

APPENDIX G

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Governor

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David S. Kim
Secretary

LOSSAN San Diego Regional Rail Corridor Working Group
Tuesday January 21, 2020 from 1:30PM – 4:30PM
San Diego Association of Governments
401 B St. #800, San Diego, CA 92101

AGENDA

<u>Time</u>	<u>Agenda Item</u>	<u>Topic</u>	<u>Presenter</u>
1:30 PM	Item 1	Welcome and Introductions (10 Mins.)	Secretary David Kim, CalSTA
1:40 PM	Item 2	Recap / Overview of Del Mar Bluffs Stabilization efforts (25 Mins.)	Hasan Ikhmeta, SANDAG Matt Tucker, NCTD Bruce Smith, SANDAG
2:05 PM	Item 3	State Funding History and Options for Del Mar Bluffs Stabilization Phases 5 and 6 (30 Mins)	Angel Pyle, Caltrans
2:35 PM	Item 4	Past Experiences and Lessons Learned with State Grant Programs (20 Mins)	Robyn Wapner, SANDAG Matt Tucker, NCTD
2:55 PM		Break (10 Mins)	
3:05 PM	Item 5	Federal Funding Sources and Strategy (20 Mins)	Victoria Stackwick, SANDAG
3:25 PM	Item 6	Briefing on Long-Term San Diego Regional Rail Alternative Alignment Study (20 Mins)	Linda Culp, SANDAG
3:45 PM	Item 7	Gateway Development Corporation Lessons Learned and Corporate Governance of Large Infrastructure Projects (30 Mins)	John Porcari, WSP USA
4:15 PM	Item 8	Next Steps (15 Mins)	Secretary David Kim, CalSTA
4:30 PM	Item 9	Adjourn	All Participants

LOSSAN San Diego Regional Rail Corridor Working Group

January 21, 2020

Meeting Notes

- Opening remarks from Secretary Kim
- Introductions
- Hasan Ikhata (SANDAG): Noted that he wants to turn down expectations, but also be ambitious and focus on both short-term and long-term solutions with cooperation between national, state, and local governments.
- Matt Tucker (NCTD):
 - Provided background info on LOSSAN Rail Corridor, specifically the SD subdivision.
 - NCTD has operational control over the entire corridor and is the accountable entity.
 - There is an expected jump in ridership between 2020-2030.
 - Del Mar Bluffs span 1.6 miles. There have been 8 surface slides reported. The bluffs are expected to naturally retreat 6 inches/year. There is currently no alternate route.
 - Safety is NCTD's top priority. They will halt services if necessary.
 - NCTD's focus is securing funding for Phases 5 & 6, and to have long-term projects fully vetted and funding identified.
- Bruce Smith (SANDAG):
 - Project history: 5 projects completed since 2000 (2000, 2001, 2003, '07-'08, '11-'12).
 - Total spent on these projects was about \$15 million. They partially stabilized about 30% of the bluffs.
 - Phase 4: Consists mostly of urgent repairs. Status- Construction award: January 2020.
 - Phase 5: Thanked Senator Atkins for securing the design funding. (Design begins January 2020). Construction estimate is \$24 million and is still unfunded.
 - Phase 6: Rough estimate- \$7 million for design, \$60-\$70 million for construction.
- Question from Secretary Kim: What was the time expectation for the early 2000s projects?
 - Answer (Bruce Smith): The early projects were designed to last 20 years because the Regional Plan included a tunnel as a long-term

solution. But, there wasn't money at the time to build the tunnel, and there still isn't.

- Question from Del Mar Councilmember Dwight Worden: What is the vehicle for the alternate analysis?
 - Answer (Bruce Smith): There will be a full environmental review document, but the type depends on the funding source.
- Question from Councilmember Dwight Worden: What can we anticipate in terms of environmental review between phases 5 and 6?
 - Answer (Bruce Smith): We will follow NEPA because it is a federal railway, but it gets more complicated when we go down to the beaches.
- Note from Jim Linthicum (SANDAG): Even though the early 2000s projects were designed to last "20 years," they are not functionally obsolete. They are still working, but they need more piles, etc.
- Note from Matt Tucker: The increased types and occurrences of bluff failures is what caught our attention. We always thought we were building a tunnel, but now we can no longer trust that.
- Note from Hasan Ikhata: Phases 5 & 6 are not permanent. They are temporary solutions for safety reasons.
- Note from Secretary Kim: The Transportation Permitting Task Force Report (AB1282) is scheduled to come out soon, it will show the importance of early engagement with environmental agencies.
- Presentation from Angel Pyle (Caltrans):
 - Potential Funding Sources:
 - Competitive:
 - Local Partnership Program (LPP)
 - Trade Corridor Enhancement Program (TCEP)
 - Solutions for Congested Corridors Program (SCCP)
 - Corridor plan is necessary to compete
 - Transit and Intercity Rail Capital Program (TIRCP)
 - State Transportation Improvement Program (STIP: ITIP/RTIP)
 - Formulaic:
 - LPP (has components of both competitive and formulaic)
 - State of Good Repair (SGR) *Different from federal program
 - Low Carbon Transit Operations Program (LCTOP)
 - Transportation Development Act (TDA): State Transit Assistance (STA) & Local Transportation Fund (LTF)

- Other:
 - State Emergency Funding (State Highway Account)
 - Emergency Declaration from Governor needed
 - State Rail Assistance (SRA): has components of both competitive and formulaic
 - Next Steps:
 - Working Group needs to align project phases with timing of these programs
 - Coordinate to create strong and robust applications
- Question from Frank Ramirez (GoBiz): Does the LPP include an opportunity for private partnerships as well?
 - Answer from Angel Pyle: At this point, no.
- Note from Secretary Kim: We need to identify the most promising funding opportunities with a high chance of receiving money.
- Note from Giles Giovinazzi (CalSTA): We also need to identify other funding opportunities outside of CalSTA. For example, the Governor's Budget included includes the Climate Resiliency Bond, there may be CNRA funding, etc.
- Note from Secretary Kim: Many of the programs Angel presented have CTC oversight, the only one CalSTA is in the driver's seat for is TIRCP.
- Presentation from Matt Tucker:
 - NCTD's annual operational budget is \$170 million.
 - Pie chart showing that 48% of their budget is for operational expenses (Federal \$\$ cannot be used for this), 27% is capital improvements, and 25% is preventative maintenance.
 - NCTD is working on replacing their fleet (COASTER began with a used fleet, now at the end of their life)
 - Funding Applications:
 - NCTD & SANDAG have submitted applications 7 times since 2016
 - TIGER ('16), TIGER ('17), BUILD ('18), BUILD ('19), FRA SGR (March '19), FRA SGR (Dec '19), FRA CRISI Program ('19), TIRCP (2020)
 - There are 3 pending grants out right now. (TIRCP is the only state program.)
- Presentation from Robyn Wapner (SANDAG):
 - We need to think competitively with our applications, in terms of the established guidelines. We need to find a way to tell the story of "what if" all these benefits are lost.

- We can potentially modify our ITIP request for this round? (Work with Caltrans?)
 - Note: Re: emergency funding- Emergency must be declared within 10 days. It must be *reactive*, not *proactive*.
- Continued by Matt Tucker:
 - Note: 65% of NCTD ridership is on the bus system. We are concerned with taking away funding from the bus system to fund rail.
- Question from CTC Commissioner Christine Kehoe: In hindsight, programming annually for maintenance and repair would have been good, but since the tunnel did not happen, what are we doing now?
 - Answer from Secretary Kim: The purpose of this group is to figure that out. In terms of a solution: what, when, and how to pay for it?
- Question from Councilmember Dwight Worden: What about potential federal funding opportunities?
 - Answer from Matt Tucker: Yes, there are some opportunities. NCTD knows we must bring money to the table as well, but this may create a crisis in other areas of NCTD.
- Question from Councilmember Dwight Worden: military funding?
 - Answer from Matt: No, we have tried in the past.
 - Answer from Robyn: We will go over that later.
- Question from Mayor of Encinitas, Catherine Blakespear: What about the actual goods companies (She noted that she is surprised none of them were at the table)? Noted that airlines often finance gate and terminal improvements at airports.
 - Answer from Matt Tucker: When the railroad was purchased from BNSF around 1993-'94, NCTD assumed responsibility. There is no way for NCTD to levy a tax on those moving goods because that's interstate commerce.
- Note from Secretary Kim: We would like the Department of Defense and or the Navy at future meetings to learn about opportunities from them.
- Question from Giles Giovinazzi: Which SB1 funding opportunity looks best for you?
 - Answer from Robyn Wapner: TCEP, maybe LPP's competitive portion. We need to talk with CTC staff about how to quantify the project. (Maybe SCCP- depends on Corridor Plan)
- Presentation from Laurie Gartrell (SANDAG): Existing federal opportunities: CRISI, BUILD, INFRA, SOGR, RRIF
- Robyn Wapner:
 - We could potentially make a talking point for the FAST Act reauthorization.

- We could look into the Army Corps of Engineers- Shoreline Preservation Efforts
 - Giles Giovinazzi: Potential action item is getting a briefing from them.
 - Opportunities for discussion of Del Mar Bluffs during upcoming DC trips
 - Secretary Kim: Will be in DC in February and will raise the issue there.
- Question from Secretary Kim: John Porcari, I am interested in your thoughts/any advice?
 - A common characteristic of a lot of the federal opportunities mentioned is that they are all small grant awards. But, the RRIF loan has a \$33 billion capacity. Small grants could help with short-term repairs, but the long-term alternative solution will be much bigger.
- Question from Councilmember Dwight Worden: What about the CA Infrastructure Financing Bank?
 - Answer from Robyn Wapner: That may be a good idea for a future briefing.
- Question from Secretary Kim: Thoughts from Congressional representatives?
 - Kyle Krahel-Frolander (Congressman Levin's Office): We could engage other House members.
- Note from Mayor of Solana Beach, Jewel Edson: Regarding the Army Corps Shoreline Preservation efforts- Encinitas and Solana Beach have an approved project (it has been approved for 11 years now), but there is no money for it.
 - Note from John Porcari: The WRDA projects list is oversubscribed. The Corp of Engineers is interested in P3s but can't do it because of OMB. But, there is a discussion of a pilot program for WRDA eligible projects which would create potential private partners for projects.
- Note from Matt Tucker: LOSSAN/BNSF/Port/NCTD initiated a broad study. The study captures the growth of the Port, etc. The LOSSAN study will provide a super-regional perspective which will help on grant applications.

-- 5 Minute Break --

- Presentation from Linda Culp (SANDAG): Long-Term Realignment
 - Looked at 5 alternatives- all double-tracked, each about 5 miles in length, underground portions between 10k-13k feet

- Need a new updated study: further analysis, future extensions, updated cost, etc.
- 5 Alternatives:
 - Camino Del Mar Tunnel: shortest, but slowest
 - Crest Canyon higher speed tunnel: shortest travel-time, deep so ventilation shafts needed, significant properties needed and roadway improvements
 - Crest Canyon Tunnel
 - I-5 Tunnel: longest (longer than current), but majority is under I-5 so minimize potentials to existing homes; slower, significant disruption to traffic
 - I-5 East Tunnel: longer than current alignment, slower
- All are pricy: \$2-3.5 billion range
- Preliminary work for the study scheduled to begin in the next few months
- Deliberation between Councilmember Dwight Worden, Mayor Edson, Linda Culp, and Bruce Smith on the cost of the alignment. Councilman Worden thought the alignment had a different cost in the 2017 study, Mayor Edson suggested he may be thinking of the cost of the trench. Bruce Smith clarified that the trench would cost between \$300-400 million.
- Question from Councilmember Dwight Worden: Why are we not relocating more inland where jobs and housing are?
 - Answer from Linda Culp: The regional plan will address future plans for inland development.
- Question from Councilmember Dwight Worden: If the 5 Big Moves succeed- is this still important?
 - Answer from Bruce Smith: Yes, LOSSAN will be there as long as there is freight.
- Note from CTC Commissioner Kehoe: Getting there faster is a big deal, it is already too slow to go northbound to downtown LA.
- Note from Matt Tucker: NCTD would have to approve this. We have agreements with railroad operators, anything adding time will not get approved because it would degrade the ability to operate.
- Question from Mayor Blakespear: What are the north and south boundaries for the study?
 - Answer from Linda Culp: 61 miles, Orange County-SD County Line to San Diego. This is for the entire study, but we can phase the study to do smaller sections in greater detail (like Del Mar Bluffs).

- Note from Mayor Edson: Tokyo and New York have rail and public transit that work because there is more than one line. There may be more than one solution here, instead of just improving one line.
- Question from Mayor of Del Mar, Ellie Haviland: We are assuming both passenger and freight on LOSSAN, but if the 5 Big Moves are implemented, will passenger move off this system?
 - Answer from Linda Culp: It is a possibility.
- Question from Giles Giovinazzi: What is the study leading to?
 - Answer from Linda Culp: The goal is to have less than 5 alternatives, so they can carry fewer on to future phases. They will have a good handle on the environmental approach, but no clear environmental project.
 - Question from Giles Giovinazzi: At the end of Regional Rail Alignment Study, would you be in a position to initiate the environmental review process for a long-term solution?
 - Answer from Linda Culp: Yes.
- Note from Matt Tucker: We need to develop a scope that is more in line with the State Rail Plan.
- Primer from Chad Edison (CalSTA) on 2018 State Rail Plan:
 - Large focus on frequency and regular connectivity; providing hourly-30 minute all day service
 - Less emphasis on speed, more on express and local service all-day long in both directions
- Presentation from John Porcari: Gateway Development Corporation
 - Focus: replace existing tunnel under Hudson River (110 years old) and other improvement projects
 - Existing tunnel flooded during Hurricane Sandy
 - National significance (similar to LOSSAN)
 - NY Penn Station is the busiest in North America
 - Governance: Used to be local/regional/state/federal partnership
 - Not federal anymore, but working on getting them back
 - Governance Considerations:
 - Federal grant & loan eligibility; ownership; project delivery capacity (primary consideration); maintenance and operations; liability; political resiliency; timely & efficient program delivery; enabled powers and abilities of member organizations
 - Success Factors:
 - Congressional support; federal support; lessons learned from ARC; federal technical assistance; working groups; integrated program team, etc.

- Other peers to consider: Florida: Brightline (Virgin Trains USA); Virginia (Long Bridge/Atlantic Gateway Program); Illinois (CREATE); Michigan (Dearborn to Kalamazoo Corridor Acquisition)
- Question from Giles Giovinazzi: What type of analysis/assessment was done (if any) to determine project delivery capacity?
 - Answer from John Porcari: NJ Transit and Amtrak did not have capacity, this left the Port Authority of NY & NJ who believed they could do the job, but executive directors were honest about their capacity. They also had discussions with industry.
- Note from Jim Linthicum: SANDAG has the ability to build a tunnel, without a doubt.
- Note from Councilmember Tony Kranz: We are biting off a big chunk of transit infrastructure. As the Chair of NCTD, we need to focus on the short-term (not just the long-term). There is potential for significant crisis.
- Question from Maurice Lyles (Governor's Office): The stabilization efforts will last another 20-25 years?
 - Answer from Matt Tucker: Yes.
- Note from John Porcari: As a nation, we don't *fund* big projects, we *finance* them.
- Note from Secretary Kim: Federal loans require revenue streams to pay back, you must demonstrate creditworthiness.
- Closing Remarks/Action Items from Secretary Kim:
 - Prioritize moving forward on Federal and State funding for Phase 5 & 6.
 - CalSTA will reach out to sister agencies at the state level to find out more about climate resiliency funding.
 - Plan for briefings from the Navy & Army Corps of Engineers.
 - Secretary Kim will raise awareness in DC, others please do the same.



LOSSAN

Coastal Rail Corridor

San Diego Segment

Los Angeles • San Diego • San Luis Obispo



Building Today. Boarding Tomorrow.

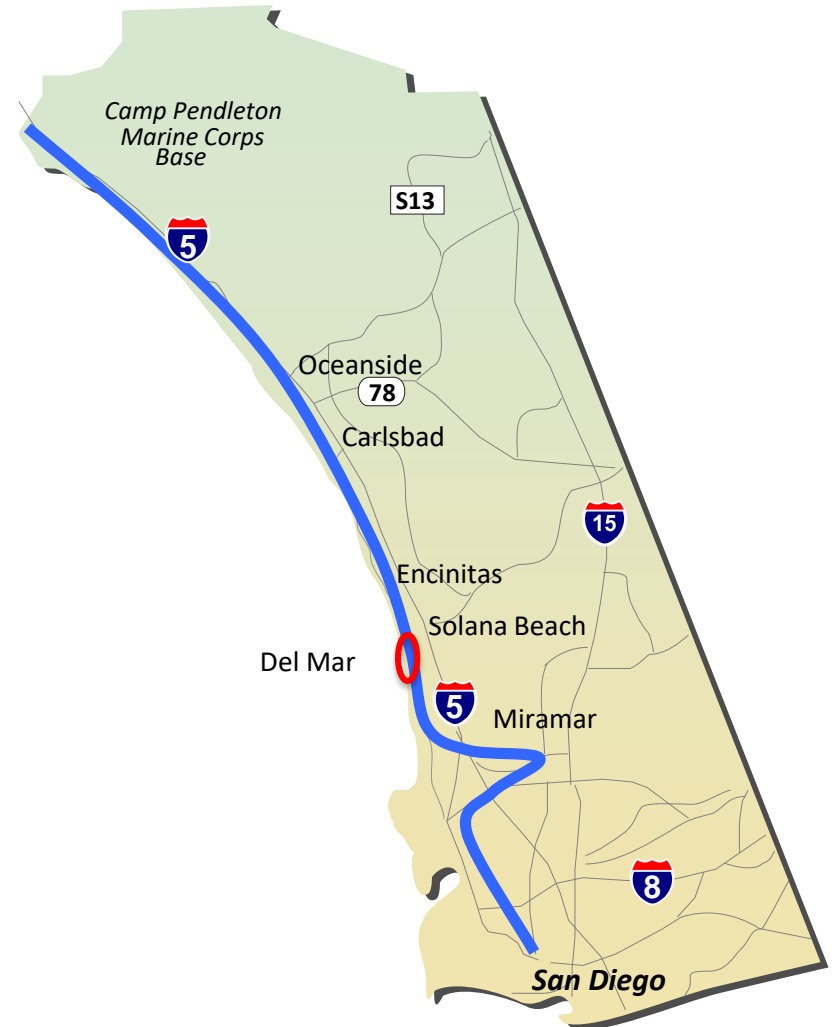
Del Mar Bluffs Stabilization Update

January 2020

KeepSanDiegoMoving.com

LOSSAN Rail Corridor San Diego Subdivision

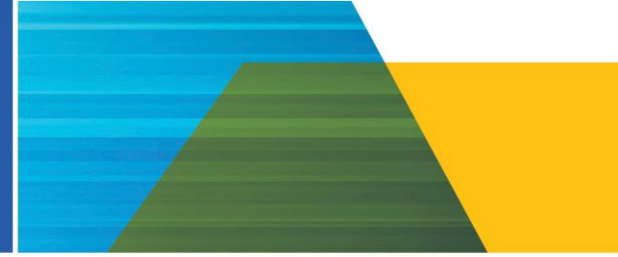
- 60 directional miles of track from Orange County Line to Santa Fe Depot
- NCTD owns ROW in North County Cities. NCTD has easement from Department of Navy for Right of Way (ROW) on Camp Pendleton
- NCTD is designated as the Railroad of Record and is responsible for dispatch, operations, maintenance (tracks, signals, ROW, equipment), and safety of the railroad.
- MTS owns ROW south of Del Mar
- SANDAG plans, funds, and implements capacity enhancing capital improvements and bridge replacement projects



LOSSAN Rail Corridor San Diego Subdivision



- San Diego Subdivision supports Amtrak (intercity), BNSF (freight), PacSun (freight), Metrolink (commuter), and COASTER (commuter) operations
- Service Frequencies
 - (2020): 50 passenger trains and 6 freight trains per average weekday
 - (2030): 78 passenger trains and 22 freight trains per average weekday
- Service Impact
 - 1.4 million trips on COASTER in CY 2018
 - 2.7 million trips on Amtrak in CY 2018 between San Diego and San Luis Obispo
 - Goods movement value of approximately \$1 billion



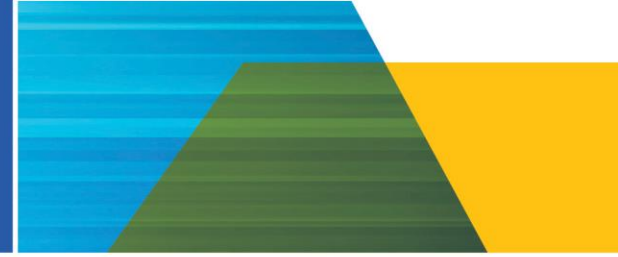
- Span approximately 1.6 miles
- Since the summer of 2018, 8 surface slides on the face of the bluffs have been reported
- On average, the bluffs will naturally retreat six inches per year
- There is no alternative route if the bluffs fail

Safety Must Be The Top Priority

- Safety is one of NCTD's top priorities. NCTD will halt services on the rail line if we receive a report for our experts that it is no longer safe to operate
 - Discontinuing service will also have safety impacts as more trucks and cars will be pushed onto already congested roads
 - Negative economic and health impacts related to discontinuing operations
- Primary focus must be on securing funding for Projects 5 and 6 activities
- Long term projects alternatives must be fully vetted and funding for operating and maintenance costs must be identified

Del Mar Bluffs (DMB) Stabilization

Short and medium term projects



1. Completed Projects

2. Current projects

- 2019 Emergency Project
- Del Mar Bluffs 4 – Construction contract award in progress

3. Medium term projects

- Del Mar Bluffs 5 – Maintaining a stable trackbed as bluff retreats
- Del Mar Bluffs 6 – Slowing bluff retreat

Del Mar Bluffs Stabilization Completed Projects since 2000

2000 Del Mar Bluffs Geotech Study (NCTD)

2001 Emergency repair 8th St. (NCTD) – \$1 million

2003 Del Mar Bluffs 1 drainage (NCTD) – \$4.2 million

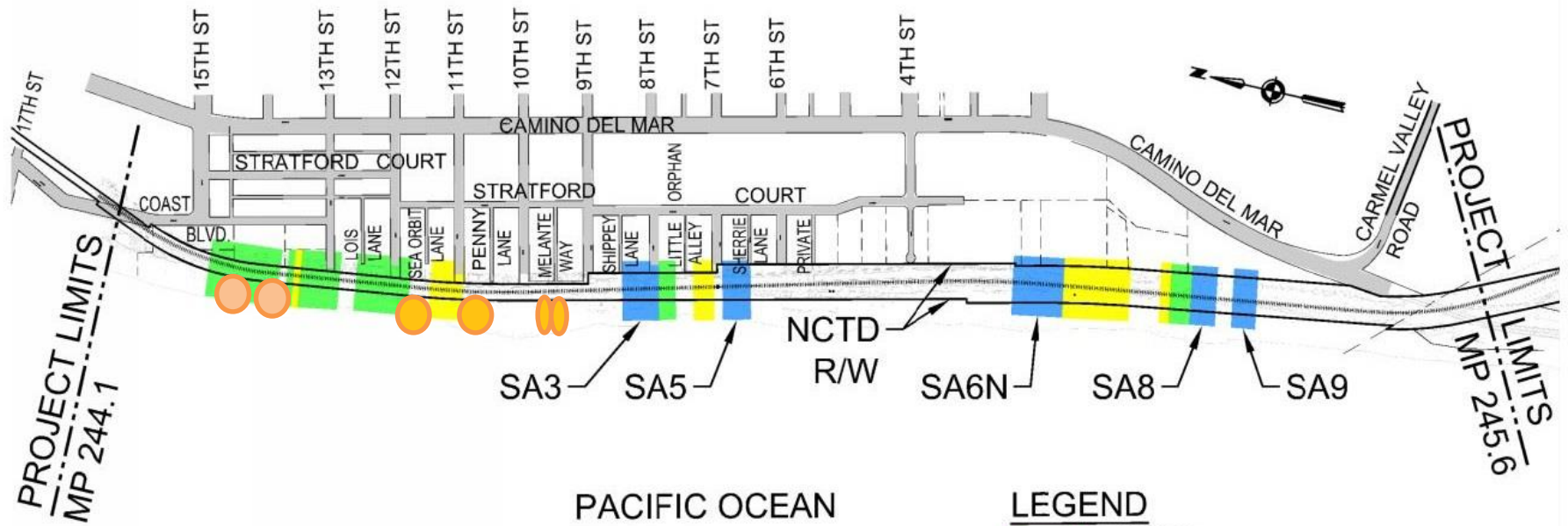
2007-08 DMB2 stabilization with piles (SANDAG) – \$5 million

2011-12 DMB3 stabilization with piles (SANDAG) – \$4.6 million

**Total spent around \$15m for drainage improvements and
bluff stabilization on 30% of bluffs**



Bluffs Stabilization Program Overview



Del Mar Bluffs 1 Drainage Improvements
 Del Mar Bluffs 2 and 3 – installed piles on
 30% of bluffs

- LEGEND**
- DMB 2
 - DMB 3
 - DMB FUTURE
 - RETREAT EVENTS 2018/19

SA STABILIZATION AREA

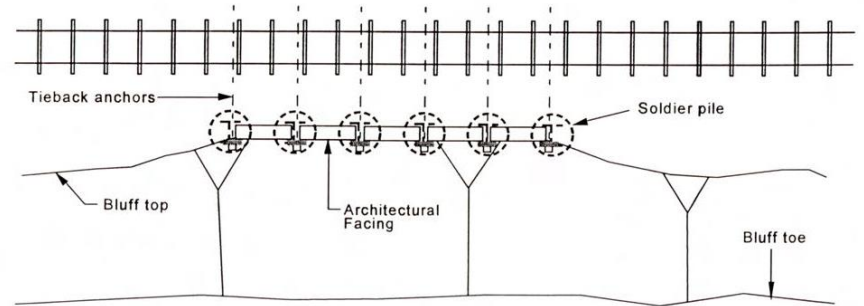
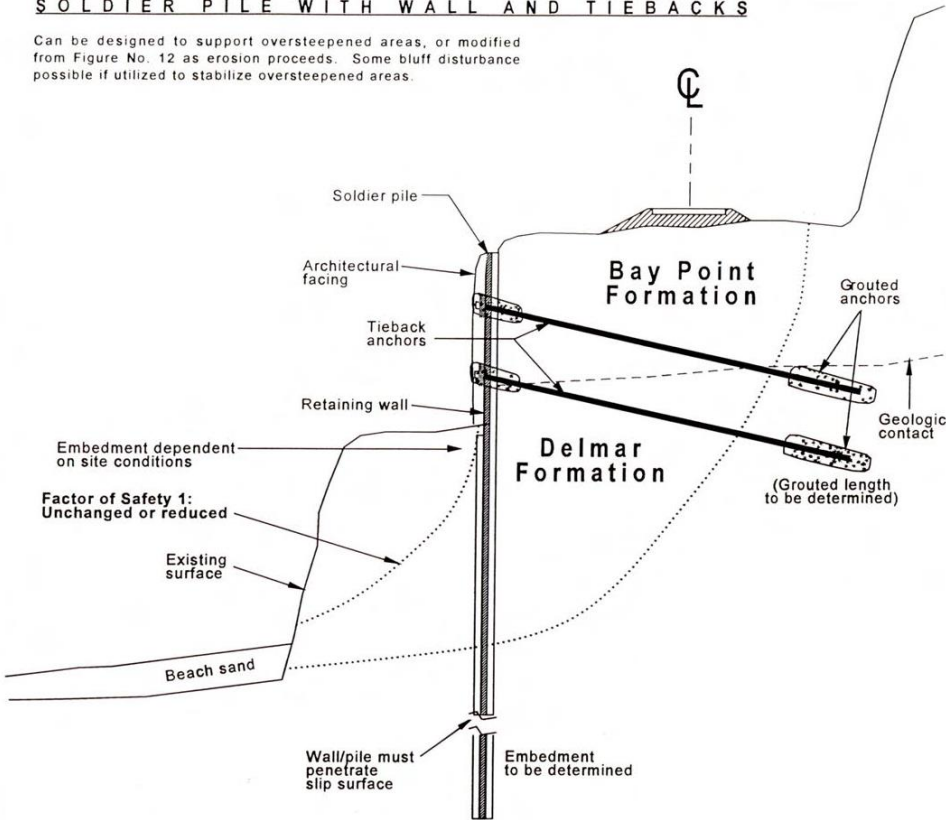
Pile & Lagging

2500 ft or 30% of track protected by piles



SOLDIER PILE WITH WALL AND TIEBACKS

Can be designed to support oversteepened areas, or modified from Figure No. 12 as erosion proceeds. Some bluff disturbance possible if utilized to stabilize oversteepened areas.



Del Mar Bluffs Project Area

Location of recent washouts



Coast Boulevard
MP 244.1



Torrey Pines Overhead Bridge
MP 245.7

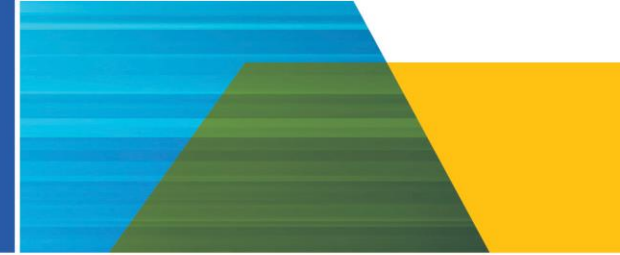
Bluffs are 1.6 miles or 8,448 feet long

Piles for 2500 feet or 30% of bluffs

Bluff toe walls for 790 ft or 9% of bluffs

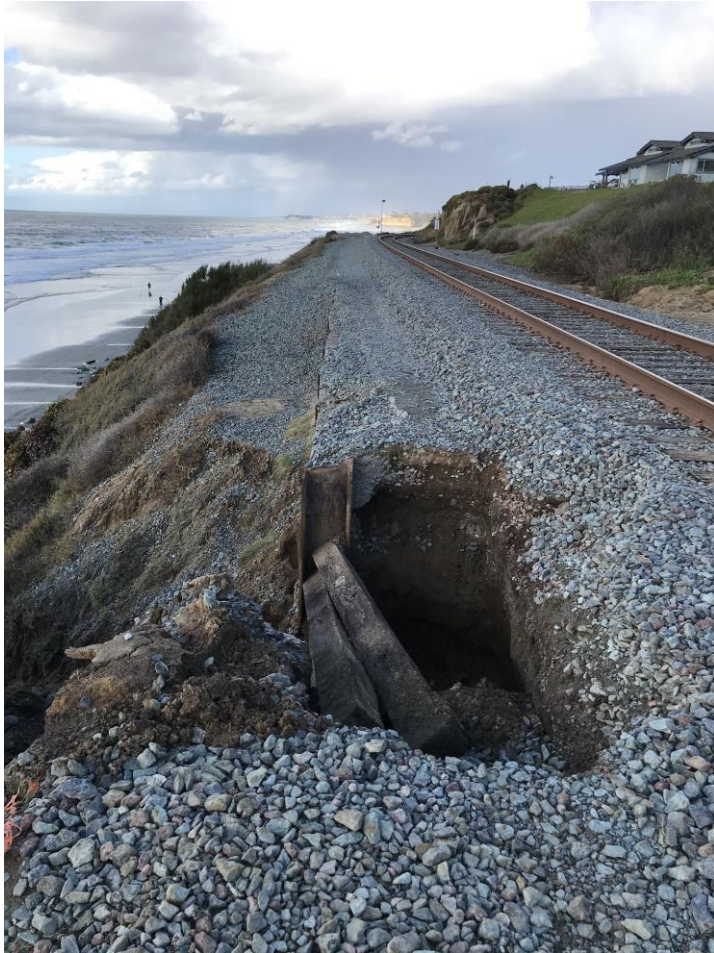
Storm Data – Del Mar

2 months of rain in 2 days



- Typical Nov. Rainfall
Total 1.4 inches
- Rainfall Nov. 28 – 29
Total 2.5 inches
- Overwhelmed Drainage
System
 - Volume
 - Debris
 - Soil

Storm Damage 14th Street, November 28-29, 2019



Storm Damage Repairs 14th Street, December 1, 2019

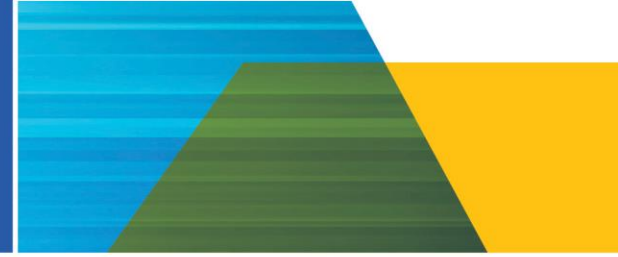


Storm Damage 15th Street, December 1, 2019



3 ft. diameter piles 40 to 60 ft. with 45 ft. tie-back anchors

Storm Damage Bluff Erosion 15th Street, December 1, 2019



Damage before repair was completed – Piles supporting track bed

Storm Damage Repairs 15th Street December 14 – 15, 2019



Storm Damage Repairs 15th Street December 14 – 15, 2019



Storm Damage Repaired West of 15th Street



Del Mar Bluffs Phase 4

Improvements

- Repair existing drainage structures
- Replace piles supporting sea walls

Project Budget

- \$5.78 million

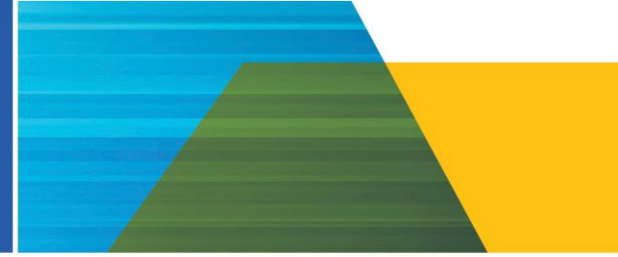
Status

- Construction award January 2020



Del Mar Bluffs Phase 5

Maintaining stable track support



Del Mar Bluffs Phase 5 - Design starts January 2020

- Reevaluate drainage capacity and needs
- Document bluff retreat in last 20 years
- Reevaluate stabilization needs – static and seismic against deep landslides
- Add piles and tie backs and lagging
- Install new drainage structures

Design Cost

- \$3.4 million

Construction Estimate

- \$24 million, unfunded

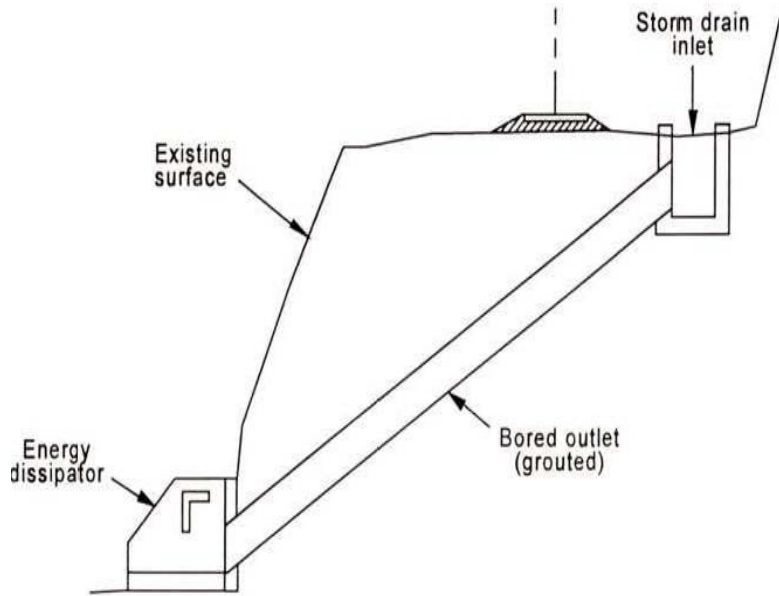


Del Mar Bluffs Phase 5

Example of Drainage Work

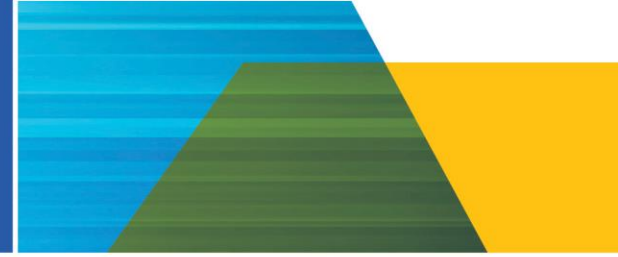


Replace the circa 1912 storm drain at 12th Street



Del Mar Bluffs Phase 6

Slowing bluff retreat



Del Mar Bluffs Phase 6 - Unfunded Scope

- Analyze alternatives for Bluff Protection against the waves and sea level rise
- Consider walls, bridges, trench or tunnels
- Need to provide bluff toe protection
- Need to stabilize bluff face
- Need to install lagging between piles
- Coastal access study with City
- Will require coastal access mitigation

Rough Estimates

- Design: \$7 million
- Construction: \$60 to \$70 million



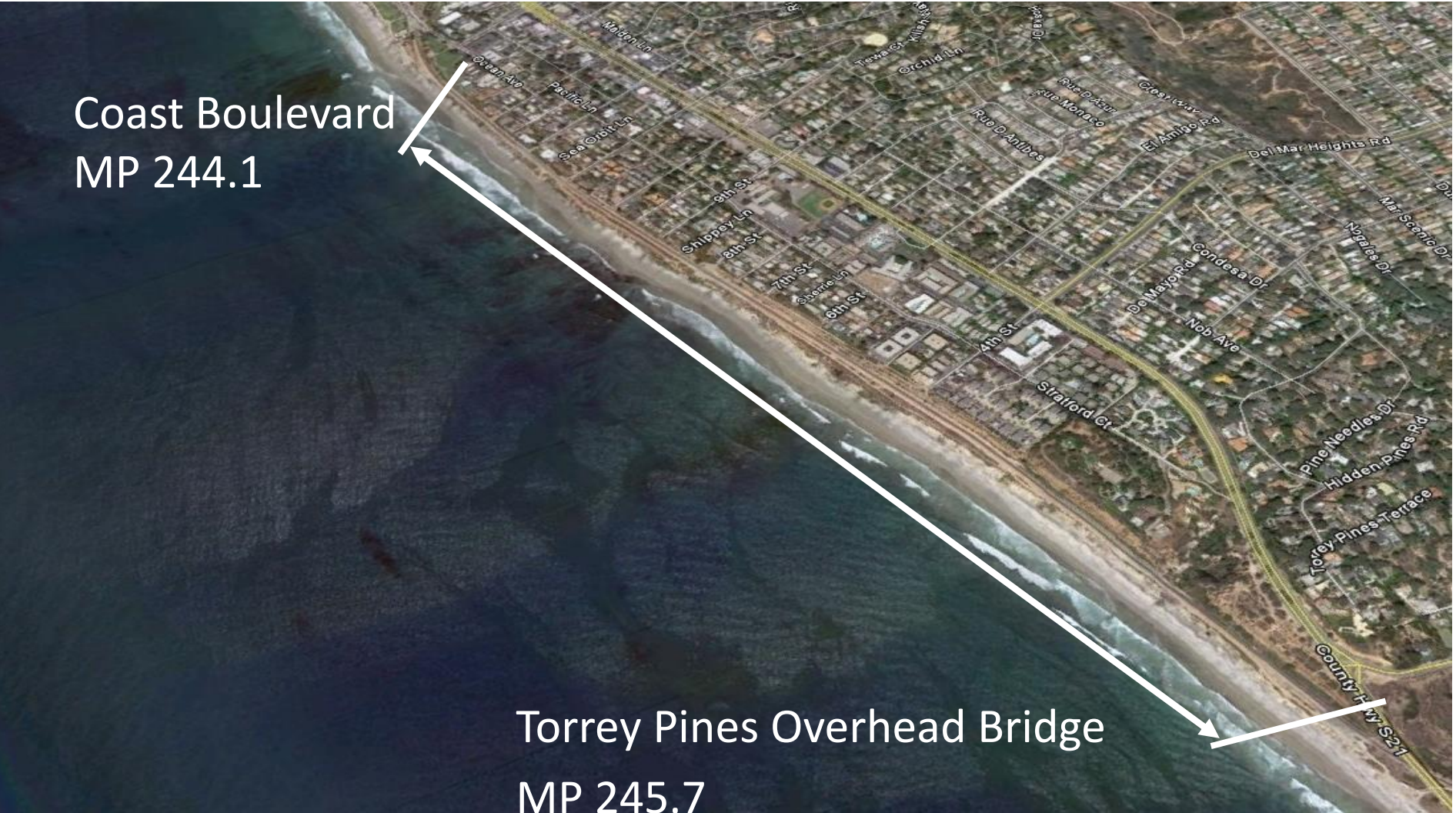
Del Mar Bluffs

Need to study Coastal Access



Coast Boulevard
MP 244.1

Torrey Pines Overhead Bridge
MP 245.7



Questions



Project Information:
KeepSanDiegoMoving.
com/ LOSSAN/ Del
Mar Bluffs

Bruce Smith, PE, Corridor Director SANDAG
Email bsm@sandag.org or Ph 619 699 1907

State Transportation Funding Options

Prepared by Angel Pyle, Division Chief (Acting), Caltrans
Division of Rail & Mass Transportation

PURPOSE

- Funding History
- Quick Reference Guide
 - Foundation
- Potential Funding Options
 - Formula
 - Competitive
 - Other

OVERVIEW

- Del Mar Bluffs phases 1-4
 - Funding History
- Del Mar Bluffs phases 5 & 6
 - Potential state funding opportunities
- Existing Local Area Funding
 - Potential Usage

DEL MAR BLUFFS PHASES 1-4

- Previous Funding

Phase	Funding
Phases 1-3 & Drainage Projects	\$26,894,000
Phase 4	\$5,781,000
Total	\$32,675,000

POTENTIAL FUND SOURCES

State provided

Competitive Programs

CTC
PROGRAMS

LOCAL PARTNERSHIP
PROGRAM
(LPP)

TRADE CORRIDOR
ENHANCEMENT PROGRAM
(TCEP)

SOLUTIONS FOR
CONGESTED CORRIDOR
PROGRAM (SCCP)

TRANSIT AND INTERCITY
RAIL CAPITAL PROGRAM
(TIRCP)

STATE TRANSPORTATION
IMPROVEMENT PROGRAM
(STIP)
ITIP/RTIP

Formulaic Programs

LOCAL PARTNERSHIP
PROGRAM
(LPP)

STATE OF GOOD REPAIR
(SGR)
SB-1 CREATED

LOW CARBON TRANSIT
OPERATIONS PROGRAM
(LCTOP)

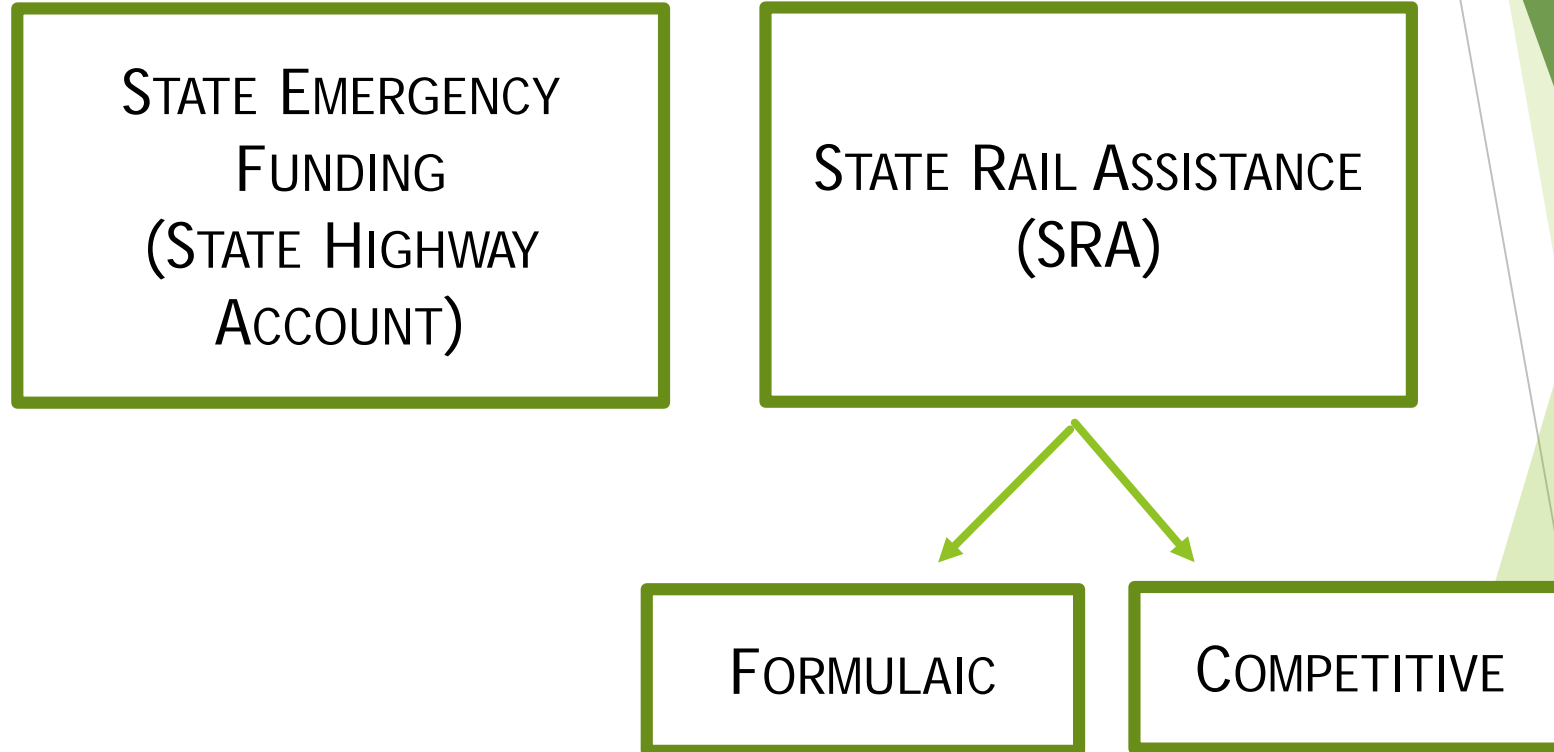
TRANSPORTATION
DEVELOPMENT ACT
(TDA)

STATE TRANSIT
ASSISTANCE (STA)

LOCAL TRANSPORTATION
FUND (LTF)



Other Funding Sources



LPP

LOCAL PARTNERSHIP PROGRAM

Program Funding

- ~\$200 million annually
- Competitive and Formulaic

Program Schedule (Formulaic & Competitive)

- 2 year cycle
- Call for projects, March 2020
- Apps due June 2020
- CTC awards Fall 2020

Details:

Program Benefits

(Formulaic & Competitive)

- Improve state highways and local roads
- Improvements to transit facilities
- Increase ridership
- Purchase rolling stock
- Improvements to bike and ped
- Air quality improvements
- Reduction in VMT

LPP

LOCAL PARTNERSHIP PROGRAM

Local Partnership Program (Formulaic)

	17/18 Allocation	18/19 Allocation	19/20 Allocation
SANDAG	\$9,470,000	\$9,470,000	\$9,727,000

TCEP

TRADE CORRIDOR ENHANCEMENT PROGRAM

Guidelines:

- Improves the safety, security, or resilience of the freight system
- Improves or preserves the freight system infrastructure

Program Funding

~\$300 million annually

Program Schedule

- 3 year cycle, adding FY 21-22, 22-23, 23-24
- Call for projects March 2020
- Apps due July 2020
- CTC awards Dec 2020
- Pre-Construction Phases Eligible

Details:

Program Benefits

- Highway improvements
- Freight rail system improvements
- Grade separations
- Port enhancements
- Intelligent Transportation Systems & other technology
- Environmental & community improvements
- Pre-Construction Phases

SCCP

SOLUTIONS FOR CONGESTED CORRIDORS PROGRAM

Program Funding

~\$250 million annually

Program Schedule

- Adding FY's 21/22, 22/23
- Call for projects Jan 2020
- Apps due June 2020
- CTC awards Dec 2020

Special Note

- Corridor Plan
- Construction Only

Details:

Program Benefits

- Addition of HOV lanes, bus only lanes
- Adding bus or rail capacity
- Improved safety and service
- Transit hubs
- Zero-emission rolling stock
- Advanced & innovative technology,
- Support infrastructure - ie. charging stations
- Bike and ped infrastructure

TIRCP

TRANSIT AND INTERCITY RAIL CAPITAL PROGRAM

Program Funding

- ~\$450M - Cycle 4

Program Schedule

- 2 year cycle
- Apps due Jan 16, 2020
- CalSTA awards April 2020
- Next Cycle 2022

Details:

Program Benefits

- Reduce emissions
- Expand and improve transit service
- Increase ridership
- Integrate rail services
- Improve transit safety

TIRCP

TRANSIT AND INTERCITY RAIL CAPITAL PROGRAM

Note: Table does not reflect full TIRCP award, only component available for improving corridor performance

TIRCP

LOSSAN	\$45.97 million (of which \$22.96 million TIRCP) for Service Increase and Capital Maintenance on NCTD	<ul style="list-style-type: none">• Match provided by mix of increased passenger revenues, formulaic State Rail Assistance and Intercity PTA resources• Funding available for 10 years starting in April 2019• NCTD may direct to high-priority capital maintenance activities, including Del Mar Bluffs stabilization
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SGR

STATE OF GOOD
REPAIR
(SB 1 FUNDED)

Program Schedule

- Project lists submitted to Caltrans each Sep 1
- Annual expenditure reports due to Caltrans Dec 31
- Formulaic distribution made quarterly by State Controller's Office

Details:

Program Benefits

- Transit capital projects
- Repair existing fleets & facilities
- New vehicle procurement
- New facilities

State of Good Repair (SB-1 State Program)

	17/18 Distribution	18/19 Distribution	19/20 Distribution (*Estimated)
SANDAG	\$1,750,022	\$1,604,310	\$1,619,780
SD MTS	\$4,569,030	\$4,462,014	\$4,589,380

LCTOP

LOW CARBON TRANSIT
OPERATIONS PROGRAM

FUNDED BY CARB AUCTION
PROCEEDS

Program Funding Variable Distributions

Program Schedule

- Late January 2020:
Open call for allocations
- March 2020:
Allocation request due
- June 2020:
SCO announces allocation award

Details:

Program Benefits

- Reduce greenhouse gas emissions
- Serve disadvantaged communities
- Operating and capital assistance
- New or expanded bus or rail service
- Transit facilities
- Equipment acquisition
- Fueling and maintenance costs

LCTOP		
	17/18 Distribution	18/19 Distribution
SD MTS	\$4,204,139	\$6,248,084
NCTD	\$1,610,043	\$2,246,545

TDA - STA

TRANSPORTATION
DEVELOPMENT ACT

STATE TRANSIT
ASSISTANCE

STA Program Schedule

- Formulaic distributions - quarterly
- Recipients are Transportation Planning Agencies, County Transportation Commissions, and the San Diego Metropolitan Transit System

Details:

Program Benefits

- Transportation planning, public transportation, and community transit purposes

State Transit Assistance

	17/18 Distribution	18/19 Distribution	19/20 Distribution (*Estimated)
SANDAG	\$8,302,936	\$10,176,363	\$10,482,769
SD MTS	\$21,680,915	\$28,302,475	\$29,701,185

TDA - LTF

TRANSPORTATION
DEVELOPMENT ACT

LOCAL TRANSPORTATION
FUND

LTF Program Schedule

- County Recipients w RTPA involvement
- Reporting Requirements (project)
- Fiscal and Compliance audits

Details:

Program Benefits

- Planning & program activities
- Bike & ped facilities
- Transit services
- Bus & Rail projects

Local Transportation Fund			
	17/18 Distribution	18/19 Distribution	19/20 Distribution
SANDAG	\$138,132,800	\$157,885,489	*Distributions in Progress

SRA

STATE RAIL ASSISTANCE

Funds available
over next 5 years

- LOSSAN - ~\$30M
- Coaster - ~\$20M

Competitive

- ~\$30M next five
years

Program Funding

- \$45-\$50 million annually statewide

Program Schedule

- Awards to commuter & intercity rail operators
- All commuter rail and 75% of intercity rail awarded formulaically, 25% Competitive
- Guidelines available --- reference for formula expectations
- Most funds through FY19-20 already programmed
- Up to five years of programming beginning with FY20-21 possible this year for each recipient agency
- Competitive intercity call for projects for emerging and expanding services expected later in 2020

Details:

Program Benefits

- Improve commuter and intercity rail service
- Reduce air pollution
- Ease traffic congestion

STATE EMERGENCY FUNDING

Funding

\$100M made available in state budget act

Overview

- Payable from State Highway Account
- Emergency Declaration from Governor needed

NEXT STEPS

Considerations Going Forward

- Summary
- Alignment of project phase, timing, program funding
- Applications
- Coordinated Approach & Partnerships
- Questions? Resources

THANK YOU!

Questions?

Angel Pyle

Caltrans, Division of Rail & Mass Transportation

Cell: 916-207-2554

Desk: 916-654-6542

Email: angel.pyle@dot.ca.gov

AREA FUNDING REFERENCE TABLES



State Transit Assistance			
	17/18 Distribution	18/19 Distribution	19/20 Distribution (*Estimated)
SANDAG	\$8,302,936	\$10,176,363	\$10,482,769
SD MTS	\$21,680,915	\$28,302,475	\$29,701,185

Local Transportation Fund			
	17/18 Distribution	18/19 Distribution	19/20 Distribution
SANDAG	\$138,132,800	\$157,885,489	*Distributions in Progress

Area Funding Summary Tables

LCTOP		
	17/18 Distribution	18/19 Distribution
SD MTS	\$4,204,139	\$6,248,084
NCTD	\$1,610,043	\$2,246,545

Local Partnership Program (Formulaic)			
	17/18 Distribution	18/19 Distribution	19/20 Distribution
SD County Regional Transportation Commission	\$8,470,000	\$0	\$3M Available for Programming
NCTD	\$1,000,000		

Area Funding Summary Tables

State of Good Repair (SB-1 State Program)

	17/18 Distribution	18/19 Distribution	19/20 Distribution (*Estimated)
SANDAG	\$1,750,022	\$1,604,310	\$1,619,780
SD MTS	\$4,569,030	\$4,462,014	\$4,589,380

TIRCP

LOSSAN	\$45.97 million (of which \$22.96 million TIRCP) for Service Increase and Capital Maintenance on NCTD	<ul style="list-style-type: none"> • Match provided by mix of increased passenger revenues, formulaic State Rail Assistance and Intercity PTA resources • Funding available for 10 years starting in April 2019 • NCTD may direct to high-priority capital maintenance activities, including Del Mar Bluffs stabilization
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Area Funding Summary Tables



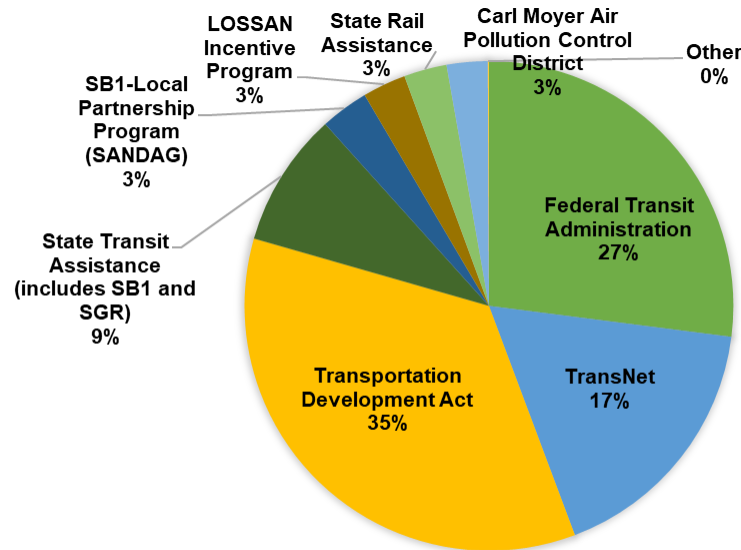
NORTH COUNTY
TRANSIT DISTRICT

FY2021-FY2025 Capital Improvement Program Overview

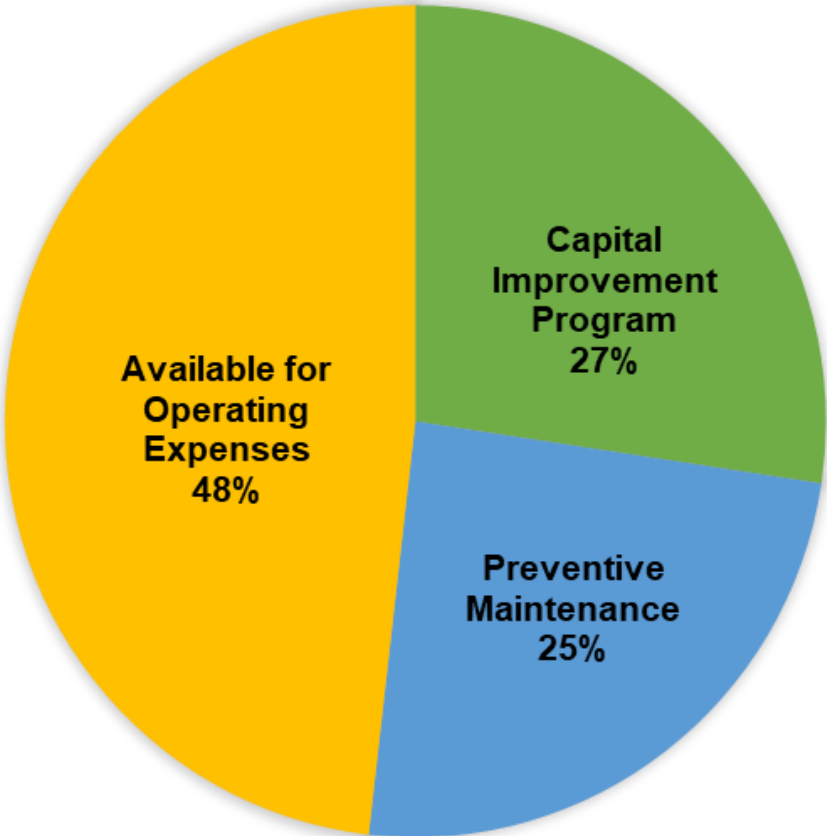
*Los Angeles-San Diego-San Luis Obispo (LOSSAN)
San Diego Regional Rail Corridor Working Group*

FY2021-FY2025 Grant Revenues

Sources of Grant Revenues	FY2021	FY2022	FY2023	FY2024	FY2025	Total
Federal Transit Administration	\$ 35,836,266	\$ 35,929,313	\$ 35,929,313	\$ 35,929,313	\$ 35,929,313	\$ 179,553,518
TransNet	15,866,000	17,095,000	36,231,000	29,080,000	16,459,400	114,731,400
Transportation Development Act	43,515,021	45,067,544	46,747,588	48,412,371	49,864,742	233,607,266
State Transit Assistance (includes SB1 and SGR)	11,803,099	11,803,098	11,803,098	11,803,098	11,803,098	59,015,491
SB1-Local Partnership Program (SANDAG)	1,500,000	2,200,000	8,600,000	8,900,000	-	21,200,000
LOSSAN Incentive Program	3,821,125	3,821,125	3,821,125	3,821,125	3,821,125	19,105,625
State Rail Assistance	3,680,000	3,720,000	3,760,000	3,810,000	3,860,000	18,830,000
Carl Moyer Air Pollution Control District	10,000,000	8,000,000	-	-	-	18,000,000
Other	100,000	100,000	100,000	100,000	100,000	500,000
	\$ 126,121,511	\$ 127,736,080	\$ 146,992,124	\$ 141,855,907	\$ 121,837,678	\$ 664,543,300

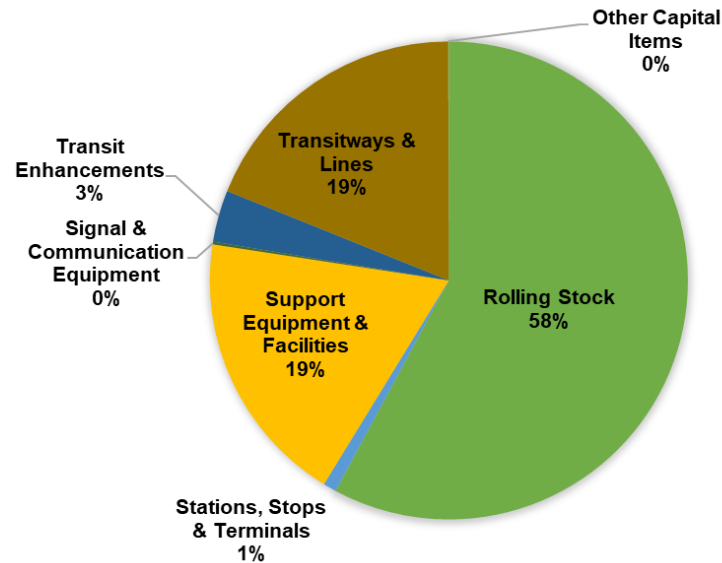


FY2021-FY2025 Use of Grant Funds



FY2021-FY2025 Unconstrained Baseline (Excludes SANDAG-Managed Projects)

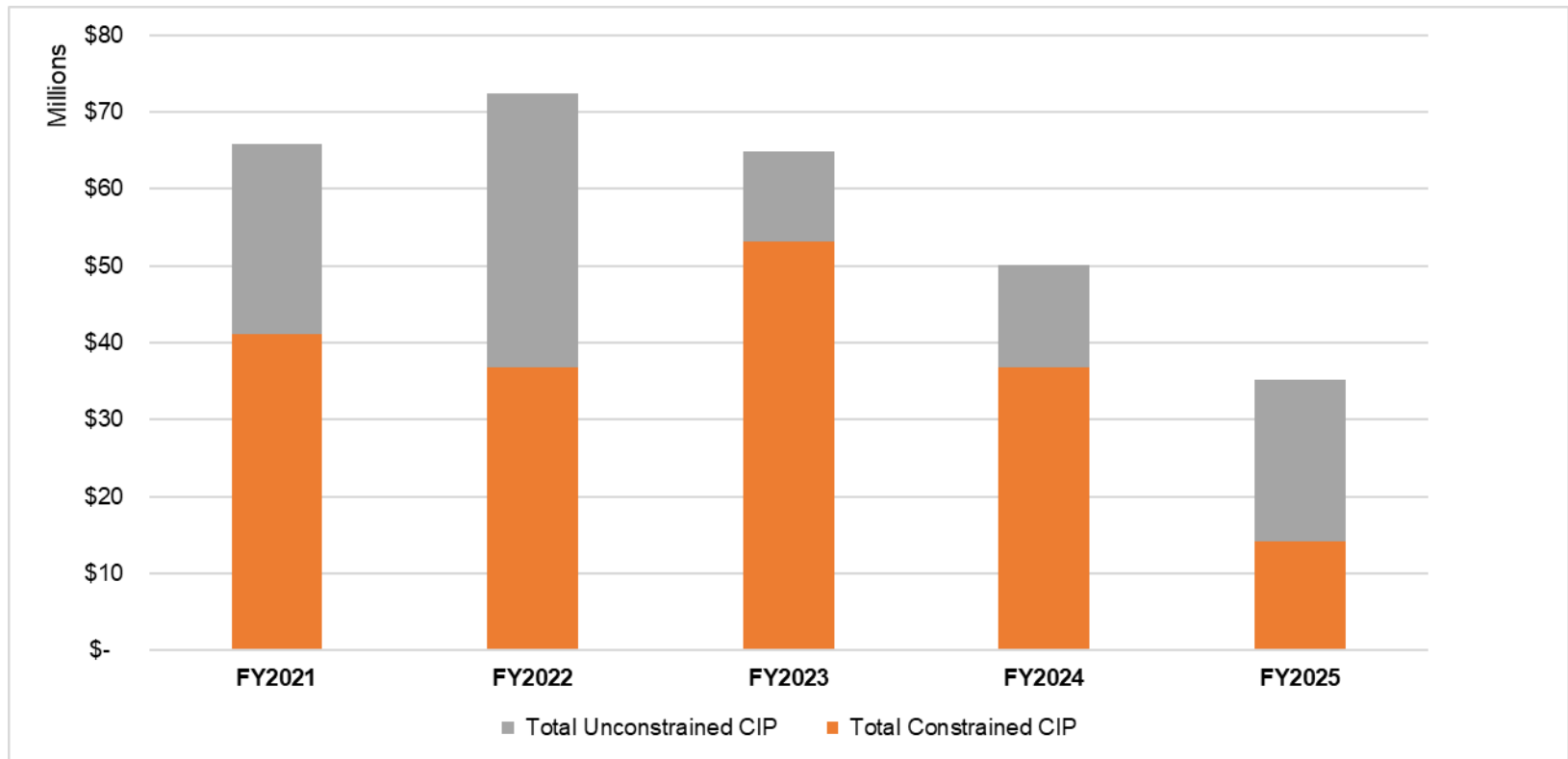
FTA ALI	FTA ALI Description	FY2021	FY2022	FY2023	FY2024	FY2025	Total
111-00	Bus Rolling Stock	\$ 15,909,377	\$ 12,507,202	\$ 14,056,273	\$ 7,218,005	\$ 7,376,362	\$ 57,067,219
113-00	Bus Stations, Stops & Terminals	225,000	380,000	225,000	225,000	225,000	1,280,000
114-00	Bus Support Equipment & Facilities	7,906,850	9,767,679	990,000	695,000	1,135,000	20,494,529
119-00	Bus Associated Transit Enhancements	2,110,000	2,000,000	2,000,000	2,000,000	2,000,000	10,110,000
121-00	Rail Rolling Stock	19,927,545	20,243,332	35,753,616	27,180,852	6,767,103	109,872,448
122-00	Rail Transitways & Lines	10,514,887	9,127,464	9,032,000	9,241,500	16,501,814	54,417,665
123-00	Rail Stations, Stops & Terminals	619,782	394,000	219,000	57,000	-	1,289,782
124-00	Rail Support Equipment & Facilities	8,041,851	18,041,500	2,589,000	3,519,500	1,177,000	33,368,851
126-00	Rail Signal & Communication Equipment	521,000	-	-	-	-	521,000
127-00	Rail Other Capital Items	100,000	-	-	-	-	100,000
Total Unconstrained CIP		\$ 65,876,292	\$ 72,461,177	\$ 64,864,889	\$ 50,136,857	\$ 35,182,279	\$ 288,521,494



FY2021-FY2025

Unconstrained and Constrained

	FY2021	FY2022	FY2023	FY2024	FY2025	5-Year Total
Total Constrained CIP	\$ 41,100,753	\$ 36,839,579	\$ 53,095,398	\$ 36,727,887	\$ 14,218,646	\$181,982,263
Total Unconstrained CIP	\$ 65,876,292	\$ 72,461,177	\$ 64,864,889	\$ 50,136,857	\$ 35,182,279	\$288,521,494



Proposed FY2021 Projects

Description	FY2021 Requested	% of Total
BREEZE CNG Fleet Replacement	\$ 13,151,581	
Bus Engine & Transmission Overhauls	500,000	
111-00 Bus Rolling Stock	13,651,581	33.21%
Zero Emission Bus Pilot Infrastructure	1,011,224	
Transit Scheduling Software	500,000	
Five Diesel Underground Storage Tanks Removal	495,000	
BREEZE Operations West Roof Repairs-Replacements	340,000	
114-00 Bus Support Equipment & Facilities	2,346,224	5.71%
Wayfinding Master Plan	801,234	
119-00 Bus Associated Transit Enhancements	801,234	1.95%
COASTER Locomotives	12,180,000	
COASTER Locomotives (Expansion)	3,000,000	
SPRINTER Carbody Brake System	397,246	
SPRINTER CIC Cabinet Upgrades	150,000	
121-00 Rail Rolling Stock	15,727,246	38.27%
Bridge 257.2 Replacement	3,821,125	
COASTER Bombardier Capital (Rail Replacement)	500,000	
Right-of-Way Fencing Construction	259,000	
122-00 Rail Transitways & Lines	4,580,125	11.14%
SPRINTER Station Cameras	125,000	
Wireless Network Implementation	98,000	
123-00 Rail Stations, Stops & Terminals	223,000	0.54%
Fare Revenue System	2,230,843	
Maintenance of Way New Building Design	863,000	
Charger Facility Modifications	250,000	
Network Upgrades	140,000	
General Administrative Office P2000 Replacement	120,000	
IT Equipment Upgrades	55,000	
IT Server Upgrades	49,000	
IT Software Upgrades	33,000	
IT Storage Upgrades	20,000	
Remote Desktop Licenses	10,500	
124-00 Rail Support Equipment & Facilities	3,771,343	9.18%
TOTAL FY2021	\$ 41,100,753	100.0%

SANDAG - Managed NCTD Projects – Unfunded Needs

Project	FY21-25 SANDAG CIP Funded Amount	FY21-25 SANDAG CIP Unfunded Amount	Total Project Cost (EAC)
North Green Beach Bridge Replacements	\$478,000	\$6,686,827	\$7,164,827
San Onofre to Pulgas Double Track Phase 2	\$30,040,000	\$187	\$30,040,187
Eastbrook to Shell Double Track	\$10,526,000	\$64,681,765	\$75,207,765
Oceanside Station Pass-Through Track	\$28,328,140	\$0	\$28,328,140
Carlsbad Village Double Track	\$3,580,000	\$83,730,868	\$87,310,868
Carlsbad Village Trench Analysis	\$369,000	\$0	\$369,000
Poinsettia Station Improvements	\$33,748,000	\$675,939	\$34,423,939
Batiquitos Lagoon Double Track	\$14,853,000	\$81,411,626	\$96,264,626
Encinitas Pedestrian Crossings (El Portal Undercrossing)	\$500,000	\$8,437,000	\$8,937,000
San Elijo Lagoon Double Track	\$78,615,000	\$0	\$78,615,000
Chesterfield Drive Crossing Improvements	\$7,243,000	\$0	\$7,243,000
San Dieguito Double Track and Platform	\$16,445,000	\$195,019,560	\$211,464,560
Del Mar Bluffs Stabilization 4	\$3,247,444	\$2,461,656	\$5,709,100
Del Mar Bluffs Stabilization 5	\$3,473,000	\$24,000,000	\$27,473,000
Del Mar Bluffs Stabilization 6	\$0	\$77,000,000	\$77,000,000
Los Penasquitos Lagoon Bridge Replacement	\$45,535,856	\$1,037,376	\$46,573,232
Sorrento Valley Double Track	\$32,989,000	\$0	\$32,989,000
Sorrento to Miramar Phase 1	\$45,411,000	\$0	\$45,411,000
Sorrento to Miramar Phase 2	\$29,440,000	\$174,784,178	\$204,224,178
Rose Canyon Bridge Replacements	\$77,000	\$14,080,305	\$14,157,305
Bridge 257.2 Replacement	\$4,774,000	\$8,530,434	\$13,304,434
Elvira to Morena Double Track	\$186,925,000	\$0	\$186,925,000
San Diego River Bridge Double Track	\$91,666,000	\$0	\$91,666,000
Two Additional Trainsets	\$58,800,000	\$0	\$58,800,000
TOTAL	\$727,063,440	\$742,537,721	\$1,469,601,161

Del Mar Bluffs Discretionary Grant Submittals

- **NCTD and SANDAG have jointly submitted applications requesting funding for the Del Mar Bluffs seven times since 2016**
 - TIGER Grant Program (2016)
 - TIGER Grant Program (2017)
 - BUILD Grant Program (2018)
 - BUILD Grant Program (2019)
 - FRA State of Good Repair Program (March 2019)
 - FRA State of Good Repair Program (December 2019)
 - FRA CRISI Program (2019)
 - TIRCP (2020)

State Discretionary Funding Sources

- **Solutions for Congested Corridors Program**
- **Trade Corridor Enhancement Program**
- **Local Partnership Program**
- **State Transportation Improvement Program (STIP)**
- **Interregional Transportation Improvement Program (ITIP)**
- **State Emergency Funds**
- **Governor's Proposed Budget**

Key Take-Aways

- **NCTD's capital needs are significant and requires difficult choices**
- **NCTD cannot assume that SANDAG will have the capacity to fund projects identified in *TransNet***
- **NCTD needs more revenue to support its capital program needs**



LOSSAN

Coastal Rail Corridor

San Diego Segment

Los Angeles • San Diego • San Luis Obispo



Building Today. Boarding Tomorrow.

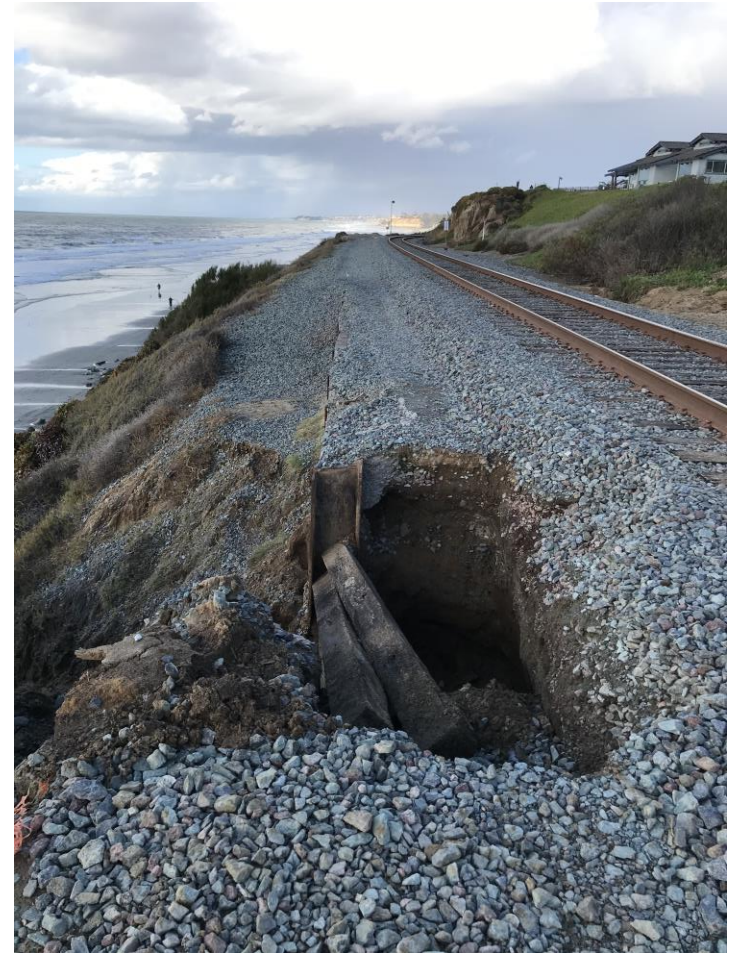
Federal Funding Sources and Strategy

January 21, 2020

KeepSanDiegoMoving.com

Federal Funding Opportunities Overview

Objectives: Seeking \$100 million to complete the bluff stabilization work (Phases 5 and 6). Simultaneously, to ensure the long-term viability of the corridor, SANDAG is seeking \$5 million to evaluate alternative strategies to move the tracks completely off the bluffs.



Existing Federal Funding Opportunities

- Consolidated Rail Infrastructure and Safety Improvements (CRISI) - **NOFO ETA in Mid-April**
- Better Utilizing Infrastructure to Leverage Development (BUILD) – **NOFO ETA Feb 18, 2020**
- Infrastructure for Rebuilding America (INFRA) – **NOFO released Jan 13, 2020. Apps due Feb 25, 2020**
- State of Good Repair (SOGR) – **NOFO ETA in March 2020?**
- Railroad Rehabilitation & Improvement Financing (RRIF)

- **Strategic Rail Corridor Network (STRACNET) –**
 - FY 2021 Appropriations Process (near-term), and/or
 - National Defense Authorization Act (NDAA)
- **FAST Act** Reauthorization
- **Army Corp of Engineers –** Shoreline Preservation Efforts
- **CY 2019 Federal Transit Administration** Emergency Funding





- Opportunities for Upcoming trips?
- Congressional Delegation (CODEL), Congressional Staffer (Staffdel), and Agency visits
- Appropriations Requests
- Authorization Requests



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Coastal Rail Corridor

San Diego Segment

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Federal Funding Sources and Strategy

January 21, 2020

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San Diego Segment

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Briefing on Long-Term San Diego Regional Rail Alternative Alignment Study

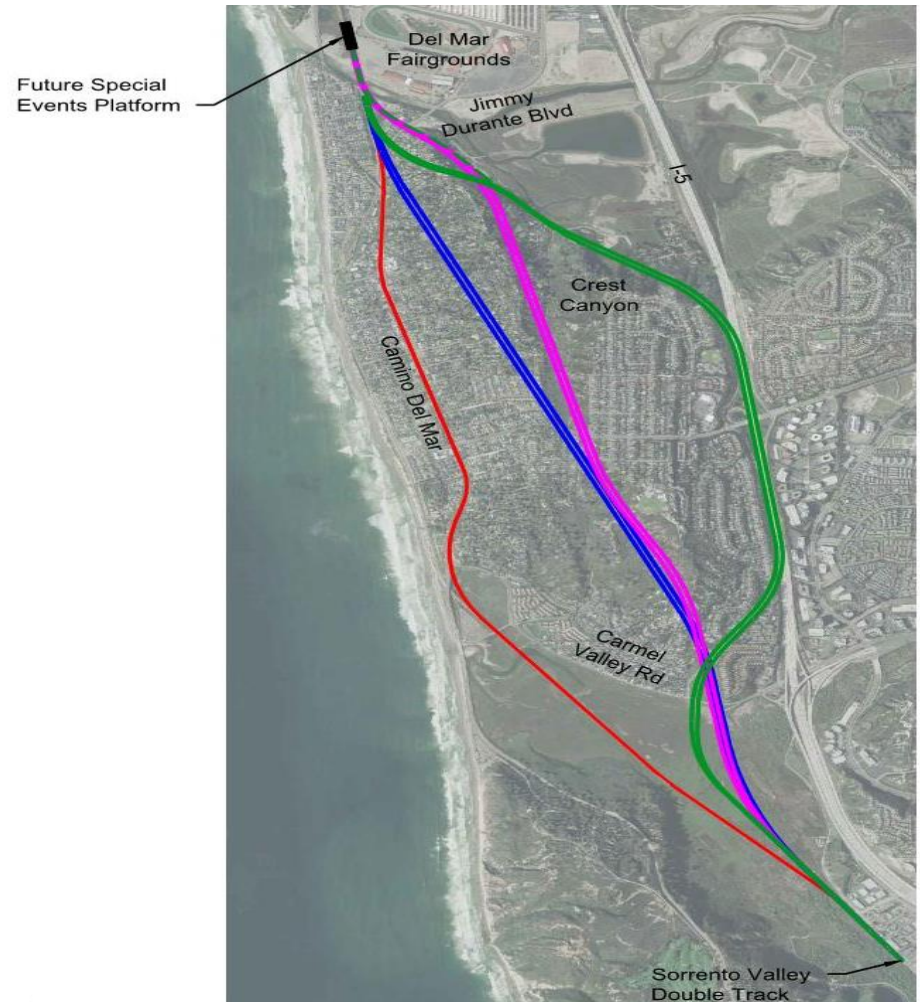
Item 6 | LOSSAN San Diego Regional Rail Corridor Working Group
January 21, 2020

KeepSanDiegoMoving.com

Long Term Planning - Del Mar Tunnel Alignment Alternatives

Studied five alignments from Del Mar Fairgrounds to Sorrento Valley

Conceptual Engineering and Environmental Constraints Report in 2017

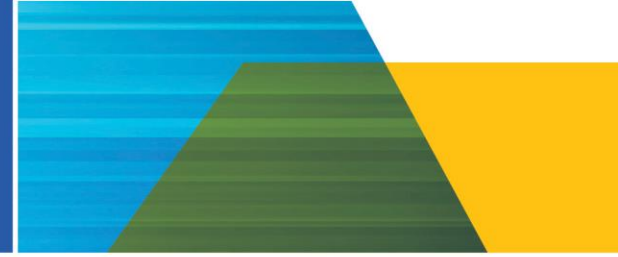


Purpose and Need

- Current single track alignment along sensitive coastal bluffs
- Programmatic environmental studies call for further study
- Included in Regional Plan in 2050 phase
- San Dieguito Double Track Project under design by SANDAG and potentially impacted



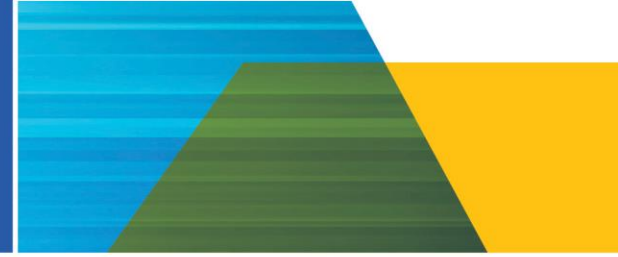
Alignment Alternatives Overview



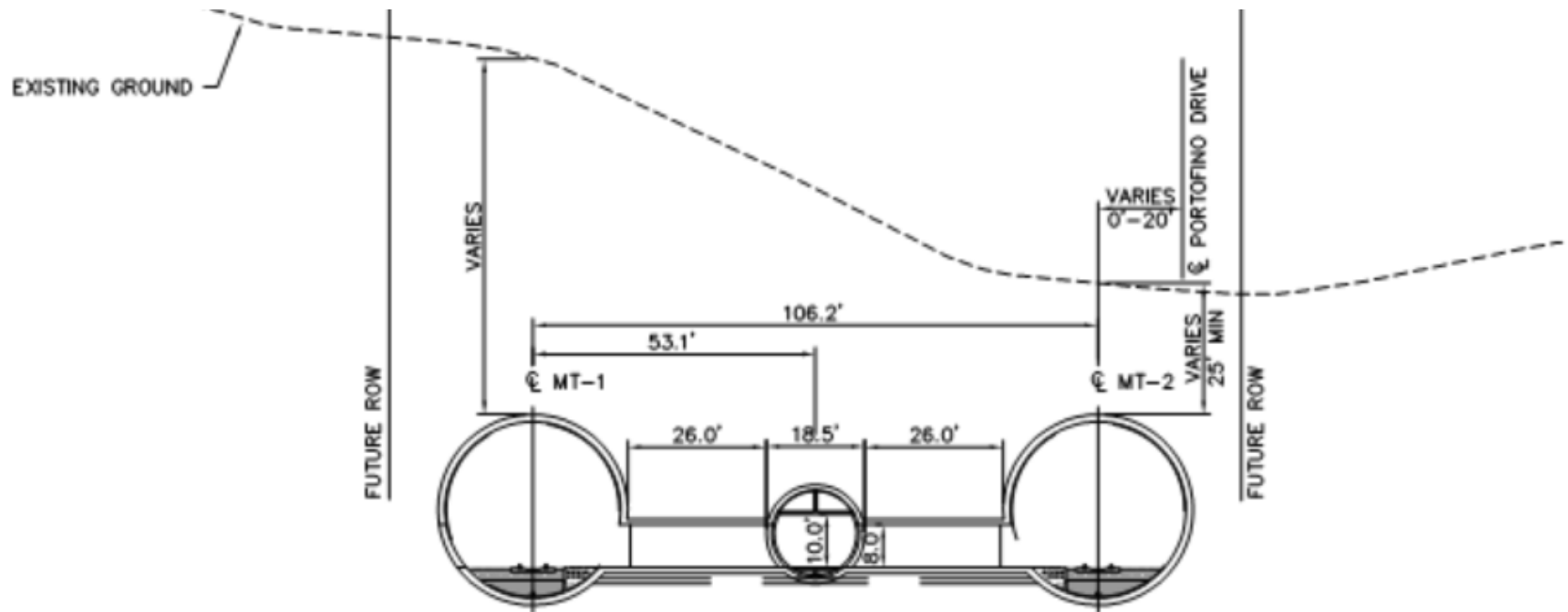
- Each alignment is from San Dieguito Lagoon through Los Penasquitos Lagoon to Sorrento Valley
- Each about 5 miles in total length
- Underground sections between 10,000 and 13,000 feet in length
- Camino Del Mar Alternative is cut/cover (10-70 feet below grade)
- All others are bored tunnels (30-250 feet below grade)

Long Term Planning

Typical Tunnel Infrastructure



- Twin bore train tunnel with emergency access tunnel



SECTION D-D
'MT-2' 13001+22 TO 'MT-2' 13003+50

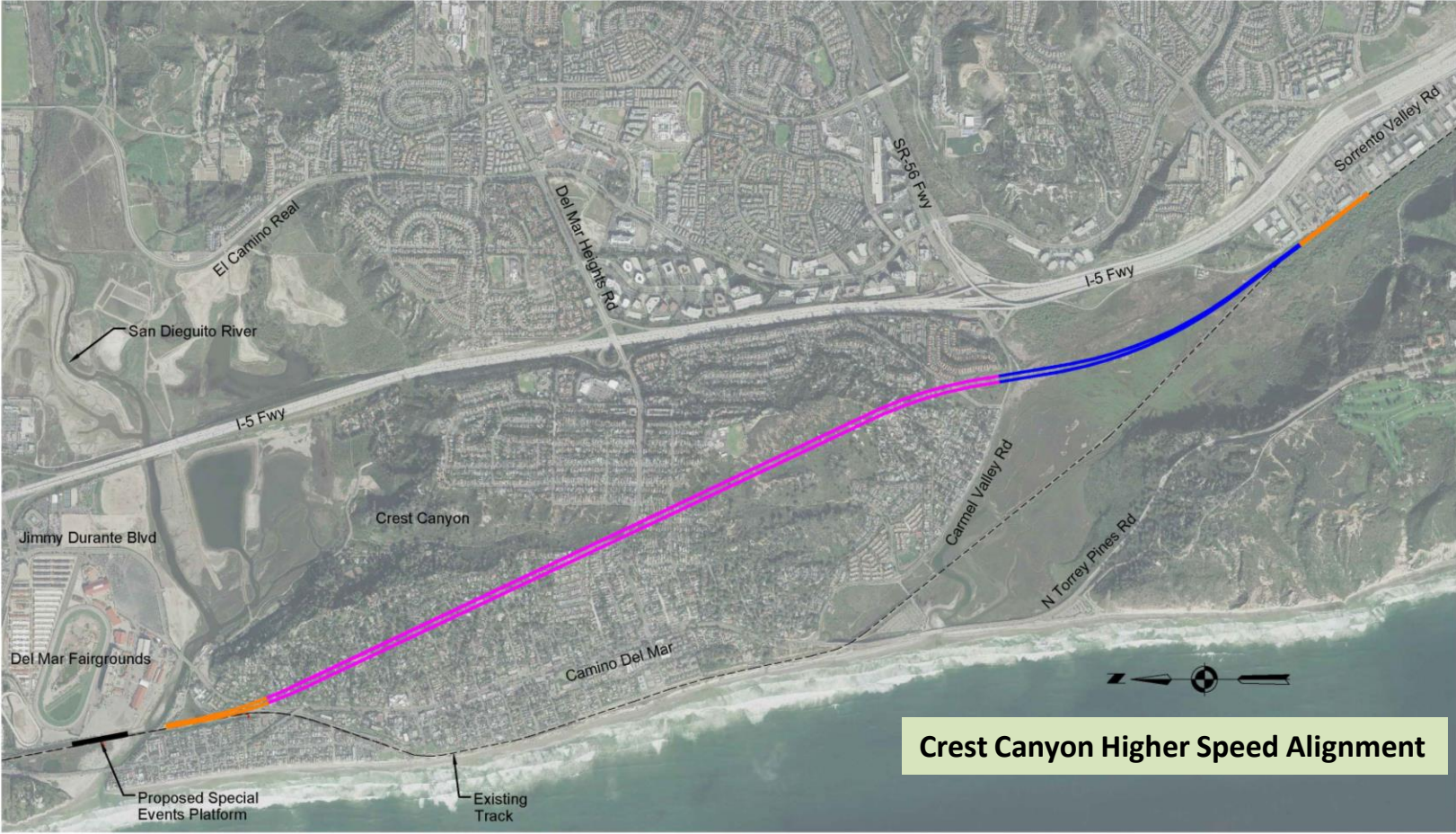
Camino Del Mar Tunnel



ALIGNMENT KEY

GRADED	Orange line
TRENCH	Yellow line
TUNNEL	Magenta line
BRIDGE	Blue line

Crest Canyon – Higher Speed Tunnel



Crest Canyon Tunnel



Crest Canyon Alignment

ALIGNMENT KEY

GRADED	Orange line
TRENCH	Yellow line
TUNNEL	Magenta line
BRIDGE	Blue line

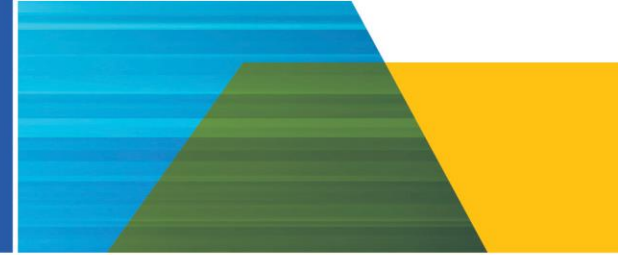
Interstate 5 Tunnel



Interstate 5 East Tunnel



Summary Comparison: Cost and Description



Issue Area	Alternative Alignment				
	Camino Del Mar	Crest Canyon Higher Speed	Crest Canyon	I-5	I-5 East
Total Cost (\$2017B)	\$2.5	\$3.0	\$3.1	\$3.5	\$3.3
Total Length (mi)	5.0	4.8	4.9	5.3	5.2
Tunnel Length (ft)	10,200	13,200	12,700	13,400	11,600
Type	Cut/Cover	Twin bored	Twin bored	Twin bored	Twin bored
Depth (ft)	10-70	Up to 270	Up to 250	Up to 120	Up to 120
Travel Time (minutes)	6	3.2	3.7	5.4	5.3

San Diego Regional Rail Alternative Alignments Study

- Further analysis and refinement of tunnel alternatives
- Updated cost estimates
- Implementation plan
- Address safety, capacity, and speed along entire San Diego Subdivision
- Future extensions

San Diego Regional Rail Alternative Alignments Study

- Preliminary work scheduled to begin in April 2020
- Study expected to take 18-24 months
- Funding
 - Initial funding approved by Board of Directors
 - Caltrans Planning Grant Application pending
 - Seeking state funding to advance study

LOSSAN Coastal Rail Corridor



Q&A

Project Info: KeepSanDiegoMoving.com/LOSSAN

Linda Culp, Principal Planner SANDAG. Email lcu@sandag.org or Ph 619 699 6957



**Introduction to
Gateway Program Governance**
January 21, 2020

John Porcari, President, U.S. Advisory Services

Contents

- Gateway Program Overview
- Economic Impacts
- Partners
- Governance
- Funding/Finance
- Key Takeaways
- Similar Cases
- Discussion
- Contacts

Gateway is a comprehensive *program* of strategic rail infrastructure improvements to improve rail services and create new capacity to allow the doubling of passenger trains under the Hudson River between New York and New Jersey.



Long Island
Rail Road

What is the Gateway Program?

- New Hudson River Tunnel
- Rehabilitation of Existing Tunnel
- Replacement of Portal Bridge
- Expansion of NY Penn Station
- Capacity/Renewal Projects in New Jersey
 - *Portal South Bridge*
 - *Secaucus Station and Loops*
 - *Newark-Secaucus Improvements*
- Replaces the cancelled Access to the Region's Core Trans-Hudson commuter rail project
- Adds capacity for Amtrak passenger trains



Gateway Program Overview

NEW JERSEY

Essex

Penn Station Newark

4th Track at Harrison

- Expansion from three to four tracks through Harrison.

Penn Station Newark

- Platform and pedestrian circulation improvements to accommodate Gateway Program new capacity.



Sawtooth Bridge

- Replacement of distressed, outmoded structures.
- Expansion from two to four tracks.

High Line State-of-Good-Repair

- Replacement and renewal of 105-year old two track rail bridges/infrastructure.

High Line Expansion

- Expansion from two to four track system.

Rail Yard and Operational Support Facilities; Location TBD

Secaucus Junction



Secaucus Loop

Portal North Bridge

- Replacement of existing bridge with two-track, high-level fixed bridge.

Portal South Bridge

- Addition of two-track fixed bridge to support Gateway Program new capacity.



Frank R. Lautenberg Secaucus Junction

- Expansion of tracks and platforms.
- Addition of loop tracks.



Moynihan Station Penn Station



Penn Station NY

- Expansion of Penn Station
- Option for future expansion of new tracks eastward.
- Planning for vertical circulation to future deep cavern high-speed rail station.



Hudson Tunnel Project

- New two-track tunnel connecting to Penn Station.
- Complete rehabilitation and rebuilding of existing two-track tunnel.



Hudson

Brooklyn

New York Bay

STATEN ISLAND

Union

Elizabeth Station



Passaic River

Hackensack River

Study Area

Hudson River

MANHATTAN

East River

QUEENS



- Existing NEC
- Gateway Program
- Resiliency
- Capacity

Gateway is similar in many ways to LOSSAN

- Project of National and Regional Significance
- Corridor serves Amtrak, commuter, and freight rail
- Significant passenger traffic, connecting major coastal metropolitan areas
- Multibillion dollar infrastructure investment required
 - *Address infrastructure resiliency*
 - *Provide new capacity to meet growing demand*
- Complex corridor with many institutional partners
 - *Railroads; federal, state, local governments; regional authorities*
- Opportunities for federal funding/financing from USDOT
 - *Federal Rail, Transit Administrations; Build America Bureau*

Why do we need Gateway?

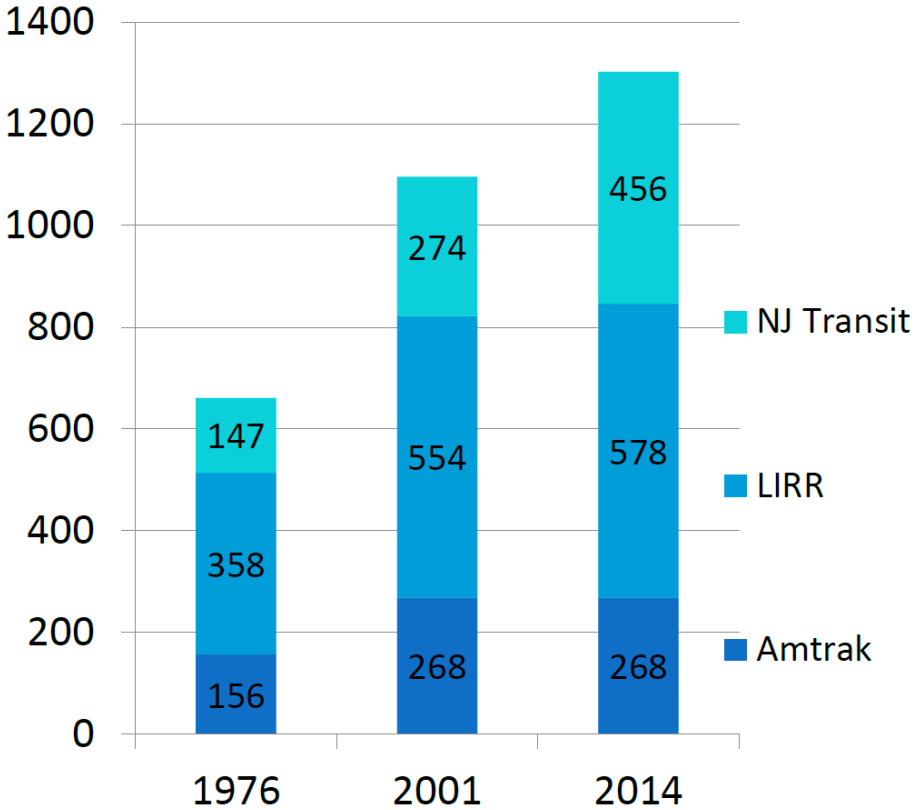
Existing North River Tunnel, Completed in 1910



NY Penn Station – Busiest Rail Station in North America

Train and passenger volumes have doubled since 1976

Weekday Train Movements 1976 - 2014

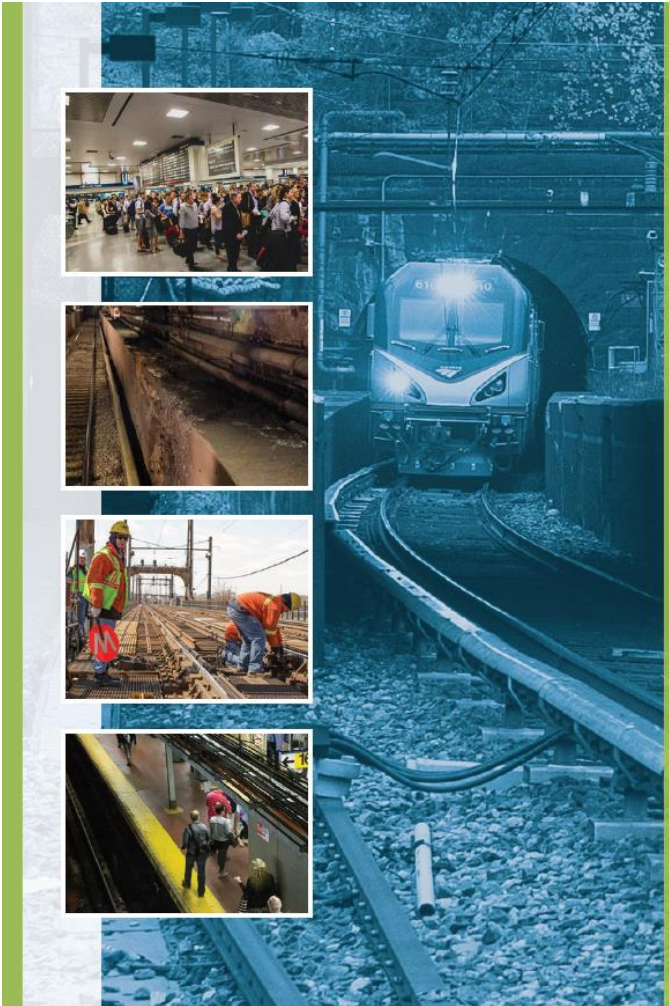


Superstorm Sandy Caused Irreparable Damage

- Forced ~4-day closure of NEC in October 2012
- Ongoing damage to requires complete renewal of inundated tunnels
- Reconstruction requires closure of each tube for ~1.5 years
- Rebuilding existing tunnel cannot begin until new tunnel built

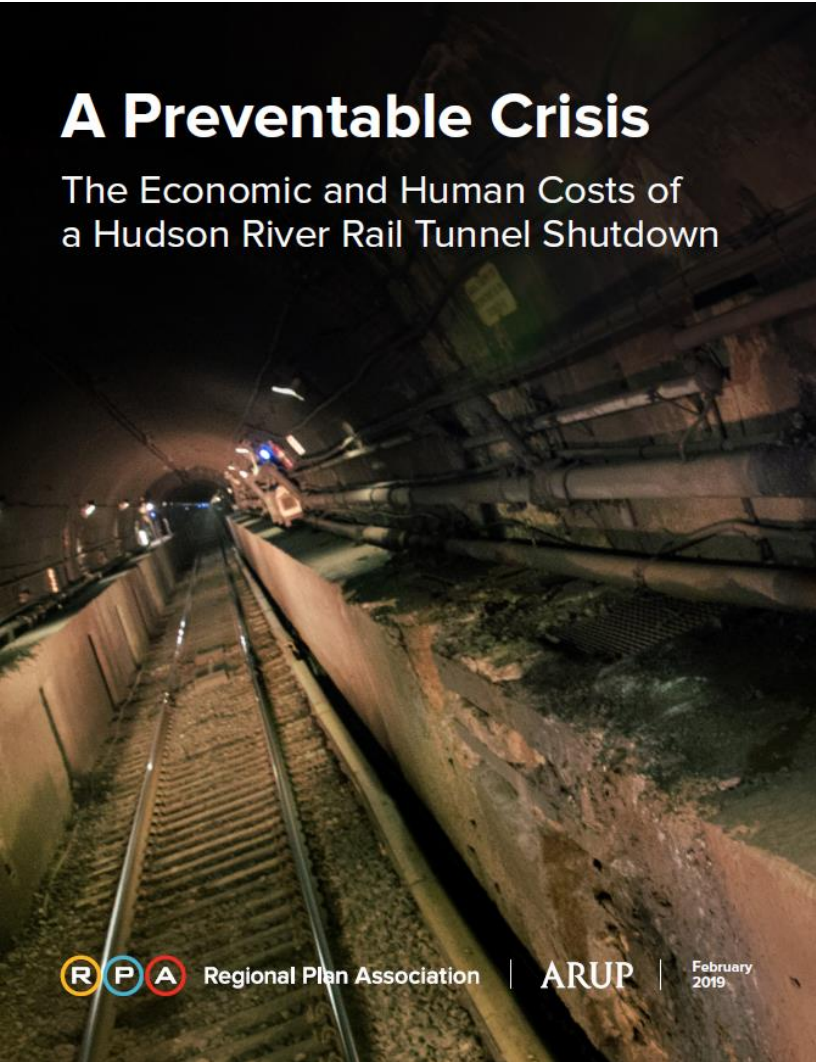


Studying & Communicating Economic Impacts



December 2016

THE ECONOMIC BENEFITS OF INVESTMENT IN THE GATEWAY PROGRAM



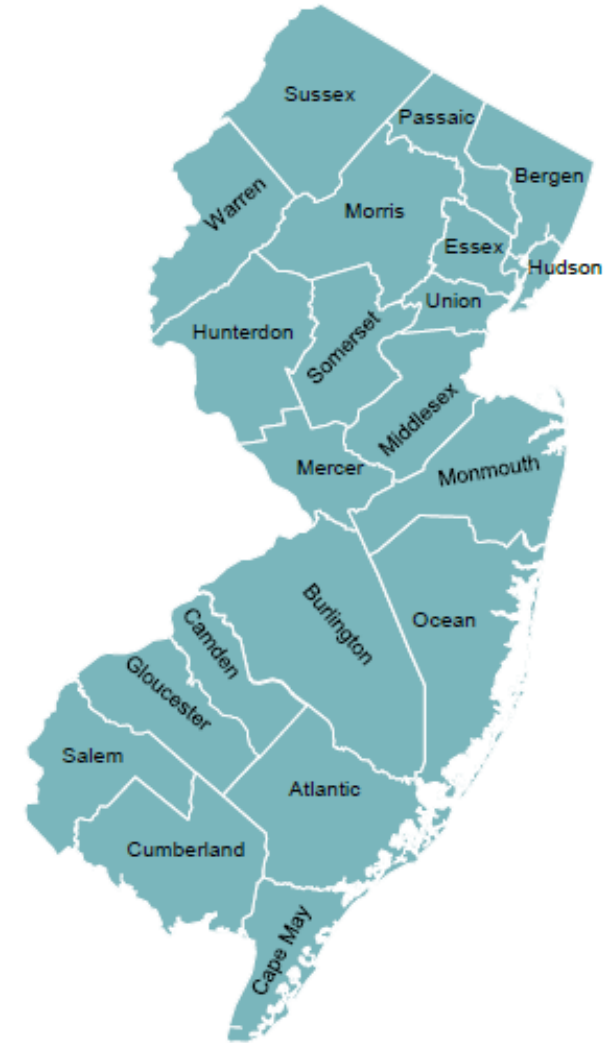
Why Gateway Matters – New York City

- Rapid development on the Far West Side depends on expanded transit access, including growing trans-Hudson market
- For Manhattan employers, access to highly-trained regional workforce is essential
- Many Manhattan jobs would leave the region over time without good transportation access



Why Gateway Matters – New Jersey

- TOTAL income earned in Manhattan by NJ commuters equals at least **\$33 billion** annually
- If NJ workers cannot readily commute, similar jobs in NJ would be unavailable or pay much less
- The loss in yearly earnings could range from **\$5-\$15 billion** based on average wage differential

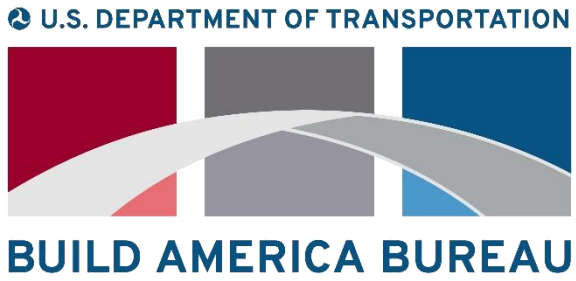


Gateway Program Partners

A Local / Regional / State / Federal Partnership



THE PORT AUTHORITY OF NY & NJ



Governance Considerations

- Federal grant eligibility
- Federal loan eligibility
- Ownership
- Project delivery capacity
- Maintenance and operations
- Liability
- Enabled powers and abilities of member organizations
- Political resiliency
- Timely & effective program delivery

Governing Body

- Gateway Program Development Corporation chartered in 2016 to develop and deliver the Gateway Program
 - *Issue debt*
 - *Grant recipient (with state/federal action)*
 - *Loan recipient*
 - *Shield liabilities*
- Gateway Development Commission established in 2019
 - *Bi-state commission with Amtrak representation*
 - *Public body able to receive federal grants/loans*
 - *New York and New Jersey pledge to equally fund non-federal share of project costs in commission enabling act*

Project Funding/Financing

— Portal North Bridge

- *FTA Core Capacity Grant (~40%)*
- *Amtrak/FRA funds (~10%)*
- *New Jersey Transportation Trust Fund (~40%)*
- *Financing through New Jersey Economic Development Authority*

— Hudson Tunnel Project

- *FTA New Starts Grant (~40%)*
- *Amtrak/FRA funds (~10%)*
- *Port Authority of New York/New Jersey (~20%)*
- *States of New York and New Jersey split remainder*
- *Financing through Federal Railroad Rehabilitation and Improvement Financing (RRIF) Loan*

Success Factors

- Lessons learned from ARC
- No single point of failure
- Unified Congressional support to champion
- Building federal support in two administrations
- Federal technical assistance
 - *EIS, Letter of No Prejudice, Build America Bureau*
- Proactive federal outreach
- Working groups
- Integrated program team
- Build on incremental wins over time

Lessons Learned (So Far...)

- Start early
- Bring everyone to the table
- Work as integrated project team
- Build a planning cell incorporating all major players
- Develop a unified work program
- Work from a common set of facts and shared analysis
- Develop a catalogue of supportive arguments
- Compromise on funding shares in short-term, and true-up over long-term
- Build coalitions with other projects of national/regional significance
- Encourage public agencies to work together
 - *Locally* - NJT, PANYNJ, Amtrak
 - *Federally* - FTA & FRA

Other Peers to Consider

- **Florida:** Brightline (Virgin Trains USA)
 - *Private passenger rail service in South Florida incorporates land development on railroad property adjacent to stations*
- **Virginia:** Long Bridge/Atlantic Gateway Program
 - *State purchase of Richmond-Washington ROW from CSX*
 - *Additional tracks, sidings, new Potomac River Bridge*
 - *Increased Amtrak, commuter service; improved freight capacity*
- **Illinois:** Chicago Region Environmental and Transportation Efficiency Program (CREATE)
 - *Spot improvements to improve Amtrak, commuter, and freight rail congestion at choke points around Chicago*
- **Michigan:** Dearborn to Kalamazoo Corridor Acquisition
 - *State purchase, improvement of Norfolk-Southern ROW*

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Appendix



Amtrak

- Operates Acela, Northeast Regional, and other intercity passenger service in corridor
- Owns existing Hudson River Tunnels and adjacent infrastructure
- Maintains existing infrastructure, reimbursed by tenant railroads
- Supports Gateway project design and engineering



New Jersey Transit

- Operates commuter rail service across Hudson River tunnels, carries 90% of peak-hour passengers in corridor
- Reimburses Amtrak for use of infrastructure
- Half of Hudson Tunnel in New Jersey
- Site of Portal North Bridge, other projects on approach
- NEPA Applicant
- Project sponsor and procurement agency for Portal North Bridge, Phase 1A of Gateway Program
 - *Contributing approximately 50% of non-federal cost*



Port Authority of New York and New Jersey

- Bi-state authority with responsibility for ports, airports, tunnels and bridges, PATH train, World Trade Center, and other infrastructure
- Facilitating activities between New York, New Jersey, including project coordination and development
- Financial support for Portal North Bridge Project, Phase 1A
 - *Approximately 50% of non-federal cost of project*
 - *Financing contribution via USDOT loan (TIFIA or RRIF)*

New York State

- Half of Hudson River Tunnel in New York State
- Site of New York Penn Station
- Limited role to date; Port Authority of New York/New Jersey acts as an agent

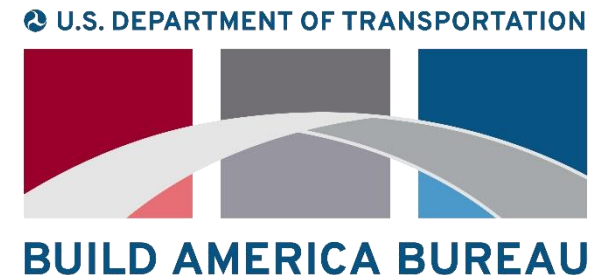


United States Department of Transportation



U.S. Department
of Transportation

- Program funding (FTA, FRA)
 - *Anticipating FTA Core Capacity grant for approximately 50% of Portal North Bridge, Phase 1A*
 - *Anticipate FRA grants to Amtrak for program*
 - *Additional federal grants for subsequent phases of program*
- Program financing (BAB)
 - *Lending via TIFIA loan or Railroad Rehabilitation and Improvement Financing (RRIF) loan to GDC*
 - *Loans administered by Build America Bureau*
- Program oversight (FRA, FTA)
- NEPA Lead (FRA)

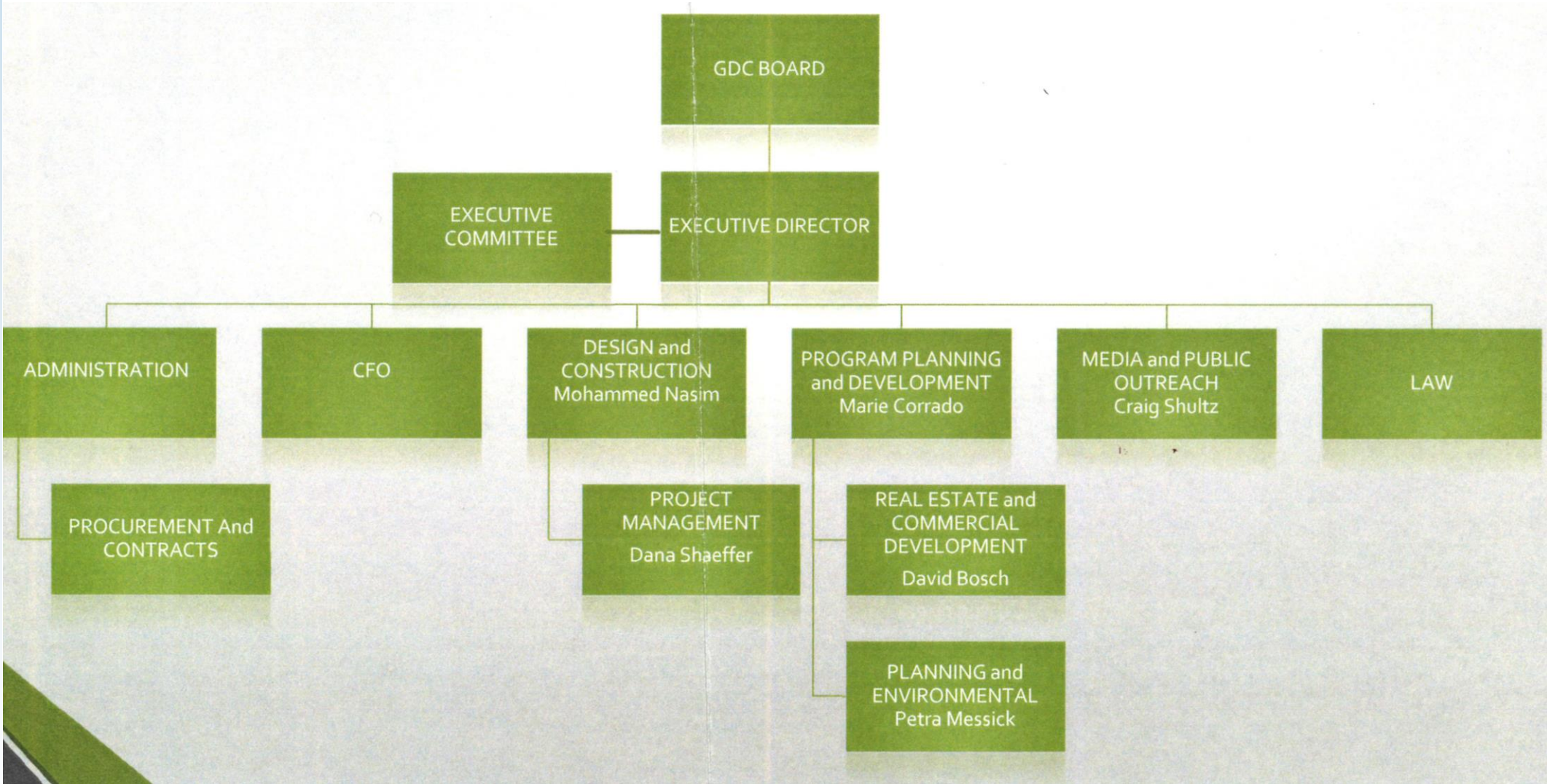


Governance & Organizational Design Task

- Governance Structures Overview, September 2015
 - *Governance structuring options from best practices*
 - Interstate Compact Agreement
 - Intergovernmental Agreement
 - Capacity-Sharing Agreement
 - Non-Profit Corporation
 - *Detailed pros and cons*
 - *Criteria for selecting governance structures*
 - *Program requirements including legal, funding, and operational issues*



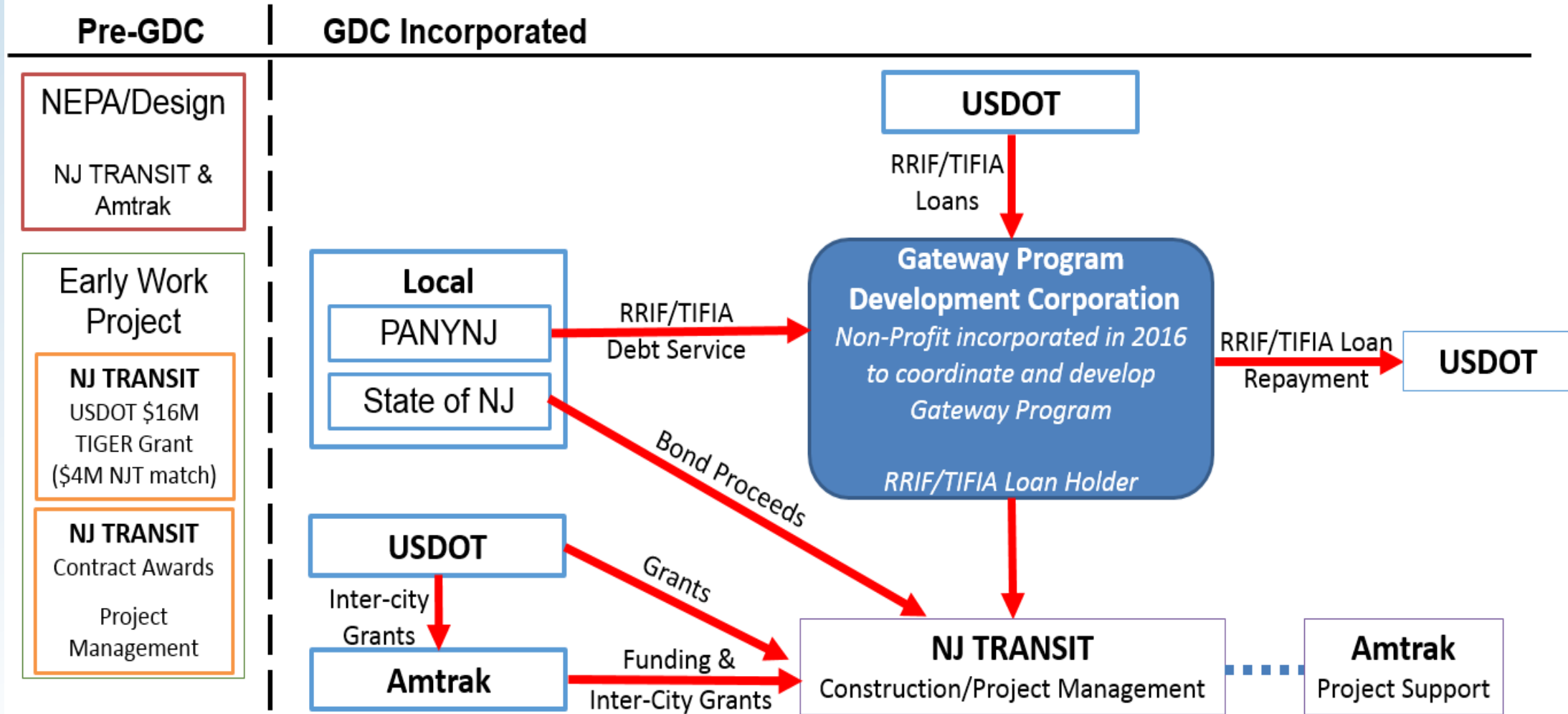
Gateway Development Corporation Organizational Chart



Working Groups

- 6 groups tasked with coordinating Gateway activities
 - *Executive Committee*
 - *Environmental*
 - *Funding*
 - *Construction, Preliminary Engineering, Process, and Office Space*
 - *Governance*
 - *Rail Operations & Planning*
- Representatives of each major stakeholder group
 - *Port Authority, Amtrak, NJT, USDOT/FRA/FTA on each group*
 - *States of New York, New Jersey; US Senators on some groups*

Portal North Bridge Project Organization



Agreements

- Funding agreement for design
 - *Amtrak and Port Authority*
- Funding agreement for program delivery
 - *Amtrak and GDC*
- Financial support agreement for TIFIA Loan
 - *PANYNJ and GDC*
- Funding agreement for PNB construction
 - *GDC and NJT*
- Long-term operation and maintenance
 - *Amtrak and NJT*
- Financing agreements
 - *NJT and N.J. Economic Development Authority*