

# TRANSBAY

**The Key Capacity Challenge for the Transbay Study Area:** Demand for trips to San Francisco through the transbay corridor grew by 42% between 2010 and 2015 during the AM peak hour – an increase of 8,600 transit riders. While the range for potential future growth is wide, the Core Capacity Transit Study has concluded that more capacity will be needed to satisfy demand in the very near future.



**Implement projects already identified:** It is critical to fund and implement projects that transportation agencies are already in various stages of planning and implementing.

**Additional capacity will be necessary:** It is likely that growth in demand will outpace capacity well before 2040, perhaps in the next 10 to 15 years even if the region implements the critical projects the agencies have already identified. This means that the region needs to identify additional short and medium-term investments in projects, programs, and policies that effectively address capacity issues, in addition to exploring bigger investments that will address a projected capacity short-fall over the long term.



**Transit is crucial in the transbay corridor:** Without significant changes in private vehicle occupancy, nearly all projected growth in this corridor would need to be met by increased transit service. If that is the case, transit would need to make room for several thousand new riders by 2025.



# VALUE PRICING

This package considers the effect of increasing automobile tolls on the Bay Bridge to improve Transbay bus service reliability.

## Package Summary: Adjust tolls to reduce vehicle queues and improve Transbay bus access

This package would change Bay Bridge tolls to reduce vehicle queues on the toll plaza during peak commuting periods.

- **Incentivizing carpools and transit:** This policy change would incentivize some commuters to shift to non-automobile transportation modes and others to shift their trips to off-peak times.
- **Benefits for buses:** Eliminating or minimizing queues at the toll plaza would result in faster and more reliable transit service, allowing buses to quickly pass through an area in which they are sometimes delayed today.
- **Using spare capacity:** Though BART is crowded today, some transbay bus lines have available capacity during peak periods.
- **Adjusting tolls based on demand:** Regular toll adjustments over time to minimize vehicle queues during peak times (i.e. tolls would be raised if queue lengths exceeded a threshold).
- **Expected performance on evaluation:** Significant increase in auto toll likely needed to shift automobile drivers to non-automobile transportation modes in volumes large enough to reduce vehicle queues to allow for buses to access the HOV lanes (which would, in turn, improve reliability).



### Key Components:

- **San Francisco Bay Bridge Automobile Toll Increase**

# VALUE PRICING AND TRANSIT SERVICE INCREASE

This package combines the tolling increase from explored in Package #1 and additional Transbay bus and ferry service.

## Package Summary: Implement additional bus and ferry service

- **Bus service improvements:** Increase the amount of AC Transit Transbay bus service. These improvements would rely on increase automobile tolls to reduce the vehicle queue lengths so that buses can seamlessly access the HOV lanes at the Bay Bridge, improving overall speed and reliability.
- **Ferry service improvements:** Increase ferry frequencies to 15 and 30 minute headways. These improvements would increase frequency and capacity on all routes to the San Francisco Core. In addition, improve or implement bus feeder service from ferry terminals to provide better connections to local transit service.
- **Transit fare adjustments:** Reduce fares on certain modes and introduce surcharges on others to balance passenger loads across all available capacity.
- **Expected performance on evaluation:** Increases in bus and ferry service significantly, increasing transit capacity overall in the corridor.



## Key Components\*:

- **Increase Transbay Bus Service**
- **Implement WETA 15-30 Minute Plan**
- **Ferry Feeder Bus Services**
- **Transbay Bus Park and Ride Facilities**
- **Transit Fare Adjustments**
- San Francisco Bay Bridge Automobile Toll Increase

\*Additional descriptions of bolded items on page with "Projects Common to Packages 2-5."

*New key components (not included in previous packages) are shown in bold.*

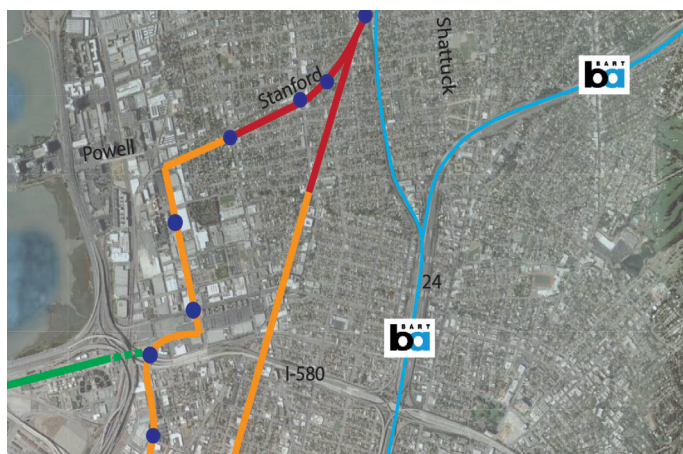


# VALUE PRICING, SERVICE INCREASE, AND INFRASTRUCTURE

Building on Bay Bridge toll increases and increases in transbay transit service, this package would provide transit infrastructure to improve reliability and the overall travel experience.

## Package Summary: Speed up buses on key East Bay streets

- **A new bus connection to the Bay Bridge:** The first infrastructure improvement would be refurbishing an old key system tunnel under the approach to the Bay Bridge to create a separate, dedicated bus access route to the Bay Bridge Toll Plaza. This would allow buses to skip any queues approaching the toll plaza, increasing bus travel speeds and improving reliability, and it would provide more direct routing in north Oakland and Emeryville. The investment would also reduce the travel distance on AC Transit transbay bus routes from North Oakland, Berkeley, Albany, and Emeryville to the Toll Plaza by about one-half mile and bypass a few delay-prone intersections.
- **Speed up service on the way to the bridge:** This package would also implement surface street improvements for transbay bus routes serving Berkeley, Emeryville and Oakland by adding dedicated bus lanes and other transit priority measures along major thoroughfares, construct rail-like bus stations, make streetscape improvements, and install signal priority along the corridor. Such improvements would make riding transit an even more attractive option for commuters.
- **Expected performance on evaluation:** Improves transit reliability and overall transit trip experiences.



### Key Components:

- **Bus Tunnel from Mandela Parkway to Bay Bridge**
- **Surface Street Transit Priority Connecting to I-80, I-580**
- **San Francisco Bay Bridge Automobile Toll Increase**
- Increase Transbay Bus Service
- Transbay Bus Park and Ride Facilities
- Implement WETA 15-30 Minute Plan
- Ferry Feeder Bus Services
- Transit Fare Adjustments

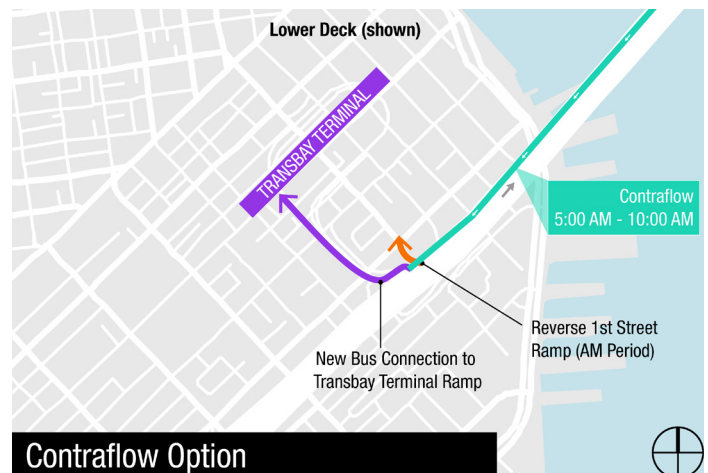
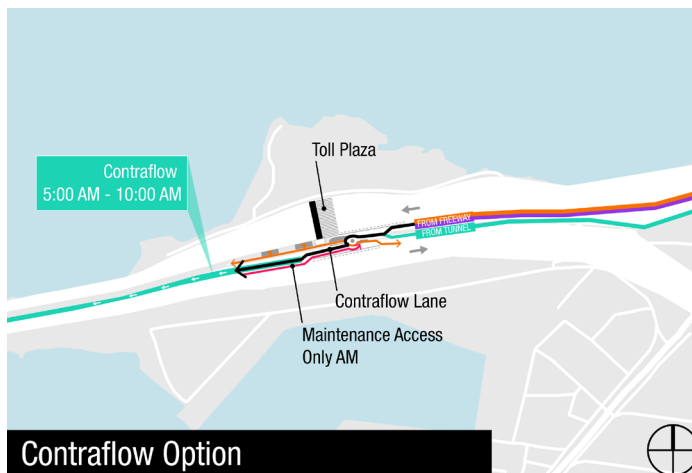
*New key components (not included in previous packages) are shown in bold.*

# VALUE PRICING, SERVICE INCREASE, INFRASTRUCTURE, AND CONTRAFLOW LANE

This package would implement all projects included in previous packages and create a contraflow lane for the exclusive use of buses on the lower deck of the Bay Bridge during the AM peak period only.

## Package Summary: Provide a dedicated bus lane on the lower deck of the Bay Bridge

- **Making use of reverse-commute capacity:** Traffic is considerably lower in the eastbound direction in the morning. A bus-only lane would take advantage of this available capacity.
- **The potential benefits:** The lane would improve transit travel speeds in the morning peak, which has more severe traffic congestion than the afternoon peak. It would also improve reliability.
- **Expected performance on evaluation:** Provides a seamless bus priority lane from the toll plaza to the Transbay Transit Center in San Francisco, improving overall transit reliability.



### Key Components:

- **Bus Only Contraflow Lane, Westbound on Lower Deck**
- San Francisco Bay Bridge Automobile Toll Increase
- Bus Tunnel from Mandela Parkway to Bay Bridge
- Surface Street Transit Priority Connecting to I-80, I-580
- Increase Transbay Bus Service
- Implement WETA 15-30 Minute Plan
- Ferry Feeder Bus Services
- Transit Fare Adjustments

*New key components (not included in previous packages) are shown in bold.*

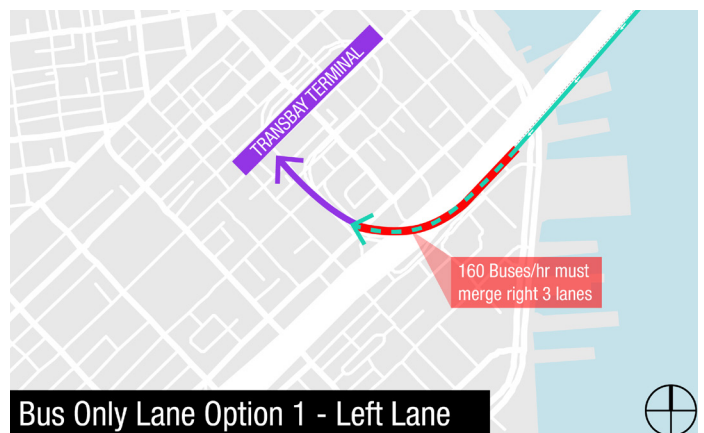
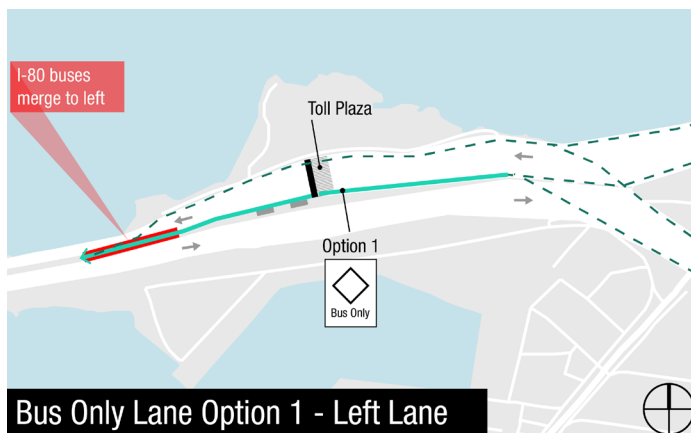
# VALUE PRICING, SERVICE INCREASE, INFRASTRUCTURE, AND BUS/HOV LANE

This package would implement all projects included in the transbay Packages #1, #2, and #3 and establish a westbound peak-period bus and/or high-occupancy vehicle (HOV) lane on the Bay Bridge.

## Package Summary: Provide a lane for high-occupancy vehicles on the upper deck of the Bay Bridge

The bus and HOV lane would replace an existing mixed-flow lane along the Bay Bridge's upper deck. There are two potential variations on this concept.

- **Option 1 – HOV/bus right-Of-way in the left lane:** I-80 buses and HOVs merge to the far left at the Bay Bridge Toll Plaza. On the San Francisco side, buses merge to exit via the Transbay Terminal ramp.
- **Option 2 - Right Lane:** HOVs/buses merge right at the Bay Bridge Toll Plaza. At Yerba Buena Island, these vehicles merge with westbound on-ramps. On the San Francisco side, buses move over one lane to exit via the Transbay Terminal ramp.
- **Expected performance on evaluation:** Potentially reduces capacity for automobiles if a bus only option. Operational challenges as buses will need to weave across travel lanes to access Transbay Transit Center



### Key Components:

- **Bus-Only Lane Bus/Truck Lane with Flow, Westbound**
- **Automated Toll Collection**
- San Francisco Bay Bridge Automobile Toll Increase
- Bus Tunnel from Mandela Parkway to Bay Bridge
- Surface Street Transit Priority Connecting to I-80, I-580
- Increase Transbay Bus Service
- Implement WETA 15-30 Minute Plan
- Ferry Feeder Bus Services
- Transit Fare Adjustments

New key components (not included in previous packages) are shown in bold.

## PROJECTS COMMON TO PACKAGES 2-5

The projects common to all packages include investments that would enable major components of the approaches described in previous pages or common sense investments that have simply not received detailed study by the agencies to date.

| PROJECT  | DESCRIPTION  |
|--|--|
| BART Glen Park Turnback  | A new “pocket” track on the existing BART right-of-way immediately south of Glen Park Station. This new middle track would allow southbound trains to divert into the “pocket” to prepare for a northbound return to downtown San Francisco and to the East Bay.   |
| Implement WETA Service Expansion   | Taking advantage of planned improvements at the Ferry Building and expansions in its fleet, WETA would run frequent service (every 15 minutes during peak periods and every 30 minutes midday) on the Vallejo, Oakland, and Alameda routes. In addition, it would add new terminals at Richmond, Berkeley, Alameda, and Mission Bay. |
| Improve Feeder Bus Service to Ferry Terminals  | Paired with the planned increases in ferry service, this project would provide access for new riders without a corresponding increase in the supply of automobile parking.   |
| Increase Transbay Bus Service  | An additional 50 high-capacity, low-floor, double-deck buses each seating up to 75 passengers, to significantly increase transbay bus service on key routes.   |
| Platform Screen Doors and Improve Vertical Circulation at Montgomery and Embarcadero | Platform screen doors separate passengers from the trackway and open automatically when a train is in a stopped position to receive or discharge passengers. Coupled with new escalators, stairs, and elevators, this would increase the capacity of the busiest stations in the BART system.  |
| Transbay Bus Park and Ride Facilities  | A park and ride facility in close proximity to the Bay Bridge that would use and activate an unused Caltrans right-of-way beneath freeway junctions and create an opportunity for improvements in the streetscape and landscaping, as well as additional lighting and security.  |