Rio Vista

Rio Vista

Overview

Rio Vista is located on the east side of Solano County and, because it is not on the Interstate-80 corridor, is somewhat isolated from the rest of the county. It is a small waterfront town situated on the west bank of the Sacramento River. Its historic downtown serves as the city's main retail area. CA-12 bisects the city in an east-west direction, serving as the principal connector to I-80 in Fairfield, to CA-113 leading to Dixon, and to Interstate-5 in Stockton. CA-84 starts in Rio Vista and continues north to Sacramento. Most of Rio Vista is undeveloped, with self-contained pockets of residential development located throughout the city. The largest employer within Rio Vista is Rosetta Resource, a natural gas well operator, though Trilogy and Homecoming, two residential developments, recently created mored jobs after establishing a presence in the city. Rio Vista is the smallest city in Solano County, with a population of 9,009 people as of 2017.

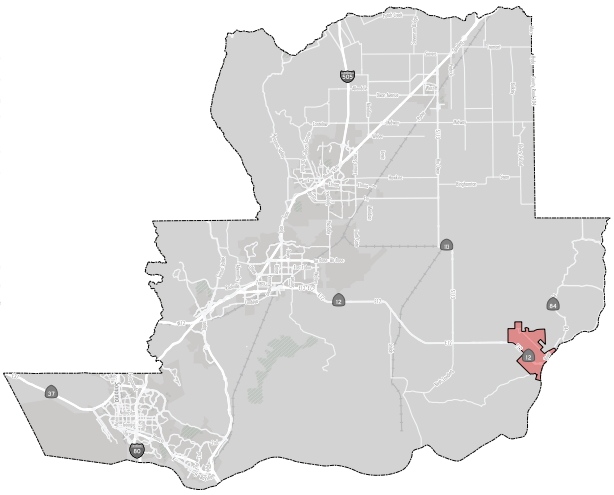


Figure RV-1: Rio Vista

Existing Conditions

This section provides a high-level summary of the existing conditions related to active transportation in Rio Vista. For more details on the demographic composition and travel patterns of people walking and bicycling and the existing active transportation network in Rio Vista, refer to *Appendix B. Technical Analysis and Summary Memorandums*.

Active Transportation Profile

This section evaluates demographic characteristics of the population who currently walk or ride a bicycle in Rio Vista using data from the United States Census American Community Survey (2017, 5-year estimates) and the California Household Travel Survey (2012). While these surveys are useful, the data may be less accurate for smaller communities like Rio Vista due to reduced sample sizes; however, the data do provide a general indication of walking and bicycling trends in Rio Vista.

Demographic Characteristics

According to the United States Census American Community Survey, the population of Rio Vista increased by 22 percent from 2010 to 2017. The share of vulnerable populations (people 18 or under and 65 or older), who may be more likely to rely on walking, bicycling, and transit, increased by 30 percent.

Travel Characteristics

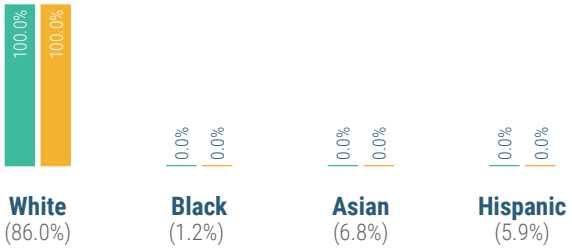
In 2017, nearly 9 percent of the employed population age 16 or older bicycled, walked, or rode public transit to work. Based on data from the California Household Travel Survey, the majority of trips in Rio Vista across all modes are for dining (30%), while only 13 percent of trips are for work. One-third of trips (33%) in Rio Vista across all modes are for dining, with only about 14 percent of trips being for work. Almost half of all trips taken in Rio Vista by any mode of transportation (51%) are less than three miles, which is considered a reasonable bicycling distance. Over 42 percent of all trips are less than one mile, which is considered a reasonable walking distance. This indicates that almost half of all trips made within Rio Vista could be converted to walking or bicycling trips. Additional travel patterns for Rio Vista are depicted in Figure RV-2.

Rio Vista Active Transportation Profile

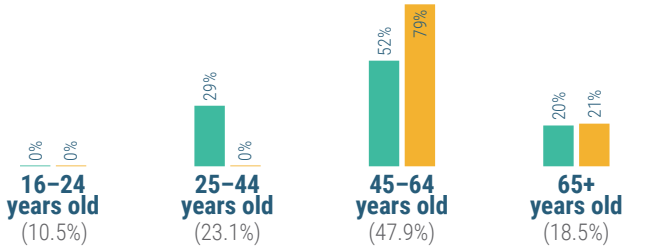
Characteristics of residents who walk or bike to work:

Source: US Census, ACS 5-Year Estimates 2016. Sample size = 72 people who walk and 25 people who bike

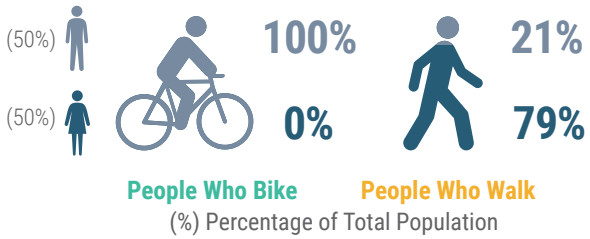
Race



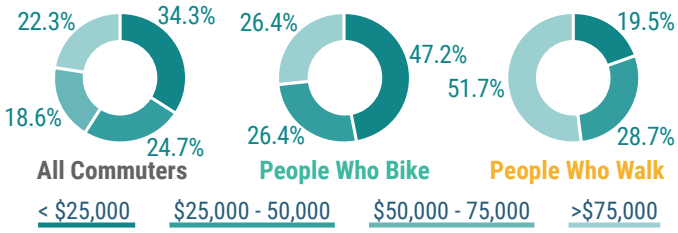
Age



Gender



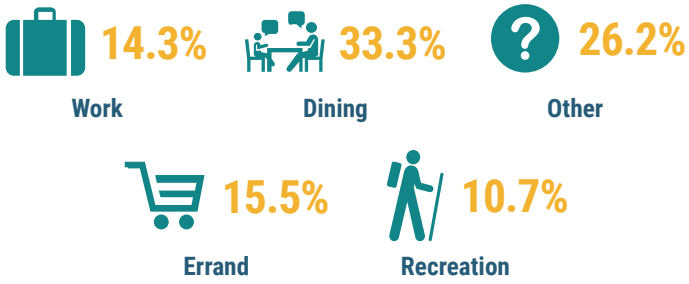
Income



General travel characteristics (all modes):

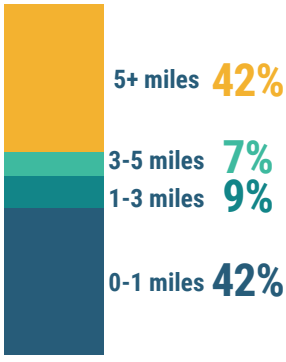
Trip Purposes

Sample size = 166 trips (all modes)



Trip Distances

Sample size = 74 trips (all modes)



Mode Share

Sample size = 2,599 people (commute trips)

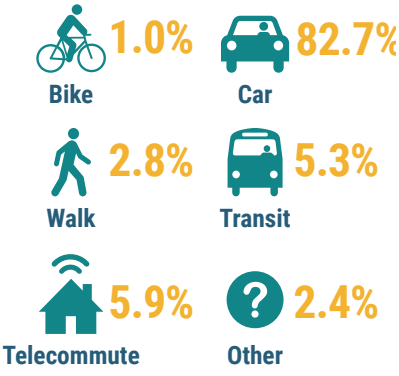


Figure RV-2: Rio Vista Active Transportation Infographic

Existing Active Transportation Network

The active transportation network consists of both pedestrian and bicycle infrastructure that work together to provide mobility options for all those that live, work, study, or play in Rio Vista. Whether we're aware of it or not, everyone in Rio Vista uses active transportation infrastructure, such as sidewalks, at some point in their day even if just for short distances to reach their destinations.

Existing Pedestrian Network

The pedestrian network within Rio Vista consists largely of sidewalk infrastructure supported by crossing treatments, multi-use paved trails (see Figure RV-3), and unpaved recreational trails. Rio Vista currently has an overall Walk Score of 75 out of 100 according to the real-estate website www.WalkScore.com, indicating that it is very walkable, with most errands able to be accomplished on foot. The city currently has 50 miles of sidewalks, which includes measurements of sidewalks on both sides of the street. There are approximately 118 miles of maximum potential sidewalk coverage (total roadway mileage multiplied by two to account for both sides of the street), as shown in Figures RV-4 and RV-5. Depending on land use context, there may be areas of the city with rural characteristics where typical sidewalk infrastructure may not be compatible. However, it was not possible to exclude these areas from the sidewalk inventory.

Existing Bicycle Network

This section summarizes Rio Vista's existing bicycle network. It also presents the results of the bicyclist comfort and connectivity analyses – that is, level of traffic stress (LTS) and bicycle network analysis (BNA), respectively – for the existing network. Additional information on the LTS and BNA methodologies can be found in the existing conditions section of the Solano County Active Transportation Plan. Rio Vista has a 59-mile roadway network, but there are no on-street designated bikeways, as shown in Figure RV-6. However, a majority of roadway lane miles are on low-speed and low-volume streets. Figures RV-7 and RV-8 present the LTS and BNA results for Rio Vista's existing bicycle network, respectively.

Figure RV-3: Class I Multi-use Path in Rio Vista

Sidewalk Network Inventory

	Existing Sidewalk Lane Miles	Roadway Network Lane Miles*
Rio Vista	50	118
Priority Development Areas	-	-
Communities of Concern	-	-
Disadvantaged Communities	-	-

*Maximum potential sidewalk coverage

Bicycle Network Inventory

Bicycle Facilities	Miles
Multi-Use Paths (Class I)	2
Bicycle Lanes (Class II)	-
Bicycle Routes (Class III)	-
No Designated Facility	57
All Roadways	59

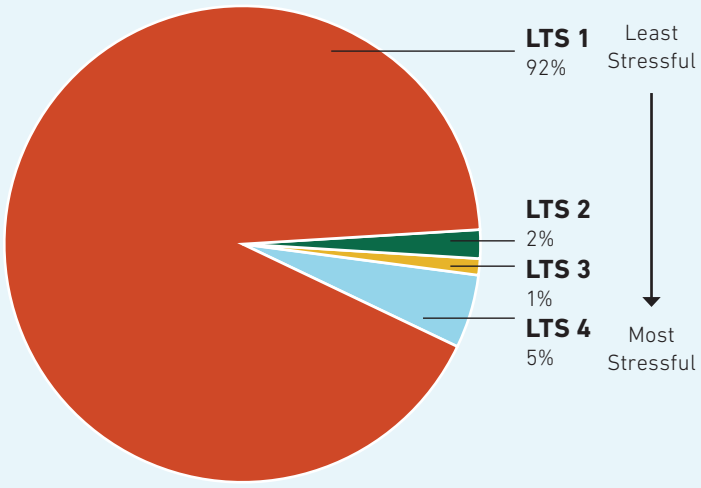
Citywide Bicycle Network Analysis (BNA) Score

54

Low Connectivity 0→100 High Connectivity

Percent of Roadway Mileage

Level of Traffic Stress (LTS)



Bicycle Inventory

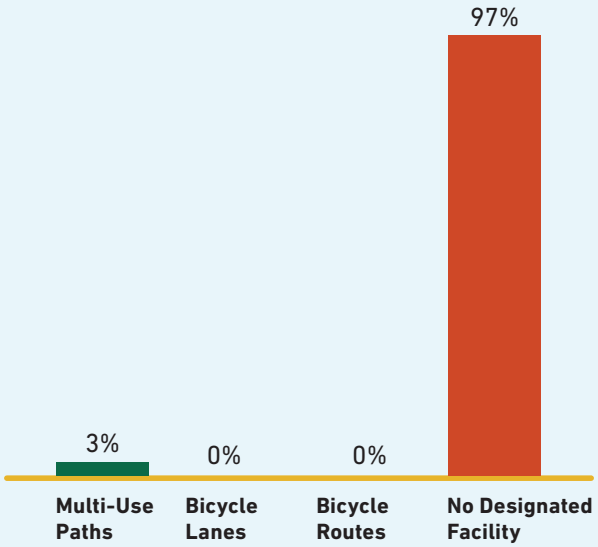


Figure RV-4: Rio Vista Active Transportation Network Infographic

Figure RV-5: Rio Vista Sidewalk Coverage Map

Figure RV-6: Rio Vista Existing Bike Network Map

Rio Vista

STA
County Active Transportation Plan
Bicycle Network

Bikeways
- Class I Multi-Use Path
- Class II Bicycle Lane
- Class II Buffered Bicycle Lane
- Class III Bicycle Boulevard
- Class III Bicycle Route
- Class IV Separated Bikeway
- County
- Jurisdictions
- Parks
- Water

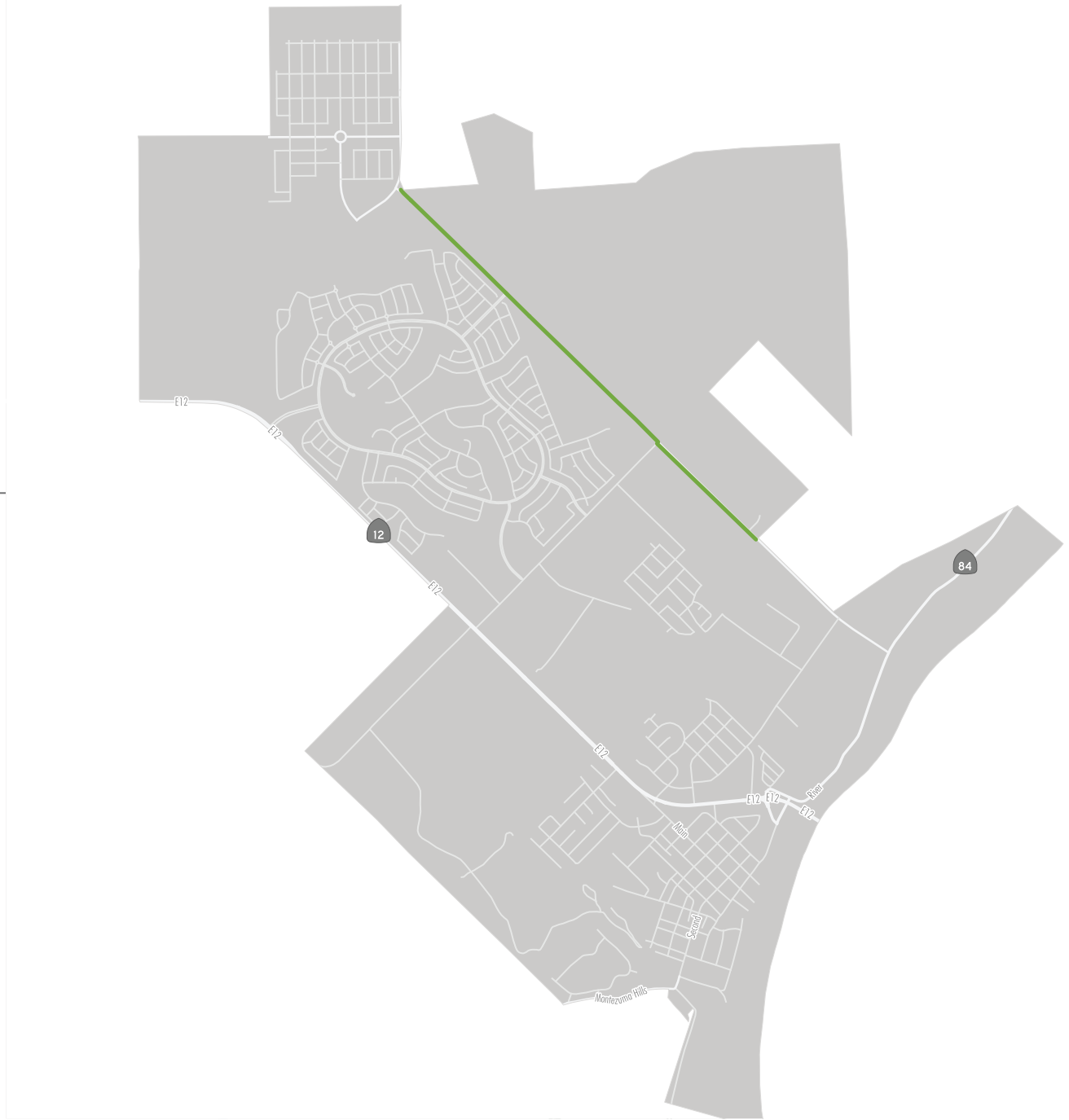
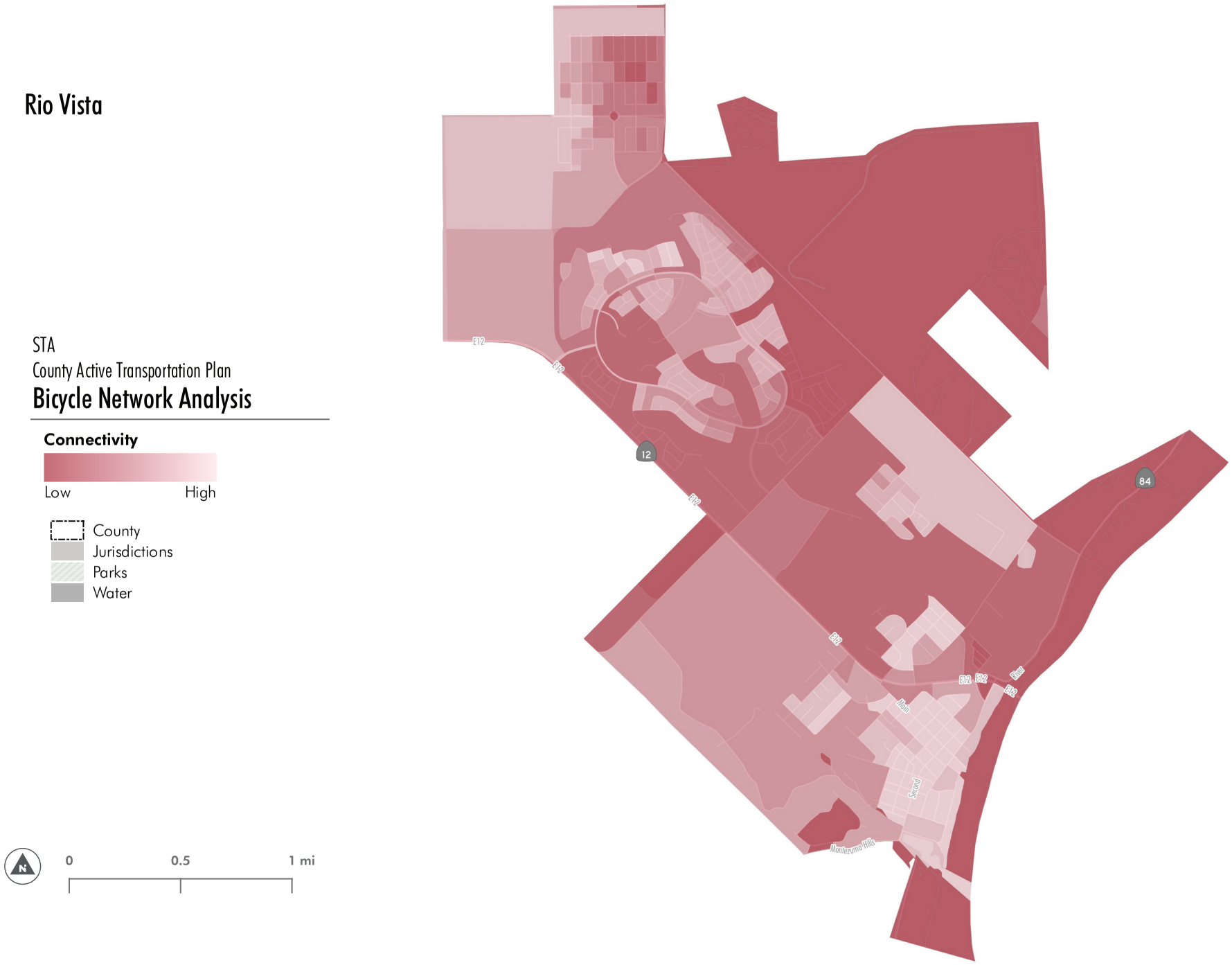


Figure RV-7: Rio Vista Bicycle LTS Map

Figure RV-8: Rio Vista Bicycle Network Connectivity Map



Safety Corridors

Real and perceived safety can strongly influence a person's decision to walk or bicycle. Collision analyses are one way to assess traffic safety in a community and can help identify key areas for infrastructure or programmatic changes that improve safety and comfort for people walking and bicycling. This section summarizes the pedestrian- and bicycle-involved collision trends and high-risk locations in Rio Vista. The raw collision data was retrieved from the Statewide Integrated Traffic Records System (SWITRS) for the most recent five years (2012 - 2017) for which collision data were available.

The collision analysis followed a systemic safety approach and used the Equivalent Property Damage Only (EPDO) method to assess crashes. The EPDO method weights crashes by severity so that when EPDO scores are calculated, they reflect both frequency *and* severity of collisions. Collisions resulting in a greater injury severity (e.g., fatal or severe) are weighted much heavier than collisions resulting in a minor injury, or no injury at all. For more information about the collision analysis methodology and a more detailed discussion of the results, refer to *Appendix B: Technical Analysis and Summary Memorandums*. When interpreting the results, note that no volume data was used in this analysis, so it is unclear how the numbers of people walking, bicycling, and driving are influencing collision trends.

Summary of Results

During the five-year analysis period there were 168 traffic collisions in Rio Vista. Of these collisions, one percent (two) were pedestrian collisions and there were no bicycle collisions.

In Rio Vista, the EPDO scores for pedestrian collisions at intersections was zero, indicating that both the collisions occurred along segments. Both of Rio Vista's pedestrian collisions also occurred during daylight.

The Project Team analyzed the geographic distribution of EPDO scores and identified priority safety corridors and intersections for pedestrian collisions in Rio Vista (see Figure RV-9). No street segments in Rio Vista were identified as warranting further investigation because of the low numbers of pedestrian and bicycle collisions. Additionally, there are no identified safety projects in previous planning documents for Rio Vista.

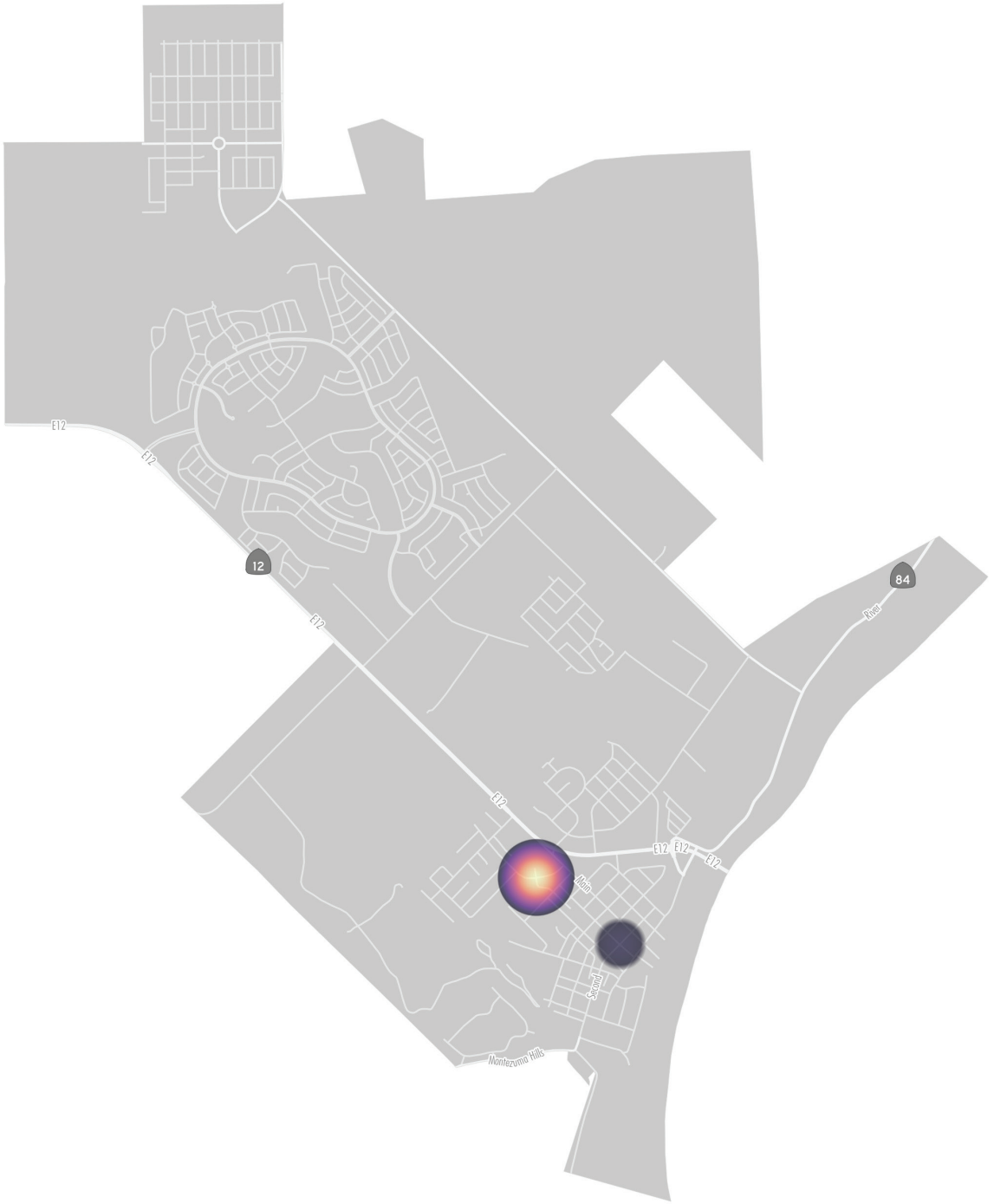
Figure RV-9: Rio Vista Pedestrian Collision Hot Spot Analysis

Rio Vista

STA
County Active Transportation Plan
Pedestrian Collisions

Pedestrian Collisions*
- Greater
- Fewer
- County
- Jurisdictions
- Parks
- Water

* For 5 year period 2012 - 2017
Collisions weighted by severity



0 0.5 1 mi

Community Engagement

Throughout each stage of the Plan development, residents and stakeholders from Rio Vista were asked to provide insights on where improvements to walking, bicycling, and access to transit could be improved and prioritized. A City of Rio Vista staff member was part of the Plan Development Team. In-person and online outreach efforts to Rio Vista residents occurred over four phases during the 18-month project.

Phase I: Data Collection and Initial Outreach

The goal of the first phase of public outreach was to increase awareness about the Plan and find out where people feel comfortable and uncomfortable walking and bicycling in each jurisdiction. As part of the first phase of public outreach both online and in-person events were held to try to reach people throughout the county. The in-person pop-up event in Rio Vista was the Bass Derby & Festival in October 2018. The online and in-person feedback was combined to highlight where all participants had positive or negative input about existing infrastructure throughout Rio Vista. Positive comments identified where people currently like to walk or bicycle. Negative comments mostly highlight areas where people feel it is unsafe or uncomfortable to walk or bicycle. In total, 1,080 individual line and point comments were collected across Solano County, with 483 comments from in-person events and 597 comments from the project website. Figure RV-10 shows the positive and negative comments about walking and bicycling in Rio Vista from the online map. For larger versions of the comment maps, refer to *Appendix B: Technical Analysis and Summary Memorandums.*

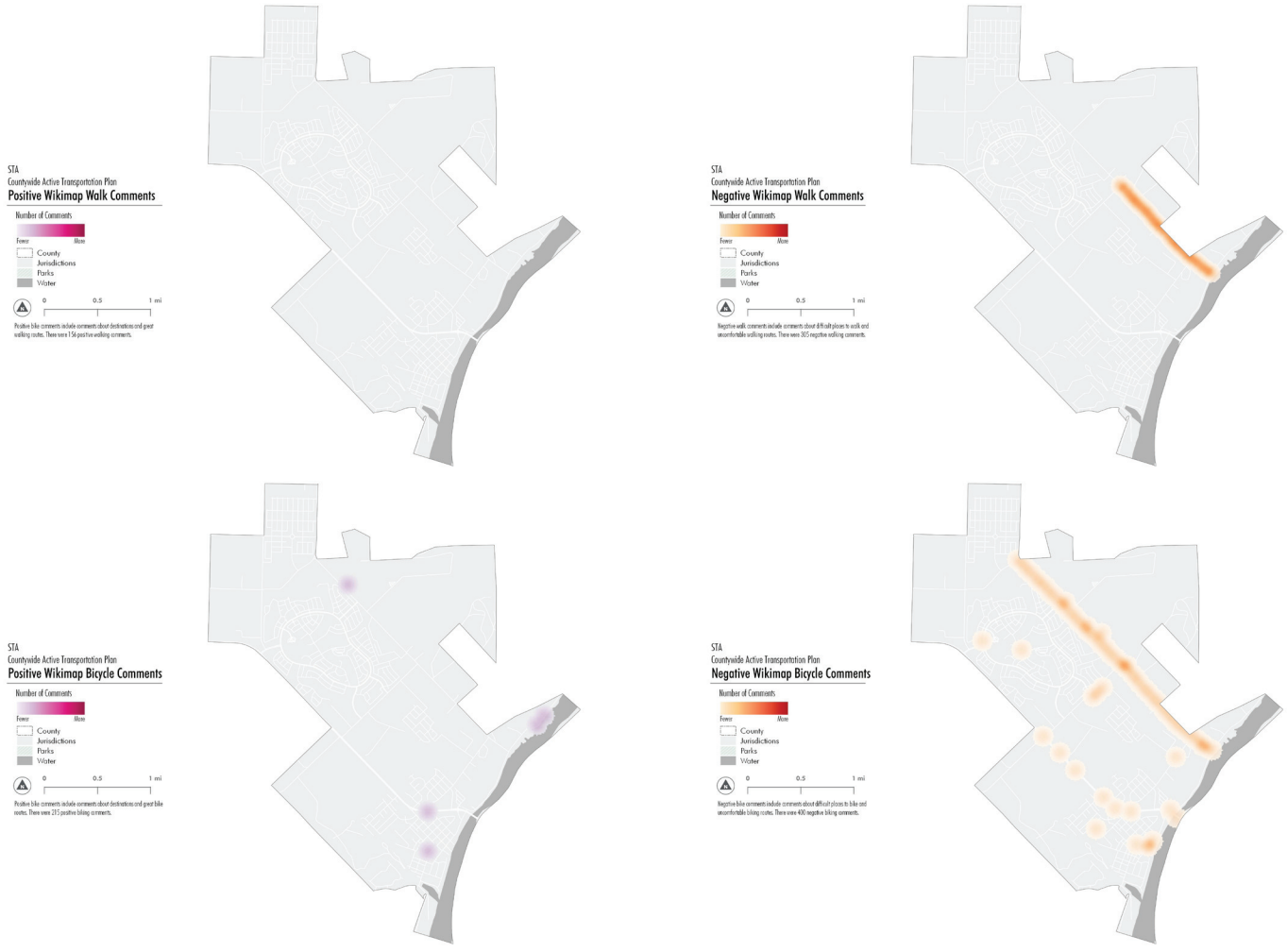


Figure RV-10: Online Map Positive and Negative Walking and Bicycling Comments for Rio Vista

Phase II: Countywide Needs and Recommendations

The goal of Phase 2 was to develop the countywide backbone network to create a countywide all ages and abilities network. Refer to Page 4 of the main body of the Plan for a description of an all ages and abilities network. This phase consisted primarily of technical analysis conducted by the consultant team and review of major deliverables by the Plan Development Team, including representatives from the City of Rio Vista. The outcomes of this phase included a regional priority bikeway network, regional priority pedestrian project recommendations, and regional trails network.

Phase III: Jurisdiction Needs and Recommendations

The third phase of outreach occurred in late Summer/early Fall 2019. The Project Development Team (PDT) met with each jurisdiction individually to hold a coordination meeting with internal jurisdiction staff. During these meetings, the PDT shared what it had learned during Phase 1 outreach and subsequent analyses in Phase II. Rio Vista held a bicycling tour and coordination meeting on September 19, 2019 starting at City Hall to review initial proposed recommendations and visit key sites to refine or develop additional recommendations. The results of this meeting and walking tour (see RV-11) were used to update project lists and maps that were presented to the public during Phase IV.

Figure RV-11: Walk Audit in Rio Vista

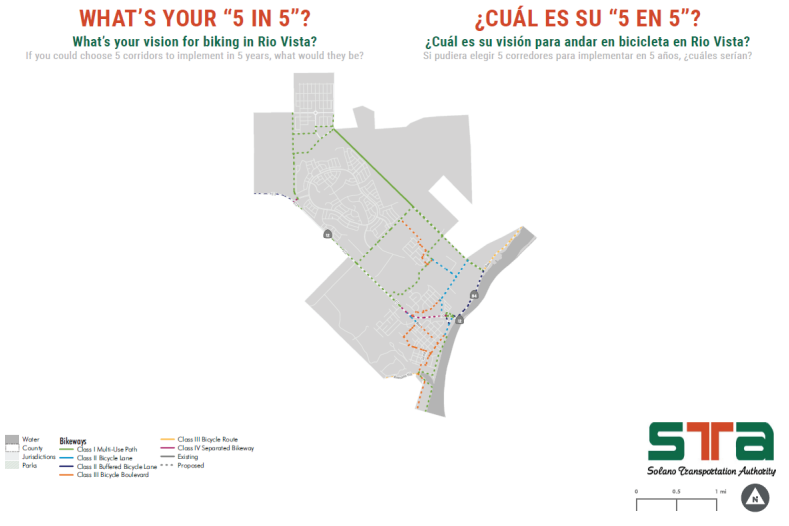


Figure RV-12: 5 in 5 activity in Rio Vista

Phase IV: Implementation Strategy and Draft Plan

The fourth phase of outreach occurred in late Fall 2019 and focused on educating the public about different types of bicycle and pedestrian infrastructure and obtaining input on the best recommendations to prioritize. The PDT invited the public and interested stakeholders to participate in a presentation and workshop at the Active Transportation Committee Community Meeting at City Hall on October 23, 2019. Participants identified their top five bikeway facilities that should be prioritized in the next five years in an activity called "5 in 5," as shown in Figure RV-12. This activity is intended to help Rio Vista focus on which facilities the public is most likely to use in the near-term to build out a connected network of all ages and abilities facilities. The PDT also reviewed pedestrian recommendations and reviesd them as necessary.

Network Development

The Rio Vista Active Transportation Backbone Network is a network of facilities suitable for people of all ages and abilities. The PDT developed the network by conducting analyses to identify areas that have the highest propensity to produce walking and bicycling trips, and assessing whether all ages and abilities pedestrian and bicycle facilities already exist along the network. The results of these analyses were used to develop the countywide and local active transportation backbone networks. Rio Vista's backbone network is shown in Figure RV-14.

Backbone Network Development

The PDT used an attractors and generators analysis to develop the backbone network. In Rio Vista, a local backbone network was developed which links the top 10 highest composite demand areas within the city. For more information on the analyses used to develop the backbone network refer to *Appendix B: Technical Analysis and Summary*.

Complete Networks and Citywide Recommendations

Once the backbone network routes were identified, the PDT assessed the complete citywide networks using both technical analysis from the Existing Conditions Report and public input from the first phase of outreach. The PDT developed recommendations to promote cross-town connectivity to priority destinations and to maximize available curb to curb right-of-way to keep costs as low as possible. Where feasible, The PDT proposed all ages and abilities facility recommendations. Recommendations that did not meet that criteria are still important and play a large role in improving connectivity by closing gaps or addressing safety. Figure RV-13 below shows the network development steps and how analyses or public input was intregated into the process.

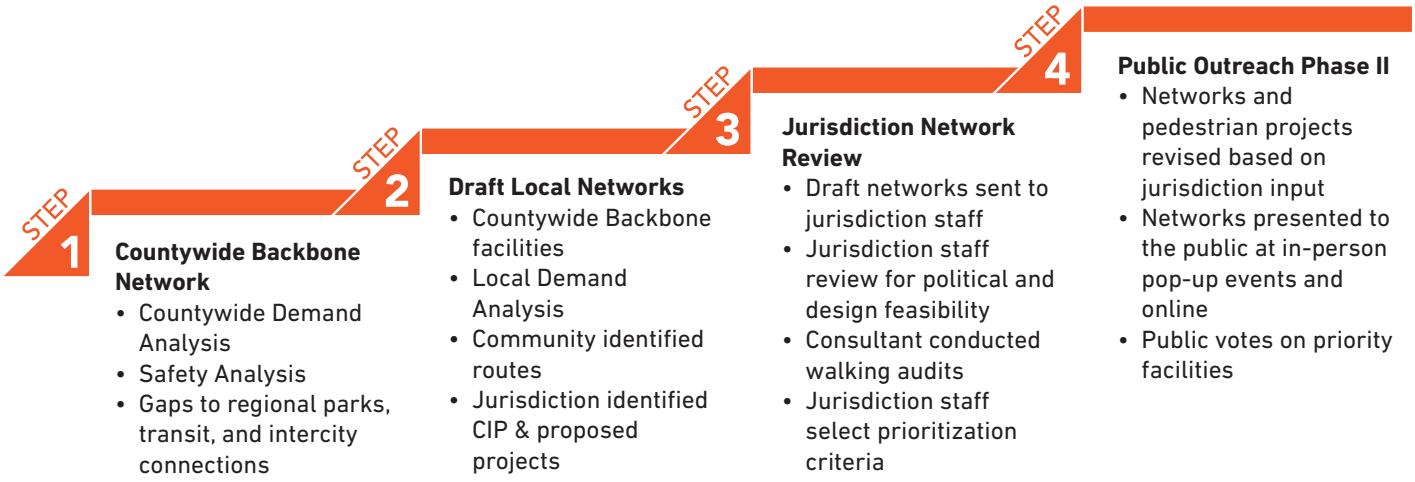


Figure RV-13: Active Transportation Network and Project Development Process

Rio Vista Attractors/Generators Analysis

Overview

The goal of an attractors/generators analysis is to develop an understanding of the most likely network of bicycling and walking activity. The result is a conceptual network linking regional activity centers.

Process

1 Generators

Generator factors are demographic indicators that represent where the population or people more likely to walk or bicycle are located. Factors are measured at the census block or block group level.

2 Attractors

Attractor factors are trip destinations and consist of factors that attract demand. Factors are scored on how many trips they are likely to attract based on Institute of Transportation Engineers guidelines for trip rates.

3 Attractor Generator Pairs and Composite Trip Demand

The composite trip demand between the activity centers is determined by adding the attractor trips and generator score, and multiplying the demand of each activity center by the distance decay factor between the zones. This total represents the number of trips that will occur between the two areas.

4 High Demand Routes

The high demand routes are developed between the top 10 pairs. These pairs are identified below, including a generalized land use category.

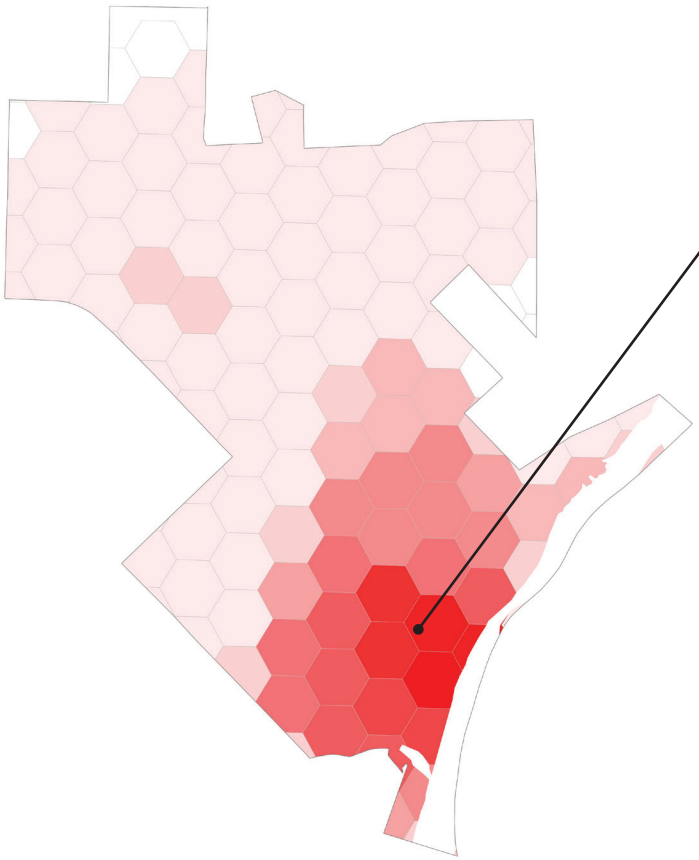
Only the Top 10 attractors and generators are listed in the table above but the Top 25 lines were used to generate Origin-Destination lines.

Top 10 Composite Demand Areas

Ref	Activity Center 1	Activity Center 2	Composite Trip Demand	Description
1	Residential	Downtown	2,320,045	Downtown near Main Street and South Front Street to Logan Street and North 5th Street
2	Downtown	Residential/ School	1,779,130	Downtown near Main Street and South Front Street to California Street and South 7th Street
3	Downtown	Residential/ commercial	1,284,243	Downtown near MainStreet and South Front Street to Main Street and Hillside Terrace
4	Residential	Downtown	1,281,515	Downtown near MainStreet and South Front Street to South Francis Way and Rolling Green Drive
5	Downtown	Residential	1,223,870	Downtown near MainStreet and South Front Street to South 2nd Street and Santa Clara Street
6	Downtown	Residential	824,115	Downtown near MainStreet and South Front Street to Madere Street and Fisher Street
7	Downtown	Residential	772,944	Downtown near MainStreet and South Front Street to Rubler Way and Vieira Road
8	Residential	Downtown	551,553	Downtown near MainStreet and South Front Street to Airport Road and Palisades Drive
9	Residential	Downtown	484,892	Downtown near MainStreet and South Front Street to Church Road and Marks Road
10	Residential	Residential/ School	265,260	Logan Street and North 5th Street to California Street and South 7th Street

1 Generator Scores

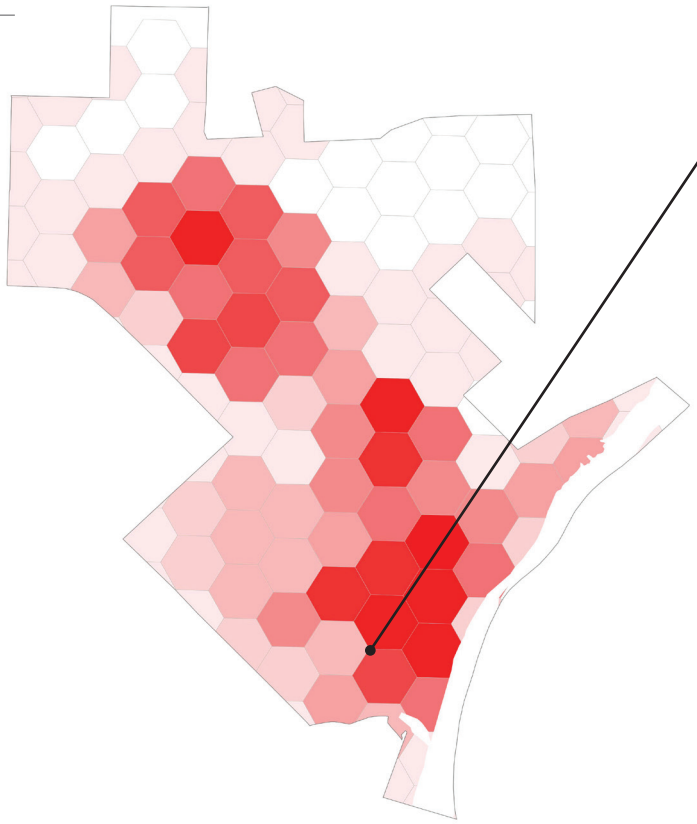
Low High



Generator	People
Total Population	319
Over 65 Population	17
Under 18 Population	24
Low Income Population	16
Zero Car Population	0
TOTAL GENERATORS TRIPS	**377**

2 Attractor Scores

Low High



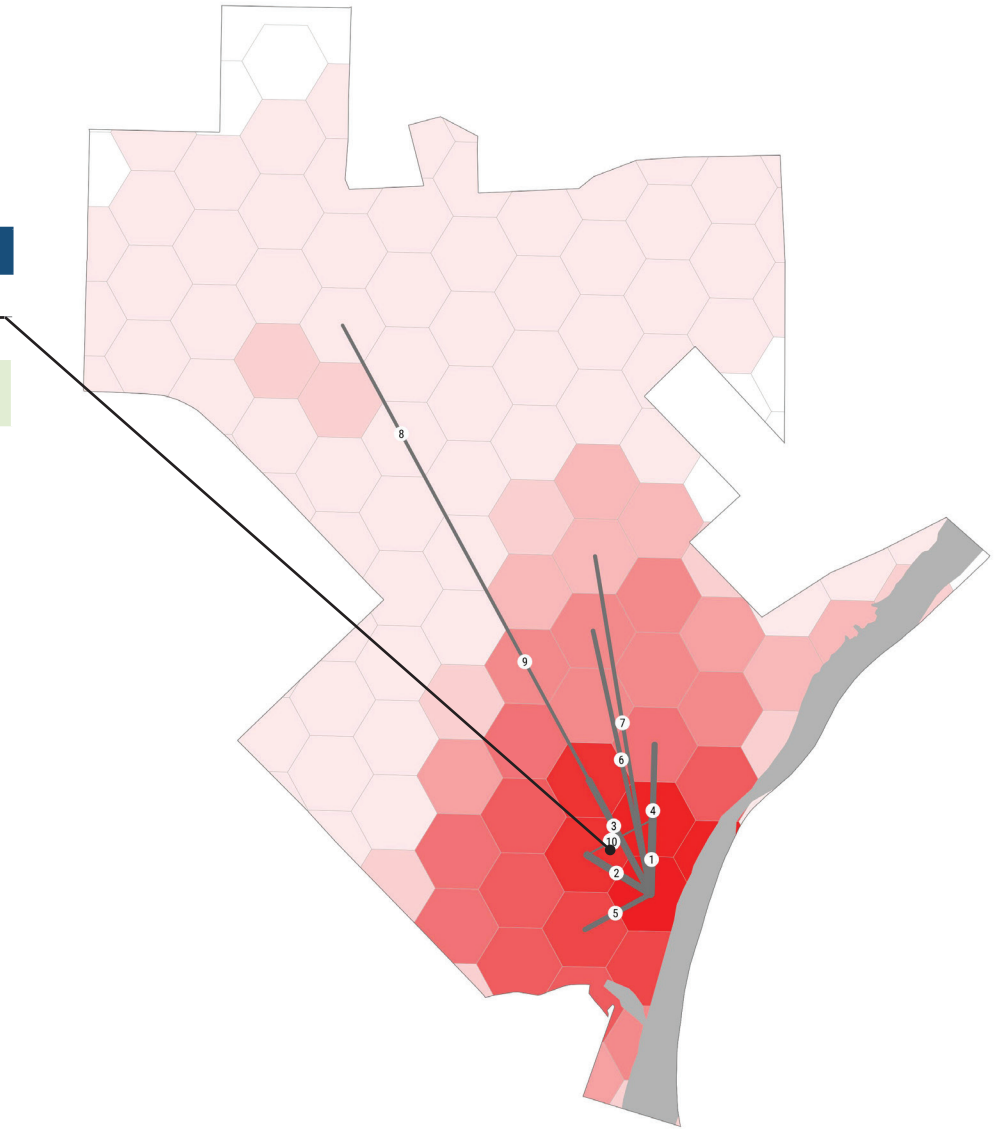
Attractor	Trips
Transit	2
Bus Stops	0
Employment Density	273
Higher Education	0
Schools	162
Parks	12
Neighborhood Commercial	0
Downtown	4,516
Major Retail	0
Services	48
Libraries	104
Entertainment	0
Public Input Destinations	5
TOTAL ATTRACTORS TRIPS	**5,121**

3 Attractor Generator Pairs and Composite Trip Demand

All the pairs start or end in downtown, linking downtown to residential, commercial, and industrial/employment areas around the city.

The total demand in each hexagon is multiplied by a distance decay function, which takes into account that the likelihood of traveling to a destination decreases as distance increases. This composite score between each hexagon pair is then ranked to determine the top ten pairs.

Total Demand	Trips
Attractors*	6,028
Generators	377
TOTAL TRIPS	**6,405**



* Attractors score was adjusted based on public outreach. The public was asked to rank which types of destinations they wanted to bike or walk to. The trip totals for the top three destinations were increased by 20%, and the trip totals for the bottom three destinations were reduced by 20%. The remaining destinations were not changed.

4 High Demand Routes

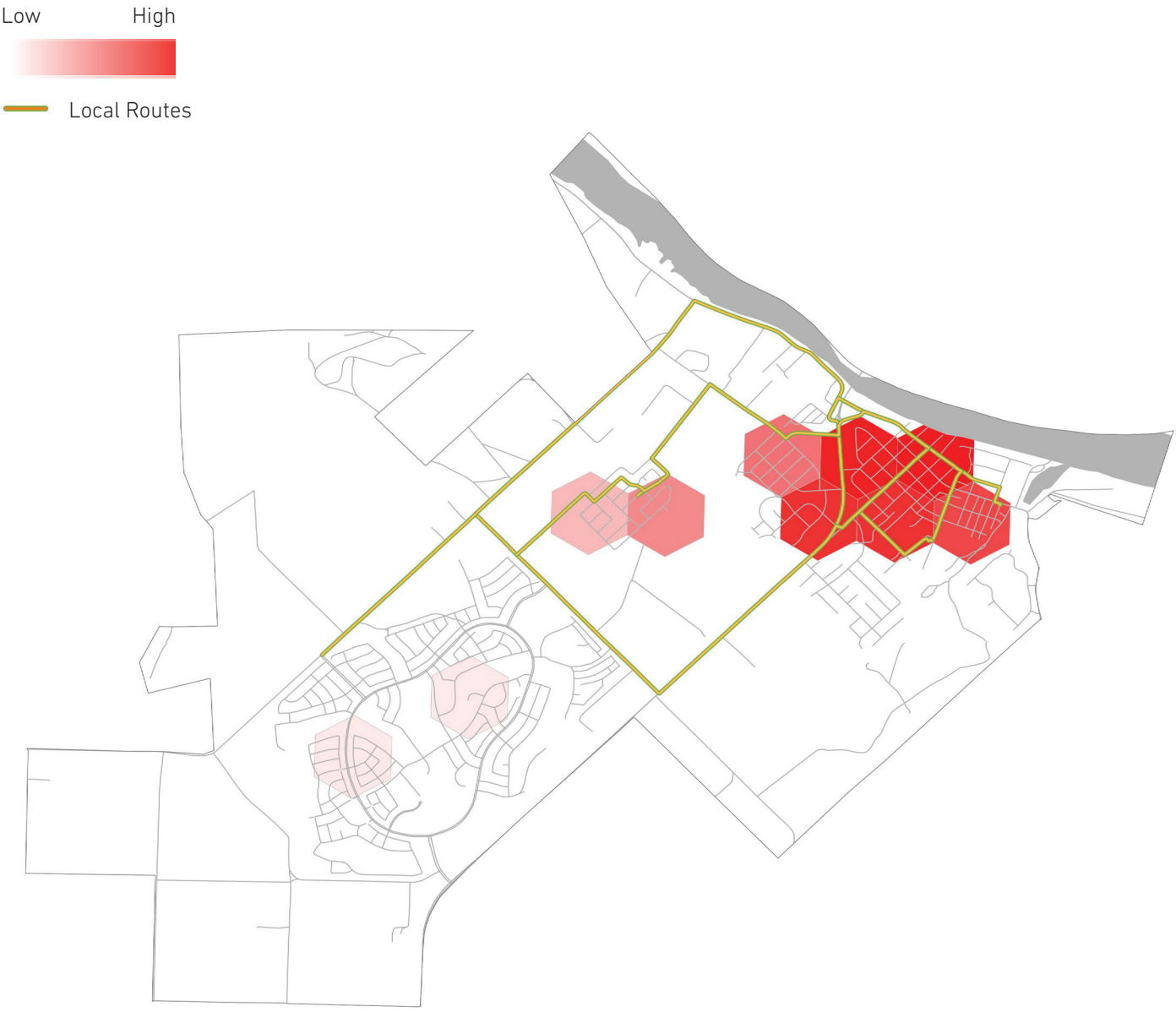


Figure RV-14: Analysis of attractors and generators of trips in Rio Vista

The high demand routes are created by identifying routes along the street network, taking into consideration existing facilities, street classification, route directness, and other key destinations nearby. Routes were created using discretion regarding the context of the area and facilities and land uses within or around the hexagon to maximize the demand that each route accesses.

Recommended Vision Bicycle Network

After developing the countywide and local backbone networks and conducting outreach with key stakeholders, a series of bicycle projects were identified to help build Dixon's full build-out vision bicycle network into one that is more comfortable for people of all ages and abilities. The vision bicycle network represents an unconstrained project list. The Solano Transportation Authority will continue to partner with the City of Rio Vista to identify relevant funding sources for betwork build out. This Plan proposes adding 21 new miles of bikeways to Rio Vista's existing bikeway network. Table RV-1 presents the existing and proposed bikeway mileage by facility type, along with the costs associated with installing each facility type. Facility installation costs vary depending on the materials used; for more information about the assumptions included in the cost estimates see *Appendix B: Technical Analyses and Summary Memorandums*. Figure RV-16 shows the recommended bicycle network, with existing and proposed projects shown with solid and dotted lines, respectively. able RV-2 lists details for all of the recommended bikeway projects in Rio Vista. Figure RV-17 depicts which facilities meet the AASHTO all ages and abilities bikeway selection criteria. Nearly 92 percent of the recommended bikeways meet the all ages and abilities criteria (see Figure RV-15).

Table RV-1: Existing and Proposed Bicycle Network Mileage

Facility Type	Existing Mileage (approximate)	Proposed Mileage (approximate)	Estimated Cost per mile	Total Estimated Cost
Class I Multi-use Path	1.90	9.8	$1,610,000	$15,778,000
Class II Bicycle Lane	0.37	1.70	$270,000	$459,000
Class II Buffered Bicycle Lane	-	0.80	$310,000	$248,000
Class III Bicycle Route	-	3.95	$1,390,000	$5,490,500
Class III Bicycle Boulevard	-	3.83	$220,000	$842,600
Class IV Separated Bikeway	-	0.69	$370,000	$255,300
Total	**2.27**	**20.77**	**-**	**$23,073,400**

*Costs presented in 2020 dollars

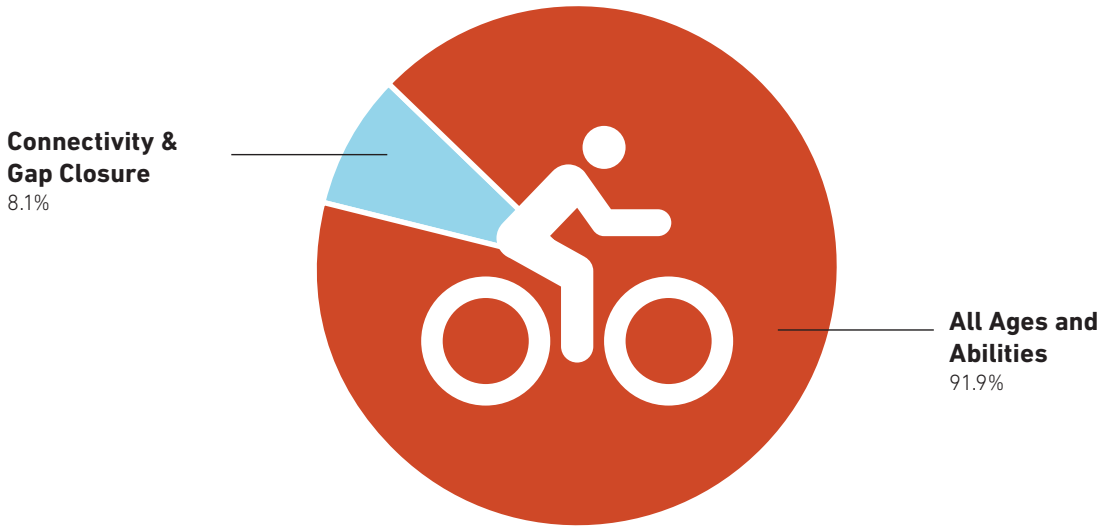


Figure RV-15: Share of Recommended Bikeways by Network Type

Figure RV-16: Proposed Bicycle Network for Rio Vista

Figure RV-17: Recommended All Ages and Abilities Bikeway Network in Rio Vista

Table RV-2: Rio Vista Recommended Bikeway Project List

ID	Corridor Name	From	To	Recommendation	Network	Length (mi)	Cost	Prioritization Rank
423A	Highway 12	Drouin Dr	N Front St	Class IV Separated Bikeway	All Ages & Abilities	0.62	$228,716	High
417A	Hamilton Ave	S 2nd St	S Front St	Class III Bicycle Boulevard	All Ages & Abilities	0.06	$13,780	High
414A	Highway 84	Airport Rd	N Front St	Class II Buffered Bicycle Lane	All Ages & Abilities	0.72	$222,926	High
414B	Highway 84	N Front St	Highway 12	Class I Multi-Use Path	All Ages & Abilities	0.16	$256,608	High
415A	N Front St	Highway 84	Logan St	Class II Bicycle Lane	All Ages & Abilities	0.28	$74,368	High
415B	N Front St	Logan St	Hamilton Ave	Class III Bicycle Boulevard	All Ages & Abilities	0.44	$96,492	High
420A	Main St	Highway 12	6th St	Class II Bicycle Lane	All Ages & Abilities	0.25	$67,092	High
420B	Main St	6th St	Front St	Class III Bicycle Boulevard	Connectivity & Gap Closure	0.30	$66,841	High
431A	River Walk Extension Feasibility Study	Logan St	Sandy Beach County Park	Class I Multi-Use Path	All Ages & Abilities	1.56	$2,518,859	High
409A	S 2nd St	Santa Clara Ave	Beach Dr	Class III Bicycle Boulevard	All Ages & Abilities	0.13	$29,198	Medium
413B	Airport Rd	Church Rd	Highway 84	Class I Multi-Use Path	All Ages & Abilities	1.20	$1,924,392	Medium
435A	St Francis Downtown Connector Path	St Francis Way	N Front St	Class I Multi-Use Path	All Ages & Abilities	0.34	$540,691	Medium
419A	Bruning Ave	S 7th St	S Front St	Class III Bicycle Boulevard	All Ages & Abilities	0.44	$97,185	Medium
422A	S 7th St	Bruning Ave	Main St	Class III Bicycle Boulevard	All Ages & Abilities	0.24	$53,529	Medium
427A	Virginia Dr	Highway 12	St Francis Way	Class II Bicycle Lane	All Ages & Abilities	0.21	$55,903	Medium
425A	Church Rd	Highway 12	Airport Rd	Class I Multi-Use Path	All Ages & Abilities	1.00	$1,604,459	Medium
430A	Homecoming Park Bike Boulevard	Poppy House Rd	Church Rd	Class III Bicycle Boulevard	All Ages & Abilities	0.86	$188,307	Medium
433A	Midtown Path	Airport Rd	Hwy 12	Class I Multi-Use Path	All Ages & Abilities	1.22	$1,970,028	Medium
426A	N Front St On/ Off-Ramp	N Front St	Highway 12	Class II Buffered Bicycle Lane	All Ages & Abilities	0.08	$25,853	Medium
402A	Liberty Island Rd	Airport Rd	Canright Rd	Class I Multi-Use Path	All Ages & Abilities	0.59	$956,222	Medium
402B	Liberty Island Rd	Canright Rd	Summerset Rd	Class I Multi-Use Path	All Ages & Abilities	0.58	$939,425	Medium

Table RV-2: Rio Vista Recommended Bikeway Project List

ID	Corridor Name	From	To	Recommendation	Network	Length (mi)	Cost	Prioritization Rank
403A	Summerset Rd	Liberty Island Rd	Highway 12	Class IV Separated Bikeway	All Ages & Abilities	0.07	$25,252	Medium
404A	Province Path	Liberty Island Rd	McCormack Rd	Class I Multi-Use Path	All Ages & Abilities	0.51	$814,714	Medium
411A	Beach Dr	Montezuma Hills Rd	Sandy Beach County Park	Class III Bicycle Boulevard	All Ages & Abilities	0.51	$111,866	Medium
412A	Highway 12	City Limit	Drouin Dr	Class I Multi-Use Path	All Ages & Abilities	1.86	$2,990,323	Medium
429A	Poppy House Rd	St Francis Way	Sullivan St	Class II Bicycle Lane	All Ages & Abilities	0.37	$98,993	Medium
434A	Flores Bike Boulevard	Virginia Dr	Hwy 12	Class III Bicycle Boulevard	All Ages & Abilities	0.47	$102,883	Medium
407A	St Francis Wy	Airport Rd	Poppy House Rd	Class II Bicycle Lane	All Ages & Abilities	0.60	$163,685	Medium
408A	Montezuma Hills Rd	Beach Dr	Burgundy Wy	Class III Bicycle Route	Connectivity & Gap Closure	0.40	$560,394	Low
400A	Liberty Island Rd	McCormack Rd	Airport Rd	Class I Multi-Use Path	All Ages & Abilities	0.21	$337,222	Low
432A	Liberty Neighborhood Path	Liberty Island Rd	Province Path	Class I Multi-Use Path	All Ages & Abilities	0.60	$963,077	Low
410A	Highway 84	Airport Rd	City Limit	Class III Bicycle Route	Connectivity & Gap Closure	0.73	$1,009,766	Low

Implementation Note: All recommended proposed projects may need further evaluation at the local level including potential parking, traffic operations, design, and/or feasibility studies. Additionally, projects that may require multiple studies could be assessed with a Complete Streets Corridor Study and include additional public engagement.

Near-Term Implementation Bicycle Network Action Plan

During the fourth phase of outreach, participants at each workshop or meeting were asked to identify their top five projects that Rio Vista should prioritize in the next five years. This activity is intended to highlight the recommended bikeway facilities that would be most well-used as a complete, connected network. Research has shown that rapidly building out a connected, low-stress network provides the highest mode shift to bicycling. Given realistic funding constraints and staff capacity to implement all bikeway recommendations, the Solano Transportation Authority identified a focused list of projects to build out a simplified citywide network. The Solano Transportation Authority will partner with the City of Rio Vista to identify funding sources to implement the facilities over the next five years. While some projects may score lower on the prioritization list, they represent critical connections within the overall network and receive strong public support. Figure RV-18 shows the results from the 5 in 5 outreach activity. Figure RV-19 and Table RV-3 identify the top corridors from the "5 in 5" activity with their associated prioritization rankings; these scores should be considered for near-term implementation to build out a connected network.

Table RV-3: Near-Term Implementation Bicycle Network Corridors

Corridor Name	Segment IDs	Total Project Cost	Safe Routes to Transit	Safe Routes to School	Supports Equity Goals
Main Street Bikeway	420A, 420B	$133,933		√	
Cross-Downtown Bikeway	415A, 415B, 417A, 409A, 411A	$325,704		√	
St. Francis Bikeway	407A, 435A	$704,376		√	
Airport Road Multi-Use Path Gap Closure	413B	$1,924,392		√	
North Rio Vista Trail Network Expansion	400A, 432A, 404A	$2,115,013		√	
Total Near-Term Cost	-	**$5,203,417**	-	-	-

Action Plan Corridor Descriptions

The following descriptions of the near-term action plan corridor should be used to help identify funding sources and apply for potential grant applications.

Near-term Existing Planned Projects

In collaboration with Caltrans and STA, Rio Vista is working to implement a Class IV Separated Bikeway as part of a complete streets project on CA-12. This project provides a critical link to many of the local businesses along CA-12 and includes enhanced crossing treatments to assist both bicyclists and pedestrians. This new facility will provide a safe route and crossings to school for DH White Elementary School, Riverview Middle School, and Rio Vista High School.

Near-term Action Plan Projects

Using the input received from the "5 in 5" outreach activity and the prioritized project list, the projects in this section form a suggested near-term action plan that serve as a guide for developing a connected all ages and abilities network. While some projects may score lower on the prioritization list, they represent critical connections within the overall network framework. Figure RV-19 details how these 5-year action plan projects build on the existing facilities to enhance the bicycle network coverage in Rio Vista.

1. **Main Street Bikeway (420A, 420B)** – Implement Class II Bicycle Lanes to connect from Ca-12 to 6th Street and implement a Class III Bicycle Boulevard with enhanced traffic calming and bicycle-oriented wayfinding to Front Street. This route provides a critical link from the new Class IV Separated Bikeway on CA-12 and the associated intersection crossing at Hillside Terrace. The route establishes a connection from the surrounding neighborhoods to Downtown Rio Vista for employment, retail, entertainment, and dining opportunities. This corridor establishwa safe routes to schools for nearby DH White Elementary School, Riverview Middle School, and Rio Vista High School.
2. **Cross-Downtown Bikeway (415A, 415B, 417A, 409A, 411A) –** Implement a Class III Bicycle Boulevard with enhanced traffic calming and wayfinding from Sandy Beach County Park to Logan Street to provide a cross-downtown bikeway. A Class II Bicycle Lane could be implemented from Logan Street to River Road to connect with a potential new pathway opportunity. This facility establishes safe routes to school access for Rio Vista High School and Riverview Middle School. It establishes a connection from the surrounding neighborhoods to Downtown Rio Vista for employment, retail, entertainment, and dining opportunities. Recreational opportunities are also promoted through the connection to Sandy Beach County Park and the existing Downtown Rio Vista Pathway.
3. **St. Francis Way Bikeway (407A, 435A) –** Implement Class II Bicycle Lanes along St Francis Way by narrowing travel lanes and restricting parking in limited areas. Explore an easement to implement a Class I Multi-use Path connection along a small portion of the currently vacant property just south of the intersection with Rolling Green Drive to provide a direct connection to the proposed Cross-Downtown Bikeway without traversing CA-12. This would act as a near-term alternative to the highly requested, but very expensive future expansion of CA-84/River Road. This corridor establishes a safe route to school for nearby DH White Elementary School. This route was specifically requested by seniors who wish to ride bicycles or walk from the Trilogy retirement community to Downtown Rio Vista. The route establishes a connection from the surrounding neighborhoods to Downtown Rio Vista for employment, retail, entertainment, and dining opportunities. Recreational opportunities are also promoted through creating access to the proposed trail expansion on Airport Road, Egbert Field Park, and the Downtown Rio Vista Pathway.
4. **Airport Road Multi-Use Path Gap Closure (413B) –** Implement a Class I Multi-use Path with pedestrian-scale lighting to close a critical gap from the Trilogy retirement community and northern Rio Vista communities to downtown. This facility was the most highly requested bikeway in Rio Vista from the community engagement process, especially from seniors and parents with young children in newer northern Rio Vista communities. Recreational opportunities are also promoted through creating access to the proposed trail expansion on Airport Road north of Trilogy and to the waterfront. This corridor establishes safe routes to schools for nearby DH White Elementary School, Riverview Middle School, and Rio Vista High School for residents in northern Rio Vista.
5. **North Rio Vista Trail Network Expansion (400A, 432A, 404A) –** In coordination with the development of a new park to the north of Liberty Road, extend the Class I Multi-use Path from Airport Road through the park and to the new housing developments. This project connects these neighborhoods to all ages and abilities connections in Downtown Rio Vista. Recreational opportunities are also promoted through creating access to the proposed trail expansion on Airport Road south of Trilogy and to the waterfront. These corridors establish safe routes to schools for nearby DH White Elementary School, Riverview Middle School, and Rio Vista High School for residents in northern Rio Vista.

Figure RV-18: 5 in 5 Public Input Activity Results for Rio Vista

Figure RV-19: Rio Vista Near-term Action Plan Bikeway Network

Recommended Pedestrian Projects

The Project Development Team completed two types of analyses to identify pedestrian network recommendations. The first assessment identified sidewalk gaps along the local backbone network that play a regionally significant role in the pedestrian realm. This analysis identified 10.5 miles of sidewalk gaps in Rio Vista along the local backbone network. Table RV-4 presents the sidewalk gaps along the local backbone network along with a cost estimate for filling each gap. Figure RV-20 shows the sidewalk network gaps and the local backbone network.

The second assessment identified pedestrian projects highlighted through the safety analysis, walk audits, community outreach, or previous transportation plans; or sidewalk gaps located in high-demand areas, such as along arterials in close proximity to transit stops or schools (see Table RV-5). Note that there is some overlap in projects identified in each process for sidewalk gap closure projects as local priorities were evaluated. Figure RV-21 shows the list of pedestrian projects identified using this second assessment. All of the projects identified through these two analyses will help improve Rio Vista's pedestrian network so that it is more comfortable for people of all ages and abilities.

For more information about the assumptions included in the cost estimates see *Appendix B: Technical Analyses and Summary Memorandums.*

Table RV-4: Rio Vista Sidewalk Gaps along the Active Transportation Backbone Network

Street / Facility Name	Extents	North or West Side of Street Distance (mi)	South or East Side of Street Distance (mi)	Total Distance (mi)	Cost
Airport Rd	Palisades Dr to Church Rd	0.00	0.81	0.81	$801,900
Airport Rd	Church Rd to Hwy 84	1.19	1.19	2.38	$2,356,200
Church Rd	Hwy 12 to Airport Rd	0.99	0.99	1.97	$1,950,300
Harris Rd	Church Rd to Viera Way	0.00	0.36	0.36	$356,400
Poppy House Rd	Sullivan St to St. Francis Way	0.00	0.37	0.37	$366,300
St. Francis Way	Poppy House Rd to Virginia Dr	0.07	0.29	0.36	$356,400
Hwy 84	Airport Rd to Front St	0.72	0.72	1.44	$1,425,600
Hwy 85	Front St to Hwy 12	0.13	0.09	0.22	$217,800
Front St	Hwy 12 to N Front St	0.11	0.09	0.19	$188,100
Front St	Hwy 84 to Logan St	0.10	0.26	0.36	$356,400
Bruning Ave	7th St to Bruning Ave (Around Parking Lot)	0.13	0.14	0.26	$257,400
Main St	Hwy 12 to 7th St	0.00	0.06	0.06	$59,400
Hwy 12	Church Rd to Drouin Dr	0.76	0.76	1.53	$1,514,700
Hwy 13	Drouin Dr to Hwy 84	0.19	0.29	0.48	$475,200
Total	-	**4.38**	**6.42**	**10.80**	**$10,692,000**

Figure RV-20: Rio Vista Sidewalk Gaps Along the Backbone Network

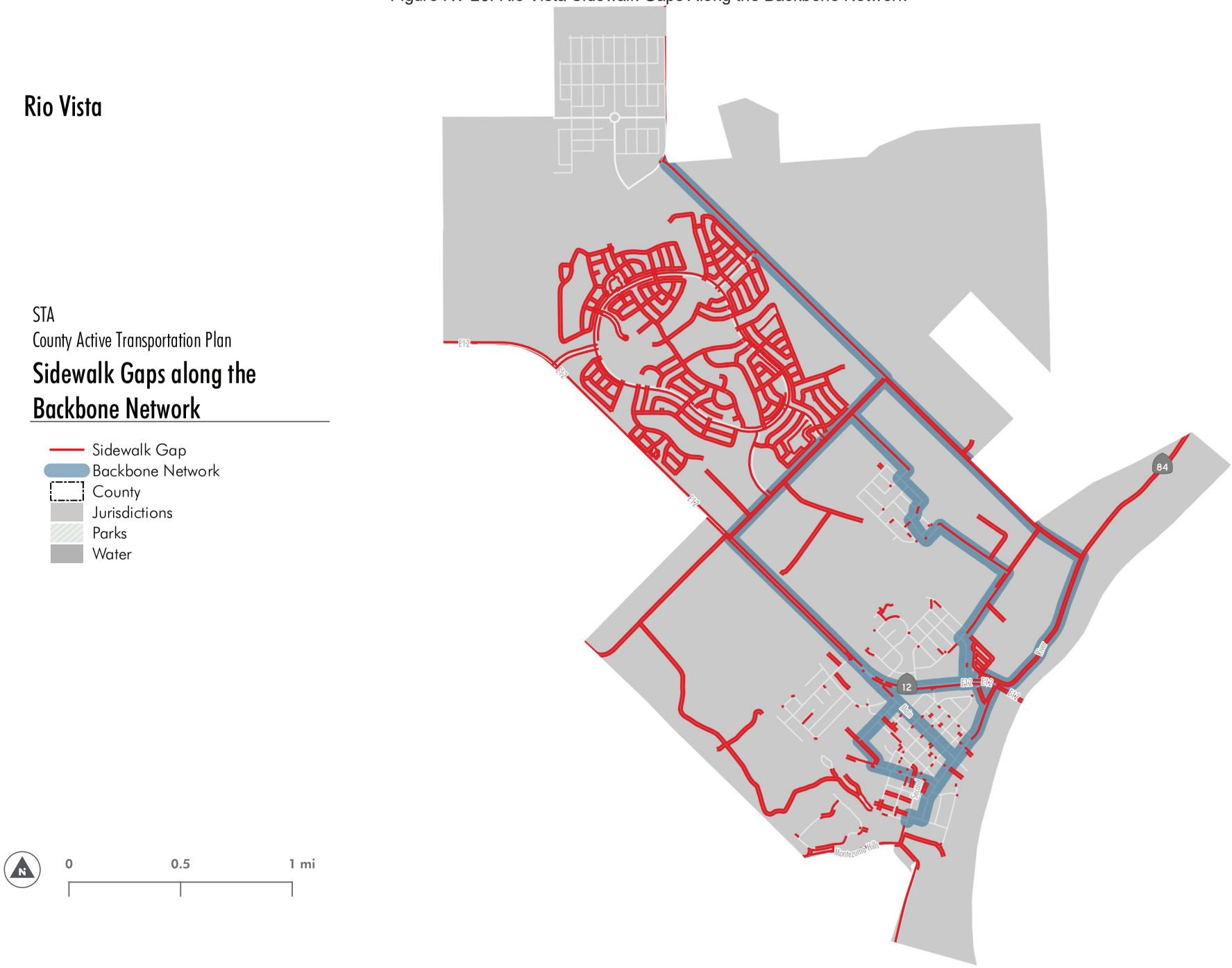


Table RV-5: Proposed Priority Pedestrian Projects

Project ID	Location	Description	Project Type	Length	Estimated Cost*
RV.SR2S.1	S 4th St and Montezuma	ADA Ramp	Safe Routes to School	-	-
RV.SR2S.2	S 4th St and Gertrudes	Improve Crossing/ ADA Ramps	Safe Routes to School	-	-
RV.SR2S.3	Main St from CA-12 to 4th St	Sidewalk Gap Closures/ADA	Safe Routes to School	0.34	$334,500
RV.SG.1	S 2nd Street between Marina Dr and Montezuma Hills Rd	School Access and Transit Access	Sidewalk Gap Closure	0.08	$82,313
RV.SG.2	River Rd, Montezuma Hills Rd	Transit Access	Class I Path	0.76	$750,000
RV.SG.3	N Front St	Transit Access	Class I Path	0.11	$112,500

*Additional analysis is needed to determine costs associated with projects other than sidewalk gap closure projects.

Figure RV-21: Proposed Priority Pedestrian Projects in Rio Vista