

# Core Capacity Transit Study

## CORE CAPACITY TRANSIT STUDY



Alameda County Transportation  
Commission

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Commission

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## Agenda

- Study Background
- Transbay Corridor
  - Capacity and Demand
  - Short/Mid Term Priorities
  - Long Term Options
- Next Steps



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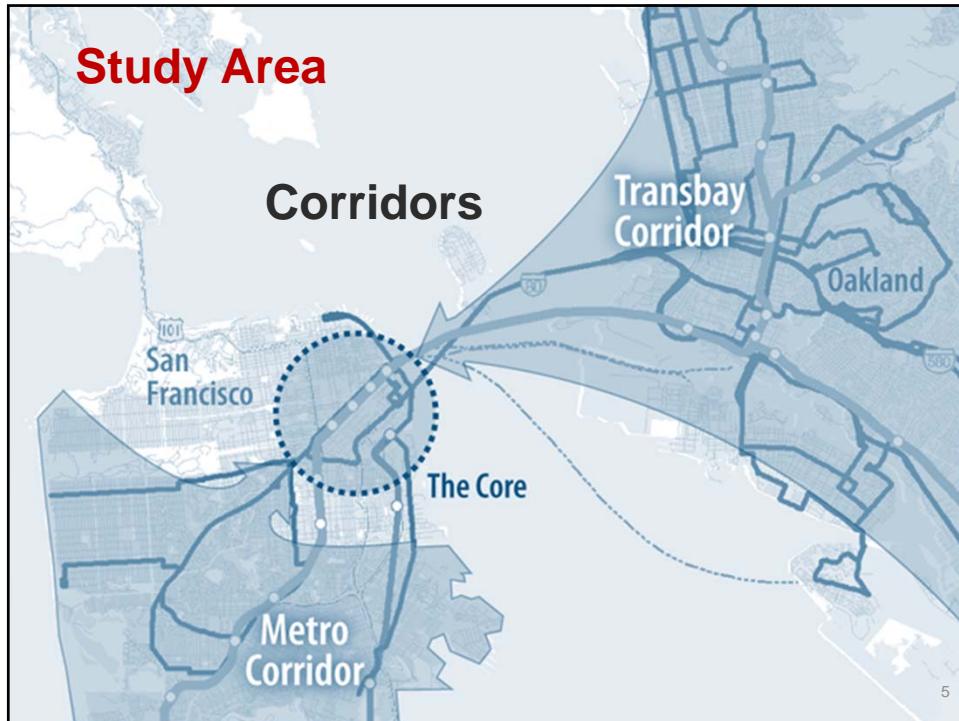
# Study Background

## Study Purpose

- Multi-agency effort focused on increasing transit capacity to the San Francisco Core



- Study investigates *short, medium, and long term* transit solutions that:
  - Increase transit capacity to meet expected demand
  - Improve transit reliability
  - Manage demand
- Tests multiple packages to understand tradeoffs between infrastructure investments and policy changes
- Identifies project synergies between short, medium and long term projects



## **Transbay Corridor: Capacity/Demand & Short/Mid Term Priorities**

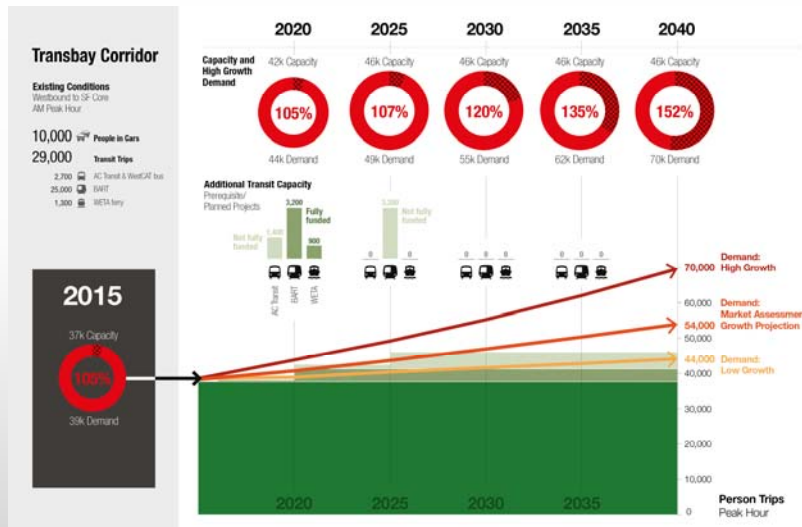
# Transbay: Prerequisite Projects

Tier 1: Fully funded    Tier 2: Not Fully Funded

Tier	Timeframe	Sponsor	Project
1	Short Term	AC Transit	AC Transit Richmond Facility Reopening
1	Short Term	BART	BART Additional Cars – Fleet Transition
1	Short Term	WETA	WETA Maintenance Facilities Alameda, Vallejo
1	Short Term	WETA	WETA Richmond-SF Ferry Service
1	Short Term	WETA	WETA SF Ferry Terminal Expansion
1	Short Term	WETA	WETA SF Fleet Replacement & Expansion
1	Short Term	Caltrans	I-80 Integrated Corridor Mobility
1	Short Term	TJPA	Transbay Terminal (Phase 1)
1	Short Term	TJPA	AC Transit Bus Ramp to Transbay terminal
1	Short Term	MTC	Bay Bridge Forward
2	Short Term	AC Transit	AC Transit Fleet Expansion (40 buses)
2	Short Term	AC Transit	AC Transit West County Bus Facility (new)
2	Short Term	BART	BART Hayward Maintenance Complex, Phase 1
2	Medium Term	BART	BART Additional Railcars – Core Capacity
2	Medium Term	BART	BART Metro Program
2	Medium Term	BART	BART Traction Power System
2	Medium Term	BART	BART Train Control System
2	Medium Term	BART	BART Hayward Maintenance Complex, Phase 2

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# Transportation Trends: Transbay Corridor



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## Transbay Corridor Problem Statement






- The need to fund and implement the Tier 1 and Tier 2 prerequisite projects under all growth scenarios
- An increasing possibility that growth in demand will outpace capacity
- The need for additional investments in projects, programs and policies to address increasingly significant shortfalls in capacity
- Without significant changes in vehicle occupancy, nearly all future growth would need to be met by transit

## Recommended Short/Mid Term Package







- Improvements include:
  - Higher auto tolls
  - Bus and Ferry service increases
    - +40 buses from prerequisite projects
    - +70 buses from recommended package (85% planning capacity goal)
    - +13 boats from recommended package
  - Infrastructure improvements
    - Direct ROW for buses to Bay Bridge
    - Surface street transit priority lanes and park and ride lots in Oakland and elsewhere
    - New bus yard for AC Transit
    - New ferry terminals in Berkeley, Alameda and Mission Bay
- Optional supportive elements:
  - Higher toll in lieu of Direct ROW for buses to Bay Bridge
  - Fare adjustments for demand management
  - Contraflow or Bus-Only/HOV Lane for additional reliability improvements

## Transbay Recommended Package

### % Change by Mode, Peak Hour

Mode	2030 Peak Hour Modeled Trips	2030 Modeled Package Trips	% Change
 Non HOV	10,900	10,200	-6%
 HOV	10,600	11,300	+7%
 BUS	3,800	7,700	+100%
 BART	31,700	30,600	-3%
 Ferry	1,900	4,200	+123%
Total Trips	58,900	64,000	9%

## Recommended Package: Total Fleet Needs

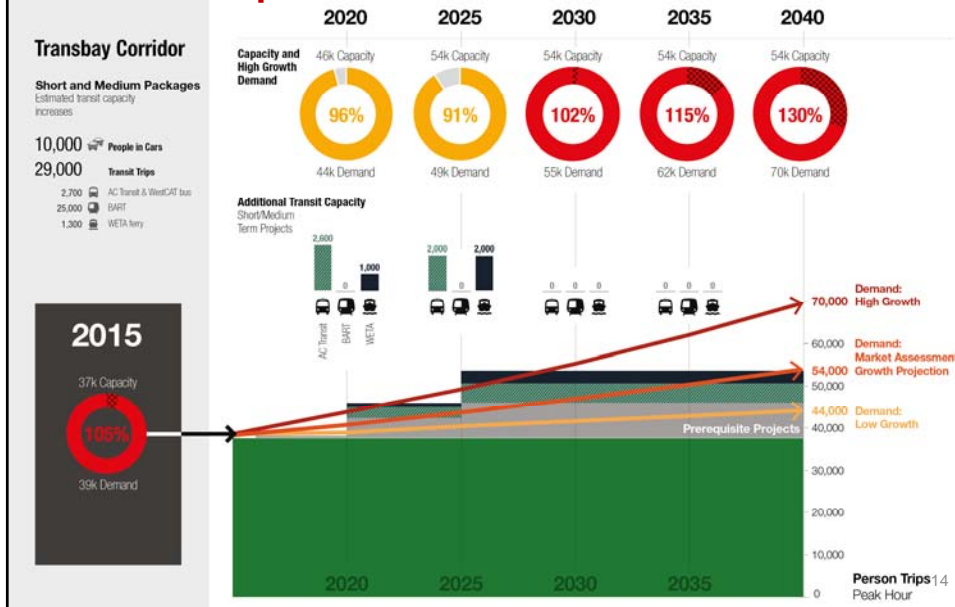
	Planning Capacity Goal	Total Fleet Needs Unfunded Prerequisite projects + recommended package	Total Capital Costs
 Bus	 85%	110 Buses	\$90M
 Ferry	 80%	13 boats	\$172M
 BART	 98%	231 trains	\$1.1B

## Findings Summary

- Effectively managing bridge queues and relieving short-mid term capacity issues across operators requires a combination of:
  - Adjusting peak hour auto tolls to manage Bay Bridge queues
  - Additional transit service (new bus and ferry fleet)
  - New infrastructure (new transit priority ROW, yards and terminals)
- Fare adjustments are an effective tool to manage demand but are not essential for meeting study objectives
- A Contraflow or Bus-Only/HOV Lane, in isolation, does not fulfill the study's objectives, but can be considered once necessary tolling, service and infrastructure have been delivered



## Transbay Capacity and Demand: Short and Medium Improvements



# Transbay Corridor: Long Term Options

## Long Term Options

	Long Term Option	Capacity Estimate
1	More Bus and Ferry: Maximize Existing Assets - +125 buses - +6 ferries	+13,000
2	BART Independent Line (via Mission) -28 trains/hour	+30,000
3	BART Independent Line (3 <sup>rd</sup> St. Crossing) - 28 trains/hour	+30,000
4	BART Merged Line (SOMA/Mission Bay) - 12 to 24 trains/hour	+10,000 – 20,000
5	Greater Regional Rail Connection - 10 to 12 trains/hour	+12,000 – 18,000



## Long Term Options – SF Alignments

BART  
Independent  
Line – via  
Mission St.



#2

BART  
Independent  
Line – 3<sup>rd</sup> St.  
Crossing



#3

BART  
Merged  
Line – SOMA/  
Mission Bay



#4

Greater  
Regional  
Rail  
Connection



#5

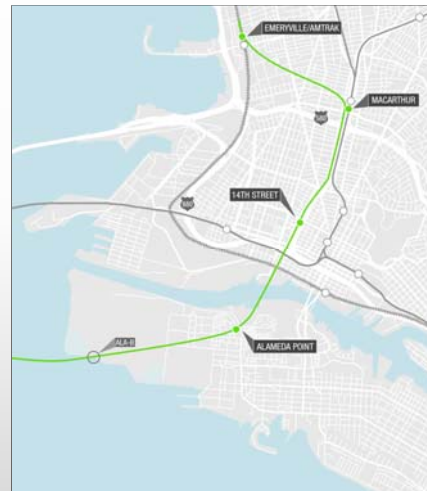
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## Long Term Options – East Bay Alignments



BART Alignments #2-4

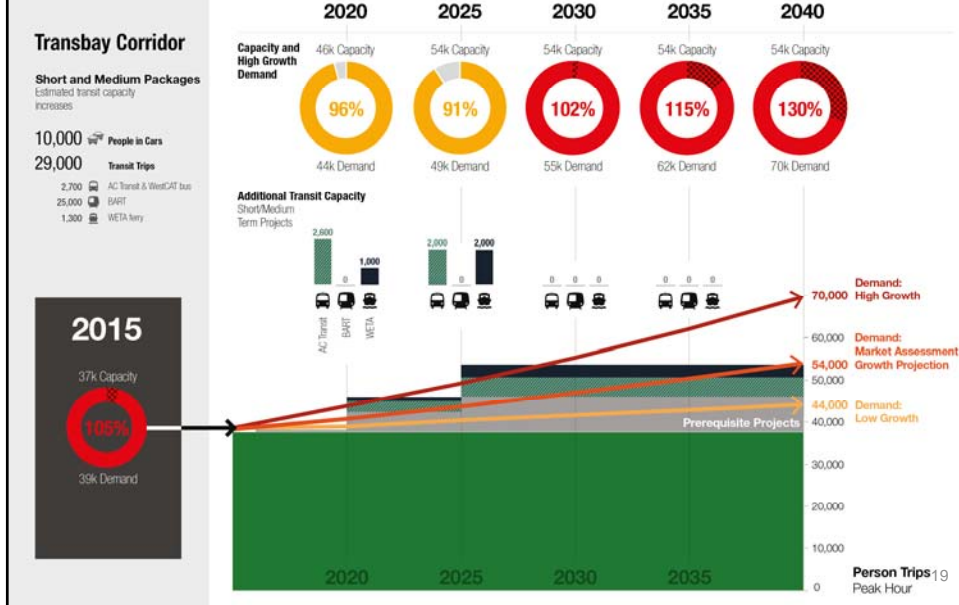


Greater Regional Rail Connection

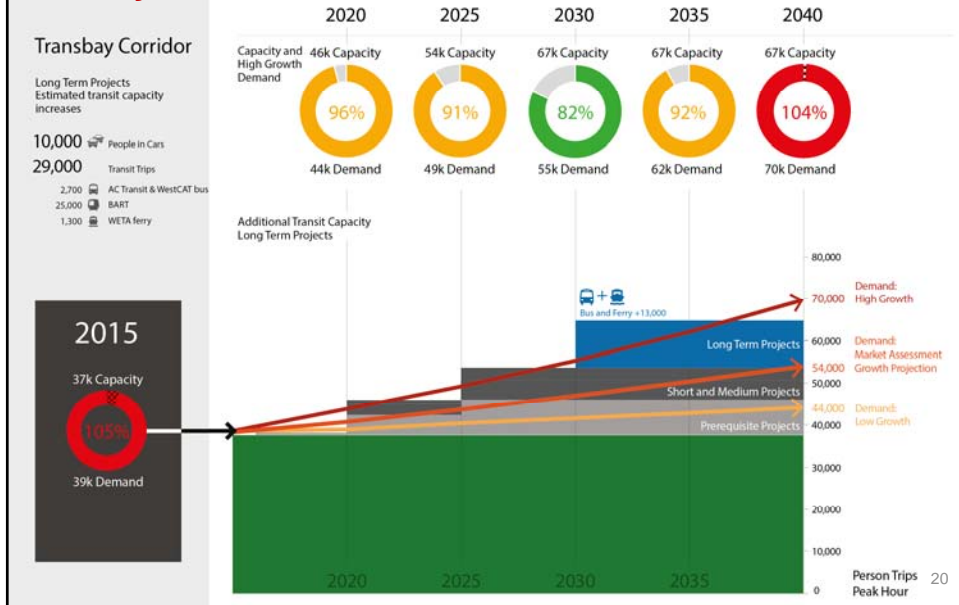
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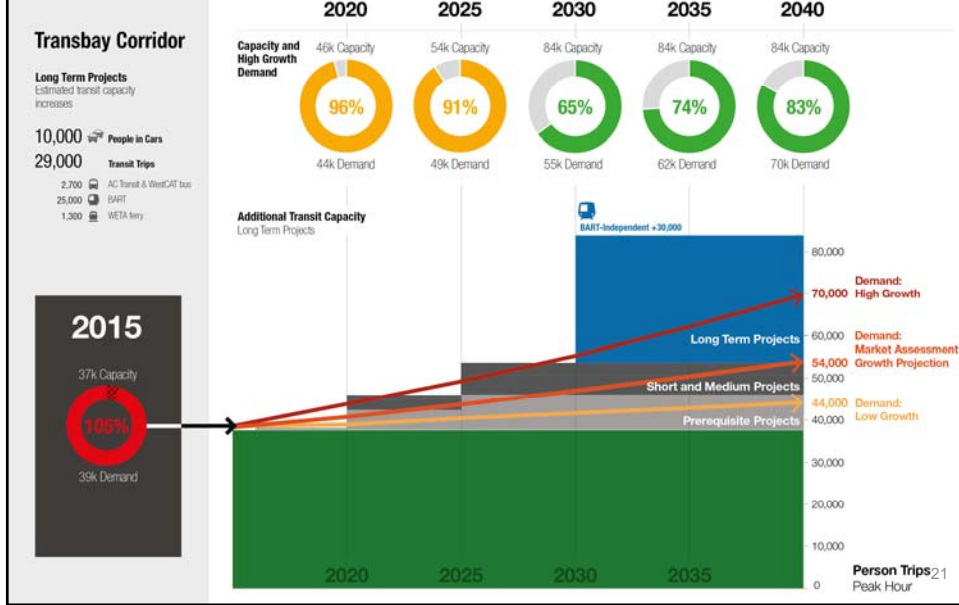
## Transbay Capacity and Demand: Short and Medium Improvements



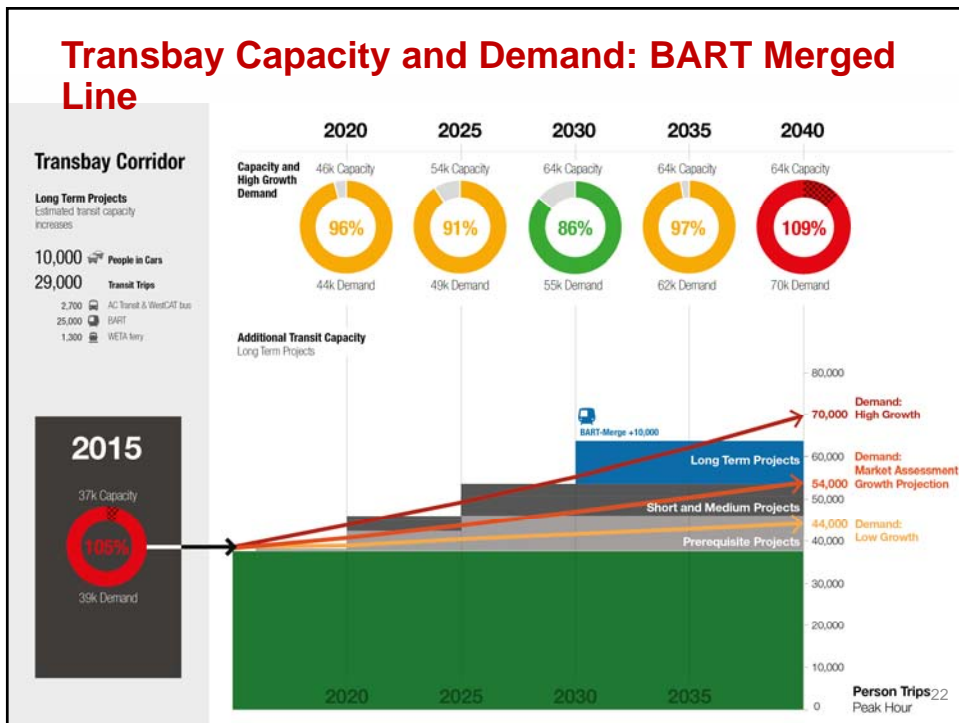
## Transbay Capacity and Demand: More Bus and Ferry



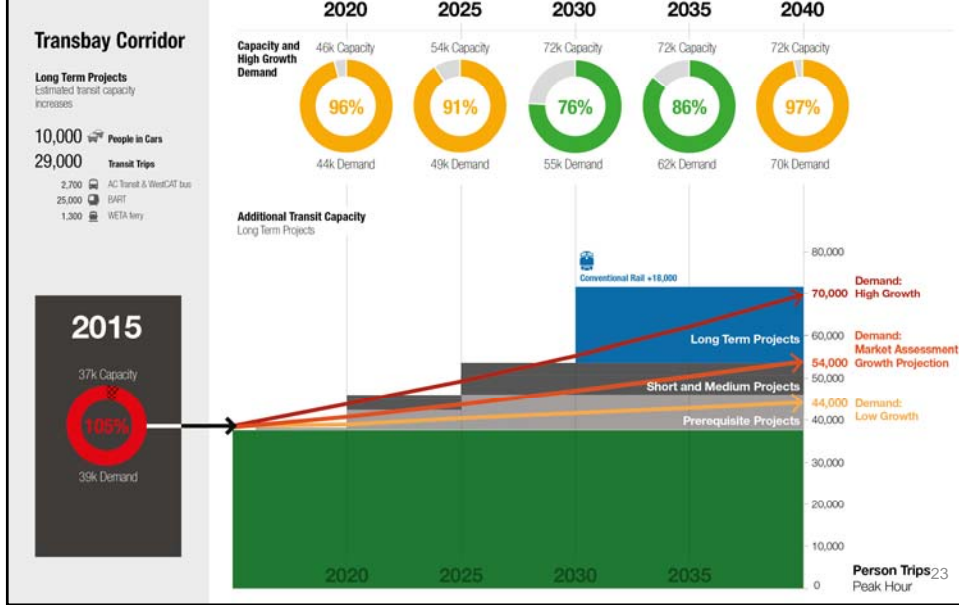
## Transbay Capacity and Demand: BART Independent Line



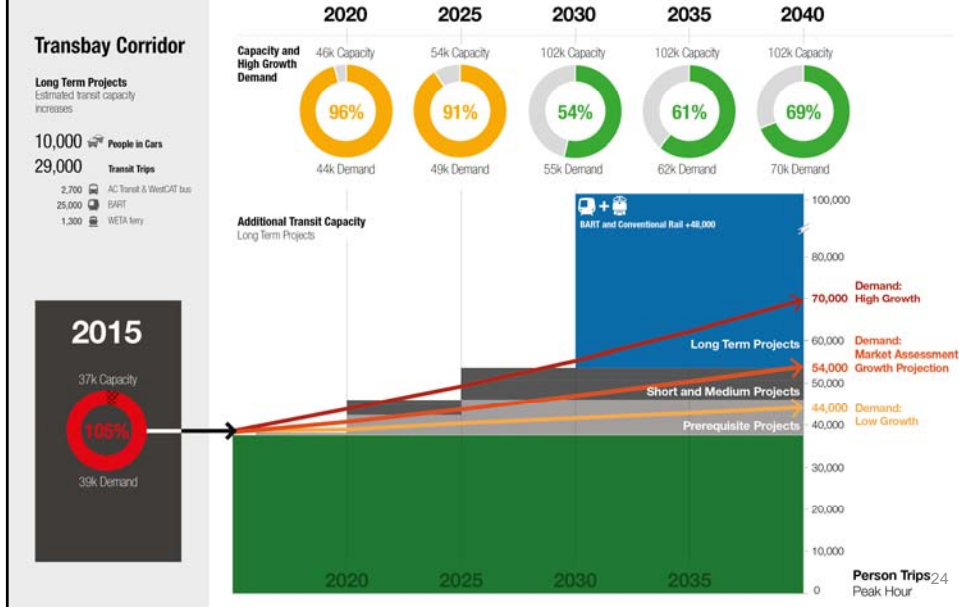
## Transbay Capacity and Demand: BART Merged Line



## Transbay Capacity and Demand: Greater Regional Rail



## Transbay Capacity and Demand: BART + Conventional Rail



## Long Term Summary

- All options deliver sufficient capacity to meet demand for the medium growth 2040 forecast
- However, two options (bus and ferry option and BART Merged/Breakout Line) do **not** deliver sufficient capacity for the high-growth forecast
- All other rail options provide sufficient capacity for the high growth 2040 forecast
- Recommend a long term project to provide additional transit capacity in the corridor for 2030+

## Next Steps

- Develop and issue Final Report
- Second crossing continuation study
  - Includes BART and conventional rail option for analysis
  - Need to Identify study leaders
    - Identify program management role and who does it
    - BART will lead BART portion
    - Responsible entity to lead conventional rail portion needs to be identified/created
  - Extend PMT participation (and new stakeholders)
- Key scoping questions
  - Geographic scale: corridor, regional, mega-regional?
  - Institutional governance and other policy considerations
- A scoping effort is needed ASAP to develop a second crossing continuation study framework.

# Thank you!



Questions? Contact:  
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