

## El Camino Real Bus Speed and Reliability Study

APPENDIX:
CAPITAL IMPROVEMENT
PLANS BY CITY





# ECR Bus Speed & Reliability Study DALY CITY VISION

The El Camino Real Bus Speed and Reliability Study provides a corridor-wide vision to reduce travel times by 30 percent and achieve a more dependable service. As the backbone of the SamTrans network, Route ECR serves 13 cities across 25 miles. Route ECR accounts for one quarter of average weekday bus ridership on SamTrans – with the majority of riders being lower income people of color. This study envisions faster and more reliable Route ECR service primarily through bus stop balancing, bus bulbs, and queue jumps, while also investigating the suitability of bus-only lanes on congested roadway segments.

SamTrans encourages Daly City to consult this vision and the specific bus priority treatments when conducting capital improvement and development review processes to achieve more equitable and sustainable mobility outcomes on El Camino Real.



## **Route ECR in Daly City (2019)**

This page summarizes Route ECR's performance in Daly City, including its ridership patterns, travel time, and reliability.

### Who Rides Route ECR?

### WEEKDAY RIDERS IN DALY CITY



### WEEKDAY TRIPS THROUGH DALY CITY

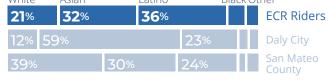


### WHERE RIDERS GO

VVIII I	NIDENS GO		
Daly City	SSF	San Bruno	Other
30%	19%	17%	34%

### **AVERAGE HOUSEHOLD INCOME**





### **Route ECR Operations**

### AVERAGE SPEED (MPH) IN DALY CITY



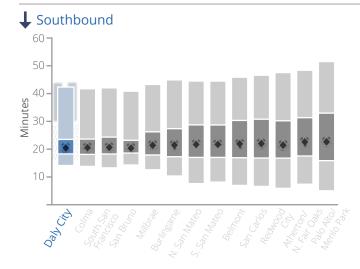
### ON-TIME PERFORMANCE (% OF TRIPS)

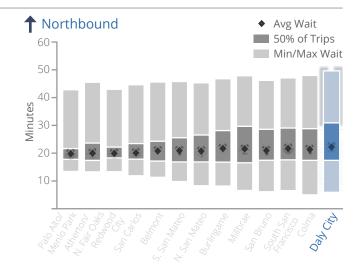


### TRAVEL TIME (MIN) IN DALY CITY



### PASSENGER WAIT TIME PER CITY





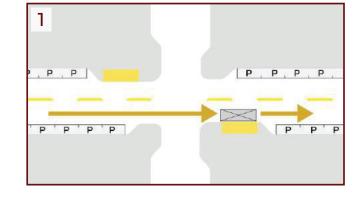


### PROPOSED BUS STOP LOCATIONS & IMPROVEMENTS Existing Stop, No Changes Stop Location with Improvement(s) Relocated or Removed Stop SAN FRANCISCO Service north of John Dalv Blvd will be provided by Routes 120 and 121 **↑** DALY CITY BART MISSION / DALY **↓** MISSION / DALY **↓** DALY CITY BART ↑ MISSION / ALP MISSION ST / PARKVIEW AVE MISSION ST / EASTLAKE AVE MISSION ST / WESTLAKE AVE **DALY CITY** MISSION ST / MISSION ST / BISMARK ST MISSION ST / CASTLE ST MISSION ST / SCHOOL ST MISSION ST / SAN PEDRO RD MISSION ST / MARKET ST **BROADMOOR COLMA ↑** COLMA BART **↓** COLMA BART Colma

The following infrastructure improvements are recommended to support faster and more reliable bus operations on El Camino Real in Daly City.

Bus Stop Balancing & Placement

Far-side, in-lane bus stops with balanced spacing helps buses travel faster and more reliably. ECR stops should be spaced every 1/4 to 1/3 mile, with shorter spacing occurring in areas with high ridership and/or serving transit connections, public facilities, and equity priority areas. Stops should be located on the far side of intersections in the lane of travel to maximize the effectiveness of the corridor's transit signal priority system and avoid delays and conflicts associated with near-side and pullout stops.



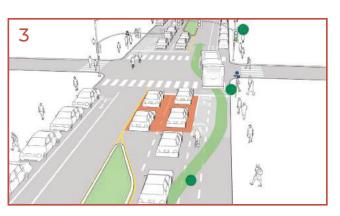
2 Bus Bulbs

Bus bulbs are curb extensions that allow buses to stop in the lane of traffic. Bus bulbs improve speed and reliability by reducing the amount of time lost when merging in and out of traffic, while also reducing pedestrian crossing distances. Where space permits, near-level boarding and separated bikeway bypasses are suggested features for bus bulbs.



3 Queue Jumps

In cases where near-side pullout stops are most suitable, queue jumps reduce delay for buses merging back into traffic. Queue jumps allow buses to enter traffic flow from a dedicated bus lane or right-turn only lane via transit signal priority (a leading bus interval or active signal priority). Alternatively, allowing buses to proceed straight in a right-turn only lane can function as an informal queue jump.



4 Pedestrian Improvements



Bus lanes help buses bypass traffic congestion to achieve faster and more reliable service. On average, curbside bus lanes reduce travel times by 15 to 20 percent, providing complementary benefits to the other improvement measures identified for the corridor. Bus lanes can be implemented with signage and striping changes at a relatively-low cost, but would require converting a general purpose lane.

Bus lanes would be most useful along congested segments of El Camino Real where buses could bypass traffic congestion. SamTrans is prioritizing advancing bus lanes along segments of El Camino Real that include three general purpose lanes in each direction, slow bus speeds, and high bus ridership. Daly City does not fit these initial prioritization criteria, but we encourage the City to consider how bus lanes may fit into its vision for El Camino Real.

### Implementing the Vision

Implementing this transit vision for El Camino Real will require coordination between SamTrans, Caltrans, Daly City, and other cities along the corridor. SamTrans looks forward to working in partnership with cities and other stakeholders to weave the improvements identified in this vision into future local and regional planning efforts. For questions, please contact Millie Tolleson at tollesonm@samtrans.com





Bus lanes are recommended for further consideration on segments of El Camino Real with three general purpose lanes in each direction, slow bus speeds, and high bus ridership..



## ECR Bus Speed & Reliability Study

## **COLMA VISION**

The El Camino Real Bus Speed and Reliability Study provides a corridor-wide vision to reduce travel times by 30 percent and achieve a more dependable service. As the backbone of the SamTrans network, Route ECR serves 13 cities across 25 miles. Route ECR accounts for one quarter of average weekday bus ridership on SamTrans – with the majority of riders being lower income people of color. This study envisions faster and more reliable Route ECR service primarily through bus stop balancing, bus bulbs, and queue jumps, while also investigating the suitability of bus-only lanes on congested roadway segments.

SamTrans encourages Colma to consult this vision and the specific bus priority treatments when conducting capital improvement and development review processes to achieve more equitable and sustainable mobility outcomes on El Camino Real.



## **Route ECR in Colma (2019)**

This page summarizes Route ECR's performance in Colma, including its ridership patterns, travel time, and reliability.

### Who Rides Route ECR?

### **WEEKDAY RIDERS IN COLMA**

380

### WEEKDAY TRIPS THROUGH COLMA

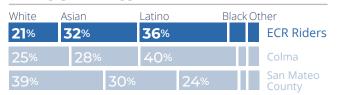
1,590

### WHERE RIDERS GO

26%	20%	19%	35%
Daly City	San Bruno	SSF	Other

### **AVERAGE HOUSEHOLD INCOME**





### **Route ECR Operations**

### AVERAGE SPEED (MPH) IN COLMA



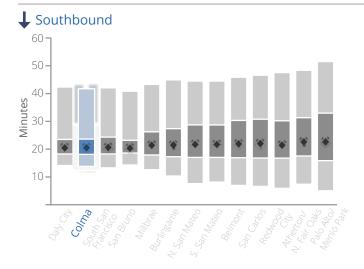
### **ON-TIME PERFORMANCE (% OF TRIPS)**

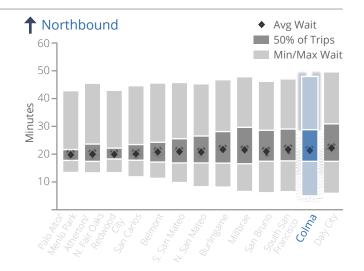


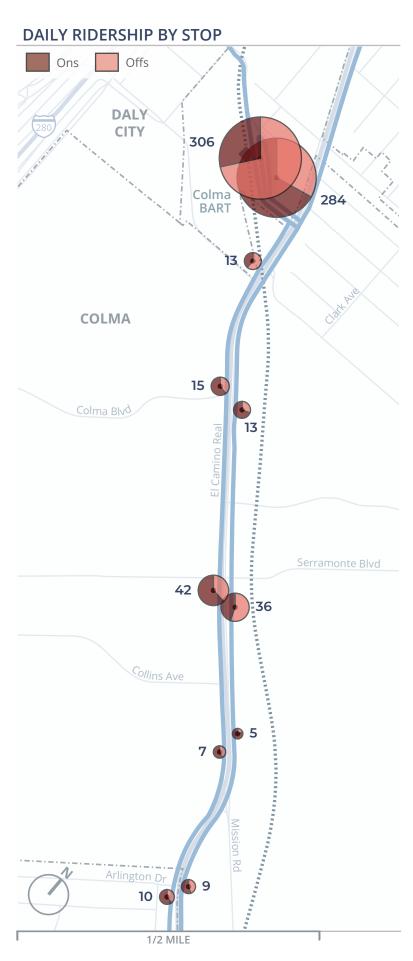
### TRAVEL TIME (MIN) IN COLMA



### PASSENGER WAIT TIME PER CITY

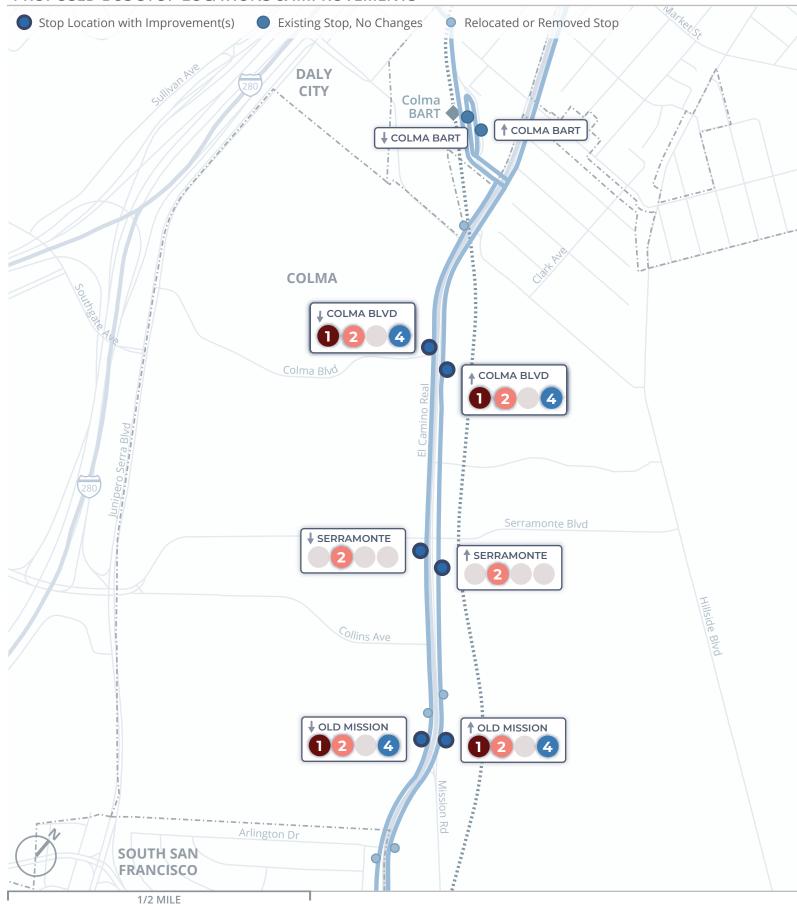








### PROPOSED BUS STOP LOCATIONS & IMPROVEMENTS



The following infrastructure improvements are recommended to support faster and more reliable bus operations on El Camino Real in Colma.

### Bus Stop Balancing & Placement

Far-side, in-lane bus stops with balanced spacing helps buses travel faster and more reliably. ECR stops should be spaced every ¼ to ½ mile, with shorter spacing occurring in areas with high ridership and/or serving transit connections, public facilities, and equity priority areas. Stops should be located on the far side of intersections in the lane of travel to maximize the effectiveness of the corridor's transit signal priority system and avoid delays and conflicts associated with near-side and pullout stops.

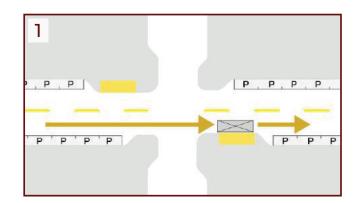


Bus bulbs are curb extensions that allow buses to stop in the lane of traffic. Bus bulbs improve speed and reliability by reducing the amount of time lost when merging in and out of traffic, while also reducing pedestrian crossing distances. Where space permits, near-level boarding and separated bikeway bypasses are suggested features for bus bulbs.

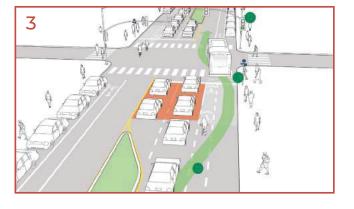
### **3** Queue Jumps

In cases where near-side pullout stops are most suitable, queue jumps reduce delay for buses merging back into traffic. Queue jumps allow buses to enter traffic flow from a dedicated bus lane or right-turn only lane via transit signal priority (a leading bus interval or active signal priority).

## 4 Pedestrian Improvements









Bus lanes help buses bypass traffic congestion to achieve faster and more reliable service. On average, curbside bus lanes reduce travel times by 15 to 20 percent, providing complementary benefits to the other improvement measures identified for the corridor. Bus lanes can be implemented with signage and striping changes at a relatively-low cost, but would require converting a general purpose lane.

Bus lanes would be most useful along congested segments of El Camino Real where buses could bypass traffic congestion. SamTrans is prioritizing advancing bus lanes along segments of El Camino Real that include three general purpose lanes in each direction, slow bus speeds, and high bus ridership. Colma does not fit these initial prioritization criteria, but we encourage the City to consider how bus lanes may fit into its vision for El Camino Real.

### Implementing the Vision

Implementing this transit vision for El Camino Real will require coordination between SamTrans, Caltrans, Colma, and other cities along the corridor. SamTrans looks forward to working in partnership with cities and other stakeholders to weave the improvements identified in this vision into future local and regional planning efforts. For questions, please contact Millie Tolleson at tollesonm@samtrans.com





Bus lanes are recommended for further consideration on segments of El Camino Real with three general purpose lanes in each direction, slow bus speeds, and high bus ridership..



## ECR Bus Speed & Reliability Study

## SOUTH SAN FRANCISCO VISION

The El Camino Real Bus Speed and Reliability Study provides a corridor-wide vision to reduce travel times by 30 percent and achieve a more dependable service. As the backbone of the SamTrans network, Route ECR serves 13 cities across 25 miles. Route ECR accounts for one quarter of average weekday bus ridership on SamTrans – with the majority of riders being lower income people of color. This study envisions faster and more reliable Route ECR service primarily through bus stop balancing, bus bulbs, and queue jumps, while also investigating the suitability of bus-only lanes on congested roadway segments.

SamTrans encourages South San Francisco to consult this vision and the specific bus priority treatments when conducting capital improvement and development review processes to achieve more equitable and sustainable mobility outcomes on El Camino Real.



## **Route ECR in South San Francisco (2019)**

This page summarizes Route ECR's performance in South San Francisco, including its ridership patterns, travel time, and reliability.

### Who Rides Route ECR?

### WEEKDAY RIDERS IN SOUTH SAN FRANCISCO

680

### WEEKDAY TRIPS THROUGH SSF

2,130

### WHERE RIDERS GO

WHERE RIBERS GO					
San Bruno	Daly City	SSF	Other		
26%	25%	19%	29%		

### **AVERAGE HOUSEHOLD INCOME**

\$35 K ECR Riders
\$129 K South San
Francisco
San Mateo
County

### **DEMOGRAPHICS**

White	Asian	Lati	no	Black (	<u> Ither</u>
21%	<b>32</b> %	36	5%		ECR Riders
20%	41%		33%		South San Francisco
39%		30%	24%		San Mateo County

### **Route ECR Operations**

### **AVERAGE SPEED (MPH) IN SSF**



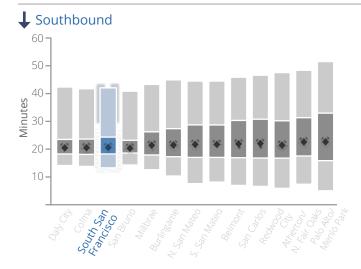
### **ON-TIME PERFORMANCE (% OF TRIPS)**

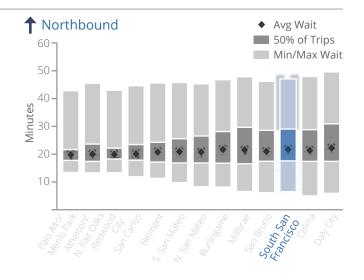


### TRAVEL TIME (MIN) IN SSF



### PASSENGER WAIT TIME PER CITY

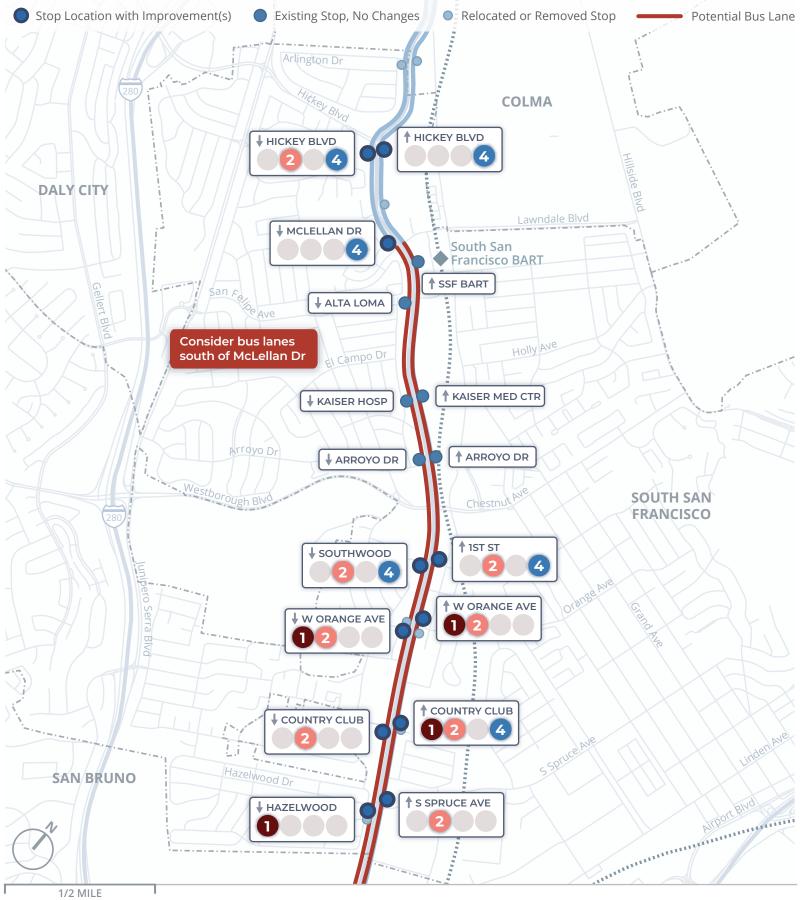




## **DAILY RIDERSHIP BY STOP** 10 **COLMA** Lawndale Blvd South San Francisco 123 SOUTH SAN **FRANCISCO** 1/2 MILE



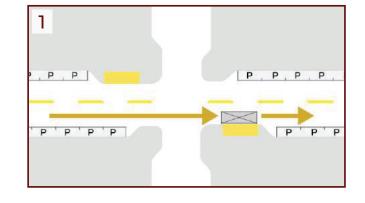
### PROPOSED BUS STOP LOCATIONS & IMPROVEMENTS



The following infrastructure improvements are recommended to support faster and more reliable bus operations on El Camino Real in South San Francisco.

### Bus Stop Balancing & Placement

Far-side, in-lane bus stops with balanced spacing helps buses travel faster and more reliably. ECR stops should be spaced every ¼ to ½ mile, with shorter spacing occurring in areas with high ridership and/or serving transit connections, public facilities, and equity priority areas. Stops should be located on the far side of intersections in the lane of travel to maximize the effectiveness of the corridor's transit signal priority system and avoid delays and conflicts associated with near-side and pullout stops.



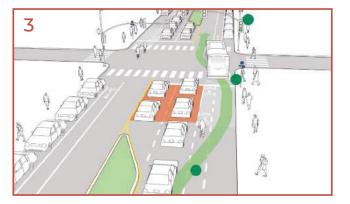
### 2 Bus Bulbs

Bus bulbs are curb extensions that allow buses to stop in the lane of traffic. Bus bulbs improve speed and reliability by reducing the amount of time lost when merging in and out of traffic, while also reducing pedestrian crossing distances. Where space permits, near-level boarding and separated bikeway bypasses are suggested features for bus bulbs.



### 3 Queue Jumps

In cases where near-side pullout stops are most suitable, queue jumps reduce delay for buses merging back into traffic. Queue jumps allow buses to enter traffic flow from a dedicated bus lane or right-turn only lane via transit signal priority (a leading bus interval or active signal priority).



### 4 Pedestrian Improvements



Bus lanes help buses bypass traffic congestion to achieve faster and more reliable service. On average, curbside bus lanes reduce travel times by 15 to 20 percent, providing complementary benefits to the other improvement measures identified for the corridor. Bus lanes can be implemented with signage and striping changes at a relatively-low cost, but would require converting a general purpose lane.

Bus lanes would be most useful along congested segments of El Camino Real where buses could bypass traffic congestion. SamTrans is prioritizing advancing bus lanes along segments of El Camino Real that include three general purpose lanes in each direction, slow bus speeds, and high bus ridership. South San Francisco meets these criteria; bus lanes are recommended for further consideration south of McLellan Drive connecting to San Bruno.

### Implementing the Vision

Implementing this transit vision for El Camino Real will require coordination between SamTrans, Caltrans, South San Francisco, and other cities along the corridor. SamTrans looks forward to working in partnership with cities and other stakeholders to weave the improvements identified in this vision into future local and regional planning efforts. For questions, please contact Millie Tolleson at tollesonm@samtrans.com





Bus lanes are recommended for further consideration on segments of El Camino Real with three general purpose lanes in each direction, slow bus speeds, and high bus ridership..



## ECR Bus Speed & Reliability Study

## SAN BRUNO VISION

The El Camino Real Bus Speed and Reliability Study provides a corridor-wide vision to reduce travel times by 30 percent and achieve a more dependable service. As the backbone of the SamTrans network, Route ECR serves 13 cities across 25 miles. Route ECR accounts for one quarter of average weekday bus ridership on SamTrans – with the majority of riders being lower income people of color. This study envisions faster and more reliable Route ECR service primarily through bus stop balancing, bus bulbs, and queue jumps, while also investigating the suitability of bus-only lanes on congested roadway segments.

SamTrans encourages San Bruno to consult this vision and the specific bus priority treatments when conducting capital improvement and development review processes to achieve more equitable and sustainable mobility outcomes on El Camino Real.



## **Route ECR in San Bruno (2019)**

This page summarizes Route ECR's performance in San Bruno, including its ridership patterns, travel time, and reliability.

### Who Rides Route ECR?

### WEEKDAY RIDERS IN SAN BRUNO

1,050

### WEEKDAY TRIPS THROUGH SAN BRUNO

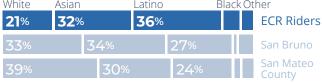
2,470

#### WHERE RIDERS GO

WHERE RIBERS GO					
SSF :	San Bruno S	San Mateo	o Other		
21%	16%	14%	49%		

### **AVERAGE HOUSEHOLD INCOME**





### **Route ECR Operations**

### AVERAGE SPEED (MPH) IN SAN BRUNO



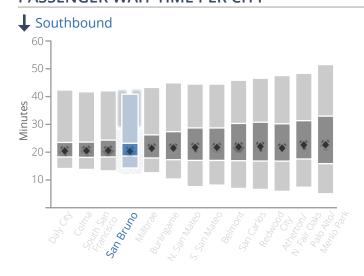
### **ON-TIME PERFORMANCE (% OF TRIPS)**

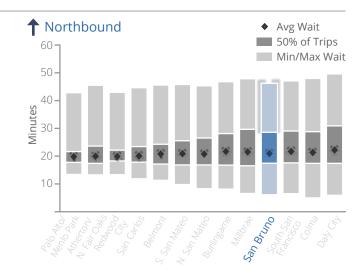


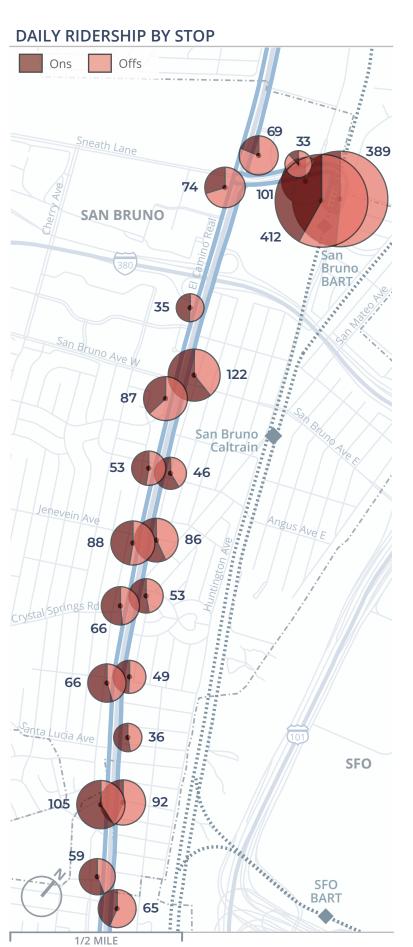
### TRAVEL TIME (MIN) IN SAN BRUNO



### PASSENGER WAIT TIME PER CITY

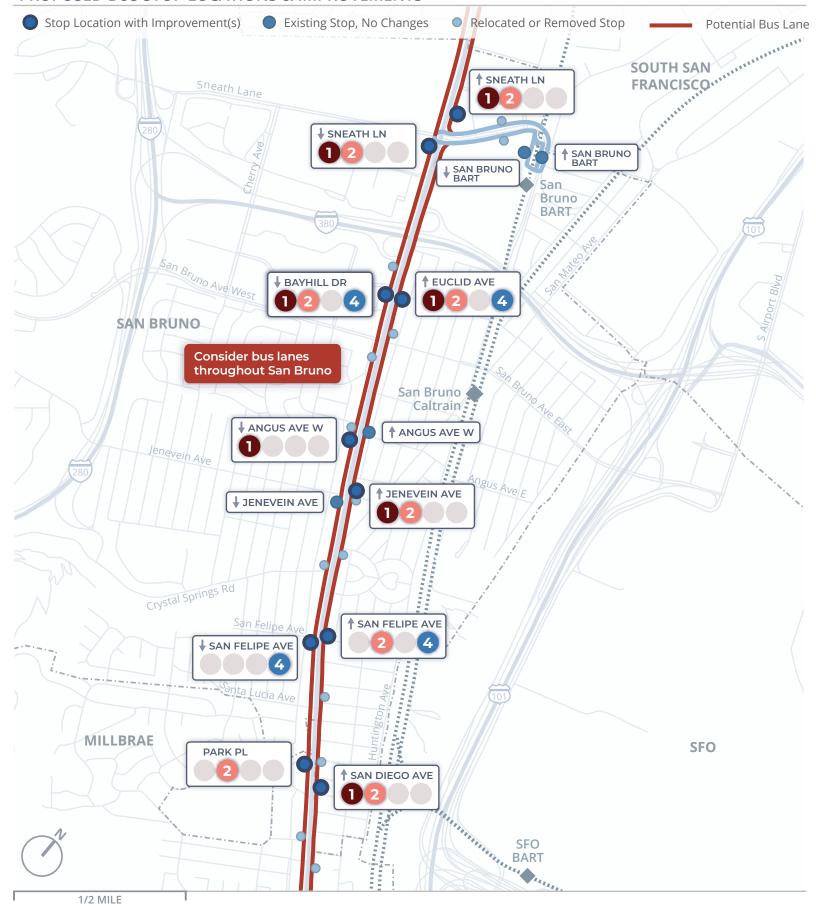






## **AVERAGE BUS SPEED (MPH)** <10 10-12.5 12.5-15 15-17.5 **SAN BRUNO** Bruno **BART** San Bruno Caltrain SFO

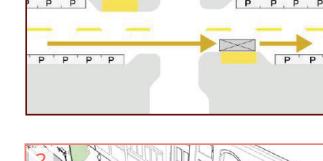
### PROPOSED BUS STOP LOCATIONS & IMPROVEMENTS



The following infrastructure improvements are recommended to support faster and more reliable bus operations on El Camino Real in San Bruno.

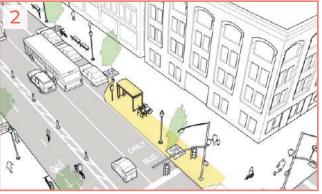
### 1 Bus Stop Balancing & Placement

Far-side, in-lane bus stops with balanced spacing helps buses travel faster and more reliably. ECR stops should be spaced every ¼ to ½ mile, with shorter spacing occurring in areas with high ridership and/or serving transit connections, public facilities, and equity priority areas. Stops should be located on the far side of intersections in the lane of travel to maximize the effectiveness of the corridor's transit signal priority system and avoid delays and conflicts associated with near-side and pullout stops.



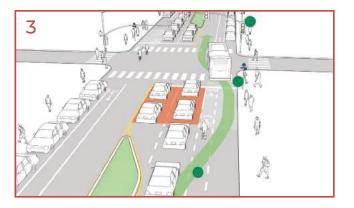
### 2 Bus Bulbs

Bus bulbs are curb extensions that allow buses to stop in the lane of traffic. Bus bulbs improve speed and reliability by reducing the amount of time lost when merging in and out of traffic, while also reducing pedestrian crossing distances. Where space permits, near-level boarding and separated bikeway bypasses are suggested features for bus bulbs.



### **3** Queue Jumps

In cases where near-side pullout stops are most suitable, queue jumps reduce delay for buses merging back into traffic. Queue jumps allow buses to enter traffic flow from a dedicated bus lane or right-turn only lane via transit signal priority (a leading bus interval or active signal priority).



### 4 Pedestrian Improvements



Bus lanes help buses bypass traffic congestion to achieve faster and more reliable service. On average, curbside bus lanes reduce travel times by 15 to 20 percent, providing complementary benefits to the other improvement measures identified for the corridor. Bus lanes can be implemented with signage and striping changes at a relatively-low cost, but would require converting a general purpose lane.

Bus lanes would be most useful along congested segments of El Camino Real where buses could bypass traffic congestion. SamTrans is prioritizing advancing bus lanes along segments of El Camino Real that include three general purpose lanes in each direction, slow bus speeds, and high bus ridership. San Bruno meets these criteria; bus lanes are recommended for further consideration along the entirety of El Camino Real connecting to South San Francisco and Millbrae.

### Implementing the Vision

Implementing this transit vision for El Camino Real will require coordination between SamTrans, Caltrans, San Bruno, and other cities along the corridor. SamTrans looks forward to working in partnership with cities and other stakeholders to weave the improvements identified in this vision into future local and regional planning efforts. For questions, please contact Millie Tolleson at tollesonm@samtrans.com





Bus lanes are recommended for further consideration on segments of El Camino Real with three general purpose lanes in each direction, slow bus speeds, and high bus ridership..



## ECR Bus Speed & Reliability Study

**MILLBRAE VISION** 

The El Camino Real Bus Speed and Reliability Study provides a corridor-wide vision to reduce travel times by 30 percent and achieve a more dependable service. As the backbone of the SamTrans network, Route ECR serves 13 cities across 25 miles. Route ECR accounts for one quarter of average weekday bus ridership on SamTrans – with the majority of riders being lower income people of color. This study envisions faster and more reliable Route ECR service primarily through bus stop balancing, bus bulbs, and queue jumps, while also investigating the suitability of bus-only lanes on congested roadway segments.

SamTrans encourages Millbrae to consult this vision and the specific bus priority treatments when conducting capital improvement and development review processes to achieve more equitable and sustainable mobility outcomes on El Camino Real.



## **Route ECR in Millbrae (2019)**

This page summarizes Route ECR's performance in Millbrae, including its ridership patterns, travel time, and reliability.

### Who Rides Route ECR?

### WEEKDAY RIDERS IN MILLBRAE

550

### WEEKDAY TRIPS THROUGH MILLBRAE

2,000

### WHERE RIDERS GO

VVIII IX	IDEIXO G		
San Mateo	San Bruno	Burlingame	e Other
23%	21%	15%	4]%

### **AVERAGE HOUSEHOLD INCOME**

\$35 K ECR Riders
\$161 K Millbrae
\$174 K San Mateo County

### **DEMOGRAPHICS**

White	Asian	Latino	<u>Black</u>	<u>O</u> ther
21%	<b>32</b> %	36%	6	ECR Riders
34%	499	%	11%	Millbrae
39%	3	O%	24%	San Mateo County

### **Route ECR Operations**

### AVERAGE SPEED (MPH) IN MILLBRAE



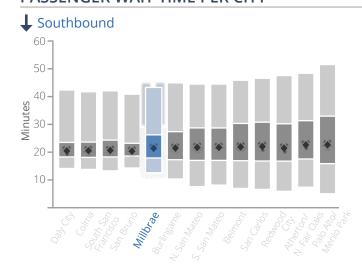
### **ON-TIME PERFORMANCE (% OF TRIPS)**

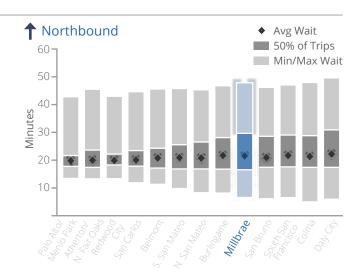


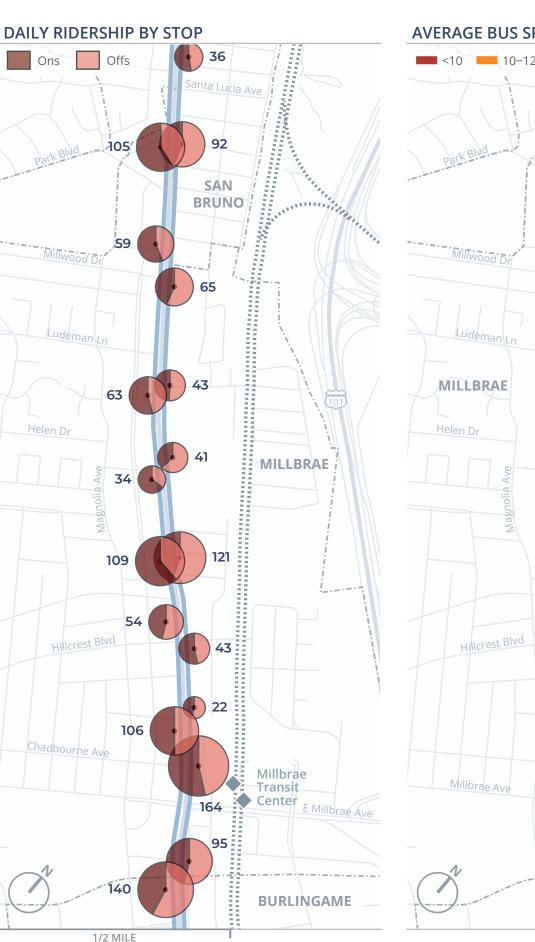
### TRAVEL TIME (MIN) IN MILLBRAE



### PASSENGER WAIT TIME PER CITY

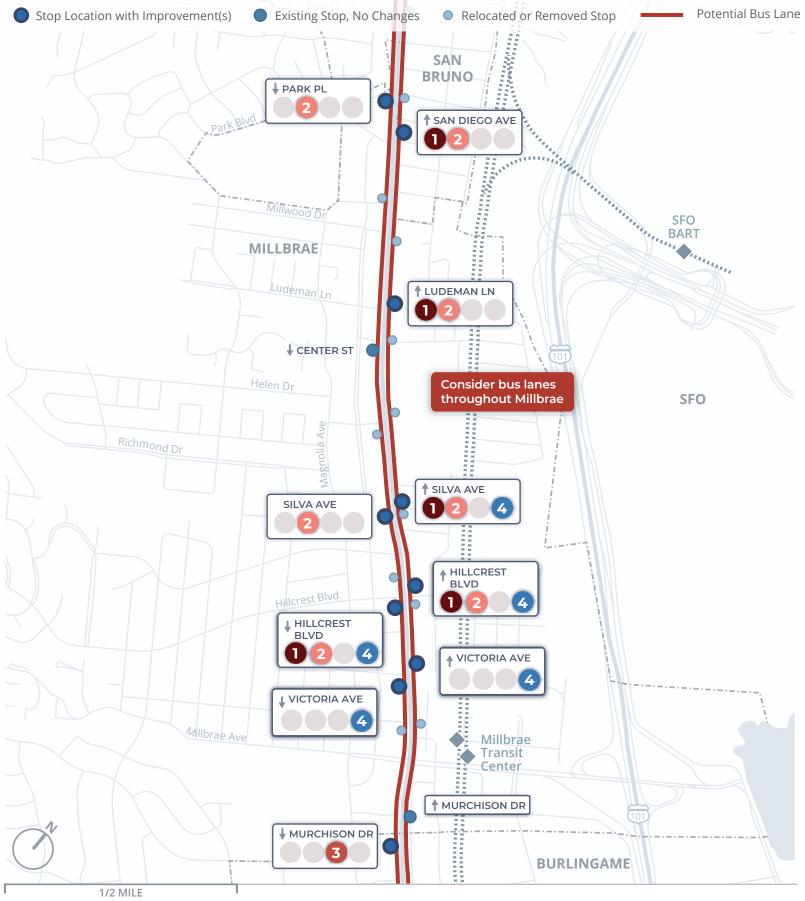








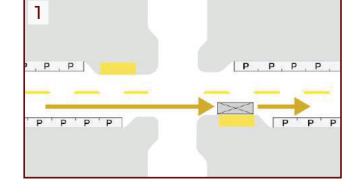
### PROPOSED BUS STOP LOCATIONS & IMPROVEMENTS



The following infrastructure improvements are recommended to support faster and more reliable bus operations on El Camino Real in Millbrae.

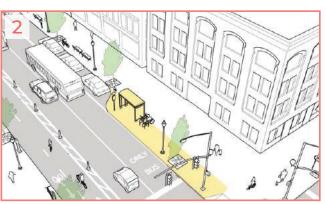
Bus Stop Balancing & Placement

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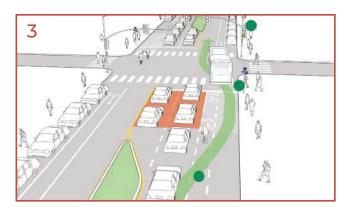
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**3** Queue Jumps

In cases where near-side pullout stops are most suitable, queue jumps reduce delay for buses merging back into traffic. Queue jumps allow buses to enter traffic flow from a dedicated bus lane or right-turn only lane via transit signal priority (a leading bus interval or active signal priority).



4 Pedestrian Improvements



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### Implementing the Vision

Implementing this transit vision for El Camino Real will require coordination between SamTrans, Caltrans, Millbrae, and other cities along the corridor. SamTrans looks forward to working in partnership with cities and other stakeholders to weave the improvements identified in this vision into future local and regional planning efforts. For questions, please contact Millie Tolleson at tollesonm@samtrans.com





Bus lanes are recommended for further consideration on segments of El Camino Real with three general purpose lanes in each direction, slow bus speeds, and high bus ridership..



## ECR Bus Speed & Reliability Study

## BURLINGAME VISION

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SamTrans encourages Burlingame to consult this vision and the specific bus priority treatments when conducting capital improvement and development review processes to achieve more equitable and sustainable mobility outcomes on El Camino Real.



## **Route ECR in Burlingame (2019)**

This page summarizes Route ECR's performance in Burlingame, including its ridership patterns, travel time, and reliability.

### Who Rides Route ECR?

### WEEKDAY RIDERS IN BURLINGAME

560

### WEEKDAY TRIPS THROUGH BURLINGAME

1,940

### WHERE RIDERS GO

San Mateo	Burlingame	Millbrae	Other
25%	23%	<b>17</b> %	35%

### **AVERAGE HOUSEHOLD INCOME**



White	Asian	Latir	10	Black	Ot	her
21%	<b>32</b> %	36	%			ECR Riders
53%		27	%	13%		Burlingame
39%		30%	24%	ó		San Mateo County

### **Route ECR Operations**

### AVERAGE SPEED (MPH) IN BURLINGAME



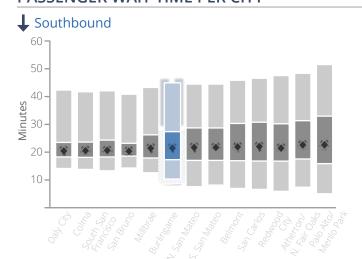
### **ON-TIME PERFORMANCE (% OF TRIPS)**

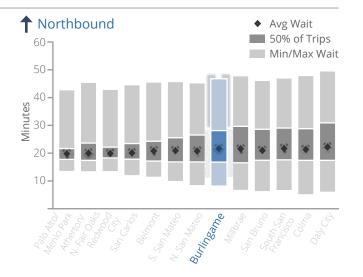


### TRAVEL TIME (MIN) IN BURLINGAME



### PASSENGER WAIT TIME PER CITY



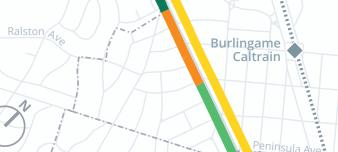


## **DAILY RIDERSHIP BY STOP** Millbrae Transit Center MILLBRAE 140 99 BURLINGAME 23 **Broadway** Caltrain 23 HILLSBOROUGH 20 Ralston/

1/2 MILE

## **AVERAGE BUS SPEED (MPH)** <10 10-12.5 12.5-15 15-17.5 >17.5 Millbrae Transit MILLBRAE Center **BURLINGAME**





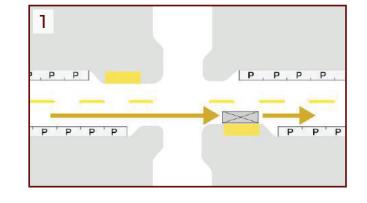
### PROPOSED BUS STOP LOCATIONS & IMPROVEMENTS



The following infrastructure improvements are recommended to support faster and more reliable bus operations on El Camino Real in Burlingame.

## 1 Bus Stop Balancing & Placement

Far-side, in-lane bus stops with balanced spacing helps buses travel faster and more reliably. ECR stops should be spaced every ¼ to ½ mile, with shorter spacing occurring in areas with high ridership and/or serving transit connections, public facilities, and equity priority areas. Stops should be located on the far side of intersections in the lane of travel to maximize the effectiveness of the corridor's transit signal priority system and avoid delays and conflicts associated with near-side and pullout stops.



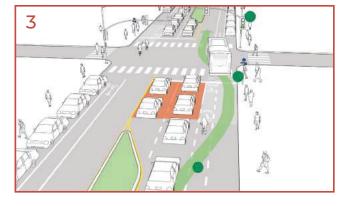
### 2 Bus Bulbs

Bus bulbs are curb extensions that allow buses to stop in the lane of traffic. Bus bulbs improve speed and reliability by reducing the amount of time lost when merging in and out of traffic, while also reducing pedestrian crossing distances. Where space permits, near-level boarding and separated bikeway bypasses are suggested features for bus bulbs.



### **3** Queue Jumps

In cases where near-side pullout stops are most suitable, queue jumps reduce delay for buses merging back into traffic. Queue jumps allow buses to enter traffic flow from a dedicated bus lane or right-turn only lane via transit signal priority (a leading bus interval or active signal priority).



### 4 Pedestrian Improvements



Bus lanes help buses bypass traffic congestion to achieve faster and more reliable service. On average, curbside bus lanes reduce travel times by 15 to 20 percent, providing complementary benefits to the other improvement measures identified for the corridor. Bus lanes can be implemented with signage and striping changes at a relatively-low cost, but would require converting a general purpose lane.

Bus lanes would be most useful along congested segments of El Camino Real where buses could bypass traffic congestion. SamTrans is prioritizing advancing bus lanes along segments of El Camino Real that include three general purpose lanes in each direction, slow bus speeds, and high bus ridership. Burlingame partially meets these criteria; bus lanes are recommended for further consideration north of Dufferin Avenue connecting to Millbrae.

### Implementing the Vision

Implementing this transit vision for El Camino Real will require coordination between SamTrans, Caltrans, Burlingame, and other cities along the corridor. SamTrans looks forward to working in partnership with cities and other stakeholders to weave the improvements identified in this vision into future local and regional planning efforts. For questions, please contact Millie Tolleson at tollesonm@samtrans.com





Bus lanes are recommended for further consideration on segments of El Camino Real with three general purpose lanes in each direction, slow bus speeds, and high bus ridership..



# ECR Bus Speed & Reliability Study SAN MATEO VISION

The El Camino Real Bus Speed and Reliability Study provides a corridor-wide vision to reduce travel times by 30 percent and achieve a more dependable service. As the backbone of the SamTrans network, Route ECR serves 13 cities across 25 miles. Route ECR accounts for one quarter of average weekday bus ridership on SamTrans – with the majority of riders being lower income people of color. This study envisions faster and more reliable Route ECR service primarily through bus stop balancing, bus bulbs, and queue jumps, while also investigating the suitability of bus-only lanes on congested roadway segments.

SamTrans encourages San Mateo to consult this vision and the specific bus priority treatments when conducting capital improvement and development review processes to achieve more equitable and sustainable mobility outcomes on El Camino Real.



## **Route ECR in North San Mateo (2019)**

This page summarizes Route ECR's performance in North San Mateo, including its ridership patterns, travel time, and reliability.

### Who Rides Route ECR?

### WEEKDAY RIDERS IN NORTH SAN MATEO

810

### WEEKDAY TRIPS THROUGH N. SAN MATEO

2,270

### WHERE RIDERS GO

***************************************			
San Mateo	Millbrae B	urlingam	e Other
34%	13%	13%	40%

### **AVERAGE HOUSEHOLD INCOME**

\$35 K ECR Riders

\$158 K North San Mateo
San Mateo County

### **DEMOGRAPHICS**

White	Asian	La	atino	Black O	ther
21%	<b>32</b> %	3	6%		ECR Riders
39%		24%	30%		North San Mateo
39%		30%	24%		San Mateo County

### **Route ECR Operations**

### AVERAGE SPEED (MPH) IN N. SAN MATEO



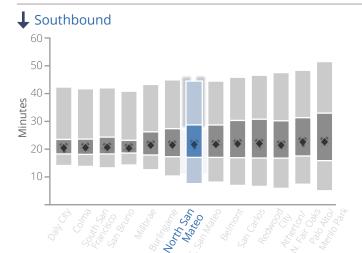
### **ON-TIME PERFORMANCE (% OF TRIPS)**

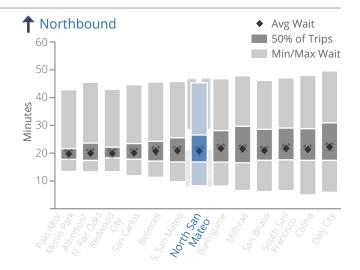


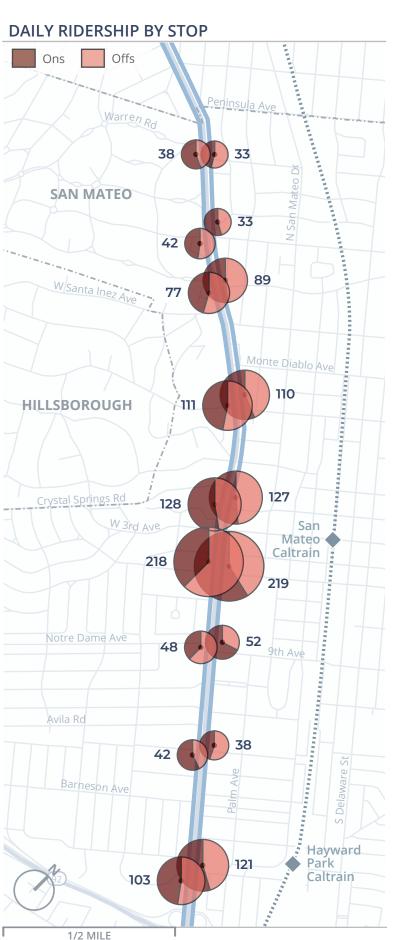
### TRAVEL TIME (MIN) IN N. SAN MATEO



### PASSENGER WAIT TIME PER CITY







## **AVERAGE BUS SPEED (MPH)** 10-12.5 12.5-15 15-17.5 SAN MATEO HILLSBOROUGH Crystal Springs Rd San Mateo Caltrain Avila Rd Hayward Caltrain

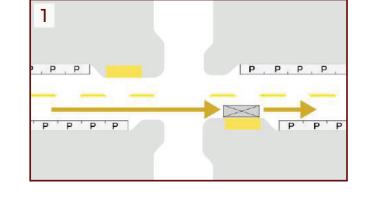
### PROPOSED BUS STOP LOCATIONS & IMPROVEMENTS



The following infrastructure improvements are recommended to support faster and more reliable bus operations on El Camino Real in North San Mateo.

### 1 Bus Stop Balancing & Placement

Far-side, in-lane bus stops with balanced spacing helps buses travel faster and more reliably. ECR stops should be spaced every ¼ to ½ mile, with shorter spacing occurring in areas with high ridership and/or serving transit connections, public facilities, and equity priority areas. Stops should be located on the far side of intersections in the lane of travel to maximize the effectiveness of the corridor's transit signal priority system and avoid delays and conflicts associated with near-side and pullout stops.



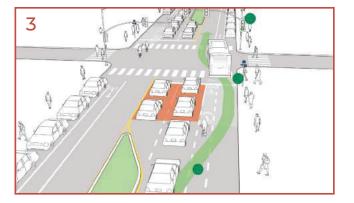
### 2 Bus Bulbs

Bus bulbs are curb extensions that allow buses to stop in the lane of traffic. Bus bulbs improve speed and reliability by reducing the amount of time lost when merging in and out of traffic, while also reducing pedestrian crossing distances. Where space permits, near-level boarding and separated bikeway bypasses are suggested features for bus bulbs.



### 3 Queue Jumps

In cases where near-side pullout stops are most suitable, queue jumps reduce delay for buses merging back into traffic. Queue jumps allow buses to enter traffic flow from a dedicated bus lane or right-turn only lane via transit signal priority (a leading bus interval or active signal priority).



### 4 Pedestrian Improvements



## **Route ECR in South San Mateo (2019)**

This page summarizes Route ECR's performance in South San Mateo, including its ridership patterns, travel time, and reliability.

### Who Rides Route ECR?

### WEEKDAY RIDERS IN SOUTH SAN MATEO

880

### WEEKDAY TRIPS THROUGH S. SAN MATEO

2,300

### WHERE RIDERS GO

San Mateo R	edwood City	San Brur	no Other
<b>31</b> %	19%	10%	4]%

### AVERAGE HOUSEHOLD INCOME

\$35 K ECR Riders
\$180 K South San Mateo
\$174 K San Mateo County

### **DEMOGRAPHICS**

White	nite <u>Asian</u>		<u>Latino</u> <u>E</u>		Black Other		
21%	<b>32</b> %	36%			ECR Riders		
44%		30%	18%		South San Mateo		
39%	3	30%	24%		San Mateo County		

### **Route ECR Operations**

### AVERAGE SPEED (MPH) IN S. SAN MATEO



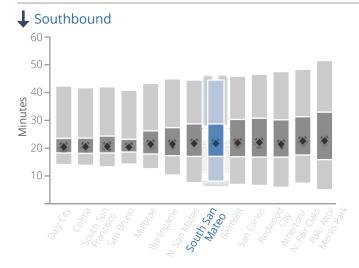
### **ON-TIME PERFORMANCE (% OF TRIPS)**

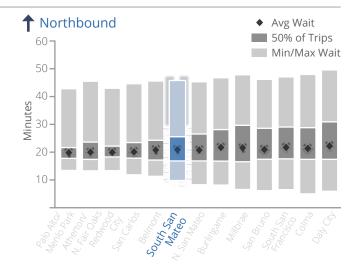


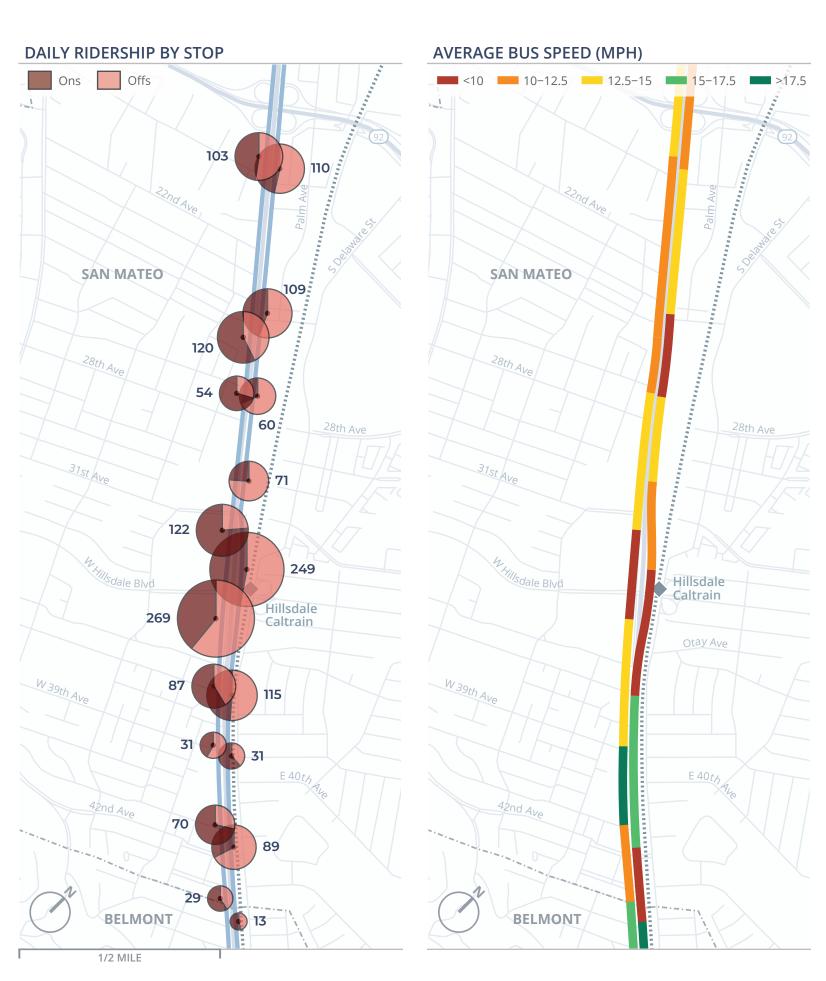
### TRAVEL TIME (MIN) IN S. SAN MATEO



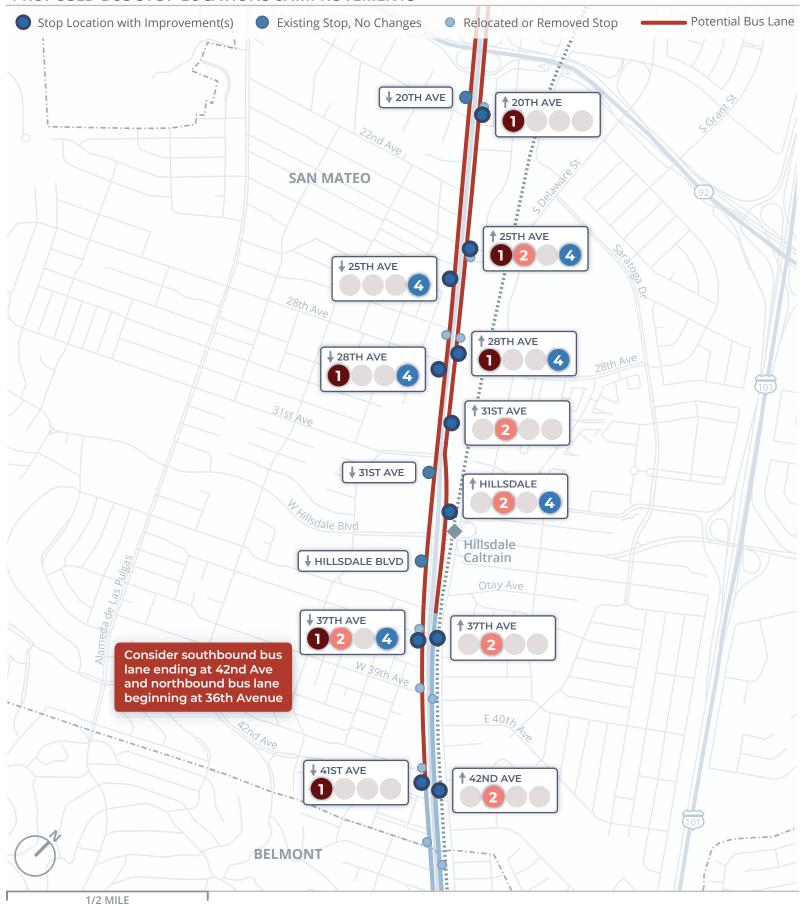
### PASSENGER WAIT TIME PER CITY







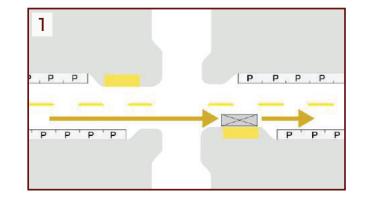
### PROPOSED BUS STOP LOCATIONS & IMPROVEMENTS



The following infrastructure improvements are recommended to support faster and more reliable bus operations on El Camino Real in South San Mateo.

### Bus Stop Balancing & Placement

Far-side, in-lane bus stops with balanced spacing helps buses travel faster and more reliably. ECR stops should be spaced every ¼ to ½ mile, with shorter spacing occurring in areas with high ridership and/or serving transit connections, public facilities, and equity priority areas. Stops should be located on the far side of intersections in the lane of travel to maximize the effectiveness of the corridor's transit signal priority system and avoid delays and conflicts associated with near-side and pullout stops.



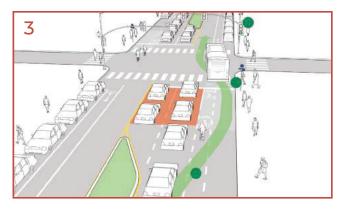
### 2 Bus Bulbs

Bus bulbs are curb extensions that allow buses to stop in the lane of traffic. Bus bulbs improve speed and reliability by reducing the amount of time lost when merging in and out of traffic, while also reducing pedestrian crossing distances. Where space permits, near-level boarding and separated bikeway bypasses are suggested features for bus bulbs.



### **3** Queue Jumps

In cases where near-side pullout stops are most suitable, queue jumps reduce delay for buses merging back into traffic. Queue jumps allow buses to enter traffic flow from a dedicated bus lane or right-turn only lane via transit signal priority (a leading bus interval or active signal priority).



### 4 Pedestrian Improvements



Bus lanes help buses bypass traffic congestion to achieve faster and more reliable service. On average, curbside bus lanes reduce travel times by 15 to 20 percent, providing complementary benefits to the other improvement measures identified for the corridor. Bus lanes can be implemented with signage and striping changes at a relatively-low cost, but would require converting a general purpose lane.

Bus lanes would be most useful along congested segments of El Camino Real where buses could bypass traffic congestion. SamTrans is prioritizing advancing bus lanes along segments of El Camino Real that include three general purpose lanes in each direction, slow bus speeds, and high bus ridership. San Mateo partially meets these criteria; bus lanes are recommended for further consideration between 2nd Avenue and 36th Avenue (northbound) / 42nd Avenue (southbound).

### Implementing the Vision

Implementing this transit vision for El Camino Real will require coordination between SamTrans, Caltrans, San Mateo, and other cities along the corridor. SamTrans looks forward to working in partnership with cities and other stakeholders to weave the improvements identified in this vision into future local and regional planning efforts. For questions, please contact Millie Tolleson at tollesonm@samtrans.com





Bus lanes are recommended for further consideration on segments of El Camino Real with three general purpose lanes in each direction, slow bus speeds, and high bus ridership..



# ECR Bus Speed & Reliability Study BELMONT VISION

The El Camino Real Bus Speed and Reliability Study provides a corridor-wide vision to reduce travel times by 30 percent and achieve a more dependable service. As the backbone of the SamTrans network, Route ECR serves 13 cities across 25 miles. Route ECR accounts for one quarter of average weekday bus ridership on SamTrans – with the majority of riders being lower income people of color. This study envisions faster and more reliable Route ECR service primarily through bus stop balancing, bus bulbs, and queue jumps, while also investigating the suitability of bus-only lanes on congested roadway segments.

SamTrans encourages Belmont to consult this vision and the specific bus priority treatments when conducting capital improvement and development review processes to achieve more equitable and sustainable mobility outcomes on El Camino Real.



## **Route ECR in Belmont (2019)**

This page summarizes Route ECR's performance in Belmont, including its ridership patterns, travel time, and reliability.

### Who Rides Route ECR?

### WEEKDAY RIDERS IN BELMONT

300

### WEEKDAY TRIPS THROUGH BELMONT

1,650

### WHERE RIDERS GO

San Mateo Redwood City Millbrae Other							
31%	19%	12%	38%				

### **AVERAGE HOUSEHOLD INCOME**



### **DEMOGRAPHICS**

White	Asian		Latino		Blacl	k Ot	her
21%	<b>32</b> %		<b>36</b> %				ECR Riders
54%			28%		12%		Belmont
39%		30%		24%			San Mateo County

### **Route ECR Operations**

### AVERAGE SPEED (MPH) IN BELMONT



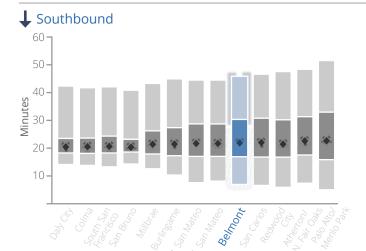
### **ON-TIME PERFORMANCE (% OF TRIPS)**

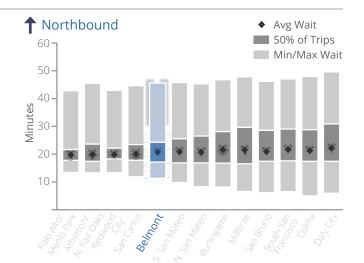


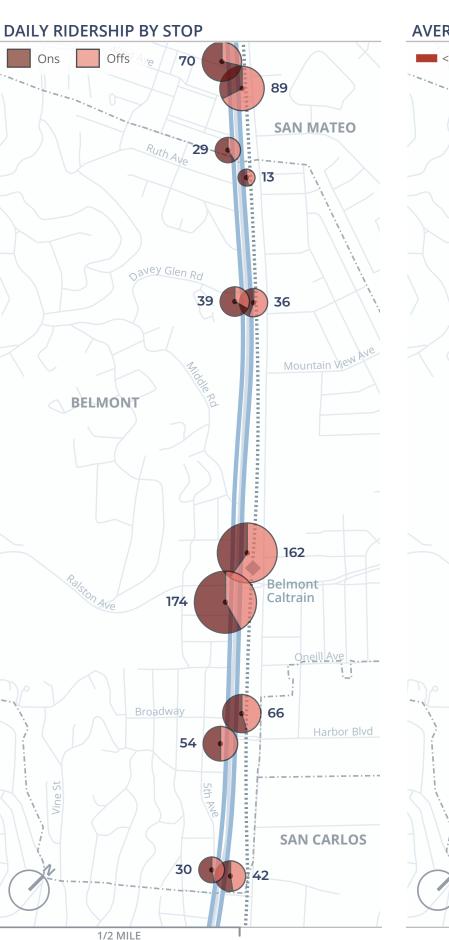
### TRAVEL TIME (MIN) IN BELMONT

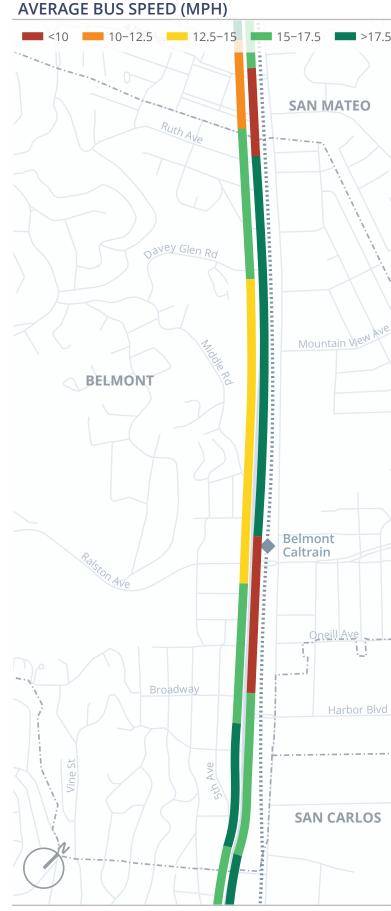


### PASSENGER WAIT TIME PER CITY

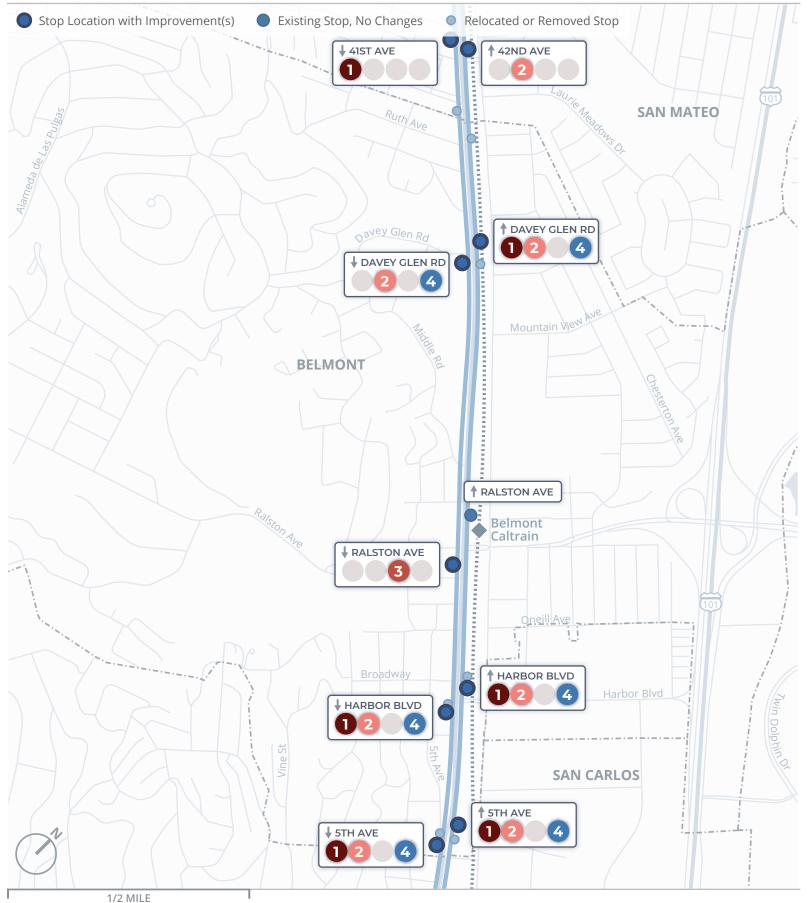








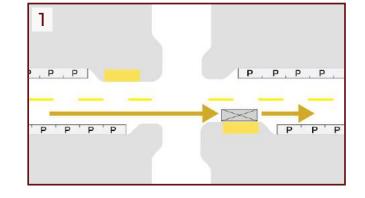
### PROPOSED BUS STOP LOCATIONS & IMPROVEMENTS



The following infrastructure improvements are recommended to support faster and more reliable bus operations on El Camino Real in Belmont.

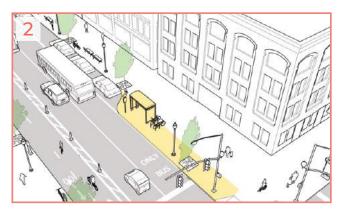
### Bus Stop Balancing & Placement

Far-side, in-lane bus stops with balanced spacing helps buses travel faster and more reliably. ECR stops should be spaced every ¼ to ½ mile, with shorter spacing occurring in areas with high ridership and/or serving transit connections, public facilities, and equity priority areas. Stops should be located on the far side of intersections in the lane of travel to maximize the effectiveness of the corridor's transit signal priority system and avoid delays and conflicts associated with near-side and pullout stops.



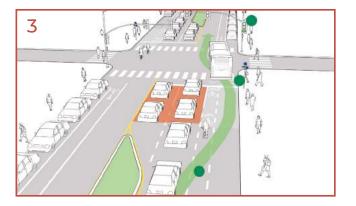
### 2 Bus Bulbs

Bus bulbs are curb extensions that allow buses to stop in the lane of traffic. Bus bulbs improve speed and reliability by reducing the amount of time lost when merging in and out of traffic, while also reducing pedestrian crossing distances. Where space permits, near-level boarding and separated bikeway bypasses are suggested features for bus bulbs.



### 3 Queue Jumps

In cases where near-side pullout stops are most suitable, queue jumps reduce delay for buses merging back into traffic. Queue jumps allow buses to enter traffic flow from a dedicated bus lane or right-turn only lane via transit signal priority (a leading bus interval or active signal priority).



### 4 Pedestrian Improvements



Bus lanes help buses bypass traffic congestion to achieve faster and more reliable service. On average, curbside bus lanes reduce travel times by 15 to 20 percent, providing complementary benefits to the other improvement measures identified for the corridor. Bus lanes can be implemented with signage and striping changes at a relatively-low cost, but would require converting a general purpose lane.

Bus lanes would be most useful along congested segments of El Camino Real where buses could bypass traffic congestion. SamTrans is prioritizing advancing bus lanes along segments of El Camino Real that include three general purpose lanes in each direction, slow bus speeds, and high bus ridership. Belmont does not fit these initial prioritization criteria, but we encourage the City to consider how bus lanes may fit into its vision for El Camino Real.

### Implementing the Vision

Implementing this transit vision for El Camino Real will require coordination between SamTrans, Caltrans, Belmont, and other cities along the corridor. SamTrans looks forward to working in partnership with cities and other stakeholders to weave the improvements identified in this vision into future local and regional planning efforts. For questions, please contact Millie Tolleson at tollesonm@samtrans.com





Bus lanes are recommended for further consideration on segments of El Camino Real with three general purpose lanes in each direction, slow bus speeds, and high bus ridership..



# ECR Bus Speed & Reliability Study SAN CARLOS VISION

The El Camino Real Bus Speed and Reliability Study provides a corridor-wide vision to reduce travel times by 30 percent and achieve a more dependable service. As the backbone of the SamTrans network, Route ECR serves 13 cities across 25 miles. Route ECR accounts for one quarter of average weekday bus ridership on SamTrans – with the majority of riders being lower income people of color. This study envisions faster and more reliable Route ECR service primarily through bus stop balancing, bus bulbs, and queue jumps, while also investigating the suitability of bus-only lanes on congested roadway segments.

SamTrans encourages San Carlos to consult this vision and the specific bus priority treatments when conducting capital improvement and development review processes to achieve more equitable and sustainable mobility outcomes on El Camino Real.



# **Route ECR in San Carlos (2019)**

This page summarizes Route ECR's performance in San Carlos, including its ridership patterns, travel time, and reliability.

### Who Rides Route ECR?

### **WEEKDAY RIDERS IN SAN CARLOS**

340

### WEEKDAY TRIPS THROUGH SAN CARLOS

1,730

### WHERE RIDERS GO

San Mateo	Redwood City Belmont Other				
26%	23%	9%	42%		

### **AVERAGE HOUSEHOLD INCOME**



### **DEMOGRAPHICS**

White	Asian		Latino		Blac	k Ot	her
21%	<b>32</b> %		<b>36</b> %				ECR Riders
68%				16%	9%		San Carlos
39%		30%		24%			San Mateo County

### **Route ECR Operations**

### AVERAGE SPEED (MPH) IN SAN CARLOS



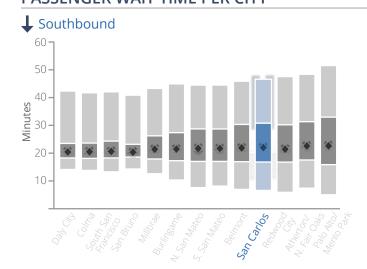
### **ON-TIME PERFORMANCE (% OF TRIPS)**

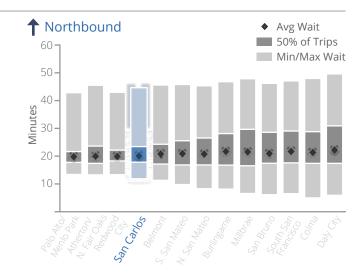


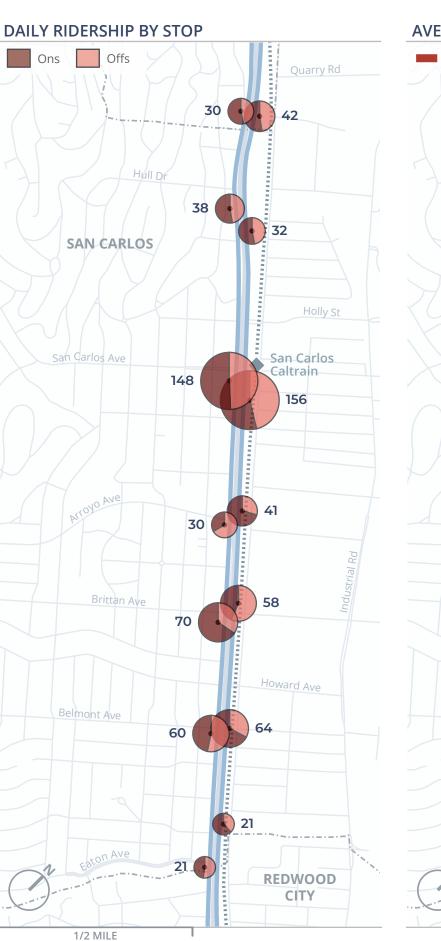
### TRAVEL TIME (MIN) IN SAN CARLOS



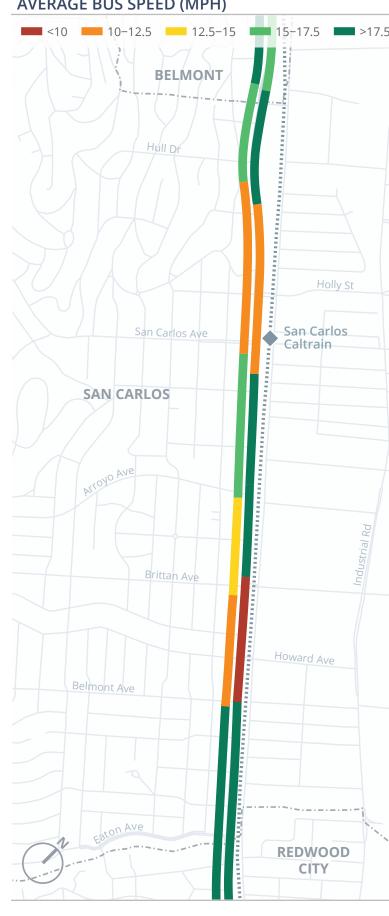
### PASSENGER WAIT TIME PER CITY



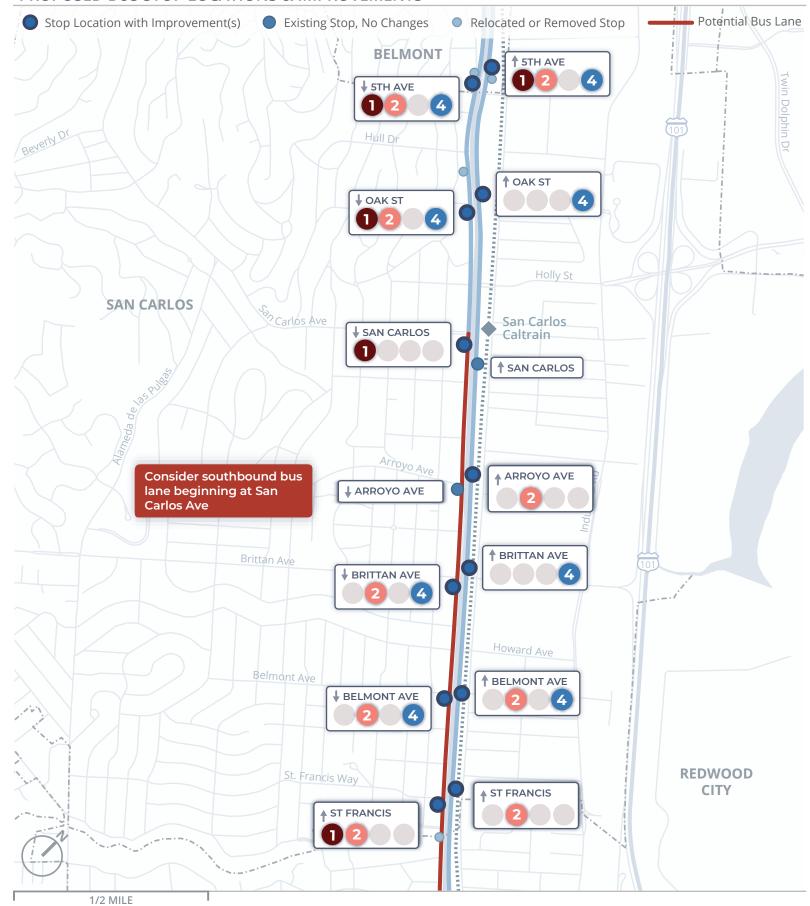




### **AVERAGE BUS SPEED (MPH)**



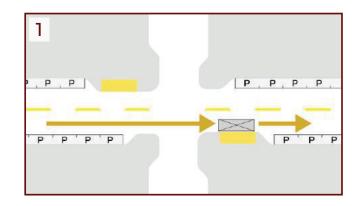
### PROPOSED BUS STOP LOCATIONS & IMPROVEMENTS



The following infrastructure improvements are recommended to support faster and more reliable bus operations on El Camino Real in San Carlos.

# Bus Stop Balancing & Placement

Far-side, in-lane bus stops with balanced spacing helps buses travel faster and more reliably. ECR stops should be spaced every ¼ to ½ mile, with shorter spacing occurring in areas with high ridership and/or serving transit connections, public facilities, and equity priority areas. Stops should be located on the far side of intersections in the lane of travel to maximize the effectiveness of the corridor's transit signal priority system and avoid delays and conflicts associated with near-side and pullout stops.



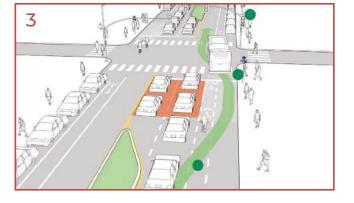
## 2 Bus Bulbs

Bus bulbs are curb extensions that allow buses to stop in the lane of traffic. Bus bulbs improve speed and reliability by reducing the amount of time lost when merging in and out of traffic, while also reducing pedestrian crossing distances. Where space permits, near-level boarding and separated bikeway bypasses are suggested features for bus bulbs.



## 3 Queue Jumps

In cases where near-side pullout stops are most suitable, queue jumps reduce delay for buses merging back into traffic. Queue jumps allow buses to enter traffic flow from a dedicated bus lane or right-turn only lane via transit signal priority (a leading bus interval or active signal priority).



# 4 Pedestrian Improvements



Bus lanes help buses bypass traffic congestion to achieve faster and more reliable service. On average, curbside bus lanes reduce travel times by 15 to 20 percent, providing complementary benefits to the other improvement measures identified for the corridor. Bus lanes can be implemented with signage and striping changes at a relatively-low cost, but would require converting a general purpose lane.

Bus lanes would be most useful along congested segments of El Camino Real where buses could bypass traffic congestion. SamTrans is prioritizing advancing bus lanes along segments of El Camino Real that include three general purpose lanes in each direction, slow bus speeds, and high bus ridership. San Carlos partially meets these criteria; bus lanes are recommended for further consideration in the southbound direction south of San Carlos Avenue connecting to Redwood City.

## Implementing the Vision

Implementing this transit vision for El Camino Real will require coordination between SamTrans, Caltrans, San Carlos, and other cities along the corridor. SamTrans looks forward to working in partnership with cities and other stakeholders to weave the improvements identified in this vision into future local and regional planning efforts. For questions, please contact Millie Tolleson at tollesonm@samtrans.com





Bus lanes are recommended for further consideration on segments of El Camino Real with three general purpose lanes in each direction, slow bus speeds, and high bus ridership..



# ECR Bus Speed & Reliability Study

# REDWOOD CITY VISION

The El Camino Real Bus Speed and Reliability Study provides a corridor-wide vision to reduce travel times by 30 percent and achieve a more dependable service. As the backbone of the SamTrans network, Route ECR serves 13 cities across 25 miles. Route ECR accounts for one quarter of average weekday bus ridership on SamTrans – with the majority of riders being lower income people of color. This study envisions faster and more reliable Route ECR service primarily through bus stop balancing, bus bulbs, and queue jumps, while also investigating the suitability of bus-only lanes on congested roadway segments.

SamTrans encourages Redwood City to consult this vision and the specific bus priority treatments when conducting capital improvement and development review processes to achieve more equitable and sustainable mobility outcomes on El Camino Real.

FALL 2022 RECOMMENDATIONS



# **Route ECR in Redwood City (2019)**

This page summarizes Route ECR's performance in Redwood City, including its ridership patterns, travel time, and reliability.

### Who Rides Route ECR?

### WEEKDAY RIDERS IN REDWOOD CITY



### WEEKDAY TRIPS THROUGH REDWOOD CITY



#### WHERE RIDERS GO

San Mateo	San Carlos	Palo Alto	Other
25%	17%	14%	45%

### **AVERAGE HOUSEHOLD INCOME**



White	Asian	Lati	ino	Black	Other
21%	<b>32</b> %	36	5%		ECR Riders
44%		15%	35%		Redwood City
39%		30%	24%		San Mateo County

### **Route ECR Operations**

### AVERAGE SPEED (MPH) IN REDWOOD CITY



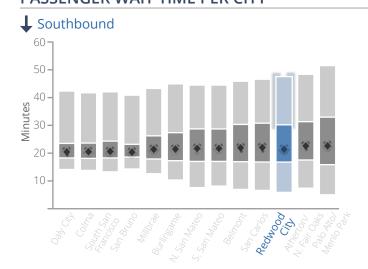
### **ON-TIME PERFORMANCE (% OF TRIPS)**

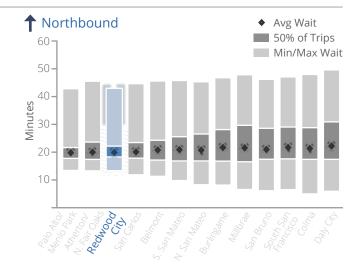


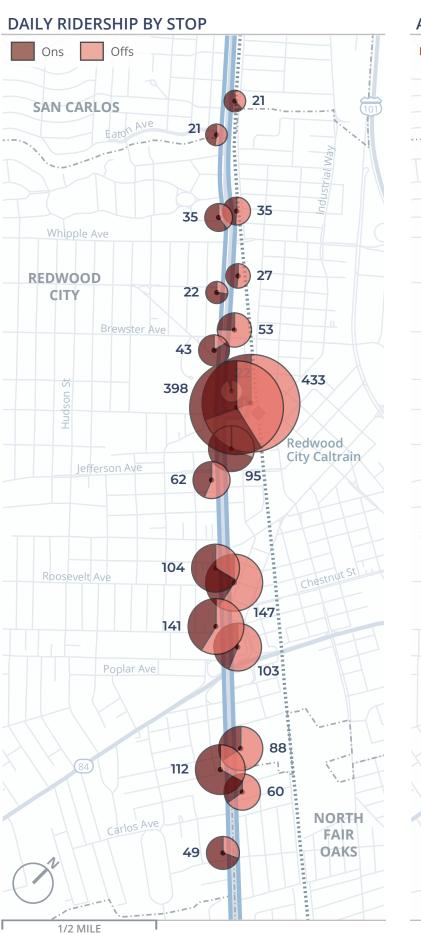
### TRAVEL TIME (MIN) IN REDWOOD CITY



### PASSENGER WAIT TIME PER CITY

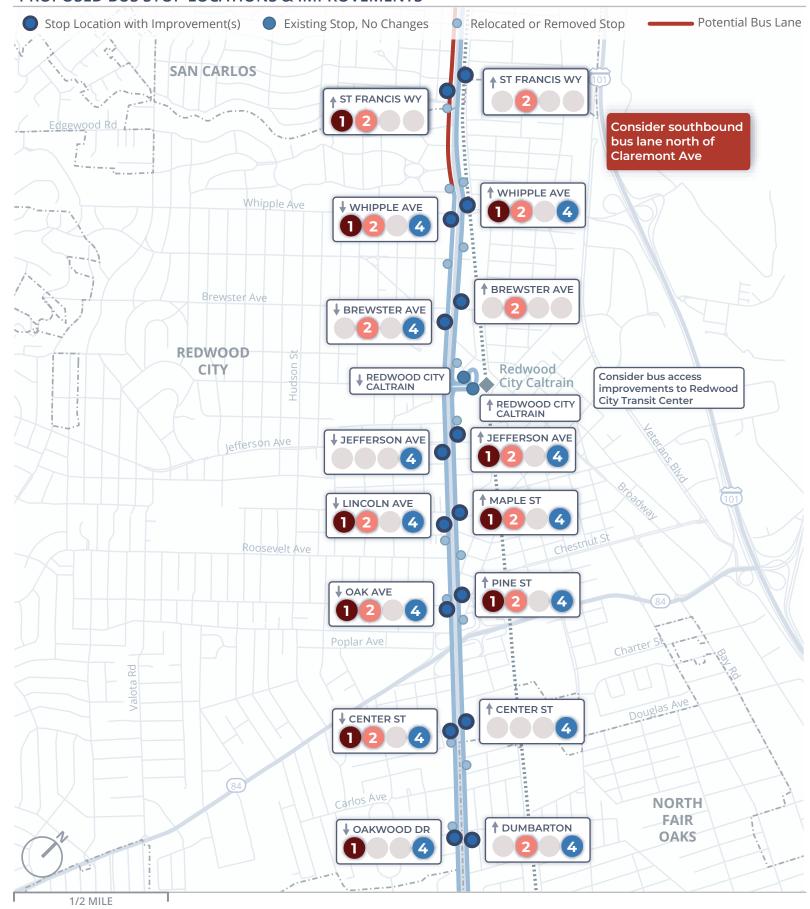






# **AVERAGE BUS SPEED (MPH)** <10 10-12.5 12.5-15 15-17.5 SAN CARLOS Whipple Ave REDWOOD CITY Brewster Ave Redwood City Caltrain Jefferson Ave Poplar Ave NORTH FAIR OAKS

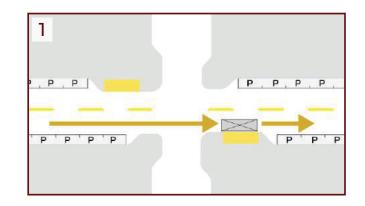
### PROPOSED BUS STOP LOCATIONS & IMPROVEMENTS



The following infrastructure improvements are recommended to support faster and more reliable bus operations on El Camino Real in Redwood City.

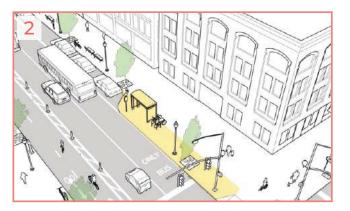
# Bus Stop Balancing & Placement

Far-side, in-lane bus stops with balanced spacing helps buses travel faster and more reliably. ECR stops should be spaced every ¼ to ½ mile, with shorter spacing occurring in areas with high ridership and/or serving transit connections, public facilities, and equity priority areas. Stops should be located on the far side of intersections in the lane of travel to maximize the effectiveness of the corridor's transit signal priority system and avoid delays and conflicts associated with near-side and pullout stops.



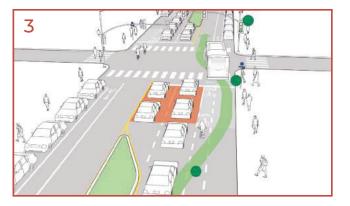
## 2 Bus Bulbs

Bus bulbs are curb extensions that allow buses to stop in the lane of traffic. Bus bulbs improve speed and reliability by reducing the amount of time lost when merging in and out of traffic, while also reducing pedestrian crossing distances. Where space permits, near-level boarding and separated bikeway bypasses are suggested features for bus bulbs.



## 3 Queue Jumps

In cases where near-side pullout stops are most suitable, queue jumps reduce delay for buses merging back into traffic. Queue jumps allow buses to enter traffic flow from a dedicated bus lane or right-turn only lane via transit signal priority (a leading bus interval or active signal priority).



# 4 Pedestrian Improvements



Bus lanes help buses bypass traffic congestion to achieve faster and more reliable service. On average, curbside bus lanes reduce travel times by 15 to 20 percent, providing complementary benefits to the other improvement measures identified for the corridor. Bus lanes can be implemented with signage and striping changes at a relatively-low cost, but would require converting a general purpose lane.

Bus lanes would be most useful along congested segments of El Camino Real where buses could bypass traffic congestion. SamTrans is prioritizing advancing bus lanes along segments of El Camino Real that include three general purpose lanes in each direction, slow bus speeds, and high bus ridership. Redwood City partially meets these criteria; bus lanes are recommended for further consideration in the southbound direction north of Claremont Avenue connecting to San Carlos.

## Implementing the Vision

Implementing this transit vision for El Camino Real will require coordination between SamTrans, Caltrans, Redwood City, and other cities along the corridor. SamTrans looks forward to working in partnership with cities and other stakeholders to weave the improvements identified in this vision into future local and regional planning efforts. For questions, please contact Millie Tolleson at tollesonm@samtrans.com





Bus lanes are recommended for further consideration on segments of El Camino Real with three general purpose lanes in each direction, slow bus speeds, and high bus ridership..



# ECR Bus Speed & Reliability Study

# NORTH FAIR OAKS -ATHERTON VISION

The El Camino Real Bus Speed and Reliability Study provides a corridor-wide vision to reduce travel times by 30 percent and achieve a more dependable service. As the backbone of the SamTrans network, Route ECR serves 13 cities across 25 miles. Route ECR accounts for one quarter of average weekday bus ridership on SamTrans – with the majority of riders being lower income people of color. This study envisions faster and more reliable Route ECR service primarily through bus stop balancing, bus bulbs, and queue jumps, while also investigating the suitability of bus-only lanes on congested roadway segments.

SamTrans encourages North Fair Oaks and Atherton to consult this vision and the specific bus priority treatments when conducting capital improvement and development review processes to achieve more equitable and sustainable mobility outcomes on El Camino Real.

FALL 2022 RECOMMENDATIONS



# Route ECR in North Fair Oaks - Atherton (2019)

This page summarizes Route ECR's performance in North Fair Oaks and Atherton, including its ridership patterns, travel time, and reliability.

### Who Rides Route ECR?

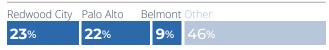
WEEKDAY RIDERS IN NFO - ATHE

120

WEEKDAY TRIPS THROUGH NFO - ATHE

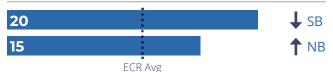
1,030

WHERE RIDERS GO



### **Route ECR Operations**

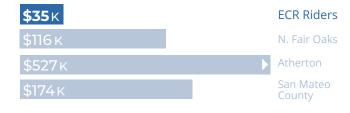
AVERAGE SPEED (MPH) IN NFO - ATHE



TRAVEL TIME (MIN) IN NFO - ATHE



**AVERAGE HOUSEHOLD INCOME** 



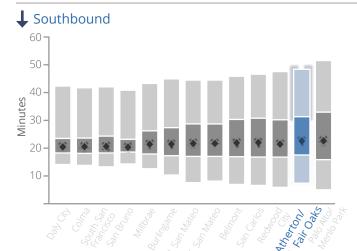
**DEMOGRAPHICS** 

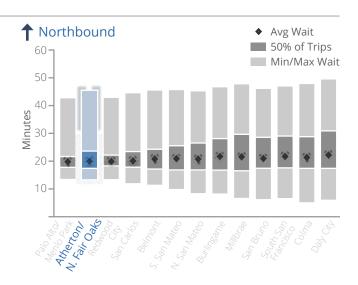
White	Asian	Latino	Black C	ther
21%	<b>32</b> %	<b>36</b> %		ECR Riders
18%	6% 73%			N. Fair Oaks
69%		21 %		Atherton
39%	30	% 24	%	San Mateo County

### ON-TIME PERFORMANCE (% OF TRIPS)



### PASSENGER WAIT TIME PER CITY

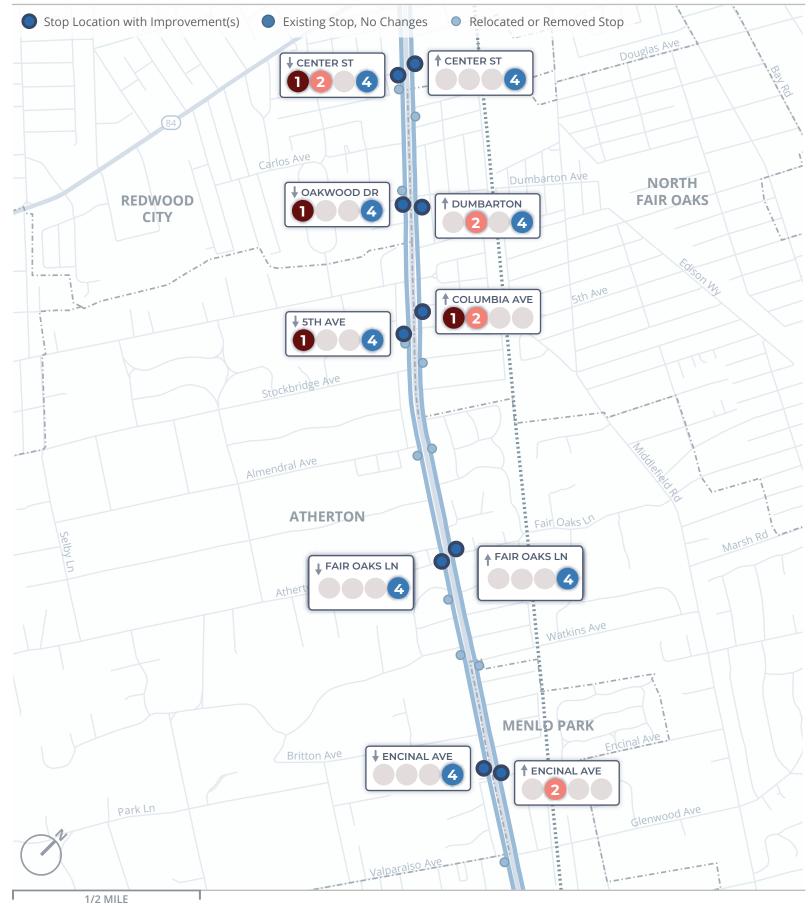








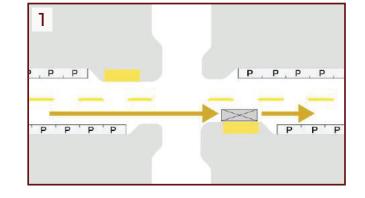
### PROPOSED BUS STOP LOCATIONS & IMPROVEMENTS



The following infrastructure improvements are recommended to support faster and more reliable bus operations on El Camino Real in North Fair Oaks and Atherton.

# 1 Bus Stop Balancing & Placement

Far-side, in-lane bus stops with balanced spacing helps buses travel faster and more reliably. ECR stops should be spaced every ¼ to ½ mile, with shorter spacing occurring in areas with high ridership and/or serving transit connections, public facilities, and equity priority areas. Stops should be located on the far side of intersections in the lane of travel to maximize the effectiveness of the corridor's transit signal priority system and avoid delays and conflicts associated with near-side and pullout stops.



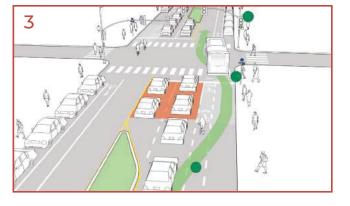
## 2 Bus Bulbs

Bus bulbs are curb extensions that allow buses to stop in the lane of traffic. Bus bulbs improve speed and reliability by reducing the amount of time lost when merging in and out of traffic, while also reducing pedestrian crossing distances. Where space permits, near-level boarding and separated bikeway bypasses are suggested features for bus bulbs.



# **3** Queue Jumps

In cases where near-side pullout stops are most suitable, queue jumps reduce delay for buses merging back into traffic. Queue jumps allow buses to enter traffic flow from a dedicated bus lane or right-turn only lane via transit signal priority (a leading bus interval or active signal priority).



# 4 Pedestrian Improvements



Bus lanes help buses bypass traffic congestion to achieve faster and more reliable service. On average, curbside bus lanes reduce travel times by 15 to 20 percent, providing complementary benefits to the other improvement measures identified for the corridor. Bus lanes can be implemented with signage and striping changes at a relatively-low cost, but would require converting a general purpose lane.

Bus lanes would be most useful along congested segments of El Camino Real where buses could bypass traffic congestion. SamTrans is prioritizing advancing bus lanes along segments of El Camino Real that include three general purpose lanes in each direction, slow bus speeds, and high bus ridership. Atherton and North Fair Oaks do not fit these initial prioritization criteria, but we encourage both cities to consider how bus lanes may fit into a vision for El Camino Real.

### Implementing the Vision

Implementing this transit vision for El Camino Real will require coordination between SamTrans, Caltrans, Atherton, North Fair Oaks and other cities along the corridor. SamTrans looks forward to working in partnership with cities and other stakeholders to weave the improvements identified in this vision into future local and regional planning efforts. For questions, please contact Millie Tolleson at tollesonm@samtrans.com





Bus lanes are recommended for further consideration on segments of El Camino Real with three general purpose lanes in each direction, slow bus speeds, and high bus ridership..



# ECR Bus Speed & Reliability Study

# MENLO PARK -PALO ALTO VISION

The El Camino Real Bus Speed and Reliability Study provides a corridor-wide vision to reduce travel times by 30 percent and achieve a more dependable service. As the backbone of the SamTrans network, Route ECR serves 13 cities across 25 miles. Route ECR accounts for one quarter of average weekday bus ridership on SamTrans – with the majority of riders being lower income people of color. This study envisions faster and more reliable Route ECR service primarily through bus stop balancing, bus bulbs, and queue jumps, while also investigating the suitability of bus-only lanes on congested roadway segments.

SamTrans encourages Menlo Park and Palo Alto to consult this vision and the specific bus priority treatments when conducting capital improvement and development review processes to achieve more equitable and sustainable mobility outcomes on El Camino Real.

FALL 2022 RECOMMENDATIONS



# Route ECR in Menlo Park - Palo Alto (2019)

This page summarizes Route ECR's performance in Menlo Park and Palo Alto, including its ridership patterns, travel time, and reliability.

### Who Rides Route ECR?

### WEEKDAY RIDERS IN MP - PA

640

### WEEKDAY TRIPS THROUGH MP - PA

1,060

### WHERE RIDERS GO

Redwood City	Menlo Park i	NFO Other	
40%	12%	<b>7</b> % 41%	

### **Route ECR Operations**

### AVERAGE SPEED (MPH) IN MP - PA



### TRAVEL TIME (MIN) IN MP - PA



### AVERAGE HOUSEHOLD INCOME



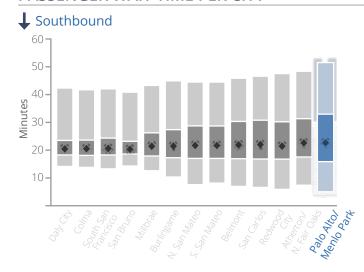
### **DEMOGRAPHICS**

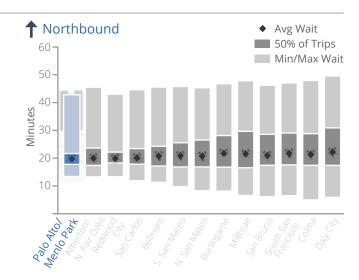
White	Asian	Latino	Black C	)ther
21%	<b>32</b> %	<b>36</b> %		ECR Riders
58%		15 %	15%	Menlo Park
55%		32%	6%	Palo Alto
39%	30	D% 24	4%	San Mateo County

### **ON-TIME PERFORMANCE (% OF TRIPS)**



### PASSENGER WAIT TIME PER CITY







# **AVERAGE BUS SPEED (MPH) ATHERTON** Menlo Park Caltrain **MENLO PARK** Middle AV **PALO ALTO**

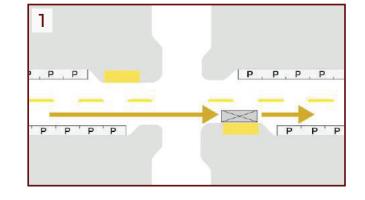
### PROPOSED BUS STOP LOCATIONS & IMPROVEMENTS



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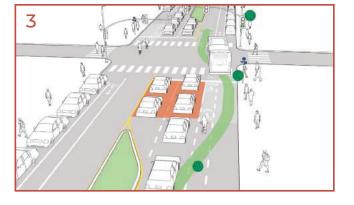
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### Implementing the Vision

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