



**Santa Cruz County**  
**Unified Corridors Investment Study Survey**  
**May 2017**

## Survey Results Summary

- Total survey participants: 1,979
- Time period: May 16, 2017 to May 31, 2017
- Availability: Interactive web-based survey tool supported by MetroQuest <https://sccrtc-ucs.metroquest.com>
- Notices and outreach: online newspapers ads, eNews, social media
- Purpose: Solicit input on what projects on Highway 1, Soquel & Freedom, and the rail right-of-way are important to the community. The input will inform development of future transportation scenarios to be evaluated in the Unified Corridor Investment Study.
- Survey type: Individuals decide whether to access and complete the survey, and it is possible for individuals to complete the survey more than once. Participants were not selected randomly and may not be representative of the entire Santa Cruz County population; therefore, the survey results cannot be assumed to be statistically valid.

**Demographic Characteristics:** Survey participants were invited to provide information about their age, place of residence, car ownership, and employment status. Of total survey participants, 84% provided the following demographic information:

- Age: 60% ages 50 and older, 32% ages 30-49, 8% ages 29 and younger
- Place of residence:

City of Santa Cruz	28.5%
Aptos/Sea Cliff/Rio Del Mar	22.91%
Live Oak	10.58%
Capitola/Soquel	12.63%
Watsonville	9.8%
Other parts of Santa Cruz County	6.86%
San Lorenzo Valley	4.51%
Scotts Valley	2.83%
North Coast (e.g. Davenport)	1.14%
UCSC campus	0.24%

- Car ownership: 66% own a car and drive often, 30% own a car and drive it a few days a week or rarely use it, 2% do not own a car, but have access to a car and 3% don't have a license, don't drive or don't have access to a car.



# Santa Cruz County Unified Corridors Investment Study Survey May 2017

- Employment: 57% employed full-time, 22% are retired and 12% employed part time and 9% either a student, unemployed or something else.

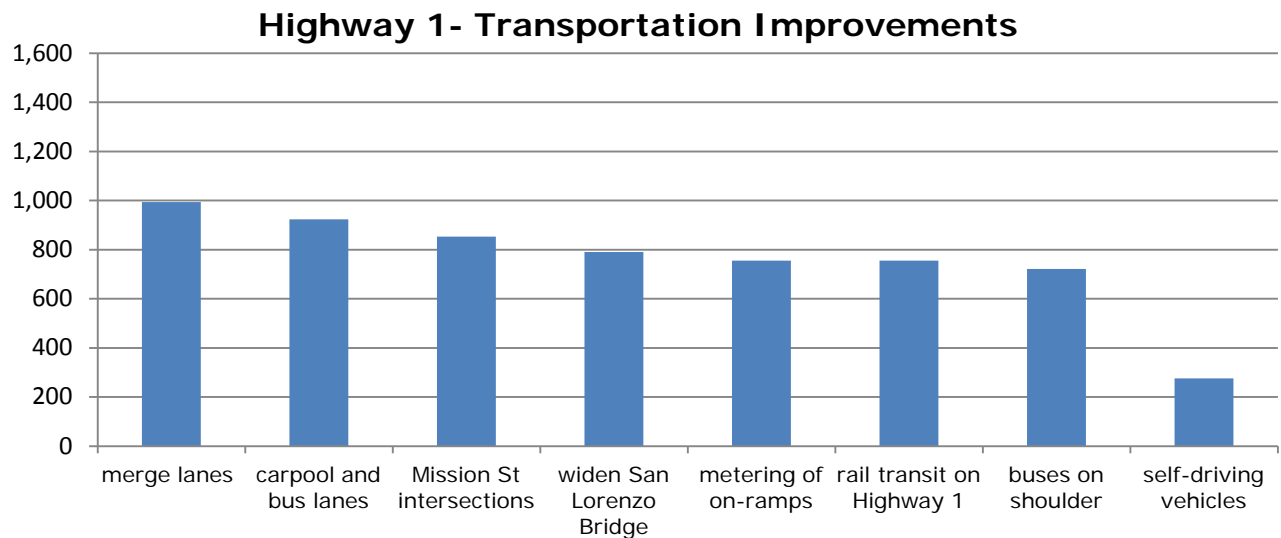
**Transportation Improvements:** Participants were asked what transportation improvements they think should be prioritized on Highway 1, Soquel Avenue/Drive & Freedom, and Santa Cruz Branch Rail Line. Of total survey participants, 74% of participants ranked the transportation priorities. Other participants provided comments and/or demographic information only.

Indicators of the most important transportation improvements to the community on Highway 1, Soquel & Freedom and Santa Cruz Branch Rail Line are: number of times transportation improvement was ranked, average ranking of transportation improvement and the comments provided.

1. Number of times a transportation priority was selected by survey participants:

## Highway 1

- **Merge lanes** was the most frequently selected transportation project on Highway 1, with 66% of survey participants who prioritized projects on Highway 1 selecting merge lanes
- **Carpool and bus lanes** was the second most frequently selected transportation project on Highway 1, with 61% of survey participants who prioritized projects on Highway 1 selecting carpool and bus lanes



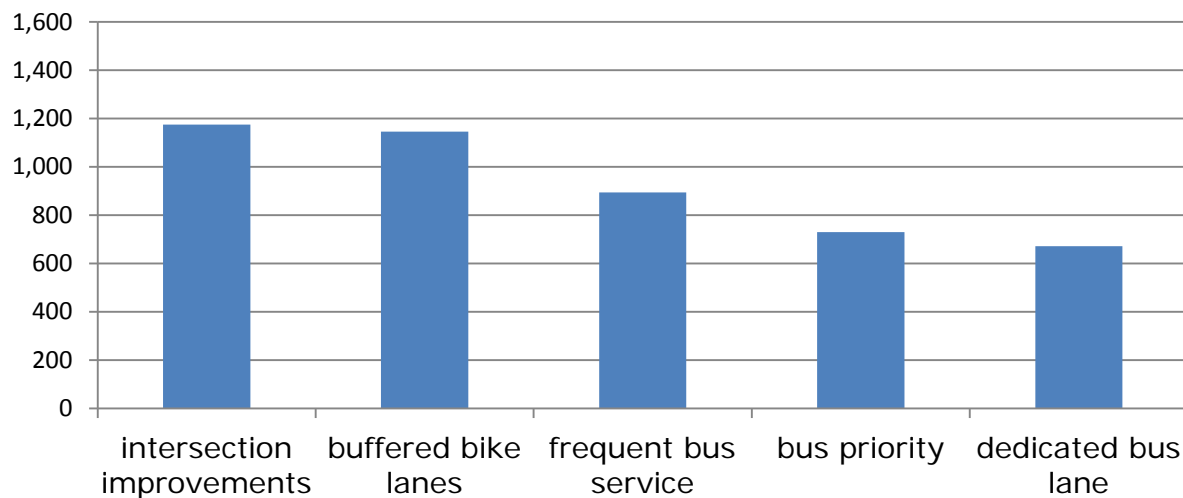


# Santa Cruz County Unified Corridors Investment Study Survey May 2017

## *Soquel Avenue/Drive and Freedom Boulevard*

- **Intersection improvements** for automobiles and bicycles and pedestrians was the most frequently selected transportation project on Soquel Avenue/Drive and Freedom Boulevard, with 82% of survey participants who prioritized improvements on Soquel and Freedom selecting intersection improvements.
- **Buffered bike lanes** was the second most frequently selected transportation project on Soquel Avenue/Drive and Freedom Boulevard with 80% of survey participants who prioritized improvements on Soquel and Freedom selecting buffered bike lanes.

### Soquel & Freedom Transportation Improvements



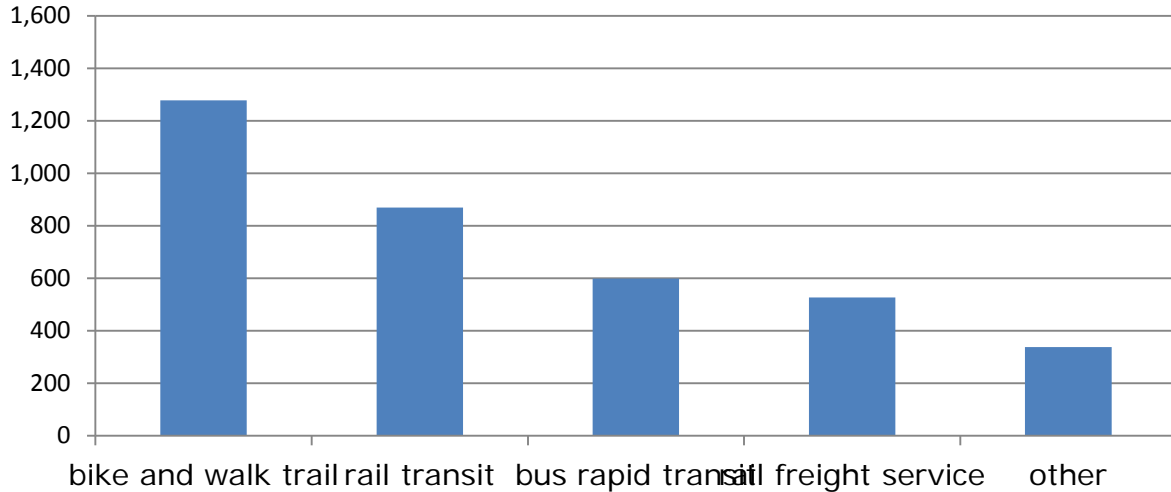
## *Rail Line*

- **Bike and walk trail** was the most frequently selected transportation project on the Rail Line, with 87% of survey participants who prioritized projects on the rail line selecting bike and walk trail.
- **Rail transit** was the second most frequently selected transportation project on the Rail Line with 59% of participants who prioritized projects on the rail line selecting rail transit.



**Santa Cruz County  
Unified Corridors Investment Study Survey  
May 2017**

**Rail Line- Transportation Improvements**



2. Average ranking of a transportation project (on a scale of 0-5 with 5 being the most important):

<b>Transportation Project</b>	<b>Average Rank</b>
<i>Rail Line- bike and walk trail</i>	3.89
<i>Soquel &amp; Freedom- buffered bike lanes</i>	3.27
<i>Soquel &amp; Freedom- intersection improvements</i>	3.25
<i>Rail Line- rail transit</i>	2.53
<i>Highway 1- merge lanes</i>	2.30
<i>Soquel &amp; Freedom- frequent bus service</i>	2.15
<i>Highway 1- carpool and bus lanes</i>	2.08
<i>Highway 1- rail transit</i>	1.90
<i>Highway 1- Mission St intersections</i>	1.65
<i>Highway 1- widen San Lorenzo Bridge</i>	1.64
<i>Highway 1- metering of on-ramps</i>	1.60
<i>Rail Line- bus rapid transit</i>	1.43
<i>Highway 1- buses on shoulder</i>	1.40
<i>Soquel &amp; Freedom- bus priority</i>	1.42
<i>Soquel &amp; Freedom- dedicated bus lane</i>	1.30
<i>Rail Line- rail freight service</i>	1.07
<i>Rail Line- other</i>	0.55
<i>Highway 1- self-driving vehicles</i>	0.54



**Santa Cruz County**  
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**Comments:**

*Highway 1*

636 comments were submitted in the Highway 1 transportation portion of the survey. In general, comments reemphasized priority for transportation improvements selected including merge lanes, carpool and bus lanes, ramp metering and rail transit on Highway. Other comments discussed the lack of priority for the projects listed in the survey particularly self driving vehicles and the concern that they would only be for wealthy people. There were many comments requesting that Highway 1 be widened for general purpose lanes and conversely that there be no highway widening. Other suggestions include a through lane for commute traffic, motorcycle lanes on center shoulders, free bus passes, improved pedestrian crosswalks and sidewalks on Mission St., reversible lane on Highway 1, incentives for employers to stagger commute times and shift school start times after morning peak traffic. A few comments referenced investments on other routes.

*Soquel & Freedom*

258 comments were submitted in the Soquel & Freedom transportation investments portion of the survey. In general, comments reemphasized priority for transportation improvements selected including buffered bike lanes and intersection improvements and priorities to not invest in dedicated bus lanes. Some comments introduced new transportation investments including on-demand transit and smaller transit vehicles. Other comments referred to the importance of bike safety. A few comments referenced investments on other routes.

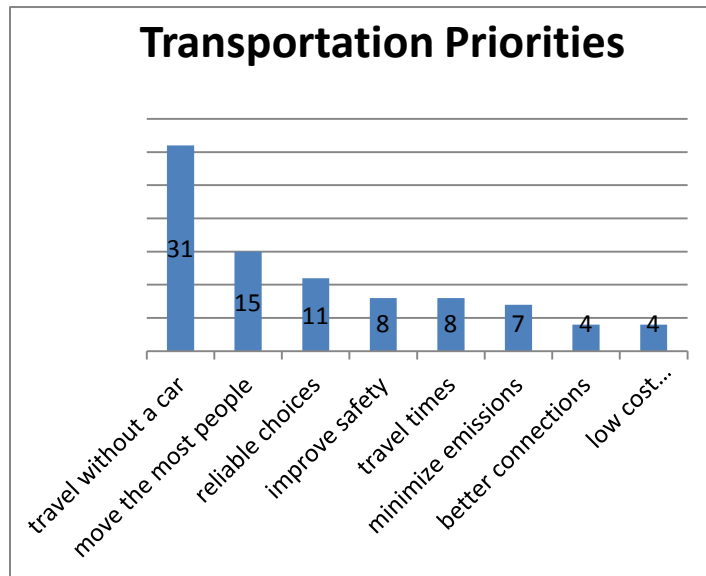
*Rail Line*

554 comments were submitted in the rail line transportation investments portion of the survey. In general, comments reemphasized the priorities for the transportation improvements selected, including indications of support for a trail, rail, bus rapid transit, rail and trail, and freight service and the priorities to not invest in rail, bus rapid transit, freight service, and a trail. Additional comments described the value of investing in new technologies including autonomous vehicles and electric vehicles to provide transportation services on the rail line, considerations for the location of transit stations and parking near stations, the potential for use of the rail right-of-way for utilities and the value of studying transportation services on the rail. A few comments referenced investments on other routes.





## Santa Cruz County Unified Corridors Investment Study Public Workshop January 2017



2. Public workshop participants were invited to identify additional goals and priorities for the Unified Corridor Study. Additional goals identified by public workshop participants included addressing the cost and feasibility of transportation improvements and the health and environmental impacts. Additional priorities identified by public workshop participants focused on project types and included: transit options, new bicycle connections, separated bicycle and pedestrian facility on rail line next to rail transit, separated bicycle and pedestrian facility on rail line without rail transit, connections for electric vehicles, and road surface improvements.

❖ **Transportation Project Types:** Participants were asked to identify projects most beneficial for accomplishing the project objective listed and add other ideas, as appropriate. The questions that were asked at the workshop are listed below.

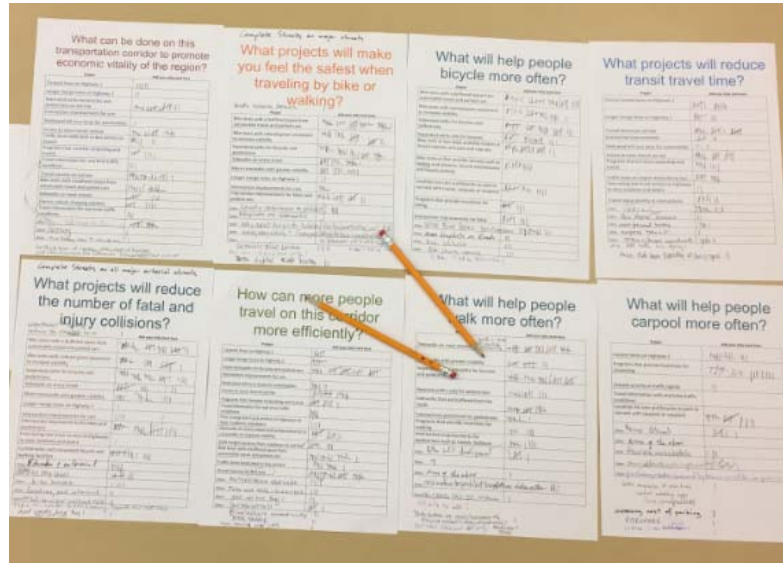
- What projects will make you feel the safest when traveling by bike or walking?
- What projects will reduce the number of fatal and injury collisions?
- What projects will reduce auto travel time?
- What projects will reduce transit travel time?
- What will help people ride transit more often?
- What will help people bicycle more often?
- What will help people walk more often?
- What will help people carpool more often?





## Santa Cruz County Unified Corridors Investment Study Public Workshop January 2017

- How can more people travel on this corridor more efficiently?
- What projects will bring about the greatest reduction in pollutants including greenhouse gas?
- How can travel without a car be made easier?
- What can be done on this transportation corridor to promote economic vitality of the region?



1. The number of times a transportation project was identified by public workshop participants across all transportation priorities was an indicator of the **most important transportation project types**. The most frequently selected project types across all priorities included:
  - Bike lanes with a buffered space from automobile travel and parked cars
  - Bicycle lanes with colored green pavement to increase visibility
  - Separated path for bicycles and pedestrians on rail line
  - Separated multiuse path for bicycles and pedestrians
  - Transit service on rail line
  - Access to more transit service
  - Decreasing travel time for transit
  - Sidewalks on most streets
  - Sidewalks that are buffered from the roads
  - Intersection improvements for bikes and pedestrians
  - More crosswalks with greater visibility
  - Programs that provide incentives for carpooling
  - Locations for cars and bicycles to park to connect with transit
  - Enforcement and education



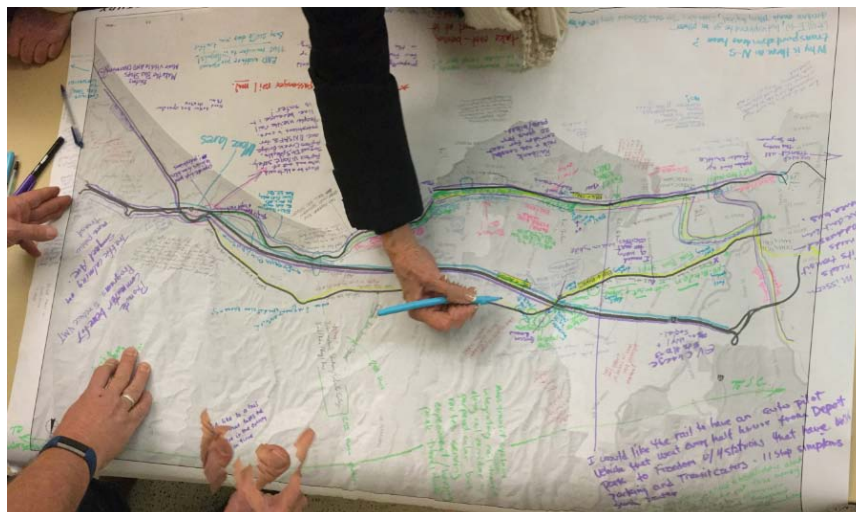


## Santa Cruz County Unified Corridors Investment Study Public Workshop January 2017

2. The number of times a transportation project was identified by public workshop participants for each transportation priority was an indicator of the **most important transportation project types**. The most frequently selected project types based on each transportation priority include:

Priority	Public Workshop - Top choices for each Priority
Travel Time	Transit service on rail line; access to more transit service; separated bike and ped path; carpool and transit incentive programs
Travel without a Car	Separated bike and ped path; bike lanes with a buffered space from auto travel and parked cars; sidewalks on most streets; transit service on rail line; Locations for cars and bicycles to park to connect with transit
Improve Safety	Separated bike and ped path; bike lanes with a buffered space from auto travel and parked cars
Move the Most People	Separated bike and ped path; transit service on rail line; bike lanes with a buffered space from auto travel and parked cars
Minimize Emissions	Separated bike and ped path; bike lanes with a buffered space from auto travel and parked cars; transit service on rail line

- ❖ **Transportation Project Types:** Participants were also asked to identify transportation improvements they would like to see in the project area on a map.





# Santa Cruz County Unified Corridors Investment Study Public Workshop January 2017

Projects identified include:

- Highway 1
  - Add lanes
  - Add passenger rail
  - Bus rapid transit
  - Auxiliary lanes
  - Ramp meters
- Soquel Ave/Drive
  - Traffic calming
  - Protected bike lanes
  - Keep parking
  - No bikes
- Rail Corridor
  - Passenger rail to Watsonville
  - Bike and pedestrians only
  - Bus rapid transit
- Overall Project Area
  - Transit – more service, improved travel times, improved bus stops
  - Bike and Walk – safer facilities including safer crosswalks and protected bike lanes and safer access to Aptos Village
  - Multimodal transportation hubs – serving Cabrillo College and elsewhere
  - Consider north-south corridors and connections between routes and over Highway 1
  - Transit connections to rail
  - Electric vehicle charging stations
  - Commuter incentive programs



# Santa Cruz County Unified Corridors Investment Study Survey January – March 2017

## Survey Results Summary

- Total survey participants: 3,405
- Time period: January 6, 2017 to March 3, 2017
- Availability: Interactive web-based survey tool supported by MetroQuest <https://sccrtc-ucs.metroquest.com> and distributed in hard copy
- Notices and outreach: newspapers hardcopy and online, news releases and enews, social media, partner agencies
- Purpose: Solicit input on the community's transportation priorities, projects and preferences including outcomes and project types to support development of Unified Corridor Study goals and scenario analysis
- Survey type: Individuals decide whether to access and complete the survey, and it is possible for individuals to complete the survey more than once. Participants were not selected randomly and may not be representative of the entire Santa Cruz County population; therefore, the survey results cannot be assumed to be statistically valid.

❖ **Demographic Characteristics:** Survey participants were invited to provide information about their age, place of residence, car ownership, and employment status. Of total survey participants, 80% provided the following demographic information:

- Age: 65% 50 and older, 28% ages 30-49, 7% 29 and younger
- Place of residence:

City of Santa Cruz	28.95%
Aptos/Sea Cliff/Rio Del Mar	20.92%
Live Oak	10.53%
Capitola/Soquel	10.35%
Watsonville	8.79%
Other parts of Santa Cruz County	7.75%
San Lorenzo Valley	7.56%
Scotts Valley	4.20%
North Coast (e.g. Davenport)	0.69%
UCSC campus	0.25%

- Car ownership: 64% own a car and drive often, 33% own a car and drive it a few days a week or rarely use it, 1% do not own a car, but have access to a car and 2% don't have a license, don't drive or don't have access to a car.



## Santa Cruz County Unified Corridors Investment Study Survey January – March 2017

- Employment: 52% employed full-time, 27% are retired and 12% employed part time and 9% either a student, unemployed or something else.
- ❖ **Transportation Priorities:** Participants were asked what transportation priorities are most important to them. Of total survey participants, 95% ranked transportation priorities.

2 Your Top Priorities

What to do Next Task

Order your top 5 items  
↑ above this line ↑

Better connections  
Low cost options  
Travel time  
Reliable choices  
Travel without a car  
Move the most people  
Minimize emissions  
Improve safety

What transportation options are most important to you?

Please drag 5 of the items above the line in your preferred order.

Suggest another item

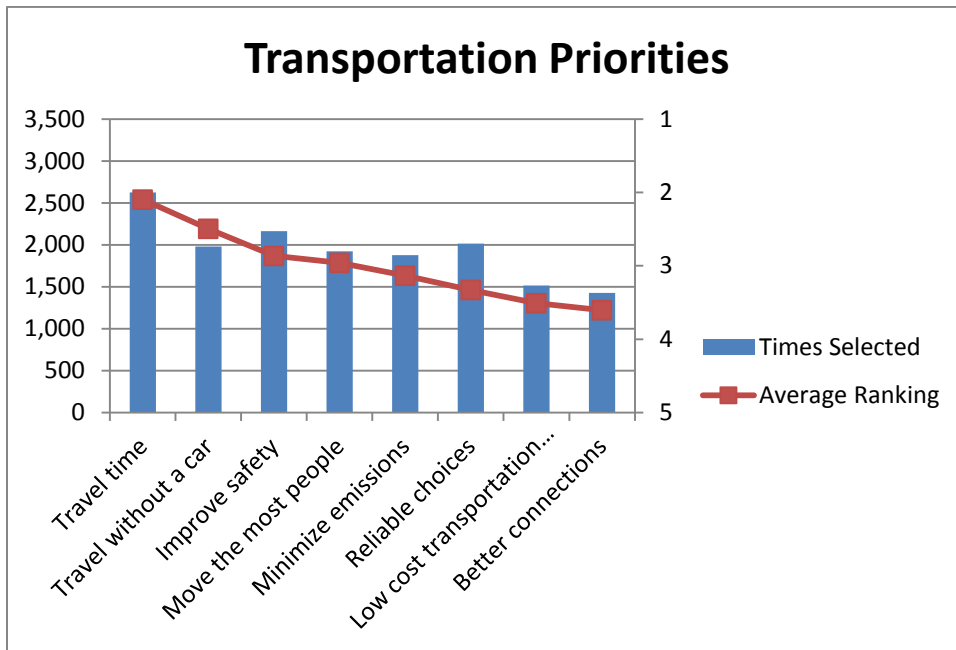
Indicators of the **most important transportation priorities** to the community based on survey responses are: number of times transportation priority was ranked, average ranking of transportation priority and the comments provided.

1. Number of times a transportation priority was selected by survey participants:
  - **Travel time** was the most frequently selected transportation priority, with **78%** of survey participants selecting travel time
  - **Improved safety** was the second most frequently selected transportation priority, with **67%** of survey participants selecting improved safety
  - **Reliable choices** was the third most frequently selected transportation priority with **62%** of survey participants selecting reliable choices
2. Average ranking of a transportation priority (on a scale of 1-5 with 1 being the most important):
  - **Travel time** was most highly ranked transportation priority, with an average ranking of **2.1**



## Santa Cruz County Unified Corridors Investment Study Survey January – March 2017

- **Travel without a car** was the second most highly ranked transportation priority, with an average ranking of **2.5**
- **Improved safety** was the third most highly ranked transportation priority, with an average ranking of **2.9**

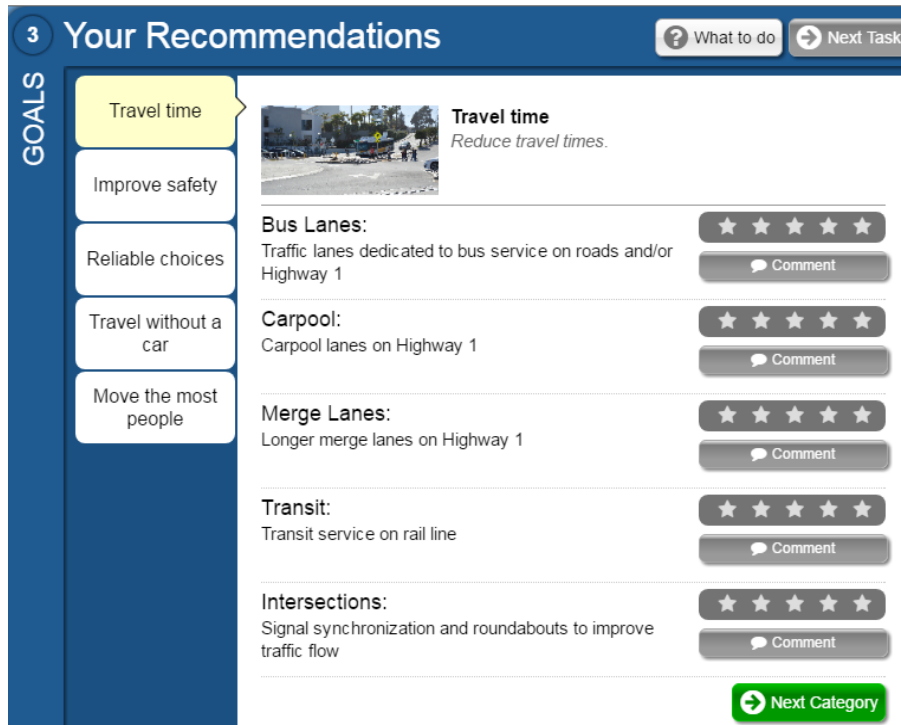


3. **Comments:** 297 comments were submitted by 280 survey participants regarding transportation priorities. Comments can be categorized as:
  - reemphasizing the importance of transportation priorities identified in the survey
  - identifying a new priority not listed in the survey including equitable distribution of impacts, enforcement and education, travel with car, protect neighborhoods, and improve health
  - providing input on a project type or service



# Santa Cruz County Unified Corridors Investment Study Survey January – March 2017

- ❖ **Transportation Project Types:** Participants were asked to identify how important each transportation service is in addressing their priorities. Of total survey participants, 91% rated transportation project types.



Indicators of the **most important transportation project types** to the community based on survey responses are: number of times the project type was rated 5 stars across all priorities; the number of times the project was rated 1 star across all priorities; the highest and lowest rated project type for each priority; and the average rating for each project type across all priorities. Five stars is the highest rating for project types and 1 star is the lowest rating.

1. Number of times the project type was ranked 5 stars, the highest rating, across all priorities:
  - **Bike and walk facilities** was the project type most frequently rated 5 stars (3,500 times)
  - **Transit along the rail line** was the second most frequently rated project type with 5 stars (2,533 times)
2. Number of times the project was rated 1 star, the lowest rating, across all priorities:



## Santa Cruz County Unified Corridors Investment Study Survey January – March 2017

- **Transit along the rail line** was the project type most frequently rated 1 star or less (1,603 times)
- **Traffic lanes dedicated to bus on roadways or highway 1** was the second most frequently rated project type with 1 star or less (1,037 times)

### 3. Project type rating by priority:

Priority	Project Type with Highest Rating	Rating	Project Type with Lowest Rating	Rating
Travel Time	Intersection Improvements	4.2	Dedicated Bus Lanes	2.6
Travel without a Car	Bike and Walk Facilities	4.5	Transit on Rail Line	3.5
Improve Safety	Buffered Bike Lanes	4.1	Merge Lanes	3.4
Move the Most People	Bike and Walk Facilities	3.8	Dedicated Bus Lanes	2.8
Minimize Emissions	Bike and Walk Facilities	4.3	Rail Freight	3.2
Reliable Choices	Traveler Information	3.6	Bus Priority	2.9
Low Cost Options	Bike and Walk Facilities	4.2	Reduced cost Transit Fares	3.5
Better Connections	Park and Ride	3.9	Bike Stations	2.8

### 4. Average rating of project type across all priorities:

Project	Scoring across all priorities	Project	Scoring across all priorities
Bike and Walk	4.2	Bus	3.5
Intersection Improvements – traffic flow	4.2	Bike Parking	3.5
Bike lanes	4.1	Transit Fares	3.5
Multiuse path	4.0	Merge Lanes	3.5
Park and Ride	3.9	Transit on Rail Line	3.4
Access to More Transit	3.7	Rail	3.2
Sidewalk Crosswalks	3.7	Incident Management	3.2
Intersection Improvements - safety	3.7	Carpool	3.1
Demand Management	3.7	Bus Priority	2.9
Travel Information	3.6	Bike Stations	2.8
Electric Vehicles	3.6	Bus Lanes	2.7
Bus Stops	3.5		





## Santa Cruz County Unified Corridors Investment Study Survey January – March 2017

5. Comments: 3,178 comments were submitted regarding transportation project types by 780 participants. Comments can be categorized as:

- reemphasizing the importance of project types already identified in the survey
- proposing projects types not included in the survey including: rail transit on Highway 1, self driving cars, education and enforcement, multimodal transportation hubs, adding general purpose lanes to Hwy 1, on demand transit, adding a commuter through lane to Hwy 1, converting a general purpose lane to HOV, adding a toll lane during peak periods, bike signal priority, auto connections between Capitola Rd and Bay Ave and between Broadway and Brommer, reducing the number of highway ramps, adding more off ramps, rail only on rail corridor, personal rapid transit, neighborhood bus services, smaller transit buses/vans, add lanes to Capitola Rd, remove 4 way stops, electric bicycle and vehicle infrastructure and education

❖ **Transportation Preferences:** Participants were asked to identify which alternative they prefer. Of total survey participants, 91% rated transportation project types.

4 Your Preferences

TRADE OFFS

Safety Roadway Design Transit Travel Lanes Bicycling

Safety

Choose the option that best shows which tradeoff you prefer

Faster travel speeds for automobiles

1 2 Neutral 4 5

Fewer serious collisions

Daily Herald

Beltime.gov

Previous Optional Comment Next Tradeoff

Three indicators of **transportation preferences** that are most important to the community based on survey responses are: where the middle toggle (“neutral”)

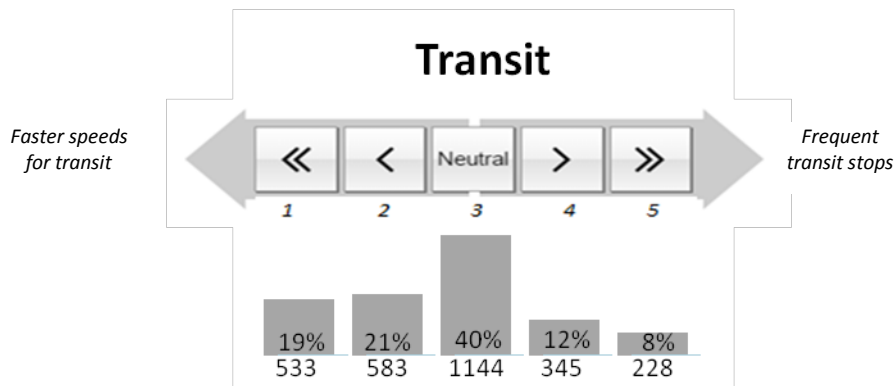


# Santa Cruz County Unified Corridors Investment Study Survey January – March 2017

was the most frequently selected preference; where both of the end toggles (“1” and “5”) were the most frequently selected; and, where one of the end toggles (“1” or “5”) were the most frequently selected.

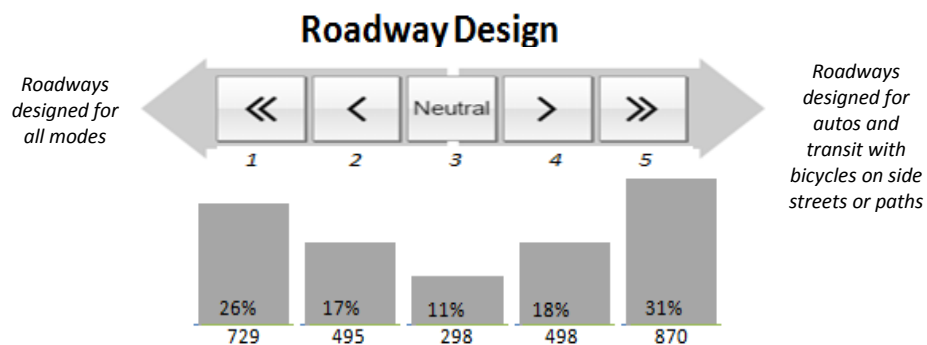
1. The middle toggle (“neutral” or “3”) was most frequently selected, indicating that the tradeoffs should be balanced for :

- **transit service**, with 40% of participants selecting the middle toggle (“neutral” or “3”) for *faster transit service and frequent transit stops*.



2. Both end toggles (“1” and “5”) were the most frequently selected, indicating that members of the community had different preferences for:

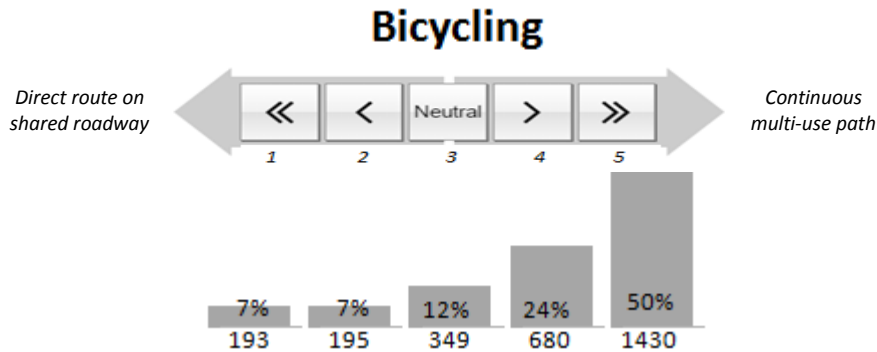
- **roadway design**, with 26% selecting the end toggle “1” indicating *roadways designed for all modes* and 31% selecting the end toggle “5” indicating *roadways designed for autos and transit with bicycles on side streets or paths*. The remaining 43% distributed relatively evenly on toggles “2,3,4” between these preferences.



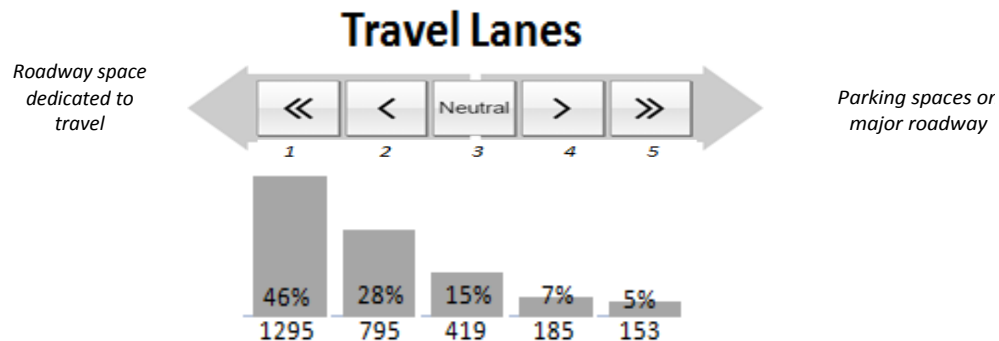


# Santa Cruz County Unified Corridors Investment Study Survey January – March 2017

3. Responses where one side of the scale (“1,2” or “4,5”) was most frequently selected indicating a community preference for one alternative) for:
- **Bicycling**, with 74% of participants selecting “4 or5” for *bicycling longer distance on a continuous multi-use path* when presented with the alternative of *a direct route on a shared roadway*



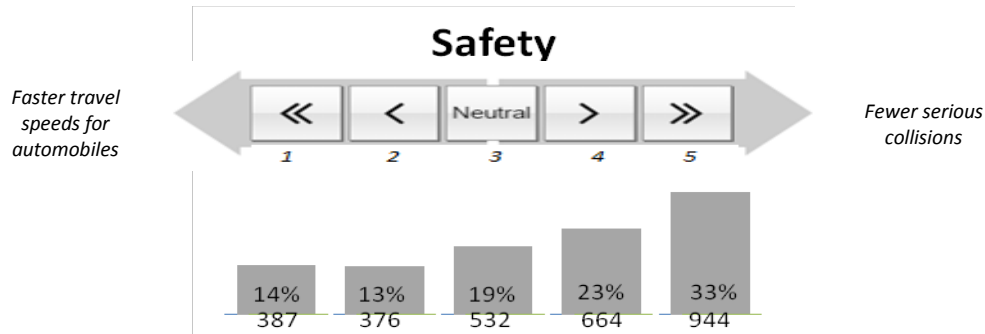
- **Travel lanes**, with 74% of participants selecting “1,2” for *roadway space dedicated to travel* when presented with the alternative of providing *parking spaces on major roadway*



- **Safety**, with 56% of participants selecting “4,5” for *fewer serious collisions* when presented with the alternative of *faster travel speeds for automobiles*



# Santa Cruz County Unified Corridors Investment Study Survey January – March 2017



**Comments:** 662 comments were submitted by 334 participants regarding transportation preferences. Comments can be categorized as:

- reemphasizing the importance of one or the need to balance preferences
- reflecting alternative preferences such as stating that routes should be designed for: biking and walking; walking and taking transit; buses only, cars only, and that bicycle facilities should be provided on all streets, and the need to reduce congestion
- communicating the need for context sensitive designs with references to: the relationship between the speed of automobiles and the design of bicycle facilities (i.e sharrows, bike lanes), the importance of parking (i.e available alternative parking options, shared parking, parking behind stores), proximity to businesses and other land uses, inclusion of or removal of bicycle facilities, impacts on neighborhoods, moving bicycling and pedestrian facilities to side streets) and transit services (i.e. transit stops, faster service and on time performance)
- reemphasizing specific projects types: transportation by train, bus only lanes, multi-modal hubs, including transit, and multi-use paths
- proposing project types not listed in the survey such as: reversible commuter lane on Highway 1, widening Highway 1, autonomous vehicle lanes, neighborhood transit services, streets closed to automobiles, back in parking, parking garages, parking behind stores, bus pullouts, direct transit services to senior living facilities, smaller transit vehicles, on demand traffic services such as Uber and Lyft, bike racks on buses, bus travel only on highways, personal rapid transit
- proposing to not consider project types including bus service, bus only lanes, or projects that involve removing parking on major roadways, train services on the rail corridor, or cycle tracks
- suggesting the role of intersection improvements in improving safety
- stating the value of education and enforcement of traffic laws
- appreciation and concern with survey design and functionality