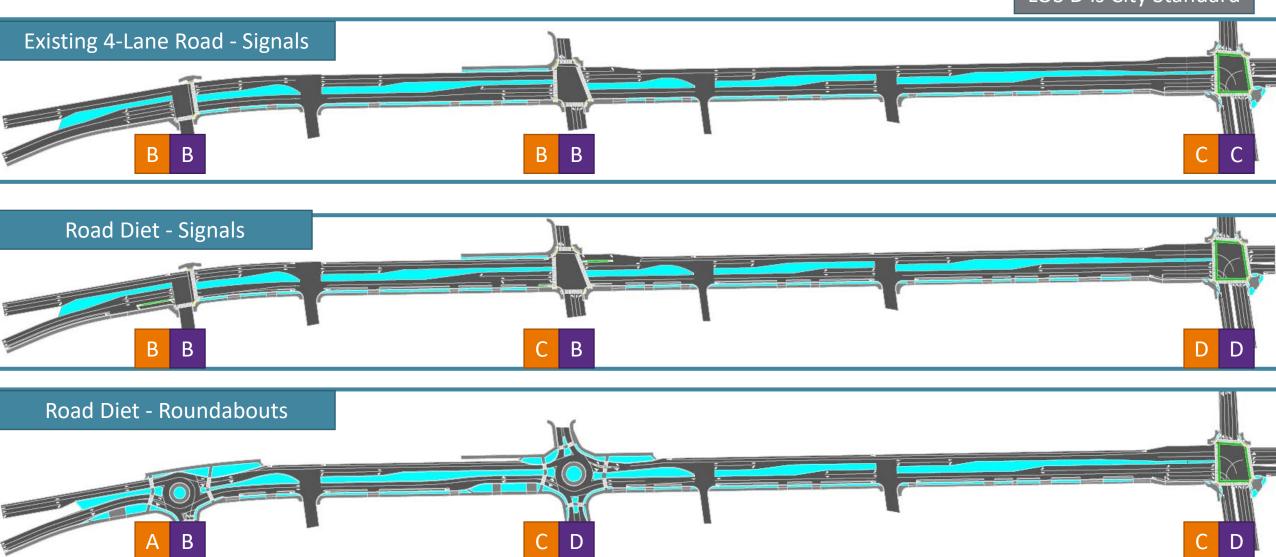
Traffic Results

• 2040 AM & PM Peak Volumes

- Traffic simulation model and analysis using VISSIM
 - Ideal tool for roundabout vs signal comparison
 - Intersection vehicle delay, queues, level of service
 - Roadway travel times, speeds
 - Model bike, pedestrian, transit activity

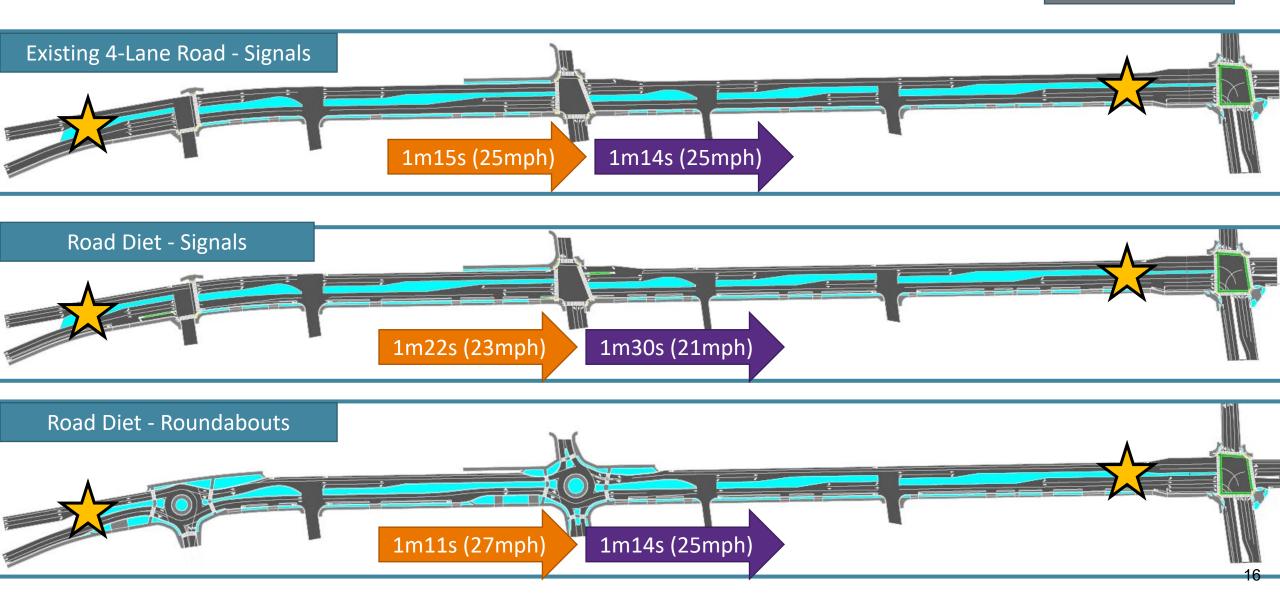
Intersection LOS Summary





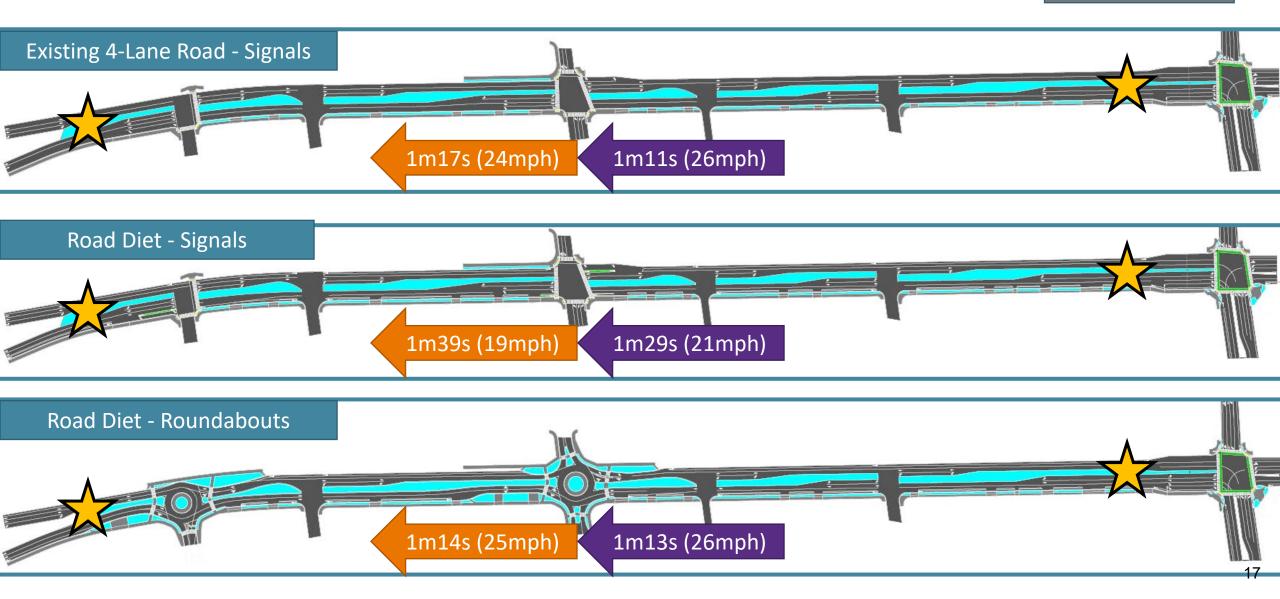
Northbound Travel Times





Southbound Travel Times



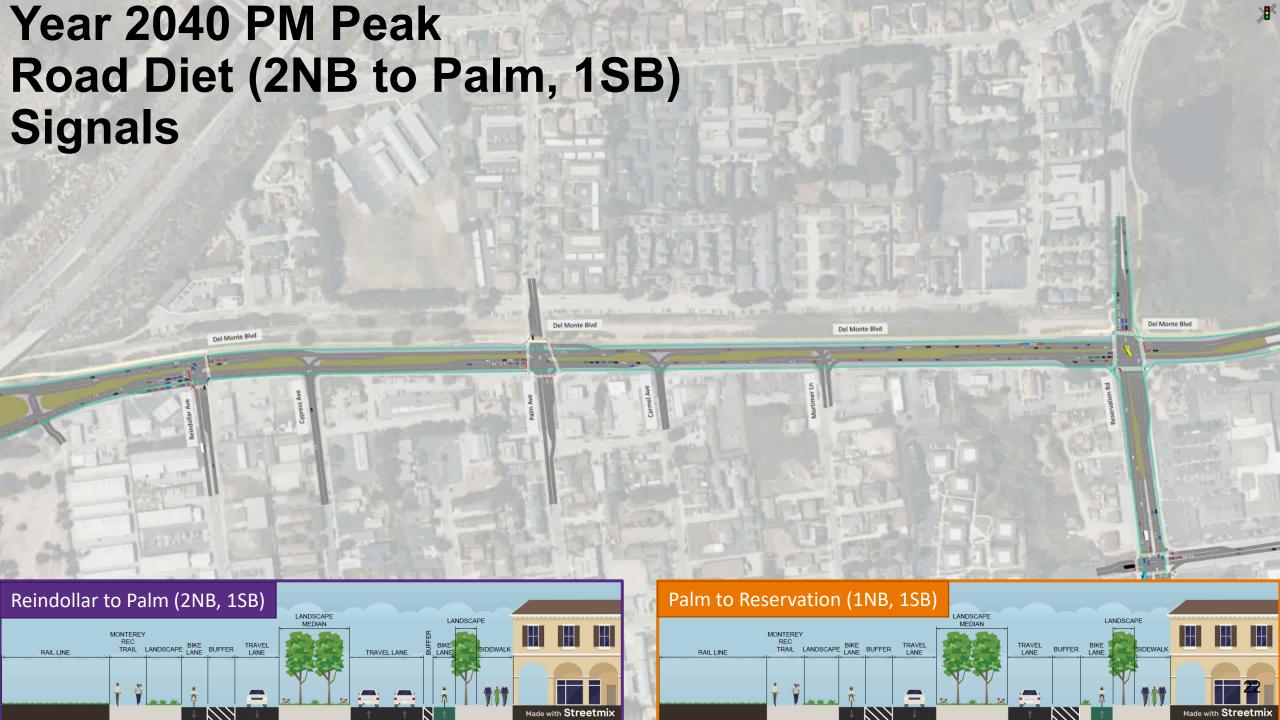


VISSIM Simulations











Summary & Recommendations

2040 LOS Summary

Road Layout	Control	Reindollar LOS AM (PM)	Palm LOS AM (PM)	Notes	
Existing 4-Lane	Signal	B (B)	B (B)	Year 2040 Baseline Scenario	
2-Lane Road Diet	Signal	B (B)	C (D)	Heavy NB queues during PM peak	
	Roundabout	A (F)	C (F)	Intersection NB queue fails at Palm during PM peak	
Road Diet (2NB, 1SB)	Signal	B (B)	C (B)	Standing queues at intersection	
	Roundabout	A (B)	C (D)	Moving queues at intersection	

2040 Queue Summary

Road Layout	Control	Reindollar Queues Ok?	Palm Queues Ok?	Notes	
Existing 4-Lane	Signal	Yes	Yes	Year 2040 Baseline Scenario	
2-Lane Road Diet	Signal	Yes	No	Heavy NB queues during PM peak	
	Roundabout	No	No	Intersection NB queue fails at Palm during PM peak	
Road Diet (2NB, 1SB)	Signal	Yes	Yes	Standing queues at intersection	
	Roundabout	Yes	Yes	Moving queues at intersection	

2040 Operations Summary

Road Layout	Control	Multimodal Safety	Bike Mobility	Pedestrian Mobility	Transit & Fire Access
Existing 4-Lane	Signal	Poor	Poor No bike lanes on Del Monte	Poor No streetscape & sidewalk Long intersection crossings	Yes
2-Lane Road Diet	Signal	Ok	Very Good Protected median Class IV bike lanes	Good Wide sidewalk & access Long intersection crossings	Yes
	Roundabout	Good	Very Good Protected median Class IV bike lanes	Very Good Wide sidewalk & access Short intersection crossings	Yes
Road Diet (2NB, 1SB)	Signal	Ok	Very Good Mix of protected striped & median Class IV bike lanes	Good Wide sidewalk & access Long intersection crossings	Yes
	Roundabout	Good	Very Good Mix of protected striped & median Class IV bike lanes	Very Good Wide sidewalk & access Short intersection crossings	Yes 27

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Questions & Open Discussion

