

# Bay Bridge Forward I-80 Projects

West Contra Costa Transportation Commission Board Meeting

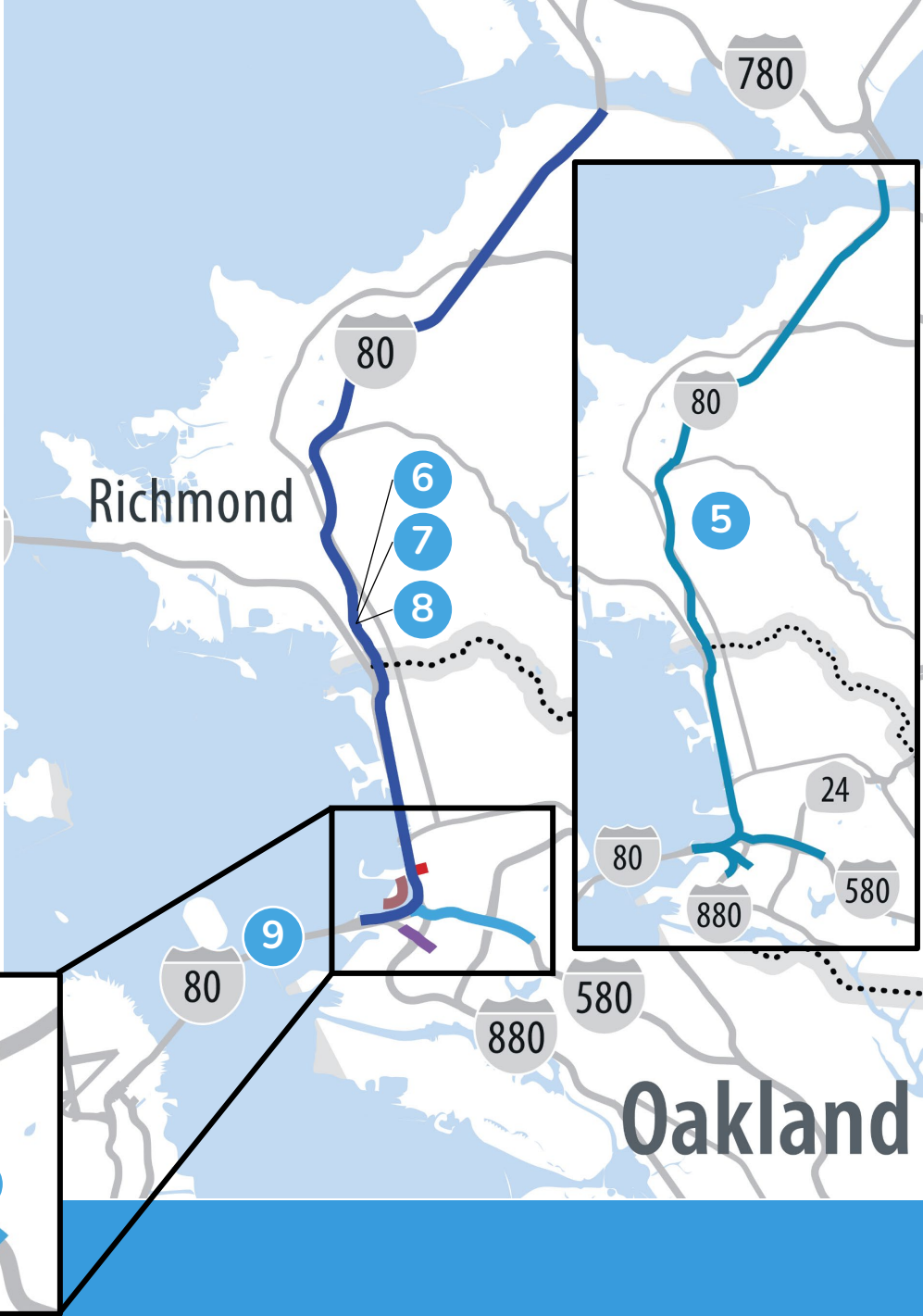


June 27, 2025



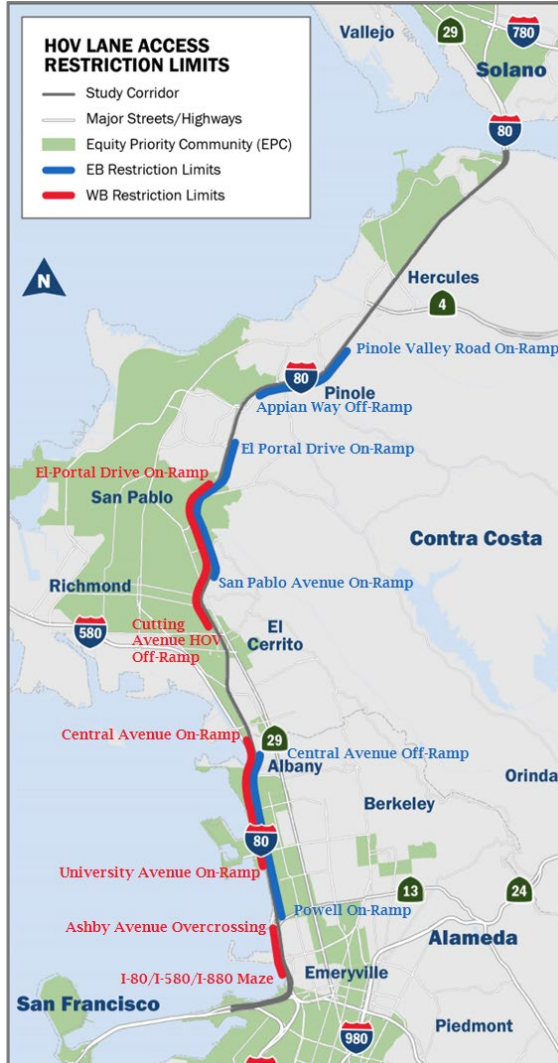
# Bay Bridge Forward

| # | Bay Bridge Forward                                  | Phase        | Opening Year |
|---|---|--------------|--------------|
| 1 | West Grand Bus/HOV Lane Extension                   | Final Design | 2027         |
| 2 | I-580 Westbound HOV Lane Extension                  | Final Design | 2026         |
| 3 | I-80 Powell Street Interchange Transit Improvements | Final Design | 2026         |
| 4 | I-80 Westbound Bus/HOV Lane Project                 | Planning     | TBD          |
| 5 | I-80, Bay Bridge, & Carquinez Bridge HOV Hours      | Planning     | 2027         |
| 6 | I-80 HOV Lane Access Restrictions                   | Planning     | 2028         |
| 7 | I-80 Localized Transit Priority                     | Planning     | 2028         |
| 8 | I-80 Bus on Shoulder Feasibility Study              | Planning     | TBD          |
| 9 | Smart Transbay Transit                              | Planning     | 2026/2027    |

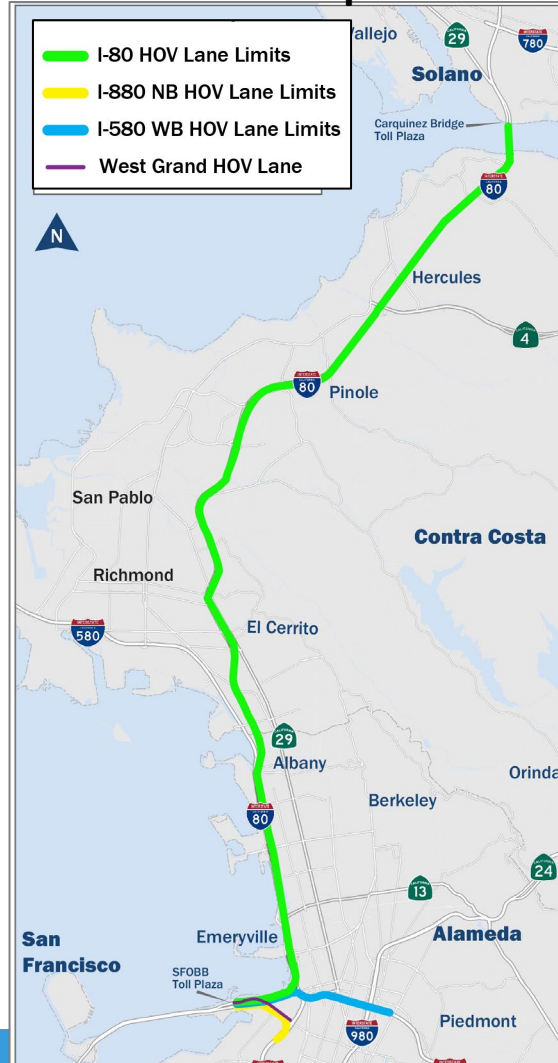


# I-80 Corridor Projects in Planning

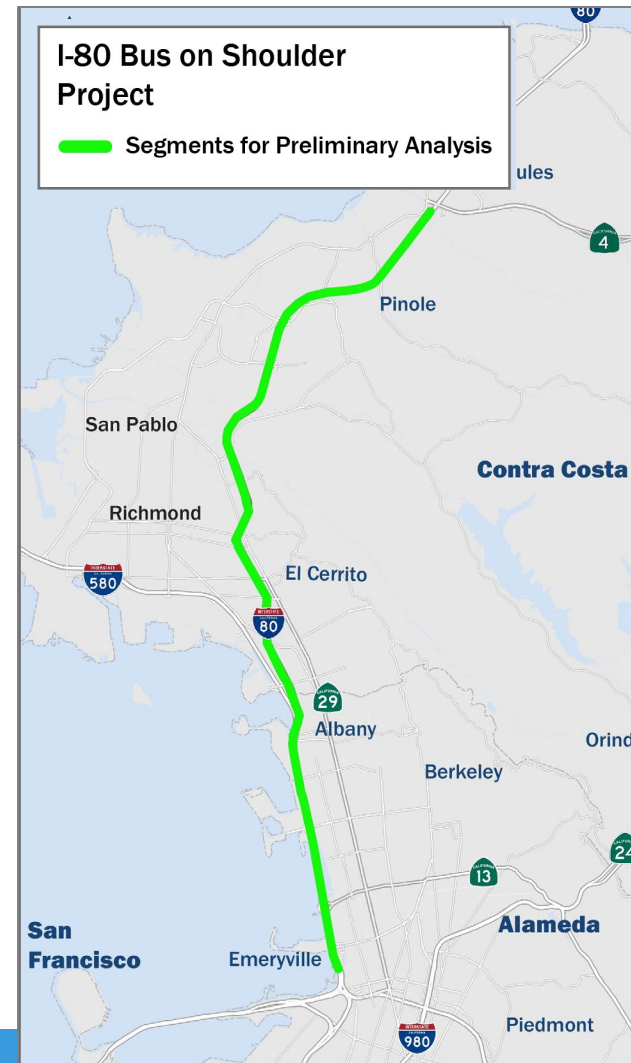
## I-80 HOV Lane Access Restrictions Project\*



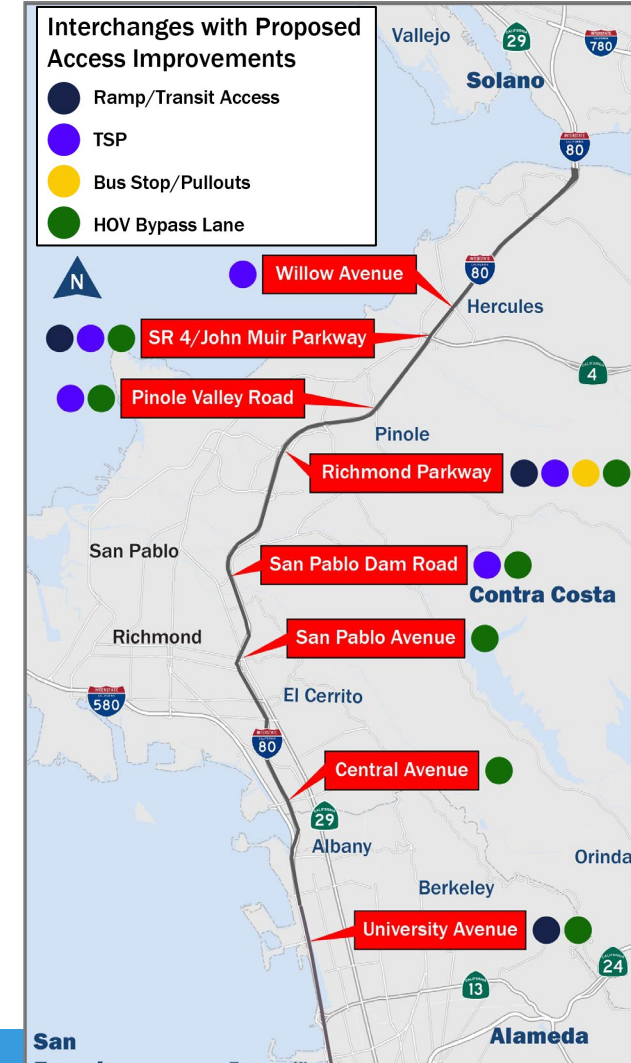
## I-80, Bay Bridge, & Carquinez Bridge HOV Hours of Operation



## I-80 Bus on Shoulder Feasibility Study



## I-80 Localized Transit Priority/HOV Strategies



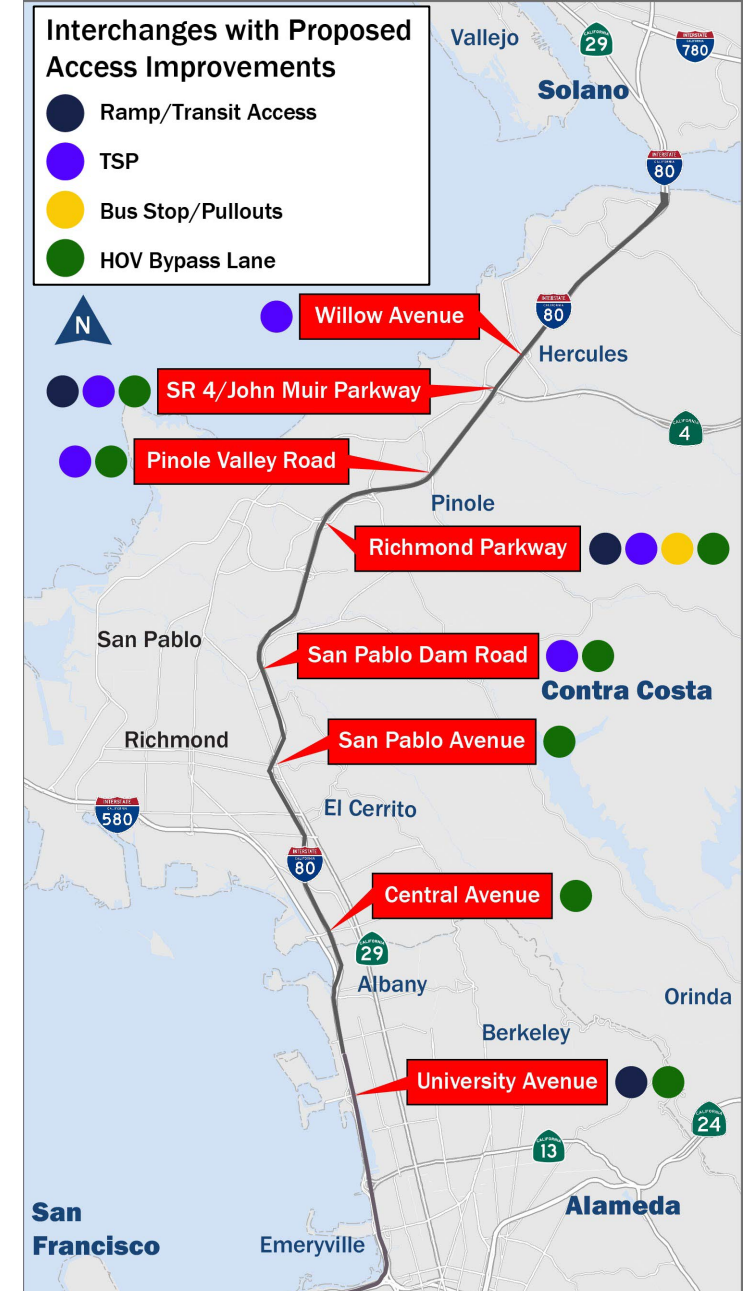


# Localized Transit Priority / HOV Strategies











# I-80 Localized Transit Priority/HOV Strategies Project

Evaluate, prioritize, and design transit priority / HOV improvements at eight on-ramps



# Summary

| #  | Name             | Improvement   | HOV Savings<br>(passenger-minutes) | Transit Savings<br>(passenger-minutes) | Total Passenger Minutes Saved | Cost (2025 \$) | Cost/passenger minute saved | EPC | Return on Investment  |
|----|------------------|---|------------------------------------|--|-------------------------------|----------------|-----------------------------|-----|---|
| 1  | Willow Ave       | - Transit Signal Priority   | --                                 | 12                                     | 12                            | \$0.13M        | \$10,800                    | ✓   |    |
| 2  | John Muir Pkwy   | - Ramp Widening<br>- HOV Lane extension                                       | 1,767                              | 115                                    | 1,882                         | \$2.32M        | \$1,200                     | --  |    |
| 3  | Pinole Valley Rd | - Transit Signal Priority<br>- GP Ramp lane to HOV                            | 417                                | 21                                     | 438                           | \$0.755M       | \$1,700                     | --  |    |
| 4B | Richmond Pkwy    | - Transit Signal Priority<br>- Bus stop pullout<br>- Ramp reconfiguration     | 598                                | 40                                     | 638                           | \$4.74M        | \$7,400                     | ✓   |    |
| 4C | Richmond Pkwy    | - Transit Signal Priority<br>- Ramp reconfiguration                           | 598                                | 6                                      | 605                           | \$2.76M        | \$4,560                     | ✓   |    |
| 6B | San Pablo Ave    | - GP Ramp lane to HOV   | 190                                | --                                     | 190                           | \$0.125M       | \$700                       | --  |    |
| 7  | Central Ave      | - GP Ramp lane to HOV   | 147                                | --                                     | 147                           | \$0.145M       | \$1,000                     | ✓   |    |
| 8B | University Ave   | - Switch GP and HOV lane<br>- Convert portion of shoulder to extend HOV lane. | 272                                | 67                                     | 339                           | \$0.875M       | \$2,600                     | ✓   |  |

1. All Travel Time Savings are per peak hour
2. HOV savings based on 3 pax/veh
3. Transit ridership data from Spring 2024
4. Location 5 was removed from further consideration due to engineering infeasibility per Caltrans

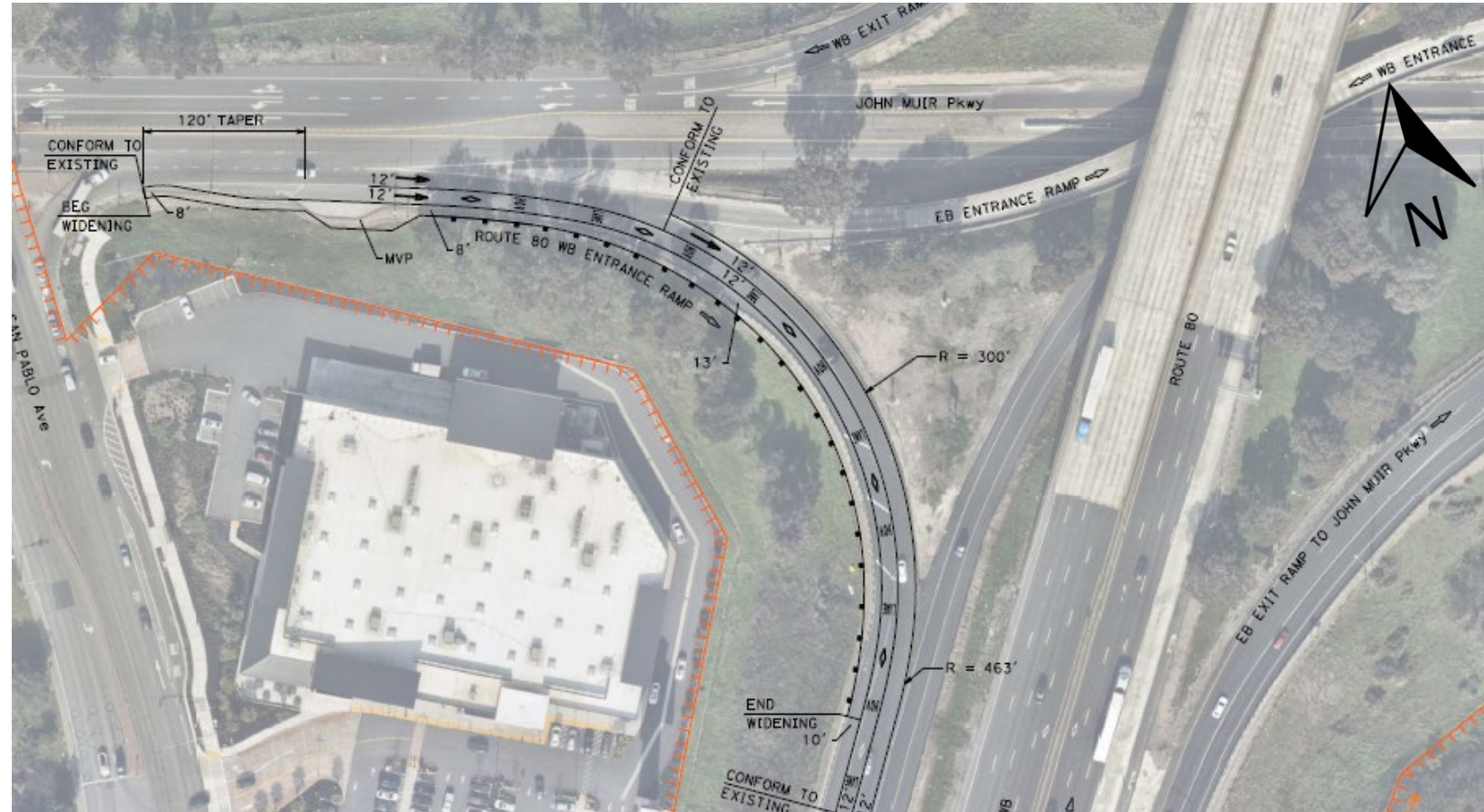
# Recommendations

| Project Location           | Cost (Construction Year 2028) | Return on \$ | EPC | Preliminary Recommendation  |
|----------------------------|-------------------------------|--------------|-----|---|
| 2 – John Muir Parkway/SR 4 | \$2.94M                       | High         | --  | Advance   |
| 6B – San Pablo Ave         | \$0.16M                       | High         | --  | Advance   |
| 7 – Central Avenue         | \$0.185M                      | High         | ✓   | Advance   |
| 3 – Pinole Valley Rd       | \$0.955M                      | Med-High     | --  | Advance   |
| 8B – University Ave        | \$1.11M                       | Medium       | ✓   | Advance   |
| 4C – Richmond Parkway      | \$3.13M                       | Medium       | ✓   | Advance   |
| 1 – Willow Avenue          | \$0.16M                       | Low          | ✓   | Potentially advance as part of other TSP projects                 |
| 4B – Richmond Parkway      | \$5.95M                       | Low          | ✓   | Retire in favor of 4C (no new transit stop/retaining wall)        |
| 5 – San Pablo Dam Rd       | --                            | --           | --  | Retired; Pedestrian island and TSP incorporated into CCTA project |

# Location 2: SR-4/John Muir Parkway

Hercules, CA

|                             |  |
|-----------------------------|--|
| Proposed Improvements       | Extend WB on-ramp HOV lane   |
| Buses Using On-Ramp         | WestCat: Lynx, JX  |
| Preliminary Traffic Results | No impacts to general purpose traffic  |
| Preliminary Cost            | \$2,320,000 (Current Year)   |
| Benefits                    | <ul style="list-style-type: none"> <li>• HOV Savings: 1,767 passenger-min</li> <li>• Transit Savings: 115 passenger-min</li> </ul> |

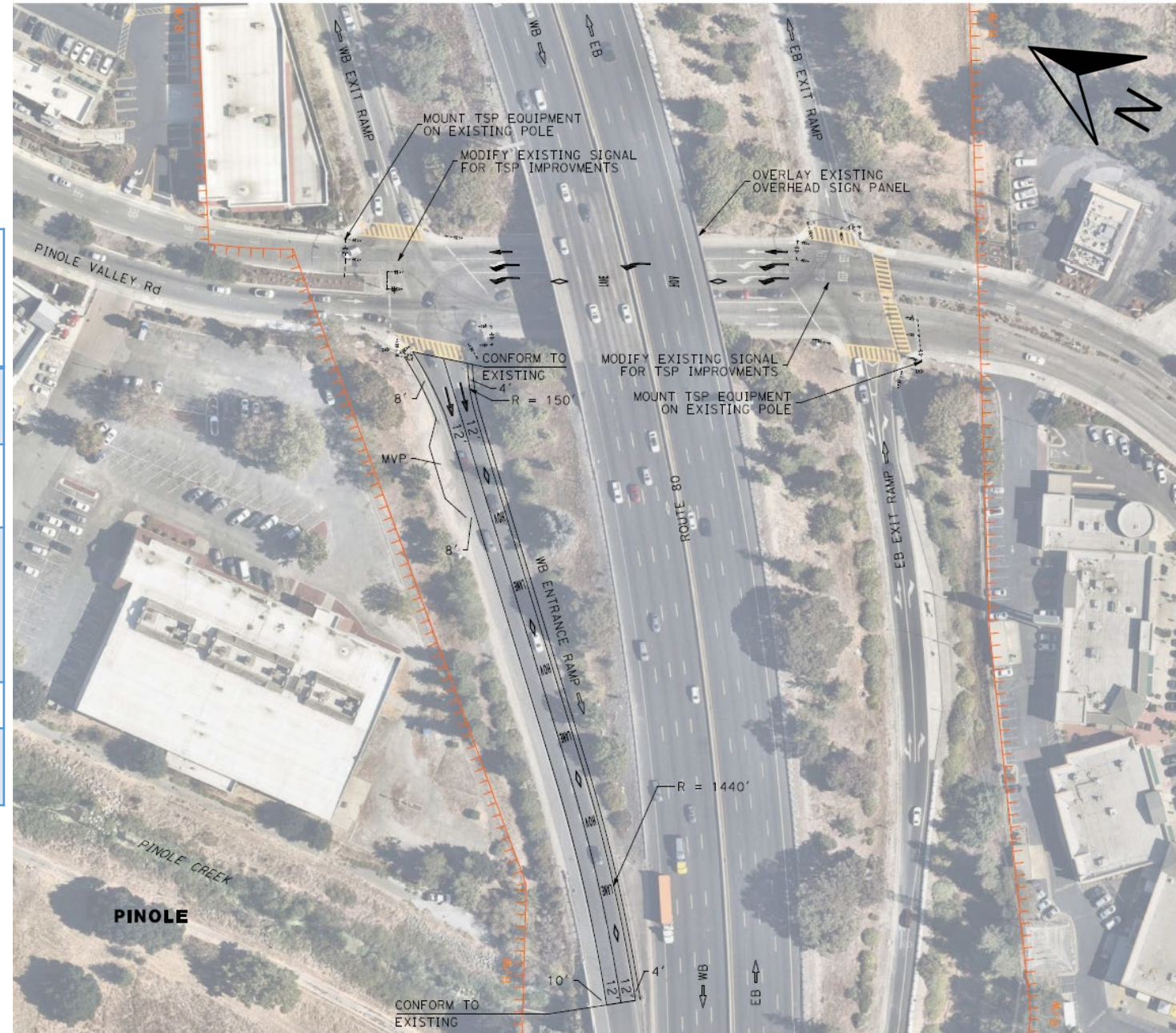




# Location 3: Pinole Valley Road

Pinole, CA


|                             |  |
|-----------------------------|--|
| Proposed Improvements       | <ul style="list-style-type: none"> <li>• Convert WB on-ramp left lane to HOV lane</li> <li>• Convert inside lane of the two NB left-turn lanes to WB on-ramp to an HOV lane</li> <li>• Implement TSP at 2 signals</li> </ul> |
| Buses Using On-Ramp         | WestCat: JPX, 19 (Saturday)  |
| Buses On Local Road         | WestCat: 16, JR/JL (limited to school hours)   |
| Preliminary Traffic Results | <ul style="list-style-type: none"> <li>• Moderate increases in delay on Pinole Valley Road</li> <li>• On-ramp queue increases predicted to stay within available storage</li> </ul>  |
| Preliminary Cost            | \$755,000 (Current Year)   |
| Benefits                    | <ul style="list-style-type: none"> <li>• HOV Savings: 417 passenger-min</li> <li>• Transit Savings: 21 passenger-min</li> </ul>  |

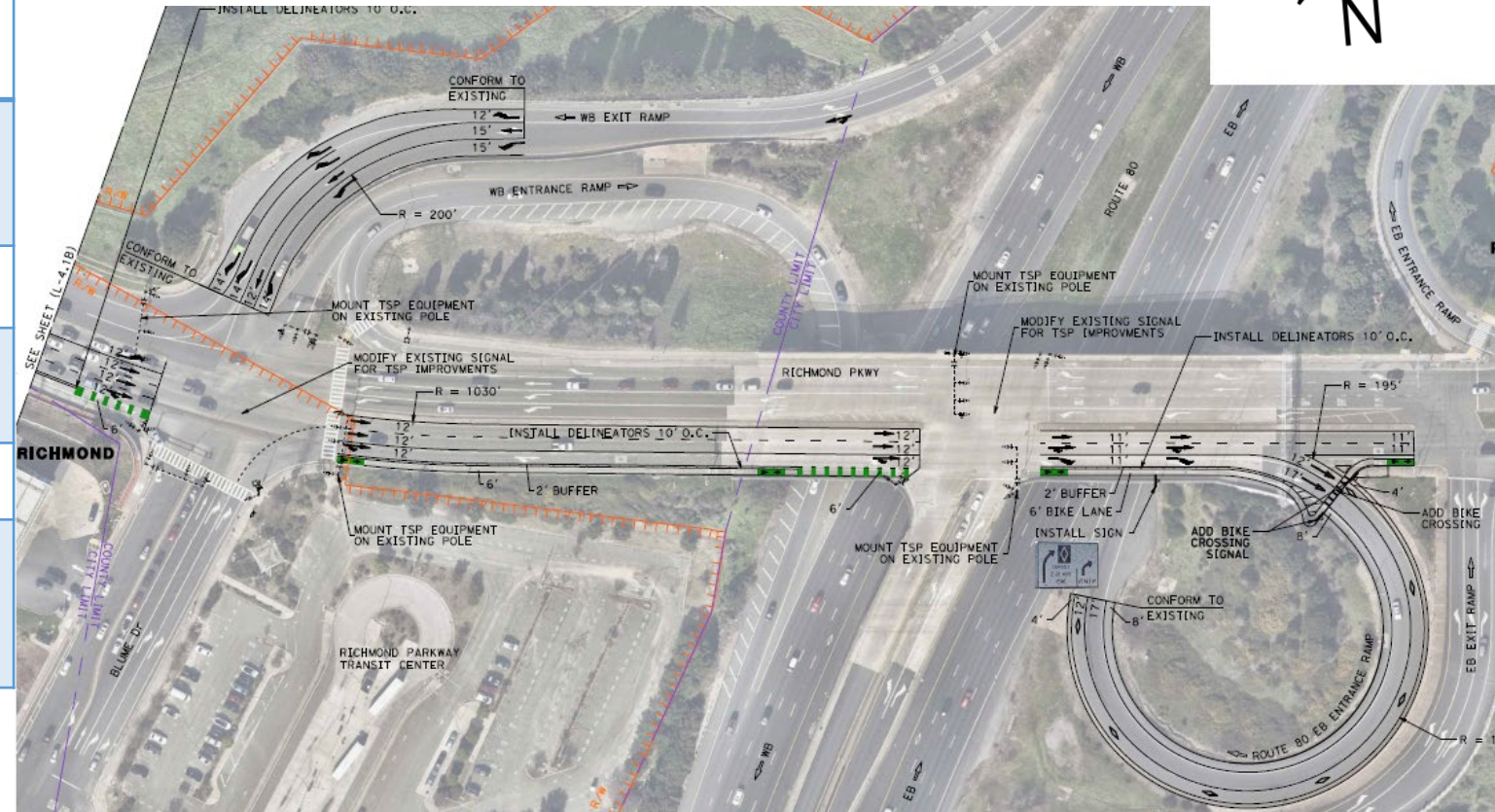




# Location 4: Richmond Parkway – Option C

Richmond, CA and Pinole, CA

|                             |  |
|-----------------------------|--|
| Proposed Improvements       | <ul style="list-style-type: none"> <li>Convert EB loop on-ramp right lane to HOV and add TSP at two intersections</li> <li>Implement buffered bike lane and striping improvements on Richmond Parkway</li> </ul> |
| Buses On Local Road         | <ul style="list-style-type: none"> <li>WestCat: JPX, JR/JL, 16, 19</li> <li>AC Transit: LA, 70, 71, 76</li> </ul>  |
| EPCs at Location            |   |
| Preliminary Traffic Results | Significant increases in PM peak hour queue from on-ramp   |
| Preliminary Cost            | \$2,760,000 (Current Year)   |
| Benefits                    | <ul style="list-style-type: none"> <li>Bicycle safety enhancements on Richmond Parkway</li> <li>HOV Savings: 598 passenger-min</li> <li>Transit Savings: 7 passenger-min</li> </ul>                              |





# Location 6: San Pablo Avenue – Option B


Richmond, CA

|                             |   |
|-----------------------------|---|
| Proposed Improvements       | Convert EB on-ramp left GP lane to HOV lane                       |
| Buses On Local Road         | AC Transit: L, 72/72M/72R   |
| Preliminary Traffic Results | Increases PM peak hour queue but is contained within ramp storage |
| Preliminary Cost            | \$125,000 (Current Year)  |
| Benefits                    | HOV Savings: 190 passenger-minutes                                |



# Location 7: Central Avenue

Richmond, CA

|                             |  |
|-----------------------------|--|
| Proposed Improvements       | Convert EB on-ramp GP lane to HOV lane   |
| EPCs at Location            |                         |
| Preliminary Traffic Results | On-ramp queue is contained within available storage with no observable impact to general purpose traffic |
| Preliminary Cost            | \$145,000 (Current Year)   |
| Benefits                    | HOV Savings: 147 passenger-min   |

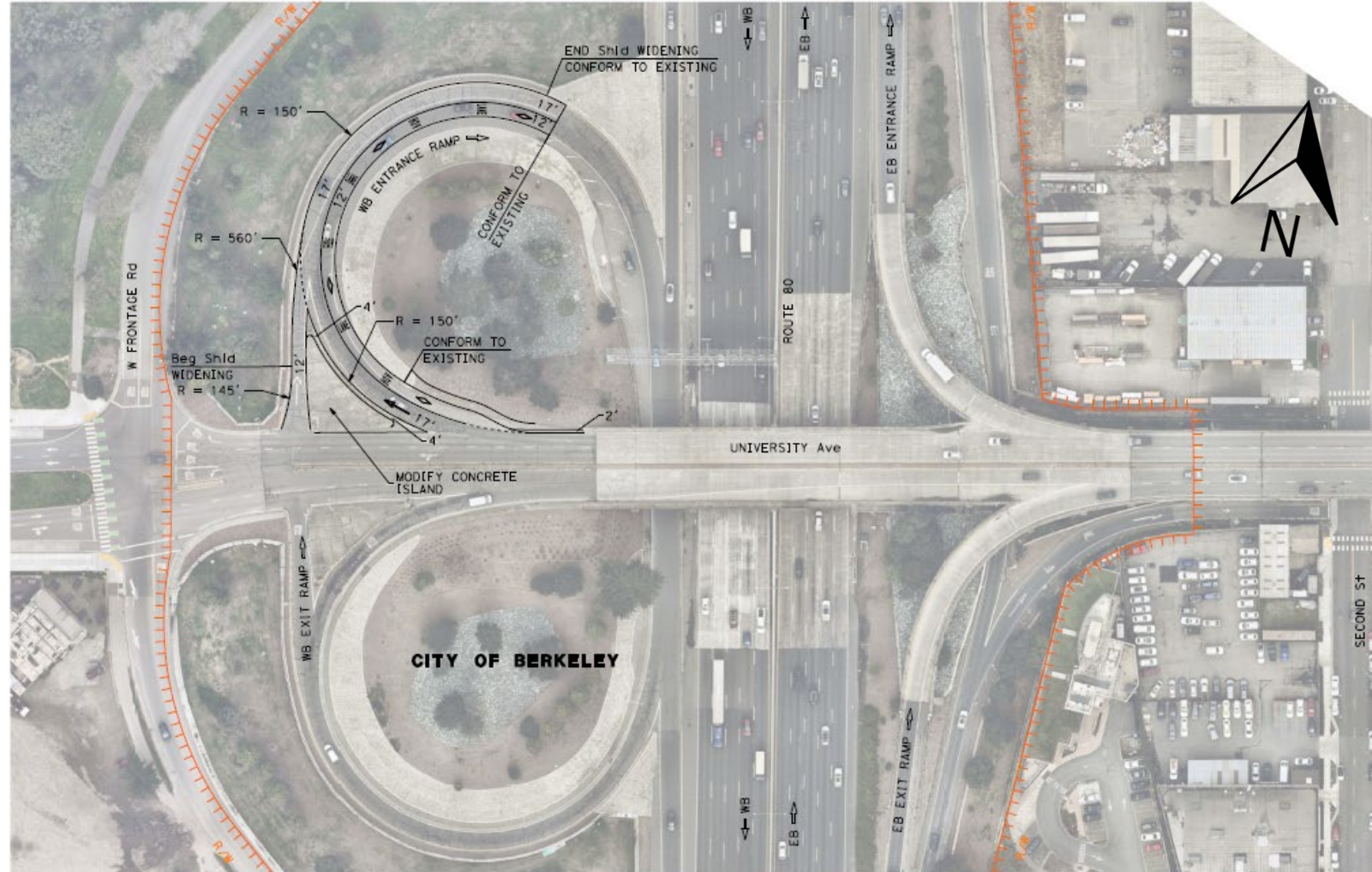




# Location 8: University Avenue – Option B

Berkeley, CA

|                             |  |
|-----------------------------|--|
| Proposed Improvements       | <ul style="list-style-type: none"> <li>Convert WB on-ramp HOV lane from left side to right side</li> <li>Extend WB on-ramp HOV lane to intersection for earlier access</li> <li>Reconstruct concrete island</li> </ul> |
| Buses Using On-Ramp         | AC Transit: FS, G  |
| Buses On Local Road         | AC Transit: 51B  |
| EPCs at Location            | ✓  |
| Preliminary Traffic Results | Increases AM peak hour queue, decreases PM peak hour queue   |
| Preliminary Cost            | \$875,000 (Current Year)   |
| Benefits                    | <ul style="list-style-type: none"> <li>HOV Savings: 272 passenger-minutes</li> <li>Transit Savings: 67 passenger-minutes</li> </ul>  |





# I-80 Bus on Shoulder Feasibility Study



# Draft Caltrans Transit Bus on Shoulder (TBOS)\* Pilot Eligibility Guidance

- Mainline speeds below 35 mph
- Congestion occurs for at least one hour or more
- 10-Foot minimum shoulders
- At least one fixed transit route

\*Draft Caltrans TBOS guidance from 2022. Final is TBD.

\*TBOS is for authorized transit buses only versus BOS could allow public and private buses.

# Draft Caltrans TBOS Operational Policies

- Mainline speeds **below 35 mph**
- Bus cannot travel **more than 15 MPH faster** than adjacent mainline lane
- Bus **cannot exceed 35 mph** in shoulder
- Bus must use Aux lane if present
- Buses must exit shoulder if blocked
- Shoulders shall not be used during periods of inclement weather



## LEGEND

### AC TRANSIT

- Line F
- Line FS
- Line G
- Line J
- Line L
- Line LA

### WESTCAT

- Lynx
- JPX
- JX
- J (JR/JL)
- AMTRAK THRUWAY**
- 99

### SOLTRANS

- Green Line
- Red Line
- Route 82

### NAPA VINE TRANSIT

- Route 29



Transit Center



Park & Ride

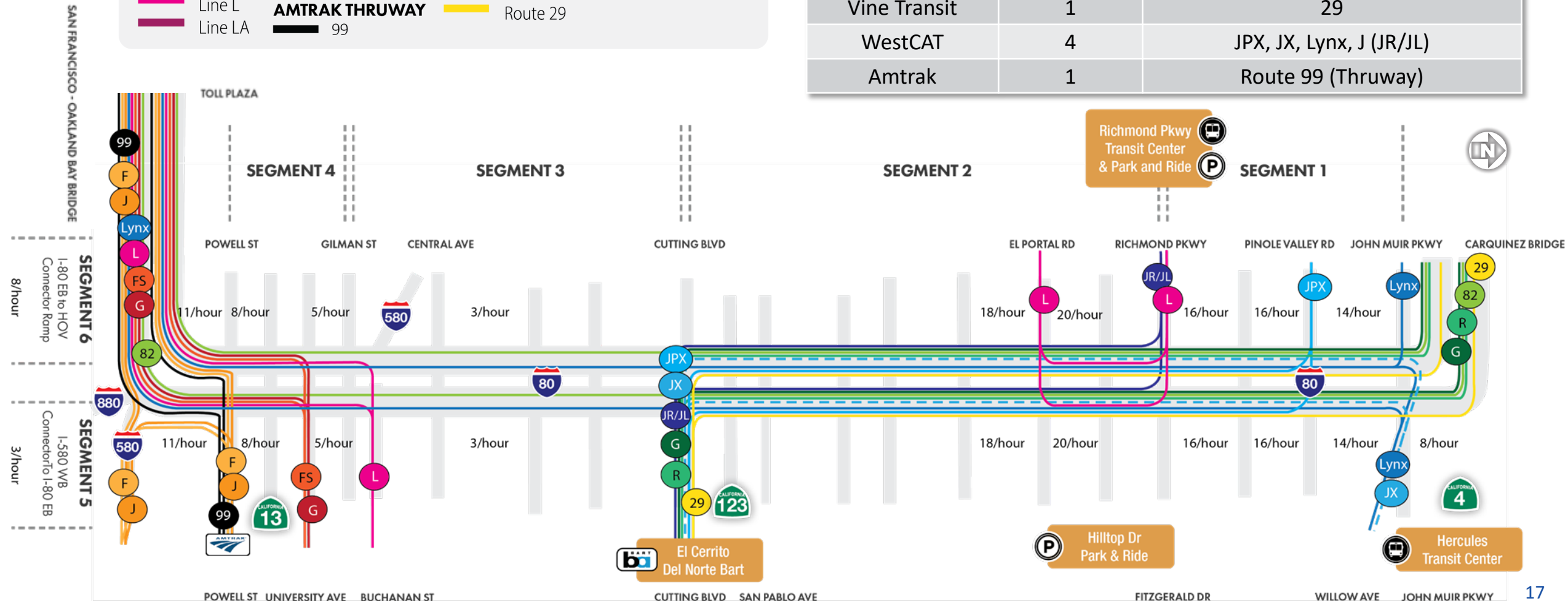


BART Station



Amtrak Station

| Agency       | # of Routes | Routes   |
|--------------|-------------|--|
| AC Transit   | 5           | FS, F, G, J, L<br>(LA and L are consolidated in Realign Plan. J to be rerouted onto I-80 and exit at Powell with I-80/Powell St. Interchange Transit Improvements) |
| SolTrans     | 3           | Green, Red, 82   |
| Vine Transit | 1           | 29   |
| WestCAT      | 4           | JPX, JX, Lynx, J (JR/JL)   |
| Amtrak       | 1           | Route 99 (Thruway)   |



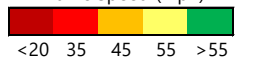
|                               | WB I-80  |                     | General Purpose (GP) Lanes |        |        |        |         |          |          |         |        |        |        |        |        |        | HOV Lane |        |        |        |        |         |          |          |         |        |        |        |        |        |        |        |
|-------------------------------|--|---------------------|----------------------------|--------|--------|--------|---------|----------|----------|---------|--------|--------|--------|--------|--------|--------|----------|--------|--------|--------|--------|---------|----------|----------|---------|--------|--------|--------|--------|--------|--------|--------|
|                               | Location   | Segment Length (ft) | 5-6 AM                     | 6-7 AM | 7-8 AM | 8-9 AM | 9-10 AM | 10-11 AM | 11-12 PM | 12-1 PM | 1-2 PM | 2-3 PM | 3-4 PM | 4-5 PM | 5-6 PM | 6-7 PM | 7-8 PM   | 5-6 AM | 6-7 AM | 7-8 AM | 8-9 AM | 9-10 AM | 10-11 AM | 11-12 PM | 12-1 PM | 1-2 PM | 2-3 PM | 3-4 PM | 4-5 PM | 5-6 PM | 6-7 PM | 7-8 PM |
| S1                            | John Muir Pkwy off-ramp to John Muir Pkwy on-ramp        | 4,000               | 67                         | 67     | 64     | 64     | 64      | 67       | 65       | 68      | 67     | 67     | 66     | 66     | 66     | 66     | 66       | 67     | 70     | 64     | 64     | 64      | 67       | 65       | 68      | 67     | 67     | 66     | 69     | 66     | 66     | 66     |
|                               | John Muir Pkwy on-ramp to Pinole Valley Rd off-ramp      | 3,730               | 65                         | 65     | 62     | 61     | 61      | 65       | 63       | 67      | 64     | 64     | 63     | 63     | 63     | 62     | 63       | 65     | 65     | 65     | 61     | 74      | 65       | 63       | 67      | 64     | 64     | 74     | 74     | 74     | 74     | 74     |
|                               | Pinole Valley Rd off-ramp to Pinole Valley Rd on-ramp    | 2,560               | 62                         | 65     | 63     | 62     | 65      | 66       | 64       | 68      | 66     | 66     | 66     | 66     | 65     | 66     | 68       | 62     | 67     | 63     | 62     | 65      | 66       | 64       | 68      | 66     | 66     | 66     | 69     | 65     | 66     | 68     |
|                               | Pinole Valley Rd on-ramp to Appian Way off-ramp          | 2,640               | 56                         | 56     | 59     | 58     | 62      | 63       | 62       | 67      | 65     | 63     | 63     | 65     | 64     | 65     | 66       | 56     | 56     | 63     | 62     | 62      | 63       | 62       | 67      | 65     | 63     | 63     | 65     | 64     | 65     | 66     |
|                               | Appian Way off-ramp to Appian Way on-ramp                | 2,300               | 56                         | 47     | 53     | 51     | 60      | 62       | 61       | 67      | 64     | 64     | 63     | 66     | 64     | 64     | 65       | 56     | 52     | 63     | 65     | 70      | 62       | 61       | 67      | 64     | 64     | 74     | 66     | 75     | 74     | 74     |
|                               | Appian Way on-ramp to Richmond Pkwy off-ramp             | 2,630               | 56                         | 30     | 26     | 31     | 57      | 63       | 62       | 66      | 63     | 64     | 63     | 64     | 63     | 65     | 65       | 56     | 30     | 63     | 64     | 87      | 63       | 62       | 66      | 63     | 64     | 76     | 67     | 77     | 75     | 76     |
| S2                            | Richmond Pkwy off-ramp to Richmond Pkwy loop on-ramp     | 1,210               | 51                         | 19     | 16     | 23     | 65      | 64       | 63       | 67      | 65     | 64     | 65     | 65     | 67     | 67     | 68       | 51     | 20     | 47     | 50     | 65      | 64       | 63       | 67      | 65     | 64     | 65     | 68     | 67     | 67     | 68     |
|                               | Richmond Pkwy loop on-ramp to Richmond Pkwy diag on-ramp | 1,020               | 48                         | 16     | 15     | 21     | 62      | 63       | 62       | 66      | 64     | 63     | 62     | 63     | 66     | 64     | 66       | 48     | 30     | 36     | 51     | 62      | 63       | 62       | 66      | 64     | 63     | 73     | 68     | 73     | 74     | 74     |
|                               | Richmond Pkwy diag on-ramp to Hilltop Dr off-ramp        | 1,600               | 50                         | 22     | 22     | 17     | 57      | 64       | 62       | 66      | 65     | 64     | 64     | 62     | 67     | 65     | 67       | 50     | 22     | 22     | 54     | 80      | 64       | 62       | 66      | 65     | 64     | 64     | 67     | 67     | 74     | 74     |
|                               | Hilltop Dr off-ramp to Hilltop Dr loop on-ramp           | 1,060               | 50                         | 21     | 21     | 18     | 62      | 64       | 62       | 66      | 65     | 64     | 62     | 62     | 66     | 65     | 67       | 50     | 25     | 27     | 50     | 62      | 64       | 62       | 66      | 65     | 64     | 72     | 68     | 73     | 73     | 74     |
|                               | Hilltop Dr loop on-ramp to Hilltop Dr diag on-ramp       | 1,090               | 50                         | 22     | 20     | 19     | 62      | 64       | 62       | 66      | 65     | 64     | 64     | 62     | 67     | 66     | 68       | 50     | 22     | 28     | 50     | 62      | 64       | 62       | 66      | 65     | 64     | 64     | 71     | 67     | 66     | 68     |
|                               | Hilltop Dr diag on-ramp to El Portal Dr off-ramp         | 1,530               | 50                         | 18     | 22     | 19     | 62      | 64       | 62       | 66      | 65     | 64     | 64     | 63     | 67     | 66     | 68       | 50     | 32     | 22     | 50     | 62      | 64       | 62       | 66      | 65     | 64     | 64     | 63     | 67     | 66     | 68     |
|                               | El Portal Dr off-ramp to El Portal Dr on-ramp            | 2,120               | 47                         | 18     | 18     | 19     | 59      | 66       | 64       | 66      | 66     | 66     | 66     | 63     | 68     | 67     | 68       | 47     | 20     | 21     | 41     | 59      | 66       | 64       | 66      | 66     | 66     | 66     | 68     | 68     | 67     | 68     |
|                               | El Portal Dr on-ramp to San Pablo Dam Rd off-ramp        | 3,080               | 42                         | 16     | 16     | 13     | 54      | 64       | 63       | 65      | 63     | 65     | 66     | 63     | 67     | 67     | 68       | 42     | 26     | 25     | 46     | 54      | 64       | 63       | 65      | 63     | 65     | 66     | 65     | 67     | 67     | 68     |
|                               | San Pablo Dam Rd off-ramp to San Pablo Dam Rd on-ramp    | 1,600               | 42                         | 19     | 15     | 20     | 48      | 61       | 62       | 65      | 61     | 63     | 63     | 62     | 65     | 66     | 64       | 42     | 20     | 20     | 22     | 52      | 61       | 62       | 65      | 61     | 63     | 74     | 68     | 75     | 75     | 75     |
|                               | San Pablo Dam Rd on-ramp to McBryde Ave off-ramp         | 1,300               | 43                         | 20     | 19     | 23     | 51      | 62       | 60       | 65      | 63     | 64     | 66     | 61     | 64     | 67     | 67       | 43     | 35     | 24     | 26     | 51      | 62       | 60       | 65      | 63     | 64     | 66     | 70     | 64     | 67     | 67     |
|                               | McBryde Ave off-ramp to Solano Ave on-ramp               | 3,440               | 51                         | 38     | 22     | 27     | 55      | 64       | 63       | 67      | 65     | 65     | 65     | 65     | 66     | 68     | 67       | 51     | 40     | 23     | 27     | 55      | 64       | 63       | 67      | 65     | 65     | 73     | 67     | 73     | 73     | 73     |
|                               | Solano Ave on-ramp to Barrett Ave off-ramp               | 1,250               | 59                         | 51     | 24     | 22     | 52      | 65       | 63       | 66      | 63     | 63     | 65     | 64     | 66     | 69     | 68       | 59     | 56     | 24     | 22     | 52      | 65       | 63       | 66      | 63     | 63     | 65     | 66     | 66     | 69     | 68     |
|                               | Barrett Ave off-ramp to Barrett Ave on-ramp              | 2,220               | 60                         | 52     | 24     | 18     | 40      | 63       | 62       | 65      | 64     | 63     | 62     | 64     | 65     | 66     | 65       | 60     | 58     | 29     | 23     | 53      | 63       | 62       | 65      | 64     | 63     | 75     | 66     | 75     | 75     | 75     |
|                               | Barrett Ave on-ramp to Cutting Blvd off-ramp             | 2,290               | 69                         | 62     | 22     | 19     | 33      | 71       | 71       | 73      | 73     | 71     | 72     | 73     | 74     | 75     | 74       | 69     | 62     | 30     | 24     | 52      | 71       | 71       | 73      | 73     | 71     | 72     | 73     | 74     | 75     | 74     |
| S3                            | Cutting Blvd off-ramp to Potrero Ave on-ramp             | 3,900               | 61                         | 55     | 16     | 13     | 31      | 63       | 63       | 66      | 65     | 64     | 65     | 67     | 67     | 69     | 69       | 63     | 63     | 27     | 33     | 31      | 63       | 63       | 66      | 65     | 64     | 65     | 68     | 67     | 69     | 69     |
|                               | Potrero Ave on-ramp to Carlson Blvd off-ramp             | 1,370               | 59                         | 50     | 16     | 12     | 27      | 60       | 58       | 65      | 63     | 63     | 63     | 64     | 62     | 69     | 68       | 66     | 63     | 24     | 32     | 27      | 60       | 58       | 65      | 63     | 63     | 63     | 71     | 62     | 69     | 68     |
|                               | Carlson Blvd off-ramp to Carlson Blvd on-ramp            | 2,380               | 60                         | 47     | 15     | 13     | 24      | 43       | 39       | 65      | 64     | 65     | 65     | 65     | 66     | 69     | 69       | 65     | 49     | 20     | 20     | 24      | 43       | 39       | 65      | 64     | 65     | 65     | 70     | 66     | 69     | 69     |
|                               | Carlson Blvd on-ramp to Central Ave off-ramp             | 1,870               | 57                         | 46     | 19     | 16     | 24      | 30       | 27       | 63      | 63     | 64     | 62     | 65     | 67     | 67     | 68       | 62     | 46     | 28     | 16     | 24      | 30       | 27       | 63      | 63     | 64     | 62     | 70     | 67     | 67     | 68     |
|                               | Central Ave off-ramp to Central Ave on-ramp              | 1,780               | 58                         | 50     | 25     | 15     | 23      | 25       | 19       | 62      | 62     | 62     | 61     | 62     | 64     | 65     | 67       | 62     | 51     | 25     | 15     | 23      | 25       | 19       | 62      | 62     | 62     | 61     | 67     | 64     | 65     | 67     |
|                               | Central Ave on-ramp to Cleveland Ave off-ramp            | 1,700               | 60                         | 49     | 21     | 16     | 20      | 19       | 17       | 62      | 62     | 62     | 63     | 64     | 65     | 66     | 68       | 60     | 49     | 21     | 16     | 20      | 19       | 17       | 62      | 62     | 62     | 63     | 67     | 65     | 66     | 68     |
|                               | Cleveland Ave off-ramp to I-580 on-ramp                  | 2,800               | 61                         | 36     | 15     | 14     | 17      | 14       | 13       | 52      | 61     | 46     | 57     | 60     | 65     | 66     | 65       | 61     | 36     | 19     | 14     | 17      | 14       | 13       | 52      | 61     | 46     | 57     | 62     | 65     | 66     | 65     |
|                               | I-580 on-ramp to N of Buchanan St on-ramp                | 1,170               | 61                         | 31     | 15     | 13     | 15      | 16       | 13       | 44      | 57     | 16     | 25     | 47     | 60     | 62     | 64       | 62     | 36     | 18     | 20     | 27      | 16       | 13       | 44      | 57     | 16     | 59     | 61     | 76     | 76     | 77     |
| S4                            | N of Buchanan St on-ramp to Gilman St off-ramp           | 1,070               | 60                         | 30     | 16     | 15     | 18      | 14       | 15       | 37      | 53     | 15     | 22     | 20     | 62     | 64     | 66       | 60     | 37     | 25     | 26     | 18      | 14       | 15       | 37      | 53     | 15     | 22     | 49     | 62     | 64     | 66     |
|                               | Gilman St off-ramp to Gilman St on-ramp                  | 2,830               | 60                         | 28     | 14     | 13     | 15      | 14       | 15       | 37      | 53     | 15     | 18     | 17     | 61     | 62     | 63       | 60     | 42     | 34     | 33     | 34      | 14       | 15       | 37      | 53     | 15     | 24     | 27     | 74     | 74     | 76     |
|                               | Gilman St on-ramp to University Ave off-ramp             | 1,790               | 62                         | 35     | 29     | 24     | 26      | 24       | 21       | 34      | 34     | 17     | 22     | 19     | 45     | 64     | 66       | 62     | 35     | 30     | 29     | 32      | 24       | 21       | 34      | 34     | 17     | 22     | 21     | 45     | 64     | 66     |
|                               | University Ave off-ramp to University Ave on-ramp        | 1,440               | 63                         | 46     | 43     | 44     | 44      | 42       | 42       | 34      | 25     | 17     | 23     | 17     | 23     | 65     | 66       | 63     | 46     | 52     | 45     | 44      | 42       | 42       | 34      | 25     | 17     | 23     | 22     | 23     | 65     | 66     |
|                               | University Ave on-ramp to Ashby Ave off-ramp             | 4,940               | 62                         | 46     | 39     | 39     | 39      | 40       | 37       | 33      | 20     | 17     | 20     | 14     | 19     | 60     | 66       | 62     | 50     | 57     | 39     | 39      | 40       | 37       | 33      | 20     | 17     | 20     | 25     | 19     | 60     | 66     |
|                               | Ashby Ave off-ramp to Ashby Ave on-ramp                  | 2,530               | 62                         | 53     | 45     | 38     | 38      | 54       | 48       | 28      | 19     | 17     | 19     | 12     | 18     | 42     | 64       | 62     | 55     | 56     | 38     | 38      | 54       | 48       | 28      | 19     | 17     | 19     | 33     | 21     | 42     | 64     |
|                               | Ashby Ave on-ramp to Frontage Rd off-ramp                | 1,220               | 61                         | 56     | 45     | 33     | 38      | 55       | 47       | 28      | 18     | 18     | 17     | 9      | 16     | 33     | 63       | 61     | 56     | 58     | 39     | 38      | 55       | 47       | 28      | 18     | 18     | 17     | 35     | 22     | 33     | 63     |
|                               | Frontage Rd off-ramp to Frontage Rd on-ramp              | 1,040               | 61                         | 55     | 42     | 28     | 34      | 55       | 44       | 24      | 16     | 15     | 15     | 13     | 14     | 27     | 58       | 61     | 61     | 59     | 29     | 34      | 55       | 44       | 24      | 16     | 15     | 15     | 13     | 14     | 27     | 58     |
|                               | Frontage Rd on-ramp to Eastshore Fwy HOV off-ramp        | 990                 | 60                         | 53     | 33     | 29     | 34      | 51       | 42       | 26      | 19     | 20     | 21     | 19     | 19     | 25     | 52       | 60     | 61     | 56     | 35     | 34      | 51       | 42       | 26      | 19     | 20     | 21     | 19     | 19     | 25     | 52     |
|                               | Eastshore Fwy HOV off-ramp to I-880 off-ramp             | 1,400               | 58                         | 54     | 48     | 41     | 45      | 59       | 51       | 41      | 37     | 37     | 37     | 36     | 37     | 39     | 60       | 65     | 65     | 65     | 65     | 65      | 65       | 65       | 65      | 65     | 65     | 65     | 65     | 65     | 65     | 65     |
|                               | I-880 off-ramp to Powell St on-ramp                      | 660                 | 58                         | 54     | 50     | 53     | 53      | 59       | 55       | 55      | 49     | 53     | 52     | 53     | 55     | 54     | 60       | 65     | 65     | 65     | 65     | 65      | 65       | 65       | 65      | 65     | 65     | 65     | 65     | 65     | 65     | 65     |
|                               | Powell St on-ramp to Eastshore Fwy HOV on-ramp           | 1,580               | 57                         | 43     | 32     | 55     | 56      | 59       | 58       | 58      | 57     | 58     | 57     | 58     | 59     | 57     | 62       | 65     | 65     | 55     | 65     | 65      | 65       | 65       | 65      | 65     | 65     | 65     | 65     | 65     | 65     | 65     |
|                               | Eastshore Fwy HOV on-ramp to I-580 on-ramp               | 1,180               | 57                         | 27     | 15     | 49     | 58      | 62       | 59       | 61      | 59     | 60     | 60     | 61     | 61     | 59     | 64       | 65     | 55     | 55     | 65     | 65      | 65       | 65       | 65      | 65     | 65     | 65     | 65     | 65     | 65     | 65     |
| I-580 on-ramp to HOV off-ramp | 270  | 64                  | 23                         | 14     | 31     | 64     | 64      | 64       | 64       | 64      | 64     | 64     | 64     | 64     | 64     | 64     | 64       | 55     | 55     | 55     | 55     | 65      | 65       | 65       | 65      | 65     | 65     | 65     | 65     | 65     | 65     |        |



| EB I-80   |  |                     | General Purpose (GP) Lanes |        |        |        |         |          |          |         |        |        |        |        |        |        | HOV Lane |        |        |        |        |         |          |          |         |        |        |        |        |        |        |        |
|---|--|---------------------|----------------------------|--------|--------|--------|---------|----------|----------|---------|--------|--------|--------|--------|--------|--------|----------|--------|--------|--------|--------|---------|----------|----------|---------|--------|--------|--------|--------|--------|--------|--------|
|   |  | Segment Length (ft) | 5-6 AM                     | 6-7 AM | 7-8 AM | 8-9 AM | 9-10 AM | 10-11 AM | 11-12 PM | 12-1 PM | 1-2 PM | 2-3 PM | 3-4 PM | 4-5 PM | 5-6 PM | 6-7 PM | 7-8 PM   | 5-6 AM | 6-7 AM | 7-8 AM | 8-9 AM | 9-10 AM | 10-11 AM | 11-12 PM | 12-1 PM | 1-2 PM | 2-3 PM | 3-4 PM | 4-5 PM | 5-6 PM | 6-7 PM | 7-8 PM |
| Location  |  |                     |                            |        |        |        |         |          |          |         |        |        |        |        |        |        |          |        |        |        |        |         |          |          |         |        |        |        |        |        |        |        |
| S4  | Bus Only off-ramp to I-580 off-ramp                      | 600                 | 66                         | 69     | 67     | 65     | 66      | 66       | 65       | 64      | 58     | 57     | 59     | 26     | 60     | 61     | 63       | 66     | 69     | 67     | 65     | 66      | 66       | 65       | 64      | 58     | 57     | 59     | 26     | 60     | 61     | 63     |
|   | I-580 off-ramp to HOV off-ramp                           | 4,450               | 60                         | 64     | 62     | 61     | 60      | 62       | 61       | 61      | 59     | 18     | 13     | 9      | 9      | 17     | 62       | 72     | 73     | 71     | 69     | 68      | 62       | 61       | 61      | 59     | 18     | 13     | 9      | 9      | 17     | 69     |
|   | HOV off-ramp to WB I-580 on-ramp                         | 2,760               | 58                         | 65     | 59     | 57     | 58      | 56       | 56       | 57      | 53     | 9      | 7      | 7      | 7      | 13     | 57       | 58     | 65     | 59     | 57     | 58      | 56       | 56       | 57      | 53     | 9      | 7      | 7      | 7      | 13     | 57     |
|   | WB I-580 on-ramp to Powell St off-ramp                   | 1,820               | 60                         | 60     | 49     | 39     | 41      | 43       | 37       | 37      | 35     | 16     | 14     | 13     | 13     | 26     | 53       | 60     | 60     | 49     | 39     | 41      | 43       | 37       | 37      | 35     | 16     | 14     | 13     | 13     | 26     | 53     |
|   | Powell St off-ramp to NB I-880 on-ramp                   | 550                 | 62                         | 62     | 55     | 49     | 48      | 51       | 47       | 47      | 35     | 15     | 13     | 12     | 11     | 23     | 58       | 62     | 62     | 55     | 49     | 48      | 51       | 47       | 47      | 35     | 15     | 13     | 12     | 11     | 23     | 58     |
|   | NB I-880 on-ramp to Powell St on-ramp                    | 1,590               | 64                         | 64     | 60     | 58     | 56      | 59       | 57       | 57      | 32     | 14     | 10     | 10     | 9      | 15     | 62       | 64     | 64     | 60     | 58     | 56      | 59       | 57       | 57      | 32     | 14     | 17     | 10     | 11     | 15     | 62     |
|   | Powell St on-ramp to Ashby Ave off-ramp                  | 1,560               | 64                         | 64     | 61     | 59     | 59      | 60       | 58       | 58      | 31     | 16     | 11     | 11     | 10     | 16     | 63       | 64     | 64     | 61     | 59     | 59      | 60       | 58       | 58      | 31     | 16     | 18     | 11     | 10     | 16     | 63     |
|   | Ashby Ave off-ramp to University Ave on-ramp             | 2,120               | 64                         | 63     | 58     | 58     | 58      | 60       | 59       | 58      | 34     | 21     | 14     | 13     | 11     | 18     | 58       | 76     | 76     | 75     | 74     | 73      | 60       | 59       | 58      | 34     | 21     | 25     | 13     | 13     | 18     | 62     |
|   | Ashby Ave on-ramp to University Ave off-ramp             | 5,200               | 66                         | 65     | 61     | 59     | 58      | 59       | 57       | 58      | 34     | 30     | 20     | 17     | 14     | 24     | 53       | 66     | 65     | 61     | 59     | 58      | 59       | 57       | 58      | 34     | 30     | 28     | 17     | 19     | 24     | 53     |
|   | University Ave off-ramp to University Ave on-ramp        | 1,920               | 67                         | 66     | 62     | 60     | 60      | 60       | 59       | 59      | 48     | 42     | 18     | 12     | 11     | 21     | 58       | 67     | 66     | 62     | 60     | 60      | 60       | 59       | 59      | 48     | 42     | 44     | 42     | 40     | 40     | 58     |
| University Ave on-ramp to Gilman St off-ramp        | 1,960  | 66                  | 65                         | 62     | 61     | 59     | 60      | 59       | 58       | 55      | 44     | 27     | 20     | 18     | 32     | 61     | 66       | 65     | 62     | 61     | 59     | 60      | 59       | 58       | 55      | 44     | 43     | 40     | 38     | 40     | 61     |        |
| Gilman St off-ramp to Gilman St on-ramp             | 2,170  | 66                  | 65                         | 62     | 61     | 59     | 60      | 59       | 58       | 55      | 44     | 26     | 19     | 17     | 32     | 61     | 66       | 65     | 62     | 61     | 59     | 60      | 59       | 58       | 55      | 44     | 45     | 44     | 43     | 41     | 61     |        |
| S3  | Gilman St on-ramp to Buchanan St off-ramp                | 830                 | 66                         | 65     | 62     | 61     | 59      | 60       | 59       | 58      | 55     | 44     | 25     | 19     | 14     | 30     | 61       | 66     | 65     | 62     | 61     | 59      | 60       | 59       | 58      | 55     | 44     | 49     | 44     | 52     | 50     | 61     |
|   | Buchanan St off-ramp to I-580 off-ramp                   | 810                 | 63                         | 63     | 61     | 59     | 58      | 58       | 57       | 57      | 46     | 29     | 28     | 28     | 30     | 62     | 63       | 63     | 61     | 59     | 58     | 58      | 58       | 57       | 57      | 46     | 47     | 51     | 54     | 52     | 62     |        |
|   | I-580 off-ramp to Buchanan St on-ramp                    | 2,490               | 65                         | 67     | 61     | 63     | 63      | 63       | 62       | 61      | 60     | 34     | 17     | 26     | 26     | 35     | 64       | 65     | 67     | 61     | 63     | 63      | 63       | 62       | 61      | 60     | 34     | 17     | 26     | 34     | 35     | 64     |
|   | Buchanan St on-ramp to Central Ave off-ramp              | 2,520               | 66                         | 67     | 62     | 62     | 63      | 63       | 63       | 62      | 62     | 25     | 13     | 13     | 17     | 23     | 58       | 66     | 67     | 62     | 62     | 63      | 63       | 63       | 62      | 62     | 25     | 13     | 13     | 20     | 23     | 58     |
|   | Central Ave off-ramp to Central Ave on-ramp              | 1,820               | 66                         | 67     | 62     | 62     | 61      | 63       | 63       | 61      | 61     | 21     | 11     | 10     | 10     | 16     | 52       | 66     | 67     | 62     | 62     | 61      | 63       | 63       | 61      | 61     | 21     | 17     | 13     | 11     | 16     | 52     |
|   | Central Ave on-ramp to Carlson Blvd off-ramp             | 1,870               | 66                         | 69     | 62     | 63     | 63      | 63       | 63       | 63      | 25     | 9      | 8      | 8      | 8      | 14     | 46       | 66     | 69     | 62     | 63     | 63      | 63       | 63       | 63      | 25     | 26     | 14     | 12     | 14     | 46     |        |
|   | Carlson Blvd off-ramp to Carlson Blvd on-ramp            | 2,310               | 66                         | 67     | 63     | 63     | 62      | 64       | 64       | 62      | 62     | 27     | 12     | 10     | 9      | 15     | 41       | 66     | 67     | 63     | 63     | 62      | 64       | 64       | 62      | 62     | 27     | 20     | 13     | 11     | 15     | 41     |
|   | Carlson Blvd on-ramp to Potrero Ave off-ramp             | 1,540               | 65                         | 66     | 62     | 62     | 61      | 63       | 62       | 62      | 60     | 31     | 16     | 12     | 10     | 18     | 49       | 65     | 66     | 62     | 62     | 61      | 63       | 62       | 62      | 60     | 31     | 16     | 12     | 13     | 18     | 49     |
|   | Potrero Ave off-ramp to Cutting Blvd loop on-ramp        | 2,850               | 66                         | 68     | 63     | 63     | 62      | 63       | 63       | 62      | 61     | 34     | 15     | 8      | 9      | 15     | 55       | 66     | 68     | 63     | 63     | 62      | 63       | 63       | 62      | 61     | 34     | 15     | 17     | 13     | 19     | 55     |
|   | Cutting Blvd loop on-ramp to Cutting Blvd diag on-ramp   | 890                 | 64                         | 68     | 61     | 61     | 62      | 61       | 63       | 63      | 60     | 33     | 15     | 13     | 11     | 17     | 52       | 64     | 68     | 61     | 61     | 62      | 61       | 63       | 63      | 60     | 33     | 16     | 13     | 11     | 21     | 52     |
| Cutting Blvd diag on-ramp to MacDonald Ave off-ramp | 1,790  | 65                  | 67                         | 63     | 62     | 62     | 62      | 64       | 64       | 62      | 29     | 14     | 12     | 10     | 18     | 49     | 65       | 67     | 63     | 62     | 62     | 62      | 64       | 64       | 62      | 29     | 14     | 12     | 10     | 18     | 49     |        |
| S2  | MacDonald Ave off-ramp to San Pablo Ave off-ramp         | 910                 | 65                         | 67     | 63     | 61     | 61      | 62       | 63       | 62      | 62     | 27     | 12     | 8      | 10     | 15     | 41       | 65     | 67     | 63     | 61     | 61      | 62       | 63       | 62      | 62     | 27     | 21     | 17     | 11     | 18     | 41     |
|   | San Pablo Ave off-ramp to San Pablo Ave on-ramp          | 1,960               | 63                         | 67     | 62     | 60     | 61      | 61       | 62       | 62      | 58     | 24     | 13     | 9      | 9      | 16     | 30       | 63     | 67     | 62     | 60     | 61      | 61       | 62       | 62      | 58     | 24     | 21     | 15     | 14     | 17     | 30     |
|   | San Pablo Ave on-ramp to Solano St off-ramp              | 1,060               | 63                         | 68     | 62     | 61     | 61      | 61       | 63       | 62      | 54     | 26     | 16     | 10     | 10     | 15     | 28       | 63     | 68     | 62     | 61     | 61      | 61       | 63       | 62      | 54     | 26     | 23     | 19     | 14     | 26     | 28     |
|   | Solano St off-ramp to San Pablo Dam Rd off-ramp          | 4,660               | 64                         | 66     | 61     | 59     | 60      | 63       | 64       | 62      | 55     | 32     | 21     | 14     | 12     | 20     | 28       | 75     | 73     | 73     | 71     | 72      | 63       | 64       | 62      | 55     | 32     | 21     | 14     | 12     | 20     | 34     |
|   | San Pablo Dam Rd off-ramp to San Pablo Dam Rd on-ramp    | 2,300               | 66                         | 68     | 64     | 62     | 63      | 64       | 65       | 64      | 63     | 55     | 21     | 11     | 11     | 19     | 53       | 66     | 68     | 64     | 62     | 63      | 64       | 65       | 64      | 63     | 55     | 21     | 16     | 12     | 20     | 53     |
|   | San Pablo Dam Rd on-ramp to El Portal Dr off-ramp        | 2,730               | 66                         | 68     | 63     | 63     | 63      | 64       | 65       | 65      | 64     | 59     | 21     | 12     | 10     | 21     | 54       | 66     | 68     | 63     | 63     | 63      | 64       | 65       | 65      | 64     | 59     | 21     | 13     | 18     | 21     | 54     |
|   | El Portal Dr off-ramp to El Portal Dr on-ramp            | 2,060               | 65                         | 66     | 62     | 61     | 61      | 61       | 63       | 63      | 63     | 57     | 18     | 13     | 8      | 16     | 53       | 65     | 66     | 62     | 61     | 61      | 61       | 63       | 63      | 63     | 57     | 18     | 13     | 20     | 24     | 53     |
|   | El Portal Dr on-ramp to Hilltop Dr off-ramp              | 1,300               | 63                         | 63     | 57     | 58     | 57      | 59       | 62       | 63      | 62     | 54     | 18     | 13     | 10     | 21     | 51       | 75     | 75     | 75     | 75     | 74      | 59       | 62       | 63      | 62     | 54     | 23     | 19     | 21     | 21     | 70     |
|   | Hilltop Dr off-ramp to Hilltop Dr loop on-ramp           | 1,220               | 65                         | 65     | 59     | 60     | 59      | 59       | 62       | 63      | 62     | 54     | 16     | 13     | 9      | 19     | 51       | 65     | 65     | 59     | 60     | 59      | 59       | 62       | 63      | 62     | 54     | 28     | 19     | 23     | 25     | 51     |
|   | Hilltop Dr loop on-ramp to Hilltop Dr diag on-ramp       | 1,270               | 65                         | 65     | 60     | 61     | 61      | 62       | 61       | 63      | 62     | 52     | 21     | 16     | 15     | 24     | 58       | 65     | 65     | 60     | 61     | 61      | 62       | 61       | 63      | 62     | 52     | 21     | 16     | 15     | 24     | 58     |
| S1  | Hilltop Dr diag on-ramp to Fitzgerald Dr off-ramp        | 1,630               | 64                         | 63     | 58     | 59     | 59      | 62       | 61       | 63      | 62     | 52     | 21     | 15     | 10     | 23     | 58       | 75     | 74     | 74     | 74     | 74      | 62       | 61       | 63      | 62     | 52     | 21     | 16     | 26     | 25     | 68     |
|   | Fitzgerald Dr off-ramp to Fitzgerald Dr loop on-ramp     | 1,480               | 66                         | 68     | 63     | 64     | 64      | 66       | 65       | 68      | 66     | 53     | 18     | 15     | 12     | 23     | 63       | 75     | 75     | 75     | 74     | 74      | 66       | 65       | 68      | 66     | 53     | 22     | 18     | 17     | 23     | 64     |
|   | Fitzgerald Dr loop on-ramp to Fitzgerald Dr diag on-ramp | 1,220               | 66                         | 69     | 61     | 63     | 62      | 66       | 66       | 68      | 65     | 45     | 15     | 15     | 12     | 14     | 63       | 76     | 76     | 76     | 75     | 76      | 66       | 66       | 68      | 65     | 45     | 27     | 16     | 20     | 29     | 66     |
|   | Fitzgerald Dr diag on-ramp to Appian Way off-ramp        | 1,600               | 66                         | 67     | 61     | 63     | 63      | 66       | 66       | 68      | 65     | 43     | 16     | 13     | 13     | 20     | 62       | 76     | 76     | 76     | 75     | 76      | 66       | 66       | 68      | 65     | 43     | 21     | 23     | 25     | 22     | 62     |
|   | Appian Way off-ramp to Appian Way loop on-ramp           | 1,440               | 68                         | 69     | 64     | 65     | 65      | 66       | 67       | 67      | 66     | 42     | 14     | 15     | 12     | 15     | 54       | 68     | 69     | 64     | 65     | 65      | 66       | 67       | 67      | 66     | 42     | 32     | 27     | 28     | 32     | 54     |
|   | Appian Way loop on-ramp to Appian Way diag on-ramp       | 920                 | 68                         | 70     | 63     | 63     | 64      | 67       | 68       | 68      | 67     | 42     | 19     | 19     | 15     | 19     | 47       | 74     | 73     | 74     | 73     | 74      | 67       | 68       | 68      | 67     | 42     | 29     | 26     | 28     | 32     | 61     |
|   | Appian Way diag on-ramp to Pinole Valley Rd off-ramp     | 2,540               | 68                         | 70     | 66     | 66     | 66      | 67       | 67       | 68      | 67     | 38     | 20     | 20     | 19     | 27     | 47       | 68     | 70     | 66     | 66     | 66      | 67       | 67       | 68      | 67     | 38     | 29     | 32     | 30     | 27     | 47     |
|   | Pinole Valley Rd off-ramp to Pinole Valley Rd on-ramp    | 2,620               | 67                         | 68     | 65     | 65     | 64      | 66       | 67       | 68      | 66     | 31     | 22     | 20     | 23     | 25     | 39       | 67     | 68     | 65     | 65     | 64      | 66       | 67       | 68      | 66     | 31     | 22     | 32     | 23     | 26     | 39     |
|   | Pinole Valley Rd on-ramp to John Muir Pkwy off-ramp      | 5,910               | 66                         | 67     | 64     | 64     | 64      | 66       | 66       | 67      | 65     | 51     | 48     | 47     | 48     | 41     | 55       | 66     | 67     | 64     | 64     | 64      | 66       | 66       | 67      | 65     | 51     | 48     | 56     | 48     | 60     | 55     |
|   | John Muir Pkwy off-ramp to John Muir Pkwy on-r           |                     |                            |        |        |        |         |          |          |         |        |        |        |        |        |        |          |        |        |        |        |         |          |          |         |        |        |        |        |        |        |        |

INRIX, PeMS, April 2024 Midweek Average (Tues – Thurs)

Traffic Speed (mph)



## Segment 5:

I-580 WB Connector to I-80 EB

### SEGMENT 5 - WB I-580 Connector to EB I-80

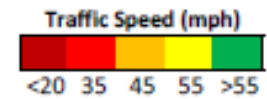
September/October 2023 Typical weekday (Tue-Thu) Average Data , Inrix

| S5 | Segment   | Length (ft) | 5:00 AM | 6:00 AM | 7:00 AM | 8:00 AM | 9:00 AM | 10:00 AM | 11:00 AM | 12:00 PM | 1:00 PM | 2:00 PM | 3:00 PM | 4:00 PM | 5:00 PM | 6:00 PM | 7:00 PM |
|----|---|-------------|---------|---------|---------|---------|---------|----------|----------|----------|---------|---------|---------|---------|---------|---------|---------|
|    | I-980 On-ramp to SR 24 On-ramp                  | 1,260       | 66      | 58      | 38      | 39      | 38      | 57       | 60       | 60       | 59      | 58      | 58      | 52      | 48      | 60      | 64      |
|    | SR 24 On-ramp to EB/WB I-80 Connectors          | 2,770       | 62      | 50      | 24      | 25      | 27      | 45       | 51       | 49       | 49      | 47      | 46      | 39      | 33      | 50      | 58      |
|    | EB/WB I-80 Connectors to MacArthur Blvd On-ramp | 650         | 60      | 53      | 31      | 22      | 23      | 34       | 38       | 36       | 36      | 31      | 29      | 23      | 20      | 37      | 49      |
|    | MacArthur Blvd On-ramp to Powell St Off-ramp    | 4,040       | 62      | 58      | 49      | 41      | 41      | 45       | 45       | 43       | 43      | 26      | 18      | 15      | 13      | 24      | 47      |
|    | Powell St Off-ramp to I-580/I-80 Junction       | 750         | 66      | 62      | 59      | 58      | 58      | 58       | 55       | 54       | 55      | 17      | 11      | 11      | 11      | 16      | 45      |
|    |   |             |         |         |         |         |         |          |          |          |         |         |         |         |         |         |         |

### SEGMENT 6 - SFO BB EB to I-80 HOV Connector

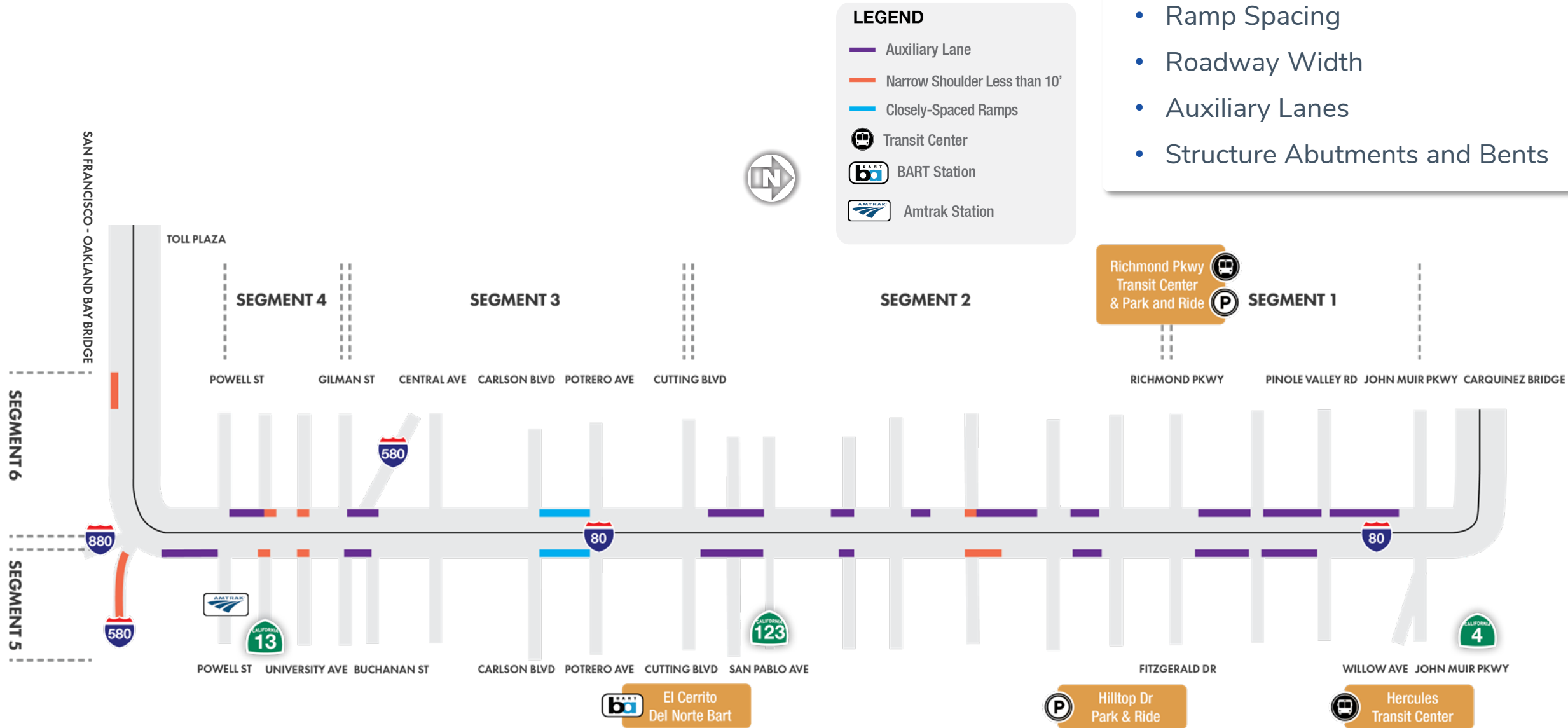
September/October 2023 Typical weekday (Tue-Thu) Average Data

| S6 | Segment                                     | Length (ft) | 5:00 AM | 6:00 AM | 7:00 AM | 8:00 AM | 9:00 AM | 10:00 AM | 11:00 AM | 12:00 PM | 1:00 PM | 2:00 PM | 3:00 PM | 4:00 PM | 5:00 PM | 6:00 PM | 7:00 PM |
|----|---|-------------|---------|---------|---------|---------|---------|----------|----------|----------|---------|---------|---------|---------|---------|---------|---------|
|    | SFOBB East Span                             | 2,750       | 68      | 67      | 65      | 65      | 64      | 64       | 64       | 64       | 63      | 59      | 59      | 59      | 58      | 54      | 57      |
|    | SFOBB East Span to Bus Only Lane off-ramp   | 2,750       | 68      | 66      | 65      | 65      | 64      | 64       | 64       | 64       | 64      | 62      | 61      | 61      | 56      | 53      | 58      |
|    | Bus Only Lane off-ramp to EB I-580 Off-ramp | 3,840       | 67      | 66      | 65      | 66      | 65      | 65       | 65       | 65       | 65      | 63      | 61      | 55      | 40      | 47      | 59      |
|    | EB I-580 Off-ramp to HOV Connector          | 3,490       | 63      | 62      | 62      | 62      | 62      | 62       | 62       | 60       | 60      | 52      | 38      | 24      | 13      | 24      | 54      |
|    | HOV Connector to I-880 Junction             | 2,420       | 67      | 66      | 67      | 63      | 62      | 61       | 56       | 45       | 34      | 12      | 12      | 9       | 7       | 10      | 33      |
|    | I-880 Junction to I-580/I-80 Junction       | 460         | 65      | 64      | 62      | 62      | 61      | 62       | 58       | 58       | 58      | 13      | 10      | 8       | 7       | 13      | 47      |





## Existing Roadway Conditions

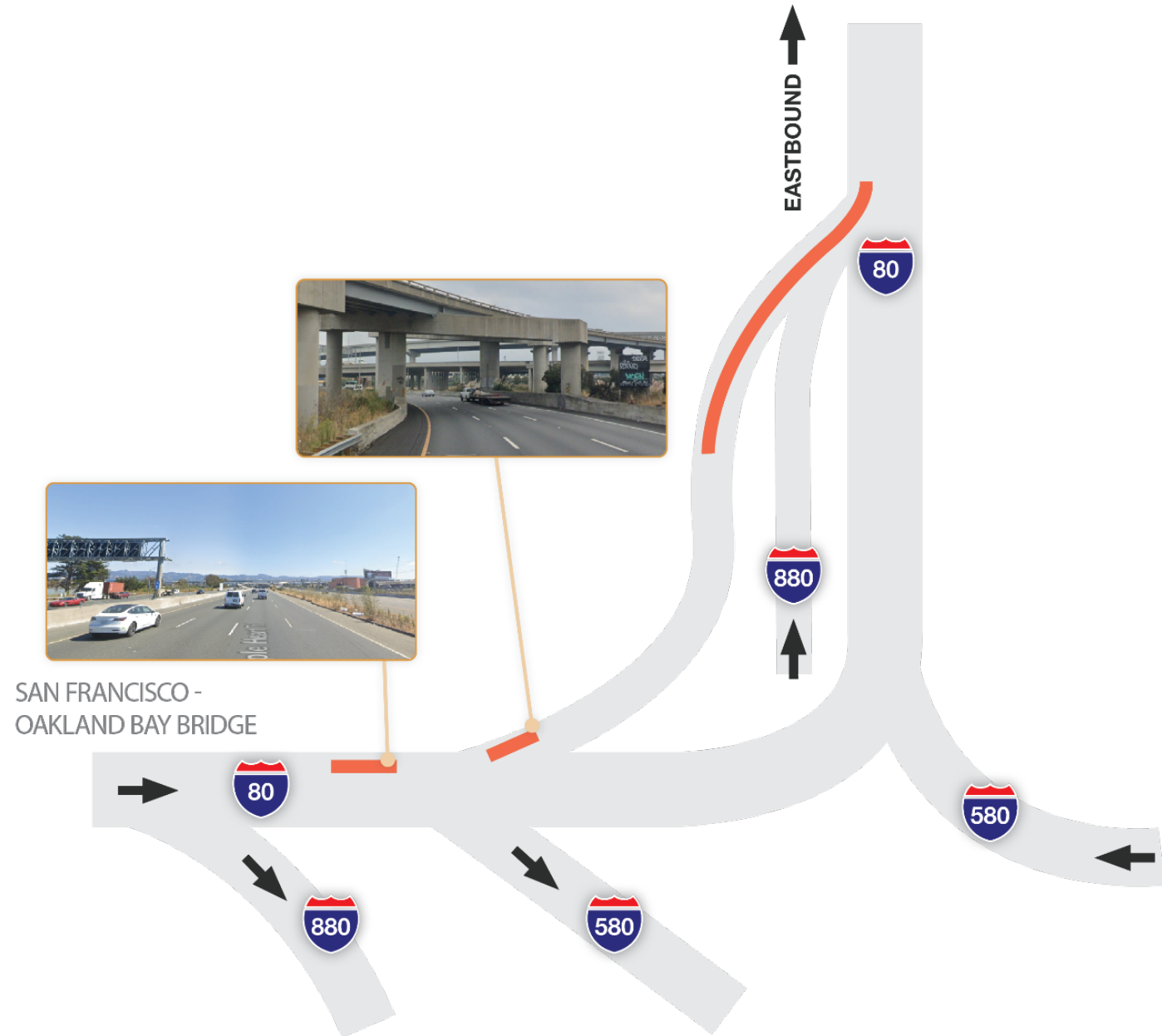


## LEGEND

— Narrow Shoulder Less than 10'

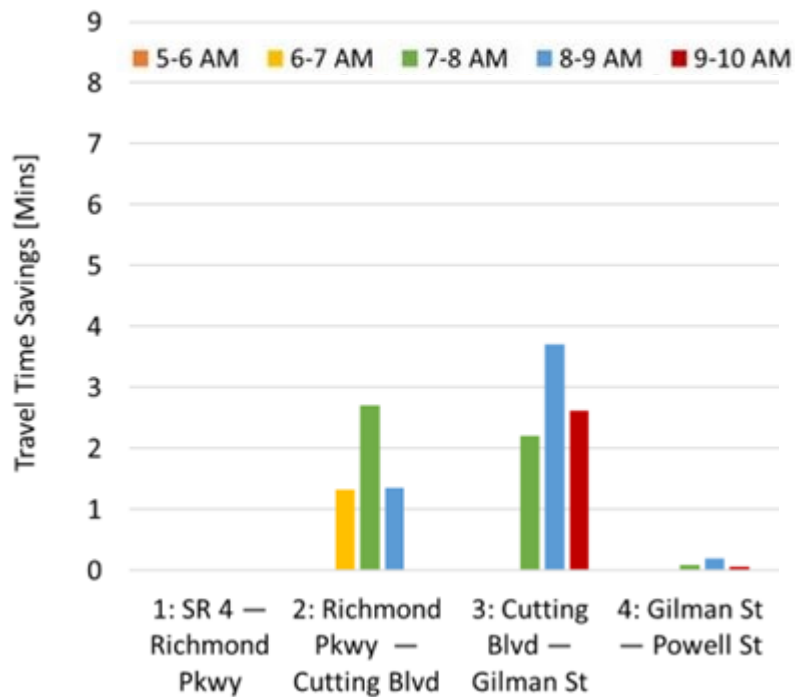


Note: left shoulder evaluated for Segment 6

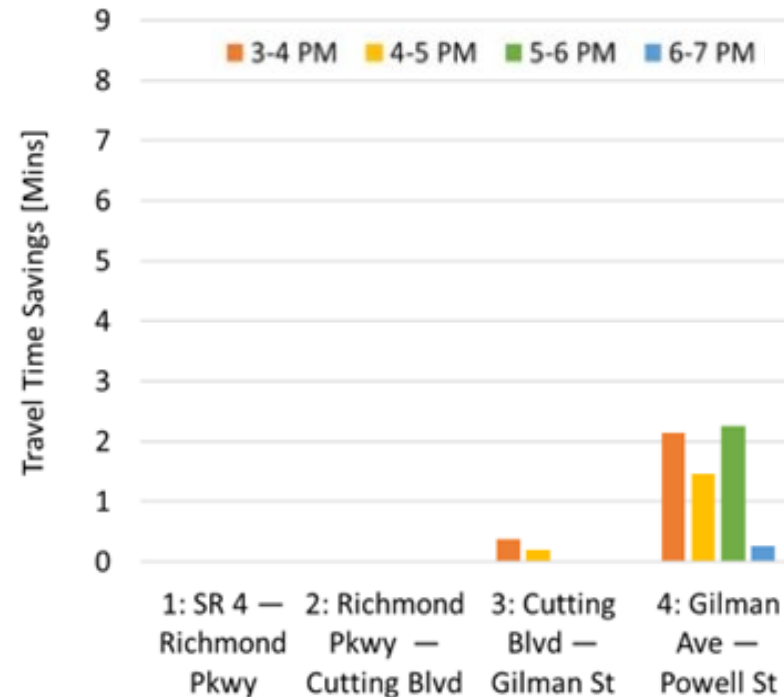




# Westbound Travel Time Savings (AM & PM)



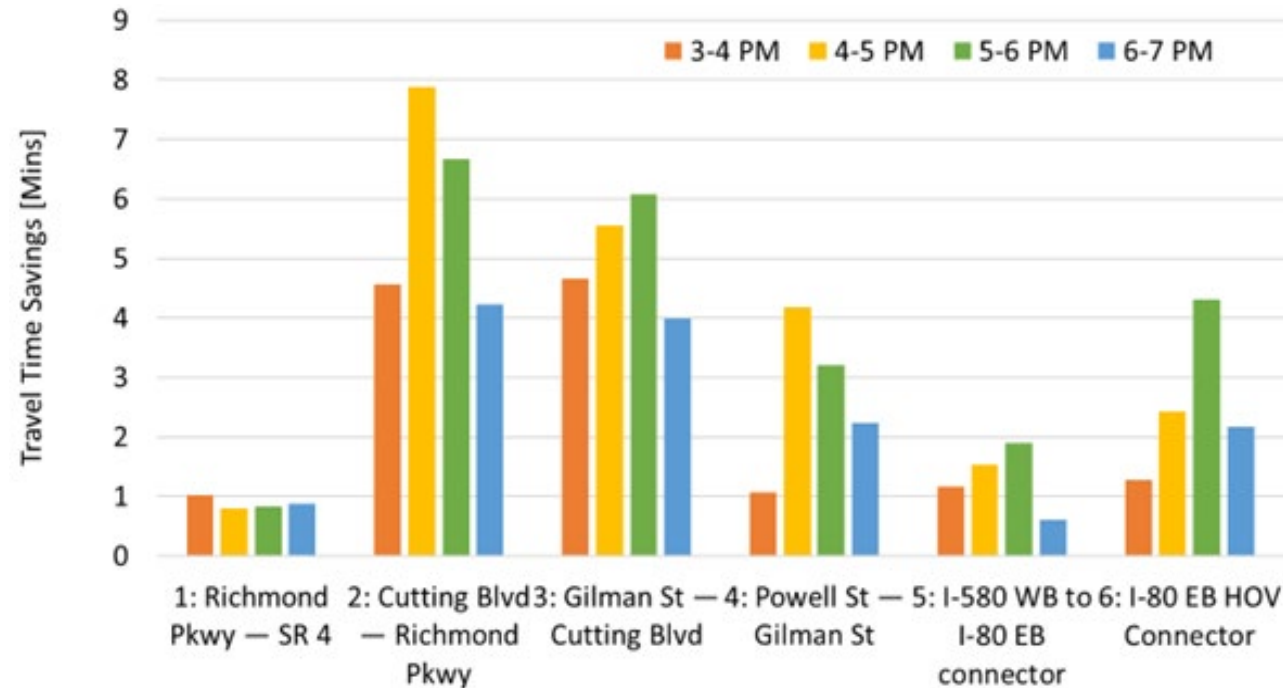
Average Travel Time Savings by Hour - AM



Average Travel Time Savings by Hour - PM

Note: Compared to HOV lane

# Eastbound Travel Time Savings (PM)



## Average Travel Time Savings by Hour - PM

Note: Compared to HOV lane, or compared to GP lane if no HOV lane available



# Preliminary Implementation Cost

## Cost by Segment and Direction on I-80

| Segment               | Segment Description                       | Total Cost Estimate<br>[2025 Dollars (Millions)] |          |
|-----------------------|---|--|----------|
|                       |   | I-80 WB  | I-80 EB  |
| Segment 1 (3.4 miles) | SR-4 to Richmond Pkwy                     | \$8.5 M  | \$9.0 M  |
| Segment 2 (4.7 miles) | Richmond Pkwy to Cutting Blvd             | \$15.5 M   | \$14.5 M |
| Segment 3 (3.5 miles) | Cutting Blvd to Gilman St                 | \$12.5 M   | \$13.5 M |
| Segment 4 (3.3 miles) | Gilman St to Powell St                    | \$6.5 M  | \$7.0 M  |
| Segment 5 (0.5 miles) | I-580 Connector Ramp to Powell St I-80 EB | -  | \$4.0 M  |
| Segment 6 (0.7 miles) | I-80 EB to HOV Connector Ramp             | -  | \$4.5 M  |

\*Costs include Caltrans Program Support, Construction Management, but no inflation.

\*Costs are order of magnitude and will be further evaluated in future phases.

# Cost Effectiveness

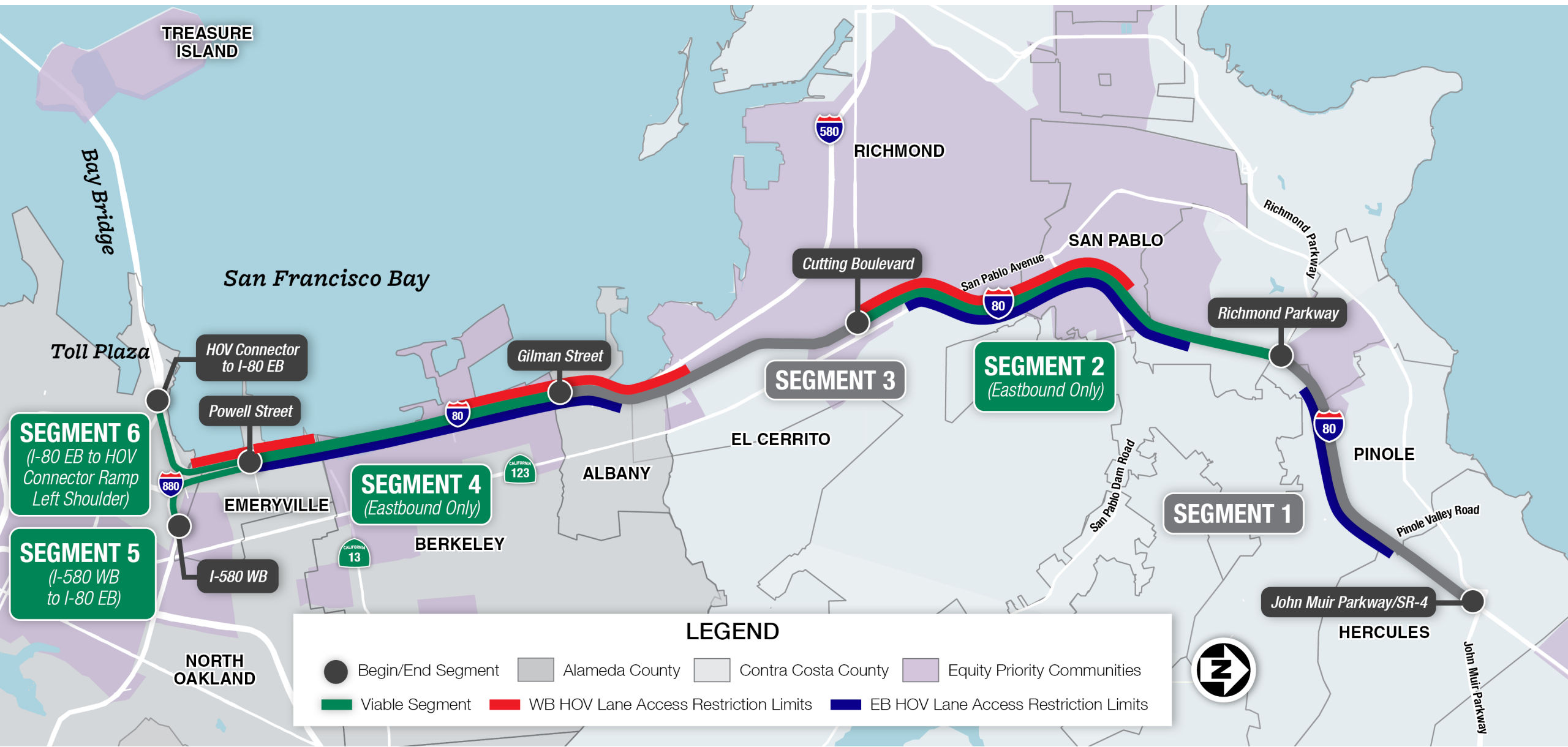
| # | Segment Description                       | Westbound I-80       |                   |                         | Eastbound I-80       |                   |                         |
|---|---|----------------------|-------------------|-------------------------|----------------------|-------------------|-------------------------|
|   |   | Person-Minutes Saved | Total Cost (2025) | \$/Person-Minutes Saved | Person-Minutes Saved | Total Cost (2025) | \$/Person-Minutes Saved |
| 1 | SR-4 to Richmond Pkwy                     | 0                    | \$8.5 M           | not effective           | 326                  | \$9.0 M           | \$28,000                |
| 2 | Richmond Pkwy to Cutting Blvd             | 459                  | \$15.5 M          | \$34,000                | 2711                 | \$14.5 M          | \$5,400                 |
| 3 | Cutting Blvd to Gilman St                 | 127                  | \$12.5 M          | \$98,500                | 597                  | \$13.5 M          | \$23,000                |
| 4 | Gilman St to Powell St                    | 65                   | \$6.5 M           | \$100,000               | 791                  | \$7.0 M           | \$9,000                 |
| 5 | I-580 Connector Ramp to Powell St I-80 EB | -                    | -                 | -                       | 223                  | \$4.0 M           | \$18,000                |
| 6 | I-80 EB to HOV Connector Ramp             | -                    | -                 | -                       | 780                  | \$4.5 M           | \$5,800                 |

Person Minutes = travel time savings x ridership (spring 2024)

Note: Travel time savings compared to HOV lane, or compared to GP lane if no HOV lane available



# BOS Viable Segments Compared with Draft HOV Lane Access Restrictions



# Recommendation

- Phase 1 – Near-Term
  - **Segments 5 and 6**
    - Low Project Cost - \$10.5 M (Escalated dollars)
    - Provides significant travel time savings per cost and length
    - No need for buses to cross on/off-ramps
    - Segment 5 may be a shoulder to lane conversion
    - Segment 6 would serve WestCAT Lynx and AC Transit routes
    - Minimal lane changing required for ease of bus operations
- Phase 2 – Longer-Term
  - **Segments 2 and 4 Eastbound**
    - Reassess after HOV Access Restrictions is implemented
    - Allow for segments 5 and 6 to be in operation and prove successful
    - Also pending future funding availability



# Summary of Recommendations

## I-80 Localized Transit Priority/HOV Strategies

| #  | Location               | Person-Minutes | Cost (2025) | \$/Person-Minutes |
|----|------------------------|----------------|-------------|-------------------|
| 2  | SR-4/John Muir Parkway | 1,882          | \$2,940,000 | \$1,200           |
| 3  | Pinole Valley Road     | 423            | \$955,000   | \$1,700           |
| 4C | Richmond Parkway       | 605            | \$2,610,000 | \$4,600           |
| 6  | San Pablo Avenue       | 190            | \$160,000   | \$700             |
| 7  | Central Avenue         | 147            | \$185,000   | \$1,000           |
| 8B | University Avenue      | 339            | \$1,110,000 | \$2,600           |

## I-80 Bus on Shoulder

| # | Segment Description                       | Person-Minutes Saved | Total Cost (2025) | \$/Person-Minutes Saved |
|---|---|----------------------|-------------------|-------------------------|
| 5 | I-580 Connector Ramp to Powell St I-80 EB | 223                  | \$4.0 M           | \$18,000                |
| 6 | I-80 EB to HOV Connector Ramp             | 780                  | \$4.5 M           | \$5,800                 |