



# TVSJVRRRA BOARD MEETING SEPTEMBER 9, 2020

## REVISED RIDERSHIP FORECASTS AND CONCEPTUAL COST ESTIMATE





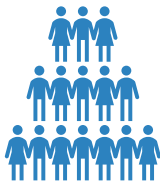
# REVISED RIDERSHIP FORECASTS

# OVERVIEW

1. Travel Time Savings due to 15% design revisions
2. Reduced Headways in Mid-Day



**-7 MINUTES**



**+6,800 WEEKDAY RIDERS**



# RIDERSHIP ASSUMPTIONS

- Valley Link
  - Phase 1 to North Lathrop
  - IOS to Greenville / Southfront or Mountain House
- ACE
  - Implementation of extension to Sacramento and Ceres/Merced
  - Shared North Lathrop Station
- BART
  - Operates at 12-minute weekday period headways when Valley Link enters service
  - 12-minute weekday headways still in effect in 2040
  - Transfers at Dublin/Pleasanton will range 3-6 minutes

# RIDERSHIP COMPARISON

	2025		2040
	Mountain House IOS	Full Route	Full Route
Updated Total Weekday Ridership (Total Boardings)	11,100* <b>+34%</b>	13,400* <b>+23%</b>	33,000* <b>+26%</b>
Prior Total Weekday Ridership (Total Boardings)	8,200	10,900	26,200

*\*scenario includes Southfront Station rather than Greenville Station*



# UPDATED RIDERSHIP OVERVIEW

	2025		2040
	Mountain House IOS*	Full Route*	Full Route*
Total Weekday Ridership (Total Boardings)	11,100	13,400	33,000
One-way Trips (Inbound SJ Co → Tri Valley)	5,550	6,700	16,500
Alightings at BART Dublin/Pleasanton	- Daily	5,400	16,100
	- Peak	3,800	11,500
BART Transfers in each direction Peak Period	3,400	4,100	10,700

\*scenario includes Southfront Station rather than Greenville Station



# MOUNTAIN HOUSE IOS 2025

**3,800** Valley Link alightings at D/P during the weekday peak period

**“Mountain House” trains (15 each peak period)**



**260** riders on each peak-period Valley Link train



**40%** of capacity of a 6-car MU train that can hold 642 riders

**3,400** Valley Link to BART transfers during the weekday peak period



**900** Transfers of New BART riders during the weekday peak period

**Transfers from “Mountain House” VL trains (15 trains each peak period)**



**230** of Valley Link riders on each peak-period “Mountain House” train would transfer to BART



**60** of them would be new BART riders



**5%** of capacity of a 10-car BART train

# UPDATED RIDERSHIP OVERVIEW

	2025		2040
	Mountain House IOS*	Full Route*	Full Route*
Total Weekday Ridership (Total Boardings)	11,100	13,400	33,000
One-way Trips (Inbound SJ Co → Tri Valley)	5,550	6,700	16,500
Alightings at BART Dublin/Pleasanton	- Daily	5,400	16,100
	- Peak	3,800	11,500
BART Transfers in each direction Peak Period	3,400	4,100	10,700

\*scenario includes Southfront Station rather than Greenville Station





# PHASE 1 TO NORTH LATHROP 2025

**4,600** Valley Link alightings at  
Dublin/Pleasanton during the weekday peak period

**78%** of total peak-period ridership would occur on  
San Joaquin Valley “full route” trains

**22%** of total peak-period ridership would occur on  
“Mountain House” trains

## “Full route” trains (8 trains each peak period)



**3,600** riders on  
San Joaquin Valley  
“full route” trains



**450** riders on each  
“full route” peak-period train



**71%** of capacity of  
a 6-car MU train that  
can hold 642 riders

## “Mountain House” trains (7 trains each peak period)



**1,000** riders on  
“Mountain House” trains



**140** riders on each peak-  
period “Mountain House” train



**22%** of capacity of a  
6-car MU train that can  
hold 642 riders



# PHASE 1 TO NORTH LATHROP 2025

**4,100** Valley Link transfers to BART during the weekday peak period      **3,000** Transfers of New BART riders during the weekday peak period

**78%** of total peak-period ridership would occur on San Joaquin Valley “full route” trains

**22%** of total peak-period ridership would occur on “Mountain House” trains

→ **3,200** transfers to/from “full route” peak-period trains

→ **900** transfers to/from peak-period “Mountain House” trains

## Transfers from “Full route” VL trains (8 trains each peak period)



**400** of Valley Link riders on each San Joaquin “full route” peak-period train would transfer to BART



**300** of them would be new BART riders



**25%** of capacity of a 10-car BART train

## Transfers from “Mountain House” VL trains (7 trains each peak period)



**130** of Valley Link riders on each peak-period “Mountain House” train would transfer to BART



**90** of them would be new BART riders



**8%** of capacity of a 10-car BART train



# UPDATED RIDERSHIP OVERVIEW

	2025		2040
	Mountain House IOS*	Full Route*	Full Route*
Total Weekday Ridership (Total Boardings)	11,100	13,400	33,000
One-way Trips (Inbound SJ Co → Tri Valley)	5,550	6,700	16,500
Alightings at BART Dublin/Pleasanton	- Daily	5,400	16,100
	- Peak	3,800	11,500
BART Transfers in each direction Peak Period	3,400	4,100	10,700

\*scenario includes Southfront Station rather than Greenville Station



# PHASE 1 TO NORTH LATHROP 2040

**11,500** Valley Link alightings at  
Dublin/Pleasanton during the weekday peak period

**“Full route” trains (15 each peak period)**



**770** riders on each peak-period  
Valley Link train



**80%** of capacity of a 9-car MU  
train that can hold 963 riders

**10,700** Valley Link to BART  
transfers during the peak period



**6,200** Transfers of New BART  
riders during the peak period

**Transfers from “Full route” VL trains (15 trains each peak period)**



**710** of Valley Link riders on each  
San Joaquin “full route” peak-period  
train would transfer to BART



**410** of them would  
be new BART riders



**34%** of capacity of  
a 10-car BART train



# TRAINSET CAPACITY UTILIZATION SUMMARY

	2025		2040
	Mountain House IOS*	Full Route*	Full Route*
<b>Total Daily Ridership</b>	11,100	13,400	33,000
<b>One-way Trips (Inbound SJ Co → Tri Valley)</b>	5,550	6,700	16,500
<b>Alightings at D/P in the Peak Period</b>	3,800	4,600	11,500
<b>Riders per Peak-Period “Mountain House” Train</b>	260 40% of 6-car VL Train	140 22% of 6-car VL Train	—
<b>Riders per Peak-Period “Full Route” Train</b>	—	450 71% of 6-car VL Train	770 80% of 9-car VL Train
<b>Peak-Period VL to BART Transfers</b>	3,400	4,100	10,700
<b>New BART riders per Peak-Period “Mountain House” Train</b>	60 5% of 10-car BART Train	90 8% of 10-car BART Train	—
<b>New BART riders per Peak-Period “Full Route” Train</b>	—	300 25% of 10-car BART Train	410 34% of 10-car BART Train

# INCREMENTAL NEW RIDERS BY BART STATION

All other stations  
23 / 117 / 162

Embarcadero  
12 / 63 / 78

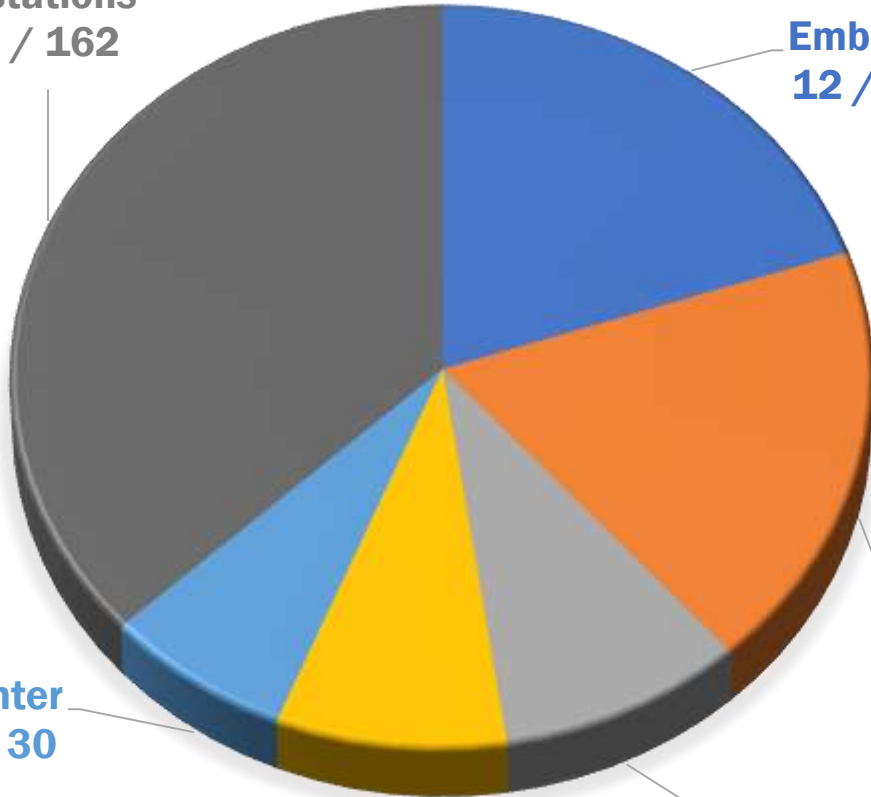
Incremental new riders per  
peak-period train, by station  
Approx. 60 new riders per “IOS” train /  
2025 300 new riders per “full route” train /  
2040 410 new riders per “full route” train /

Montgomery  
11 / 59 / 74

Civic Center  
5 / 22 / 30

12th St Oakland  
5 / 27 / 32

Lake Merritt  
5 / 29 / 39





# QUESTIONS



# CONCEPTUAL COST ESTIMATE

(2018 DOLLARS – FULL BUILDOUT TO NORTH LATHROP  
WITH 2040 RIDERSHIP)





# -7 MINUTES

---

1. Sidings
2. Vehicles
3. OMF



# CAPITAL COST ESTIMATES

## 2019 Capital Cost Estimate

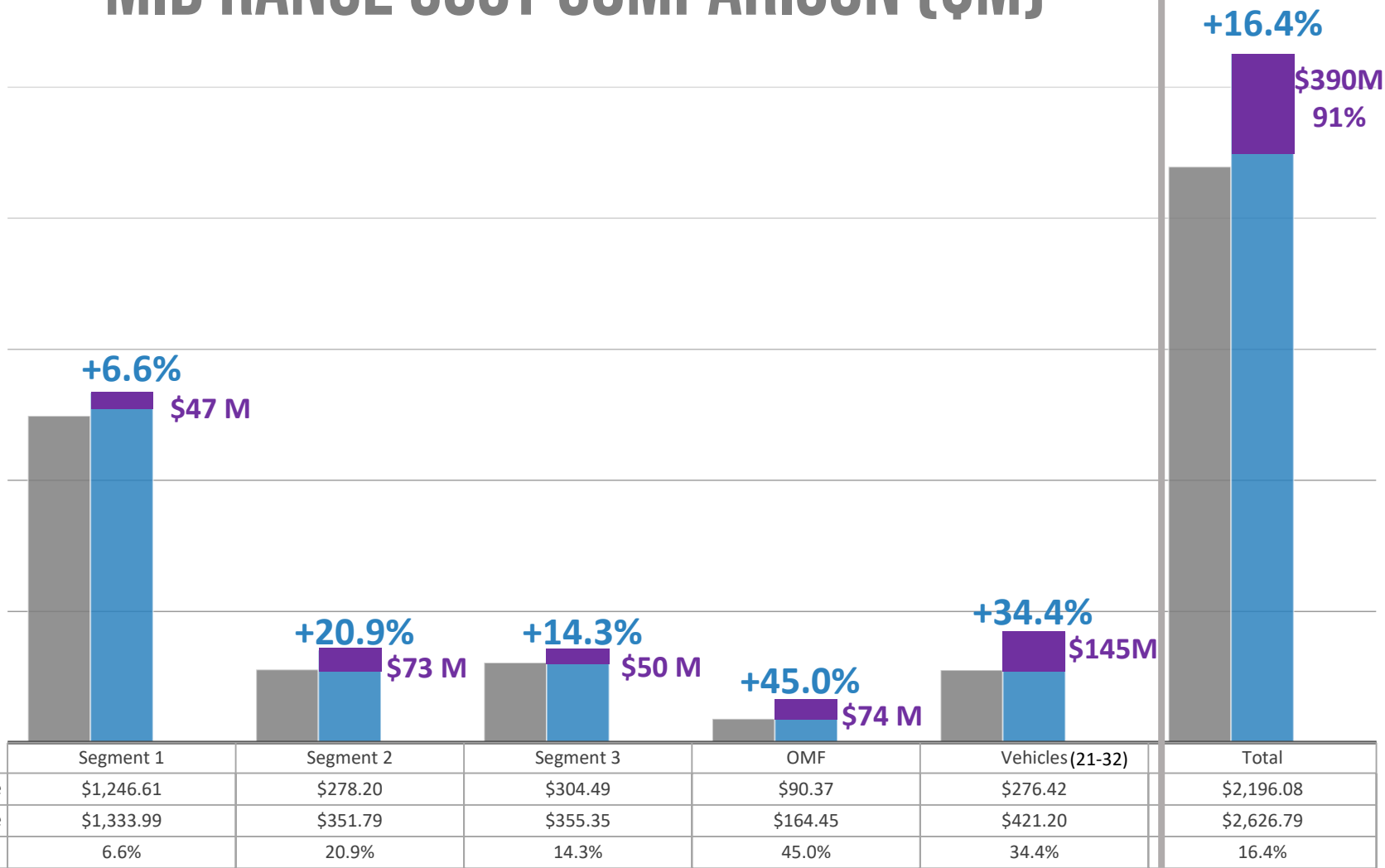
Project	Low Range Cost (FY18)	Mid Range Cost (FY18)	High Range Cost (FY18)
Phase 1: D/P to North Lathrop	\$1.88 B	\$2.20 B	\$2.51 B

## 2020 Capital Cost Estimate

Project	Low Range Cost (FY18)	Mid Range Cost (FY18)	High Range Cost (FY18)
Phase 1: D/P to North Lathrop	\$2.33 B	\$2.63 B	\$2.92 B



# MID RANGE COST COMPARISON (\$M)



■ 2019 Mid Range   ■ 2020 Mid Range   ■ Pct Delta



# COST VARIANTS

- Costs Variants (Mid Range)
  - EMU (Added Cost \$281 M)
    - Added cost for each vehicle \$2.25 M
    - \$72 M for 32 Vehicles
    - Added cost of OCS \$209 M
  - Full double track
    - Total - \$3.9 B
    - Incremental Increase \$1.3 B

# PLAN BAY AREA COST SUBMITTAL

## Alameda County Portion (FY18) - \$1.93 B

- Alignment from D/P BART to County Line - \$1,581 M
- Vehicles (64% based on portion of length in Alameda County) - \$270 M
- OMF (50% of the total facility cost) - \$82 M

## Alameda County Portion (FY24) - \$2.34 B





# QUESTIONS