

# SAN RAFAEL TRANSPORTATION CENTER



Relocation Analysis, Environmental Clearance, and Preliminary Design

**Alternative Description and Trade-Offs Summary November 2020** 















#### **Elements of the Proposed Transit Center**

(Common to All Alternatives)

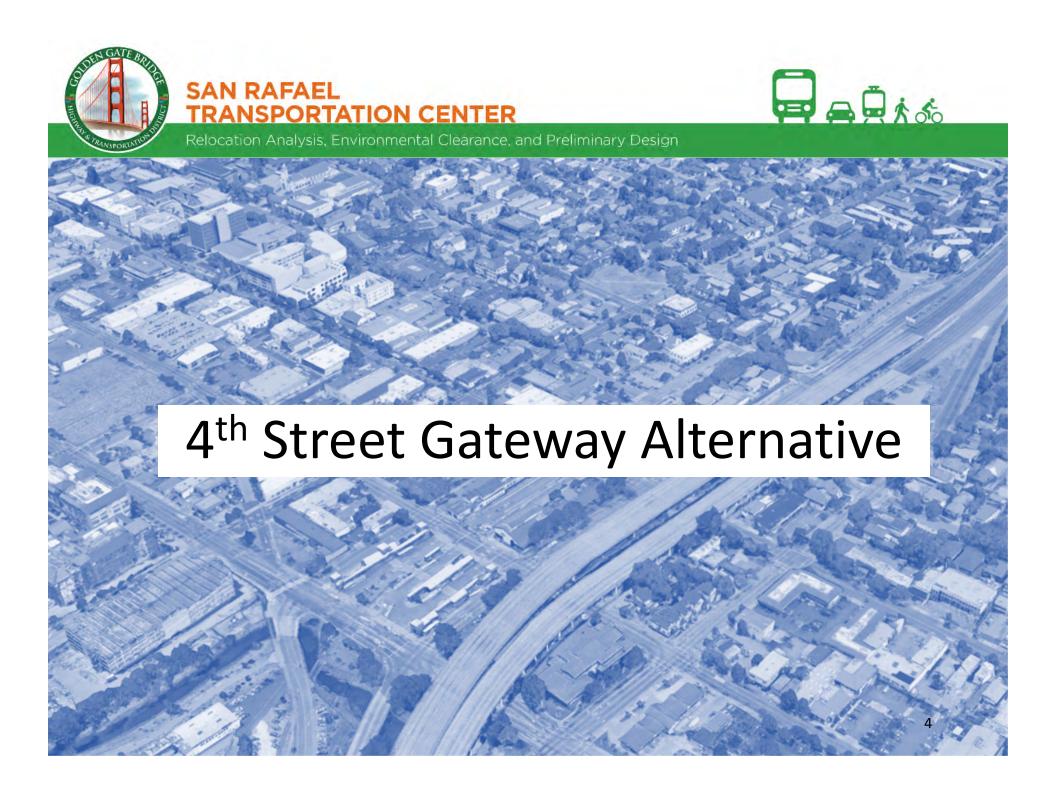
- 17 bus bays
  - Same capacity as current transit center, fully utilized at peak times (even during pandemic)
- Existing SMART Station
- Security
- Clipper machines
- Covered waiting areas and passenger seating
- Bike parking
- Green (LEED) treatments
- Wayfinding

- Customer service and transit information
- Lighting
- Landscaping and public spaces
- Ancillary retail space
- Maintenance parking
- Pick-up/Drop-off space
- Taxi and shuttle space
- Driver relief facilities
- Public restrooms













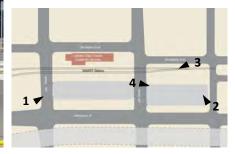
### **Existing Conditions**



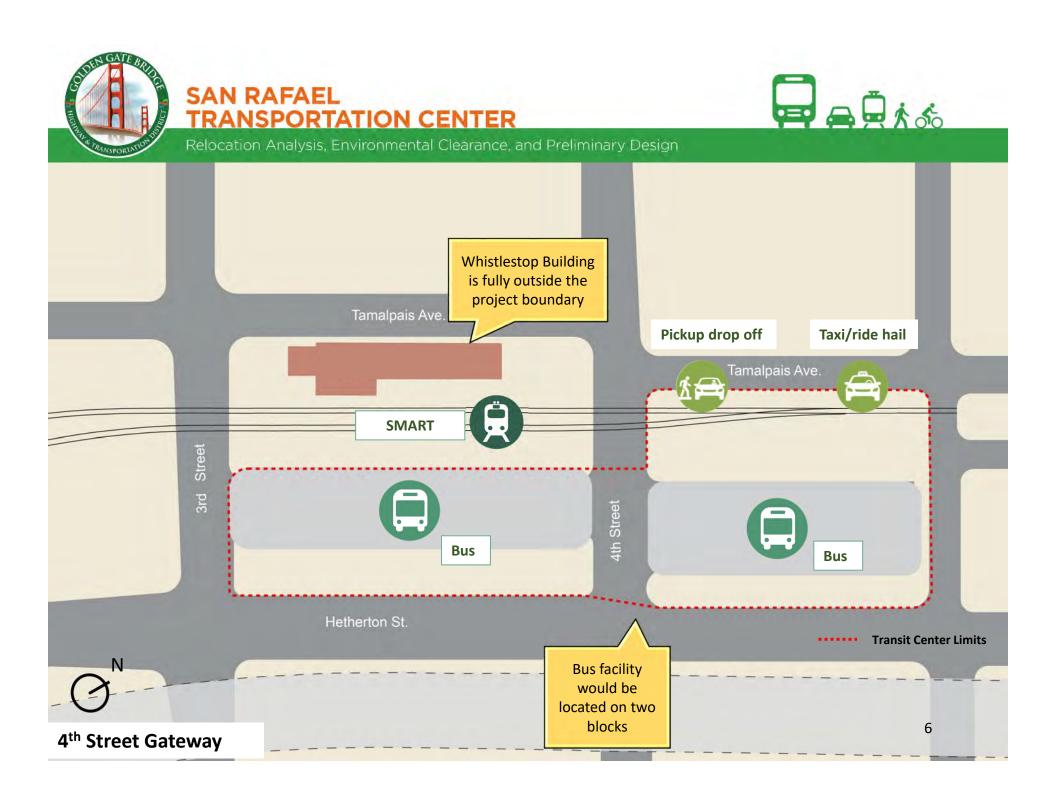


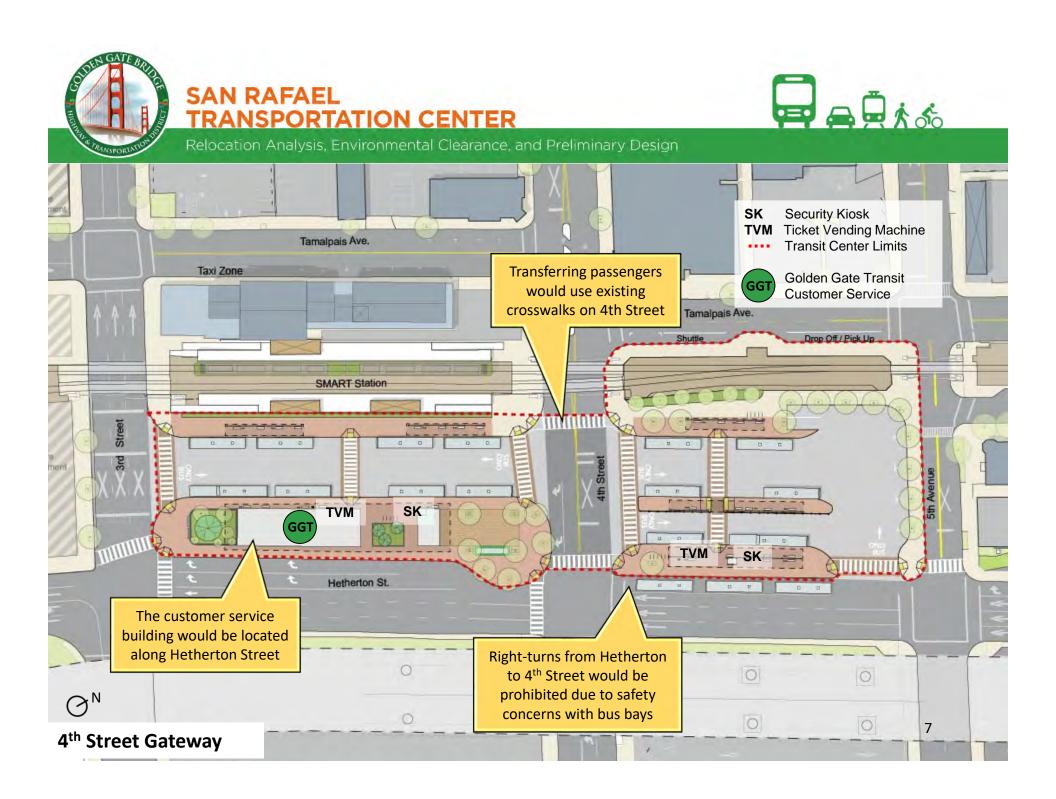




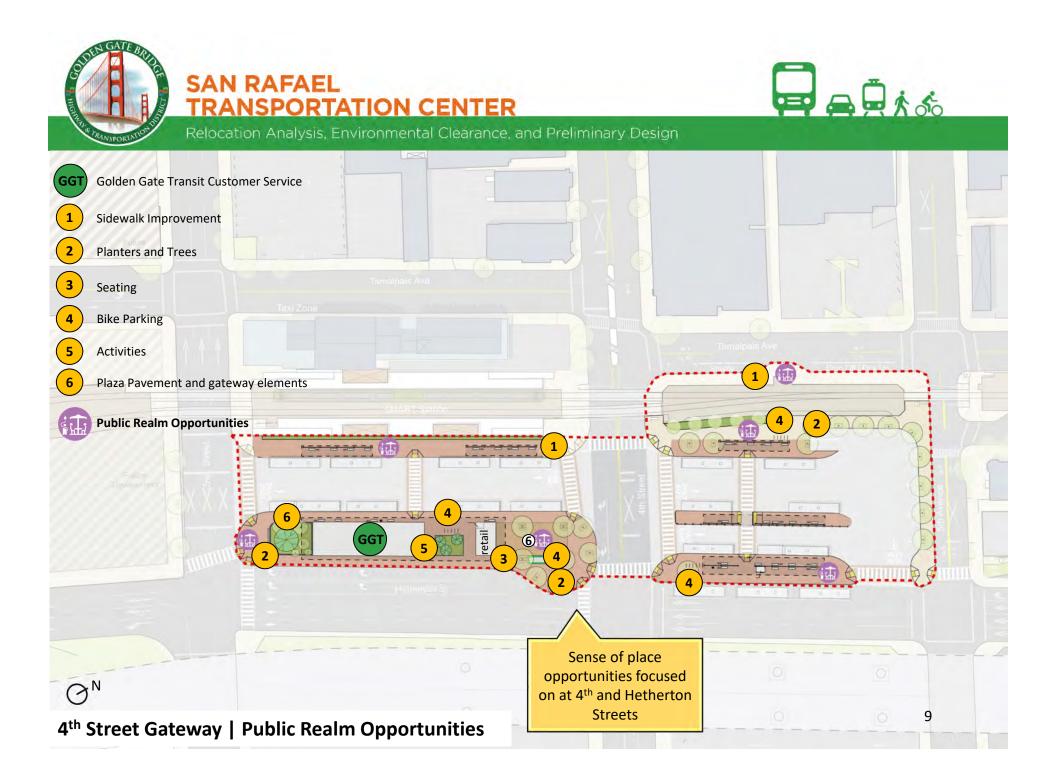


4<sup>th</sup> Street Gateway

























## Passenger Experience

- Provides convenient access to downtown San Rafael for transit users
  - Compared to the current transit center, passengers accessing most downtown destinations would no longer have to cross busy 3<sup>rd</sup> Street.
- Some people transferring between buses would have to cross 4th Street, which raises some concerns about safety
  - Based on current transfer patterns, and the planned configuration of bus bays in this alternative, 93 passengers would have to cross 4<sup>th</sup> Street during the a.m. peak hour, and 112 passengers would have to cross during the p.m. peak hour to transfer between bus routes. The maximum transfer time and distance is comparable between all Build alternatives.
- Many bus bays are would be on the same block as SMART; it would only require
  passengers coming from the north side of 4<sup>th</sup> Street to make a crossing to
  transfer to or from SMART.
  - Based on current transfer patterns, 29 passengers would have to cross 4<sup>th</sup> Street during the p.m. peak hour to transfer between a bus and SMART. This represents a significant benefit relative to No-Build (Existing) conditions where all bus-SMART transfers much cross 3<sup>rd</sup> Street, a much busier street.
- More street crossings generally raise concerns about safety, particularly for transfers, because it creates more conflict between pedestrians and vehicles





## **Traffic Operations**

- Placement of three bus bays along Hetherton Street north of 4<sup>th</sup> Street (similar to how bus bays are placed along Hetherton Street with the existing transit center) requires prohibition of the southbound right-turn from Hetherton Street to 4<sup>th</sup> Street.
  - Those movements would need to use Fifth Avenue or 3<sup>rd</sup> Street instead
  - To reduce the impact on 3<sup>rd</sup> Street, a second right-turn lane from Hetherton Street to 3<sup>rd</sup> Street would be included with the project
  - No other changes to the roadway network are proposed with this alternative
- Compared to existing conditions, alternative results an increase in a small to moderate increase in delay per vehicle in both the a.m. (<20%) and p.m. (<10%) peak hours for existing conditions
- In future Year 2040 conditions, the overall net increase in delay in the a.m. peak period is projected to be larger. The increase in delay in the a.m. peak hour is primarily due to the effects of the removal of the southbound right-turn to 4<sup>th</sup> Street





## **Transit Operations**

- Each alternative provides the same number of bus bays as the existing transit center. Configuration of bus bays with each Build alternative improves accessibility for bus routes and reduces the amount of circulation on local streets necessary for buses to access their bays.
  - Provides additional operational flexibility and has the potential to reduce transit operating costs by making transit more efficient and reliable
  - Operational flexibility for the Build alternatives also will better allow for future changes in transit service and schedules than is provided in the current transit center
- Compared to existing conditions, alternative results a modest (<5%) decrease in transit circulation time in downtown area in both the a.m. and p.m. peak hours for existing conditions. It would also result in an improvement in transit reliability.
- In future Year 2040 conditions, bus travel time in the a.m. peak hour is anticipated to increase relative to No-Build conditions due to increased congestion caused by the project alternative





## Bicycle and Pedestrian Connections

- Directly accessible by the Puerto Suello path and would also connect to the City's bike network through planned facilities (not a part of the alternative) on Tamalpais Avenue.
- Placed along the planned Commercial Connector route along 4<sup>th</sup> Street.
- Removes the existing segment of the Puerto Suello path between 4<sup>th</sup> Street and Fifth Avenue, instead routing bicycles along Fifth Avenue to Tamalpais Avenue, which is included for enhanced bicycle facilities in the City's Bicycle and Pedestrian Master Plan
- Introduces new driveways for buses along both sides of 4<sup>th</sup> Street between Hetherton Street and the SMART tracks. 4<sup>th</sup> Street is the main pedestrian corridor into downtown





## Land Use and Creating a Sense of Place

- The sites proposed for this alternative are zoned as "Hetherton Office" in the City's Station Area Plan. Placing the transit center in this location would preclude that development.
  - Opportunity Site D is within the footprint of the alternative
- By locating the transit center on each side of 4<sup>th</sup> Street, this alternative creates an opportunity to provide architectural or design elements that serve as a gateway to the City. This includes plazas and other sense of place opportunities along 4<sup>th</sup> Street
- Several active businesses are currently operational within the footprint of this alternative





#### **Environmental Considerations**

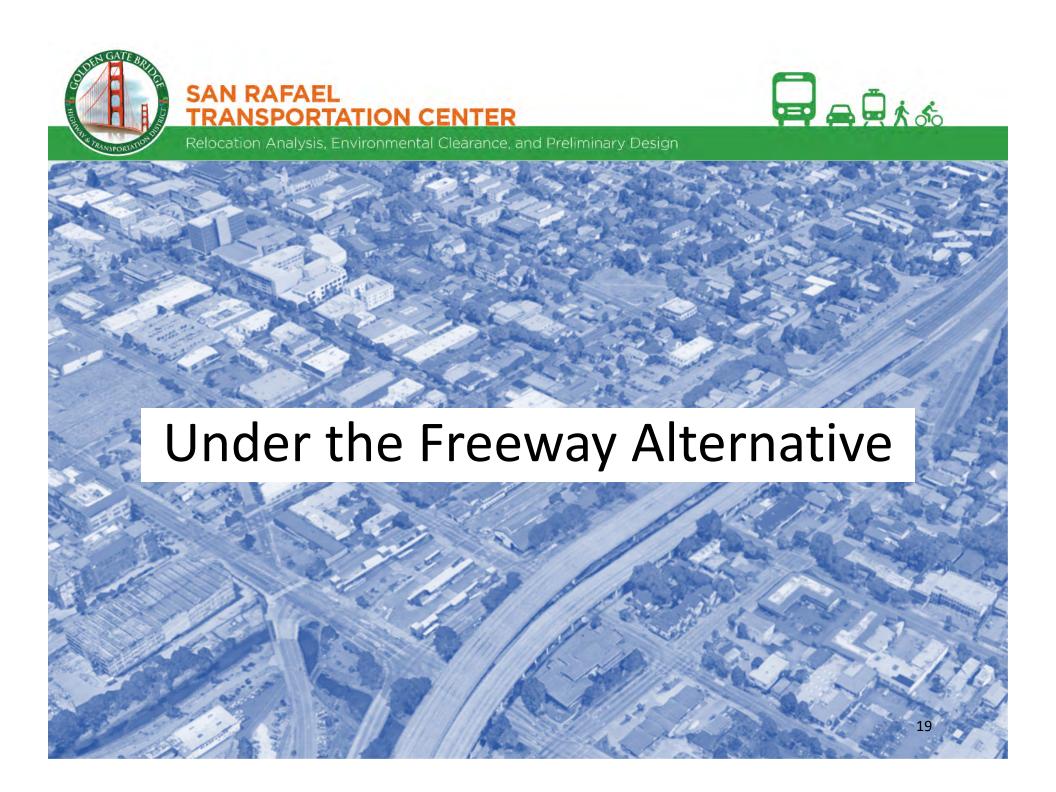
- Two Victorian-style buildings, located on 5<sup>th</sup> Avenue on the northern site of this alternative, would need to be relocated. These are potentially historic resources
- The alternative may require the removal or relocation of existing street trees.





## **Project Capital Cost**

• Estimated total cost of construction, property acquisition, and relocation (2022 dollars): \$40M-\$55M







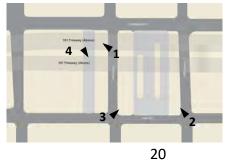
#### **Existing Conditions**



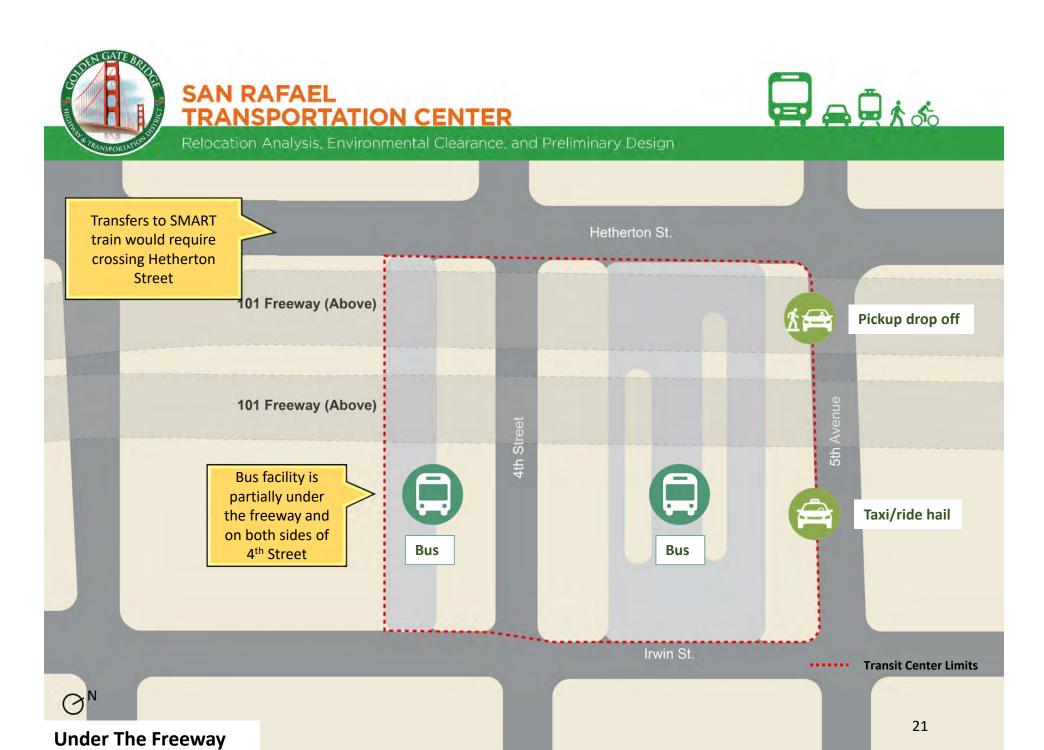


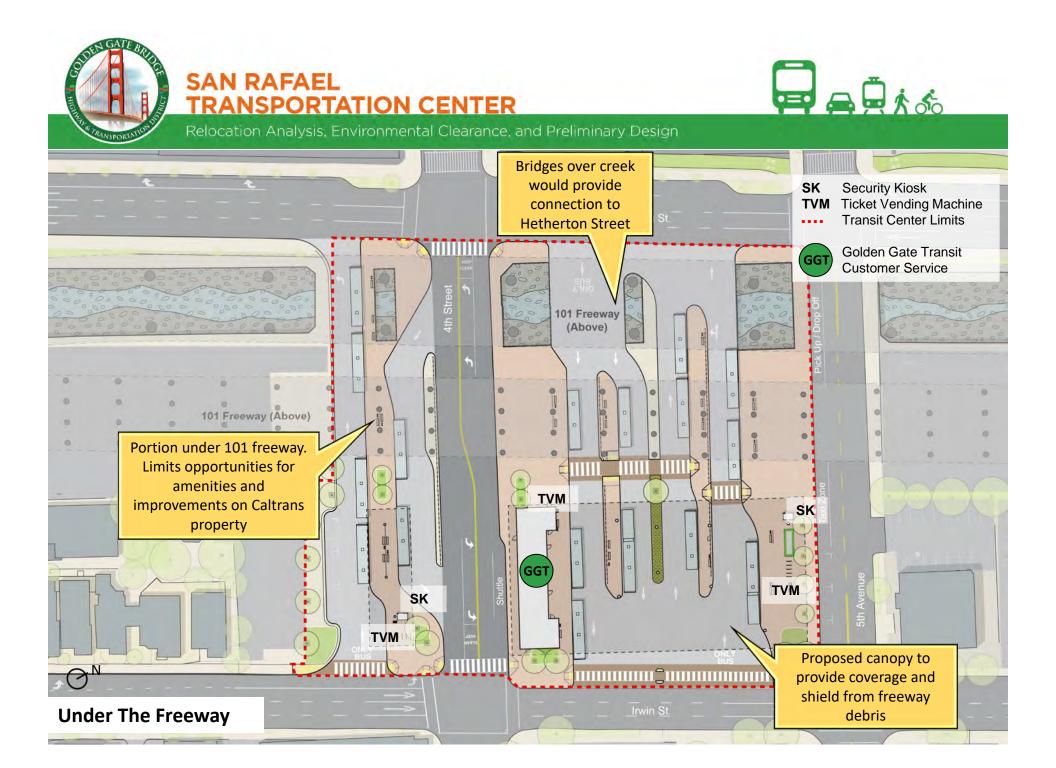


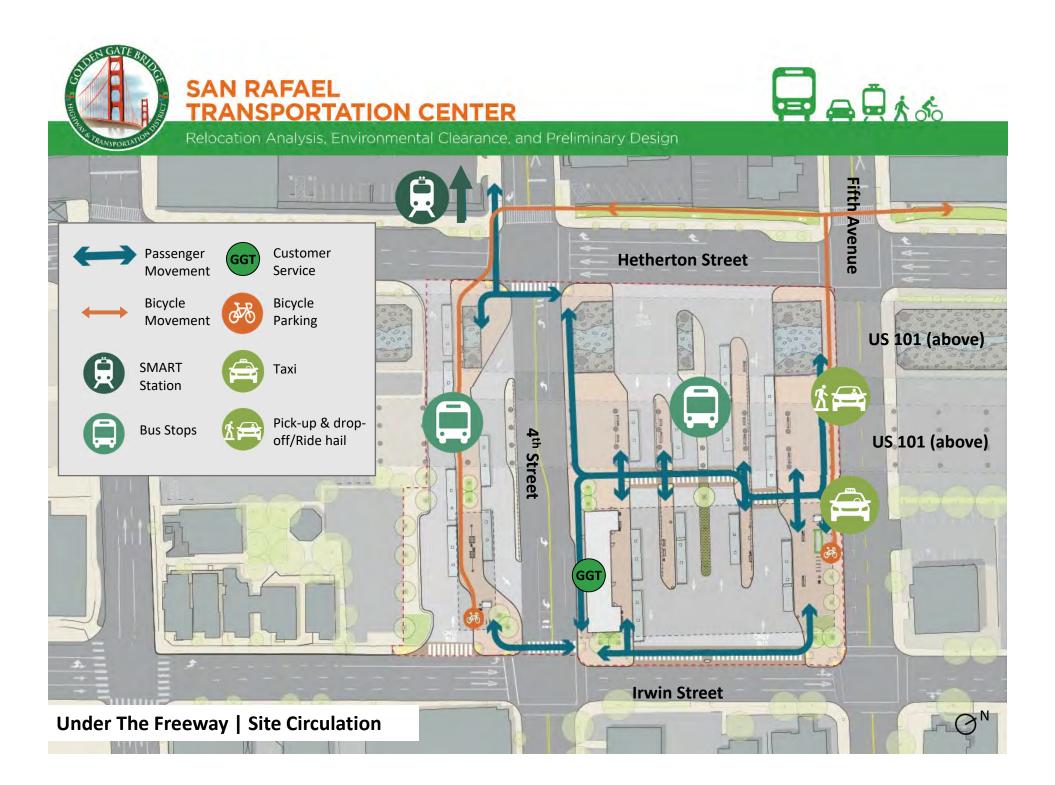




**Under The Freeway** 

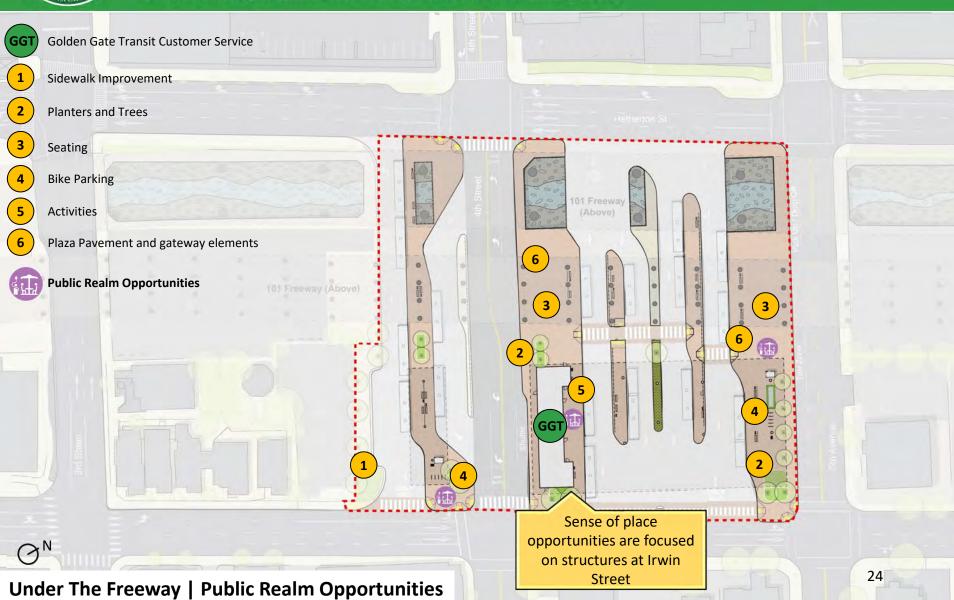
























## Passenger Experience

- Visibility would be partially blocked by freeway support columns; visibility is one
  of the components in the Crime Prevention through Environmental Design
  (CPTED) approach for creating a safe and welcoming environment for
  passengers.
- The portions of the transit center under the freeway will not be allowed to have any permanent structures, such as bus shelters; Caltrans does not allow for structures in proximity of the freeway structure in the event they need to make repairs.
- Passengers accessing most downtown destinations would no longer have to cross busy 3<sup>rd</sup> Street. However, passengers traveling to downtown San Rafael and the BioMarin employment area would now have to cross Hetherton Street.





## Passenger Experience (continued)

- Some people transferring between buses would have to cross 4<sup>th</sup> Street
  - Based on current transfer patterns, and the planned configuration of bus bays in this alternative, 32 passengers would have to cross 4<sup>th</sup> Street during the a.m. peak hour, and 39 passengers would have to cross during the p.m. peak hour to transfer between bus routes.
- All passengers going to or from SMART would have to cross Hetherton Street and many would also have to cross 4<sup>th</sup> Street to transfer to or from a bus.
  - Based on current transfer patterns, 34 passengers would have to cross Hetherton Street during the p.m. peak hour to transfer between a bus and SMART.
- More street crossings generally raise concerns about safety, particularly for transfers, because it creates more conflict between pedestrians and vehicles





## **Traffic Operations**

- The alternative would install new driveways on Hetherton Street, Irwin Street, and 4<sup>th</sup> Street, but otherwise would not change the traffic circulation network
- Compared to existing conditions, the alternative results in a small to moderate decrease in delay per vehicle in both the a.m. (<5%) and p.m. (<10%) peak hours.
- Would result in similar benefits of less than a 10% reduction in delay per vehicle in projected Year 2040 conditions, relative to the No-Build.
  - Benefits are associated with reducing bus traffic on several congested streets, including 2<sup>nd</sup>
     Street and 3<sup>rd</sup> Street.





## **Transit Operations**

- Each alternative provides the same number of bus bays as the existing transit center. Configuration of bus bays with each Build alternative improves accessibility for bus routes and reduces the amount of circulation on local streets necessary for buses to access their bays.
  - Provides additional operational flexibility and has the potential to reduce transit operating costs by making transit more efficient and reliable
  - Operational flexibility for the Build alternatives also will better allow for future changes in transit service and schedules than is provided in the current transit center
- Compared to existing conditions, would result in a significant to moderate decrease in circulation time in both the a.m. (<20%) and p.m. (<10%) peak hours. It would also result in a significant improvement in transit reliability in the a.m. peak hour.
- In future Year 2040 conditions, results in similar benefits relative to the No-Build, albeit with a small decrease in transit reliability in the p.m. peak hour





## Bicycle and Pedestrian Connections

- Placed along the proposed Commercial Connector route along 4<sup>th</sup> Street included in the City's Bicycle & Pedestrian Master Plan. It would not connect to or modify any other bicycle routes as designated in the Plan.
- Introduces new driveways for buses along the south side of 4<sup>th</sup> Street between Hetherton Street and Irwin Street. 4<sup>th</sup> Street is the main pedestrian corridor into downtown





## Land Use and Creating a Sense of Place

- The sites proposed for this alternative are zoned as "Commercial/Office" or "Residential/Office Districts" in the City's Station Area Plan. Placing the transit center in this location would preclude that development.
  - Opportunity Site E is within the footprint of the alternative
  - Area underneath the freeway does not have a zoning in the Station Area Plan
- At least four active businesses are currently operational within the footprint of this alternative east of the freeway.
- The space underneath the freeway is currently used as a Caltrans Park-and-Ride lot
  - Estimated that at least 72 parking spaces will be impacted by this alternative
  - Park-and-Ride is well-utilized and the parking spaces will need to be fully replaced as part of this alternative in a convenient and nearby location.





#### Land Use and Creating a Sense of Place (continued)

- Caltrans currently owns a large portion of the property required for this alternative
  - Golden Gate Transit will be limited to a ground lease of the property and will not be able to acquire ownership of the Caltrans portion. Caltrans will retain the right to evict Golden Gate Transit without compensation if repairs are necessary to US 101
  - Would require transit to be relocated to a different undetermined location and pay for the cost of yet another new facility.
- Sense of place opportunities would be provided near Irwin Street near both the 4<sup>th</sup> Street and Fifth Avenue intersections





#### **Environmental Considerations**

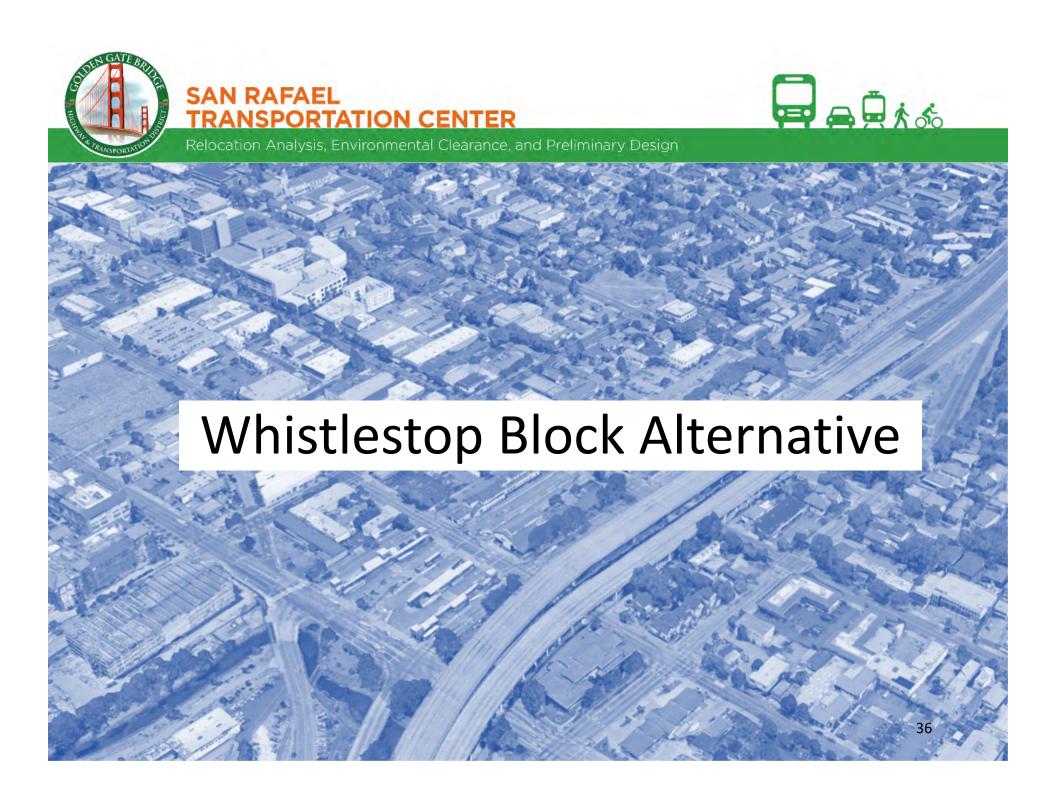
- Would require parts of the existing creek under the freeway to be covered with three bridges in order to provide connections between Hetherton Street and the bus bays
  - Covering of the creek would trigger both temporary and permanent environmental impacts. The impacts will need to be mitigated through environmental mitigation projects in other locations.
  - Modifications to the creek will require permits from the Regional Water Quality Control Board, Army Corp, USFWS and NOAA.
- The alternative may require the removal or relocation of existing street trees





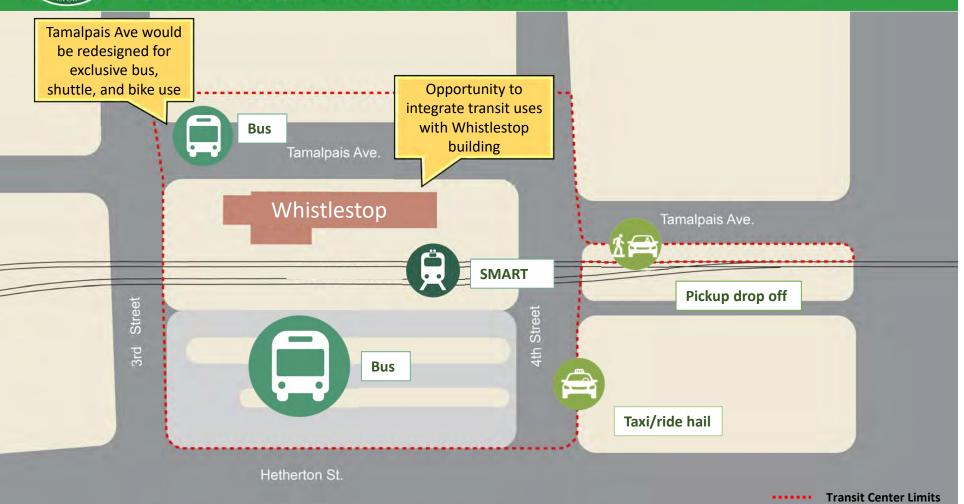
## **Project Capital Cost**

• Estimated cost of construction, property acquisition, and relocation (2022 dollars): \$60M-\$85M













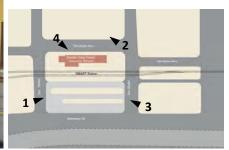
### **Existing Conditions**

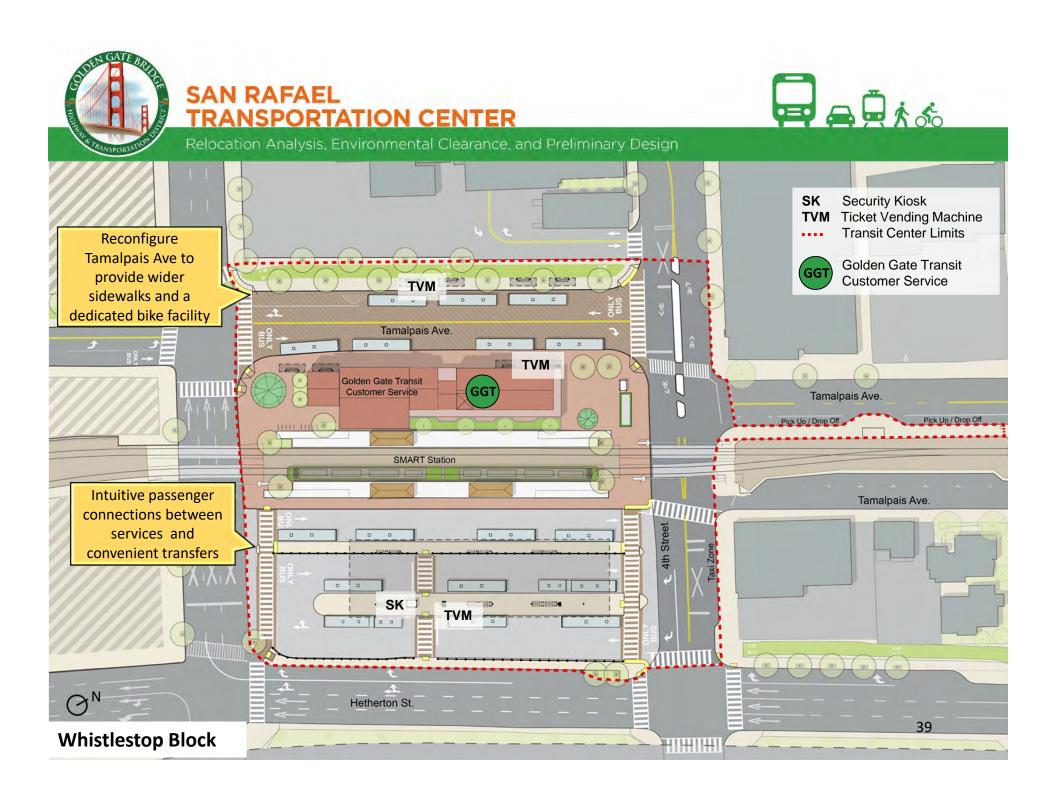


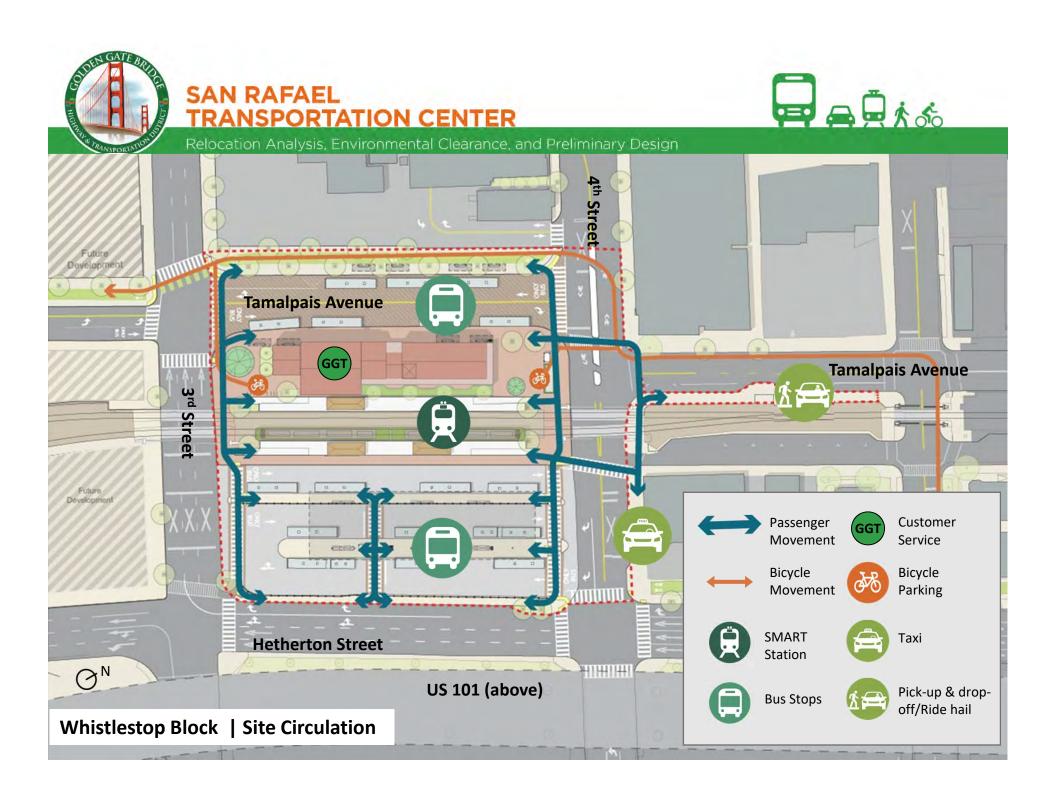






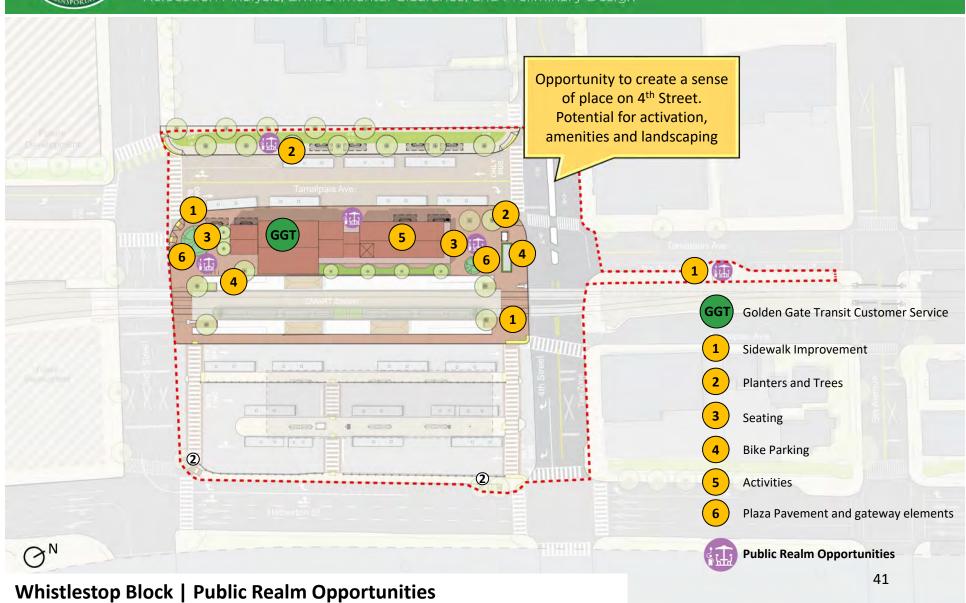
















#### Illustrative concept only – Final Design in Next Project Phase





















### Passenger Experience

- Major advantage of this alternative is that it locates all transit activity on one contiguous block
  - Results in greater convenience and safety for pedestrians
  - Does not require passengers to cross any City Streets for either transfers between buses or transfers between buses and SMART
  - Creates a cohesive transit identity and simplifies wayfinding for transit users





# **Traffic Operations**

- Places bus bays along both sides of Tamalpais Avenue between 3<sup>rd</sup> Street and 4<sup>th</sup>
   Street and converts that block to bus-only
  - Existing driveway to the lower level of the parking structure for the ClockTower Building at 960
     Lincoln Avenue would be shifted to 4<sup>th</sup> Street
  - Traffic currently using Tamalpais Avenue would instead shift to Lincoln Avenue or other northsouth streets
  - The City is currently planning for major modifications to Tamalpais Avenue, including modifying this block of Tamalpais Avenue to be one-way northbound.
- Compared to existing conditions, the alternative results in negligible change in delay per vehicle in the a.m. peak hour and a moderate decrease in the p.m. (<10%) peak hour.</li>
- Would result in a less than a 10% reduction in delay per vehicle in projected
   Year 2040 conditions relative to the No-Build for both peak hours
  - Benefits are associated with reducing bus traffic on several congested streets, including 2<sup>nd</sup>
     Street and 3<sup>rd</sup> Street.





### **Transit Operations**

- Each alternative provides the same number of bus bays as the existing transit center. Configuration of bus bays with each Build alternative improves accessibility for bus routes and reduces the amount of circulation on local streets necessary for buses to access their bays.
  - Provides additional operational flexibility and has the potential to reduce transit operating costs by making transit more efficient and reliable
  - Operational flexibility for the Build alternatives also will better allow for future changes in transit service and schedules than is provided in the current transit center
- Compared to existing conditions, the alternative achieves a moderate to significant decrease in circulation time in both the a.m. (<15%) and p.m. (<10%) peak hours. Would also result in a moderate improvement in transit reliability in the a.m. peak hour.
- In future Year 2040 projections, results in even greater benefits, achieving moderate to significant benefits to both transit travel time and reliability in both peak hours





# Bicycle and Pedestrian Connections

- Directly accessible by the Puerto Suello path and the Mahon Creek Path
- Would construct a key link in the City's planned bicycle network by building a two-way raised cycle track on Tamalpais Avenue between 2<sup>nd</sup> Street and 4<sup>th</sup> Street, effectively connecting the Puerto Suello and the Mahon Creek paths.
  - Would create both a continuous high quality facility and provide enhanced bicycle and pedestrian access to the transit center.
  - Also placed along the planned Commercial Connector route along 4<sup>th</sup> Street.
- The alternative would introduce new driveways for buses along the south side of 4<sup>th</sup> Street between Hetherton Street and the SMART tracks. 4<sup>th</sup> Street is the main pedestrian corridor into downtown.





### Land Use and Creating a Sense of Place

- The sites proposed for this alternative are zoned as "Hetherton Office" in the City's Station Area Plan. Placing the transit center in this location would preclude that development.
  - A small portion of Opportunity Site A is within the footprint of the alternative
- Would create an opportunity to use the existing Whistlestop building for transit functions (such as customer service and restrooms)
  - Some modifications would be needed to the building to upgrade it to current codes and align it with current transit needs
- Excluding Whistlestop, which is planning to relocate, two active businesses are currently operational within the footprint of this alternative. Also would encompass a portion of the off-street parking for an additional business
- The alternative would implement a key component of the Station Area Plan, which is a public plaza north of the Whistlestop Building along 4<sup>th</sup> Street. Additional sense of place opportunities would be provided along 3<sup>rd</sup> Street.





### **Environmental Considerations**

• The alternative may require the removal or relocation of existing street trees





## **Project Capital Cost**

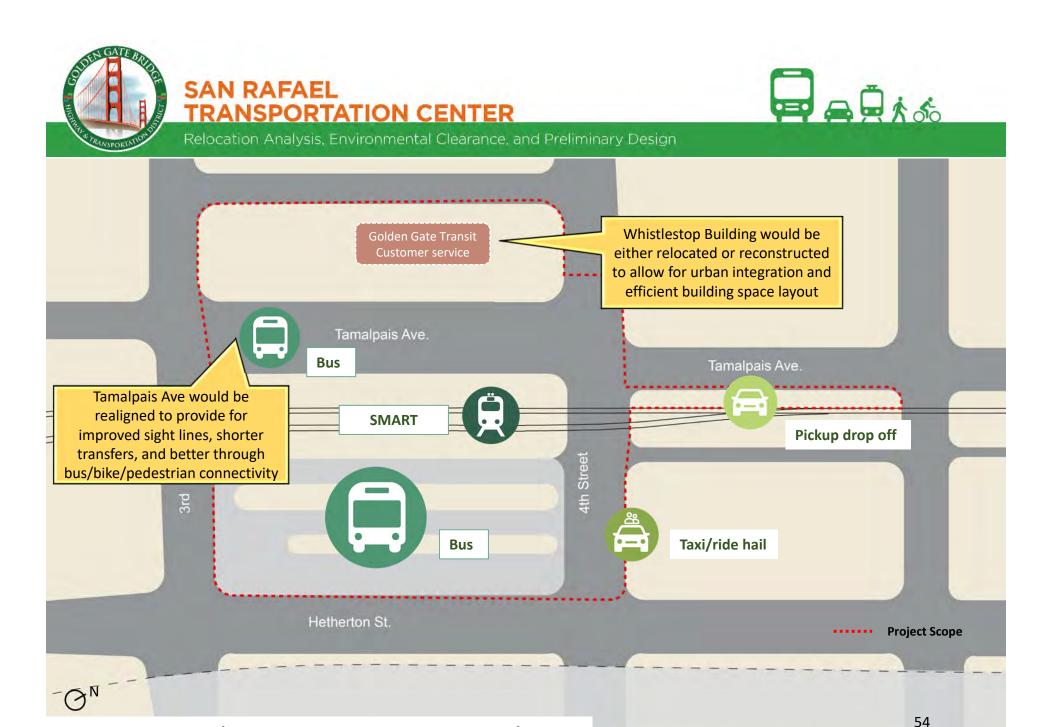
• Estimated cost of construction, property acquisition, and relocation (2022 dollars): \$40M-\$55M



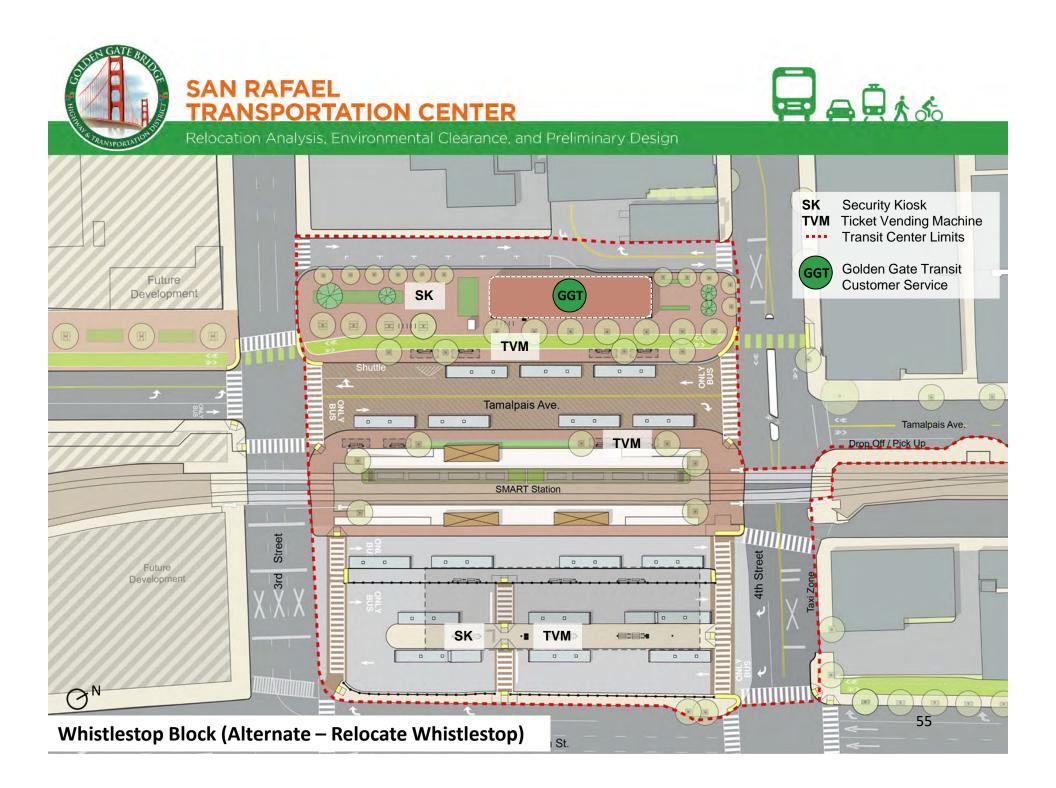


# Relocate Whistlestop Variant

 Sub-alternative to the Whistlestop Block Alternative has the same configuration east of the SMART tracks, but flips the location of the Whistlestop building and Tamalpais Avenue west of the tracks



Whistlestop Block (Alternate – Relocate Whistlestop)







Whistlestop Block (Alternate – Relocate Whistlestop) | Public Realm Opportunities





# Relocate Whistlestop Variant Benefits

- Whistlestop Building would not serve as a visual barrier in the middle of the transit services.
  - Provides line-of-sight between all transit uses, including buses, trains, and shuttles
  - Makes wayfinding easier and allows passengers to better understand transfer paths
- Reduces the transfer distance by shifting the bus bays on Tamalpais Avenue closer to the bus bays east of SMART
- Allows the relocated Whistlestop Building to serve as a visual transition from the transportation uses west of 101 to the downtown core of San Rafael. Provides an aesthetically pleasing structure as the entryway along 4<sup>th</sup> Street into Downtown.





# Relocate Whistlestop Variant Benefits (continued)

- Moving the building emphasizes the more distinctive (and less modified) east side of the Whistlestop Building that is currently obscured by the raised SMART platforms.
  - Alternatively, replacing the Whistlestop Building with a new structure west of Tamalpais would allow for greater flexibility in building configuration and design, saving cost and enhancing the opportunities to attract new supporting retail uses
- Better aligns Tamalpais Avenue between 2<sup>nd</sup> and 4<sup>th</sup> Streets with segments to the north and south, creating a more direct north-south bicycle and pedestrian route and improving the view corridor
- Creates space on the west side of Tamalpais Avenue for additional sense of place and urban design treatments





## Relocate Whistlestop Variant Considerations

- Minor modifications to the project footprint
- Does not significantly affect traffic or transit operations
- Circulation paths and active transportation considerations would be similar, but with reduced transfer distances between some transit services
- Small increase in capital cost (roughly 5%-10%)





### **Project Capital Cost**

• Estimated cost of construction, property acquisition, and relocation (2022 dollars): \$40M-\$60M