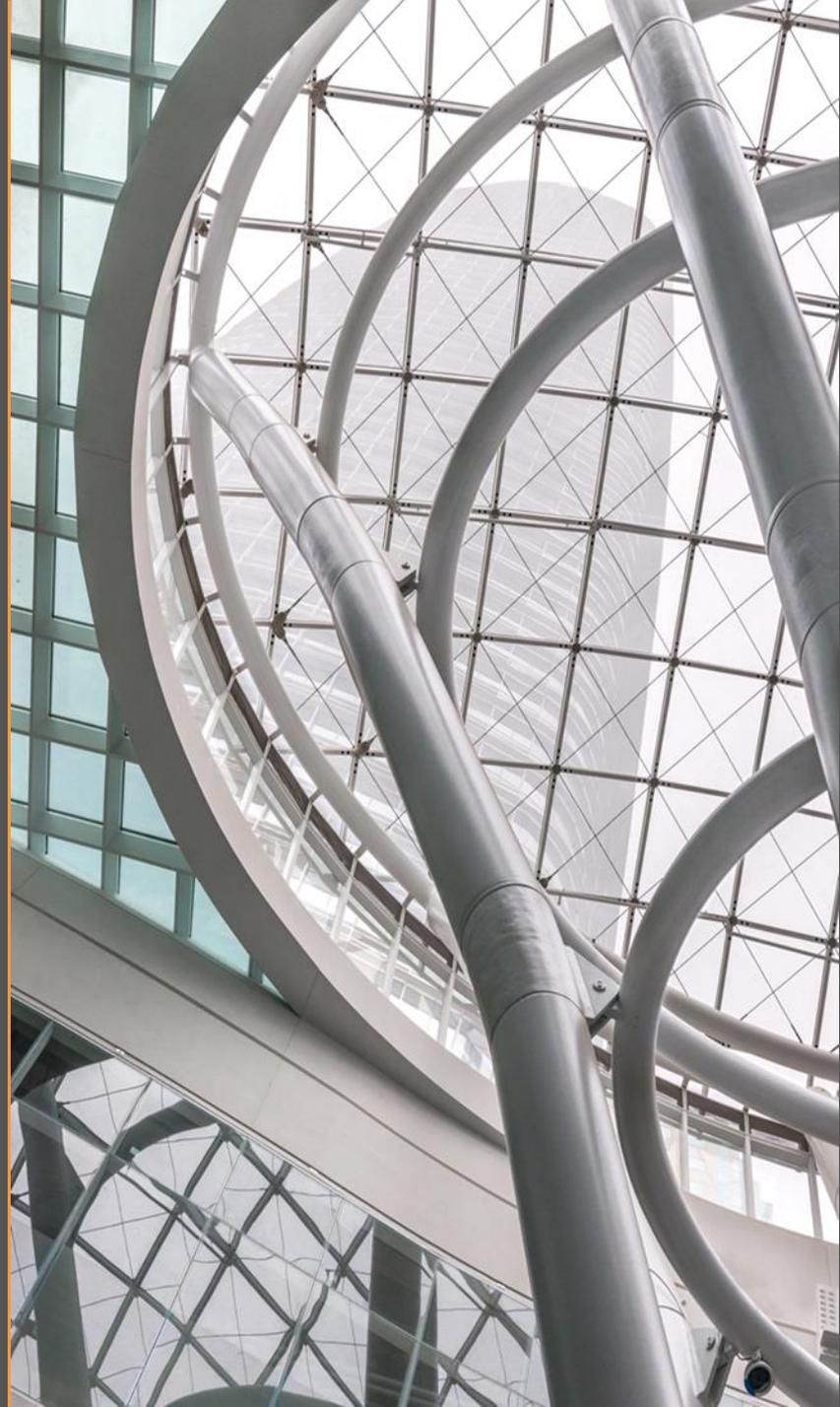


# Citizens Advisory Committee

## DTX Phasing Study

July 13, 2021



# San Francisco Peninsula Rail Program Memorandum of Understanding

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“Prepare a preferred Phasing Plan conforming with technical studies and policy direction on realistic amounts/timing of funding and stakeholder delivery date expectations - with an explicit goal to deliver rail service to the Salesforce Transit Center as soon as possible”

# Phasing Study Results Preview

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- Study purpose
- Process
- Evaluation criteria
- Phasing Study concepts and recommendations
- Costs of future implementation
- Run-thru concepts
- Summary of recommendations
- Next steps

# Phasing Study Process

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- The Integrated Program Management Team (IPMT) conducted three structured workshops and multiple technical discussions
  - Project history
  - Brainstorming of Phasing Concepts
  - Development of Evaluation Criteria
  - Supporting technical studies
  - Stakeholder discussions
  - Collaborative evaluation development

# Evaluation Criteria

## **COST AND SCHEDULE**

- Capital cost expenditure (CAPEX) deviation (escalated to 2027 \$s)
- Right-of-way
- Cost of future implementation
- Baseline Master Schedule

## **FTA NEW STARTS PROJECT JUSTIFICATION EVALUATION**

- Land use
- Economic development
- Mobility improvements
- Cost-effectiveness
- Environmental benefits
- Congestion relief

## **REGIONAL CONTEXT**

- Benefits
- Effect on regional projects
- Effect on regional significance
- Support for PBA 2050
- Effect on passengers' cost of using the service

## **ENVIRONMENTAL EFFECTS**

- Consistency with Phase 2 environmental documents
- Community Impact
- Dependency on non-environmentally cleared projects

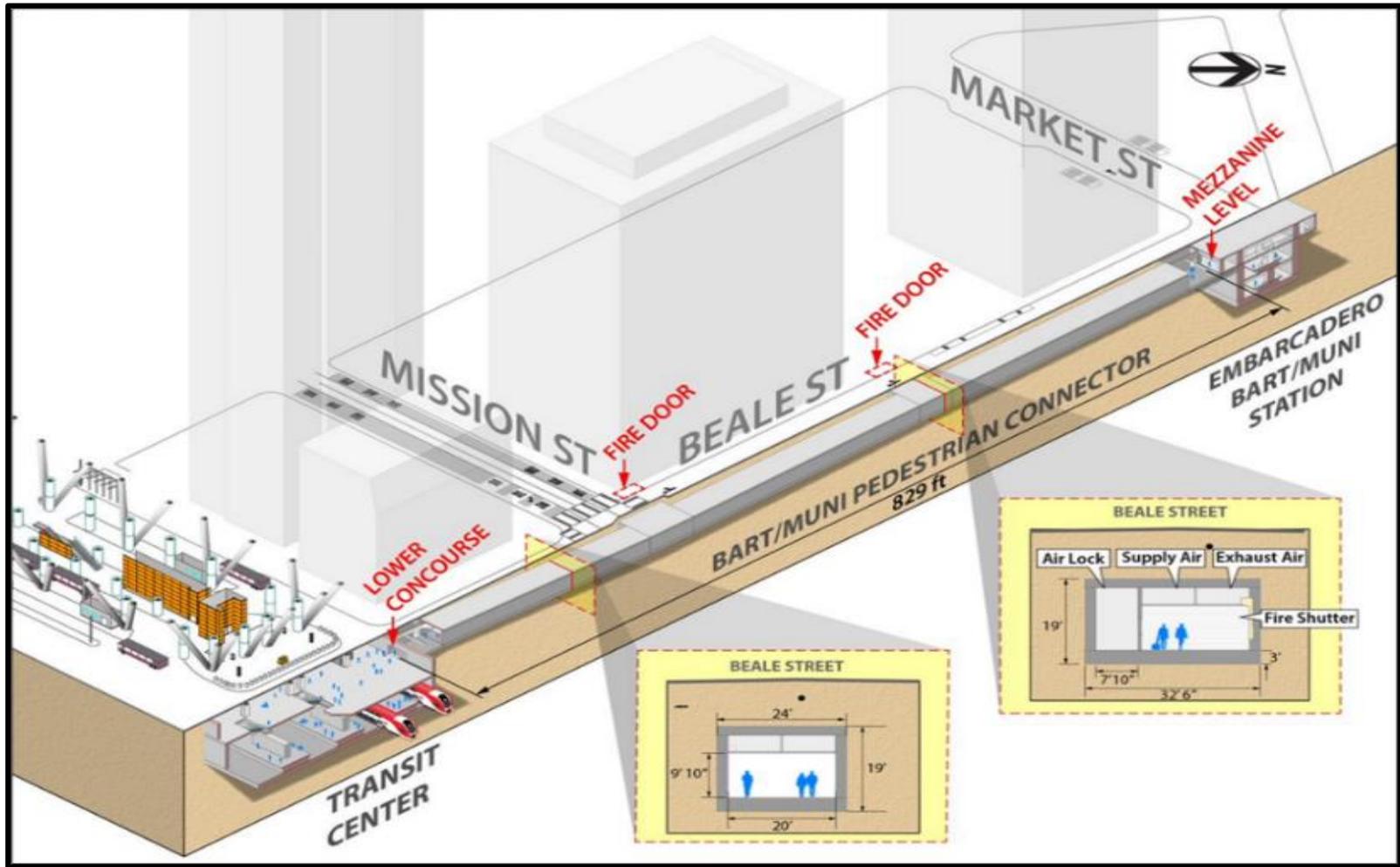
## **OPERATIONS**

- Changes to operations cost expenditure (OPEX)
- Effect on service flexibility
- Effect on operational reliability, security, safety
- Effect on future service growth
- Effect on service during future retrofit

## **MAINTENANCE**

- Changes to maintenance costs
- Effect on O&M responsibilities
- Effect on response time for repairs
- Effect on resilience

# Defer BART/Muni Pedestrian Connector



# Defer BART/Muni Pedestrian Connector

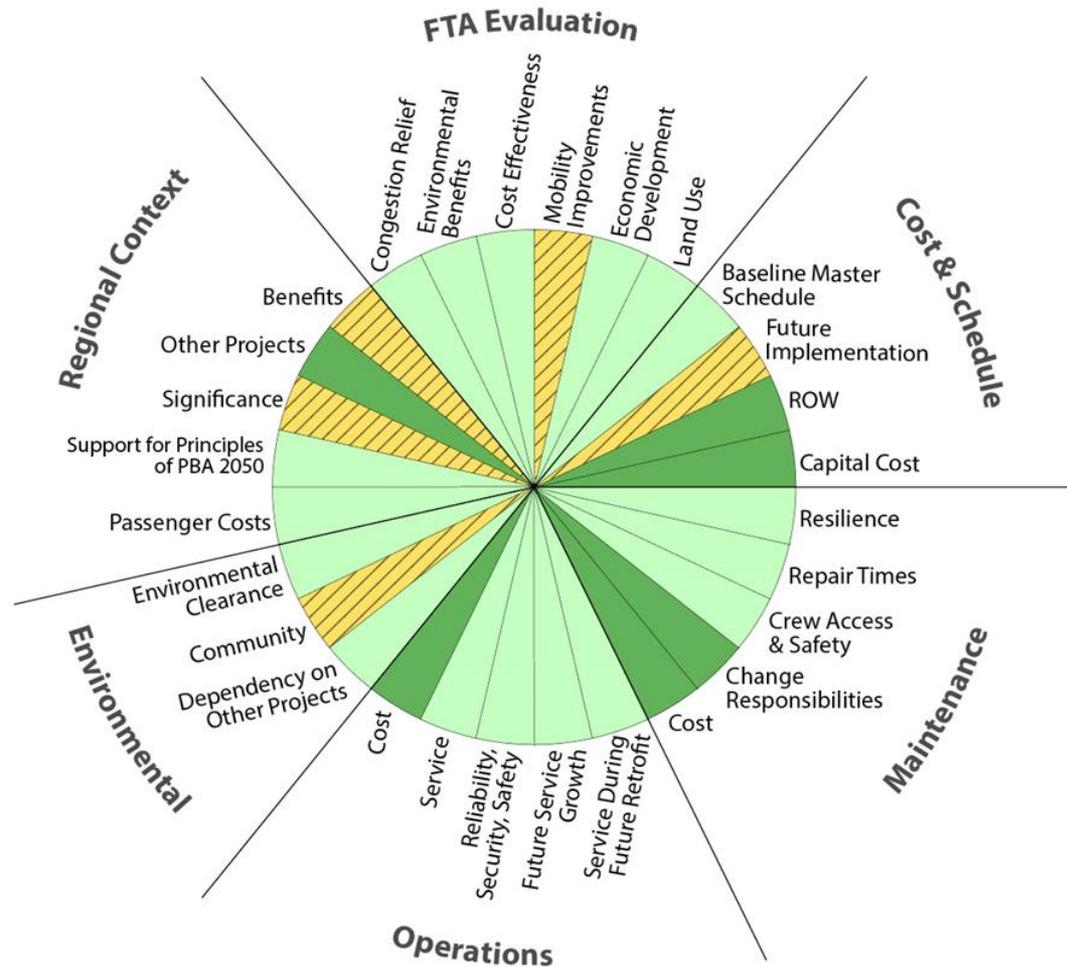
CAPEX Savings: \$228M

OPEX Savings: \$0.5M annually

IPMT Recommendation: Defer construction of the Pedestrian Connector, with reservation regarding provisions for transfers, and pedestrian way-finding and safety

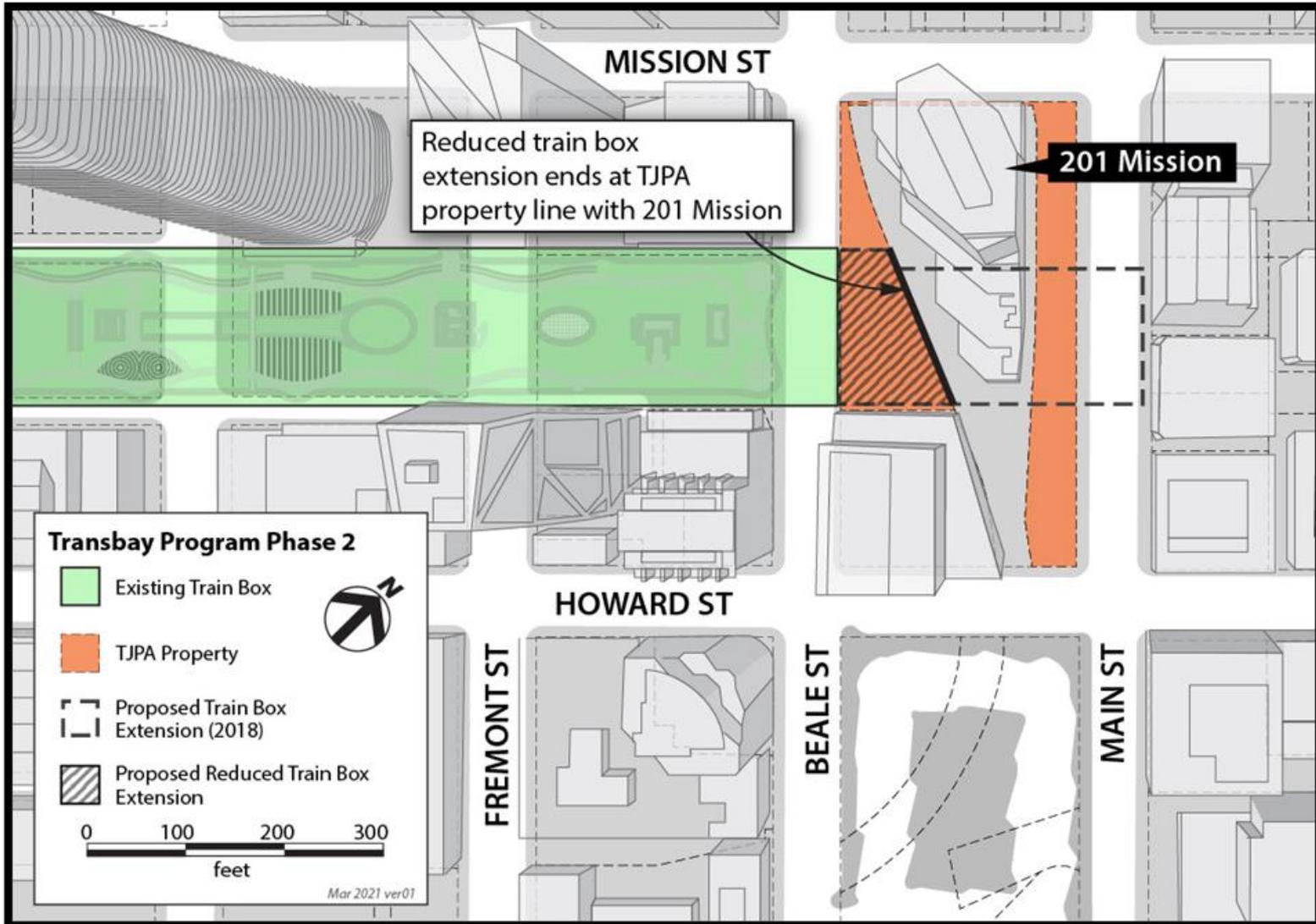
## Evaluation Key

- A positive effect by comparison to the current project
- Negative effect by comparison to the current project
- No significant positive or negative effect by comparison to the current project



Charts show majority opinions among IPMT members.

# Reduce Train Box Extension

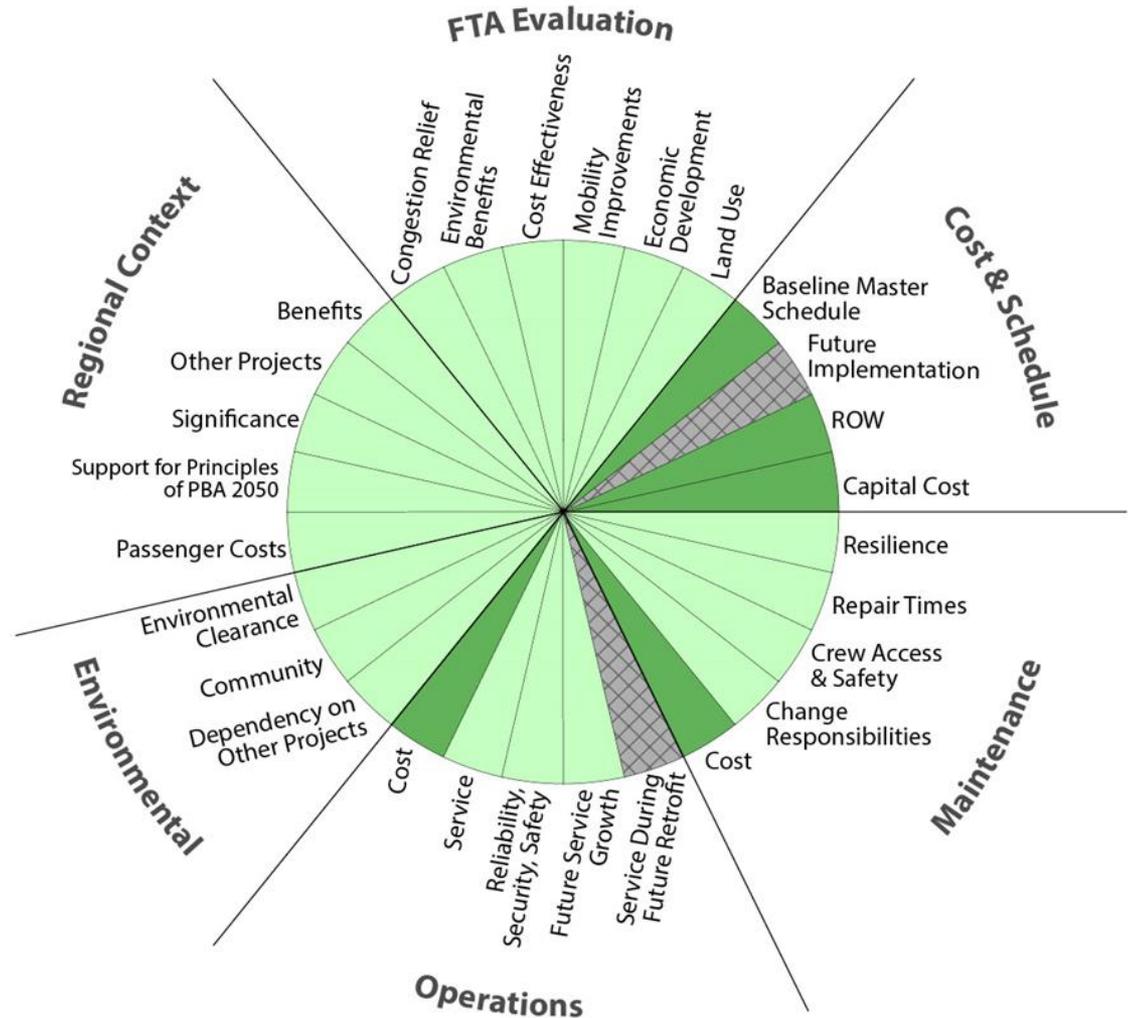


# Reduce Train Box Extension

CAPEX Savings: \$133M

OPEX Savings: \$1.7M annually

IPMT Recommendation:  
Construct the reduced train box extension



Charts show majority opinions among IPMT members.

# Defer Intercity Bus Facility



# Defer Intercity Bus Facility

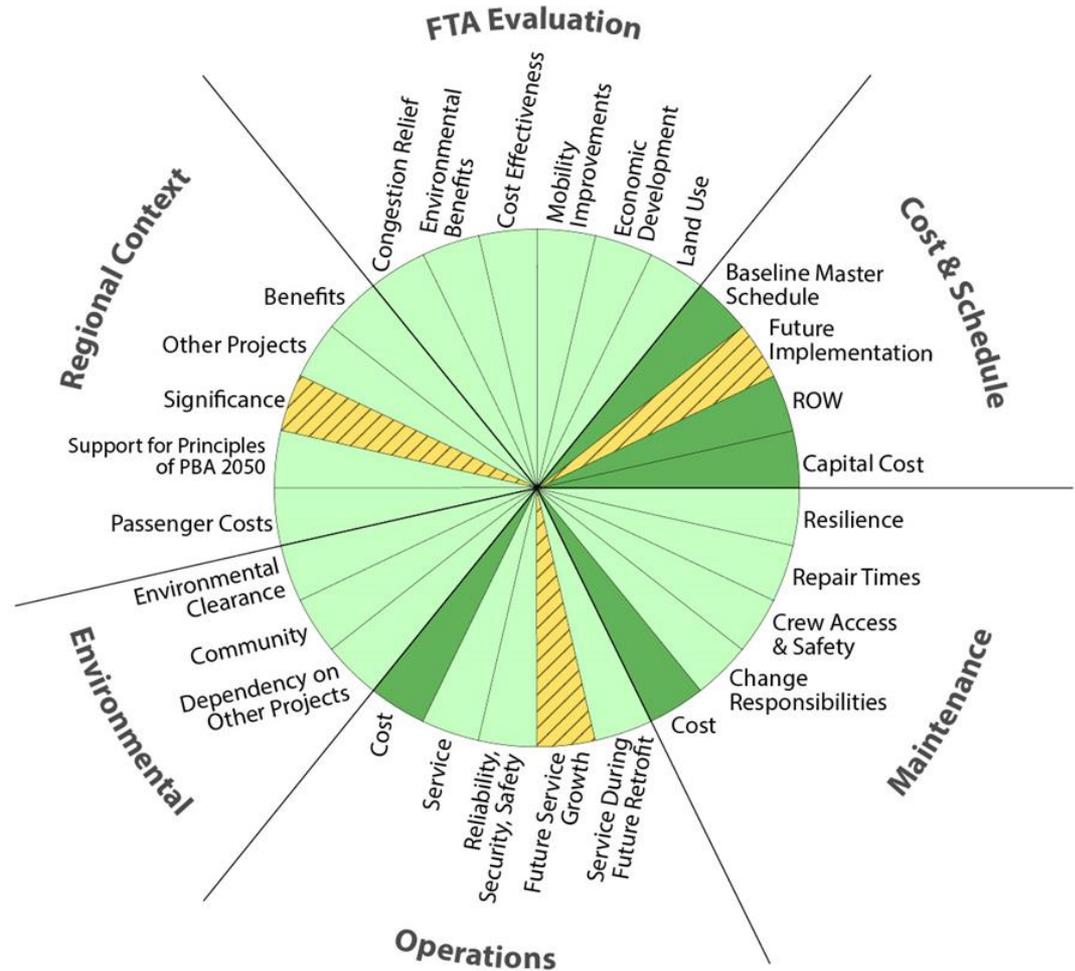
CAPEX Savings: \$40M

OPEX Savings: \$0.6 annually

IPMT Recommendation:  
Defer construction of the Intercity Bus Facility, and monitor changes in bus ridership

## Evaluation Key

- A positive effect by comparison to the current project
- Negative effect by comparison to the current project
- No significant positive or negative effect by comparison to the current project



Charts show majority opinions among IPMT members.

# Reduce Intercity Bus Facility



# Reduce Intercity Bus Facility

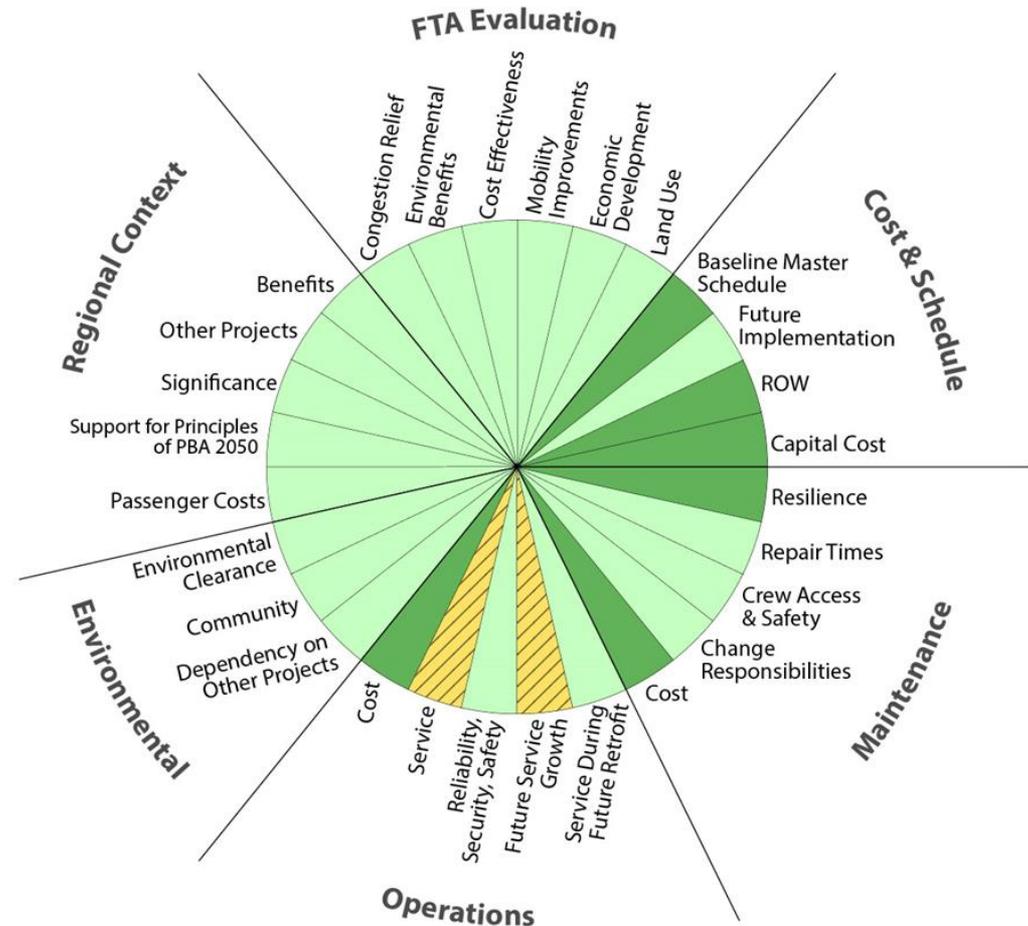
CAPEX Savings: \$31M

OPEX Savings: \$0.5 annually

IPMT Recommendation  
Defer construction of the Intercity Bus Facility, and monitor changes in bus ridership

## Evaluation Key

- A positive effect by comparison to the current project
- Negative effect by comparison to the current project
- No significant positive or negative effect by comparison to the current project



Charts show majority opinions among IPMT members.

# Defer Fit-out of Fourth and Townsend Street Station

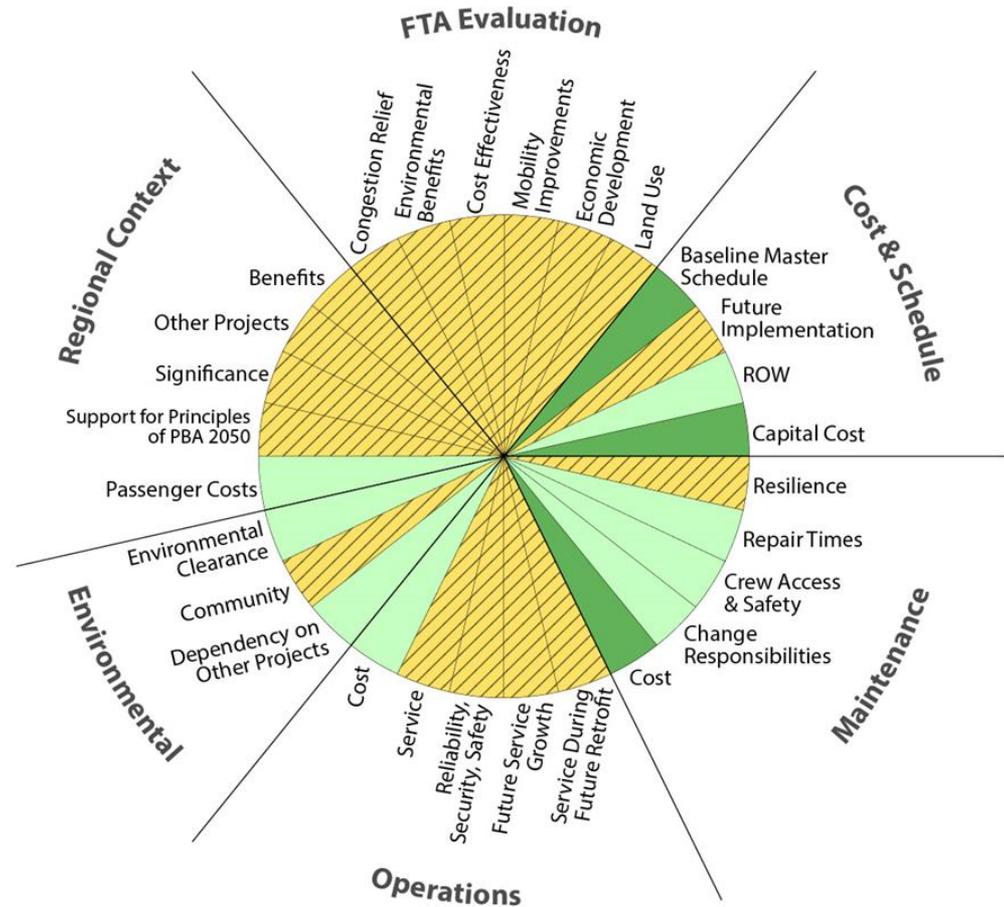
CAPEX Savings: \$29M

OPEX Savings: \$1.0 annually

IPMT Recommendation:  
Do not defer fit-out of the Fourth and Townsend Street Station

## Evaluation Key

- A positive effect by comparison to the current project
- Negative effect by comparison to the current project
- No significant positive or negative effect by comparison to the current project



Charts show majority opinions among IPMT members.

# Defer Fit-out of CHSRA-related Elements

6 Caltrain / 0 CHSRA

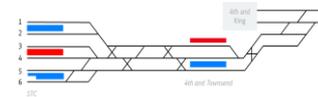
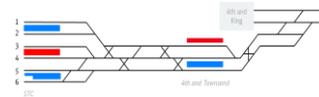
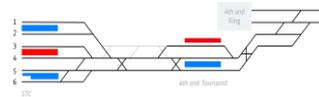
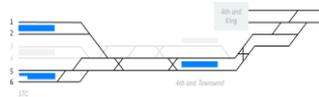
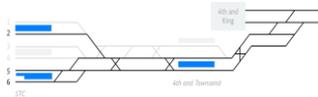
8 Caltrain / 0 CHSRA

6 Caltrain / 2 CHSRA

6 Caltrain / 4 CHSRA

8 Caltrain /  
2 or 4 CHSRA

Concept A



STC Platform Tracks: 3  
Tunnel Tracks: 2  
4T Platform Tracks: 2

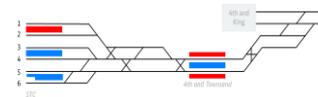
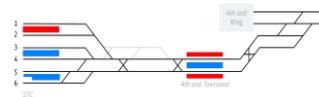
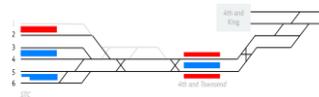
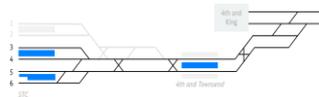
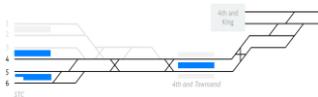
4  
2  
2

6  
2  
3

6  
3  
3

6  
3  
3

Concept B



STC Platform Tracks: 3  
Tunnel Tracks: 2  
4T Platform Tracks: 2

4  
2  
2

5  
2  
2

6  
2  
2

6  
3  
2

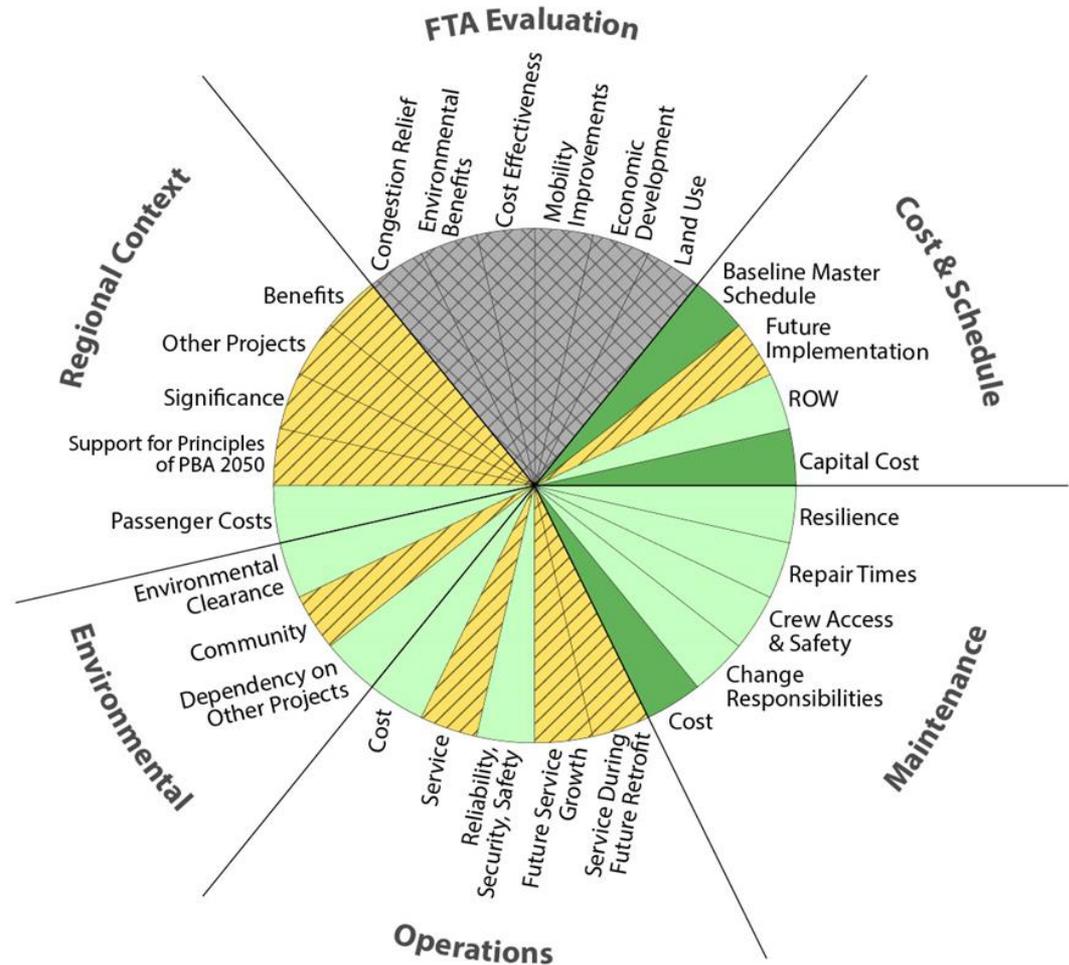
CHSRA platform Caltrain platform

# Defer Fit-out of CHSRA-related Elements

CAPEX Savings: \$38M

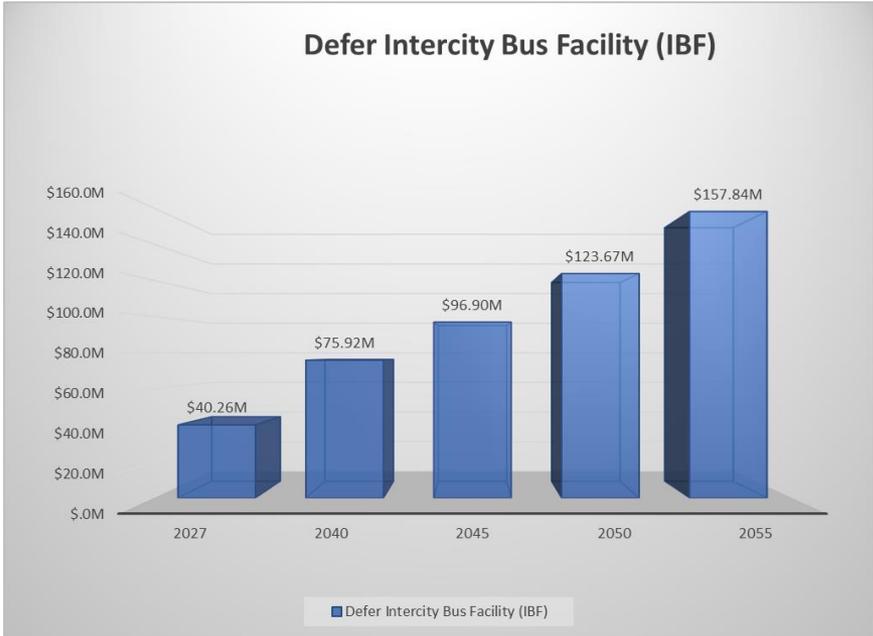
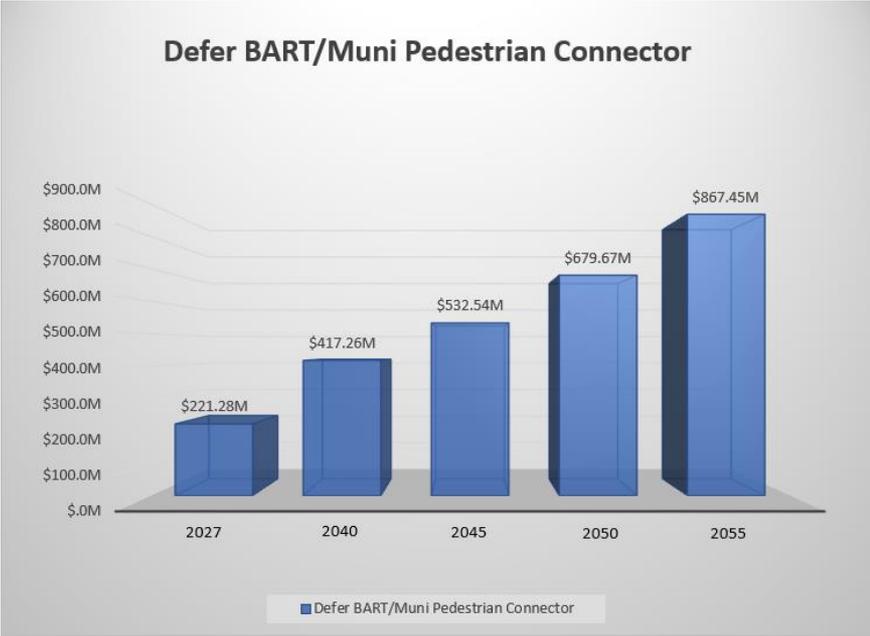
OPEX Savings: \$1.6M annually

IPMT Recommendation: Do not defer fit-out of CHSRA-related elements.

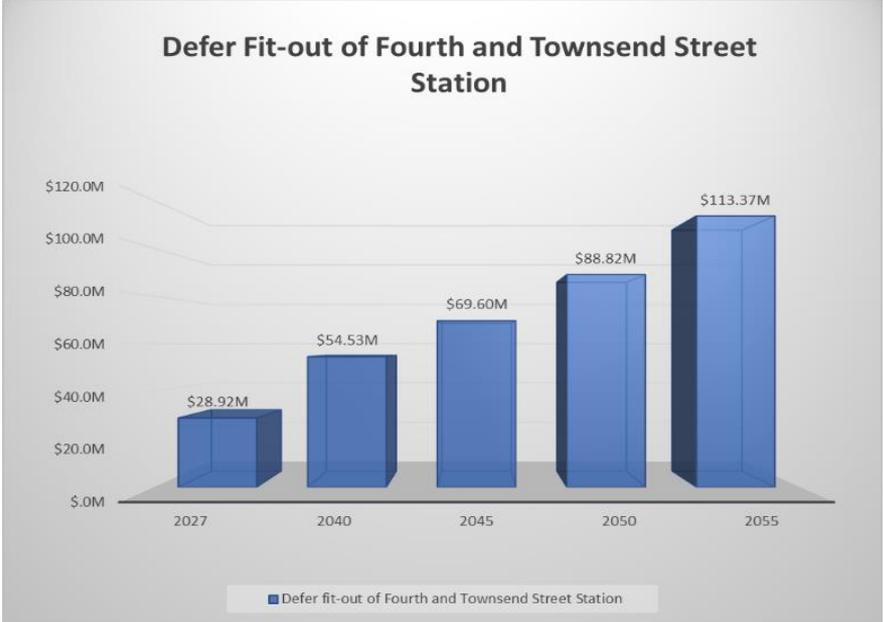
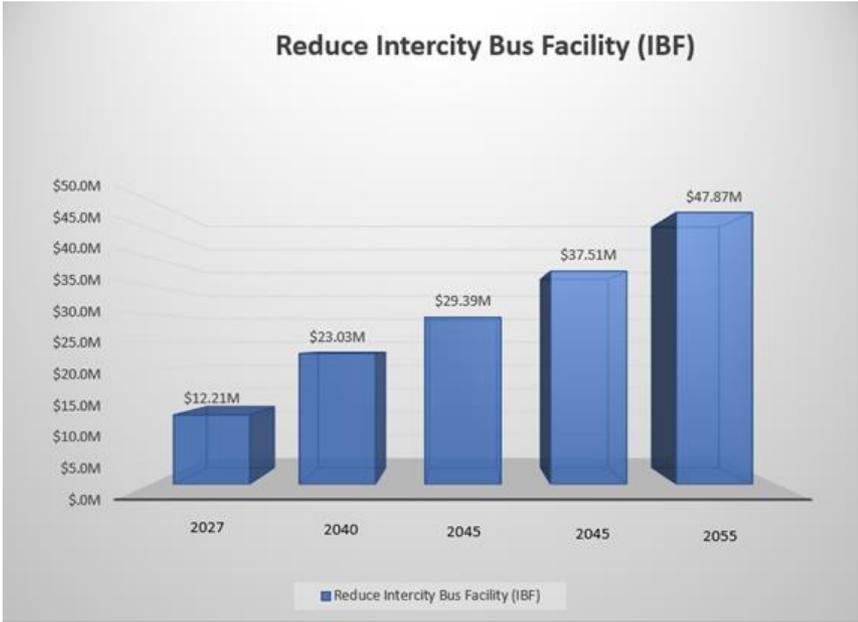


Charts show majority opinions among IPMT members.

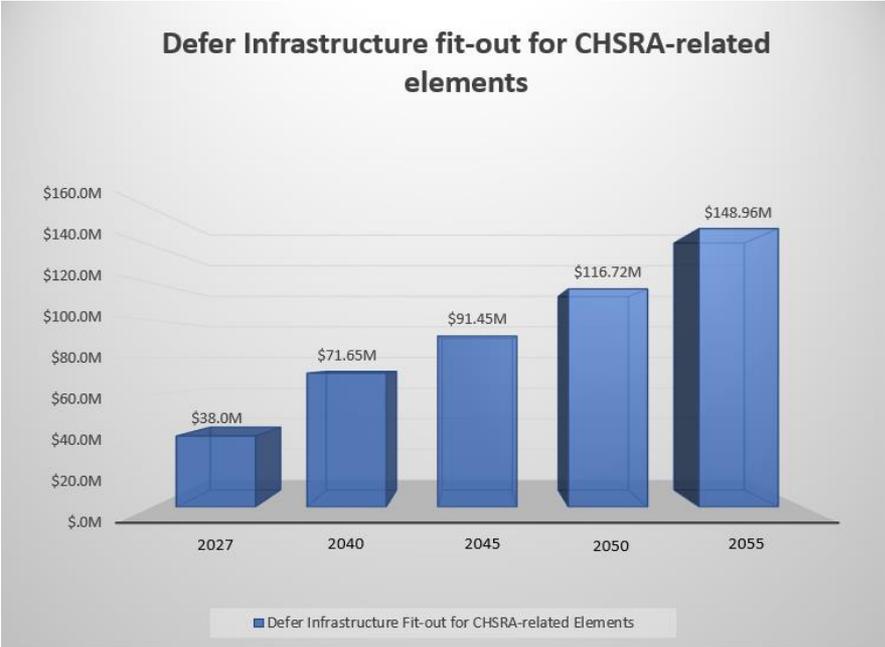
# Cost of Future Implementation



# Cost of Future Implementation



# Cost of Future Implementation



# Run-thru Options

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- Two track DTX with tail tracks
- Two track DTX with Loop track
  - Intent was to determine if added storage, staging and run-through could cost less than three track DTX
  - Cost exceeded three track baseline DTX
- Link21 Connection
  - Sketch level planning modeling scope in development
  - Intent is to inform ultimate capacity of DTX and the Transit Center
  - Link21 Team coordination on-going

# Summary of IPMT Recommendations

Deferral Concept	CAPEX Savings (2027 \$)	Annual OPEX Savings	IPMT Recommendation
Defer BART/Muni Ped Connector	\$228M	\$0.5	Defer Construction
Construct Reduced Train Box Extension	\$133M	\$1.7	Construct Reduced Train Box
Defer Intercity Bus Facility (Full facility and Reduced facility savings are not additive)	\$40M	\$0.6	Defer Construction
Construct Reduced Intercity Bus Facility	<del>\$31M</del>	<del>\$0.5</del>	Defer Construction
Defer fit-out of Fourth and Townsend Street Station	<del>\$29M</del>	<del>\$1.0</del>	Do not defer
Defer fit-out of CHSRA-related elements	<del>\$38M</del>	<del>\$1.6</del>	Do not defer
<b>SAVINGS FOR IPMT DEFER RECOMMENDATIONS</b>	<b>\$401M</b>	<b>\$2.8M</b>	



# Next Steps & Questions