History of Major Mobility Improvements on SR 78

- SR 78 originally constructed (1964)
- Construct Two Additional lanes (1994) – TransNet 1
- Complete Sprinter (2008) – TransNet 1

SR 78 by the Numbers

- 625,000 residents
- 281,000 jobs
- 15,000 students at Cal State San Marcos
- 128,000 -170,000 daily freeway users
- Daily Sprinter ridership – 8,900 pass/day
SR 78 Performance & Mobility Challenges

- Afternoon commute can require 38 mins (90% reliability)
- Sprinter travel time – 53 mins
- Freeway delay has increased 400% since 2000 (850,000 vhd/year)
- Limited freeway capacity at east & west ends
- Over 50% of Sprinter Line is single track
Current Regional Plan Projects on SR 78

SR 78 - Asset (SB1) Management

- Pavement rehabilitation
- WB auxiliary lane Nordahl to Twin Oaks
- Culvert repair
- ADA ramps
- Traffic management elements

- Total Cost $125M (2024)
Opportunity for Technology & Policy Innovations

- Congestion pricing
- Enhanced transit services
- Adaptive smart signals
- In Vehicle (V2x) messaging
- Connected vehicles

SR 78: Ongoing Funded Efforts

- 15/78 Environmental document (Complete 2022)
- Barham/Woodland improvements - Environmental/Design (Shovel Ready 2021)
- Culvert repair (Begin Construction 2020)
- Asset management improvements (Begin Construction 2024)
- 5/78 operational improvements – Design (Shovel Ready 2020)
Summary of Additional Near Term Opportunities

- Pending available funds begin construction
  - San Marcos/Escondido improvements 2023
  - 5/78 operational improvements 2020
- Prepare to compete for funding in 2020/2022 State Cycles
- Explore new partnering opportunities to advance additional improvements

Smart Green Corridors

active management - smart infrastructure - wireless charging
Next Steps

- SANDAG and Caltrans will continue to collaborate on near-term mobility solutions along the corridor
- Staff will begin to develop a Smart Green Corridor concept, including SR 78
GObyBIKE EARLY ACTION PROGRAM

- $200 million in TransNet funds
- Builds 77 linear miles of bikeways
- 70 of 77 miles either open or under design
- 7.5 miles open to date
- 3/4 of investment in City of San Diego
BIKEWAY PROGRAM STATUS

70 of 77 Miles Open or Under Development

Miles per Project Phase

- Preliminary Engineering/Environmental: 21.5 miles
- Design: 34.2 miles
- Under Construction: 6.4 miles
- Open To Public: 7.5 miles

RECENT PROGRESS
COASTAL RAIL TRAIL

ROSE CREEK BIKEWAY

COASTAL RAIL TRAIL: ROSE CREEK BIKEWAY
COASTAL RAIL TRAIL: ROSE CREEK BIKEWAY

COASTAL RAIL TRAIL: ROSE CREEK BIKEWAY
COASTAL RAIL TRAIL: ROSE CREEK BIKEWAY

- 2 miles in City of San Diego
- Construction is 57% complete
- Open to Public expected Summer 2020
COASTAL RAIL TRAIL: ENCINITAS

GObyBIKEsd.com

GObyBIKEsd.com
COASTAL RAIL TRAIL: ENCINITAS

- 1.3 miles in City of Encinitas
- Construction is 85% complete
- Open to Public expected May 2019

INLAND RAIL TRAIL: COUNTY OF SAN DIEGO AND CITY OF VISTA
INLAND RAIL TRAIL: COUNTY OF SAN DIEGO AND CITY OF VISTA
INLAND RAIL TRAIL

- 3 miles in County of San Diego, cities of Vista and Oceanside
- Construction is 65% complete
- Open to Public expected Summer 2019

CITY OF SAN DIEGO DESIGN REVIEW

- City approved first regional urban bikeway project in March 2019 (submitted in January 2018)
- Two projects currently under review; two to be submitted this month
- Lunch & Learn sessions in December 2018
- Project Manager assigned from Public Works
LESSONS LEARNED

• More realistic schedules particularly for design reviews
• More attention to potential utility relocations
• New procedures for City of San Diego design review and approvals

LEVERAGING TRANSNET FUNDS

• Active Transportation Program (ATP) – Regional Competition:
  – $8.5 million for University Bikeway
  – $1.3 million for GO by BIKE Education and Encouragement Start-Up Program

• $48 million from ATP has been secured, more than half of the non-TransNet funds in the program.
NEXT STEPS

- Continue progress on 24 EAP projects in FY 19 Program Budget
- Provide regular program status updates
PROJECT OVERVIEW

- 11-mile extension of the Blue Line Trolley
- Old Town Transit Center to University City
- Nine new stations (five with parking)
- 36 Trolley cars
- Revenue service in fall 2021
- $2.17 billion (52% TransNet, 48% FTA)
### MID-COAST CONSTRUCTION SCHEDULE

**Milestone Baseline March 2018 Update**

<table>
<thead>
<tr>
<th>Year</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
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</thead>
<tbody>
<tr>
<td>RELocate Utilities</td>
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<tr>
<td>Build Supporting Infrastructure</td>
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<td></td>
</tr>
<tr>
<td>Construct Viaducts and Bridges</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Build Stations</td>
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<td></td>
<td></td>
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<tr>
<td>Install Track and Power</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Testing/Start-Up</td>
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</tbody>
</table>

**Heavy Construction Duration**
- Baseline: 56 months
- March 2018 Update: 57 months

**Reach 14 Track Const. Complete**
- Baseline: August 2020
- March 2018 Update: November 2020

**Start MTS Pre-Revenue Testing**
- Baseline: April 2021
- March 2018 Update: May 2021

**Final Completion by MCTC**
- Baseline: July 2021
- March 2018 Update: August 2021

**Revenue Service Date**
- Baseline: September 2021
- March 2018 Update: November 2021
MID-COAST CONSTRUCTION PROGRESS

MID-COAST DBE UTILIZATION

Transportation Committee Item 8 | April 5, 2019
Ace Fence Company
- Fencing firm
- Established in 1988
- DBE, MBE, WBE, and SBE certified
- Grew from 15 to 96 employees
- Mid-Coast Project success:
  ✓ Contract value grew from $709K to $6.5M
  ✓ Purchased 9 new vehicles
  ✓ Awarded contracts on new projects with West Mission Bay Drive Bridge, Flatiron, and All American Asphalt.

WORKERS by QUARTER – Through 2018
CONSTRUCTION ACCOMPLISHMENTS

• Gilman Drive bridge opened to traffic
• Pre-Cast girders over Genesee & La Jolla Village Drive
• Pre-Cast girders fly over bridge
• Cast in place aerial guideway
• Station Falsework at UTC & Nobel Drive
• Navy fuel line casing and directional drilling
• Traction power stations & signaling
• Successful storm water management

GILMAN DRIVE BRIDGE – Ribbon Cutting
PRE-CAST GIRDERS – La Jolla Village Dr.

Genesee Viaduct – La Jolla Village Drive Closure, Setting Girder

PRE-CAST GIRDERS – LRT Flyover

Erecting Girders at Rose Creek LRT Flyover of Coaster
CAST IN PLACE – Aerial Guideway

UCSD Viaduct – Over I-5 Night Lane Closures for Concrete Pour

CAST IN PLACE – Aerial Guideway

Nobel Viaduct – North of Nobel Drive
CAST IN PLACE – Aerial Guideway

Nobel Viaduct – Weekend Falsework Over Nobel Drive

AERIAL STATIONS – Falsework

Genesee Viaduct – UTC Station Aerial
AERIAL STATIONS – Falsework

Nobel Station Falsework

NAVY FUEL LINE RELOCATION

Casing for the Navy Fuel Line
TRACTION POWER SUBSTATIONS

Olive & Nobel Traction Power Substations (TPSS)

SWPPP COMPLIANCE & MONITORING

Storm Water and Environmental Management
CONTROL POINT ROSE RESTORATION

CP Rose October 2018  CP Rose March 2019

PROJECT RISKS

<table>
<thead>
<tr>
<th>Risk Item</th>
<th>Potential Impact</th>
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</thead>
<tbody>
<tr>
<td>Right of Way Cost – Mediations, Settlements, Trials</td>
<td>Cost</td>
</tr>
<tr>
<td>Right of Way - Goodwill Claims</td>
<td>Cost (no federal participation)</td>
</tr>
<tr>
<td>Fez Street Substation</td>
<td>Schedule, Redesign, Cost</td>
</tr>
<tr>
<td>Construction Cost, Provisional Sums</td>
<td>Cost (if above current estimates)</td>
</tr>
<tr>
<td>Construction Unknowns</td>
<td>Schedule and Cost (diminishing)</td>
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RIGHT OF WAY

**Mid-Coast Project Acquisitions**

<table>
<thead>
<tr>
<th>Description</th>
<th>Quantity</th>
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<tbody>
<tr>
<td>Total Property Owners</td>
<td>43</td>
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<tr>
<td>Available for Construction (Possession)</td>
<td>38</td>
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<tr>
<td>Needed Possessions for Construction</td>
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<tr>
<td>Acquisitions Settled</td>
<td>30</td>
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<tr>
<td>Under/Pending Negotiation (11 value only)</td>
<td>13</td>
</tr>
<tr>
<td>Potential Hearings of Necessity</td>
<td>2</td>
</tr>
</tbody>
</table>

**Risks**
- Settlements, trial, legal, goodwill exposure exceeds budget
- 1 - 5 properties go to trial

LIGHT RAIL VEHICLES

LRV Production in Sacramento – First Car Arrives April 2019
CORRIDOR ACCOMPLISHMENTS

- San Diego River Bridge – all bridge Girders
- Elvira to Morena Double Track – Rose Creek bridges & track work
- Rose Creek Bikeway – bridge abutments, retaining walls, channel modifications
- Gilman Bridge – opened to traffic, up lighting
ELVIRA to MORENA DOUBLE TRACK

Bikeway Underpass & Bridge

ROSE CREEK BIKEWAY

Bikeway Underpass & Bridge
GILMAN DRIVE BRIDGE

Open to Traffic, Ongoing Grading & Up Lighting

PUBLIC OUTREACH

• Outreach Activities – La Jolla Village Drive and Nobel Drive closures
• Tours - Board Members and community leaders
• Halfway There! Construction Event
• Upcoming Green Line single tracking
PEPPER CANYON MOBILITY HUB DESIGNATHON

CASH PRIZES $5000+! FREE FOOD ALL WEEKEND!
MENTORS FROM INDUSTRY, DESIGN, & GOVERNMENT!!
CO-CURRICULAR CREDITS! JOYRIDES + MORE!

REGISTER BY MARCH 26th
https://designlab.ucsd.edu/events/peppercanyondesignathon/

APRIL 6+7 2019
9AM-9PM
WARREN MALL

(PUBLIC OUTREACH)

• Respond to public inquiries and requests for additional information

• ShiftSanDiego.com
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Questions?