# COUNTY OF RIVERSIDE HIGHWAY 74 MULTI-MODAL TRANSIT PLAN



Prepared for: County of Riverside Planning Department



Prepared by: Michael Baker International, Inc.



# DRAFT HIGHWAY 74 MULTI-MODAL TRANSIT PLAN

January 2022

**Project Sponsors:** 





# **Table of Contents**

1.0	Over	Overview of Multi-Modal Transit Planning1								
	1.1	Purpose and Need	1							
	1.2	Planning Area	1							
	1.3	Multi-Modal Transit Planning Defined	3							
	1.4	Improvement Prioritization Strategy	3							
	1.5	Identifying Important Areas and Needs	4							
	1.6	Priority Projects								
	1.7	Phasing								
	1.8	Funding	26							
2.0	Over	view of Planning Process								
	2.1	Process Overview								
	2.2	Relation to Other Plans								
3.0	Existi	Existing and Future Community Context								
	3.1	Community Profiles								
	3.2	Demographics								
	3.3	Environmental Justice (eJ) Communities	41							
4.0	Trans	sportation Infrastructure and Transit Services	43							
5.0	Comr	Community Engagement Findings5								
	5.1	Advisory Group	55							
	5.2	Community Outreach								



# List of Exhibits

Exhibit 1-1: Highway 74 Multi-Modal Transit Plan Planning Area	2
Exhibit 1-2: Needs-Based Priority Improvement Rankings by Project Category Type	10
Exhibit 1-3: Highway 74 and Meadowbrook Avenue Recommended Improvements	12
Exhibit 1-4: Highway 74 and 7 <sup>th</sup> Street Recommended Improvements	14
Exhibit 1-5: Highway 74 and Richard Street Recommended Improvements	16
Exhibit 1-6: Highway 74 and Taylor Road Intersection Recommended Improvements	18
Exhibit 1-7: Needs-Based Priority Ranking and Programming Timeframe	25
Exhibit 2-1: Planning Process	31
Exhibit 3-1: Highway 74 Community Plan Land Use	35
Exhibit 3-2: Census Block Groups in the Planning Area	
Exhibit 3-3: Disadvantaged Communities	42
Exhibit 4-1: Riverside County Typical Arterial Highway Typical Cross-Section	43
Exhibit 4-2: Riverside County Expressway Typical Cross-Section	44
Exhibit 4-3: Existing Pedestrian Facilities	46
Exhibit 4-4: Existing Bicycle Facilities	48
Exhibit 4-5: RTA Transit Routes and Stops	50
Exhibit 4-6: RTA Boardings and Alightings	51
Exhibit 4-7: Collision Map 2014-2018	53



# List of Tables

Table 1-1: Evaluation Criteria and Point Assignments	4
Table 1-2: Needs-Based Priority Rankings	6
Table 1-3: Needs – Based Priority Rankings and Recommended Improvements	8
Table 1-4: Northbound Meadowbrook Ave Needs Score	11
Table 1-5: Southbound 7th Street Needs Score	14
Table 1-6: Southbound Richard Street Needs Score	16
Table 1-7: Southbound Taylor Road Needs Score	
Table 1-8: Needs-Based Priority Recommendations Cost and Programming Timeframes	22
Table 1-9: Grant Opportunities	27
Table 3-1: Demographic Data, Warm Springs, Meadowbrook, Good Hope	40
Table 4-1: Average Daily Traffic Volumes: 2016 and 2045	44
Table 4-2: Collision Rate	52
Table 4-3: Collision Type Summary	54
Table 4-4: Bicycle/Pedestrian Related Collision Summary by Severity	54



# List of Appendices

Appendix A: Ranking Criteria and Results

Appendix B: Design Element Examples

Appendix C: Community Outreach



#### 1.0 Overview of Multi-Modal Transit Planning

#### I.I PURPOSE AND NEED

The County of Riverside (County) has identified transportation improvements in the unincorporated communities of Warm Springs, Meadowbrook and Good Hope as part of this Highway 74 Multi-Modal Transit Plan (Plan). Recommended improvements will enhance and promote transit ridership and non-motorized travel to and along the Highway 74 corridor. These communities face significant mobility barriers related to transit access, primarily due to missing first mile/last mile connections to transit facilities. The communities also lack pedestrian, bicycle infrastructure and other facilities needed to connect residents to local and regional transit options.

Future development within the three neighborhoods is anticipated to result in residential population and employment base increases. Transportation infrastructure and modal options will need to keep pace with land use changes including expanding the transportation system to meet multimodal demands of existing and future residents and workers.

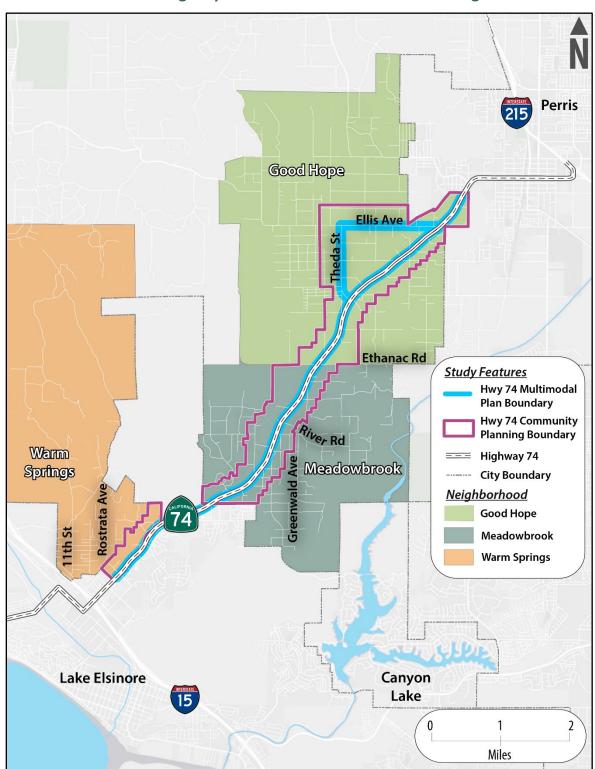
The Plan process assessed current conditions and identified projects to increase transit access by walking, bicycling, and other travel modes. Proposed solutions address safety, connectivity, and user comfort. By expanding access to alternative forms of transportation, proposed solutions will further improve the health and quality of life for residents by improving access to local and regional amenities including recreational and employment opportunities, reducing reliance on the automobile and improving air quality in the community.

The Plan recommends a range of solutions that address the needs of the community while conforming to goals and objectives set forth by regional and local agency partners.

#### I.2 PLANNING AREA

The Plan is intended to complement the Highway 74 Community Plan (Community Plan) currently being prepared by the County by recommending transportation improvements for the three unincorporated communities of Warm Springs, Meadowbrook and Good Hope. The Planning Area for this Plan is focused on the 8-mile portion of Highway 74 between the City of Lake Elsinore and the City of Perris and is located within the Community Plan boundaries including portions of Ellis Avenue and Theda Street that contain bus stops associated with Riverside County Transit Agency (RTA) Route 9 as illustrated in **Exhibit 1-1**.









# **I.3 MULTI-MODAL TRANSIT PLANNING DEFINED**

In the context of this Plan, multi-modal refers to modes of transportation such as walking, bicycling, public transit, automobiles, and connections between these modes. Plan recommendations focus specifically on walking and bicycling to and from public transit, providing an alternative to vehicle ownership and use. The Plan is local in nature. It has been prepared for a smaller, neighborhood-scale planning area. It is designed primarily to address first/last mile connectivity around the Highway 74 corridor to better connect local communities with the surrounding area and region. First/last mile connectivity is the portion of an individual's trip between their place of residence to the nearest bus stop. While bus service might be utilized for the majority of a trip, users may need to walk or bike safely to access transit.

#### **I.4 IMPROVEMENT PRIORITIZATION STRATEGY**

The Planning Area is eight miles long and includes 30 bus stops that serve three different neighborhoods. With an array of potential improvements, prioritization criteria were developed to identify and prioritized connectivity enhancements along the corridor. This approach provides a transparent and defensible project identification and prioritization methodology that considers robust stakeholder and public feedback.

In 2017, RTA published their *First & Last Mile Mobility Plan* (RTA Plan) detailing efforts to improve ridership throughout the RTA service area, including along the Highway 74 corridor. RTA identifies the typology of the stations along the Highway 74 corridor and within the Plan area as Rural Stations, which are bus stops located in remote or lightly developed unincorporated areas of the County. Basic strategies were developed by RTA to improve access and connectivity to these types of stations, which include:

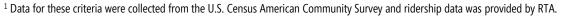
- Ridership (boarding & alighting)
- Vehicle Ownership
- Commuting by Transit
- Student Population (High School/College)
- Population Density

The above strategies were adapted into criteria for this Plan, creating consistency between the two plans.<sup>1</sup>

Additional criteria were developed to further reflect Plan goals, community concerns and priorities as voiced through outreach and collaboration with stakeholders.

The additional analysis criteria added for the Plan include:

- Pedestrian- or bike-related collisions<sup>2</sup>
- Collision severity



<sup>&</sup>lt;sup>2</sup> Data associated with safety criteria was collected from the California Statewide Integrated Traffic Records System (SWITRS) database. This database collects and allows for analyzing of all data gathered from the California Highway Patrol (CHP) at a collision scene.



• Future land use

It should be noted that stakeholder and public outreach conducted during the planning process identified safety as a top priority for residents; therefore, collision severity and the involvement of pedestrians and/or bicycles in a crash were weighted higher than other criteria. The inclusion of the Pedestrian/Bike criteria helped identify areas of safety concern, leading to development of improvement recommendations designed to minimize safety risks.

Finally, the Highway 74 Community Plan indicates significant future development of commercial retail, residential and mixed-use projects along the corridor. As a result, the Plan Advisory Committee recommended consideration of future land use in the scoring criteria. This metric reflects the potential for new transit riders, particularly where mixed-use and high-density housing is proposed by the Highway 74 Land Use Plan<sup>3</sup>.

#### **I.5 IDENTIFYING IMPORTANT AREAS AND NEEDS**

Points were assigned to each of the needs listed below in **Table 1-1** (greater scoring methodology details and information are included in **Appendix A**, **Ranking Criteria and Results**). Each bus stop along the corridor could receive up to 53 points. Bus stops where a pedestrian or bicyclist were involved in a crash, or a fatal crash occurred received up to 20 of the 53 points, placing an emphasis on identification of priority safety improvement locations along the corridor.

With the evaluation criteria and scoring thresholds, as defined in **Table 1-1**, each of the bus stops were assigned a score ranked from highest score (greatest need) to lowest score (lowest need). **Table 1-2** lists all bus stops in order of their priority score and rank including a summary of all bus stop-specific evaluation criteria scoring data.

Evaluation Criteria	Point Range			
Ridership	2-10			
Percent Households without Vehicle	1-5			
Percent Public Transit to Work	1-5			
Percent Household with Students	1-5			
Population Density Per Square Mile	1-5			
Collisions involving Pedestrians/Bicyclist	0 or 10			
Fatal & Severe Pedestrian/Bicyclist collisions	0 or 10			
Future Land Use	0-3			

#### Table 1-1: Evaluation Criteria and Point Assignments

<sup>&</sup>lt;sup>3</sup> As of January 2022, the Highway 74 Land Use Plan has not yet adopted by the County.



Once locations were prioritized, the evaluation criteria data were reviewed to determine which factors most influenced the prioritization score and ranking by location. From there, the improvement needs were grouped into three categories:

**Safety:** Four bus stops are in this category. They have the highest pedestrian or bike-related collision and collision severity scores. Safety improvements focus on increasing visibility, separating pedestrians and bicyclists from cars where feasible, and raising awareness of roadway users utilizing alternative forms of transportation.

**Bus Stop Enhancement:** Nine bus stops are in this category. These bus stops have the highest ridership and vehicle access criteria scores. Bus stop enhancements focus on upgrades and increased comfort to attract and retain more riders. Proposed improvements adhere to RTA's *First & Last Mile Mobility Plan* design recommendations and include lighting, benches, shelters, and bike racks.

**Local Connection:** Seventeen bus stops are in this category. These bus stops have low baseline ridership and the potential for increased ridership based on demographic data including vehicle ownership. The potential for increased ridership was also considered in this category based on planned land use density increases included in the Highway 74 Community Plan.



# Table 1-2: Needs-Based Priority Rankings

Rank	Bus Stop ID	Direction	Project Name / Location	Project Category	Bus Ridership	Bus Ridership Score	Percent No Household Vehicle	Percent No Household Vehicle Score	Percent Public Transit	Percent Public Transit Score	Students per Household	Students per Household Score	Population Density Per Square Mile	Population Density Score	Bike and Pedestrian Collision	Bike and Pedestrian Collision Score	Fatal and Severe Collision	Fatal and Severe Collision Score	General Plan Land Use	General Plan Land Use Score	Total Score
1	2317	N	Hwy 74 and Meadowbrook Ave	Safety	10	8	6.90%	4	0.00%	1	0.30	1	245.50	1	1	10	1	10	Retail / Employment Uses	2	37
2	2396	S	Hwy 74 and 7th St	Safety	0	2	2.18%	2	2.34%	4	0.57	3	1980.70	3	1	10	1	10	Mixed Use Area (MUA)	3	37
3	2446	S	Hwy 74 and Richard St	Safety	1	2	6.90%	4	0.00%	1	0.30	1	245.50	1	1	10	1	10	Mixed Use Area (MUA)	3	32
4	2444	S	Hwy 74 and Taylor Rd	Safety	0	2	4.29%	3	0.00%	1	0.42	2	435.01	1	1	10	1	10	Other	0	29
5	1175	Ν	Ellis Ave and Hwy 74	Local Connection	0	2	2.18%	2	2.34%	4	0.57	3	1980.70	3	1	10	0	0	Mixed Use Area (MUA)	3	27
6	2397	S	Ellis Ave and Hwy 74	Local Connection	0	2	2.18%	2	2.34%	4	0.57	3	1980.70	3	1	10	0	0	Other	0	24
7	2321	Ν	Hwy 74 and Taylor St.	Bus Stop Enhancement	3	4	4.29%	3	0.00%	1	0.42	2	435.01	1	0	0	1	10	Other	0	21
8	1176	N	Hwy 74 / Fourth St and Belloma Ln	Local Connection	4	4	0.00%	1	0.00%	1	0.71	4	6503.93	5	0	0	0	0	Retail / Employment Uses	2	17
9	2445	S	Hwy 74 and Spring St	Bus Stop Enhancement	5	6	4.29%	3	0.00%	1	0.42	2	435.01	1	0	0	0	0	Mixed Use Area (MUA)	3	16
10	2447	S	Hwy 74 and Meadowbrook Ave	Bus Stop Enhancement	5	6	6.90%	4	0.00%	1	0.30	1	245.50	1	0	0	0	0	Retail / Employment Uses	2	15
11	2320	Ν	Hwy 74 and Spring St	Bus Stop Enhancement	3	4	4.29%	3	0.00%	1	0.42	2	435.01	1	0	0	0	0	Mixed Use Area (MUA)	3	14
12	3667	S	Ellis Ave and Cox St	Bus Stop Enhancement	0	2	2.18%	2	2.34%	4	0.57	3	1980.70	3	0	0	0	0	Other	0	14
13	2318	N	Hwy 74 and River Rd	Local Connection	1	2	0.00%	1	0.80%	2	0.63	3	396.87	1	0	0	0	0	Mixed Use Area (MUA)	3	12
14	4002	S	Hwy 74 and River Rd	Local Connection	0	2	6.90%	4	0.00%	1	0.30	1	245.50	1	0	0	0	0	Mixed Use Area (MUA)	3	12
15	2319	N	Hwy 74 and Richard St	Local Connection	2	2	0.00%	1	0.80%	2	0.63	3	396.87	1	0	0	0	0	Retail / Employment Uses	2	11
16	2448	S	Hwy 74 and Wasson Canyon Rd	Local Connection	1	2	6.90%	4	0.00%	1	0.30	1	245.50	1	0	0	0	0	Retail / Employment Uses	2	11



.

# Highway 74 Multi-Modal Transit Plan Riverside County Planning Department

Rank	Bus Stop ID	Direction	Project Name / Location	Project Category	Bus Ridership	Bus Ridership Score	Percent No Household Vehicle	Percent No Household Vehicle Score	Percent Public Transit	Percent Public Transit Score	Students per Household	Students per Household Score	Population Density Per Square Mile	Population Density Score	Bike and Pedestrian Collision	Bike and Pedestrian Collision Score	Fatal and Severe Collision	Fatal and Severe Collision Score	General Plan Land Use	General Plan Land Use Score	Total Score
17	2315	N	Hwy 74 and Hammack Ave	Bus Stop Enhancement	2	2	1.16%	1	0.00%	1	0.46	2	1417.04	2	0	0	0	0	Retail / Employment Uses	2	10
18	2442	N/S	Theda St and Hwy 74	Local Connection	1	2	4.29%	3	0.00%	1	0.42	2	435.01	1	0	0	0	0	High Density Residential	1	10
19	2443	S	Hwy 74 and Theda St	Bus Stop Enhancement	2	2	4.29%	3	0.00%	1	0.42	2	435.01	1	0	0	0	0	Other	0	9
20	2449	S	Hwy 74 and Hammack Ave	Local Connection	2	2	6.90%	4	0.00%	1	0.30	1	245.50	1	0	0	0	0	Other	0	9
21	2316	N	Hwy 74 and Wasson Canyon Rd	Local Connection	2	2	6.90%	4	0.00%	1	0.30	1	245.50	1	0	0	0	0	Other	0	9
22	2441	N/S	Theda St and Betty Rd	Local Connection	0	2	4.29%	3	0.00%	1	0.42	2	435.01	1	0	0	0	0	Other	0	9
23	2440	N/S	Theda St and Mountain Ave	Local Connection	0	2	1.90%	1	0.30%	1	0.55	3	1360.51	2	0	0	0	0	Other	0	9
24	2439	N/S	Theda St and Louise St	Local Connection	0	2	1.90%	1	0.30%	1	0.55	3	1360.51	2	0	0	0	0	Other	0	9
25	2438	N/S	Theda St and Ellis Ave	Local Connection	0	2	1.90%	1	0.30%	1	0.55	3	1360.51	2	0	0	0	0	Other	0	9
26	2399	S	Ellis Ave and Cowie Ave	Local Connection	0	2	1.90%	1	0.30%	1	0.55	3	1360.51	2	0	0	0	0	Other	0	9
27	2327	N	Ellis Ave and Cowie Ave	Local Connection	0	2	1.90%	1	0.30%	1	0.55	3	1360.51	2	0	0	0	0	Other	0	9
28	1174	Ν	Ellis Ave and Cox St	Local Connection	0	2	1.90%	1	0.30%	1	0.55	3	1360.51	2	0	0	0	0	Other	0	9
29	2313	N	Hwy 74 and Rosetta Canyon Drive	Bus Stop Enhancement	2	2	1.16%	1	0.00%	1	0.46	2	1417.04	2	0	0	0	0	Other	0	8
30	2314	Ν	Hwy 74 and Riverside St	Bus Stop Enhancement	1	2	1.16%	1	0.00%	1	0.46	2	1417.04	2	0	0	0	0	Other	0	8



**Table 1-3** displays all bus stop locations in priority improvement rank order and includes identification of bus stop site-specific improvement recommendations. Improvement recommendations were identified considering demographic, operational, and safety data included in **Table 1-2** in conjunction with in-depth pedestrian, bicycle and transit connectivity infrastructure reviews that considered existing infrastructure and connectivity gaps. **Exhibit 1-2** shows the location of the prioritized recommendations by improvement project category type. Recommendation design element cutsheets including illustrations and examples of proposed improvements are included in **Appendix B, Design Element Examples.** 

Rank	Bus Stop ID	Direction	Project Name / Location	Project Category	Total Score	Improvement Recommendations
1	2317	N	Hwy 74 and Meadowbrook Ave	Safety	37	ADA ramps, improved crosswalk striping (ladder/continental) cross walks on all 4 legs, improved lighting at intersection, improved lighting at bus stop and bike rack
2	2396	S	Hwy 74 and 7th St	Safety	37	Crosswalk at 7th St., improved lighting at intersection, new pedestrian signal, ADA ramps, bike rack, improved lighting at bus stop, bus stop shelter and sidewalk to bus stop
3	2446	S	Hwy 74 and Richard St	Safety	32	Improved lighting at intersection, sidewalk to bus stop from crossing, new pedestrian signal, improved lighting at stop, bus stop shelter and multi-use trail
4	2444	S	Hwy 74 and Taylor Rd	Safety	29	Improved lighting at intersection, sidewalk to bus stop from crossing, new pedestrian crossing signal, improved lighting at stop, bus stop shelter and multi-use trail
5	1175	N	Ellis Ave and Hwy 74	Local Connection	27	Bus Stop Concrete Pad Bus Stop Bench
6	2397	S	Ellis Ave and Hwy 74	Local Connection	24	Bus Stop Concrete Pad Bus Stop Bench
7	2321	N	Hwy 74 and Taylor Rd	Bus Stop Enhancement	21	Bus Stop Shelter Bus Stop Lighting
8	1176	N	Hwy 74 / 7 <sup>th</sup> St and Belloma Ln.	Local Connection	17	Bus Stop Concrete Pad Bus Stop Shelter Bus Stop Lighting Bus Stop Bench Bike Rack
9	2445	S	Hwy 74 and Spring St	Bus Stop Enhancement	16	Bus Stop Shelter Bus Stop Lighting
10	2447	S	Hwy 74 and Meadowbrook Ave	Bus Stop Enhancement	15	Bus Stop Lighting Bike Rack
11	2320	N	Hwy 74 and Spring St	Bus Stop Enhancement	14	Bus Stop Shelter Bus Stop Lighting
12	3667	S	Ellis Ave and Cox St	Bus Stop Enhancement	14	Bus Stop Concrete Pad Bus Stop Bench
13	2318	N	Hwy 74 and River Rd	Local Connection	12	Bus Stop Shelter Bus Stop Lighting

#### Table 1-3: Needs – Based Priority Rankings and Recommended Improvements



# Highway 74 Multi-Modal Transit Plan Riverside County Planning Department

Rank	Bus Stop ID	Direction	Project Name / Location	Project Category	Total Score	Improvement Recommendations
14	4002	S	Hwy 74 and River Rd	Local Connection	12	Bus Stop Pull-Out Bus Stop Concrete Pad Bus Stop Shelter Bus Stop Lighting Bus Stop Bench
15	2319	N	Hwy 74 and Richard St	Local Connection	11	Bus Stop Shelter Bus Stop Lighting Bus Stop Bench
16	2448	S	Hwy 74 and Wasson Canyon Rd	Local Connection	11	Bus Stop Shelter Bus Stop Lighting
17	2315	N	Hwy 74 and Hammack Ave	Bus Stop Enhancement	10	Bus Stop Shelter Bus Stop Lighting
18	2442	N/S	Theda St and Hwy 74	Local Connection	10	Bus Stop Concrete Pad
19	2443	S	Hwy 74 and Theda St	Stop Enhancement	9	Bus Stop Shelter Bus Stop Lighting
20	2449	S	Hwy 74 and Hammack Ave	Local Connection	9	Bus Stop Shelter Bus Stop Lighting
21	2316	N	Hwy 74 and Wasson Canyon Rd	Local Connection	9	Bus Stop Shelter Bus Stop Lighting
22	2441	N/S	Theda St and Betty Rd	Local Connection	9	Bus Stop Concrete Pad Bus Stop Bench
23	2440	N/S	Theda St and Mountain Ave	Local Connection	9	Bus Stop Concrete Pad Bus Stop Bench
24	2439	N/S	Theda St and Louise St	Local Connection	9	Bus Stop Concrete Pad Bus Stop Bench
25	2438	N/S	Theda St and Ellis Ave	Local Connection	9	Bus Stop Shelter Bus Stop Lighting
26	2399	S	Ellis Ave and Cowie Ave	Local Connection	9	Bus Stop Concrete Pad Bus Stop Bench
27	2327	N	Ellis Ave and Cowie Ave	Local Connection	9	Bus Stop Concrete Pad Bus Stop Bench
28	1174	N	Ellis Ave and Cox St	Local Connection	9	Bus Stop Concrete Pad Bus Stop Bench
29	2313	N	Hwy 74 and Rosetta Canyon Dr	Bus Stop Enhancement	8	Bus Stop Shelter Bus Stop Lighting
30	2314	N	Hwy 74 and Riverside St	Bus Stop Enhancement	8	Bus Stop Shelter Bus Stop Lighting



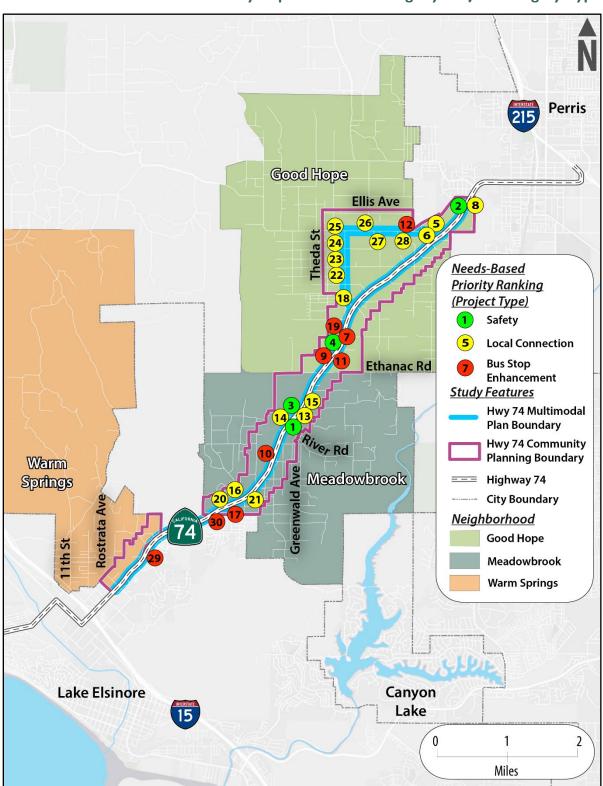


Exhibit 1-2: Needs-Based Priority Improvement Rankings by Project Category Type



# **I.6 PRIORITY PROJECTS**

Four locations ranked highest due to the pedestrian/bicycle fatalities that occurred near the bus stops. The top priority projects are proposed at the following locations:

- Highway 74 and Meadowbrook Avenue
- Highway 74 and 7<sup>th</sup> Street
- Highway 74 and Richard Street
- Highway 74 and Taylor Road

Given the severity of collisions at these four locations, these stops are discussed in greater detail to highlight the issues at each location and provide potential solutions.

#### I.6.1 Highway 74 and Meadowbrook Avenue

There are two bus stops within the vicinity of Highway 74 and Meadowbrook Avenue. Both the northbound and southbound bus stops include a small bench, trash can, and a metal bus shelter (See the photo to the right, which shows the existing Southbound Meadowbrook Avenue bus shelter.) The two transit stops have sidewalks connecting them to the existing intersection. Meadowbrook Market is located on the southwest corner of the intersection.



Existing Southbound Meadowbrook Avenue Bus Stop

The existing signalized four-legged intersection includes crosswalks at all legs except the south leg. The eastbound and westbound left turn movements have permissive phasing meaning vehicles are permitted to turn left after yielding to pedestrians and on-coming traffic travelling in the opposite direction. The northbound and southbound left turn movements have protected phasing meaning a separate phase is provided for left-turning traffic and left-turns can only be made in association with a green left arrow signal indication. Based on a visual assessment of existing conditions, none of the existing ADA ramps appear to be up to current standards.

The northbound Meadowbrook Avenue bus stop had a Priority Score of 37, the highest of all stops. **Table 1-4** below shows the breakdown of the scoring for this bus stop. According to collisions reports, a pedestrian was hit and fatally injured while traveling northbound across the eastern leg of the intersection outside of the crosswalk. The collision occurred between 12:00 PM and 3:00 PM.

Criterion	Points	Points Possible
Ridership	8	10
Percent Households without Vehicle	4	5
Percent Public Transit to Work	1	5
Percent Household with Students	1	5
Population Density Per Square Mile	1	5
Collisions involving Pedestrians/Bicyclists	10	10

#### Table 1-4: Northbound Meadowbrook Ave Needs Score



Criterion	Points	Points Possible
Fatal & Severe Pedestrian/Bicyclist collisions	10	10
Future Land Use	2	3
Total	37	53

Exhibit 1-3: Highway 74 and Meadowbrook Avenue Recommended Improvements



The northbound bus stop has been designated the improvement category of Safety, given collisions are the primary scoring trait. **Exhibit 1-3** highlights various improvements near the intersection and at the bus stops that would improve pedestrian and cyclist accessibility and visibility.

**Add south leg crosswalk:** The intersection currently has crosswalks across three of the four legs and no sidewalk approaching/departing the intersection with the exception of the sections connecting the bus stops to the intersection. Adjusting the signal timing and installing the fourth crosswalk along the southern leg would reduce potential "out of the way travel" and crossing outside of the crosswalks at this intersection.

**Update the crosswalk striping:** The existing three crosswalks would also benefit from restriping with a Ladder or Zebra pattern rather than the standard striping. Alternative Ladder or Zebra striping are more visible to motorists granting further visibility to anyone crossing.

**Upgrade the pedestrian ramps:** Based on the existing conditions, the ADA ramps located at the intersection do not meet current standards. Upgrading the curb ramps would ensure all users have easier access to both transit stops.



**Add new sidewalk:** At a minimum, new sidewalk should be added to both sides of the east leg (Greenwald Avenue) from Highway 74 to Senola Avenue. This will provide a dedicated walkway for pedestrians outside of the shoulder of the roadway as Greenwald Avenue curves south. The existing curvature of the road may impair a driver's ability to see a pedestrian walking along the shoulder. The sidewalk will move the pedestrian out of the travel way and improve visibility of the pedestrian along the roadway.

**Improve street lighting:** Proper lighting can help motorists better recognize pedestrians and cyclists in dark situations. Existing luminaires can be inspected to ensure proper luminance. If the existing luminaire do not provide proper lighting, newer equipment can be installed.

The northbound bus stop's secondary scoring trait is a high level of ridership. Because of this, improvements at the bus stops themselves may also be considered.

**Improve lighting at the bus stops**: To improve rider visibility at the bus stops, lighting may be installed at the bus shelters. The increased lighting would also provide a greater sense of security to riders. Furthermore, the installation of bike racks at the bus stops would encourage cycling for access.

#### **I.6.2** Highway 74 and 7<sup>th</sup> Street

There are three bus stops within the vicinity of Highway 74 and 7<sup>th</sup> Street. Two of the three are within Perris City limits and are not the focus of this Plan. Within unincorporated Riverside County, there is one southbound transit stop approximately 800 feet south of 7<sup>th</sup> street along Highway 74. The bus stop consists of a bench (See photo below.)

This intersection is a one-way stop-controlled threelegged intersection and lacks marked crosswalks on all legs. Along Highway 74, there is a northbound left turn pocket and a southbound right turn pocket for vehicles turning onto 7<sup>th</sup> Street. There is a non-compliant ADA ramp on the northwest corner near the Family Basket restaurant and sidewalk is provided north of 7<sup>th</sup> St to Navajo Road and beyond along the west side of Highway 74.



Existing Southbound 7th Street Bus Stop

The bus stop is located approximately 720 feet south of

7<sup>th</sup> Street on the west side of Highway 74. There is a sidewalk at the bus stop, which is approximately 100 feet long. However, there is no sidewalk that connects the bus stop to 7<sup>th</sup> Street.

The southbound 7<sup>th</sup> Street bus stop had a Priority Score of 37, tied for the highest score.

**Table 1-5** below shows the breakdown of the scoring for this bus stop. According to collision reports, a pedestrian was hit and fatally injured while traveling southbound across the western leg of the intersection. The collision occurred between 3:00 AM and 6:00 AM.



#### Table 1-5: Southbound 7th Street Needs Score

Criterion	Points	Points Possible
Ridership	2	10
Percent Households without Vehicle	2	5
Percent Public Transit to Work	4	5
Percent Household with Students	3	5
Population Density Per Square Mile	3	5
Collisions involving Pedestrians/Bicyclist	10	10
Fatal & Severe Pedestrian/Bicyclist collisions	10	10
Future Land Use	3	3
Total	37	53





The bus stops have been designated the improvement category of Safety, given collisions are the primary scoring trait. **Exhibit 1-4** highlights several improvements near the intersection and at the bus stops that would improve pedestrian and cyclist accessibility and visibility.

**Improve Street Lighting:** Due to the pedestrian collision occurring during low light conditions, existing lighting at the intersection should be examined. Currently, the existing luminaires are offset from the intersection itself. This may not provide adequate lighting for those crossing southbound across 7<sup>th</sup> Street. Installation of an additional lighting system may better aid pedestrian and bicyclist visibility in low light conditions.

**Add marked crosswalk across 7th Street and Highway 74:** The existing intersection at Highway 74 and 7th Street does not provide any marked crosswalks. A new crosswalk across 7th Street with a Ladder or Zebra pattern would improve safety for pedestrians crossing stop-controlled 7th Street and those



traveling along the west side of Highway 74 to access the southbound bus stop. A new crosswalk with a ladder or zebra pattern across Highway 74 on the northern leg of the 7<sup>th</sup> Street intersection would improve safety for those crossing Highway 74 to access the northbound bus stop.

**Install pedestrian signal:** The closest controlled pedestrian crossing to the south of 7th Street is located approximately one mile south at the Meadowbrook Avenue intersection. To the north, the nearest controlled crossing is at Navajo Road, which is 800 feet north of the intersection and 1,700 feet north of the bus stop. Placing a signal at this intersection will improve access for residents connecting to Highway 74 from 7<sup>th</sup> Street.

**Construct new sidewalk from 7<sup>th</sup> Street to bus stops:** Currently, there is no sidewalk connecting the bus stops to the intersection. Means of reaching the bus stops are via paved shoulders along Highway 74 or along an unmaintained dirt path. Providing sidewalks along the highway would allow users to more safely access the bus stops. New ADA ramps should be constructed with the sidewalk.

**Add bus shelters and lighting at the bus stops:** At the bus stops, the installation of bus shelters and lighting may be beneficial given their rural and isolated nature. While these bus stop have low ridership scores, the identified improvements will provide comfort and safety enhancements that may encourage new transit riders. Furthermore, the installation of bike racks at the stops would encourage cycling for access.

#### I.6.3 Highway 74 and Richard Street

There are two bus stops within the vicinity of Highway 74 and Richard Street. Both the northbound and the southbound bus stops include a bench. The two bus stops have sidewalks at the stops, but the sidewalks do not connect to the Richard Street intersection. (See the photo to the right of the existing Southbound Richard Street bus stop.)



Existing Southbound Richard Street Bus Stop

The intersection of Highway 74 and Richard Street is a one way stop-controlled three-legged intersection and

lacks marked crosswalks on all legs. Along Highway 74, there is a southbound left turn pocket for vehicles turning from Highway 74 onto Richard Street.

The southbound Richard Street transit stop had a Priority Score of 32, which is highly driven by the pedestrian involved fatal collision that occurred at the intersection.

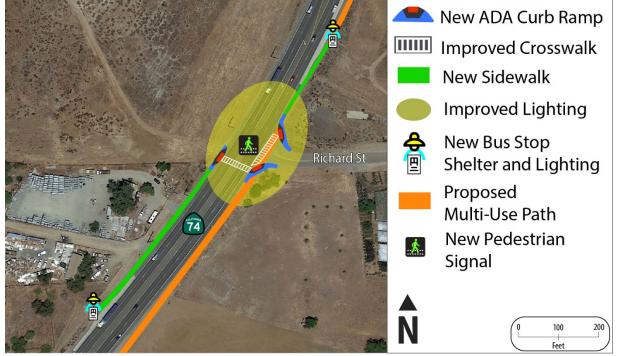
**Table 1-6** below shows the breakdown of the scoring for this bus stop. According to collision reports, a pedestrian was hit while traveling along the shoulder. The collision occurred between 9:00 PM and 12:00 AM.



Table 1-6:	Southbound	Richard	Street	Needs	Score
------------	------------	---------	--------	-------	-------

Criterion	Points	Points Possible
Ridership	2	10
Percent Households without Vehicle	4	5
Percent Public Transit to Work	1	5
Percent Household with Students	1	5
Population Density Per Square Mile	1	5
Collisions involving Pedestrians/Bicyclist	10	10
Fatal & Severe Pedestrian/Bicyclist collisions	10	10
Future Land Use	3	3
Total	32	53

Exhibit 1-5: Highway 74 and Richard Street Recommended Improvements



The southbound bus stop has been designated the improvement category of Safety, given collisions are the primary scoring trait. **Exhibit 1-5** highlights several improvements near the intersection and at the bus stops that would improve pedestrian and cyclist accessibility and visibility.

**Improve street lighting on Highway 74:** Due to the pedestrian collisions occurring during low light conditions, existing light at the intersection should be examined. Currently, there appears to be no existing lighting systems within the vicinity of the intersection, or the transit stops. The installation of the lighting systems would assist in increasing the visibility of pedestrians and cyclists traveling to the transit stops. At the bus stop itself, the installation of a bus shelter and lighting may be beneficial given the rural and isolated nature of this bus stop.



**Install sidewalk from Richard Street to bus stops:** There is no sidewalk connecting the bus stops to the intersection. Means of reaching the bus stops are via the paved shoulders along Highway 74 or along an unmaintained dirt path along the side of the highway. New ADA compliant curb ramps should be installed with the new sidewalk.

**Install pedestrian signal:** The closest controlled pedestrian crossing to Richard Street is located approximately 1.5-miles north at the Hwy 74/Theda Street intersection. To the south, the nearest controlled crossing is at Meadowbrook Avenue, which is almost 1 mile south of Richard Street. Placing a signal at this intersection will improve access for residents connecting to Highway 74 from Richard Street.

**Add bus shelters and lighting at the bus stops:** At the bus stops, the installation of bus shelters and lighting may be beneficial given their rural and isolated nature. While these bus stops have low ridership scores, the identified improvements will provide comfort and safety enhancements that may encourage new transit riders.

**Construct Multiuse Trail:** To provide a cohesive pedestrian network, a multi-use trail can be constructed to connect two important endpoints within the communities of Good Hope and Meadowbrook. The area between Meadowbrook Avenue (south of Richard Street) and Theda Street (north of Richard Street) has a higher percentage of homes without vehicles and is planned for future mixed use. A trail along the east side of Highway 74 would provide residents another option to travel within their community.

#### **1.6.4 Highway 74 and Taylor Road**

There are two bus stops within the vicinity of Highway 74 and Taylor Road. Both the northbound and southbound bus stops include a bench (The photo below shows the existing southbound Taylor Road bus stop.) The two transit stops have sidewalks at the bus stop, but the sidewalks do not connect to the intersection.

The Taylor Road intersection is a one-way stopcontrolled three-legged intersection with no designated crosswalks. Along Highway 74, there is a southbound left turn pocket for vehicles turning from Highway 74 onto Taylor Road. There are no ADA ramps or sidewalks that connect the intersection to the bus stops.



Existing Southbound Taylor Road Bus Stop

The southbound Taylor Road bus stop had a Priority Score of 29, which is heavily driven by the pedestrian involved collision at Taylor Road. **Table 1-7** shows the breakdown of the scoring for this bus stop. According to collision reports, a pedestrian was hit and fatally injured while travelling northbound crossing the eastern leg of the intersection. The collision occurred between 3:00 AM and 6:00 AM.



Criterion	Points	Points Possible
Ridership	2	10
Percent Households without Vehicle	3	5
Percent Public Transit to Work	1	5
Percent Household with Students	2	5
Population Density Per Square Mile	1	5
Collisions involving Pedestrians/Bicyclist	10	10
Fatal & Severe Pedestrian/Bicyclist collisions	10	10
Future Land Use	0	3
Total	29	53

#### Table 1-7: Southbound Taylor Road Needs Score

#### Exhibit 1-6: Highway 74 and Taylor Road Intersection Recommended Improvements

		New ADA Curb Ramp
		New Crosswalk
		New Sidewalk
		Improved Lighting
Taylor Rd		New Bus Stop Shelter and Lighting
		Proposed Multi-Use Path
	<b>*</b>	New Pedestrian Signal
	N	0 100 200 

The southbound bus stop has been designated the improvement category of Safety, given collisions are the primary scoring trait. **Exhibit 1-6** highlights several improvements near the intersection and to the bus stops that could improve pedestrian and cyclist accessibility and visibility.

**Improved street lighting on Highway 74:** Due to the pedestrian collisions occurring during low light conditions, existing lighting at the intersection should be examined. Currently, there appears to be no existing lighting systems within the vicinity of the intersection, or the transit stops. The installation of lighting systems would assist in increasing the visibility of pedestrians and cyclist traveling to the bus stops.



**Improved bus stop enhancements:** At the bus stops themselves, installation of bus shelters and lighting may be beneficial given the rural nature of the stops. While the ridership score for these bus stops is low, existing development near the bus stops suggests that with improvements to service, access and amenities transit may be a more viable option for some.

**Install sidewalks connecting the bus stops to Taylor Road:** There is no sidewalk connecting the bus stops to the intersection at Taylor Road. Means of reaching the bus stops are via the paved shoulders along Highway 74 or along the unmaintained dirt paths along the side of the highway.

**Install pedestrian signal:** The closest controlled pedestrian crossing to Taylor Road is located approximately 0.5-miles north at the Hwy 74/Theda Street intersection. To the south, the nearest controlled crossing is at Meadowbrook Avenue, which is almost 2 miles south of Taylor Road. Placing a signal at this intersection will improve access for residents connecting to Highway 74 from Taylor Road.

**Construct a Multiuse Trail:** The closest controlled crossing is more than half a mile away north at the Theda Street intersection. To provide a cohesive pedestrian network, a multi-use trail can be constructed to connect two important endpoints within the communities of Good Hope and Meadowbrook. The area between Meadowbrook Avenue (south of Taylor Road) and Theda Street (north of Taylor Road) has a higher percentage of homes without vehicles and is planned for future mixed use. A trail along the east side of Highway 74 would provide residents another option to travel within their community.

#### I.7 PHASING

The large scale of the corridor and the total cost of the planned projects requires phasing. Low-cost improvements provide the County with an opportunity to improve the quality of life for residents without needing to secure large sums of capital. These improvements include the restriping of existing crosswalks, striping new crosswalks, providing ADA ramps, replacing existing luminaires, providing bus stop shelters and benches. This phasing of improvements is applicable with priority areas or other locations with less priority. Phasing allows for improvements throughout the planning area, although priority areas may get more investment and improvements to address the gravity of the issues.

Higher cost improvements may be more difficult to implement due to the need for large sums of capital and potential environmental impacts. These costs include the construction of sidewalks, installation of pedestrian signals, new lighting systems and construction of multi-use trails.

The project list in **Table 1-8** and shown in **Exhibit 1-7** is broken into three phases based on complexity of deliverability and cost:

**Short-Term** includes relatively simple less expensive projects that will not require environmental clearances, formal design, right-of-way acquisition, utilities coordination, etc. meaning projects in this category can be implemented quickly. Examples of short-term improvements include, but are not limited to the following:

- Crosswalk striping
- ADA ramps
- Benches at transit stops

- Bus shelters
- Bike racks
- On-street bike lanes (Class II)
- Wayfinding signage

**Mid-Term** includes more complex projects that require some time and resource dependent site-specific engineering design, coordination, environmental clearances, potential right-of-way acquisition, utilities coordination, etc. and more funding before construction. These may be constructed in the mid-term. Examples of mid-term improvements include, but are not limited to:

- Site-specific lighting
- Pedestrian Signals
- Sidewalks
- Bus Stop Pullouts

**Long-Term** makes up the remaining longer term more complex projects. For example, when substantial right-of-way acquisition and multiple funding sources are necessary projects may take 10 or more years from design to construction. Recommendations identified as long-term improvements include multiuse trails that may not be constructed in the existing right-of-way and/or recommendations consisting of several project components, some that may be short-term or mid-term improvements on their own. When these easier to deliver project components are combined project delivery will require larger funding amounts and increased coordination of technical engineering disciplines.

Higher cost projects may become Short-Term projects due to changing conditions. For example, the following might allow reclassification of Mid-Term or Long-Term projects into Short-Term improvements.

- **Political will:** At times, projects move up to an earlier phase when political will increases. Members of the public may advocate for a project causing an elected official to propose moving a project into an earlier Phase.
- Land Development: As land development occurs, the cost of projects to the County decrease when the County requires improvements to the right-of-way to mitigate traffic impacts. Those improvements must be done to standards included in the Plan.
- **Grant funding priorities:** Funding agencies and organizations have different funding sources that change over time. Projects may also be expedited when Mid-Term or Long-Term projects are eligible for and most suited to grant funding priorities.

As shown in **Table 1-8**, many projects fall in the Short-Term category; however, multiple projects may have the potential to be expedited from Mid-term/Long-Term due to political will and available funding. Planning level conceptual costs have also been identified for each recommended improvement utilizing the following scale:

- \$ = Bus stop and intersection location-specific improvements that consist of one or a few Short-Term recommendations.
- \$\$ = Bus stop and intersection location-specific improvements that consist of at least one Mid-Term improvement or a combination of a relatively small number of Short-Term and Mid-Term improvements.



• \$\$\$ = Bus stop and intersection location-specific improvements that consist of a Long-Term multi-use trail or a combination of several Short-Term, Mid-Term and/or Long-Term improvements that collectively are anticipated to require funding from multiple sources, site-specific engineering design and notable coordination.

When programming and designing recommended improvements, input from other public agencies, community organizations, and local leaders should be considered. Partnerships with the following agencies would be beneficial:

- Riverside Transit Agency (RTA)
- County of Riverside Public Health Department
- Riverside County Regional Park and Open Space District
- Metrolink
- City of Perris
- City of Lake Elsinore
- Western Riverside Council of Governments (WRCOG)

• Caltrans

These organizations can provide meaningful feedback and potential avenues of funding. The involvement of community ambassadors will also ensure the improvements remain in line with the priorities and desires of the community.



Rank	Bus Stop ID	Direction	Project Name / Location	Project Category	Total Score	Recommendation	Cost	Programming Timeframe
1	2317	N	Hwy 74 and Meadowbrook Ave	Safety	37	ADA Ramps, improved crosswalk striping (ladder/continental) Cross walks on all 4 legs, improved lighting at intersection, improved lighting at bus stop and bike rack	\$\$\$	Mid-Term
2	2396	S	Hwy 74 and 7th St	Safety	37	Crosswalk at 7th St., improved lighting at intersection, new pedestrian signal, ADA ramps, bike rack, improved lighting at bus stop, bus stop shelter and sidewalk to bus stop	\$\$\$	Mid-Term
3	2446	S	Hwy 74 and Richard St	Safety	32	Improved lighting at intersection, sidewalk to bus stop from crossing, new pedestrian signal, improved lighting at stop, improved bus stop shelter and multi-use trail	\$\$\$	Long-Term
4	2444	S	Hwy 74 and Taylor Rd	Safety	29	Improved lighting at intersection sidewalk to bus stop from crossing, new pedestrian signal, improved lighting at bus stop, bus stop shelter and multi-use trail	\$\$\$	Long-Term
5	1175	N	Ellis Ave and Hwy 74	Local Connection	27	Bus Stop Concrete Pad Bus Stop Bench	\$	Short-Term
6	2397	S	Ellis Ave and Hwy 74	Local Connection	24	Bus Stop Concrete Pad Bus Stop Bench	\$	Short-Term
7	2321	Ν	Hwy 74 and Taylor Rd	Bus Stop Enhancement	21	Bus Stop Shelter Bus Stop Lighting	\$\$	Mid-Term
8	1176	Ν	Hwy 74 / 7th St and Belloma Ln.	Local Connection	17	Bus Stop Concrete Pad Bus Stop Shelter Bus Stop Lighting Bus Stop Bench Bike Rack	\$\$	Mid-Term

Table 1-8: Needs-Based Priority	Recommendations Cost and	<b>Programming Timeframes</b>



# Highway 74 Multi-Modal Transit Plan Riverside County Planning Department

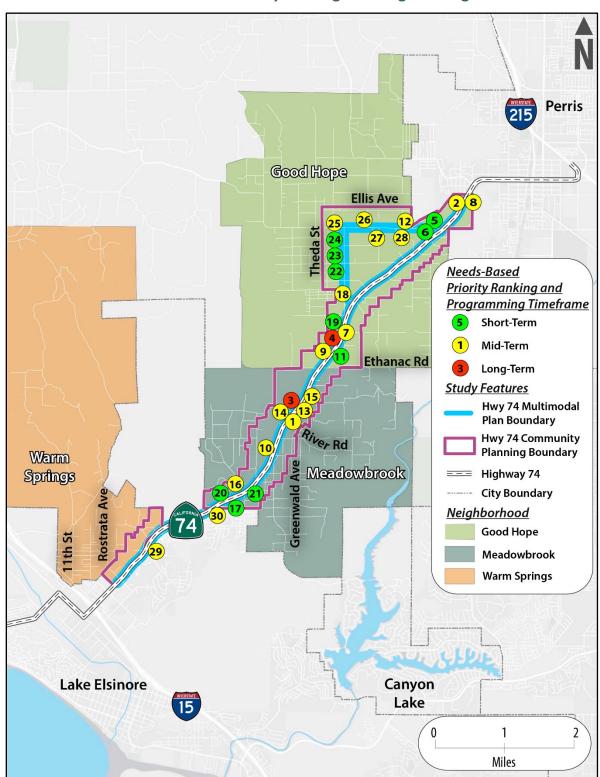
Rank	Bus Stop ID	Direction	Project Name	Project Category	Total Score	Recommendation	Cost	Programming Timeframe
9	2445	S	Hwy 74 and Spring St	Bus Stop Enhancement	16	Bus Stop Shelter Bus Stop Lighting	\$\$	Mid-Term
10	2447	S	Hwy 74 and Meadowbrook Ave	Bus Stop Enhancement	15	Bus Stop Lighting Bike Rack	\$	Mid-Term
11	3667	S	Ellis Ave and Cox St	Bus Stop Enhancement	14	Bus Stop Concrete Pad Bus Stop Bench	\$	Short-Term
12	2320	N	Hwy 74 and Spring St	Bus Stop Enhancement	14	Bus Stop Shelter Bus Stop Lighting	\$\$	Mid-Term
13	2318	N	Hwy 74 and River Rd	Local Connection	12	Bus Stop Shelter Bus Stop Lighting	\$\$	Mid-Term
14	4002	S	Hwy 74 and River Rd	Local Connection	12	Bus Stop Pull-Out Bus Stop Concrete Pad Bus Stop Shelter Bus Stop Lighting Bus Stop Bench	\$\$	Mid-Term
15	2319	N	Hwy 74 and Richard St	Local Connection	11	Bus Stop Shelter Bus Stop Lighting Bus Stop Bench	\$\$	Mid-Term
16	2448	S	Hwy 74 and Wasson Canyon Rd	Local Connection	11	Bus Stop Shelter Bus Stop Lighting	\$\$	Mid-Term
17	2442	N/S	Theda St and Hwy 74	Local Connection	10	Bus Stop Concrete Pad	\$	Short-Term
18	2315	N	Hwy 74 and Hammack St	Bus Stop Enhancement	10	Bus Stop Shelter Bus Stop Lighting	\$\$	Mid-Term
19	2441	N/S	Theda St and Betty Rd	Local Connection	9	Bus Stop Concrete Pad Bus Stop Bench	\$	Short-Term
20	2440	N/S	Theda St and Mountain St	Local Connection	9	Bus Stop Concrete Pad Bus Stop Bench	\$	Short-Term
21	2439	N/S	Theda St and Louise St	Local Connection	9	Bus Stop Concrete Pad Bus Stop Bench	\$	Short-Term
22	2399	S	Ellis Ave and Cowie Ave	Local Connection	9	Bus Stop Concrete Pad Bus Stop Bench	\$	Short-Term
23	2327	N	Ellis Ave and Cowie Ave	Local Connection	9	Bus Stop Concrete Pad Bus Stop Bench	\$	Short-Term
24	1174	N	Ellis Ave and Cox St	Local Connection	9	Bus Stop Concrete Pad Bus Stop Bench	\$	Short-Term
25	2443	S	Hwy 74 and Theda St	Bus Stop Enhancement	9	Bus Stop Shelter Bus Stop Lighting	\$\$	Mid-Term



# Highway 74 Multi-Modal Transit Plan Riverside County Planning Department

Rank	Bus Stop ID	Direction	Project Name	Project Category	Total Score	Recommendation	Cost	Programming Timeframe
26	2449	S	Hwy 74 and Hammack Ave	Local Connection	9	Bus Stop Shelter Bus Stop Lighting	\$\$	Mid-Term
27	2316	N	Hwy 74 and Wasson Canyon Rd	Local Connection	9	Bus Stop Shelter Bus Stop Lighting	\$\$	Mid-Term
28	2438	N/S	Theda St and Ellis Ave	Local Connection	9	Bus Stop Shelter Bus Stop Lighting	\$\$	Mid-Term
29	2313	N	Hwy 74 and Rosetta Canyon Dr	Bus Stop Enhancement	8	Bus Stop Shelter Bus Stop Lighting	\$\$	Mid-Term
30	2314	N	Hwy 74 and Riverside St	Bus Stop Enhancement	8	Bus Stop Shelter Bus Stop Lighting	\$\$	Mid-Term









#### I.8 FUNDING

A range of grant funding opportunities exist for active transportation and first mile/last time infrastructure. A number of potential grant funding sources that could be utilized to implement the improvements noted in this Plan have been included below in **Table 1-9**.

Due to the top four priorities based on Safety considerations and overall operational needs being assigned Mid-Term and Long-Term programming timeframes in addition to relatively high costs, it will be important for Riverside County to continue pursuing grant opportunities. Securing grant funding will allow top priority projects based on need to be delivered in a more expeditious manner.

Another way the County may be able to deliver improvements at top priority locations is to secure funding and program improvements for one or a subset of some of the Short-Term lower cost improvements at the following locations:

- Highway 74 and Meadowbrook Avenue
- Highway 74 and 7th Street
- Highway 74 and Richard Street
- Highway 74 and Taylor Road

This approach may allow the County to make safety improvements at top priority locations while working to secure funding for more complex improvements utilizing existing funding streams and/or grant funding. This may also allow for expeditious delivery of simpler lower cost improvements while more complex improvements await funding and/or design completion prior to construction.



Table	1-9:	Grant	<b>Opportunities</b>
-------	------	-------	----------------------

Grant	Description	Eligible Costs/Project Types	Sponsor	Timeframe	Submission Month	Funding Amount	Application and Reporting Complexity	Reimbursement Amounts	Program Guidelines Links
Highway Safety Improvement Program (HSIP)	Funds for projects that reduce fatalities and serious injuries	Preliminary Engineering, NEPA and CEQA clearances, Plans, Specifications and Estimates, ROW when less than 10% of construction cost, engineering, utility relocation, and construction	Federal Highway Administration (FHWA)	Bi-Annually	Мау	\$227 million (for California), up to \$10 million for a single project	Funding Dependent on Benefit-Cost Ratio Analysis and a <u>competitive</u> <u>application process</u>	Reimbursement of 100%, 90% or 50% of costs per the project's safety countermeasures as defined in <u>Section 4.2 of the</u> <u>Local Roadway</u> <u>Safety Manual</u>	HSIP Program Guidelines
Local Streets and Roads Program (LSRP)	Funding for basic road maintenance and rehabilitation, including critical safety projects	All phases of Road maintenance and rehabilitation including safety projects and active transportation projects, which include pedestrian and bicycle safety projects, transit facilities, and traffic control devices. Funds may also be available to satisfy a match requirement in order to obtain state or federal funds	California Transportation Commission (CTC)	Annual	July 1	\$1.5 billion	Submit a Proposed Projects for Approval List to CTC each fiscal year, submit a project expenditure report to the Commission each fiscal year, and comply with all requirements in the <u>LSRP Reporting</u> <u>Guidelines</u>	100% project funding coverage on a continuous monthly apportionment basis	<u>LSRP Program</u> <u>Guidelines</u>
Active Transportation Program	Funds pedestrian and bicycle projects that improve safety and connectivity in communities. This program provides incentives for projects that fall within safe routes to school and disadvantaged communities	Infrastructure planning, design, and construction of walking and biking facilities, active transportation, non- infrastructure education of walking and bicycling activities, and Safe Routes to School Plans for disadvantaged communities	CTC and Caltrans	Bi-Annually	Spring of every other year unless CTC elects to perform an annual call for applications	<ul> <li>~\$220 million (Annually)</li> <li>40% allocated to MPOs with a population greater than 200,000, 25 % of which is allocated to disadvantaged communities.</li> <li>10% allocated to small urban and rural areas with populations of 200,000 or less, 25% of which is allocated to disadvantaged communities.</li> <li>50% must be awarded to projects by the CTC on a statewide basis, 25% of which is allocated to disadvantaged communities.</li> </ul>	State Application Process that requires partnerships with local stakeholders and data related to active transportation prevalence	No funding match is required, however, MPOs may require a funding match for projects selected through their competitive process	Active <u>Transportation</u> <u>Program</u> <u>Guidelines</u>



# Highway 74 Multi-Modal Transit Plan Riverside County Planning Department

Grant	Description	Eligible Costs/Project Types	Sponsor	Timeframe	Submission Month	Funding Amount	Application and Reporting Complexity	Reimbursement Amounts	Program Guidelines Links
Western Riverside Council of Governments (WRCOG) BEYOND Framework Fund Program	Funds projects that align with WRCOG's Economic Development and Sustainability Framework. Transportation projects must correspond to at least one goal outlined in the Transportation section of the <u>WRCOG Economic Development &amp;</u> <u>Sustainability Framework</u>	<ul> <li>Eligible expenses include:</li> <li>Staff time (including interns) and overhead / administration</li> <li>Consultant Services</li> <li>Materials</li> <li>Events / workshops / fairs</li> <li>Match funding for grant applications as long as the project meets BEYOND funding criteria</li> </ul>	WRCOG	Defined Funding Rounds in accordance with WRCOG Work Program development process	Defined Submission Date in accordance with WRCOG Work Program development process	\$4.1 million over previous two rounds to entire WRCOG region, \$177,254 allocation to Riverside County in latest 2016/2017 cycle	Eligibility Limited to Member Agencies of WRCOG Must provide an initial "Phase 1" Concept proposal application that provides a summary project overview. Concept Proposals approved by WRCOG will be required to submit a full application	Up to 100% funding through reimbursement Fund recipients must provide a bi- annual progress report	<u>BEYOND</u> <u>Program</u> <u>Guidelines</u>
Riverside County Transportation Commission Local Transportation Fund Article 3 for Bicycles and Pedestrians	Funds the construction and maintenance of bicycle and pedestrian facilities, as well as the development of comprehensive bicycle and pedestrian plans	<ul> <li>Eligible expenses include:</li> <li>Maintenance of trails for non- motorized use</li> <li>New trails, secure bicycle parking, park-and-ride lots, and transit terminals where other funds are available</li> <li>Creation of comprehensive pedestrian plans</li> <li>Other construction and related bicycle and pedestrian engineering expenses</li> </ul>	Riverside County Transportation Commission administration of funding from State of California	Bi-Annually	April	Source is ¼ cent apportionment of general state sales tax to the counties. Most recent annual funding was \$4,325,000. Agencies are capped at 20% of current call for projects funding, and Riverside County is only eligible to submit up to two applications per Supervisory District	All applications must be submitted in accordance with <u>application</u> <u>guidelines</u>	100% reimbursement of project costs. No matching funds are required, however, one application points are awarded for pledged local matches up to 50%.	<u>RCTC SB 821</u> <u>Article 3</u> <u>Guidelines</u>
California Transportation Commission Solutions for Congested Corridors Program	Funds improvements to state highways, local streets and roads, rail facilities, public transit facilities, as well as bicycle and pedestrian facilities	Eligible expenses include: - Improvements to state highways, local roads, and public transit facilities including stops, bicycle and pedestrian facilities, and first mile and last mile connections	State of California	Annually depending on funding availability	January	~\$250 million in 2020 cycle, funding fluctuates based on available funding	All nominated projects must be in a multimodal corridor plan prepared in accordance with Corridor Plan Guidelines. Necessary CEQA or NEPA documents must be completed at time of funding application.	No match required, however, funding leverage is desirable and will be considered in the evaluation of projects	Solutions for Congested Corridors Program Guidelines, and Multimodal Corridor Plan Guidelines



# Highway 74 Multi-Modal Transit Plan Riverside County Planning Department

Grant	Description	Eligible Costs/Project Types	Sponsor	Timeframe	Submission Month	Funding Amount	Application and Reporting Complexity	Reimbursement Amounts	Program Guidelines Links
Federal Congestion Mitigation Air Quality (CMAQ) Program	Funds transportation projects designed to reduce traffic congestion and improve air quality, particularly in areas of the country that do not attain national air quality standards	<ul> <li>Eligible expenses include:</li> <li>Congestion reduction and traffic flow improvements</li> <li>Transit improvements</li> <li>Bicycle and pedestrian facilities and programs</li> <li>Travel demand management</li> <li>Public education and outreach activities</li> </ul>	FHWA	Annual	Ongoing	~\$500 million (for California)	The Regional MPO Application Template must address California and MPO evaluation criteria. All awarded projects must be included in California statewide and MPO Transportation Improvement Program	Costs reimbursed, typical non-federal match is 11.47%	<u>Caltrans</u> <u>Division of</u> <u>Local</u> <u>Assistance</u> <u>Local</u> <u>Programs</u> <u>Procedures</u> <u>CMAQ</u> <u>Guidelines</u>
U.S. RAISE grant	Funds transportation projects that will increase safety, environmental sustainability, quality of life, economic competitiveness, state of good repair, innovation, and foster inter-agency partnerships	Grants are awarded for transportation investments, including road and transit that encompass safety, environmental sustainability, quality of life, economic competitiveness, state of good repair, innovation, and broad community partnerships	USDOT	Annual	July	\$1.5 billion (in 2021)	Federal Application Template and a <u>competitive</u> <u>application process</u>	Discretionary amount of funding for individual projects determined by the USDOT and available funding	RAISE Discretionary Grants Application Instructions
U.S. INFRA grant	Funds transportation projects of national and regional significance that result in good-paying jobs, improve safety, apply transformative technology, and explicitly address climate change and racial equity	Grants are awarded for infrastructure investments, including road and transit that improve local economies, create jobs, achieve racial equity, and address climate change and environmental justice	USDOT	Annual	Varies	905 million (in 2021)	Federal Application Template and a competitive application process	Discretionary amount of funding for individual projects determined by the USDOT and available funding	Infrastructure for Rebuilding <u>America</u> <u>Application</u> Instructions
Federal TIFIA Ioan	Provides credit assistance for qualified projects of regional and national significance	Many large-scale, surface transportation projects, including highway, transit, railroad, intermodal freight, or port access projects are eligible for assistance	USDOT	Ongoing	Ongoing	Varies	Financing Terms and Conditions	TIFIA credit assistance is often available on more advantageous terms than in the financial market, making it possible to obtain financing when it might not otherwise be available.	Federal TIFIA Program Overview and Application Instructions



#### 2.0 Overview of Planning Process

### 2.1 **PROCESS OVERVIEW**

Given that the plan is focused on improving access to transit for Planning Areas located along the corridor, input from and engagement with community members was critical to Plan development. Resident input and feedback on existing barriers to mobility formed the Plan's foundation. Refer to **Exhibit 2-1** for a visual outline of the outreach process for the Plan. The planning process began with extensive data collection to understand the existing conditions of the Planning Area. Data collection included demographics, transit routes, sidewalk and curb ramp locations, presence and quality of bike lanes, road conditions including capacity and volumes, collisions, and land uses.

Equipped with this baseline, the County reached out to community members and initiated the process of identifying potential areas of interest. Specific improvements were identified to address concerns and identified barriers to mobility. The development of solutions focused on closing gaps and resolving access issues, addressing safety concerns and demonstrated crash trends along the corridor, providing improved facilities at transit stops and proving an interconnected system of bicycle and pedestrian facilities that will encourage residents to use transit along Highway 74.

In addition to community outreach, the County engaged other stakeholders. Local and regional stakeholders formed the Advisory Group who provided input on the planning process and provided guidance in developing effective engagement strategies and events. Advisory Group meetings were conducted regularly throughout the process, at which time stakeholders discussed critical barriers, provided input on potential improvements, and discussed community identified concerns and solutions. The following agencies participated in the Advisory Group:

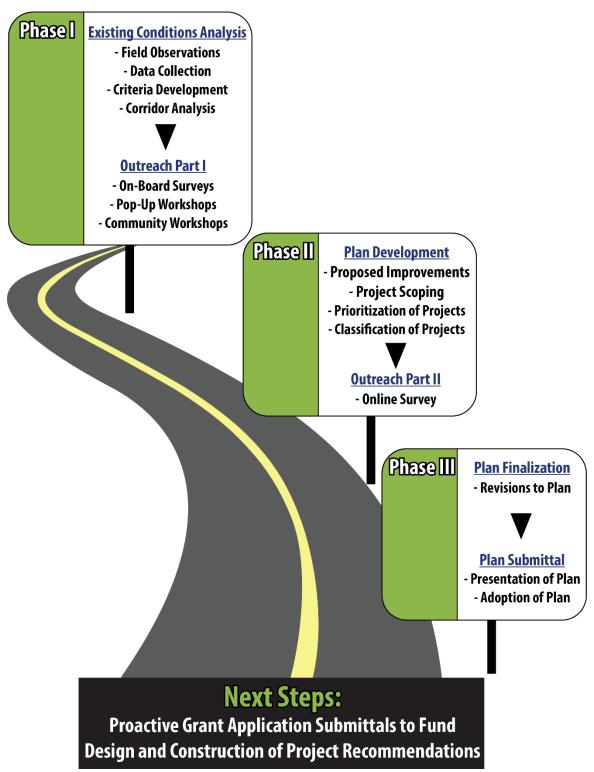
- County of Riverside Board of Supervisors, District 1
- Riverside County Transportation Commission (RCTC)
- Western Riverside Council of Governments (WRCOG)
- County of Riverside Transportation Department (RCTD)
- Riverside County Flood Control and Water Conservation District

- Riverside Transit Agency (RTA)
- Caltrans
- Metrolink
- City of Lake Elsinore
- City of Wildomar
- City of Menifee
- City of Perris
- City of Canyon Lake
- Perris Elementary School District
- Perris Union High School District
- County of Riverside Public Health
   Department

The Plan is a reflection of input from the public, observations and data collected in the field and feedback from the Advisory Group. Following each Advisory Group meeting, the approaches discussed were included in the subsequent public (community) outreach event. The results from each public outreach event informed the Advisory Group of the viability and community receptiveness to certain strategies and ideas. This development



process allowed for the refinement of ideas and strategies through an iterative process of Advisory Group and community input.



#### Exhibit 2-1: Planning Process



#### 2.2 **RELATION TO OTHER PLANS**

In addition to utilization of the 2017 RTA First & Last Mile Mobility Plan to identify areas of need and develop improvement evaluation criteria, the following plans were reviewed and considered when developing and prioritizing first and last mile connectivity improvement recommendations.

#### 2.2. County of Riverside General Plan Circulation Element

The General Plan Circulation Element is the overall framework for the County's circulation network. In compliance with state law, the Circulation Element includes an comprehensive review of future road improvements and extensions, addresses non-motorized transportation alternatives, and identifies funding options. The Circulation Element also identifies transportation routes, terminals, and facilities throughout the County.

#### 2.2.2 County of Riverside Highway 74 Community Plan

This Plan supports the efforts proposed in the Highway 74 Community Plan, specifically related to accommodating future growth along the corridor. The Community Plan, which is being undertaken independently of this Plan, includes a discussion of future mixed-use development, increased density of residential construction, and the development of key community nodes, which are highly compatible with transportation strategies such as access transit and multimodal facilities. This Plan aligns with the Community Plan by addressing current mobility challenges along Highway 74 while prioritizing improvements at key nodes identified in the Community Plan, generally located surrounding Meadowbrook Avenue, River Road, Ethanac Road, adjacent to the City of Perris. As of January 2022, this plan is not yet adopted by the County of Riverside.



WESTERN RIVERSIDE **ACTIVE TRANSPORTATION PLAN** 

FEHR TPEERS



#### 2.2.3 Western Riverside Active Transportation Plan

In 2018, the Western Riverside Council of Governments (WRCOG) adopted the Western Riverside Active Transportation Plan, which aims to improve transportation choices within the subregion for the benefit of all residents, employees, and visitors by identifying regional facilities to provide more transportation options. The Active Transportation Regional Map includes a planned regional route that crosses Highway 74 near Warm Springs. The Highway 74 Plan and the WRCOG Active Transportation Plan may be used in conjunction to strengthen grant applications.

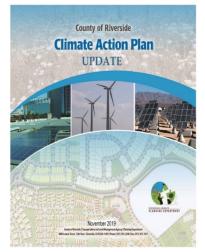






# 2.2.4 Riverside County Regional Park and Open-Space District Comprehensive Trails Plan

In 2018, the County of Riverside Regional Parks and Open Space District adopted the *Comprehensive Trails Plan*. The plan identifies a backbone network that is eligible for grant funding, including one trail that parallels the highway in Warm Springs. In addition, the backbone network includes two neighborhood scale networks that serves all three neighborhoods within the Planning Area. These trails may be used in the future to connects bicyclists to the bus stops on the highway. This plan and the trails plan may be used in conjunction to strengthen grant applications.



#### 2.2.5 County of Riverside Climate Action Plan

In 2006, the State of California adopted Assembly Bill 32 (AB 32) which required reductions in Greenhouse Gas (GHG) emissions to 15 percent below levels of a baseline year. In 2017, following changes in State policy, the California Air Resource Board (CARB) finalized the *2017 Climate Change Scoping Plan*, which provided updated quantitative summaries of regulations needed to reach GHG reduction targets. In compliance with these policy changes, the County of Riverside updated its Climate Action Plan to reevaluate reduction targets and strategies. The *2019 County of Riverside Climate Action Plan Update* (CAP) assesses GHG reductions from various sources throughout the region including but not limited to: Transportation, Agriculture, Electricity, Natural Gas, Solid Waste, Water, and Aviation.

Pertinent to this Plan, the CAP lists new transportation proposals (R2 Transportation Measures) which would aid the County in achieving its GHG emission targets. Measure R2-T1 details the County's goals to remove barriers to alternative forms of transportation (walk, bike, scooter, skateboard, etc.), which would reduce Vehicle Miles Traveled (VMT) and thus reduce GHG emissions. The CAP encourages a reduction of vehicles on the road in order to meet their emissions targets. This Plan promotes the County's goals of reducing GHG by recommending solutions to address the Planning Area's transit access limitations.



#### 3.0 Existing and Future Community Context

As previously mentioned, the Planning Area is made up of three unincorporated communities: Warm Springs, Meadowbrook, and Good Hope. All three communities are rural and predominantly residential with varying ages and densities scattered throughout. The Planning Area is characterized as a rural area between two suburban communities, the Cities of Lake Elsinore and Perris, which are characterized by higher density



Industrial Storage Yard Along the Highway 74 Corridor

single and multi-family residential uses. By contrast, the Planning Area is characterized by low density development, large parcels, and vacant land. Directly along the Highway 74 corridor, commercial, industrial, and retail businesses are the most common.

The existing population in the Planning Area is low relative to surrounding communities, and homes tend to be spread apart on large parcels. In such an environment, walking, bicycling, and use of transit tends to be limited. However, the three neighborhoods are expected to grow, resulting in an increase in density and intensity of uses. Along with growth, the demand for more transportation options will increase. To help understand current and future demand, the following sections describe the existing character of each neighborhood as well as a discussion of planned land uses and anticipated growth. (See **Exhibit 3-1**) Below are images of existing uses along the Highway 74 corridor.



A convenience store located along the Highway 74 corridor.



A residential community along the Highway 74 corridor in the City of Perris.



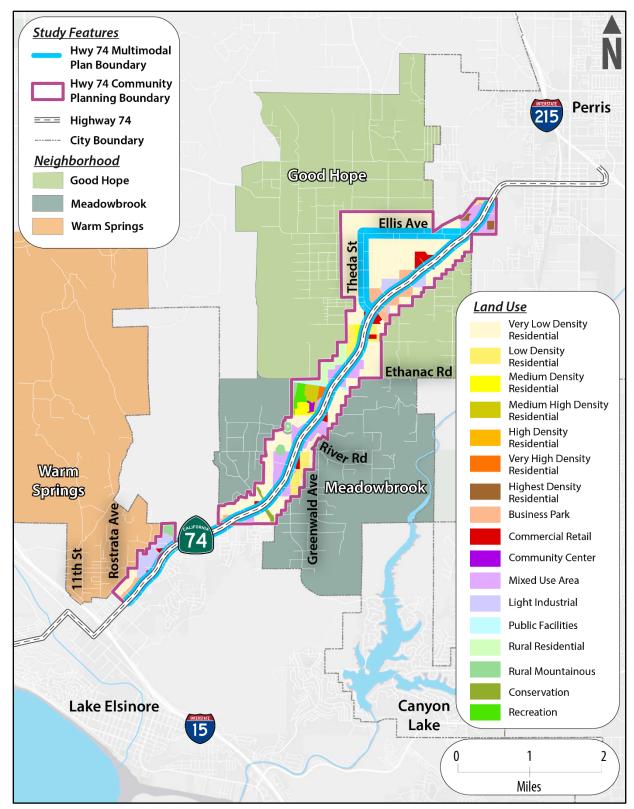
A typical commercial use along the Highway 74 corridor.



A residential community along the Highway 74 corridor.









## 3.1 COMMUNITY PROFILES

#### 3.I.I Good Hope

The community of Good Hope is in the eastern portion of the Planning Area situated northeast of Meadowbrook and west of the City of Perris. This community is rural and equestrian-oriented with distinctive rock outcroppings. Highway 74 carves a swath through this otherwise remote community, serving scattered commercial and industrial development. Most of the homes in Good Hope were built prior to the 2000s. Along the corridor, there are several commercial businesses, which are mainly



Praise Chapel Christian Fellowship

automotive-related. Below are photos that illustrate existing development typical of the Good Hope Community.



**Good Hope Elementary** 



Moses Schaffer Community Center Park



**Good Hope Fire Station** 

According to the General Plan, planned uses appear including nodes of higher intensity development in the Mixed-Use and Commercial Retail areas. Future Business Park uses are expected to serve as future employment centers. Together, these three areas will be important destinations for future transit connections and facilities.



#### 3.1.2 Meadowbrook

**Meadowbrook** is in the central portion of the Planning Area, adjoining the City of Lake Elsinore's northeastern border. It is characterized by very low density residential, vacant properties set amid rolling hills, and some commercial and light industrial uses along Highway 74. This neighborhood has the sparsest development and lowest density within the Planning Area. The residential community is relatively well established with nearly all homes built prior to the 2000s. There is a general lack of infrastructure and pedestrian/bicycle facilities in this area. In addition, there are no schools or parks in Meadowbrook.



La Guadalupana Market



Meadowbrook RV Park



Meadowbrook Market

Similar to Good Hope, the Meadowbrook neighborhood shows higher intensity development is planned in nodes of Commercial Retail and areas of Medium and High Density Residential near Good Hope. Swaths of Mixed-Use areas and smaller Business Park portions are planned for jobs.



#### 3.1.3 Warm Springs

**Warm Springs** is the westernmost neighborhood in the Planning Area. It is adjacent to the City of Lake Elsinore and near I-15. The neighborhood generally consists of rural residential and commercial uses in the southern portion of the community nearest Highway 74. This area is an activity center due to its proximity to I-15 and its border with the Lake Elsinore Marketplace. Within the residential portion of the community, there is a lack of adequate roadway, pedestrian, and cyclist infrastructure.





New Residential Uses along Highway 74

New Commercial Development along Highway 74

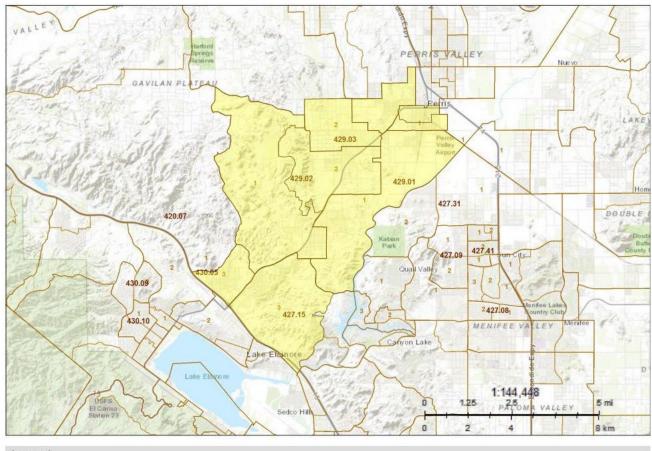
A major job center with large areas designated for Light Industrial is planned along this section of Highway 74 along with a Business Park and two smaller nodes designated for Commercial Retail. These uses will significantly change the character and the activity along Highway 74 through Warm Springs, which is an opportunity area for the corridor.

Five bus stops are in Warm Springs. One (1) of the five is located on an unimproved surface. All have benches and none have shelters.



#### 3.2 **DEMOGRAPHICS**

The source of the demographic data presented in this section is the U.S. Census and American Community Survey estimates at the geographic level of census tract block groups. Block groups are a statistical subdivision of a census tract and are the smallest geographic unit for which the Census Bureau tabulates sample data. A total of nine block group boundaries generally correspond with the communities discussed above, and include a total population of 33,257 residents, based on the most recent estimates available (2017). **Exhibit 3-2** illustrates the census tracts in the planning area.



#### Exhibit 3-2: Census Block Groups in the Planning Area

Legend Your Selections

'Your Selections'

Your Selections Selection Results
2017 boundaries were used to map No Legend

2017 Boundaries
Census Tract
Block Group



	Warm Springs	Meadowbrook	Good Hope
Total Population	1,417	2,656	9,369
Median Age (years)	39.6	41.5	28.3
Median Income (dollars)	\$44,152	\$41,875	\$44,519
Housing Tenure (% of home ownership)	65.2%	68.80%	49.10%
Median Value of Home (dollars)	\$150,300	\$183,200	\$197,500
Race (White alone)	76.3%	45.1%	27.2%
Race (Other/Non-White)	23.7%	54.9%	72.8%
Hispanic or Latino (any race)	35.3%	54.0%	84.8%
Limited English-Speaking Status (% of households)	14.6%	16.1%	31.2%
Poverty Status (% of families)	20.2%	8.0%	29.6%
<b>Source:</b> U.S. Census Bureau, <u>https://factfinder.census.gov</u> Warm Springs data taken from CT 427.15 and CT Meadowbrook data taken from CT 429.01 and 42' Good Hope data taken from CT 428, BG 1 and 2, J	430.05, BG 3. 9.02, BG 1 and 2.	y Survey estimates, accessed	7-24-19 and 6-09-21.

#### Table 3-1: Demographic Data, Warm Springs, Meadowbrook, Good Hope

Notes: CT = Census Tract, BG = Block Group

**Table 3-1** shows the demographic data for all the study area census tract block groups. Demographic characteristics tend to vary somewhat between the three different communities. The Warm Springs populations has higher median incomes, median home values, and percentages of White/non-minority residents. Meadowbrook generally has a high percentage of home ownership, low median home values, high percentages of non-White/minority residents. The population also has a high percentage of limited English-speaking proficiency, and low percentages of families living in poverty. The Good Hope population generally has the lowest median ages and median incomes in the study area with the highest percentages of Hispanic/Latino residents in the study area. The population also has the low percentages of limited English-speaking proficiency and the highest percentages of families living in poverty in the study area.



### 3.3 ENVIRONMENTAL JUSTICE (EJ) COMMUNITIES

Senate Bill 535 (SB 535), signed into law on September 30, 2012 by Governor Jerry Brown, requires the California Environmental Protection Agency (CalEPA) to identify disadvantaged communities based on geographic, socioeconomic, public health and environmental hazard criteria. In April 2017, CalEPA released its list of disadvantaged communities located throughout the State, which was compiled using the California Communities Environmental Health Screening Tool 3.0 (CalEnviroScreen 3.0), a tool that assesses all census tracts in California to identify the areas that are disproportionately burdened and vulnerable. Affected communities are:

- Disproportionately affected by environmental pollution and other hazards that can lead to negative public health effects, exposure, or environmental degradation and/or
- Areas with concentrations of people that are of low-income, high unemployment, low levels of home ownership, high rent burden, sensitive populations, or low levels of educational attainment.

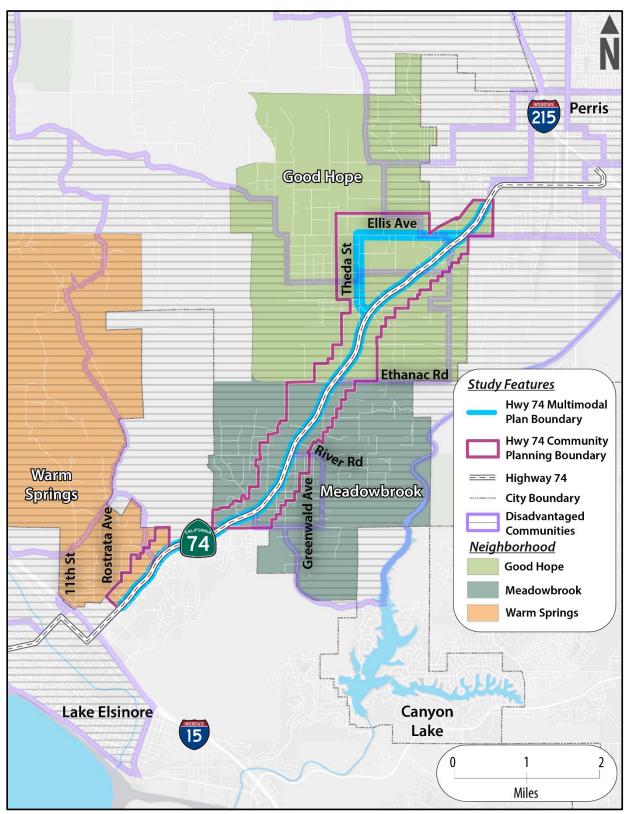
A review of CalEPA's most recent (2018) published list of disadvantaged communities shows that the following four census tracts have been designated as disadvantaged communities:

- Census Tract 6065042800
- Census Tract 6065042901

- Census Tract 6065042902
- Census Tract 6065043005

These four tracts make up the majority of the Planning Area as illustrated in **Exhibit 3-3**. All of Warm Springs is designated as disadvantaged, as is most of Meadowbrook and about half of Good Hope, including the entire length of Highway 74 through the Planning Area. This information is key as many transportation grant funds in the California, including the Active Transportation Program (ATP) grant provide additional points, considerations and set aside funding for projects located within disadvantaged communities.





**Exhibit 3-3: Disadvantaged Communities** 



#### 4.0 Transportation Infrastructure and Transit Services

Transportation and services in the Planning Area fall into five categories: roads, walkways, bicycle infrastructure, transit services, and bus stops. Each are described in this section. The final subsection covers safety, a critical concern among community members.

#### 4.1.1 Roads

Highway 74 is a five-lane roadway with two travel lanes in each direction, a center two-way left turn lane and a 55 mile per hour posted speed limit. (See the photo below that shows the existing roadway.) Traffic flows and access are managed by signals at major cross streets and stop signs at minor streets and driveways. The Highway 74 corridor in the Planning Area may be divided into two sections (northern section and southern section, logically divided at Ethanac Road.



The northern section of Highway 74 passes through Good Hope and is designated as an Arterial Highway according to

**Existing condition of Highway 74** 

the *Riverside County General Plan (December 12, 2017) Circulation Element* (See **Exhibit 4-1**). An Arterial Highway is a divided roadway primarily designed to carry through traffic and where access from abutting property is kept to a minimum. Controlled intersections along Arterial Highways should occur at a minimum of <sup>1</sup>/<sub>4</sub>-mile intervals. Arterial Highways are four to six lanes and require 128 feet of right-of-way. A typical cross-section of an Arterial Highway appears below.

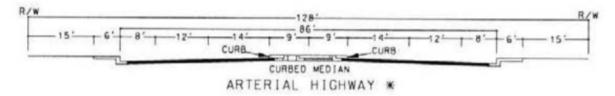


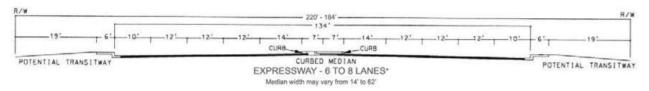
Exhibit 4-1: Riverside County Typical Arterial Highway Typical Cross-Section

SOURCE: RIVERSIDE COUNTY GENERAL PLAN, CHAPTER 4: CIRCULATION ELEMENT (DECEMBER 12, 2017)

The southern section of Highway 74 from the southern end of Good Hope to Lake Elsinore is designated an Expressway (See **Exhibit 4-2**) according to the *Riverside County General Plan Circulation Element*. An Expressway is a multi-modal roadway primarily design to carry through traffic to which access from abutting property is restricted. Controlled intersections along Expressways are limited to approximately <sup>1</sup>/<sub>2</sub>-mile intervals. An Expressway corridor is six to eight lanes and the minimum right-of-way requirement is 184 to 220 feet. A typical Expressway cross-section appears below.







Source: Riverside County General Plan, Chapter 4: Circulation Element (December 12, 2017)

Level of Service (LOS) targets are used to assess the performance of a street or highway system and the capacity of a roadway. LOS is determined based on Average Daily Traffic (ADT), which represents the average number of vehicles traveling in either direction at a given location for a 24-hour period. In the Planning Area, the 2016 baseline ADT ranges from 25,275 to 39,958<sup>4</sup> vehicles per day (See **Table 4-1**).

Location	Classification	ROW Width	ADT LOS D Capacity	Year 2016 ADT	Year 2045 ADT	2045 LOS
Highway 74 north of Ethanac Road	Arterial	128'	36,800	25,275	38,160	E
Highway 74 south of Ethanac Road	Expressway	128'-220'	36,800	26,500	33,940	D
Highway 74 just north of I- 15 Interchange	Expressway	184'-220'	55,200	39,958	56,600	E

#### Table 4-1: Average Daily Traffic Volumes: 2016 and 2045

SOURCE: ETHANAC EXPRESSWAY TRAFFIC OPERATIONS REPORT (FEHR & PEERS, FEBRUARY 2018)

The *County of Riverside General Plan Circulation Element* designates Highway 74 in the Planning Area as a minimum acceptable LOS of D. With an LOS D Capacity of 36,800 vehicles per day for the four-lane section of the highway and a baseline 2016 ADT of 25,275 to 26,500 vehicles per day, Highway 74 currently operates at an acceptable LOS according County standards. Closer to the I-15 interchange, the volume on the roadway increases to 39,958 vehicles per day, which again is below the daily threshold of 55,200 vehicles per day for the six-lane section of Highway 74.

In the future, traffic volumes along the corridor are anticipated to increase as a result of regional and local growth. By the year 2045 daily traffic volumes along Highway 74 are anticipated to increase roughly 40% to approximately 33,940 to 38,160 vehicles per day in the four-lane section and 56,600 vehicles per day in the six-lane section within the Planning Area. Without roadway improvements, by 2045, most of the corridor will be over capacity in this area.

<sup>4</sup> ETHANAC EXPRESSWAY TRAFFIC OPERATIONS REPORT (FEHR & PEERS, FEBRUARY 2018)



#### 4.1.2 Walkways

Pedestrian facilities include sidewalks and paths. Sidewalks are typically concrete pathways within the right of way with a minimum width of five feet. Pathways tend to have paved, decomposed granite, wood, or dirt tread. Some pathways are dedicated to pedestrians and others are multi-use, shared facilities for pedestrian, bicyclists and/or equestrian users. Where sidewalks or pathways are not available along Highway 74, evidence of "goat trails" indicate that pedestrians walk on the soft dirt shoulder or the paved shoulders of the roadway.

In the Planning Area, sidewalks are most typically located near bus stops to meet Americans with Disabilities Act (ADA) requirements. In locations where sidewalks are provided, they extend approximately 200 feet at the bus stop. If the stop is near an intersection,

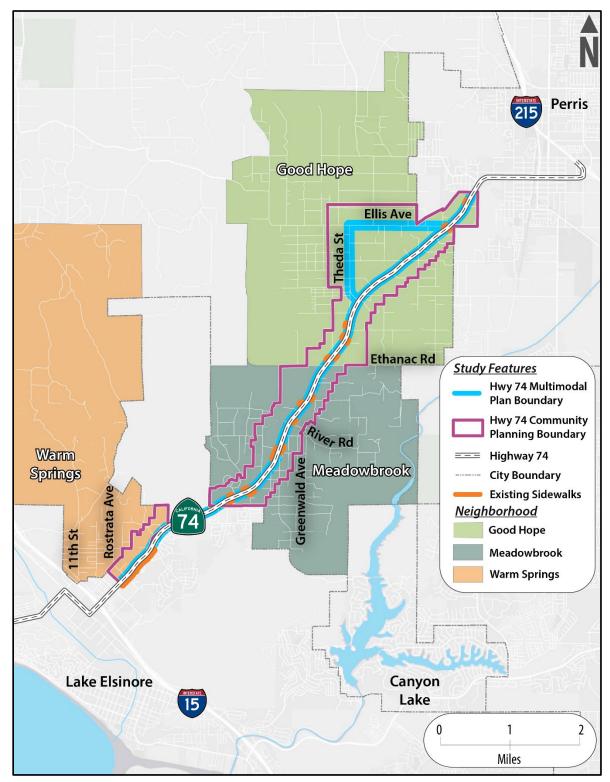


Highway 74 with a Paved Shoulder and No Sidewalk

the sidewalk may extend further to connect to the adjacent the intersection. ADA ramps are provided at some, but not all intersections. As shown in **Exhibit 4-3**, most pedestrian facilities are isolated to the bus stops and are not connected to neighborhoods, shopping, or job centers. This results in a lack of corridor connectivity.

Where sidewalks do not exist, pedestrians walk along the edges of the highway on wide shoulders adjacent to cars, trucks, buses, and bicyclists. As a result, pedestrians are placed adjacent to fast moving traffic producing significant speed differentials. (See photo above that shows the highway, which has a paved shoulder and no sidewalk.)





**Exhibit 4-3: Existing Pedestrian Facilities** 



#### 4.1.3 Bicycling infrastructure

Bicycle infrastructure is separated into Class I (multi-use trail), Class II (bicycle lanes), Class III (bicycle route) and Class IV (cycle track) facilities. Class I multi-use trails are shared trails that are separated from vehicular traffic by a physical barrier such as a curb, barricades or planting strip. Class II bicycle lanes are painted lanes dedicated to bicycle travel on roadway and may include a striped buffer. These occur at the same grade as the roadway and bicycle travel in the same direction as vehicular traffic. Class III bicycle routes include signs and pavement marking, but no dedicated space for bicycles. Typically "sharrows" are painted on the surface of the road indicating to the bicyclist and the driver that the lane is shared by both vehicles and bicyclists. Class IV cycle tracks are dedicated bicycle facilities – separated from pedestrians and vehicles – that have a physical separation. This may include a raised curb, delineators, landscaping or other physical barriers that prevent autos and pedestrians from entering the bicycle facility.

In the Planning Area, Class II bicycle lanes are provided through the Warm Springs community (illustrated in **Exhibit 4-4**) for approximately one mile from Allan Street to Trellis Lane.

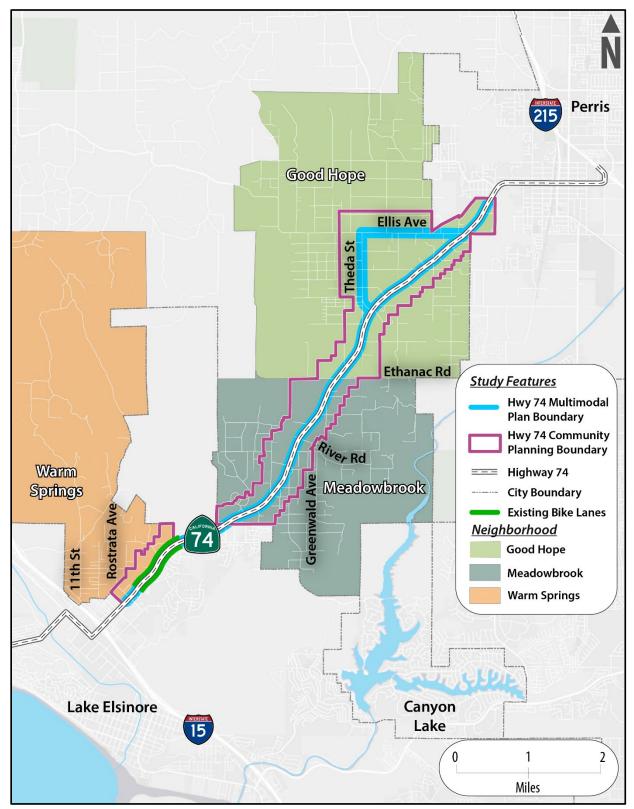
A common metric for bicycle conditions is Level of Traffic Stress (LTS). LTS is a data-based metric that evaluates roadways for stress created by roadway design, traffic volumes, and traffic speeds. A higher LTS reflects higher levels of stress on a scale from 1 to 4. The numbers indicate:

- LTS 1 Bicyclists of all ages and abilities may choose to ride
- LTS 2 Most adult bicyclists may choose to ride
- LTS 3 Experienced bicyclists may choose to ride
- LTS 4 Strong and fearless bicyclists may choose to ride

As a high-volume roadway with prevailing speed greater than 50 miles per hour as described in Section 4.1.1., Highway 74 has an LTS 4 rating. The remainder of the Highway 74 corridor does not have designated bicycle facilities. Consequently, bicyclists, like pedestrians as described above, travel on the existing eight-foot (8') paved shoulder along both sides of the roadway. (See the photo in Section 3.1.2 of the highway with a paved shoulder and no sidewalk.) Obstacles within the shoulder and high-speed vehicles along the corridor create hazardous conditions for cyclists.









#### 4.1.4 Bus Stops

Thirty bus stops are located along RTA's Route 9 within the Planning Area neighborhoods. Bus stop amenities range from a standalone sign to stops with signage, lighting, a bench and, in a few locations, a shelter (See the photos to the right showing existing bus stop amenities.) Bus stops are located along the full length of the Planning Area and distance between stops varies between 0.1 mile and over 1 mile (See **Exhibit 4-5**).

#### 4.1.5 Transit Services

Riverside Transit Agency (RTA) provide both fixed-route bus service and a Dial-A-Ride service. Fixed-route bus service has designated end points and stops. Passengers travel to the stops to catch the bus (also known as boarding). On their return trip, the get off the bus and travel to their place of origin (also known as alighting).



**Existing Bus Stop Amenities** 

Highway 74 is serviced by Route 9 with the Perris Transit Station at one

end and the Lake Elsinore Outlets at the other end. Daily service operates Monday through Saturday. Weekdays between 5 AM and 7 AM, buses arrive approximately every thirty minutes. During the rest of the day, Route 9 buses arrive approximately every hour. The time between buses is called headway.

At the Lake Elsinore Outlets at the southern terminus of Route 9, riders may connect to Wildomar via Route 8 and other destinations on additional RTA Routes (19, 19A, 22, 27, 28, 30, 61, 74, and 208). The outlets and surrounding areas also include destinations such as jobs, medical offices, business offices, post offices, churches, retail stores, and entertainment options.

The northern terminus of Route 9 is the Perris Transit Station. Connections at the Transit Station include Metrolink trains and other RTA buses. Passengers may connect to Metrolink's 91/Perris Valley Line, connecting to downtown Riverside, Orange County, and downtown Los Angeles. RTA connections include Routes 9, 19, 22, 27, 28, 30, 61, and 74. From the Perris Transit Station, riders may reach a library, a museum, churches, Riverside County offices and services, places for community gatherings, and a variety of retail and restaurant options.

#### 4.1.6 Ridership

Data compiled by RTA indicates there are approximately 46 boardings and 37 alightings during an average day at all stops combined. Like other unincorporated areas, boardings and alightings are much lower than in heavily populated areas. Riders span all ages including young adults, seniors, and a smaller number of middle age adults. **Exhibit 4-6** shows the boardings and alightings at each bust stop on Riverside Transit's Route 9 in the planning area.



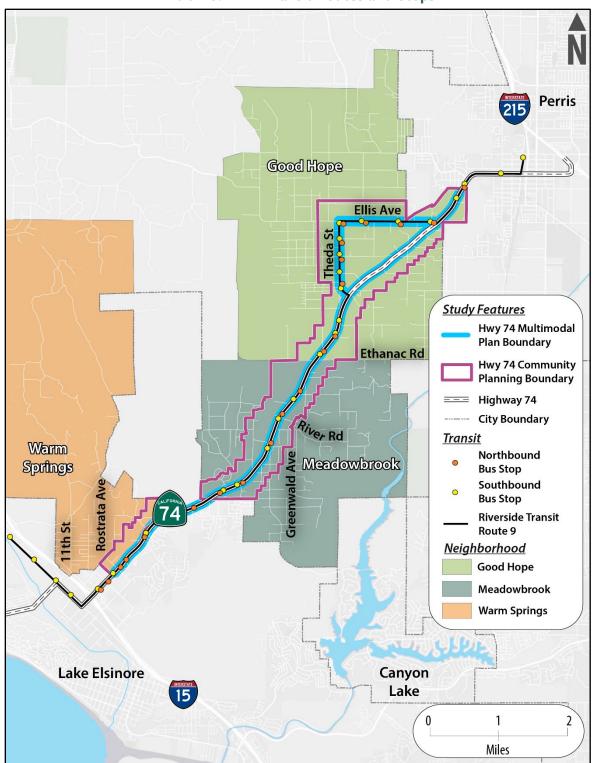


Exhibit 4-5: RTA Transit Routes and Stops



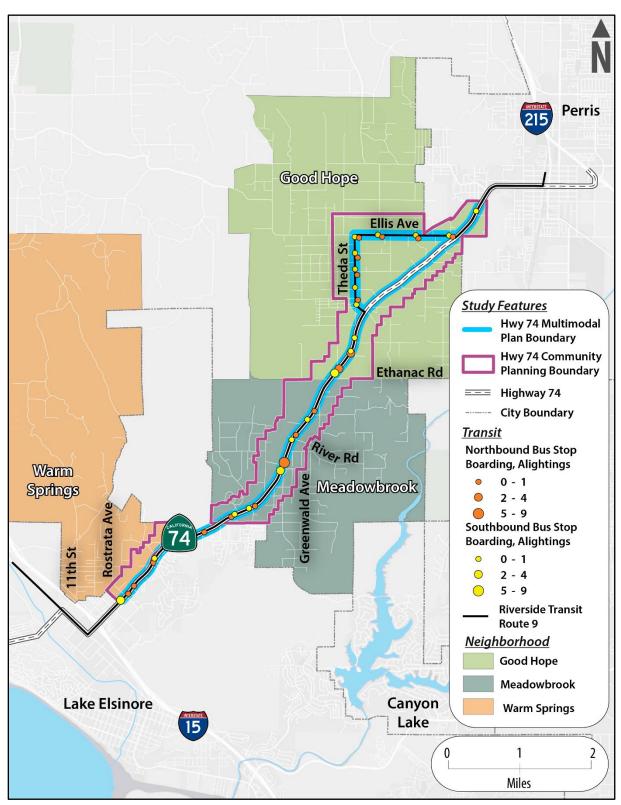


Exhibit 4-6: RTA Boardings and Alightings



#### 4.1.7 Safety

As previously mentioned, Highway 74 has a disconnected network of bicycle and pedestrian facilities along its length. In areas with insufficient facilities, residents are forced to use paved or unpaved shoulders along the highway. High-speed differentials and reckless driving can pose a significant danger to non-motorist.

To better assess existing safety conditions along Highway 74, a preliminary collision analysis was conducted using historic collision data.<sup>5</sup> The data includes collisions that resulted in injury or fatality, with property damage only collisions excluded from the data set. A total of 196 collisions (excluding property damage only collisions) were reported in the Planning Area during the five-year analysis period. Of the 196 collisions reported, 184 collisions were injury and only and 12 resulted in fatalities.

**Table 4-2** summarizes the corridor collision rate per million miles traveled. With a rate of 0.47 collisions per million miles traveled, the Planning Area rate matches the overall Caltrans District 8 fatality and injury collision rate for highway facilities of this type, which is also 0.47 collisions per million miles traveled. As a point of comparison, the statewide average is 0.40 per million miles traveled. The Planning Area roadways have a higher average collision rate than the statewide average on similar roadways. **Exhibit 4-7** displays the collisions by type that occurred in the planning area on Highway 74 from 2014-2018.

Roadway	Segment	No. Lanes	Collisions Recorded <sup>1</sup>	Time <sup>2</sup> (years)	ADT <sup>3</sup>	Length (miles)	Highway 74 Area	Hwy 74 Collision Rate <sup>4</sup> (MVM)	District 8 Rural Collision Rate <sup>5</sup> (MVM)
Highway 74	I-15 NB Ramps to W 7th St	4	196	5	27,401	8.26	Rural	0.47	0.47

Footnotes:

1. Total number of accidents that have occurred along the Highway 74 segment.

2. Analysis time period is 5 years.

3. ADT-Average Daily Traffic

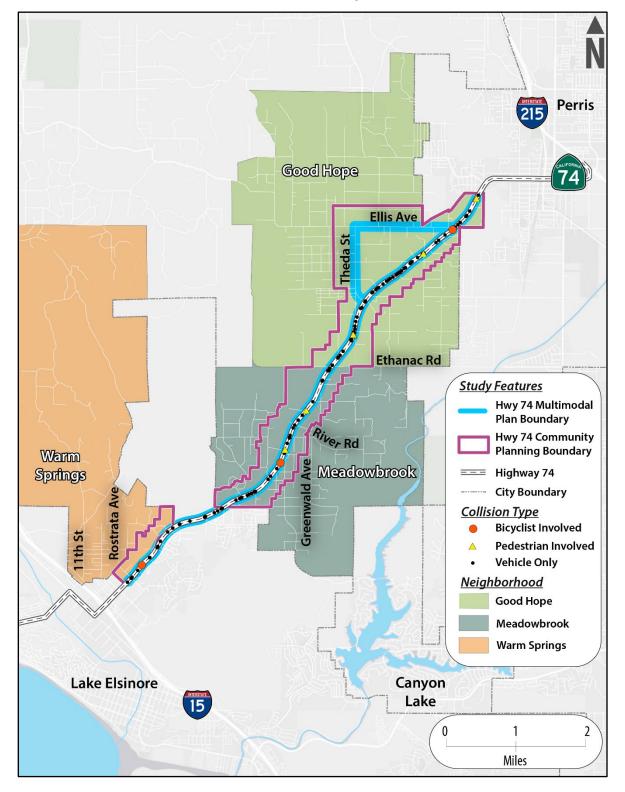
4. Accident rate is calculated as (1,000,000 x Collisions)/(Volume x 365 x Years x Length).

5. Caltrans average accident summary rate in District 8 of 4-lane divided roadway segments for rural areas. MVM = Million Vehicle Miles

<sup>5</sup> Statewide Integrated Traffic Records Systems (SWITRS) collision data was collected through the Transportation Injury Mapping System (TIMS) from January 1, 2013 to December 31, 2018 (5 years).



Exhibit 4-7: Collision Map 2014-2018





**Table 4-3**, summarizes the data by Collision Type. Rear ends and broadside collisions make up the highest percentage. The rate of such collisions is expected to be higher than vehicle/pedestrian involved collisions because of the higher relative volume of vehicles. Pedestrian involved collisions make up for 4% of the total crashes that occurred along the corridor.

Collision Tyme	Total			
Collision Type	Number of Collisions	Percent		
Head On	27	14%		
Sideswipe	16	8%		
Rear End	58	30%		
Broadside	55	28%		
Hit Object	19	10%		
Overturned	11	6%		
Vehicle/Pedestrian	7	4%		
Other	2	1%		
Unknown	1	1%		
Total	196	100%		

#### Table 4-3: Collision Type Summary

Source: Transportation Injury Mapping System (TIMS) Statewide Integrated Traffic Records Systems (SWITRS) Collision Data, 1/1/2013 to 12/31/2018.

A total of ten collisions involved bicyclists or pedestrians. These collisions are summarized in **Table 4-4**. Of the ten collisions reported, four were fatal. The four fatalities that occurred along Highway 74 were all pedestrian related and occurred near the intersections at Margarth Street, Kimes Lane, and Greenwald Avenue. At Margarth Street and Kimes Lane intersections, there are no designated or controlled (signalized) pedestrian crossings.

#### Table 4-4: Bicycle/Pedestrian Related Collision Summary by Severity

V	Number of Collisions					
Year	Fatal	Injury (Severe)	Injury (Other Visible)	Injury (Complaint of Pain)	Total	Percent
Bike	0	1	1	2	4	40%
Pedestrian	4	1	0	1	6	60%
Total	4	2	1	3	10	100%

Source: Transportation Injury Mapping System (TIMS) Statewide Integrated Traffic Records Systems (SWITRS) Collision Data, 1/1/2013 to 12/31/2018.



#### 5.0 Community Engagement Findings

The County's goal for the planning process was to develop a plan for the community that was tailored to community needs based on input from the residents. Outreach to the community allows residents to express concerns, provide comments, and identify preferred solutions. The outreach process was developed in partnership with the Advisory Group and outreach results were shared with the Advisory Group to help interpret and validate input from the broader community. A detailed description of the outreach methods and results are provided in **Appendix C, Public Outreach Summary.** This section focuses on the collective results of ridership surveys, popup surveys, and community workshops.

#### 5.1 ADVISORY GROUP

The Advisory Group was assembled at the outset of the planning process in order to receive their input as early in the process as possible. The Advisory Group comprised of key stakeholders including agency staff and local residents. Two Advisory Group meetings were held in 2019, the first meeting in June 2019 was to introduce the advisory group to the proposed planning process and receive





preliminary input on the plan approach. The second meeting was to receive input from the advisory group on the propose improvement types that were developed based on community input. Detailed summaries are included below.

#### 5.1.1 Advisory Group Meeting One

On June 13, 2019 the County of Riverside held an advisory group meeting to kick-off public outreach for the Highway 74 Multi-Modal Transit Plan project. The meeting was approximately two hours and consisted of a brief presentation from the project team as well as an open discussion regarding the Plan, local conditions and areas of concern within the Plan Area, and key focus areas.

#### *Key takeaways from the advisory group during the first meeting included:*

- The community has many residents who have one car, or do not have a family vehicle
- Stakeholders perceive Highway 74 as unsafe for pedestrians, who often must walk along the shoulder or have to cross the highway without a stop sign or traffic light
- Infrastructure is limited in the corridor
- Surface water is an important consideration
- Stakeholder outreach should include parents, talking to those riding the bus within the corridor
- Elderly and students are key stakeholders have limited transportation options and face challenges reaching transit
- Consider conditions faced by riders who experience rainy and hot weather



#### 5.1.2 Advisory Group Meeting Two

On December 12, 2019 the County of Riverside held a second advisory group meeting to update the group on the findings of the public outreach and receive feedback on potential recommended improvements for the Highway 74 Multi-Modal Transit Plan project. The meeting was approximately 90 minutes and consisted of a brief presentation from the project team as well as an open discussion regarding connections to stops, improvements at stops, roadway extensions at Ethanac and Nicols, roadway safety, and programmatic improvements. Attendees included a number of key stakeholders, including local residents and agency staff.

#### Key takeaways from the advisory group during the second meeting included:

- Improvement Prioritization Criteria
  - Age should be included in the prioritization criteria
- Improvements to Stops
  - o Lighting needs to be added to increase feeling of safety
  - Loitering needs to be watched and reduced
  - Trash cans should be added
  - Shelters should be a condition of future developments
- Connections to Stops
  - Improvements along roads connecting to/adjacent to Highway 74 should be considered
  - Trails may be more feasible than full curb and gutter
  - o Development should include future bike lanes when being approved
- Intersection Improvements
  - o Other regional improvements need to be considered
  - o Pedestrian crossings will need a signal
  - o Intersection improvements will need to consider roadway width
- Programmatic Improvements
  - Programmatic improvements should include policies to require developers to coordinate improvements when development occurs
  - o Connections between public health and alternative transportation should be developed.

### 5.2 COMMUNITY OUTREACH

The County engaged the community in a variety of ways during a two-year period of outreach. The initial round of community outreach occurred in 2019, and consisted of a series of mobile workshops, on-board ridership surveys, and a community design charette. The second round of community outreach was primarily virtual due to the COVID-19 pandemic and consisted of posters and an on-line survey.

#### **5.2.1** Mobile Workshops

Pop-up workshops with surveys were conducted in September 2019. Fifty-six total responses were recorded. Participants were asked which transportation options they use to travel the Highway 74 Corridor and how often. Forty-four respondents stated they travel the corridor in a private automobile at least monthly, while nine carpool daily. Seven respondents reported they use buses, five respondents reported utilizing rideshare services, and two respondents stated they bicycle the corridor at least monthly.



#### 5.2.2 Ridership Surveys

On-board surveys were conducted on RTA buses traveling RTA Route 9 in September 2019. Thirty-five total responses were recorded. Riders were asked which transportation options they use to travel the Highway 74 Corridor and how often. Nine respondents used cars to travel the corridor at least monthly, four additional respondents utilized carpools, thirty-one used buses, twenty-eight walked. Other respondents (1-2 per category) utilized ridesharing, cycling, and dial-a-ride services at least monthly.

#### 5.2.3 Community Design Charette

A community design charette was held on September 10, 2019, at which a presentation regarding the plan was shown followed by small group discussions regarding existing and future riders, barriers to transit, and ideas for improving the corridor. Approximately 18 people attended this charette. Throughout the discussion two key themes emerged, safety and access.

#### Key takeaways from the Charette included:

- Safety Concerns
  - Residents noted that speed along Highway 74 is a problem
  - Residents noted that drivers disregard traffic signals.
  - Residents noted concerns with the narrow shoulders
  - o Residents noted concerns related to limited amount of lighting along the corridor
- Access Concerns
  - People who utilize Route 9 use the route to travel home, but the route itself is distant from residential neighborhoods in the area.
  - The sidewalk gaps and the lack of bicycle facilities also pose a hinderance to access along Highway 74.

#### 5.2.4 Online Survey and Physical Postings (Post-Pandemic Outreach)

Due to the Stay-at-Home order at the beginning of the Covid-19 Pandemic in March of 2020, in-person outreach meetings for the project had to be cancelled. The project was put on hold, pending the ability to once again host meetings in-person. In Spring 2021, in order to re-initiate the project an on-line survey was posted on surveymonkey.com in both English and Spanish. Additionally, flyers regarding the survey as well as posters where residents could provide input were posted at La Guadalupana Market and the Moses Schaffer Community Center. The survey was also posted on the County's social media pages, as well as in the District 1 Newsletter. Responses were not received in response to the online survey nor the posters.