

NEIGHBORHOOD MOBILITY PLAN FOR THE COMMUNITIES OF NORTH SHORE AND MECCA

February 2020

Riverside County
Department of Transportation



[PAGE INTENTIONALLY LEFT BLANK]

NEIGHBORHOOD MOBILITY PLAN FOR THE COMMUNITIES OF NORTH SHORE AND MECCA

February 2020

Prepared for:



Funded by:



With technical and community support from:



Table of Contents

Executive Summary	xii
I. Introduction	1
Purpose of the Plan	2
Mobility Plan Development Processes in the ECV	2
II. Existing Conditions	7
Demographics and Income Indicators	7
Transportation Infrastructure and Connectivity Challenges	20
Environmental Conditions	22
III. Policy and Planning Context.....	27
Local Plans.....	27
Regional Plans	30
Conclusions.....	31
IV. Stakeholder Engagement.....	33
Stakeholder Involvement.....	33
Advisory Group	33
Agency and Tribal Coordination	34
Engagement Events and Public Involvement.....	35
V. Neighborhood Mobility Needs Assessment.....	45
Neighborhood Mobility Needs and Challenges.....	49
Overall Community Mobility Priorities	51
VI. Goals, Objectives, and Strategies.....	57
The Roadmap: Goals, Objectives, and Strategies.....	57
VII. Proposed Improvements and Programs	63
Proposed Multimodal and Pedestrian Facility Improvements.....	63
Proposed Intersection and Pedestrian Crossing Improvements	70
Recommendations for Public Transportation and Shared Mobility	75
Recommended Programs	78

VIII. Phasing, Implementation, and Funding..... 81
 Phasing of Recommended Neighborhood Improvements..... 81
 Potential Funding Sources..... 82
 Conclusion 83

IX. References..... 90

X. Menu of Design Options92

List of Figures

Figure 1. The Plan’s Approach	1
Figure 2. Neighborhood Mobility Plan Areas in the ECV	3
Figure 3. North Shore and Mecca Population Demographics.....	8
Figure 4. North Shore and Mecca Income and Poverty Statistics.....	9
Figure 5. Riverside County Land Use (2015) and Torres Martinez Tribal Land Use (2008)	11
Figure 6. Locations of Existing Facilities in Relation to Existing Housing.....	12
Figure 7. Locations of Existing Facilities in Relation to Existing Housing, North Shore.....	13
Figure 8. Locations of Existing Facilities in Relation to Existing Housing, central Mecca.....	14
Figure 9. Residents using pedestrian facilities along Ave 66 near Brown St in Mecca.....	15
Figure 10. North Shore Neighborhoods.....	16
Figure 11. Important points in Mecca	17
Figure 12. North Shore Existing Conditions Photos.....	18
Figure 13. Mecca Existing Conditions Photos	19
Figure 14. The Desert Riderz, a group of North Shore youth engaging in bike advocacy and repairs.....	21
Figure 15. CalEnviroScreen 3.0 Percentile Scores by Census Tract	24
Figure 16. Statement voting activity at the North Shore workshop, January 2019.....	36
Figure 17. Example of improvement type for infrastructural budgeting exercise.....	37
Figure 18. Corridor prioritization and participatory budgeting activity in Mecca, January 2019.....	37
Figure 19. Updating the community at the second workshop in North Shore, March 2019.....	38
Figure 20. Discussing priorities at the second workshops in March 2019	39
Figure 21. Discussing revisions to the proposed priorities in North Shore in March 2019	39
Figure 22. Presenting the draft Plan to the community in North Shore, November 2019.....	40
Figure 23. Discussing comments with community members in North Shore, November 2019.....	41
Figure 24. Discussing comments with community members in Mecca, November 2019.....	41
Figure 25. A mobile research beacon deployments at Leon’s Market, January 2019.....	42
Figure 26. Results of the Mobile Research Beacon Deployments	43
Figure 27. Discussing known community needs with the Advisory Committee in September 2017.....	45
Figure 28. Neighborhood Mobility Needs Identified by the Project Team and Advisory Group	46
Figure 29. Neighborhood Mobility Needs, North Shore	47
Figure 30. Neighborhood Mobility Needs, Mecca	48

Figure 31. Results from Mobility Challenges Exercise, January 2019..... 49

Figure 32. Synthesized Neighborhood Improvement Requests from Residents, North Shore 52

Figure 33. Synthesized Neighborhood Improvement Requests from Residents, Mecca..... 53

Figure 34. Overall Neighborhood Mobility Priorities, North Shore..... 54

Figure 35. Overall Neighborhood Mobility Priorities, Mecca 55

Figure 36. Proposed Multimodal Facility Improvements, North Shore..... 65

Figure 37. Proposed Multimodal Facility Improvements, Mecca..... 66

Figure 38. Typical Cross-Section: 10-foot Wide Class I Multimodal Path 67

Figure 39. Typical Cross-Section: 10-foot Wide Class I Multimodal Path with Public Transit stop 67

Figure 40. Typical Cross-Section: 5-foot Wide Concrete Sidewalk with Curb..... 68

Figure 41. Typical Cross-Section: 5-foot Wide Sidewalk with Class IV Protected Bikeway..... 68

Figure 42. Proposed Intersection and Pedestrian Crossing Improvements, North Shore..... 71

Figure 43. Proposed Intersection and Pedestrian Crossing Improvements, Mecca72

Figure 44. Community Recommendations for SunLine Improvements, North Shore..... 76

Figure 45. Community Recommendations for SunLine Improvements, Mecca.....77

Figure 46. Proposed Neighborhood Facility Improvements: Short Term (Phase 1), North Shore..... 84

Figure 47. Proposed Neighborhood Facility Improvements: Short Term (Phase 1), Mecca..... 85

Figure 48. Proposed Neighborhood Facility Improvements: Medium Term (Phase 2), North Shore 86

Figure 49. Proposed Neighborhood Facility Improvements: Medium Term (Phase 2), Mecca.....87

Figure 50. Proposed Neighborhood Facility Improvements: Long Term (Phase 3), North Shore..... 88

Figure 51. Proposed Neighborhood Facility Improvements: Long Term (Phase 3), Mecca..... 89

Acknowledgments

Project Team

Riverside County Transportation Department

Patricia Romo, Director of Transportation
Jan Bulinski, Senior Transportation Planner
Frances Segovia, Senior Transportation Planner
Susan Vombaur, Senior Civil Engineer
Brett Craig, Associate Civil Engineer

California Department of Transportation-District 8

Rebecca Forbes, Associate Transportation Planner
Kwasi Agyakwa, Transportation Planner
Ricky Rivers, Transportation Planner
Stephanie Gallegos, Transportation Planner

Kounkuey Design Initiative

Chelina Odbert, Executive Director
Jerome Chou, Planning Director
Lauren Elachi, Senior Design Coordinator
Paola Mendez, Planning Associate
Christian Rodriguez, Community Associate
Nereida Montes, Community Associate

Local Government Commission

Paul Zykofsky, Associate Director
Josh Meyer, Director of Community Planning Programs
Tony Leonard, Project & IT Manager

Inland Congregations United for Change

Karen Borja, Community Organizer
Rosa Bustamante, Community Organizer
Aron de la O, Community Organizer

Leadership Counsel for Justice and Accountability

Mariela Magaña, Policy Advocate
Rebecca Zaragoza, Policy Advocate
Kaylon Hammond, Director of Operations

Lideres Campesinas

Suguet Lopez, Executive Director
Manuela Ramirez, Community Organizer
Maricruz Ramirez, Community Organizer

Stakeholders

Torres Martinez Desert Cahuilla Indians

Robert Powell, Planning Director
Daniel Tirado-Lopez, Environmental Specialist
Beverlyann Cedeno, Council Member Proxy
Columba Quintero, Tribal Grants Administrator

Riverside County Planning Department

Phayvanh Nanthavongdouangsy, Principal Planner
Peter Hersh, Planning Consultant
Jay Olivas, Urban / Regional Planner IV
Roberto Flores, Urban / Regional Planner III
Dionne Harris, Urban / Regional Planner I

Office of Supervisor V. Manuel Perez, Fourth District Riverside County

Shayra Hernandez, East Valley Liason and Agriculture Advisor

Riverside University Health System-Public Health

Miguel A. Vazquez, Healthy Communities Urban Regional Planner
Daisy Ramirez, Health Education Assistant II

SunLine Transit Agency

Victor Duran, Transit Planning Manager
Anita M. Petke, Transit Communications Service Specialist

Coachella Valley Unified School District

Apolonio Del Toro, Director of Transportation

Thermal Oasis Community Council

Ernie Rios, Chair
Mike Wells, Secretary
Jeronimo Contreras
Sergio Duran
Matthew Melkesian
Marco Celedon

Mecca North Shore Community Council

Adrian Rodriguez, Chair
Jaime Gonzales
Janet Rodriguez
Larry French
Rogelio Mendez Estrada

Desert Recreation District

Kevin Kalman, General Manager
Christine Pimentel, Community Services Coordinator

Coachella Valley Association of Governments

LeGrand Velez, Transportation Program Manager

Alianza Coachella Valley

Silvia Paz, Executive Director
Sahara Huazano, Director of Capacity Development

California Walks

Tony Dang, Executive Director
Wendy Ortiz, Community Programs Manager

A special thank you to workshop participants and residents from the communities of North Shore and Mecca.

*[INSERT
RESOLUTION
ONCE PLAN IS
ADOPTED]*

2
3 RESOLUTION NO. 2020-066

4
5 A RESOLUTION OF THE BOARD OF SUPERVISORS OF
6 THE COUNTY OF RIVERSIDE ADOPTING THE NEIGHBORHOOD MOBILITY PLAN FOR THE
7 COMMUNITIES OF NORTH SHORE AND MECCA AND THE REGIONAL MOBILITY PLAN FOR
8 THE UNINCORPORATED COMMUNITIES OF THE EASTERN COACHELLA VALLEY

9
10 **WHEREAS**, the County of Riverside (“County”) has received grant funding from the State
11 of California and federal agencies to perform certain activities, including conducting community outreach
12 activities with the residents and stakeholders in the communities of Mecca and North Shore in the
13 unincorporated Eastern Coachella Valley region to determine possible transportation network and mobility
14 options;

15 **WHEREAS**, in order to achieve the requirements and purpose of the grant funding, the
16 County prepared the Neighborhood Mobility Plan for the Communities of North Shore and Mecca and the
17 Regional Mobility Plan for the Unincorporated Communities of the Eastern Coachella Valley (“Plans”) to
18 provide guidance and would be available for use by the County and other agencies when implementing any
19 mobility options;

20 **WHEREAS**, the Plans do not involve any specific actions to implement any possible
21 mobility options and further environmental review would need to be conducted for such actions;

22 **NOW, THEREFORE, BE IT RESOLVED, DETERMINED AND ORDERED** by the
23 Board of Supervisors of the County of Riverside, in regular session assembled on April 21, 2020, at or after
24 9:30 a.m. or soon thereafter, in the meeting room of the Board of Supervisors located on the first floor of
25 the County Administrative Center, 4080 Lemon Street, Riverside, CA, that the Board hereby adopts the
26 Neighborhood Mobility Plan for the Communities of North Shore and Mecca and the Regional Mobility
27 Plan for the Unincorporated Communities of the Eastern Coachella Valley.

FORM APPROVED COUNTY COUNSEL
BY: *Synthia M. Gunzel* 3-27-2020
DATE: _____
SYNTHIA M. GUNZEL

1 **BE IT FURTHER RESOLVED** that this Board makes available these Plans for use by the
2 County and other agencies for guidance in selecting mobility options in the unincorporated Eastern
3 Coachella Valley and is committed to achieving the goals of these Plans for the benefit of the residents of
4 these communities.

5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28

[PAGE INTENTIONALLY LEFT BLANK]

Executive Summary

The Neighborhood Mobility Plan for the Communities of North Shore and Mecca (Plan) summarizes the community's priorities for more mobility options and a complete transportation network. The Plan envisions an Eastern Coachella Valley (ECV) that is accessible and connected, shaped directly by residents in partnership with agencies and stakeholders. The Plan seeks to:

- Promote multi-modal mobility at both the regional and neighborhood scales
- Promote bicyclist and pedestrian safety
- Promote shared mobility and transit use
- Improve communication between transit agencies, stakeholders, and community members and organizations
- Enhance public health and environmental justice
- Decrease greenhouse gas emissions

To achieve these goals, the Plan proposes a long-term, flexible, and comprehensive network of bicycle and pedestrian infrastructure that connects residents to key community facilities, such as commercial corridors, schools, and clinics. Since this network will take many years to complete, the Plan also identifies a near-term priority of a connected pedestrian framework, as well as a longer-term phased approach for the complete network.

The full recommended network adds over 50 miles of multimodal pathways to North Shore and Mecca, expanding on the sidewalks that already exist in central Mecca to connect each neighborhood and begin building a regional network for multimodal travel.



This Plan envisions an Eastern Coachella Valley that is **accessible** and **connected**, shaped directly by residents in **partnership** with agencies and stakeholders. To achieve this vision, the Plan aims to improve the **physical infrastructure** and transportation services within the area, while also working toward **environmental justice** and **community empowerment** in the Eastern Coachella Valley.

“Para los padres de familia lo más importante es que nuestros niños salgan adelante, y para que eso pase necesitamos que puedan llegar a la escuela de manera segura.”

“For parents, the most important thing is for our kids to come out ahead, and for that to happen we need them to be able to get to school safely.”

**- Mecca Residents
April 2019 Workshop**



I. Introduction

The Neighborhood Mobility Plan for the Communities of North Shore and Mecca (Plan) summarizes the community's priorities for more mobility options and a complete regional transportation network. This Plan sets recommendations for the future development of transportation and mobility infrastructure within the unincorporated communities of North Shore and Mecca in the Eastern Coachella Valley (ECV). The recommendations in this Plan will serve as the blueprint for future transportation planning in these communities, while improving connections to the region at-large and previewing ways in which mobility can evolve in the future within the ECV.

The communities of the ECV, including North Shore and Mecca, have limited transportation infrastructure on the ground due to a variety of reasons. In part, the

current conditions reflect the rural, low-density, and somewhat remote nature of the communities relative to other population centers elsewhere in the Coachella Valley and Riverside County. These challenges have been reflected in lower levels of investment in infrastructure relative to other communities in the region. These conditions compound other complex challenges facing the region, including economic opportunity, social cohesion, and environmental justice.

Given the various interrelated challenges faced by these communities, the key to successful multi-modal transportation is a three-pronged participatory approach that values community and environment as well as infrastructure, as shown in Figure 1. To create a plan that embodies this approach, the County of Riverside Transportation Department organized a

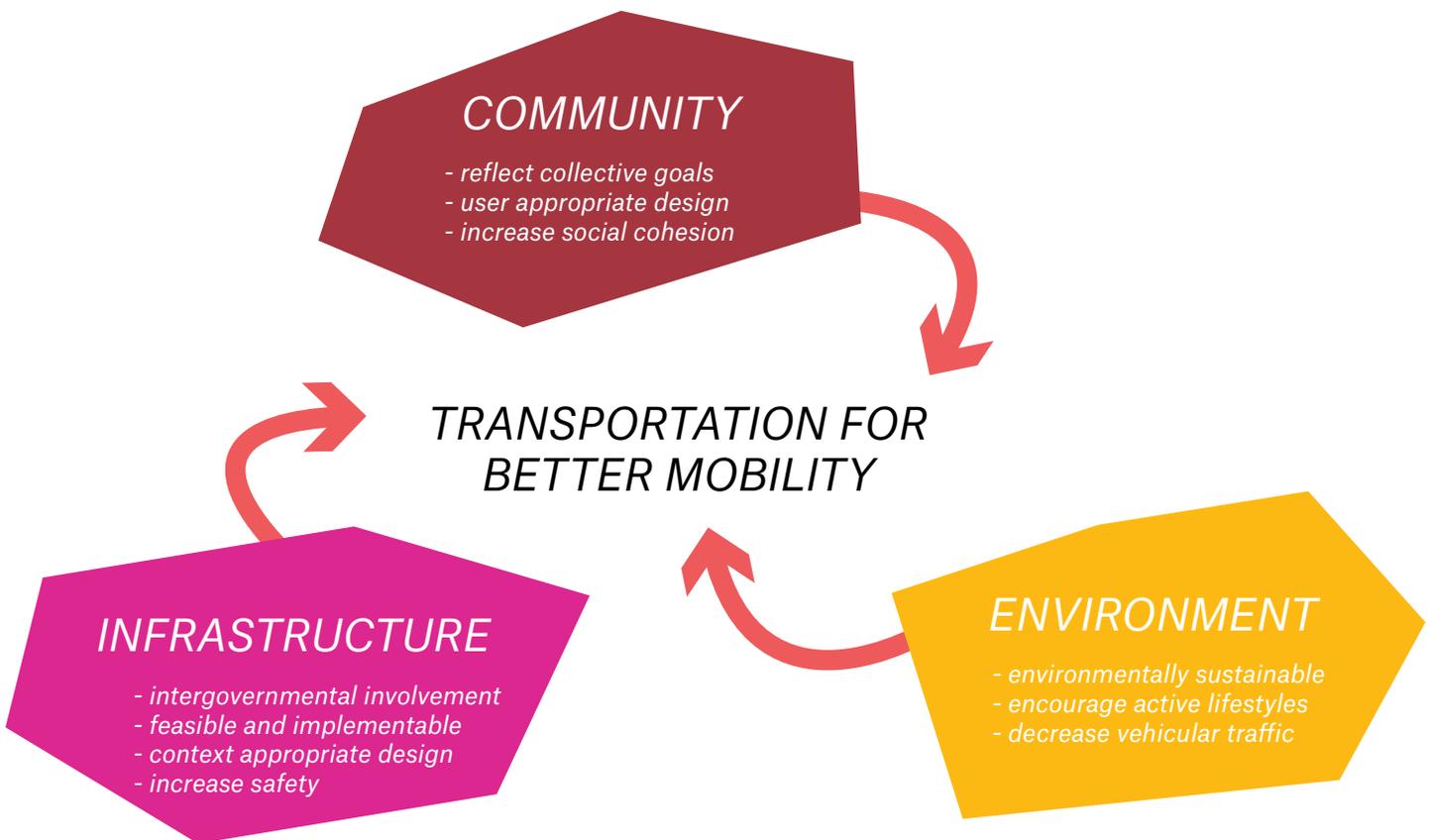


Figure 1. The Plan's Approach

highly participatory planning process to address the concerns of North Shore and Mecca residents. The County partnered with nonprofits, local organizations, and residents to create a plan that is a reflection of community priorities.

Purpose of the Plan

The Plan's purpose is to increase transportation safety by proposing implementable, environmentally sustainable, and context-sensitive solutions to identify and amend barriers to transportation for community members.

The goals of this Plan are to:

- Promote multi-modal mobility at both the regional and neighborhood scales;
- Promote bicyclist and pedestrian safety
- Promote shared mobility and transit use;
- Improve communication between transit agencies, stakeholders, and community members and organizations;
- Enhance public health and environmental justice; and
- Decrease greenhouse gas emissions.

The Plan contributes to the County of Riverside General Plan (General Plan). The General Plan considers all users— including bicyclists, pedestrians, and transit users in addition to motorists, as well as users of all ages and abilities— in planning for all streets. This Plan is consistent with the Southern California Association of Governments (SCAG) Regional Transportation Plan and is expected to reduce greenhouse gas emissions by improving transportation options for lower emission travel by bicyclists, pedestrians, and transit users.

Mobility Plan Development Processes in the ECV

The Plan was funded by a Caltrans Sustainable Communities Planning Grants awarded to the County of Riverside in December 2017. The Sustainable Communities Planning Grant has a mission to promote a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability. In applying for this grant, the County's goal was to expand the comprehensive community-

based planning approach used in the neighboring communities of Thermal and Oasis to North Shore and Mecca. This Plan should be used in conjunction with the *Neighborhood Mobility Plan for the Communities of Thermal and Oasis* and the *Regional Mobility Plan for the Unincorporated Communities of the Eastern Coachella Valley* so that the complete vision for the ECV region can be accomplished.

The County of Riverside and local grassroots organizations recognized the need for a regional mobility plan in the ECV. In June of 2017, the County began preparing a neighborhood plan aimed to identify the mobility needs of residents in Thermal and Oasis and developed corresponding solutions that would begin to address the challenges faced by the region. The *Neighborhood Mobility Plan for the Communities of Thermal and Oasis* was adopted by the County of Riverside Board of Supervisors in January of 2019.

This Plan, for North Shore and Mecca, is seen as an expansion of the Thermal and Oasis effort, applying the same comprehensive community-based planning process to these communities. The North Shore and Mecca planning process kicked off in November 2018, identifying similar mobility needs and synthesizing a plan specific to these neighborhoods. Mobility challenges and recommendations for the unincorporated ECV at the regional scale were also identified through this process, bridging the needs of Thermal, Oasis, North Shore, and Mecca residents and connecting to the broader Coachella Valley region. These findings can be found in the *Regional Mobility Plan for the Unincorporated Communities of the Eastern Coachella Valley*. Each of these plan areas is shown in Figure 2.

Throughout this Plan development, a community-based planning process was utilized. Residents expressed a desire for this type of planning process and assisted in developing a mobility plan to prioritize challenges of transportation and mobility within their communities in addition to increasing access to better socio-economic opportunities, amenities, and community resources. This Plan reflects these multiple priorities, and lays out a path to build social resilience and community cohesion alongside needed infrastructure improvements.

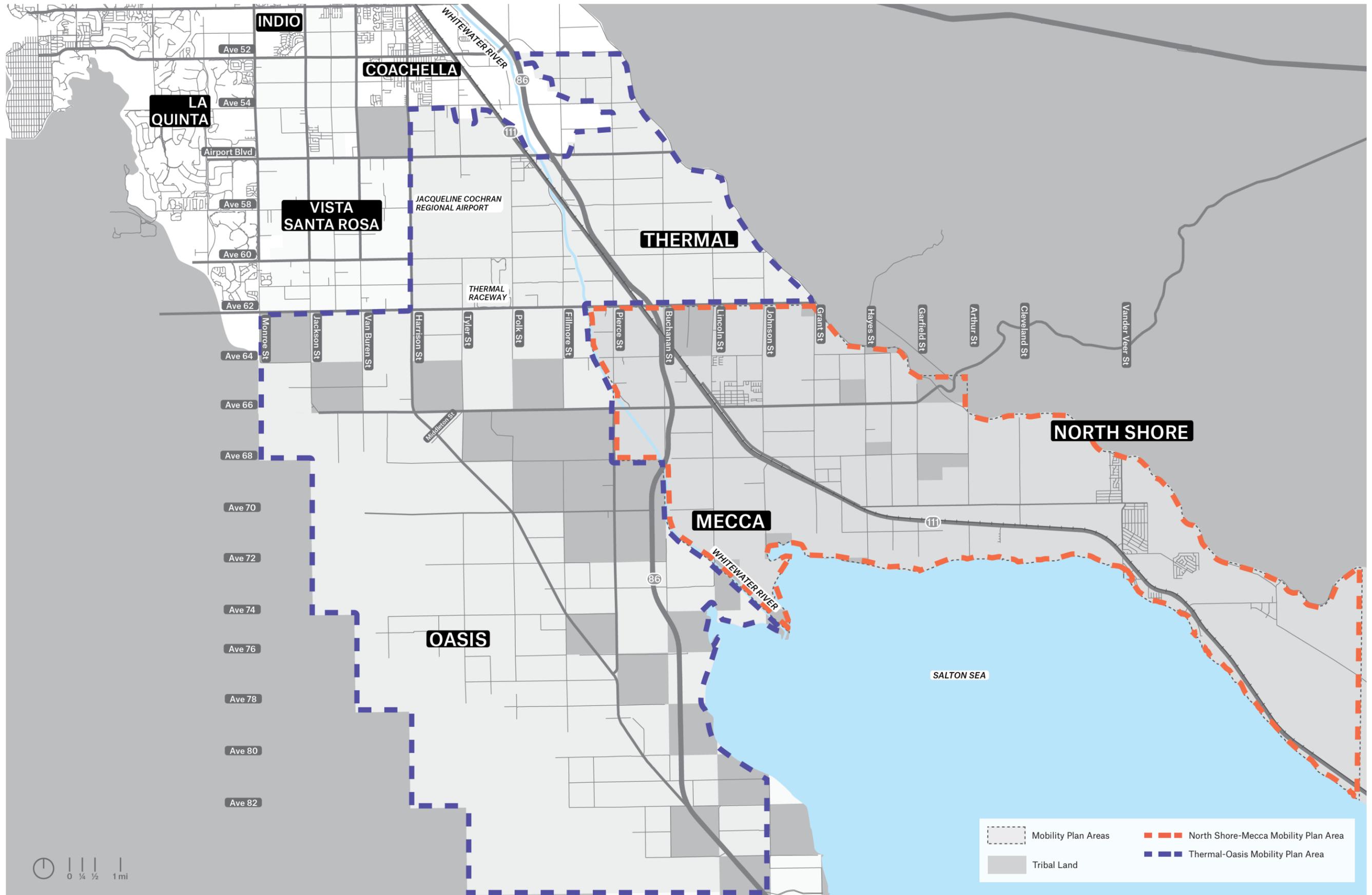


Figure 2. Neighborhood Mobility Plan Areas in the ECV

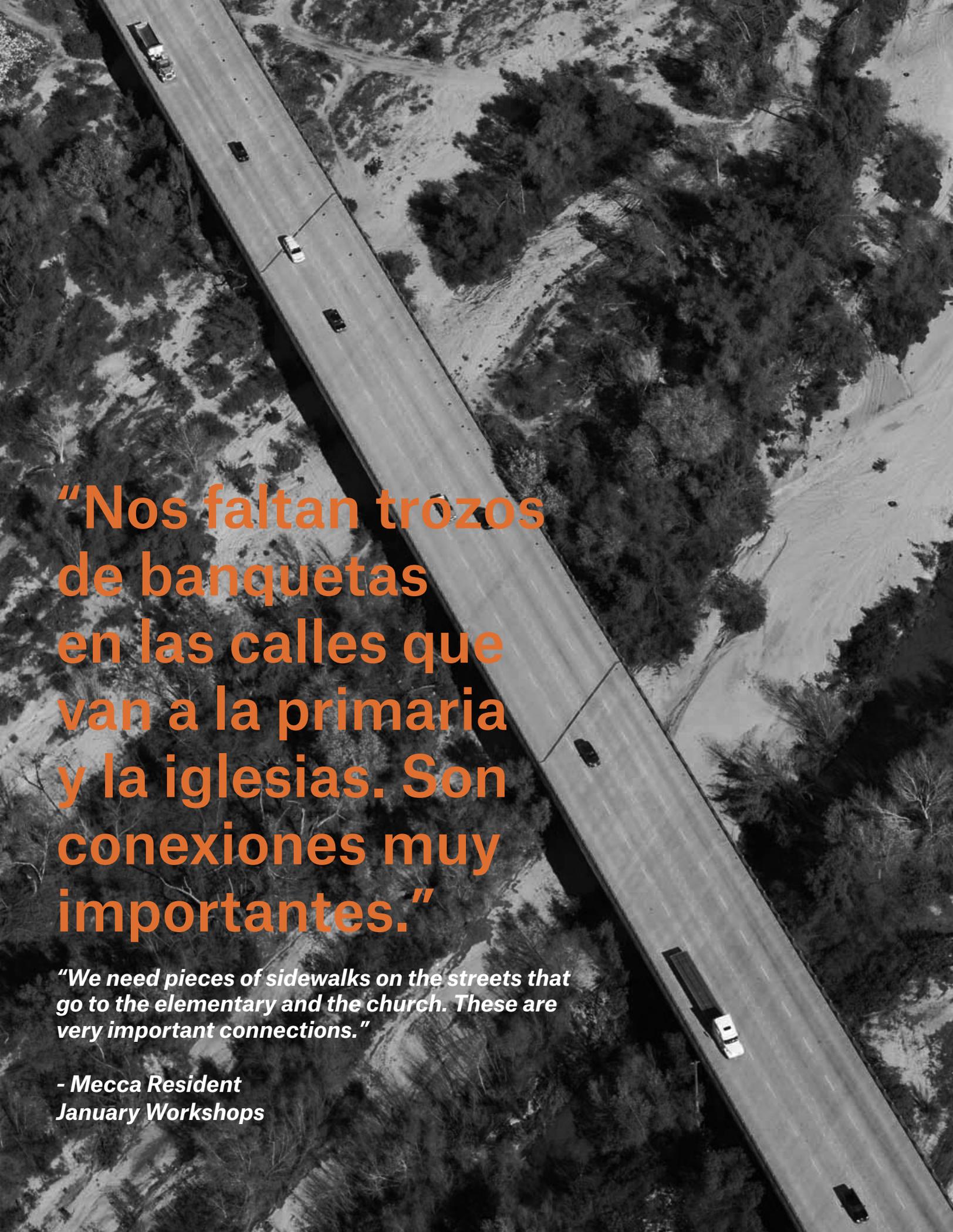
[PAGE INTENTIONALLY LEFT BLANK]

Within the community, an active Transportation Justice Coalition made up of local nonprofit organizations— including Inland Congregations United for Change (ICUC), Leadership Counsel for Justice and Accountability (LCJA), Lideres Campesinas, and Kounkuey Design Initiative (KDI)— has been working with residents for several years, as part of an initiative of The California Endowment’s Building Healthy Communities campaign (now called Alianza) in the ECV. Many of those nonprofits were included as part of the project team for this Plan. Their inclusion ensured that many of the basic needs of the community that had already been expressed were integrated into the Plan from day one, allowing for a productive and more focused set of stakeholder engagement events.

The Plan was developed through community support, built through a series of workshops that were held to not only solicit feedback on the planning framework but to invite residents into the decision-making process. Three public workshops were held in the communities of North Shore and Mecca in addition to a variety of mobile community engagement events. In January 2019, the first set of public workshops occurred in each community and residents were asked to share what type of infrastructure they thought was needed and where. Based on feedback obtained from residents, initial priorities and facility improvement recommendations were developed. In April 2019, the second set of public workshops occurred to engage residents around the desired phasing and prioritization of the Plan, and asked residents to think about regional priorities. Prior to the third set of workshops, the draft Plan was vetted through an Advisory Group consisting of stakeholders at the community, regional, and County level in October 2019. In November 2019, the third and final set of workshops were held, where the draft Plan was presented to residents to ensure that all community input was integrated into the final Plan.

Compliance with Other Planning Efforts

This Plan is consistent with Riverside County’s stated priorities via the General Plan Circulation Element and the ECV Area Plan, both of which aim to make the County more welcoming to active transportation usage and less automobile-centric.



“Nos faltan trozos de banquetas en las calles que van a la primaria y la iglesias. Son conexiones muy importantes.”

“We need pieces of sidewalks on the streets that go to the elementary and the church. These are very important connections.”

*- Mecca Resident
January Workshops*

II. Existing Conditions

Overview

The Coachella Valley in Riverside County covers approximately 675 square miles, bounded to the south by the Salton Sea, to the north by Joshua Tree National Forest, to the east by the Little San Bernardino Mountains and to the west by the San Jacinto and Santa Rosa Mountains. Desert throughout, the Western and Eastern sides of the valley vary widely in terms of demographic makeup, income distribution, and infrastructure development.

The Eastern Coachella Valley (ECV) is defined by locals and advocates as including the cities of Indio and Coachella as well as the unincorporated communities of Thermal, Oasis, Mecca, and North Shore to their southeast.¹ The more highly populated tourist area of the Western Coachella Valley, which includes cities like Palm Springs, has experienced steady economic development and has largely been able to provide the infrastructure required to adequately serve its residents and visitors.² However, the ECV, though close in proximity and interconnected economically with the Western Coachella Valley, has not experienced the same level of development.

This Plan addresses the needs of two of the unincorporated communities of the ECV— North Shore and Mecca. A previous plan, adopted by the Board of Supervisors in January 2019, addressed the communities of Thermal and Oasis. This Plan builds on the Thermal and Oasis effort, gathering similar local data for North Shore and Mecca. The needs of all four communities are described in detail within their respective plan, and findings at the regional scale are addressed in the Regional Plan for the unincorporated ECV.

The ECV, like many other parts of the Coachella Valley, includes land belonging to Native American Tribes—primarily the Torres Martinez Desert Cahuilla Indians, the St. Augustine Band of Mission Indians (St. Augustine), and the Cabazon Band of Mission Indians (Cabazon). While all three Tribes have land within the area covered by this Plan, the project team primarily coordinated with the Torres Martinez Desert Cahuilla Indians due to their active participation. Continued efforts to keep the St. Augustine and Cabazon Tribes informed were facilitated through the Advisory Group communications.

Demographics and Income Indicators

The demographic profile of the ECV differs in many ways from that of the Western Coachella Valley and Riverside County as a whole. The populations of Mecca and North Shore are over 98% Latino, with many monolingual Spanish speakers.

The Southern California Association of Governments (SCAG) has projected that there will be 581,300 people in the Coachella Valley in 2020, a 38% increase from 2008. The unincorporated areas of the valley are expected to see half of all the anticipated population growth between 2008 and 2035.³

A major hub of agricultural production for California, the ECV is part of the backbone of the American food system, representing \$526 million in gross agricultural value and employing over 40% of the working adults in these communities; for additional demographic information refer to Figure 3 and Figure 4.⁴ Transportation to and from work is key to the economic prosperity of these communities. Currently,

1 London, J., Greenfield, T., Zagofsky T. (2013). Revealing the Invisible Coachella Valley: Putting Cumulative Environmental Vulnerabilities on the Map. Davis CA: UC Davis Center for Regional Change.

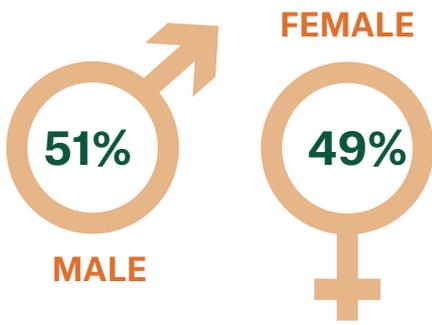
2 London, J., Greenfield, T., Zagofsky T. (2013).

3 SunLine Transit Agency Short Range Transit Plan FY 2018-2019.

4 London, J., Greenfield, T., Zagofsky T. (2013).

POPULATION DEMOGRAPHICS

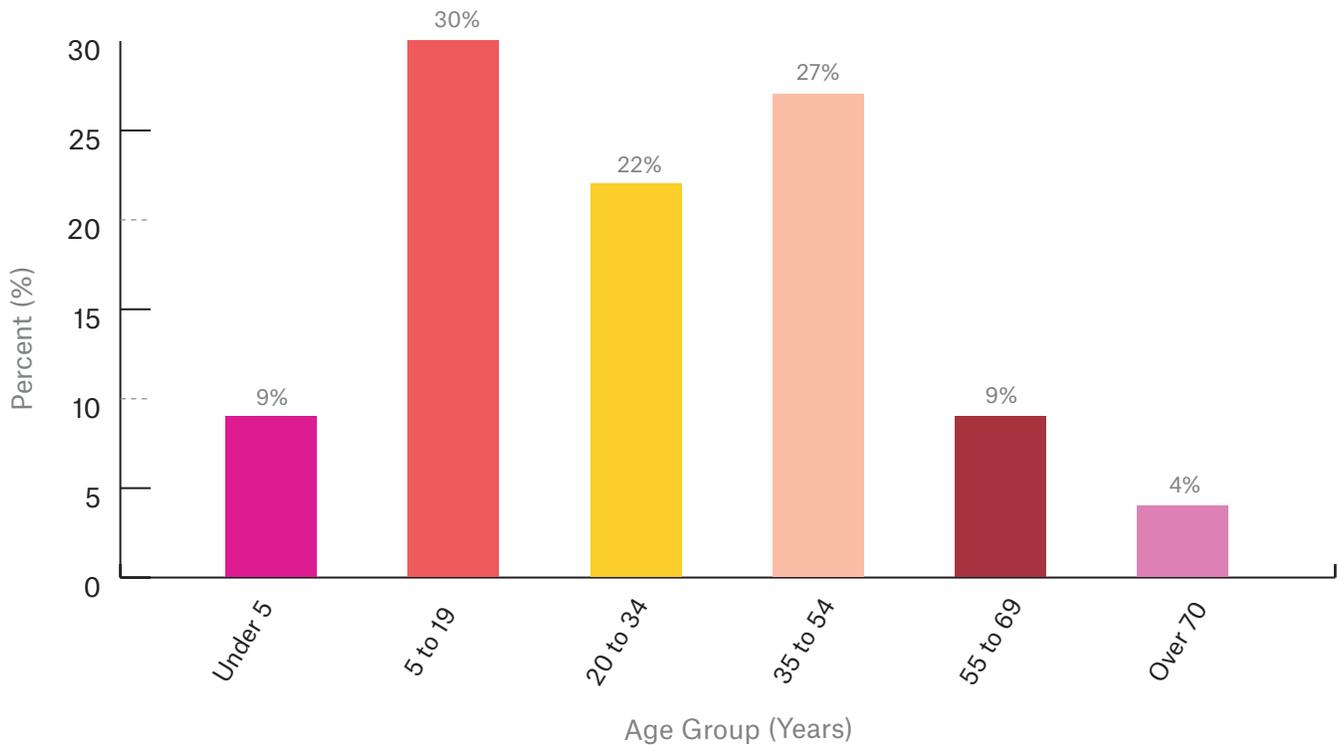
GENDER BREAKDOWN



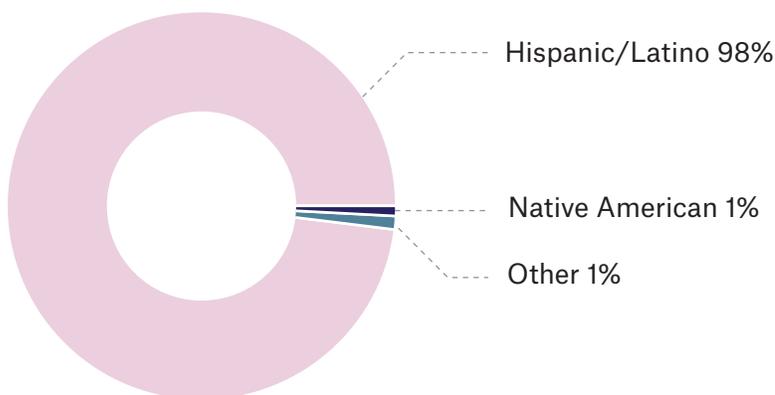
TOTAL POPULATION

NORTH SHORE	3,349
MECCA	7,893
UNINCORPORATED ECV	16,648

NORTH SHORE + MECCA AGE DISTRIBUTION



ETHNICITY



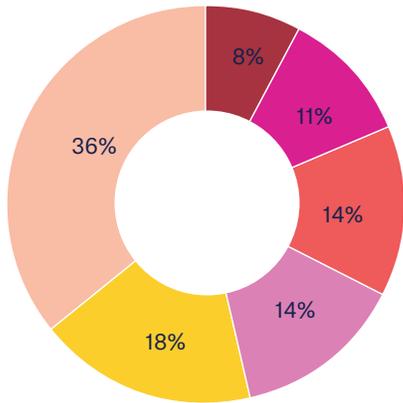
LANGUAGE PREFERENCE

- 97%** Spanish speaking households
- 30%** Bilingual in English and Spanish
- 67%** Limited English proficiency

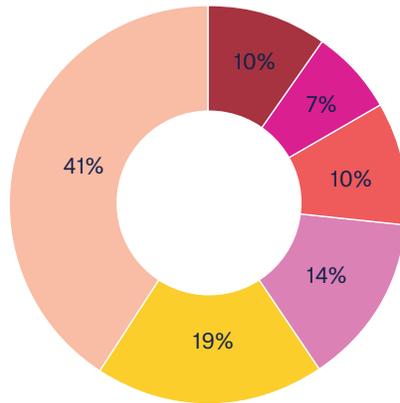
Figure 3. North Shore and Mecca Population Demographics
Source: American Community Survey 2013-2017 5-Year Estimates

INCOME AND POVERTY STATISTICS

INCOME DISTRIBUTION

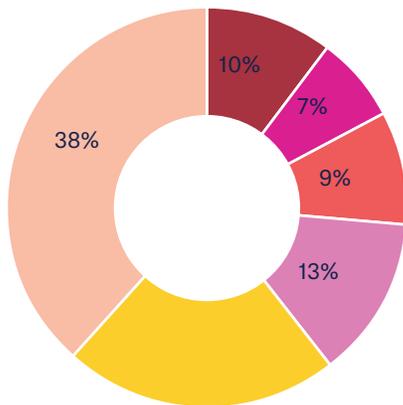


North Shore



Mecca

- Below \$20,000
- \$20,000 - \$34,999
- \$35,000 - \$44,999
- \$45,000 - \$59,999
- \$60,000 - \$74,999
- \$75,000 and above



Eastern Coachella Valley
(Unincorporated)

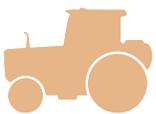
\$27,140

Median household income
(North Shore + Mecca)

34.1%

Households below poverty level
(North Shore + Mecca)

JOB INDUSTRY DISTRIBUTION



37%

Agriculture



8%

Construction



11%

Education



13%

Hospitality



7%

Retail



10%

Administration

EDUCATION LEVEL

35% of population graduated
from high school

3% of population has a
bachelor's degree or higher

Figure 4. North Shore and Mecca Income and Poverty Statistics
Source: American Community Survey 2013-2017 5-Year Estimates

more than 80% of all workers drive to work, either alone or in a carpool, with an average commute time of approximately 30 minutes.⁵ According to residents, the typical hours for agricultural jobs start around 6 AM during the hot months of April through September, resulting in much of the commuting taking place during the night or low sunlight hours leading up to sunrise. Indeed, data show that throughout the year, 60% of ECV workers age 16 and older leave for work before 6:30 AM.⁶

Despite the agricultural prosperity of the area, poverty is widespread. As of 2017, the median household income in North Shore was \$28,417 and \$25,863 for Mecca; at less than 80% of California's statewide median, both these communities are designated as Disadvantaged Communities (DACs). A significant portion of the population lives below the poverty level in each community: 25.4% in North Shore and 42.8% in Mecca; youth are particularly affected.⁷ These statistics point to a growing need for an equitable, easily accessible transportation system that can be used by multiple age groups to reach jobs, schools, markets, clinics, and other opportunities and necessities. This need is particularly acute for many lower-income residents that may not be able to afford to buy or maintain a personal vehicle.

Additional indicators reveal that residents within the Coachella Valley are subject to disproportionate health impacts with rates of diabetes, asthma, and obesity all higher than the California average.⁸ For these communities, access to connective transportation infrastructure is more than a convenience— it is essential to providing for their families and ensuring a healthy lifestyle.

Land Use and Physical Conditions

Overall Conditions

As a region with such a prevalent agricultural industry, the majority of the land within the unincorporated

5 2013-2017 American Community Survey (ACS).

6 2013-2017 American Community Survey (ACS).

7 2013-2017 American Community Survey (ACS).

8 Health Assessment and Research for Communities (HARC) Survey, 2016.

ECV is designated for agricultural use as shown in Figure 5. Medium-density and low-density are the main residential land use classifications, with small pockets of commercial uses and corridors of light industrial.

Affordable housing options are lacking in the area. The Polanco Bill (AB 3526) allows for the construction of up to 12 mobile homes for farmworker housing on parcels zoned for agricultural use. Known locally as “Polancos”, these mobile home parks provide much of the available housing stock outside of the central areas of Mecca and North Shore.

The rural nature of many of the roads in this area is evident. There is a lack of sidewalks and few shoulders adjacent to roads are paved, making walking conditions unpleasant at best and a public health issue at worst, due to the amount of dust released into the air from the roadside. Dust storms are frequent and shade is limited. The lack of sidewalks and paved shoulders force residents to either walk in the dirt or in the street, adjacent to high-speed automobile, truck, and agricultural vehicle traffic. Furthermore, large groups of school children have been observed walking within residential streets to ensure they are seen by oncoming traffic.

The relationship between existing multimodal facilities, public transportation and housing can be seen in Figure 6, Figure 7, and Figure 8.

North Shore Community Destinations

North Shore is the easternmost community in the ECV on the shoreline of the Salton Sea. Many of its transportation challenges arise from the few connections that currently exist between the community and the rest of the region. Reflecting the segmented nature of its built fabric, the residents of North Shore have named the following neighborhoods within their community, shown in Figure 10:

- Costa Mesa neighborhood— the northernmost portion of North Shore found above Avenue 70
- Miramar neighborhood— south of Avenue 70 and

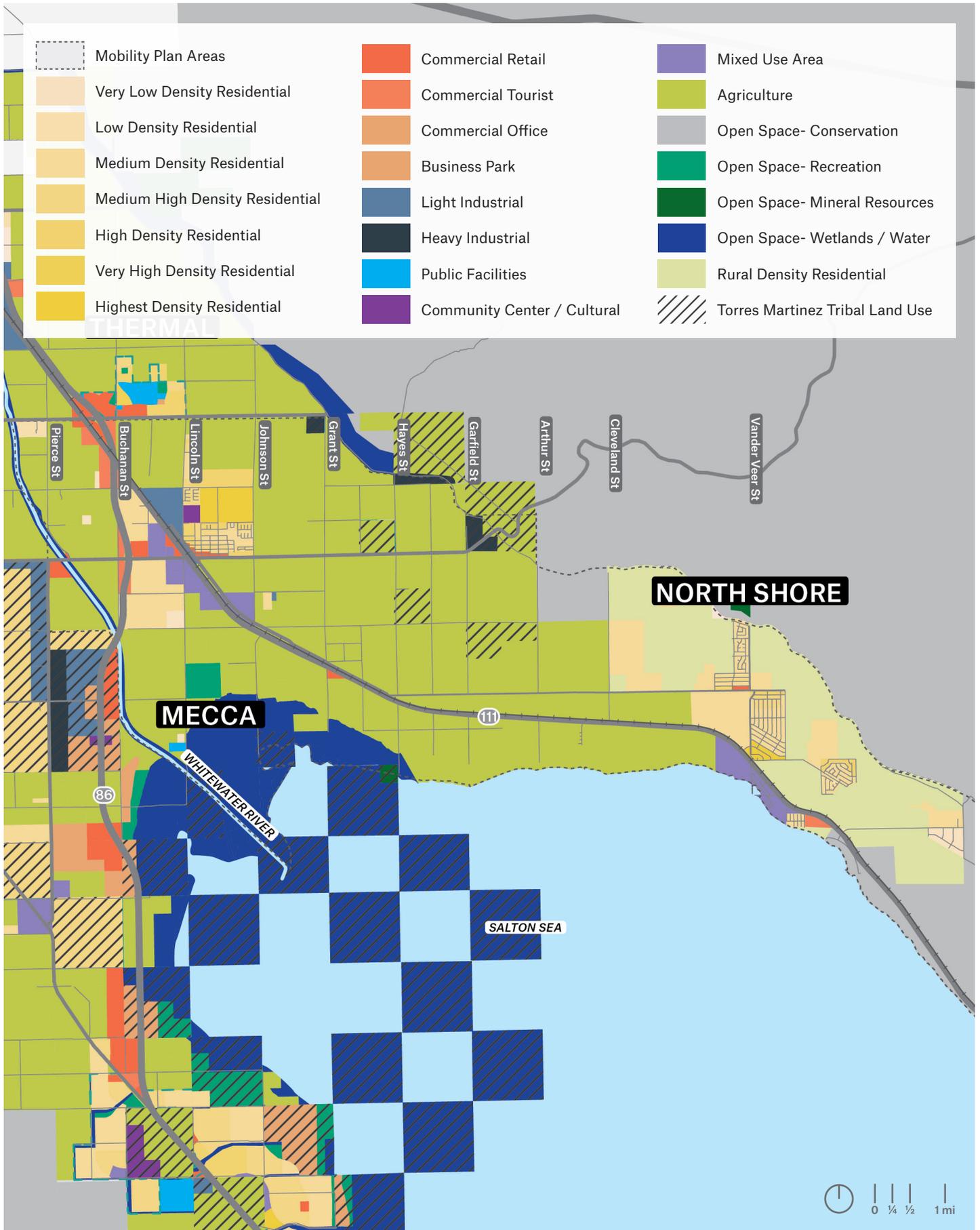


Figure 5. Riverside County Land Use (2015) and Torres Martinez Tribal Land Use (2008)



Figure 6. Locations of Existing Pedestrian and Public Transit Facilities in Relation to Existing Housing

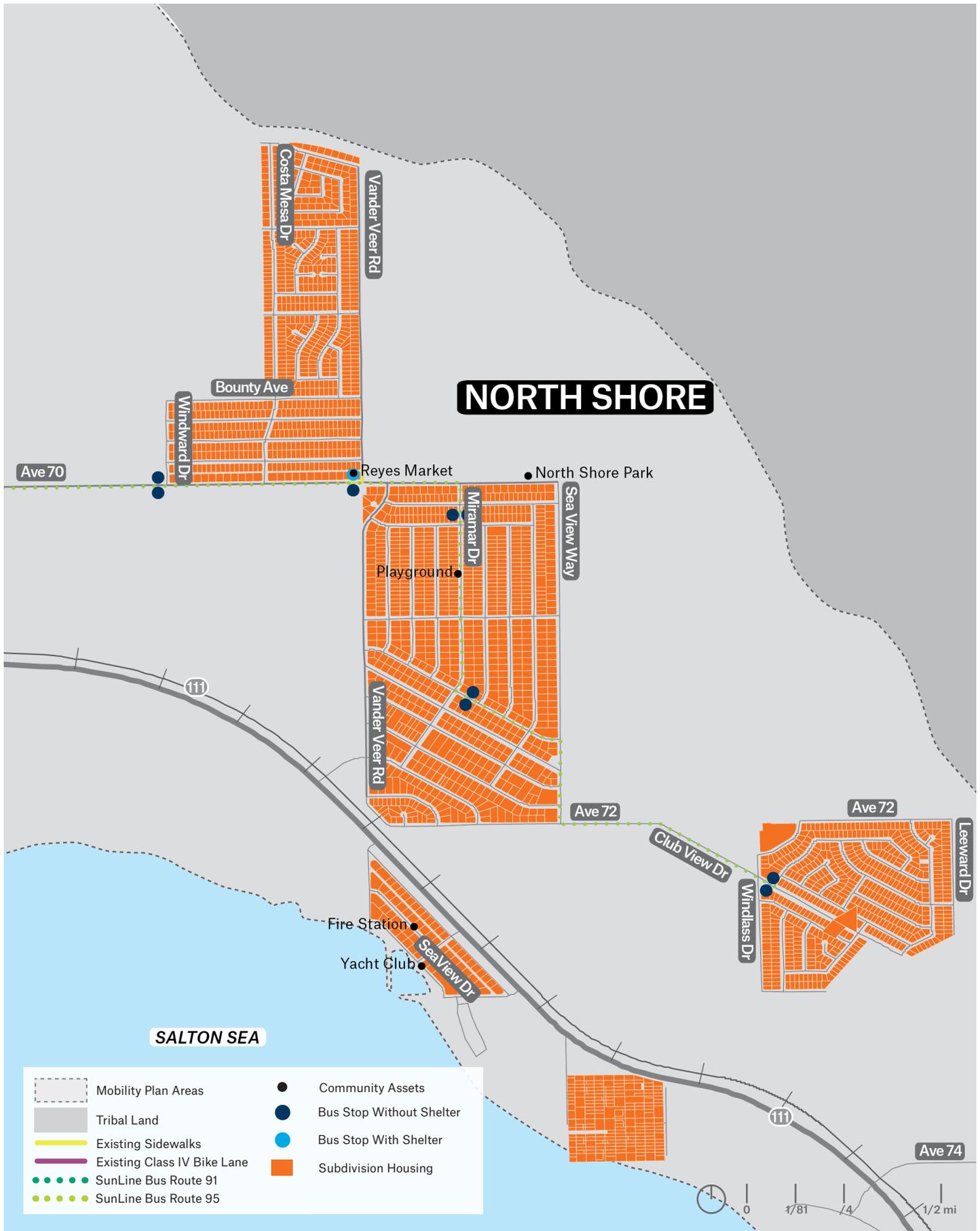


Figure 7. Locations of Existing Pedestrian and Public Transit Facilities in Relation to Existing Housing, North Shore



Figure 8. Locations of Existing Pedestrian and Public Transit Facilities in Relation to Existing Housing, central Mecca

north of Avenue 72

- Yacht Club neighborhood— found nearest the Salton Sea to the southwest of Highway 111
- Old Church neighborhood— the portion immediately south of Avenue 72 and east of Windlass Drive
- Parkside neighborhood— the small portion found furthest to the southeast along Parkside Drive, as the black directional arrow indicates.

Currently, the only connection points between North Shore and the ECV region are Avenue 70, connecting across a crucial bridge at Cleveland Street, and Highway 111, connecting across the railroad tracks via Bay Drive. As Figure 10 shows, key assets in the community include a playground on Miramar Drive, the North Shore Community Park on Avenue 70 near Sea View Way, a small commercial center at Avenue 70 and Vander Veer Road, and the Yacht Club at the Salton Sea, which is the main community center. There is little work available within the community, as shown by the predominance of residential land uses. According to the Coachella Valley Unified School District, all students in this area must be bused to schools in Mecca or other neighboring communities, since there are no schools currently existing in North Shore. As a result, the few connections into and out of the North Shore community

are crucial to residents' ability to access these vital necessities. North Shore's characteristics and existing conditions are depicted in Figure 12.

Mecca Community Destinations

Mecca is the most populous and densely developed of the ECV's unincorporated communities. Its housing stock varies widely and includes residential homes, mobile homes, apartments (most of which are affordable housing developments), and Accessory Dwelling Units (ADUs) such as mobile homes co-located on single family residential lots. The central area of Mecca to the northeast of the intersection of Avenue 66 and Highway 111 has the greatest concentration of community resources, including: a library, post office, clinics, schools, businesses, and other community centers. As a result, residents from other ECV communities must come here to access key resources, or otherwise must travel to cities further west. Mecca has the most developed network of sidewalks and SunBus shelters, as shown in Figure 8 and Figure 9, though gaps in both still persist.

Mecca is also home to a heavily trafficked travel center on Avenue 66 just east of Highway 86, shown in Figure 11. The travel center includes a large gas station, an



Figure 9. Residents using pedestrian facilities along Ave 66 near Brown St in Mecca



Figure 10. North Shore Neighborhoods

AMPM convenience store, fast food restaurants, and, most importantly to local residents, a Starbucks, which is one of the few local sources of reliable free Wi-Fi. As ubiquitous as they may be in other communities, Mecca's Starbucks is particularly important for students throughout the unincorporated ECV who need internet access for homework and may not otherwise have reliable access to it. The Starbucks is also seen by locals as a central gathering point within the ECV (even if it is not exactly central geographically) due to its accessibility from the various communities. Mecca's characteristics and existing conditions are depicted in Figure 13.

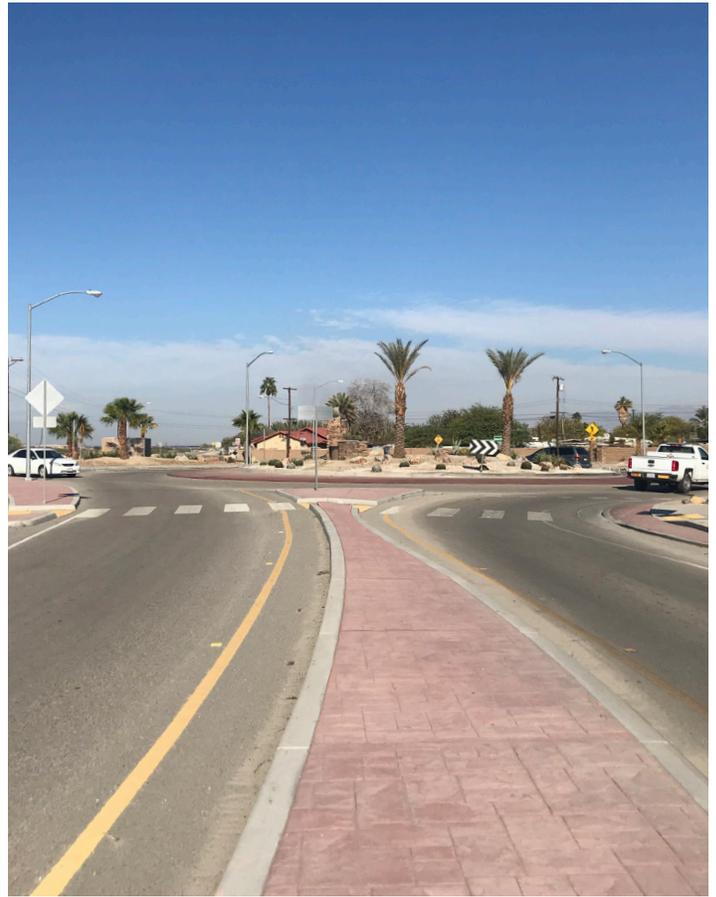


Figure 11. Important points in Mecca include the Mecca Roundabout (top) and the Mecca Travel Center (bottom)



The opening of the North Shore Park in October 2018



Roadside uses in North Shore

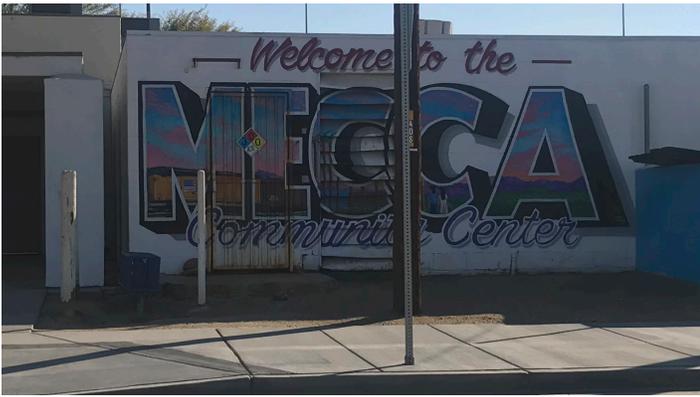


The bridge at Ave 70 and Cleveland St in North Shore, 1 of 2 entry points into the neighborhood, while under repairs



A schoolbus driver helps students cross the street in at a popular stop at Ave 69 and Costa Mesa Dr in North Shore

Figure 12. North Shore Existing Conditions Photos



Mecca Community Center



An unsheltered SunBus stop with a light in Mecca



Typical biking conditions in Mecca, along Dale Kiler Rd



Outside Saul Martinez Elementary in Mecca



A bicyclist waiting to catch the SunBus in Mecca



7th St in central Mecca, which currently has sidewalks along one side but not the other

Figure 13. Mecca Existing Conditions Photos

Transportation Infrastructure and Connectivity Challenges

Pedestrian Facilities

Sidewalk infrastructure is sparse throughout the ECV, particularly in North Shore, with the largest concentration of sidewalks existing in the central area of Mecca, as shown in Figure 6, Figure 7, and Figure 8. The County has taken steps to expand and connect sidewalk networks in central Mecca by building sidewalks as roads are resurfaced or as part of other road improvements in the area. Given the scarcity of sidewalks throughout the ECV beyond these central areas, many residents without access to personal vehicles, particularly throughout North Shore, walk and bike along dirt or graveled shoulders, or through undeveloped land.

Bicycle Facilities

There is very limited dedicated bicycle infrastructure within the communities of Mecca and North Shore. In Mecca, the roundabout at Hammond Road and 4th Street is built to accommodate bicyclists and pedestrians; however, there are no connecting bicycle or pedestrian facilities. Currently, the only significant facility for bicycling in the ECV is a newly-installed Class IV bikeway along Highway 111 / Grapefruit Boulevard. This facility spans from 4th Street to about 3,000 feet southeast, ending at the driveway into the St. Anthony mobile home park, shown in Figure 8. This facility is also often used by pedestrians traveling between the mobile home park and central Mecca, given the wide paved surface provides a safe path for pedestrian and bicyclists.

Two main types of bicyclists are typically seen in the unincorporated ECV: (1) bicyclists who may not have access to personal vehicles traveling to and from local destinations, and (2) bicyclists riding for leisure or exercise. The first group tend to be residents of the ECV who ride in the dirt on the side of the road to travel between home, work, and other important destinations within the area. The second group are often residents or visitors of nearby communities such as La Quinta and Palm Desert, who ride through

the ECV for recreation, most often in pairs or groups. These bicyclists are usually more comfortable riding in traffic, and thus are usually seen riding in the roadway alongside automobiles.

An active group of youth called the Desert Riderz started in North Shore in 2013. These youth advocate for safer bicycling in the ECV and repair bikes for local residents, as shown in Figure 14. They now base their activities at the new North Shore Community Park.

Bicycle and Pedestrian Counts

Riverside County currently does not have a bicycle and pedestrian count program. Therefore, the data available on the subject comes from the 2017 American Community Survey (ACS), which indicates that 2.7 percent of residents of Mecca walk for at least a portion of their journey to work based on the walking and transit commute mode share.⁹ No residents responded in the ACS that they walk to work in North Shore, nor that they bicycle to work in either community, however local organizations have indicated that residents use bicycles to access both formal and informal work opportunities. Similarly, the percentage of pedestrian commuting trips reported by the ACS likely underestimates the actual number of people walking in the area, even after the transit commute share is taken into account, as many people may walk for non-commute trips.

Furthermore, the area lacks infrastructure for walking and biking such as sidewalks and bike lanes/paths, which this Plan will address. The lack of comfortable facilities can be a barrier for people who walk and bike or who would otherwise utilize walking and biking facilities more regularly and in greater numbers. Since data limitations make it difficult to draw conclusions, establishment of a count program would assist in understanding active transportation behavior in the ECV and support the informed expansion of facilities moving forward.

Public Transit and School Buses

The Coachella Valley is served by SunLine Transit Agency, which provides local fixed-route bus (SunBus), dial-a-ride paratransit (SunDial), and vanpool

9 2013-2017 American Community Survey (ACS).



Figure 14. The Desert Riderz, a group of North Shore youth engaging in bike advocacy and repairs

commuter (SunVan) services. SunLine’s service area encompasses 1,120 square miles of the Coachella Valley. Currently, SunBus Line 91 serves residents within the communities of Thermal and Oasis and SunBus Line 95 serves North Shore. Both lines connect through Mecca and into the City of Coachella, where riders can transfer to routes serving the broader region. For those that use the SunBus transit system, 84% are transit dependent and 73% use the bus four times a week or more.¹⁰ Through a passenger survey conducted in November 2014, SunLine noted that approximately 76% of riders have a household income below \$25,000. Work is the primary transit trip purpose for 35% of respondents, with 16% of respondents using the SunBus for shopping, and 14% for school.¹¹

On average, SunBus Lines 91 and 95 run once an hour between 9 am and 6 pm.¹² Some of the stops along these lines have shelters installed, particularly

in Mecca. In other locations, residents have informally built benches for those waiting for the bus; however, the majority of stops are marked only by a simple pole and sign. Out of 20 SunBus stops in Mecca, 11 have shelters, while only 1 of 12 stops in North Shore does. Per SunLine Transit Agency policy, shelters cannot be built in areas that do not have existing sidewalks because the structures need to have a concrete pad to anchor to for structural reasons. However, these shade structures are vital to health and safety, especially during the summer months, when temperatures regularly reach over 100 degrees Fahrenheit.¹³

Table 1 illustrates SunLine’s current performance for SunBus Lines 91 and 95. This data shows that low ridership ultimately leads to unsustainable farebox recovery ratios (the fraction of operating expenses that are met by the fares paid by passengers) under current conditions. SunLine requires enough ridership

10 SunBus 2014 Rider Survey, via SunLine Transit Agency Short Range Transit Plan FY 2017-2018.

11 SunBus 2014 Rider Survey, via SunLine Transit Agency Short Range Transit Plan FY 2017-2018.

12 www.sunline.org/transit_routes/route/line91

13 Equity in Rural Transportation Policy Brief, via Women’s Policy Institute - County Rural Transportation Team.

to justify any increases in service frequency, however many residents expressed that they do not ride the bus frequently because stops are only served once an hour, which limits utility and results in residents waiting for long periods of time in the heat.

SunLine’s SunDial paratransit service offers curb-to-curb service to seniors and persons with disabilities as well as next-day complementary demand-response service to all Coachella Valley residents. SunDial provides service 363 days a year during the same hours as the fixed-route network.¹⁴ SunLine is also anticipating an expansion of their on-demand options through a service called TransLoc, which will enable the agency to launch a pilot program specifically for areas of low density where traditional transit applications have not been as successful.

The Coachella Valley Unified School District (CVUSD) currently runs approximately 100 buses along 31 routes within the Coachella Valley, servicing between 9,000 and 11,000 students daily. In meetings with the CVUSD transportation staff, the CVUSD identified two main challenges in servicing the school-age populations of the ECV:

- Low population density and large distances between mobile home parks make adequate bus servicing difficult; and
- Lack of sidewalks means that students living close enough to walk to school are not able to do so in a safe manner, resulting in the need for more school

bus services.

Additional pedestrian and bicycle facilities throughout these two communities would help to alleviate some of the demand on these school bus routes.

In an effort to overcome some of these mobility challenges, residents have developed networks of informal ridesharing known locally as “raites”. This informal network provides additional transportation options by creating informal carpooling networks to and from destinations throughout the region ranging from agricultural fields to shopping centers and healthcare facilities. While these solutions help fill gaps in transportation options, they also tend to be too expensive for residents to rely upon consistently.

Vehicular Roadways

Automobile travel and agricultural goods movement are the most prevalent types of transportation within the ECV with the current transportation infrastructure prioritizing that reality. Posted speed limits are at least 45 MPH along major roads with traffic signals. Large vehicles used for agricultural work or transporting food products are common on these streets. With the exception of portions of Avenue 66 and Highway 111 / Grapefruit Boulevard, most intersections in the ECV are unsignalized.

14 SunLine Transit Agency Short Range Transit Plan FY 2018-2019.

LINE	PASSENGER COUNTS	PASSENGERS PER REVENUE HOUR (PPRH)	COST PER PASSENGER	PASSENGER REVENUE PER HOUR	FAREBOX RECOVERY RATIO
91	198,391	12.6	\$12.45	\$10.01	9.54%
95	36,295	7.0	\$4.16	\$29.45	28.11%
SunDial	164,025	2.4	\$33.42	\$75.39	17.12%

Table 1. Analysis of SunLine Performance Statistics, FY 2015-2016 (via SunLine Transit Agency Short Range Transit Plan FY 2017-2018)

Environmental Conditions

CalEnviroScreen 3.0

CalEnviroScreen is a mapping tool that identifies communities in California most affected by sources of pollution and are especially vulnerable to pollution's effects. CalEnviroScreen uses environmental, health, and socioeconomic information to produce scores for every census tract in the state, with the highest scores corresponding to areas that experience a much higher pollution burden than areas with low scores.¹⁵ As Figure 15 shows, the census tract that encompasses Mecca and North Shore scores in the 84th percentile.

Environmental Justice

Environmental justice is “the fair treatment of people of all races, cultures, and incomes with respect to development, adoption, implementation, and enforcement of environmental laws, regulations, and policies” (Gov. Code §65040.12).

To account for the distinct environmental impact parameters affecting Mecca and North Shore, the County has designated them as Environmental Justice communities under the Land Use Element of the General Plan. These communities are defined by Government Code §65302 as “low-income area[s] that [are] disproportionately affected by environmental pollution and other hazards that can lead to negative health effects, exposure, or environmental degradation”. This required the County to incorporate policies into its General Plan to (1) reduce unique or compounded health risks in these disadvantaged communities, (2) promote civic engagement in public decision-making processes, and (3) prioritize improvements and programs that address the needs of these disadvantaged communities, as per Gov. Code §65302. The Riverside County Planning Department is in the process of updating the Land Use and Healthy Communities elements of its General Plan to account for the needs of Environmental Justice communities; the recommended facilities and programs contained in this Plan, and the participatory process through which the Plan was developed, help the County achieve these

goals in the unincorporated ECV.

The Salton Sea, though not directly linked to transportation, factors heavily into the environmental conditions of the ECV, and particularly North Shore. Declining water flows and rising temperatures are causing the Salton Sea to shrink, exposing large swaths of playa (dry lakebed) and increasing the amount of dust emissions in the region.¹⁶

¹⁵ <https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-30>

¹⁶ Cohen, Michael J. (2014) *Hazard's Toll*.

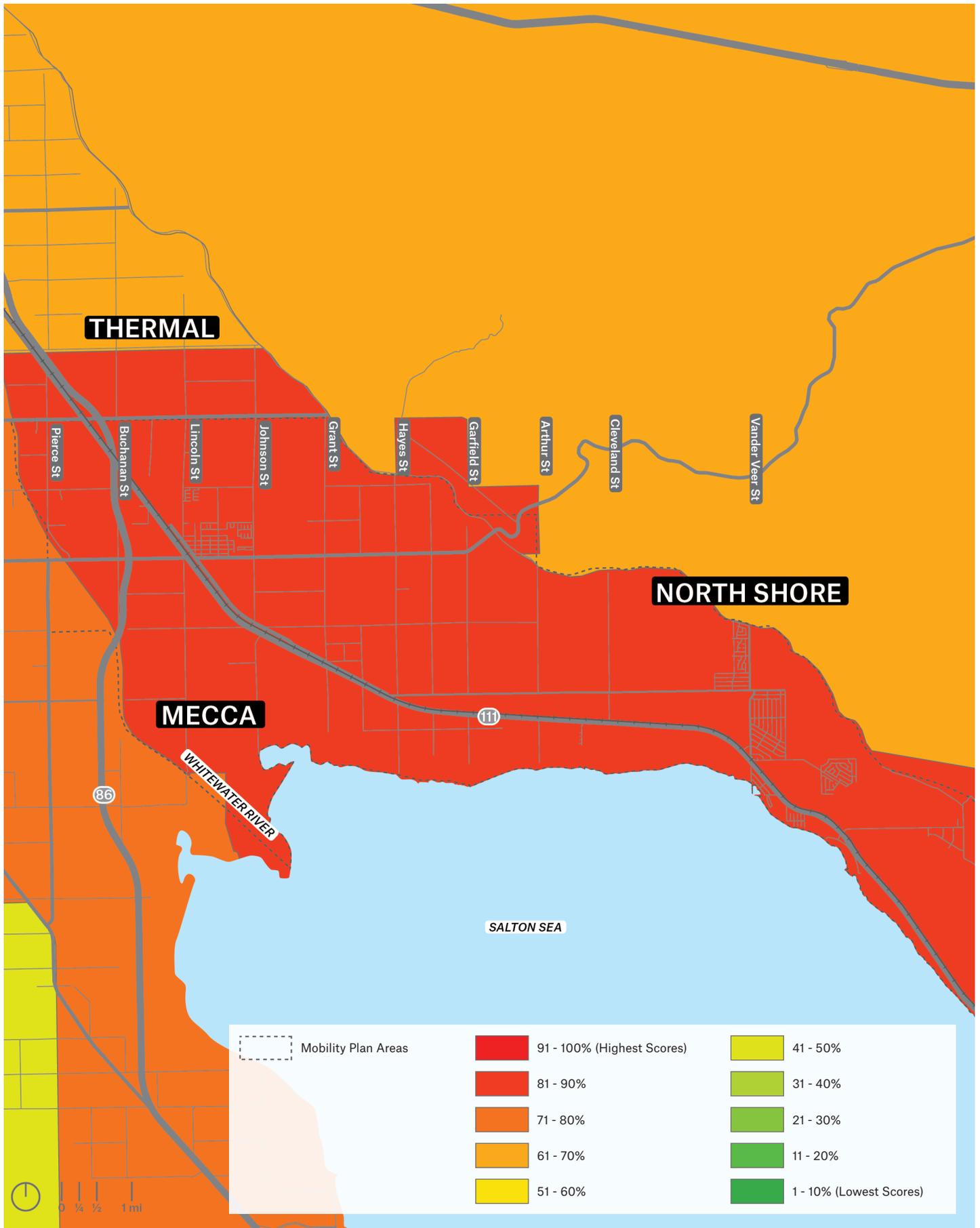
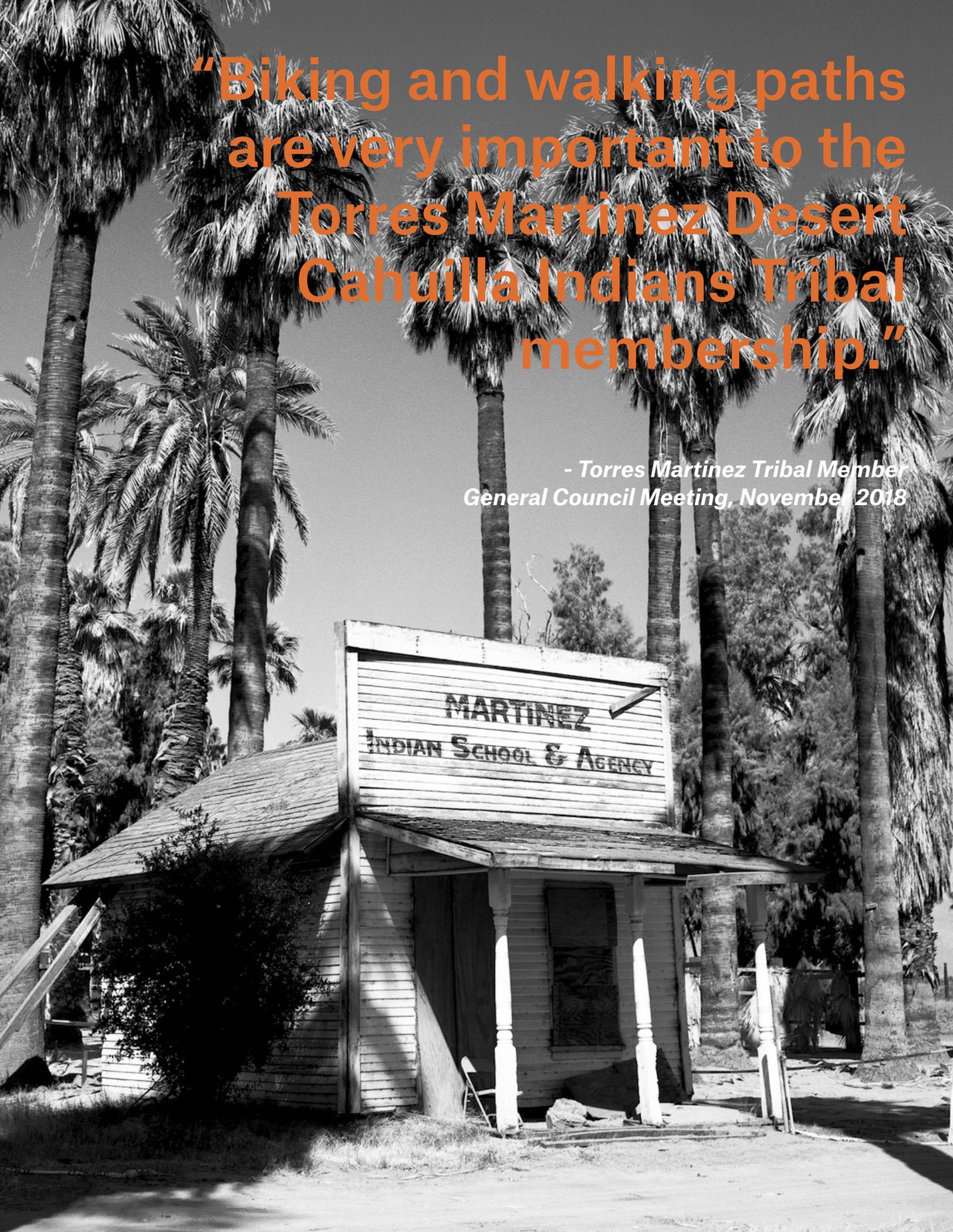


Figure 15. CalEnviroScreen 3.0 Percentile Scores by Census Tract
Source: OEHHA

[PAGE INTENTIONALLY LEFT BLANK]

**“Biking and walking paths
are very important to the
Torres Martinez Desert
Cahuilla Indians Tribal
membership.”**

*- Torres Martinez Tribal Member
General Council Meeting, November 2018*



MARTINEZ
INDIAN SCHOOL & AGENCY

III. Policy and Planning Context

Local Plans

Local plans and programs relating to mobility and active transportation in the ECV were reviewed to ensure consistency of this Plan with existing policies. Relevant plans and policies prepared by local agencies with immediate jurisdiction over this area are described in this chapter.

Riverside County

Neighborhood Mobility Plan for the Communities of Thermal and Oasis (Thermal-Oasis Mobility Plan), was adopted in January 2019 and revised in late 2019 for consistency with this Plan. The Thermal-Oasis Mobility Plan documents the first half of the planning process for the unincorporated Eastern Coachella Valley, which is expanded to the geographies of North Shore and Mecca in this Plan.



The Thermal-Oasis Mobility Plan can be accessed at <http://rctlma.org/trans/Project-Information/Transportation-Planning-Projects>

Regional Mobility Plan for the Unincorporated Communities of the Eastern Coachella Valley (ECV Regional Mobility Plan) was prepared concurrently with this Plan. The ECV Regional Mobility Plan bridges the Thermal Oasis Plan and this Plan, presenting a comprehensive vision for regional mobility in the unincorporated ECV.



The ECV Regional Mobility Plan can be accessed at <https://rctlma.org/trans/Project-Information/Transportation-Planning-Projects>

Riverside County's General Plan, especially:

- Eastern Coachella Valley (ECV) Area Plan
- Circulation Element
- Land Use Element
- Housing Element

- Multipurpose Open Space Element

Riverside County Integrated Project (RCIP) Vision for 2020, as adopted in 1998, guides the General Plan (updated in 2015). In part, it envisions Riverside County as having:

- A transportation system that keeps pace with growth and new demands for mobility, including for varied forms of transit, and that is also designed with a high regard for the environment
- A range of choices in communities and neighborhoods, from sophisticated urban villages to quality suburban neighborhoods to spacious rural enclaves, all centered around high quality schools and programs
- Thriving agriculture that continues to play an important part in the County's economy

Specific to transportation, the Circulation Element intends to "provide a plan to achieve a balanced, multimodal transportation network that meets the needs of all users of the streets, roads, and highways for safe and convenient travel in a manner that is suitable to the rural, suburban, or urban context of the General Plan."

To achieve the RCIP Vision as it relates to multimodal transportation and to encourage compact development, the ECV Area Plan:

- Seeks to provide numerous alternatives to the automobile, such as transit, pedestrian and equestrian systems, and bicycle facilities so that residents can access the region by a number of transportation options
- Designates community development land uses in areas adjacent to the existing urban fabric, leaving agriculture and open space uses on the periphery
- Identifies and designates additional lands with the potential to accommodate farmworker housing for residential uses

For the ECV, the Circulation Element and ECV Area Plan propose the future development of a network of bicycle and multi-use trails in tandem with development.

In addition, to comply with State Bill 1000—which requires cities and counties to adopt an Environmental Justice element, or integrate Environmental Justice-related policies, objectives, and goals throughout other elements of their General Plan—the Riverside County Planning Department is developing Environmental Justice policies. As discussed in Chapter 2 of this Plan, North Shore and Mecca are designated as Disadvantage Communities and will be impacted by the forthcoming policies. The Environmental Justice policies will (1) reduce unique or compounded health risks in these disadvantaged communities, (2) promote civic engagement in public decision-making processes, and (3) prioritize improvements and programs that address the needs of these disadvantaged communities, as per Gov. Code §65302.

Overall, this Plan is consistent with the General Plan’s stated goals. Adoption of this Plan will work toward achieving the RCIP Vision and integrating North Shore and Mecca with the broader Coachella Valley region.



Find the General Plan at <http://planning.rctlma.org/ZoningInformation/GeneralPlan.aspx>

Mecca Design Guidelines (2009). While no design guidelines currently exist for North Shore, the Mecca Design Guidelines provide recommendations for the design of architecture and community spaces, along with sidewalks, trails, and pathways, in each community. Chapter 7 of this Plan proposes a menu of concepts for active transportation facilities.



Find the design guidelines for Mecca at <http://planning.rctlma.org/DevelopmentProcess/DesignGuidelines.aspx>

Mecca Community Revitalization Strategy (2008) provides design recommendations for key streets in the central area of Mecca, and for building and open space typologies, as developed in collaboration with community residents. An early precursor to this Plan, the Mecca Community Revitalization Strategy laid the initial foundation for planning or active transportation

in the ECV at the neighborhood scale. This Plan builds on those initial recommendations and expands them to cover larger portions of the region.



Find the Mecca Community Revitalization Strategy at https://www.lgc.org/wordpress/wp-content/uploads/2016/06/ME_Rpt_ExecSum_063008.pdf

Upcoming development was identified per consultation with the Riverside County Planning Department. There is minimal upcoming development in the ECV in the near term—mostly a few Polanco mobile home parks and some Conditional Use Permits (CUPs).

In addition, the General Plan designates Town Centers in North Shore and Mecca. Each is composed of Mixed Use Area neighborhoods (MUA) and Highest Density Residential Development areas (HHDR), as designated by the County’s Land Use and Housing Elements. Though no developments have yet been proposed that take advantage of these zoning designations, the Town Center areas are expected to house significant populations of new residents in the long term, should they be fully built out.

Upcoming transportation infrastructure improvements

are identified in the Riverside County Transportation Improvement Program (TIP) and in the Riverside County Projects portal. The TIP is a multi-year document used by the Riverside County Transportation Department to help manage its numerous projects and financial resources and to serve as a funding roadmap to assist in the delivery of Capital Projects.

The Eastern Coachella Valley is within the Supervisorial District 4 (4th District). There are currently 78 projects programmed in the 4th District totaling roughly \$43 million in fiscal year 2019/2020, \$63 million in fiscal year 2020/2021 and utilizing over 20 fund sources during that time. The projects range from the reconstruction and resurfacing of roads, sidewalk and trail installation, widenings and traffic signal installation to bridge construction and grade separations.

Upcoming transportation projects within the Mecca/ North Shore Mobility Plan include:

- Avenue 66 Grade Separation is proposed for

construction in spring 2020. This project will construct a new grade separation and roadway to cross the Union Pacific Railroad, State Route 111 and Hammond Road from a realigned Avenue 66 in the Community of Mecca. The project will provide a secondary access point to the Community of Mecca, improve goods movement, provide pedestrian facilities, improve safety by reducing train and vehicle/pedestrian conflicts and reduce congestion which will also reduce vehicle emissions.

- Lincoln Street Project is proposed for construction at the end of 2020 in the Community of Mecca. This project will reconstruct pavement from 5th Street to 62nd Avenue. Additionally, improvements include widening pavement, curb and gutter and sidewalk on the east side of the street from 5th Street to 7th Street.
- Hammond Road, 66th Ave and Date Palm Street Project is proposed for construction in 2021 in the Community of Mecca. The proposed improvements along these streets include reconstruction and widening of pavement, curb and gutter and sidewalks. Along Hammond Road sidewalk is proposed on the east side from 2nd Street to south of 66th Avenue. On 66th Avenue, sidewalk is proposed on both sides from Hammond Road to east of Date Palm Street. A raised median with flashing beacons will be installed from Date Palm Street easterly.



Find the Riverside County TIP at <http://rctlma.org/trans/Project-Information/TIP/Transportation-Improvement-Document>



Find the Riverside County Projects portal at <http://rcprojects.org/>

Riverside University Health System-Public Health's **Safe Routes to Schools (SRTS) Program** for the ECV was recently funded via an Active Transportation Program (ATP) Cycle 3 non-infrastructure grant. The program aims to address barriers and difficulties for children walking to schools primarily via encouragement and education. The program will work with Active Transportation Ambassadors (ATA) who will earn certificates and become community role models for active transportation. Other components of the program include:

- Pedestrian and bicycle instructor training
- Pedestrian and bicycle safety rodeos
- Promotion of SCAG's "Go Human" campaign
- Implementing pedestrian and bike safety campaigns on school campuses
- International Walk to School Day
- International Bike to School Day
- Frequent Walker Program and Bike Trains
- Active transportation meetings
- Walkability workshops and walk audits
- Partnership with California Highway Patrol
- Monitoring and evaluation via pre- and post-surveys

The SRTS program for the ECV is currently funded from July 2018 to July 2020.



Find information on Public Health's SRTS programs at <http://www.rivcoips.org/Safe-Routes-to-School/About-SRTS>

SunLine Transit Agency

SunLine's **Short Range Transit Plan (S RTP)**, updated annually, is intended to serve the following purposes:

1. Identify the transit services and capital improvements required to meet SunLine's transit needs over a three year period and the proposed sources of funding to carry out the plan.
2. Serve as a management tool to guide activities over the next year.
3. Provide justification for operating and capital assistance for grant applications to be submitted to state and federal funding agencies.



Find SunLine's FY 2018-19 S RTP at <https://www.sunline.org/planning-department>

Torres Martinez Desert Cahuilla Indians

The Torres Martinez Desert Cahuilla Indians provided their **Tribal Transportation Safety Assessment (T2SA) technical report** (March 2017). The T2SA was prepared in coordination with the UC Berkeley's Institute for Transportation Studies with the primary objective of improving traffic safety on Torres Martinez tribal land. The T2SA examines traffic collisions that occurred on Tribal Land between January 1, 2013 and August 31, 2016, according to SWITRS, and suggests 12 traffic engineering improvements for the 12 locations

with the highest collision rates to correct existing patterns and reduce the frequency of collisions at those intersections. These recommendations range from the short term (6-12 months), medium term (12-24 months), and long term (2-5 years).

Torres Martinez also indicated that they are expanding their long-range planning efforts and will soon begin a master planning process.

Regional Plans

Other relevant plans prepared by planning agencies that also affect North Shore, Mecca, and the Eastern Coachella Valley region include the following:

Coachella Valley Association of Governments (CVAG)

The **Eastern Coachella Valley Climate Resilience Action Plan** (2019) recommends numerous community-identified projects that will advance climate resiliency in the Eastern Coachella Valley. Recommended projects include affordable housing, water and wastewater infrastructure, urban greening and parks. The plan identifies key corridors that require better transit-oriented infrastructure as well as a micro-transit rideshare program that would provide a cleaner and more efficient way of travelling within the region to all residents. The plan highlights the intersectionality of these various projects and links affordable housing to transit and infrastructure in ways that can help reduce greenhouse gas emissions and improve public health and quality of life in the ECV.

CVAG's **Transportation Project Prioritization Study (TPPS)** (2016) serves as the Regional Transportation Plan (RTP) for the Coachella Valley. It identifies and prioritizes transportation projects in the region, including some regional active transportation projects, and feeds into SCAG's RTP. Within the Eastern Coachella Valley, the TPPS lists projects such as the East Valley Community Connectors for the CV Link, bike lanes and routes on Grapefruit Boulevard, Airport Boulevard, Harrison Street, Pierce Street, Polk Street, Monroe Street, and Jackson Street. These projects are concentrated in the portions of Thermal and Oasis

near the CV Link or bordering incorporated cities in the Coachella Valley, particularly La Quinta, Indio, and Coachella.

CVAG's **Active Transportation Plan (ATP)** (2015) compiles active transportation plans from the various jurisdictions and governments within the Coachella Valley to create a regional ATP and coordinate local and regional efforts. For the unincorporated ECV, CVAG's ATP drew from the Riverside County bicycle and trail planning in existence at the time. This Plan, along with the Thermal-Oasis Mobility Plan and the ECV Regional Mobility Plan, are meant to compliment and expand upon the CVAG ATP. The improvements proposed by CVAG are of a regional nature that focuses on projects that provide benefit to multiple jurisdictions.

The **Coachella Valley Link (CV Link) Master Plan** (2016) lays out a vision to connect the Coachella Valley via a 50-mile multi-purpose recreational trail along the Whitewater River. The core alignment of the CV Link reaches the northern edge of Thermal at Airport Boulevard, with future extensions to the Salton Sea and Mecca-North Shore planned to reach into the ECV. Additionally, community connectors are proposed from the edge of the core alignment into central Thermal, the College of the Desert's East Valley Campus, and the Salton Sea State Park.

The ECV Regional Mobility Plan recommends an additional set of community connectors for the CV Link to more cohesively link the unincorporated communities of the ECV, including North Shore and Mecca. In addition, the improvements recommended in Chapter 7 of this Plan will help connect North Shore and Mecca to the CV Link and its proposed extensions, enhancing connectivity throughout the region and to the Salton Sea.



Find all of CVAG's plans at <http://www.cvag.org>

Southern California Association of Governments (SCAG)

SCAG's **Regional Transportation Plan / Sustainable Communities Strategy (RTP/SCS)**, is the long-range transportation plan that provides a vision for major

transportation investments in the Southern California region. In addition, the SCS portion is a newly required element that integrates land use and transportation strategies to achieve emissions reduction targets.



Find the RTP/SCS at <http://rtpscs.scag.ca.gov/>

Conclusions

Overall, while there are a variety of local and regional plans in existence, most cover the ECV (and North Shore in particular) only minimally when it comes to matters of multimodal and active transportation. Building on the *Neighborhood Mobility Plan for the Communities of Thermal and Oasis*, this Plan is the second by Riverside County to address active transportation in unincorporated areas of the County.

“Para mejorar nuestras comunidades, los residentes necesitamos involucrarnos en los planes y los mejoramientos, aún cuando los cambios sean no para nosotros, pero para las siguientes generaciones. Y necesitamos que las agencias trabajen con nosotros y escuchen nuestras voces.”

“To improve our communities, residents need to involve ourselves in the plans and improvements, even when the changes will be not for us, but for the next generations. And we need the agencies to work with us and hear our voices.”

*- Jose Cervantes, Mecca Resident
April 2019 Workshop*



IV. Stakeholder Engagement

Overview

The County, in coordination with an Advisory Group consisting of agencies and local organizations, requested input on pedestrian, bicycle, vehicular traffic, public transit, and rideshare opportunities from residents. Mecca and North Shore residents served as a vital partner in the development of this Plan, ensuring the Plan incorporated their local knowledge and addressed their needs. Obtaining direct input from the residents was a critical component in the development of this Plan.

Residents identified priority corridors and intersections for improvements and prioritized the development of those improvements.

Engagement and input from members of the public and agency groups was facilitated through participatory design workshops, stakeholder meetings, mobile research beacon deployments, and smaller one-on-one meetings. A summary of these events, the feedback and input collected, and the subsequent analysis is provided in this chapter.

Stakeholder Involvement

Members of the public, community-based organizations, and government entities were included in the engagement and outreach efforts for this Plan. These three stakeholder groups helped ensure a well-rounded assessment of needs in which community input was weighed evenly with that of agency stakeholders to create equitable solutions.

Leadership Counsel for Justice and Accountability (LCJA) and Lideres Campesinas, community-based organizations, spearheaded the public engagement efforts and were supported by a local design and community development organization, Kounkuey Design Initiative (KDI) that facilitated the workshops and prepared the Plan. These groups grounded the Plan in the communities' multi-year history of

public conversations, discussions, and input on mobility needs. Events, meetings, and workshops were conducted primarily in Spanish (with English translation as requested) to fully include monolingual residents and break down language barriers, and as a result over 100 residents were engaged and gave their input into the shaping of the Plan.

Stakeholders from multiple County of Riverside departments provided feedback and guidance on the feasibility of the Plan and helped clarify how the Plan relates to other initiatives and plans underway within the County and region as described in Chapter 3.

Advisory Group

An Advisory Group for the Plan was formed and consulted throughout the Plan's development to schedule community design workshops, discuss key issues, identify additional stakeholders, determine strategies to engage all segments of the community, and maximize workshop participation. The following organizations received communication through this Advisory Group, and those denoted with an asterisk attended one or more in-person meetings:

- Caltrans*
- SunLine Transit Agency*
- Mecca-North Shore Community Council*
- Torres Martinez Band of Desert Cahuilla Indians*
- Riverside University Health System-Public Health (RUHS-PH)*
- Riverside County Supervisor District 4*
- Coachella Valley Association of Governments (CVAG)*
- Coachella Valley Housing Coalition (CVHC)*
- Coachella Valley Unified School District (CVUSD)*
- Desert Recreation District (DRD)*
- Office of Assembly Member Eduardo Garcia*
- Riverside County Economic Development Agency (RCEDA)*
- Riverside County Transportation Commission

(RCTC)*

- Riverside County Department of Planning*
- Alianza Coachella Valley*
- Cabazon Band of Mission Indians
- St. Augustine Band of Mission Indians
- Office of Congressman Dr. Raul Ruiz

A total of three Advisory Group meetings were held for the development of this Plan. The first Advisory Group meeting was held in January of 2019 to give an overview of the Plan's scope and collect existing datasets from the stakeholder team. These datasets were used to create a base map and identify data gaps. A second meeting was held in April 2019 to summarize the results of the first two rounds of workshops and gather feedback on the proposed structure for this Plan and the Regional Plan. The third and final meeting was held in October of 2019 to present the draft Plan and obtain public comments. These meetings served to inform the agencies of the outcomes and conclusions from the community workshops. Furthermore, these meetings served as brainstorming sessions for possible ways to leverage existing funding already received by the County, or to understand key points of coordination between the Plan and other initiatives underway in the area.

Agency and Tribal Coordination

As with any plan, coordination between governmental agencies is critical, allowing for a better understanding of projects underway and potential opportunities to leverage infrastructure and funding to maximize planning efforts. This happened both in the Advisory Group meetings described above, as well as in additional meetings with the following key agencies.

SunLine Transit Agency

SunLine Transit Agency (SunLine) provided great insight and assistance in this planning process. As discussed in Chapter 2, SunLine faces low ridership numbers in the ECV even though the need is great. While this Plan cannot provide specific recommendations for SunLine as they are a separate entity, due to resident feedback on public transportation access it was important to discuss public transit with residents and share findings directly with Sunline. Additionally, SunLine has also

been conducting public workshops as part of their own internal review and planning process in these communities. The information shared by SunLine has served to better understand the challenges they face in implementation and community ridership expectations. Furthermore, an assessment of the bus routes and line configurations are underway, to be rolled out in the ECV in early 2021. The recommendations in Chapter 7 lay out a framework for potential public transit infrastructure improvements in the ECV, including the placement of shade structures, increased service, additional critical bus lines and bus stops, and larger regional transit connections.

Torres Martinez Band of Desert Cahuilla Indians

According to Tribal officials, many of the approximately 5,500 members of the Torres Martinez Band of Desert Cahuilla Indians (Tribe) use the same community amenities as other residents within the communities of the ECV, and have similar concerns about the current lack of infrastructure. Although most of the land under control of the Tribe is found within Thermal and Oasis, there are a few parcels within North Shore and Mecca. This land is either owned by the Tribe or considered fee land. Fee land is land that has been sold by the Tribe to another entity (private or public); however in many of these cases the road right of way remains under the jurisdiction of the Bureau of Indian Affairs (BIA).

The project team met with representatives of the Tribe multiple times throughout 2018 and 2019, including their Director of Transportation and the Tribal Council, who agreed with what was said in previous discussions with their General Council regarding desired improvements, and added information regarding housing developments on their land and connectivity issues within these areas.

Due to the patchwork nature of tribal land in the region, close coordination with the Torres Martinez Band of Desert Cahuilla Indians as well as St. Augustine Band of Mission Indians and Cabazon Band of Mission Indians will be required when proposing infrastructure improvements on tribal land in the region.

Coachella Valley Unified School District

The Coachella Valley Unified School District (CVUSD) faces a range of unique challenges in their efforts to safely transport their students to the nine schools in the Eastern Coachella Valley region. While the CVUSD has policies in place allowing students who live close enough to schools to walk rather than providing school buses, the current lack of pedestrian facilities around most schools does not allow for students to walk to school safely. As a result, CVUSD currently needs to bus the vast majority of its students to and from school, requiring the allocation of significant resources for coordination and staffing. CVUSD’s Director of Transportation was consulted through multiple in-person meetings to coordinate efforts—in March 2018 and April 2019—resulting in effective collaboration between the project team and CVUSD. The information obtained at these meetings informed Chapter 3 of this Plan, as well as the Plan’s recommendations.

Additionally, through the engagement events, it was revealed that children’s safety in getting to school and around school bus stops was a top priority for residents across all four unincorporated communities. This was particularly the case in North Shore since there are no schools currently within the community resulting in all students being bused to Mecca.

The multimodal and pedestrian facility improvements recommended by residents through the participatory planning process would greatly benefit CVUSD. The improvements would allow students who live near schools to walk rather than being bused which would reduce the strain on the CVUSD.

Other Agencies and Groups

Additional meetings were held with the following agencies: Riverside County Planning Department, Riverside University Health System-Public Health (RUHS-PH), Mecca-North Shore Community Council,

Riverside County Supervisor District 4, Coachella Valley Association of Governments (CVAG), and Desert Recreation District (DRD) to consult on matters specific to each agency and coordinate all mobility and transportation planning efforts for the ECV region.

The project team answered agency questions regarding the Plan and consulted on specific matters relevant to the existing conditions, the needs of the area, and/or proposed recommendations.

Engagement Events and Public Involvement

Engagement events focused on two key topics:

- Identifying key community needs and transportation barriers
- Prioritizing infrastructure solutions and phasing of improvements

Residents and stakeholders from both incorporated communities were engaged in an intensive and highly participatory public process to assess and document conditions for all travel modes and users (youth, seniors, people with disabilities, residents, visitors, and businesses), identify shared values and concerns and prioritize improvements.

Public design workshops were central to the development of this Plan. The purpose of the workshops was to work with residents to identify barriers to walking, bicycling, and transit throughout the communities, as well as to suggest solutions in the form of design and operational changes, development of public transit route and mode options, and prioritization of infrastructure and phasing at the neighborhood and regional scales. Community workshops occurred in January, April, and November of 2019. Refer to Table 2 for a summary of engagement events.

ENGAGEMENT	NORTH SHORE	LOCATION	MECCA	LOCATION
Round 1: Needs + Solutions	January 2019	Yacht Club	January 2019	Boys and Girls Club
Round 2: Priorities + Phasing	April 2019	Yach Club	April 2019	Boys and Girls Club
Round 3: Draft Plan Review	November 2019	Yach Club	November 2019	Boys and Girls Club
Mobile Engagements	January 2019	See Table 3	January 2019	See Table 3

Table 2. Summary of Engagement Events

First Round of Community Workshops

The first round of community workshops occurred in January 2019 at the Yacht Club in North Shore and the Boys and Girls Club in Mecca. Over the course of several days, workshops, stakeholder meetings and mobile research beacon deployments were conducted in Mecca and North Shore. The aim of the workshops was to:

- Introduce residents to the goals, structure, and purpose of a transportation plan;
- Understand the larger-scale challenges that residents face when trying to move around the ECV;
- Explain different traffic devices, improvement options, and other types of infrastructure that could be applied within these communities; and
- Identify where new components of pedestrian, bicycle, public transit, and vehicular infrastructure should be placed and prioritized at both the regional and neighborhood scales.

During these workshops, two activities were conducted with residents. In the first activity, shown in Figure 16, residents were presented with a series of statements highlighting broad concerns previously expressed by residents of each community, as identified by the community organizing partners and the Advisory Group. Residents were asked to agree or disagree with each statement and to provide input on the most

pressing concerns within their neighborhoods.

In the second activity, residents split into groups representing different modes of transportation (pedestrian, bicycle, public transit, and vehicular). Within each mode, four types of infrastructure with cost magnitudes assigned to each were given as options, as shown in Figure 17. With a fixed budget, residents were required to choose, mile for mile, the types of infrastructure they preferred and its location within the community, as shown in Figure 18. This participatory budgeting activity made the stakes real for residents and gave the design team insight into residents' priority corridor locations and desired improvements.

Also briefly discussed at these meetings were new ways of ridesharing or vanpooling and how these types of arrangements were currently being informally utilized within the community.

The information gathered at these workshops was immensely valuable in shaping the Plan, allowing for solutions to emerge that better address residents needed. It highlighted not only the issues to be addressed, but required residents to prioritize the types and placement of infrastructure given limited resources.



Figure 16. Statement voting activity at the North Shore workshop, January 2019



Figure 17. Example of improvement type for infrastructural budgeting exercise



Figure 18. Corridor prioritization and participatory budgeting activity in Mecca, January 2019

Second Round of Community Workshops

The second round of community workshops occurred in March of 2019 at the Yacht Club in North Shore and the Boys and Girls Club in Mecca. The goals of these workshops were to:

- Update residents on all mobility planning work done to date, including at the first round of community workshops (see Figure 19);
- Solicit input and feedback on the synthesized priority maps that had been produced based on the results of the first round of workshops (see Figure 20);
- Explain the potential timeline for project implementation;
- Identify corridors or blocks that should be prioritized in the first round of phasing and/or funding (see Figure 21); and
- Discuss the prioritization of neighborhood-scale improvements relative to regional improvements.

The approval and funding process for this Plan was explained to residents by providing an overview of a typical timeline for approval, funding, and constructing

improvements. It was vital the communities understand the process to avoid unrealistic expectations. By helping residents understand what is meant by short, medium, and long term timelines, along with communally deciding what portions of the Plan should be the first phase, residents were able to fully comprehend and appreciate the practicalities of the planning and implementation process.



Figure 19. Updating the community on work done to date at the second workshop in North Shore, March 2019



Figure 20. Discussing priorities at the second workshops in North Shore (left) and Mecca (right) in March 2019



Figure 21. Discussing revisions to the proposed priorities at the second workshop in North Shore in March 2019

Third Round of Community Workshops

The third round of community workshops occurred in November 2019 at the Yacht Club in North Shore and the Boys and Girls Club in Mecca. The goals of these workshops were to:

- Solicit comments and feedback from residents and local stakeholders on the draft Plan as part of the public review period (see Figure 23 and Figure 24);
- Confirm prioritized corridors and intersections;
- Confirm the suitability of proposed improvements to users in the local context;
- Revisit the potential timeline for project implementation and ways to organize the community in the interim; and
- Discuss ways to improve community engagement in future mobility planning efforts.

The draft Plan was presented to residents, specifically detailing the proposed goals, improvements, and phasing, as shown in Figure 22. Similar to the second round of workshops, the expected process for programming and implementation of improvements was discussed in order to establish

realistic expectations. The phasing strategy for proposed improvements was explained to provide an understanding of how the County could pursue constructing facilities when development or funding opportunities become available. It was made clear that this proposed phasing was not a guarantee that projects would be executed within a given timeframe.

All workshops and meetings were conducted in Spanish with English translation. Food and childcare were provided. All locations were accessible and chosen to maximize community turn-out.



Figure 22. Presenting the draft Plan to the community in North Shore, November 2019



Figure 23. Discussing comments with community members in North Shore, November 2019



Figure 24. Discussing comments with community members in Mecca, November 2019

Mobile Research Beacon Deployments

Reaching a large number of residents from a broad range of backgrounds is important to an authentic engagement process. Members of the Project Team went door to door prior to each set of workshops to help raise awareness about the Plan and why it was important, as well as to invite people to the public meetings. Locations and times were carefully planned to ensure the workshops were accessible to residents. However, many agricultural workers in the ECV work six days a week with long hours, and their free time is precious to them and their families. Therefore, in addition to workshops, a Mobile Research Beacon was deployed in an effort to meet people where they are.

This Mobile Research Beacon consist of a cart that allowed for easy transport between public gathering spaces to provide the community information on the Plan and gather resident input, as shown in Figure

25. Refer to Table 3 below for a list of the deployment locations. During these deployments, residents were asked to play a game in which they identified the different ways they move around the ECV currently, and how they would like to be able to get around in the future.

The results of this activity are shown in Figure 26. When residents were asked “How do you move around the ECV currently?”, a majority of residents indicated relying on cars to go to work, school, errands, or for recreation. However, when asked “How would you like to move around in the future?”, residents expressed a strong desire for multimodal transportation. While some residents still wanted to travel by car, 44% in North Shore and 37.5% in Mecca expressed a desire to be able to bike and walk around the communities safely, while others wished to be able to rely on public transportation consistently or share their car rides with friends and neighbors.

DEPLOYMENT LOCATION	ADDRESS	MONTH	# ENGAGED	TOTAL
Food Distribution at Galilee Center	66101 Hammond Rd, Mecca	Jan. 2019	40	61
Leon’s Market	65770 Hammond Rd, Mecca	Jan. 2019	21	
North Shore Mass at Reyes Market	98960 70th Ave, North Shore	Jan. 2019	26	47
Food Distribution at the Yacht Club	09155 Sea View Dr, North Shore	Jan. 2019	21	

Table 3. Mobile Research Beacon Deployment Locations



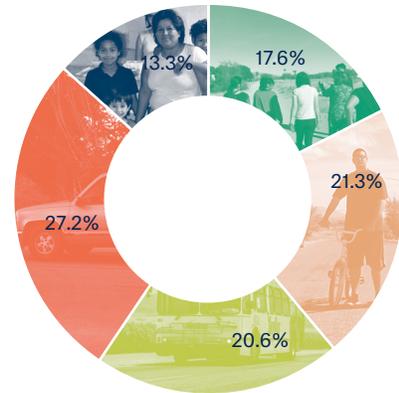
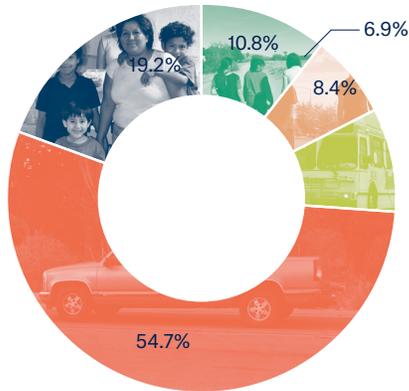
Figure 25. A mobile research beacon deployments at Leon's Market, January 2019

How do you move around the ECV **currently**?

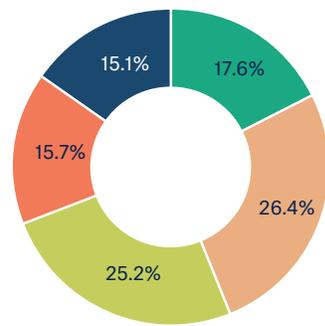
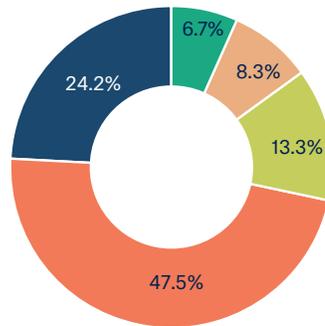
How would you **like** to move around in the future?

TOTAL ECV

- Walk
- Bike
- Bus
- Car
- Rideshare



NORTH SHORE



MECCA

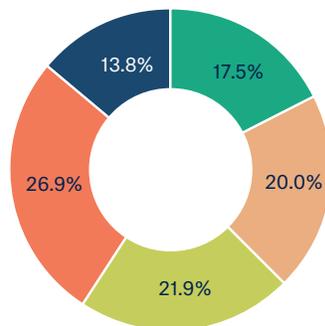
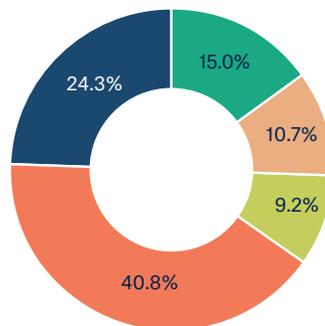


Figure 26. Results of the Mobile Research Beacon Deployments



400

“Necesitamos paradas de bús seguras y con alumbrado, para el SunBus y para el bús escolar.”

“We need bus stops that are safe and have lighting, for the SunBus and the schoolbus.”

*- North Shore Resident
January Workshop*

V. Neighborhood Mobility Needs Assessment

Overview

The first step toward assessing the neighborhood mobility needs in North Shore and Mecca was to examine the existing conditions of the region, gathering all existing data sources and photographing conditions on the ground.

The second step was to document and analyze all the challenges that residents had previously shared, as shown in Figure 27. The Project Team was conscious of previous public engagement conducted by other community organizations regarding mobility issues and wanted to acknowledge and make use of this past work so that the communities were not approached as if the Plan was being developed from a blank slate. Figure 28 depicts those needs.

The third step in assessing the neighborhood mobility needs was directly engaging community residents and other stakeholders to identify key mobility needs and challenges, depicted in Figure 29 and Figure 30. Building off of the work described in Chapters 2 and 4, this section details the mobility challenges that are currently impacting residents' quality of life and serves as a baseline for the goals and proposed improvements that follow in the remainder of this Plan.



Figure 27. Discussing known community needs with the Advisory Committee in September 2017

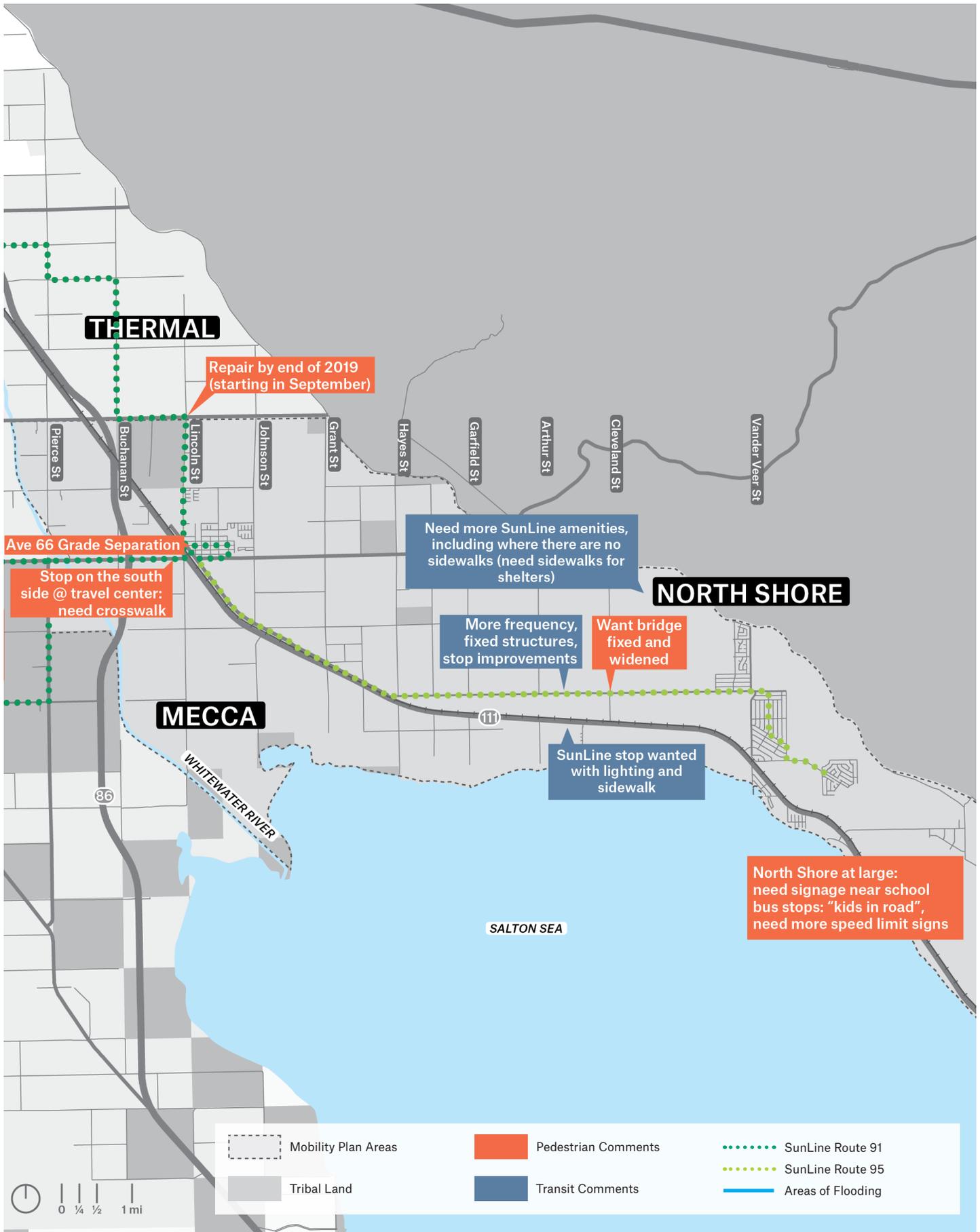


Figure 28. Neighborhood Mobility Needs of Residents Identified by the Project Team and Advisory Group

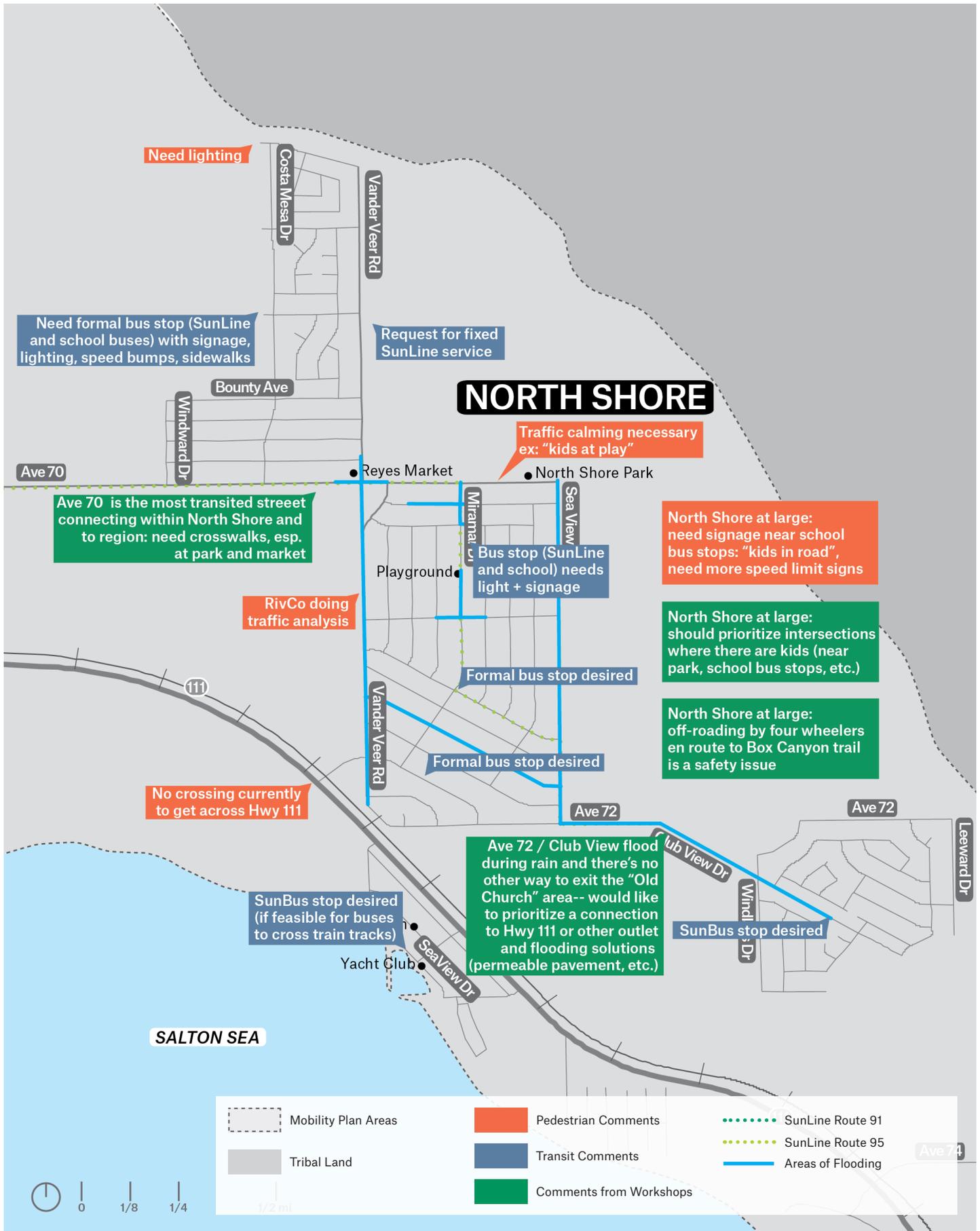


Figure 29. Neighborhood Mobility Needs, North Shore

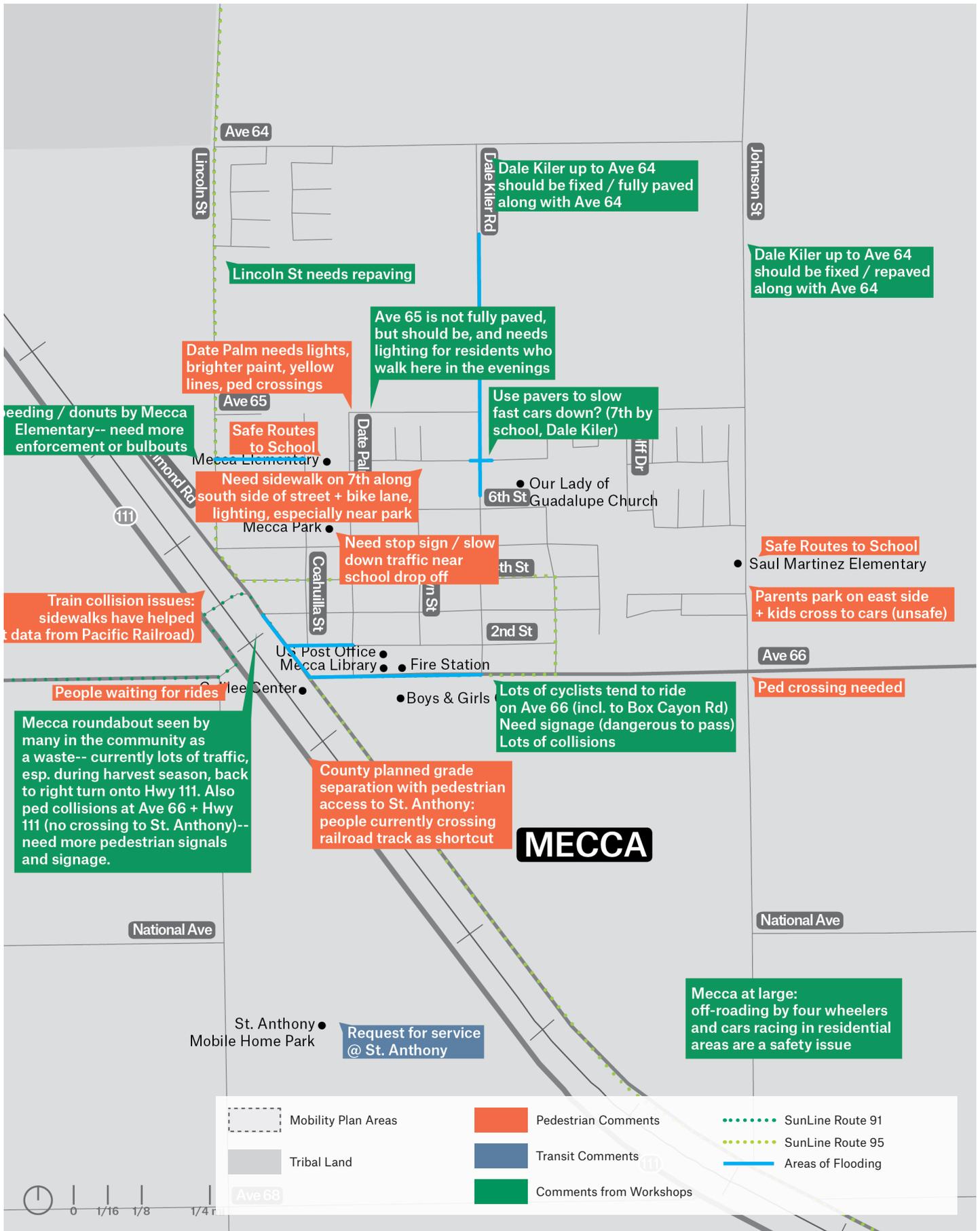


Figure 30. Neighborhood Mobility Needs, Mecca

Neighborhood Mobility Needs and Challenges

Identifying transportation challenges was one of the first tasks undertaken during the engagement process as a whole. At the first workshops in January 2019, thirteen residents in Mecca and 19 residents in North Shore were presented with statements that identified large-scale mobility challenges and asked to vote on those that they agreed with. The results of this exercise are shown in Figure 31 below.

These challenges broke down into four major categories:

1. More transportation options that encourage safe multimodal use;
2. Improved connections between the communities of the ECV and to the broader Coachella Valley region;
3. Prioritization of school connectivity; and
4. Transportation options that promote social cohesion.

There are multiple barriers to overcoming the above challenges, primarily the absence of infrastructure for travel other than by vehicle. When asked what areas of North Shore and Mecca were challenging to walk

or bicycle in, residents of each community answered that essentially all areas outside of the improved parts of central Mecca were challenging because of the lack of infrastructure to enable walking and bicycling. Main thoroughfares such as Vander Veer Road, Avenue 66, and Avenue 70 were identified in particular because of the relatively high speed of cars that drive along these main thoroughfares. Residents in the central areas of Mecca described their communities as being more comfortable for walking given the presence of some sidewalks, but identified gaps in the pedestrian network where connections were needed, as well as the need for additional infrastructure to ensure safe pedestrian crossings and bicycling.

Local and Regional Travel Destinations

The majority of residents in North Shore and Mecca regularly need to access key resources in central Mecca, such as schools and the library. Furthermore, nearly all residents travel to the more developed cities of Coachella, Indio, La Quinta and Palm Desert for shopping, errands, doctors, education and employment opportunities. For example, Palm Desert is an important destination for advanced educational opportunities due to the public community college,

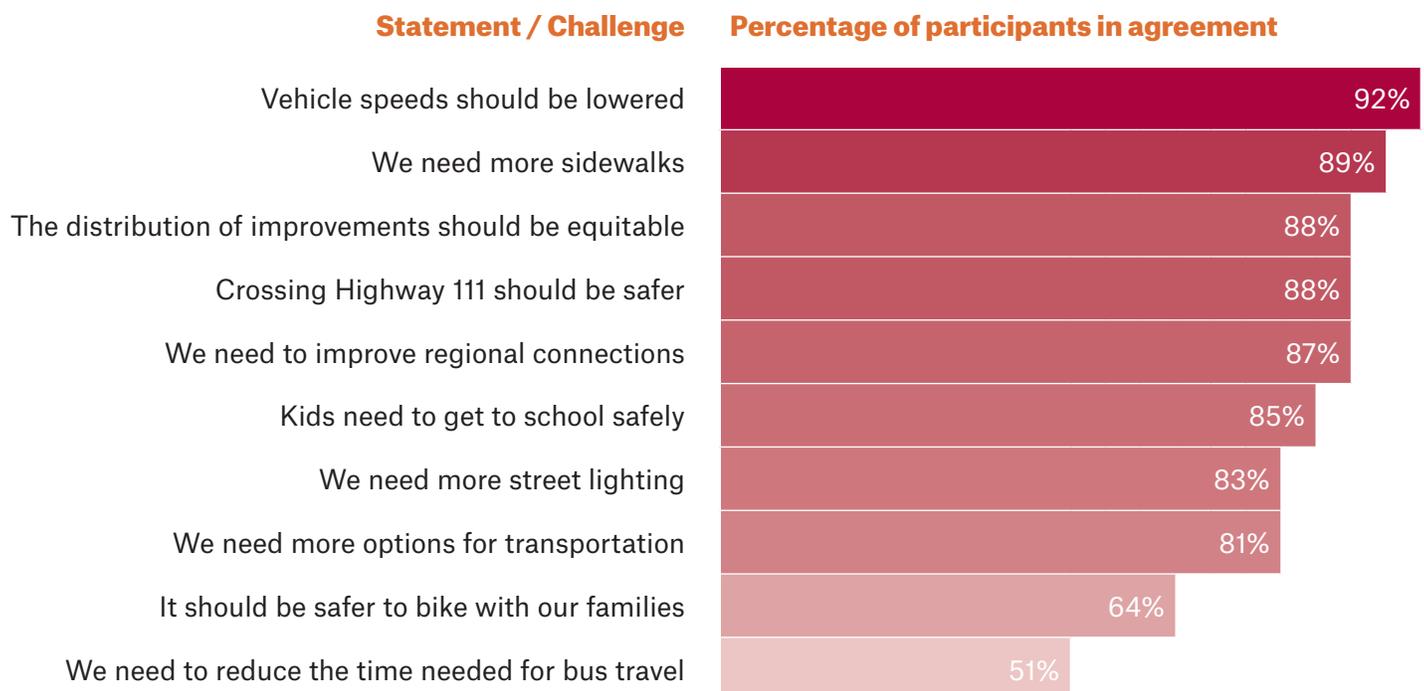


Figure 31. Results from Mobility Challenges Exercise, January 2019

College of the Desert. A survey conducted by SunLine found that approximately one-quarter of all bus trip users were traveling to Palm Desert, many of those being students at the College.¹

The dispersed landscape of the ECV is a significant challenge to navigate with the current transportation system, as the lack of safe alternative mobility options makes it necessary to use a car to access these distant nodes of activity, and not all residents have the means to own a vehicle. According to residents and local organizations, many families that do own a car are only able to afford one, which is used by the primary breadwinner to travel to work. Meanwhile, the rest of the family is left to travel to school, errands, and other important destinations by other modes of travel which may be less reliable, accessible, and/or safe. Multimodal connections and larger-scale connectivity frameworks between communities promote social cohesion in the region, long-term resiliency, and sustainable communities.

Major Areas for Improvements

Residents and stakeholder agencies alike stressed that multi-functional infrastructure in the ECV could raise the quality of life for residents, enable a more varied menu of transportation options, and improve air quality and health benefits. This approach rooted in community-based priorities, context-sensitive infrastructural responses, and active modes of transportation shaped the opportunities identified in the region. Layered onto this approach, residents identified improved safety, better connections to schools, and access to multimodal travel as driving factors within their vision for improvements.

Another major priority for residents was creating better connectivity between North Shore and Mecca. As the easternmost community in the region, North Shore residents expressed feeling particularly isolated. These feelings were especially acute during the development of this Plan as one of the two access points into the community was severed when the bridge along Avenue 70 at Cleveland Street was damaged due to a heavy storm event in October 2018. As a result of this intersection closure, Avenue 70 could not provide access into North Shore and only one route into the

community remained accessible—via Highway 111, entering North Shore along Bay Drive. Residents noted that commute times increased by approximately 30 minutes, particularly at peak hours in the early morning, when many residents departed for work in the fields, and in the afternoon, when many residents returned from work or school. The intersection of Highway 111 and Bay Drive also includes the Union Pacific Railroad (UPRR) crossing, further extending travel times during the passing of trains. Residents of North Shore, with the support of their neighbors in Mecca, requested more connections between the two communities so that more alternative routes are available.

A second area in local and regional travel identified by the communities was around Avenue 66 and Grapefruit Boulevard in Mecca. Residents of Mecca noted that significant automobile traffic tends to be congested in this area, particularly due to cars that need to turn right from eastbound Avenue 66 onto Grapefruit Boulevard to head south into the North Shore area.

The Riverside County Transportation Department recently constructed a roundabout in Mecca, connecting Grapefruit Boulevard and Hammond Road. Furthermore, in spring 2020 the Riverside County Transportation Department will be constructing the Avenue 66th Grade Separation consisting of a grade separated crossing over the existing UPRR, Highway 111 and Hammond Road in the Mecca Community. This project will provide a secondary access point to the community and emergency vehicles crossing the railroad tracks.

With the proposed grade separation, the Mecca Roundabout will no longer be the only connection from Oasis and the regional travel center on the west side of Mecca into central Mecca and to North Shore, addressing a chokepoint for travel between the communities. Such projects address the need for additional connections between North Shore and Mecca.

1 Riverside County Transportation Commission (2015). Task 2: Existing and Future Transportation Conditions: Strategic Assessment.

Overall Community Mobility Priorities

Figure 32 and Figure 33, the "Synthesized Neighborhood Improvement Requests from Residents" maps were created based on what community members identified as their top improvement priorities during the first round of workshops in North Shore and Mecca. Each of the priority intersections or corridors shown in the figures are a result of the infrastructure budgeting and prioritization exercise conducted during the workshop. Resident prioritization from the first set of workshops independently matched one another, highlighting common needs within the region. Community members served as experts, sharing lived experiences and providing a far greater level of detail than could be gathered through secondary research.

Main ideas from the workshops included:

- Improving connectivity within the central areas of Mecca and North Shore. Residents wanted to be able to travel safely from their homes to key community assets. In Mecca, these include the schools, churches, markets, and other community-serving facilities most residents access on a regular basis. In North Shore, these were mainly Reyes Market and the North Shore Yacht Club, but residents also placed high importance on safe travel to bus stops, which connect them to other amenities throughout the ECV.
- Improving and increasing East-West connections between Mecca and North Shore. Residents were especially interested in thinking long-term about how to create more points of entry and connection between the communities, for example, by paving the portion of Avenue 68 east of Johnson Street through to North Shore that is currently unimproved.

Figure 34 and Figure 35, the "Overall Neighborhood Mobility Priorities" maps, show the overall prioritization of corridors and intersections guiding the recommendations in Chapter 7 and phasing in Chapter 8. These maps expand upon the direct community input shown in Figure 32 and Figure 33 and factor in existing conditions, policies and planning, best practices research, stakeholder and agency guidance, and overall connectivity of the transportation network.

Overall mobility priorities were ranked through the community workshop process. Corridors that are coded as first priority are main connector roads that support more local community assets in the area such as schools, clinics, and commercial areas. The intersections that were identified as needing improvement are along Avenue 66 and Highway 111, due to the limited traffic signals on these roads. Additional street and intersection lighting along these corridors was highly desired by residents, who indicated that it would help increase visibility of stop signs that are prevalent throughout much of the communities. However, lighting along street corridors would require the establishment of a special district as new development is proposed and approved to fund the installation and maintenance. Signalized intersection lighting can be installed by the Riverside County Transportation Department concurrent with signalized intersection projects.

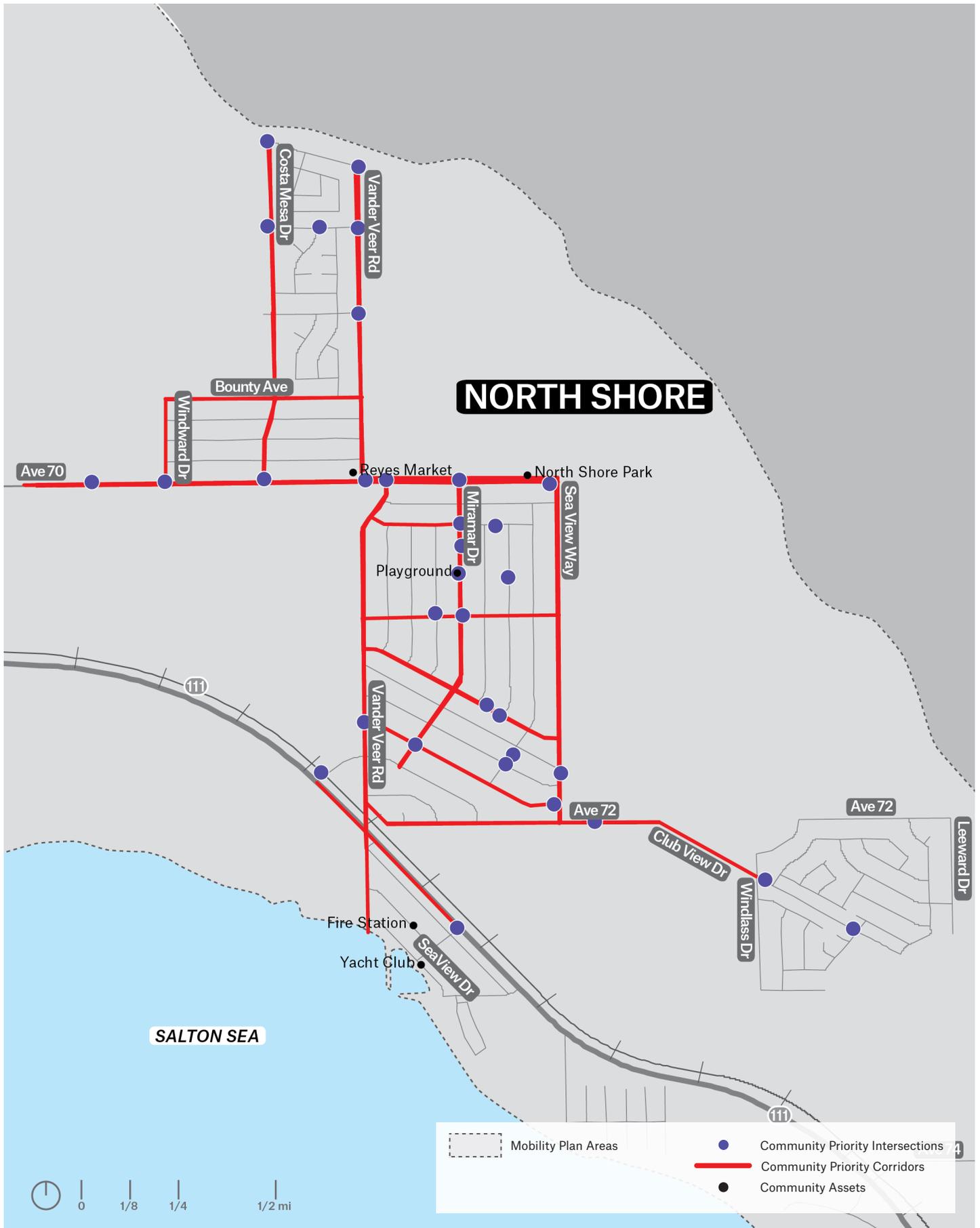


Figure 32. Synthesized Neighborhood Improvement Requests from Residents, North Shore

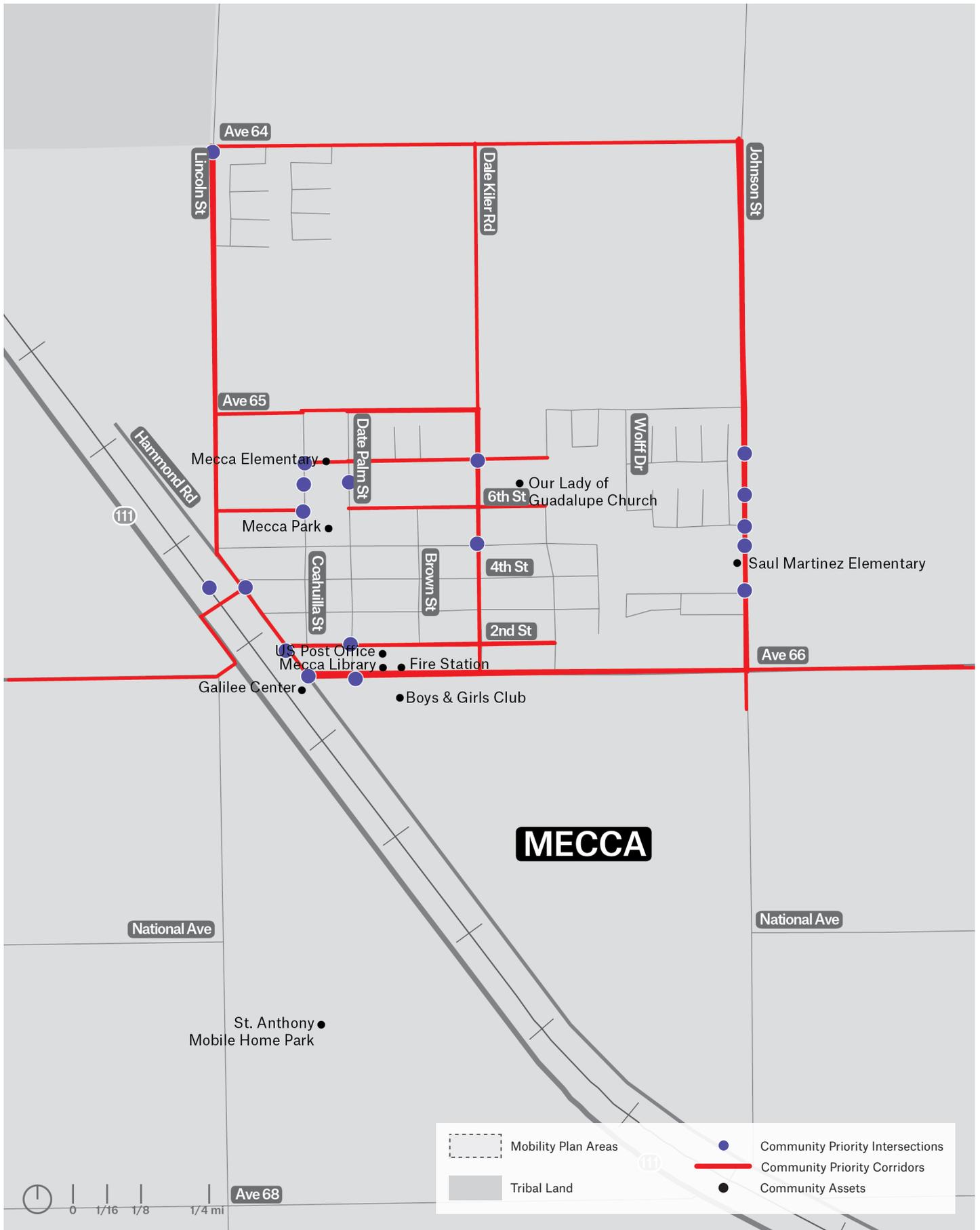


Figure 33. Synthesized Neighborhood Improvement Requests from Residents, Mecca

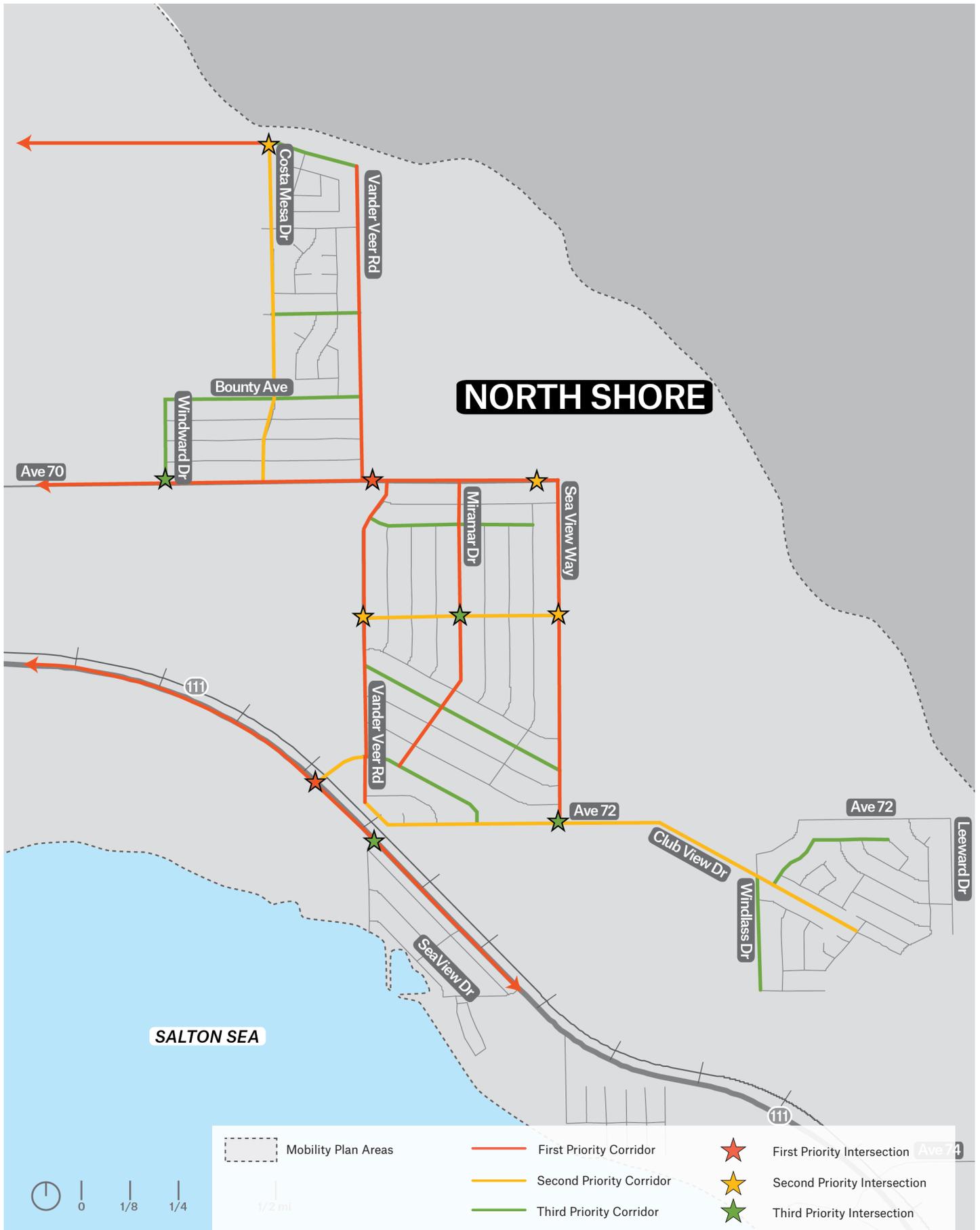


Figure 34. Overall Neighborhood Mobility Priorities, North Shore

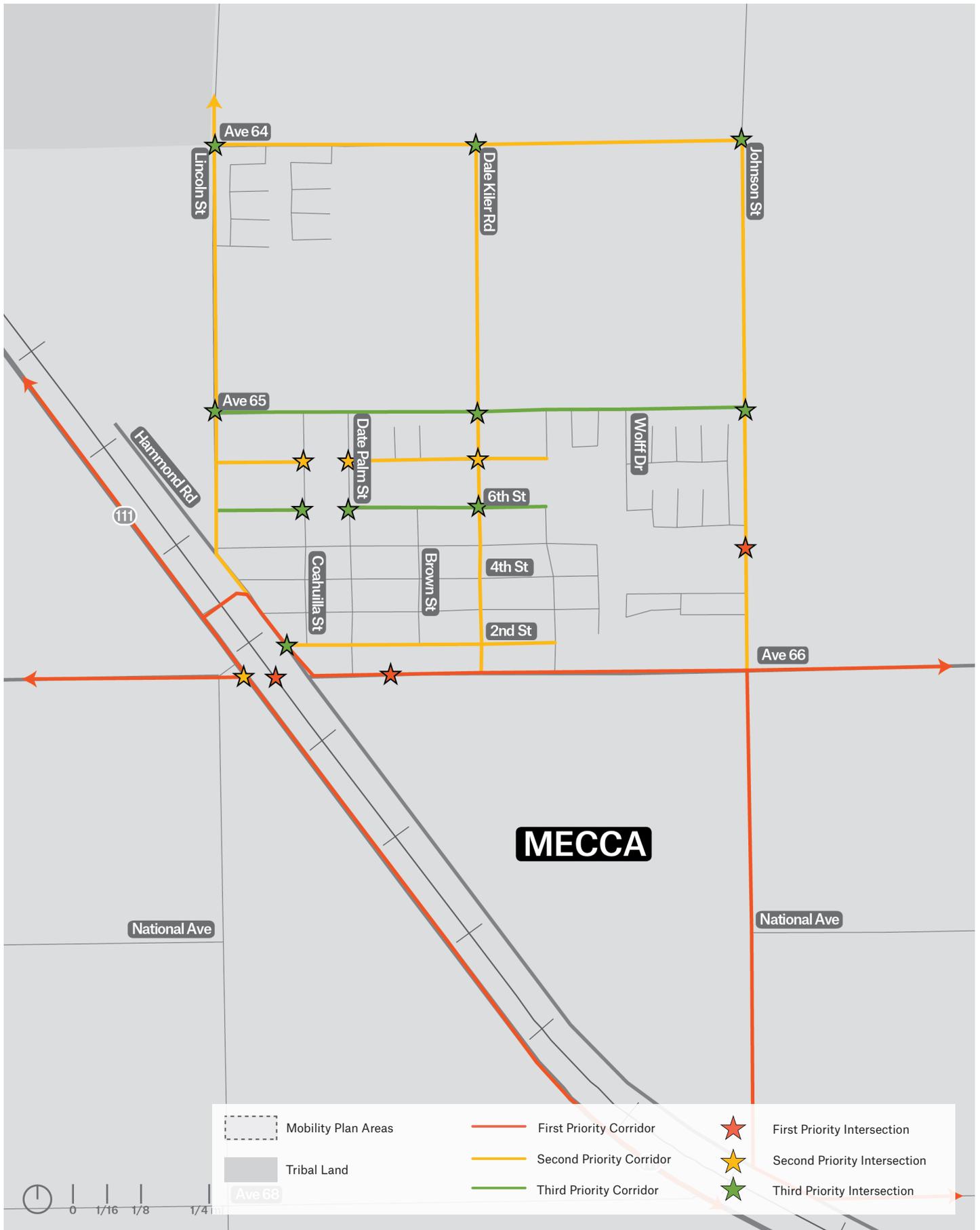


Figure 35. Overall Neighborhood Mobility Priorities, Mecca

“Es muy importante la conectividad entre las comunidades del valle.”

“The connectivity between the communities of the valley is very important.”

*- Juana Garcia, Mecca Resident
April 2019 Workshop*



VI. Goals, Objectives, and Strategies

Overview

The Neighborhood Mobility Plan for the Communities of North Shore and Mecca envisions communities that are connected to a broader regional system which offers multiple transportation modes, meets people's changing needs through flexible and context sensitive solutions, and values the importance of laying a broad framework for future improvements. This Plan aims to blend infrastructural improvements with those that encourage community cohesion and values resident voices. Throughout the Plan, the strategies proposed seek to have multi-functional value by considering mobility holistically. This means that infrastructure, environment, and community were each considered as critical elements during the decision-making processes. As a result, this plan will enable residents to build more resilient communities while improving connections within the Coachella Valley.

The Roadmap: Goals, Objectives, and Strategies

The overall goals, objectives and strategies for the Plan broadly address the goal of integrating infrastructure, environment and community which are detailed in Table 4 on the following page. The goals within this Plan are meant to identify the overarching ambitions that residents have for their community, both in its current condition and in the future. Objectives take these goals and create implementable best practices to guide any physical or planning solution proposed. Lastly, the strategies are meant to serve as directives for each solution, highlighting methods to meet each objective.

[PAGE INTENTIONALLY LEFT BLANK]

GOALS	OBJECTIVES	STRATEGIES
1. Promote multi-modal mobility.	Better accommodate multimodal travel by foot, bicycle, and public transit to connect neighborhoods.	Plan and construct new multi-modal facilities serving both the regional and neighborhood scales.
		Plan and construct more bicycle and pedestrian facilities to fill gaps in areas where some infrastructure exists.
		Develop alternate transit services serving both the regional and neighborhood scales.
2. Promote bicyclist and pedestrian safety.	Design pedestrian facilities to maximize pedestrian safety.	Ensure sidewalks are well-placed and wide enough to be used by a variety of users and abilities.
		Design intersections and crossings to increase pedestrian safety by increasing visibility that might include the following types of features: small curb radii; curb extensions; median refuge islands; rectangular rapid flashing beacons and pedestrian hybrid beacons.
	Design bicycle facilities to maximize bicyclist safety.	Ensure bicycle facilities are designed to be usable by a variety of bicyclists and minimize perceived levels of traffic stress.
		Ensure safe routes to school.
3. Promote shared mobility and transit use.	Make transit more convenient to use.	Coordinate with CVUSD to understand students' needs and provide more pedestrian infrastructure, particularly crosswalks near schools and the surrounding communities.
		Take steps to design the streets around the schools to encourage reduced vehicle speeds. Consider using AB 321 to reduce the posted speed limit around schools to 15 mph.
	Expand additional shared mobility options.	Refine bus routes and locations of transit stops in the Eastern Coachella Valley in accordance with community input.
		Provide more transit shelters that have a shade element.
4. Improve communication between transit agencies, stakeholders, and community members and organizations.	Expand opportunities for participation in planning and design.	Support the establishment of formalized vanpool programs.
		Encourage innovative ride-on-demand programs.
	Increase transparency around transportation decision-making.	Create a resident transportation task force that routinely meets with the Mecca-North Shore Community Councils and the Riverside County Transportation Department.
5. Enhance public health and environmental justice.	Provide facilities for recreational activities and exercise to combat environmental injustices.	Prioritize transportation projects that are championed by the community.
		Increase communication between agencies, stakeholders, and the public, especially outside of traditional channels.
	Promote social cohesion and neighborhood connectivity.	Support the implementation of Environmental Justice policies in the Healthy Communities and Land Use Elements of the General Plan, including by increasing miles of pedestrian and bicycle infrastructure.
6. Decrease greenhouse gas emissions	Expand modes of transportation available beyond fossil fuel based vehicles.	Supplement Riverside University Health System-Public Health's initiatives with information on active modes of transportation.
		Prioritize transportation projects that connect neighborhoods to identified community centers or hubs.
		For agencies with transit related projects, explore use of electric and hybrid vehicles for public transit, shared, and personal vehicles.

Table 4. Goals, Objectives, and Strategies

[PAGE INTENTIONALLY LEFT BLANK]

[PAGE INTENTIONALLY LEFT BLANK]

“Necesitamos más conexiones ágiles y rápidas entre North Shore y el resto del valle para poder acceder oportunidades de trabajo y para estar preparados en caso de emergencias.”

“We need more quick and agile connections between North Shore and the rest of the valley to be able to access employment opportunities and to be prepared in case of emergencies.”

*- North Shore Residents
April 2019 Workshop*



VII. Proposed Improvements and Programs

Overview of Improvements

This chapter recommends network improvements for the communities of North Shore and Mecca at the neighborhood scale based on community input, needs analysis findings, research, observations, and existing infrastructure. These improvements are intended to implement and support pedestrian and bicycle infrastructure, connect the communities internally, and supplement the regional improvements recommended in the ECV Regional Mobility Plan to solve transportation issues within the ECV.

A menu of concepts for potential improvements, the space required for such improvements, their ideal application context, and advantages and disadvantages of each, is located in the Appendix. This list of different transportation facilities is drawn from design manuals and best practices, including Caltrans' Manual of Uniform Traffic Control Devices (MUTCD) and Highway Design Manual (HDM), as well as National Association of City Transportation Officials (NACTO) standards. The menu of concept is meant to serve as a flexible array of options, all of which fit within the palette of improvements preferred by the community. These concept would require further study relative to specific contexts as projects move towards implementation.

Priorities for each of these modes were developed through a combination of agency and community input, as illustrated in Figure 34 for North Shore and Figure 35 for central Mecca. As discussed in Chapter 5, these priorities originated from resident recommendations as shown in Figure 29 and Figure 30, then vetted through agency expertise, and evaluated for their implementability and practicality. These vetted community-based priorities are the basis for the recommendations that follow in the remainder of this chapter and the improvement phasing discussion in Chapter 8.

Proposed Multimodal and Pedestrian Facility Improvements

Approach

The multimodal improvements proposed in this Plan are of critical importance to improving mobility in North Shore and Mecca, as they aim to lay an **expansive network** throughout the communities to facilitate pedestrian and bicycle trips, particularly for children traveling to and from school. Drawing on the advantages of this spacious rural region, it is recommended that this network be largely made up of wide, paved **multimodal paths** to allow for safe simultaneous use by pedestrians, bicyclists, and other means of active transportation.

The solutions suggested here focus on helping all types of pedestrians and bicyclists be **safe and comfortable**, from experienced athletes, to commuters, to children and families. To that end, the proposed facilities will need to be protected from high-speed traffic as much as possible. Similarly, residents expressed strong preference for paths and trails that are paved for comfortable usage not only by bicycles, but also by other wheeled vehicles such as strollers, carts, and wheelchairs.

Additional infrastructure supporting a comfortable and safe travel experience is also necessary in order to have a fully functional pedestrian network. Improvements could include **shade structures** that can serve as areas of respite during hot summer days, **street lighting** to allow for safe travel in the early morning hours or during the evening, and **benches** for creating public gathering spaces and opportunities for rest. **Crossing improvements** are also key to effective connectivity and safety. Residents expressed preference for paths and **sidewalks that do not meander**, as they prefer to be able to reach their destinations quickly in the hot climate.

Recommended Improvements

Figure 36 and Figure 37 show the corridors on which multimodal facility improvements are recommended for North Shore and Mecca respectively, with additional details provided in Table 5. Priority should be given to infrastructure improvements that can accommodate multimodal travel and the behavioral context of residents within these communities. Below are the recommended options for improvements:

- **Class I multimodal paths** provide pedestrian and bicycle mobility on **paved trails** that are completely separated from a street, whether by dirt, plantings, a swale, berm, or another physical buffer, as shown in Figure 38. A separated bike and pedestrian path could serve as a multimodal option for commuters, students, and recreational users alike. Residents have expressed that **wide paths** are particularly desirable, especially near the schools where large groups of students walk together. These paths should be at least 10 feet wide, as per Caltrans HDM,¹ and striped for two-way traffic, as per MUTCD standards.² Because of the typical high speeds of traffic throughout both communities (generally at least 45 MPH), residents expressed that they did not feel safe walking on a narrow sidewalk or biking in a lane immediately adjacent to moving traffic. Within North Shore and Mecca, these paths should be implemented where right of way is wide enough to accommodate a **buffer of at least 5 feet**, as per Caltrans HDM.³ These buffers should be paved in areas adjacent to SunBus stops to allow for the installation of bus shelters, benches, and other amenities, as shown in Figure 39. **Colored asphalt** is recommended to allow for visual distinction and to minimize heat radiation.
- **A concrete sidewalk at least 5 feet wide** is suggested as the second most preferable alternative for pedestrian travel in areas with narrow right of way. As shown in Figure 40, a **curb and gutter** are necessary to provide a safe separation from vehicular traffic and to manage

stormwater infiltration. Although rain is sparse in this climate, North Shore and Mecca are highly vulnerable to flooding, both in areas with and without infrastructure. In the portions of Mecca that currently have paved sidewalks without gutters, flooding is a common issue.

- In areas with narrow right of way where bicycle facilities are desired, **Class IV protected bikeways** are recommended. These should be **signed, striped, and stenciled** for one-way bicycle travel along a roadway. To maximize bicyclist safety and comfort, buffers of at least 3 feet in width should separate the bike lanes from vehicular traffic, as shown in Figure 41, marked per California MUTCD standards.⁴ A vertical barrier such as a **curb or flexible delineators** between the travel lane and the cyclist provides additional protection for bikers of all ability levels. **Rumble strips and reflective markings** in the buffers can alternatively provide for safer separation from vehicles and visibility given low levels of lighting along the streets.

Bicycle signage and wayfinding are key for the success and safe utilization of any type of bike facility. Wayfinding signs can direct bicyclists along the network of bike lanes to community destinations, but more importantly serve as a signal to vehicular traffic to be cognizant of potential bicycle traffic. This Plan recommends the installation of wayfinding signs at key decision points and sufficient stenciling to provide for bicycle safety as per California MUTCD.

The Appendix provides more details about these concepts and their ideal applications, as well as additional alternatives that may be suited to the context. Some of these improvements are recommended on corridors that may be unpaved in some segments. It is expected that these roads will be paved as County-led or Tribe-led infrastructural improvements or development progress in the area, and pedestrian facility improvements should be included as part of this process.

1 California Department of Transportation, Highway Design Manual, Index 1003.1

2 California Manual of Uniform Traffic Control Devices, Section 9C.03

3 California Department of Transportation, Highway Design Manual, Index 1003.1

4 See California Manual of Uniform Traffic Control Devices, Figure 9C-104(CA)

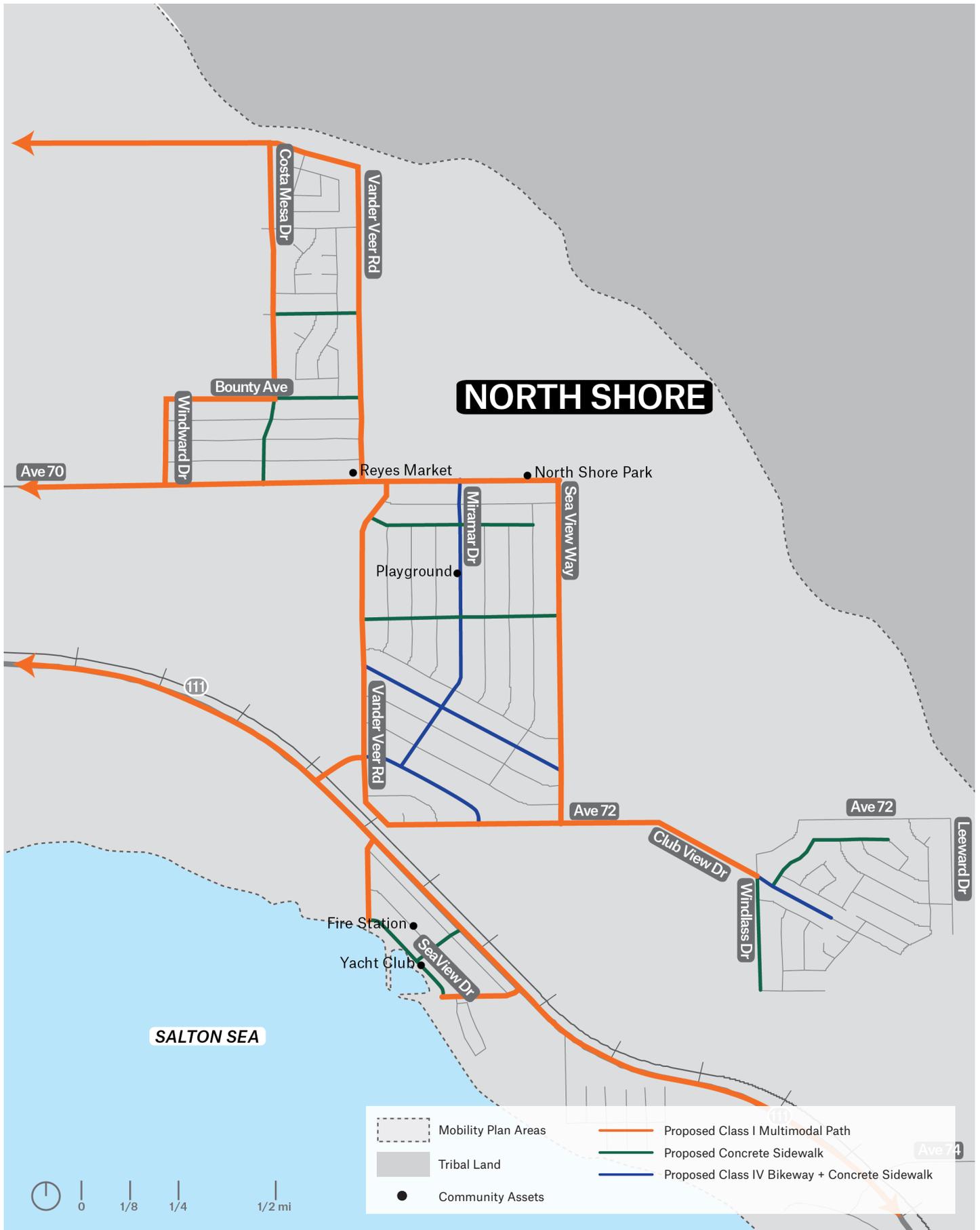


Figure 36. Proposed Multimodal Facility Improvements, North Shore

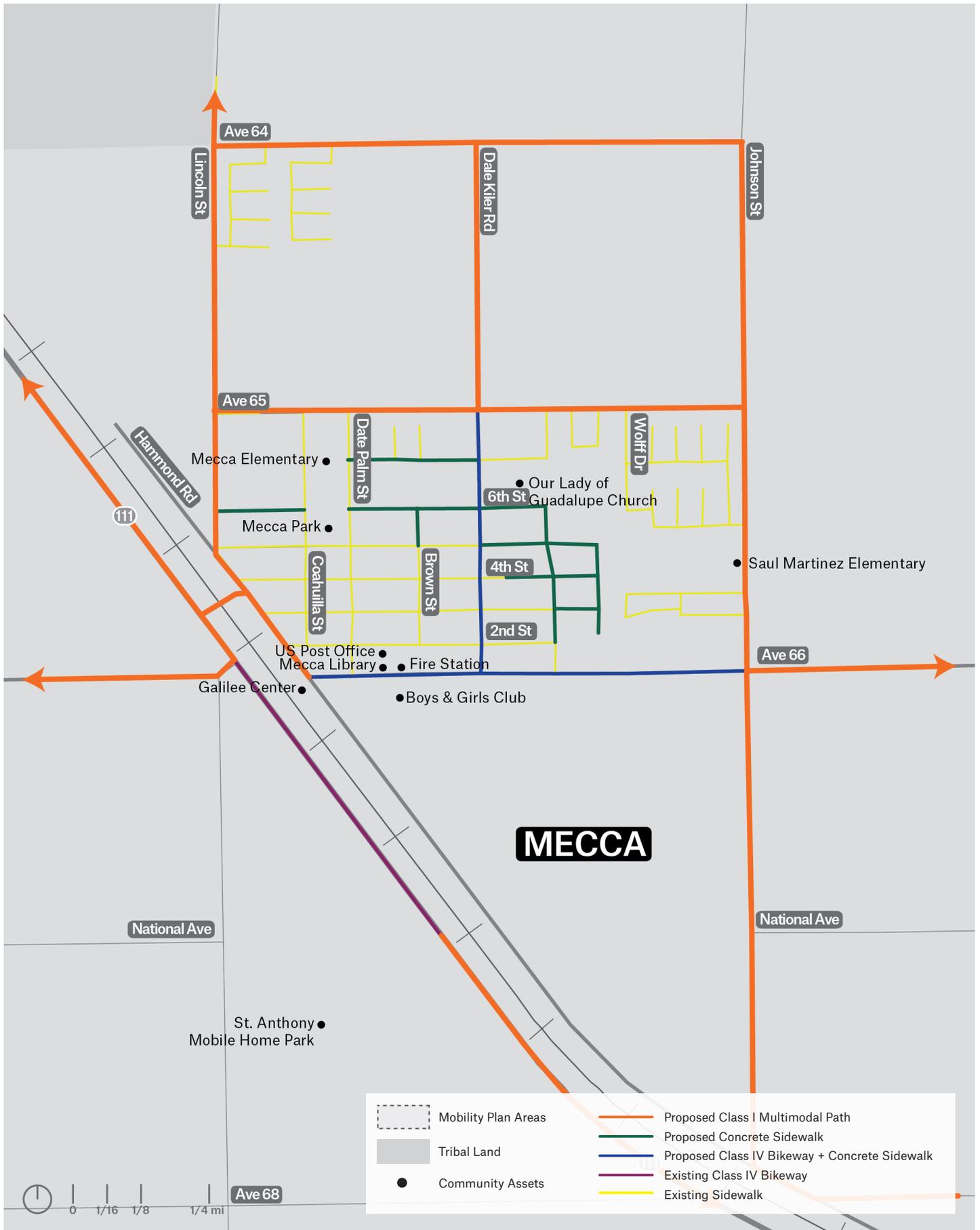


Figure 37. Proposed Multimodal Facility Improvements, Mecca

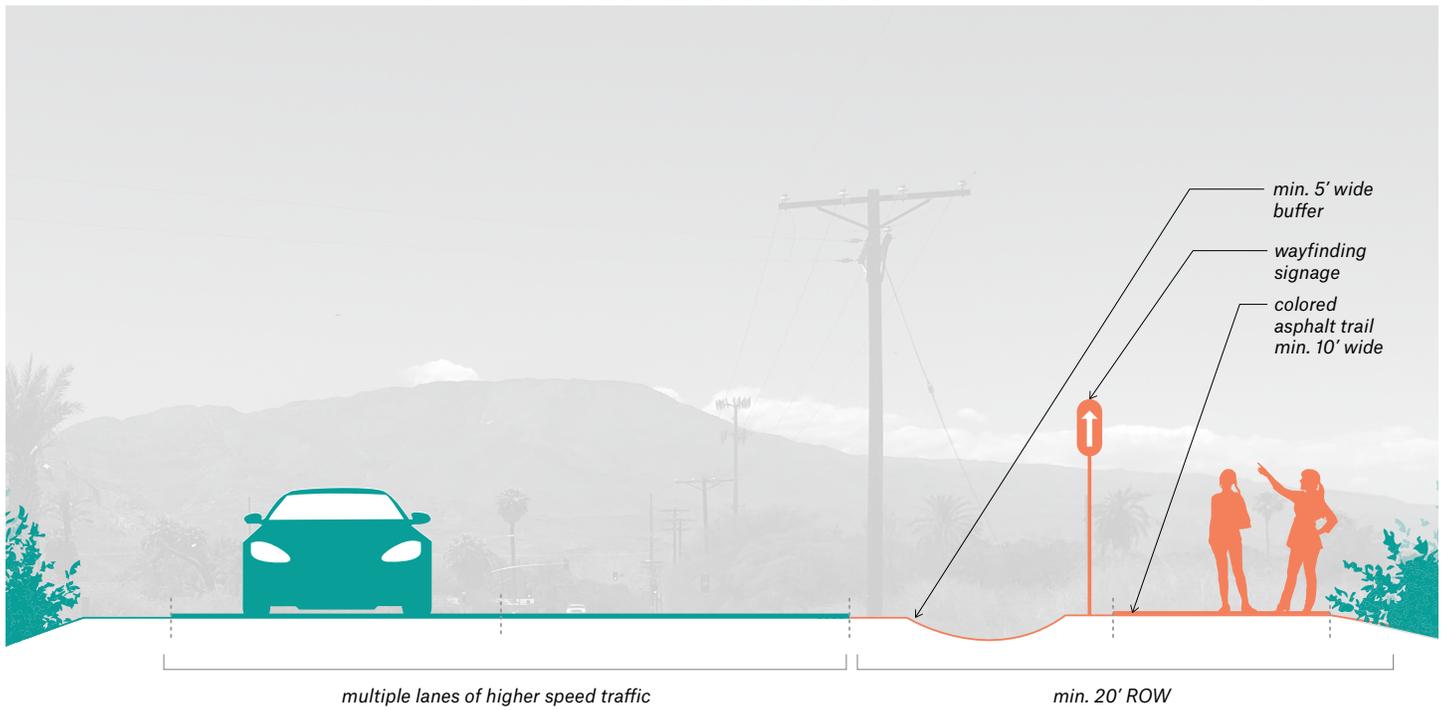


Figure 38. Typical Cross-Section: 10-foot Wide Class I Multimodal Path



Figure 39. Typical Cross-Section: 10-foot Wide Class I Multimodal Path with Public Transit stop



Figure 40. Typical Cross-Section: 5-foot Wide Concrete Sidewalk with Curb

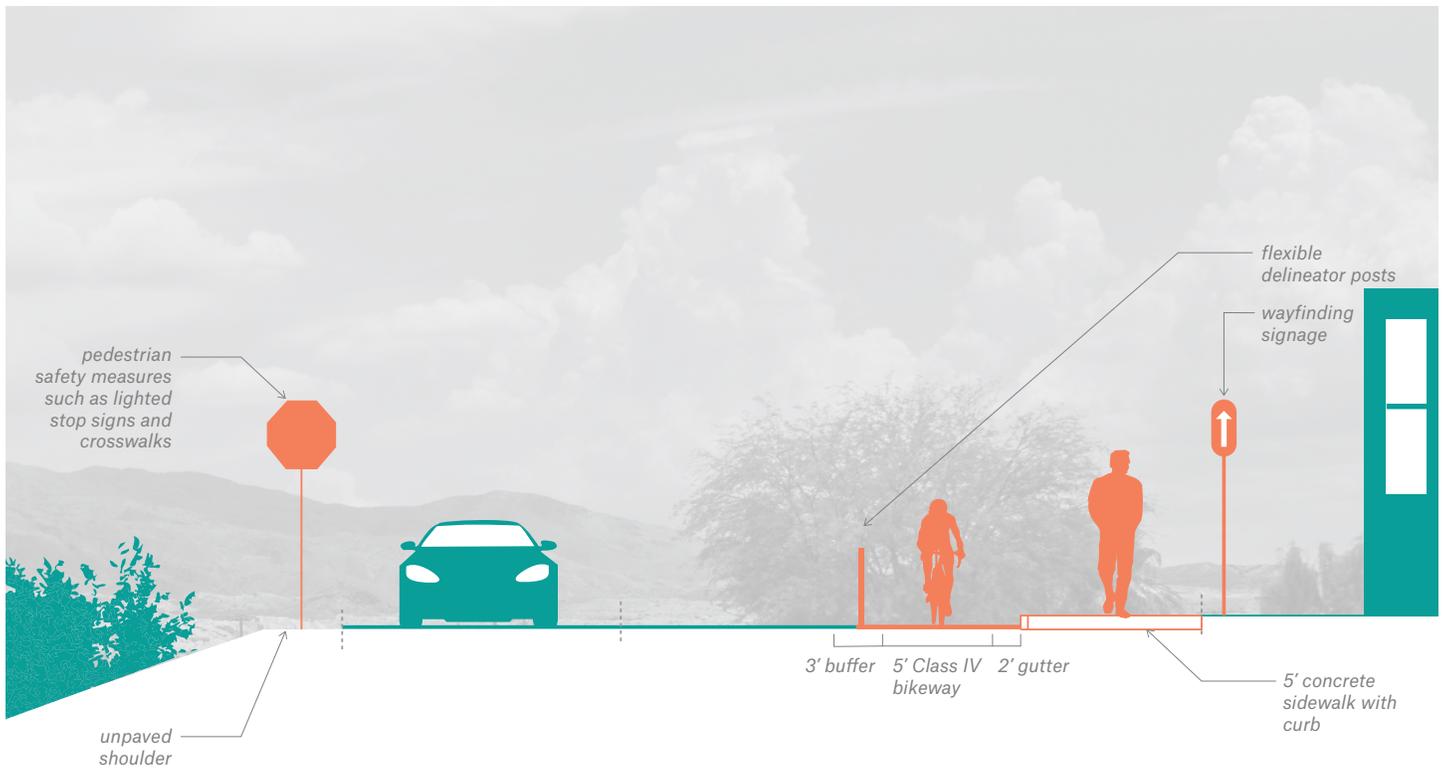


Figure 41. Typical Cross-Section: 5-foot Wide Sidewalk with Class IV Protected Bikeway

AREA	ROAD	FROM	TO	MI.	IMPROVEMENT TYPE
Both	Hwy 111	Ave 62	Edge of County	14	Class I Multimodal Path
North Shore	Ave 70	Hwy 111	Sea View Way	5.67	Class I Multimodal Path
North Shore	Ave 68	Johnson St	Vander Veer Rd	7.0	Class I Multimodal Path
North Shore	Bay Dr	Hwy 111	Vander Veer Rd	0.15	Class I Multimodal Path
North Shore	Bay Dr	Vander Veer Rd	Miramar Dr	0.1	Class IV Bike Lane + Sidewalk
North Shore	Miramar Dr	Ave 70	Bay Dr	0.87	Class IV Bike Lane + Sidewalk
North Shore	Sea View Way	Ave 70	Ave 72	1	Class I Multimodal Path
North Shore	Vander Veer Rd	Ave 68	Ave 72	2.25	Class I Multimodal Path
North Shore	Ave 72	Vander Veer Rd	Windlass Dr	1	Class I Multimodal Path
North Shore	Costa Mesa Dr	Ave 68	Bounty Ave	0.75	Class I Multimodal Path
North Shore	Costa Mesa Dr	Bounty Ave	Ave 70	0.25	Concrete Sidewalk
North Shore	Desert Beach Dr	Sea View Dr	Hwy 111	0.25	Class I Multimodal Path
North Shore	Dolphin Dr	Vander Veer Rd	Sea View Way	0.5	Concrete Sidewalk
North Shore	Ave 69	Costa Mesa Dr	Vander Veer Rd	0.25	Concrete Sidewalk
North Shore	Bay Dr	Miramar Dr	Ave 72	0.25	Class IV Bike Lane + Sidewalk
North Shore	Bounty Ave	Windward Dr	Costa Mesa Dr	0.25	Class I Multimodal Path
North Shore	Bounty Ave	Costa Mesa Dr	Vander Veer Rd	0.25	Concrete Sidewalk
North Shore	Club View Dr	Vander Veer Rd	Sea View Way	0.6	Class IV Bike Lane + Sidewalk
North Shore	Club View Dr	Windlass Dr	Sunfish Ln	0.25	Class IV Bike Lane + Sidewalk
North Shore	Flamingo Dr	Vander Veer Rd	Harbor Dr	0.42	Concrete Sidewalk
North Shore	Marina Dr	Hwy 111	Sea View Dr	0.15	Concrete Sidewalk
North Shore	Rocky Point Dr	Club View Dr	Ebb Dr	0.35	Concrete Sidewalk
North Shore	Sea View Dr	Vander Veer Rd	Desert Beach Dr	0.3	Concrete Sidewalk
North Shore	Windlass Dr	Club View Dr	Ave 73	0.33	Concrete Sidewalk
North Shore	Windward Dr	Bounty Ave	Ave 70	0.25	Class I Multimodal Path
Mecca	Ave 66	Johnson St	Garfield St	3	Class I Multimodal Path
Mecca	6th St	Lincoln St	Coahuilla St	0.18	Concrete Sidewalk
Mecca	6th St	Date Palm St	Home Ave	0.37	Concrete Sidewalk
Mecca	7th St	Date Palm St	Dale Kiler Rd	0.25	Concrete Sidewalk
Mecca	Ave 66	Lincoln St	Johnson St	1	Class IV Bike Lane + Sidewalk
Mecca	Lincoln St	Ave 62	Ave 66	2	Class I Multimodal Path
Mecca	Dale Kiler Rd	Ave 65	Ave 66	0.5	Class IV Bike Lane + Sidewalk
Mecca	Johnson St	Ave 64	Ave 68	2	Class I Multimodal Path
Mecca	Ave 65	Lincoln St	Johnson St	1	Class I Multimodal Path
Mecca	Brown St	6th St	5th St	0.1	Concrete Sidewalk
Mecca	Home Ave	6th St	2nd St	0.2	Concrete Sidewalk
Mecca	3rd St	Home Ave	Valdovino Rd	0.1	Concrete Sidewalk
Mecca	4th St	E of Dale Kiler Rd	Valdovino Rd	0.2	Concrete Sidewalk
Mecca	5th St	Dale Kiler Rd	Valdovino Rd	0.22	Concrete Sidewalk
Mecca	Ave 64	Lincoln St	Johnson St	1	Class I Multimodal Path
Mecca	Dale Kiler Rd	Ave 64	Ave 65	0.5	Class I Multimodal Path
Mecca	Valdovino Rd	5th St	S of 3rd St	0.15	Concrete Sidewalk

Table 5. Proposed Neighborhood Multimodal Facility Improvements and Length (in miles), North Shore and Mecca

Proposed Intersection and Pedestrian Crossing Improvements

Approach

The main goal for improving intersections in North Shore and Mecca is to address concerns around safe pedestrian access and visibility via **crosswalks** or through **traffic calming techniques**. Improvements that serve to reduce speeds at uncontrolled crossings, and thereby the number of collisions in the area, are listed below. These suggestions will need to be assessed through a full feasibility report conducted by traffic engineers within Riverside County to ensure their practicality as well as their integration into current County and Caltrans policy, but serve as a starting point.

Recommended Improvements

Figure 42 and Figure 43 show the intersections at which pedestrian crossing improvements are recommended with additional details provided in Table 6.

Below are the suggested improvements:

- **Roundabouts, signals, or other major improvements**, as deemed appropriate by further traffic engineering studies, may be well suited for at least one intersection in the plan area. Signal placement may be warranted based on collision data at the individual location based on a variety of data including traffic volumes, collision history, speed, pedestrian volume, and other prevailing factors. This guidance is detailed in the MUTCD to assist transportation agencies in planning signal locations.⁵ Existing roundabouts in other areas of the ECV have been designed to accommodate larger truck and farm vehicle traffic by including low curbs (known as a truck apron) that can be driven over if necessary. Roundabouts serve to slow vehicles as they approach the intersection to a calculated design speed that is relatively low and consistent as the vehicles traverse the roundabout.

Traffic signals, when properly placed, can reduce the instances of traffic collisions and can provide added safety to pedestrians and bicyclists.

- **Flashing stop signs** increase visibility of a stop condition, potentially decreasing the likelihood of vehicles running the stop signs and the potential for pedestrian involved collisions. Additional options for flashing indicators include **rectangular rapid flashing beacons** and **pedestrian hybrid beacons**. The lighting could be powered by solar panels to reduce necessary utility infrastructure. See California MUTCD for additional guidance.⁶
- **Crosswalk improvements**, with attention paid to pedestrian visibility and safety. Alternatives include new crosswalks, or re-striping of crosswalks that exist currently. Intersection lighting should be included for nighttime visibility in as many locations as possible. As development occurs, County standards require the installation of sidewalk, street lights and formation of funding districts to pay for on-going costs. Solar lighting options could be appropriate given the abundance of sun hours and local challenges around power sources and maintenance.
- **Existing Signals** have been installed with crosswalks, curb returns, and pedestrian ramps as required by standards, but no sidewalks are attached to many of these pads. It is critical to extend the pedestrian facilities to connect to community destinations, improving connectivity to the pedestrian network.

The Appendix provides more detail about these design options and their ideal applications, as well as about alternatives that may be suited to the context.

5 For typical guidance, see California Manual of Uniform Traffic Control Devices, Section 4L.05

6 California Manual of Uniform Traffic Control Devices, Chapter 4L

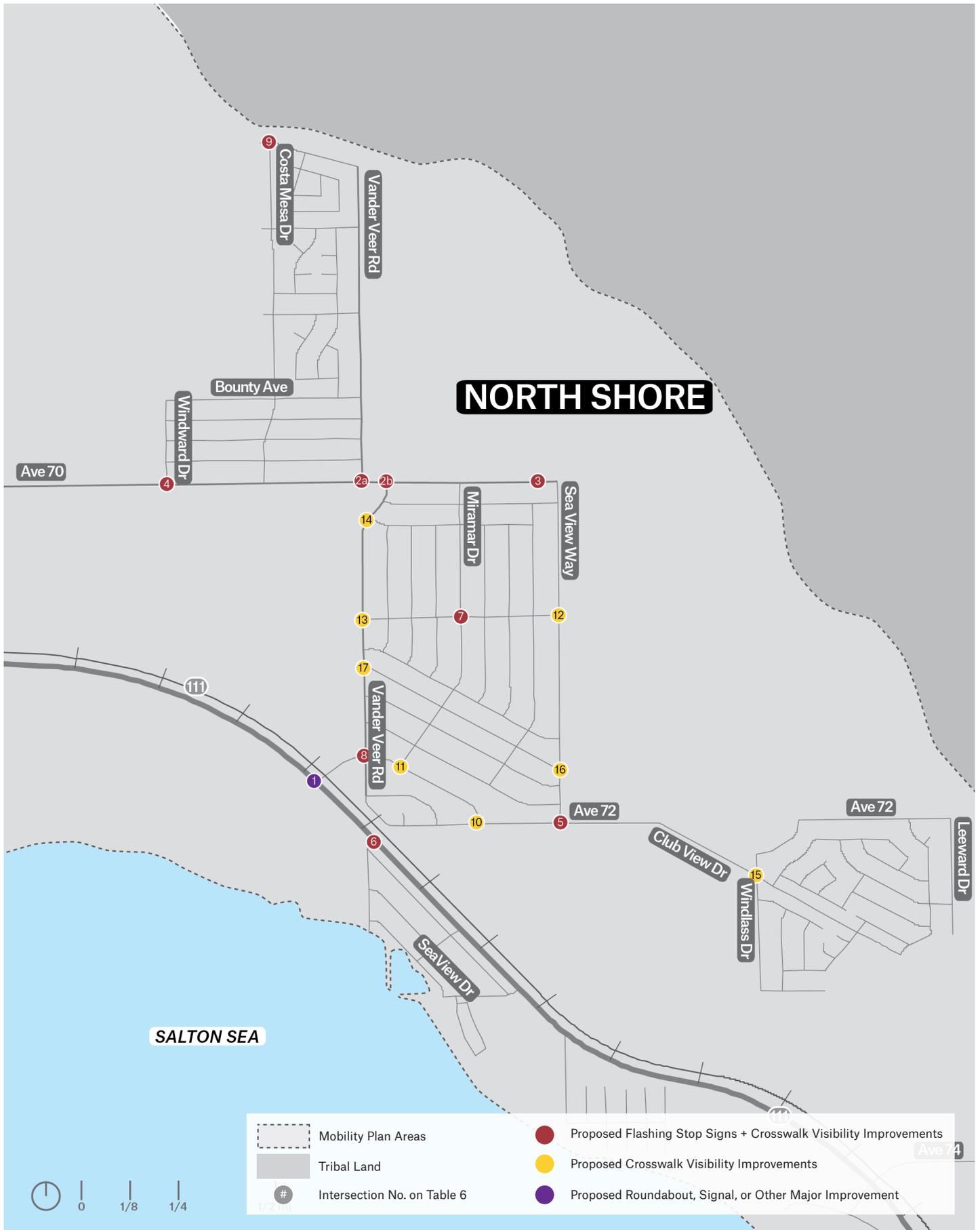


Figure 42. Proposed Intersection and Pedestrian Crossing Improvements, North Shore

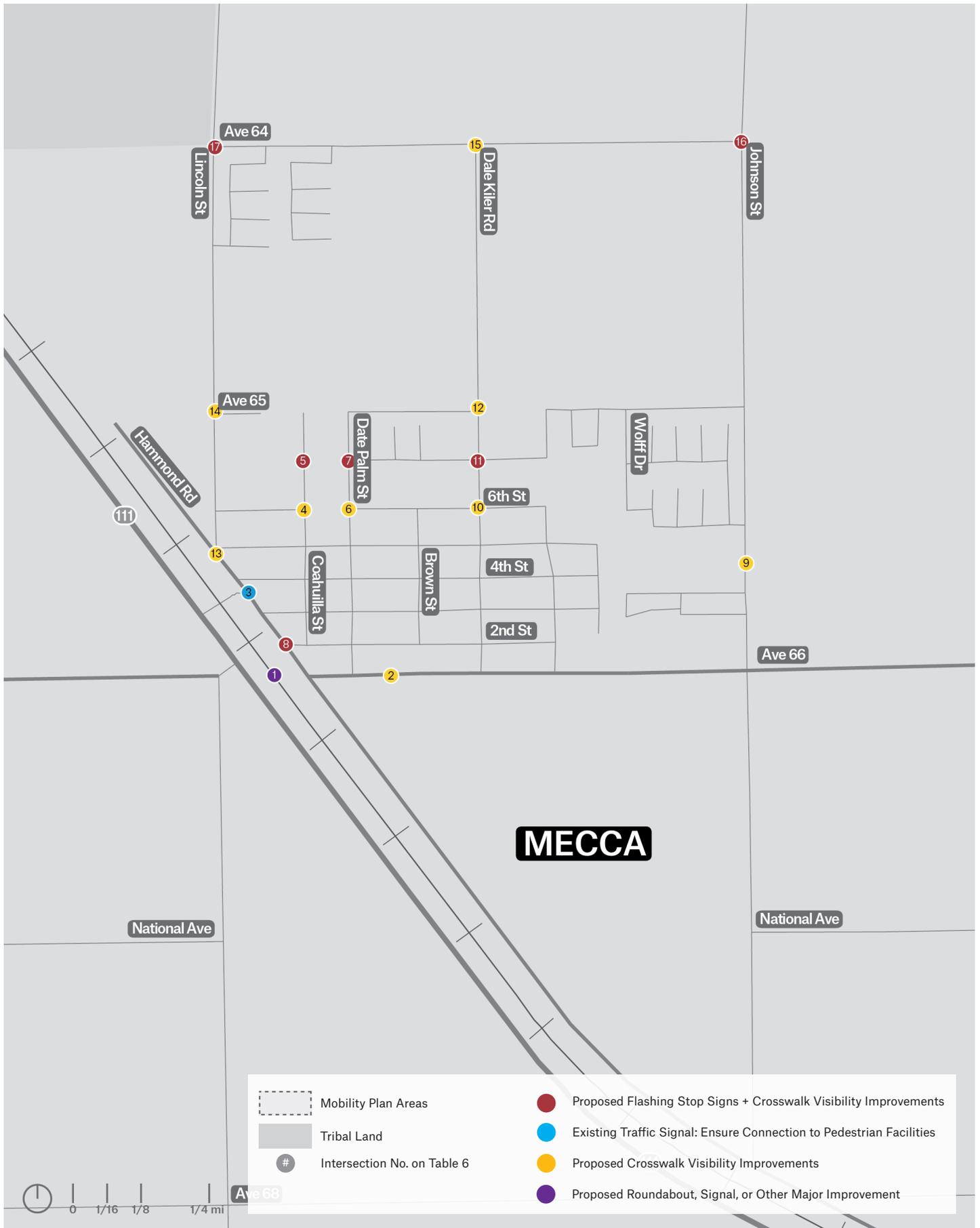


Figure 43. Proposed Intersection and Pedestrian Crossing Improvements, Mecca

AREA	NO. ON FIG. 29+30	PRIMARY RD.	SECONDARY RD.	IMPROVEMENT TYPE	NOTES:
North Shore	1	Hwy 111	Bay Dr	Roundabout, Signal, or Other Major Improvement	Main entry into North Shore over railroad crossing should be multimodal
North Shore	2	Ave 70	Vander Veer Rd	Flashing Stop Signs + Crossing Improvements	Vander Veer Rd shifts at Ave 70— improvements needed at both crossings
North Shore	3	Ave 70	W of Sea View Way	Flashing Stop Signs + Crossing Improvements	For children crossing from homes to the North Shore Park
North Shore	4	Ave 70	Windward Dr	Flashing Stop Signs + Crossing Improvements	For pedestrians to access a bus stop from housing north of Ave 70
North Shore	5	Sea View Way	Ave 72	Flashing Stop Signs + Crossing Improvements	
North Shore	6	Hwy 111	Vander Veer Rd	Flashing Stop Signs + Crossing Improvements	
North Shore	7	Miramar Dr	Dolphin Dr	Flashing Stop Signs + Crossing Improvements	For pedestrians and students to access popular bus stops
North Shore	8	Vander Veer Rd	Bay Dr	Flashing Stop Signs + Crossing Improvements	
North Shore	9	Ave 68	Costa Mesa Dr	Flashing Stop Signs + Crossing Improvements	
North Shore	10	Ave 72	Bay Dr	Crosswalk Visibility Improvements	
North Shore	11	Miramar Dr	Bay Dr	Crosswalk Visibility Improvements	
North Shore	12	Sea View Way	Dolphin Dr	Crosswalk Visibility Improvements	
North Shore	13	Vander Veer Rd	Dolphin Dr	Crosswalk Visibility Improvements	
North Shore	14	Vander Veer Rd	Flamingo Dr	Crosswalk Visibility Improvements	
North Shore	15	Club View Dr	Windlass Dr	Crosswalk Visibility Improvements	
North Shore	16	Sea View Way	Club View Dr	Crosswalk Visibility Improvements	
North Shore	17	Vander Veer Rd	Club View Dr	Crosswalk Visibility Improvements	
Mecca	1	Ave 66	Hammond Rd	Roundabout, Signal, or Other Major Improvement	Planned grade separation should improve multimodal connectivity
Mecca	2	Ave 66	E of Date Palm St	Crosswalk Visibility Improvements	For pedestrian access to a Commercial Center and other amenities
Mecca	3	Ave 66	Hwy 111	Existing Signal: Ensure Connection to Facilities	Mecca Roundabout should be connected to multimodal facilities
Mecca	4	Coahuilla St	6th St	Crosswalk Visibility Improvements	
Mecca	5	Coahuilla St	7th St	Flashing Stop Signs + Crossing Improvements	Improvements needed near Mecca Elementary
Mecca	6	Date Palm St	6th St	Crosswalk Visibility Improvements	
Mecca	7	Date Palm St	7th St	Flashing Stop Signs + Crossing Improvements	
Mecca	8	Hammond Rd	2nd St	Flashing Stop Signs + Crossing Improvements	
Mecca	9	Johnson St	N of Katherine Dr	Crosswalk Visibility Improvements	Need crosswalk to Saul Martinez Elementary for school drop off and pick up
Mecca	10	Dale Kiler Rd	6th St	Crosswalk Visibility Improvements	
Mecca	11	Dale Kiler Rd	7th St	Flashing Stop Signs + Crossing Improvements	
Mecca	12	Dale Kiler Rd	Ave 65	Crosswalk Visibility Improvements	
Mecca	13	Hammond Rd	5th St	Crosswalk Visibility Improvements	
Mecca	14	Lincoln St	Ave 65	Crosswalk Visibility Improvements	
Mecca	15	Ave 64	Dale Kiler Rd	Crosswalk Visibility Improvements	
Mecca	16	Ave 64	Johnson St	Flashing Stop Signs + Crossing Improvements	
Mecca	17	Ave 64	Lincoln St	Flashing Stop Signs + Crossing Improvements	

Table 6. Proposed Intersection and Pedestrian Crossing Improvements, North Shore and Mecca

[PAGE INTENTIONALLY LEFT BLANK]

Recommendations for Public Transportation and Shared Mobility

In addition to the options for pedestrian and bicycle facilities, community members provided recommendations through the public outreach process to improve SunBus and other public transit services in North Shore and Mecca. Recommendations included:

- Improving more SunBus stops throughout the region, as shown in Figure 44 and Figure 45, especially by installing benches and shelters wherever possible as new sidewalks or multimodal facilities are built.
- Reducing the time between SunBus vehicles (currently around one hour) to improve riders' experiences and convenience. Many residents expressed that if they didn't have to wait as long for public transit, particularly at stops without benches or shelters, they would ride more often.
- Expanding service further north into the Costa Mesa neighborhood of North Shore, particularly to the concentration of homes north of Avenue 69 and near Costa Mesa Drive, as shown in Figure 44 and Figure 45.

Residents also expressed support for the exploration and expansion of newer transit programs such as SunVans or other flexible on-demand services that can serve the geographically large expanse of the ECV in a more flexible manner than traditional fixed-route bus service. These flexible services could better reach the variety of destinations regularly frequented by residents throughout the region. See the Recommended Programs section later in this Chapter for additional suggestions, precedents, and resources.

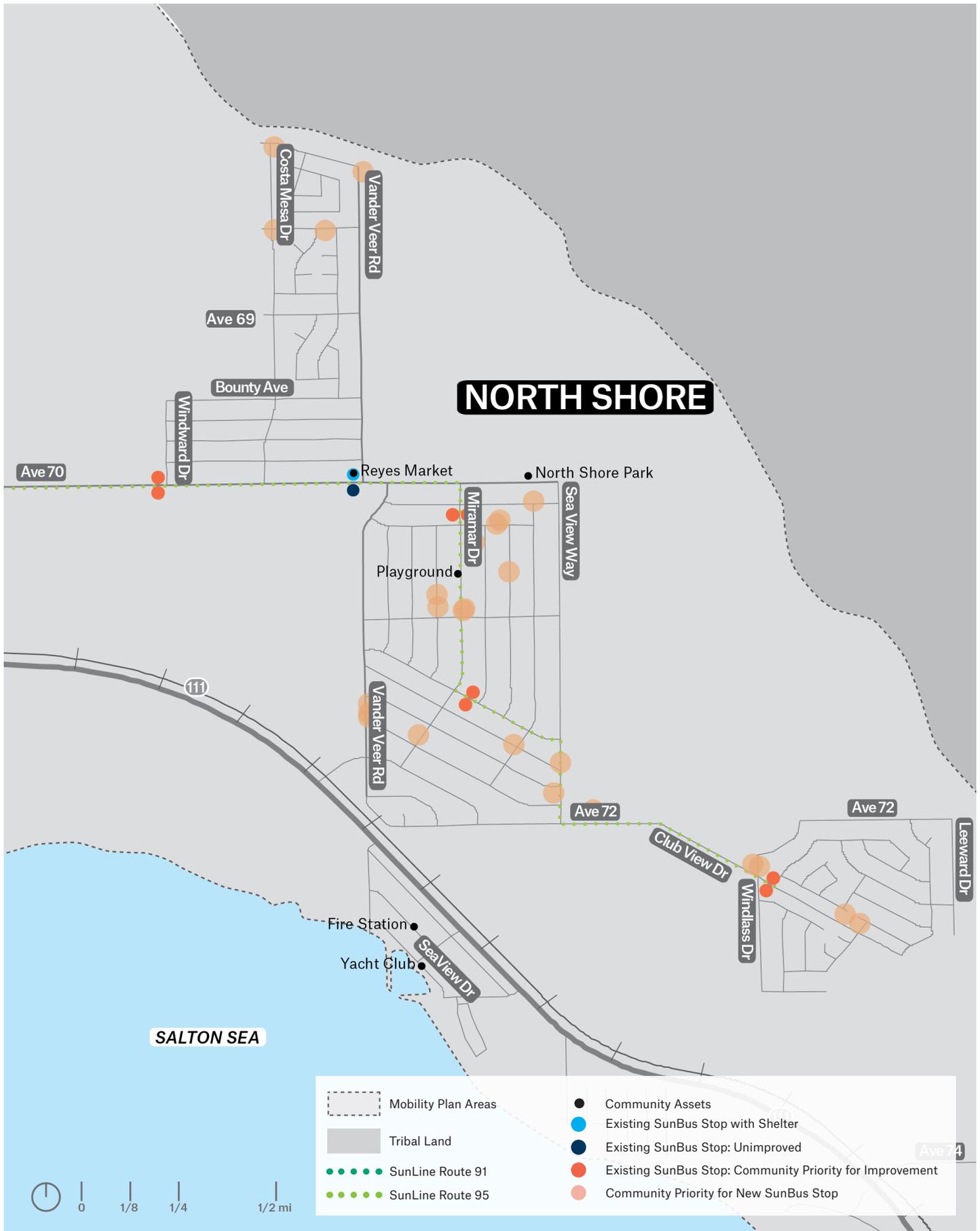


Figure 44. Community Recommendations for SunLine Improvements, North Shore

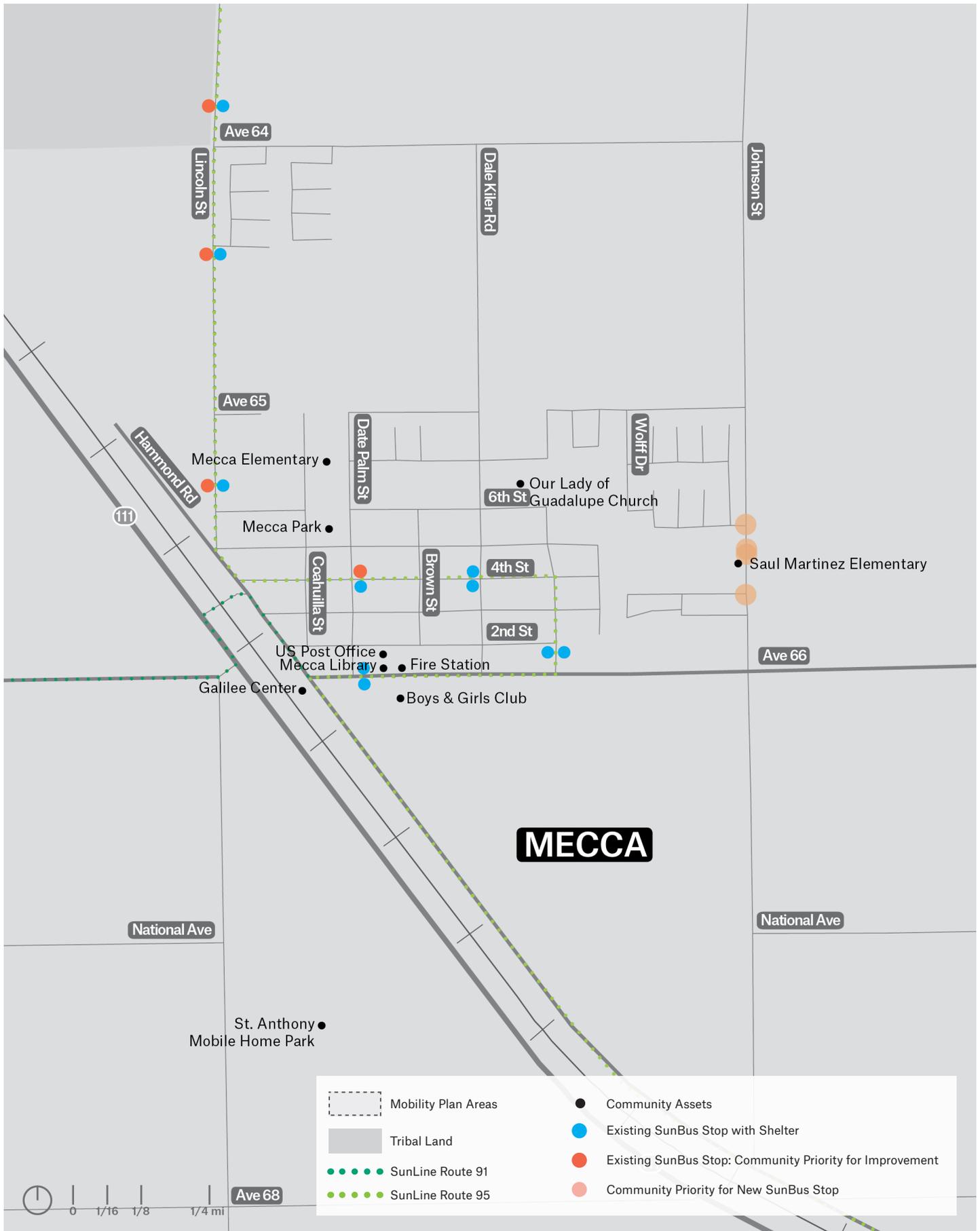


Figure 45. Community Recommendations for SunLine Improvements, Mecca

Recommended Programs

While programs to support active transportation and multimodal travel should be further developed in the ECV more broadly, this Plan places more importance on capital improvements given the current level of infrastructure in the region. However, programs should be considered and implemented in tandem with infrastructure improvements moving forward. Given residents' concern for the mobility of students, programs centered on the youth population and schools could complement this Plan.

Safe Routes to School (SRTS)

It is recommended that the County of Riverside continue its coordination and support of the Riverside University Health System Public Health (RUHS-PH) work on SRTS. RUHS-PH received funding via an Active Transportation Program (ATP) Cycle 3 non-infrastructure grant and established a SRTS program in the ECV in 2018.

SRTS Best Practices¹

- **Encouragement:** Events, activities and contests that spark interest in both students and parents in walking and biking to school and reward participation, promote the personal and community benefits of SRTS, and make walking or biking to school fun.
- **Education:** Classes and activities that teach students, parents, and community members safe walking and bicycling skills, including safe driving behavior. In addition, programs for parents and school staff to learn about safety tips and how to develop and sustain a SRTS program could be included.
- **Engineering:** Infrastructure improvements (signage, crosswalks, traffic signals, etc.) designed to improve the safety of people walking, bicycling, and driving along school routes.
- **Enforcement:** Strategies to deter unsafe behavior of drivers, bicyclists, and pedestrians, and educate all users on obeying traffic laws and following

appropriate drop-off and pick-up procedures.

- **Evaluation:** Tracking progress through regular counts, surveys, and other data collection to determine impact on student travel behavior as well as effectiveness of specific program elements.
- **Equity:** Should be integrated into all aspects of SRTS. Acknowledgment of the different challenges and barriers that students face is important to ensure that Safe Routes to School initiatives are benefiting all demographic groups. Equity, as it relates to SRTS, is about ensuring all students have safe access to and from school.

Clean Mobility Voucher Pilot Program

The California Air Resources Board (CARB) will soon make available \$17 million to fund car share and ridesharing projects serving low-income residents.² The feasibility of implementing this type of project using these funds in the ECV should be explored to fulfill residents' needs for more mobility options and connections to the broader Coachella Valley region.

CALSTART has been selected to administer the program with the Shared-Use Mobility Center (SUMC) in partnership with GRID Alternatives and the Local Government Commission. Program guidelines are under development and should be finalized in early 2020. The solicitation for applications to fund projects is anticipated in April 2020. The program administrative team will be providing extensive workshops, resources and direct technical assistance to help with project and application development and implementation if awarded.

Eligible applicants include:

- Local or regional public agencies
- Federally-recognized tribes
- Non-profit organizations with at least one year of incorporation and an office in California
- Sub-Applicants may include other public, private, or non-profit organizations, including mobility service providers

1 Los Angeles Metro, Safe Routes to School Resource Manual (2016)

2 Shared-Use Mobility Center, "CARB Announces \$17 Million Award" Press Release (2019)

Funding will be provided in the form of vouchers to pay for zero emission vehicles and equipment, operations, marketing and outreach for clean mobility projects, including:

- Carsharing
- Bike & Scooter-sharing
- Carpooling and Vanpooling
- Innovative Transit Services
- Ride on Demand Services (high-occupant).

Though not currently funded by CARB, Sunline Transit Agency's SolVan vanpool program may also suggest a model for shared mobility through vanpooling that might be expanded, modified or replicated in the region to increase mobility options for community members in North Shore and Mecca.



“[El transporte] sinceramente nos para de seguir adelante porque el transporte tiene mucho que ver con el tiempo y nuestras [vidas diarias]...”

“Transportation sincerely holds us back from moving forward because transportation has a lot to do with our time and our everyday lives...”

*- Oasis Resident
Video Voice Interview, March 2018*

VIII. Phasing, Implementation, and Funding

Overview

During the community workshops, the majority of residents in Mecca and North Shore indicated a preference for prioritizing North Shore improvements first, as Mecca currently has some sidewalk infrastructure, though there are still significant sidewalk gaps in Mecca that need to be completed.

This chapter outlines the phasing strategy for the recommended improvements ranging from within 2 to 20 years of this Plan's approval. The improvements proposed by the Plan were developed with the consideration of the various challenges associated with maintenance in unincorporated Riverside County and the ECV specifically. The designs recommended are context-sensitive and aim to require reasonably limited maintenance.

The construction of recommended facilities will require additional field work to verify conditions. These include but are not limited to: roadway width, travel lanes, actual motor vehicle speeds, motor vehicle volumes, bicycle and motor vehicle travel patterns and conflicts, and pavement conditions. Final improvements will be selected based on verified conditions. Furthermore, construction of recommended facilities is dependent on securing funding for the improvements.

Phasing of Recommended Neighborhood Improvements

Phase 1: Short Term

It is recommended that these improvements be implemented in the next 2 to 5 years. Most of these initial priorities are purposely focused on North Shore. Implementing these initial priorities would begin to create a network of active transportation facilities from which later improvements can be leveraged, reaching further into each of the communities, linking the

communities to each other, and facilitating travel within the ECV region as a whole.

This phase is illustrated in Figure 46 for North Shore, and Figure 47 for Mecca.

- **Multimodal Facilities:** Connect missing sidewalks in central Mecca near Mecca Elementary, while building out new infrastructure along the main corridors of Dale Kiler Rd, Avenue 66, and Johnson Street. Begin to establish North Shore's infrastructural network along Vander Veer Road, Miramar Drive, and Sea View Way, connecting to Avenue 70 as described at the regional scale.
- **Intersection and Pedestrian Crossing Improvements:** Install flashing stop signs or other traffic calming and pedestrian improvements at intersections near the improved corridors, particularly in North Shore, where high traffic speeds are common according to residents. This will be crucial to ensuring the multimodal improvements installed in this phase can be used safely throughout the communities.

Phase 2: Medium Term

This phase is illustrated in Figure 48 for North Shore and Figure 49 for Mecca. These improvements are recommended for implementation within the next 5 to 10 years.

- **Multimodal Facilities:** Continue to close the gaps in central Mecca's sidewalk network while connecting east and west along Avenue 64. In North Shore, expand outward from the central network built in the first phase to connect eastward into the Old Church neighborhood and northward into the Costa Mesa neighborhood.
- **Intersection and Pedestrian Crossing Improvements:** Improve intersections along corridors improved in the first and second phases

in central Mecca and in North Shore, particularly ensuring crosswalks are made highly visible for safe crossings.

Phase 3: Long Term

This phase is illustrated in Figure 50 for North Shore and Figure 51 for Mecca. These improvements are recommended for implementation within the next 10 to 20 years.

- **Multimodal Facilities:** Connect central Mecca north toward Avenue 64 and fill some final gaps in the sidewalk network. In North Shore, finish building out the multimodal network, particularly implementing the multimodal medians along Club View Drive.
- **Intersection and Pedestrian Crossing Improvements:** Finish improving intersections along the improved corridors to ensure all multimodal facilities can be used safely throughout the communities.

While all of these corridors and intersections are viewed as critically important by the community, improvements in the area will be implemented as opportunities or challenges arise. Opportunities may include grant availability, new developments, or roadway repaving.

It is recommended that this Plan be updated regularly in coordination with the public, local stakeholders and agencies. Communication and coordination with stakeholders, centering local knowledge, is crucial to achieving the suggested improvements.

Potential Funding Sources

The following are potential funding sources for implementation of the recommended improvements in this Plan.

State Funds

Local Gas Tax

The state of California imposes per-gallon excise taxes on gasoline and diesel fuel, sales taxes on gasoline and diesel fuel and registration taxes on motor vehicles with

allocations dedicated to transportation purposes. The local (city and county) portions of these allocations flow through the Highway Users Tax Account (HUTA), the familiar gasoline tax revenues that have been in place for decades, and the Road Maintenance and Rehabilitation Account (RMRA) which allocates much of the revenue from the Road Repair and Accountability Act of 2017 (SB1 Beall).¹

State Bill 821

This program is provided through the Transportation Development Act (TDA), funded through a ¼ cent of the general sales tax collected statewide. Two percent of this revenue is made available for bicycle and pedestrian facilities under TDA Article 3, also known as SB 821. Eligible projects include sidewalks, access ramps, bicycle facilities, and bicycle plan development. More info can be found here:

<http://www.rctc.org/funding-and-planning/>

Active Transportation Program (ATP)

As of September 26, 2013, existing federal and state transportation programs, including the Transportation Alternatives Program (TAP), Bicycle Transportation Account (BTA), and State Safe Routes to School (SR2S), consolidated into a single program with a focus to make California a national leader in active transportation. The ATP is administered by the Division of Local Assistance, Office of Active Transportation and Special Programs. ATP successfully funded much of the first phase of improvements recommended for neighboring Thermal and Oasis in Cycle 4. Further improvements in this area are likely to be similarly competitive in future ATP rounds.

The purpose of ATP is to encourage increased use of active modes of transportation by achieving the following goals:

- Increase the proportion of trips accomplished by biking and walking
- Increase safety and mobility for non-motorized users,
- Advance the active transportation efforts of regional agencies to achieve greenhouse gas (GHG) reduction goals,
- Enhance public health,

¹ <http://californiacityfinance.com/LSR1905.pdf>

- Ensure that disadvantaged communities fully share in the benefits of the program
- Provide a broad spectrum of projects to benefit many types of active transportation users

Office of Traffic Safety (OTS) Grant

Office of Traffic Safety Grants (OTS) fund safety programs and equipment. Bicycle and Pedestrian Safety is a specifically identified priority. This category of grants includes enforcement and education programs, which can encompass a wide range of activities, including bicycle helmet distribution, design and printing of billboards and bus posters, other public information materials, development of safety components as part of physical education curriculum, or police safety demonstrations through school visitations. The grant cycle typically begins with a request for proposals in October, and submissions are due the following January.

Federal Funds

Highway Safety Improvement (HSIP)

The purpose of the HSIP program is to achieve a significant reduction in traffic fatalities and serious injuries on all public roads, including non-State-owned public roads and roads on tribal land. HSIP funds are competitive statewide.

HSIP projects on rural roads can qualify as High Risk Rural Roads (HR3) projects. HR3 funds improvements on roads that are functionally classified as rural major collectors, rural minor collectors, or rural local roads to correct or improve hazardous roadway locations or features to reduce the frequency and severity of collisions. Some roads in the ECV may be eligible for this funding.²

Conclusion

Given the current state of multimodal infrastructure in North Shore and Mecca, the implementation of this Plan's recommended improvements could have a significantly positive impact not only on mobility in the communities, but also on various socioeconomic issues that hinge on transportation in the area, including

access to employment, education, health, and other opportunities and necessities.

Improving facilities for pedestrians, bicyclists, and transit users could improve residents' ability to travel to high priority destinations (such as schools, workplaces, churches, stores, etc.) throughout the communities safely and efficiently with or without an automobile. Improving facilities for active transportation will provide recreational opportunities for residents, particularly those who aspire to walk and bike with their families for recreation and exercise. Focusing on high-priority facilities identified around schools, will enable students living nearby to walk and bike to school more safely. In addition to these infrastructure improvements, continued coordination with Riverside University Health System-Public Health on Safe Routes to School will foster a multimodal culture in the ECV and make transportation safer for all residents.

This Plan will be used by the County of Riverside, in conjunction with the *Neighborhood Mobility Plan for the Communities of Thermal and Oasis* and the *Regional Mobility Plan for the Unincorporated Communities of the Eastern Coachella Valley* to: plan for future active transportation and multimodal improvements; to apply for various funding sources for planning, engineering, and construction; and to condition future development.

² State of California Department of Transportation, Division of Local Assistance. Local Assistance Program Guidelines: Processing Procedures for Implementing Federal and/or State Funded Local Public Transportation Projects. December 2008

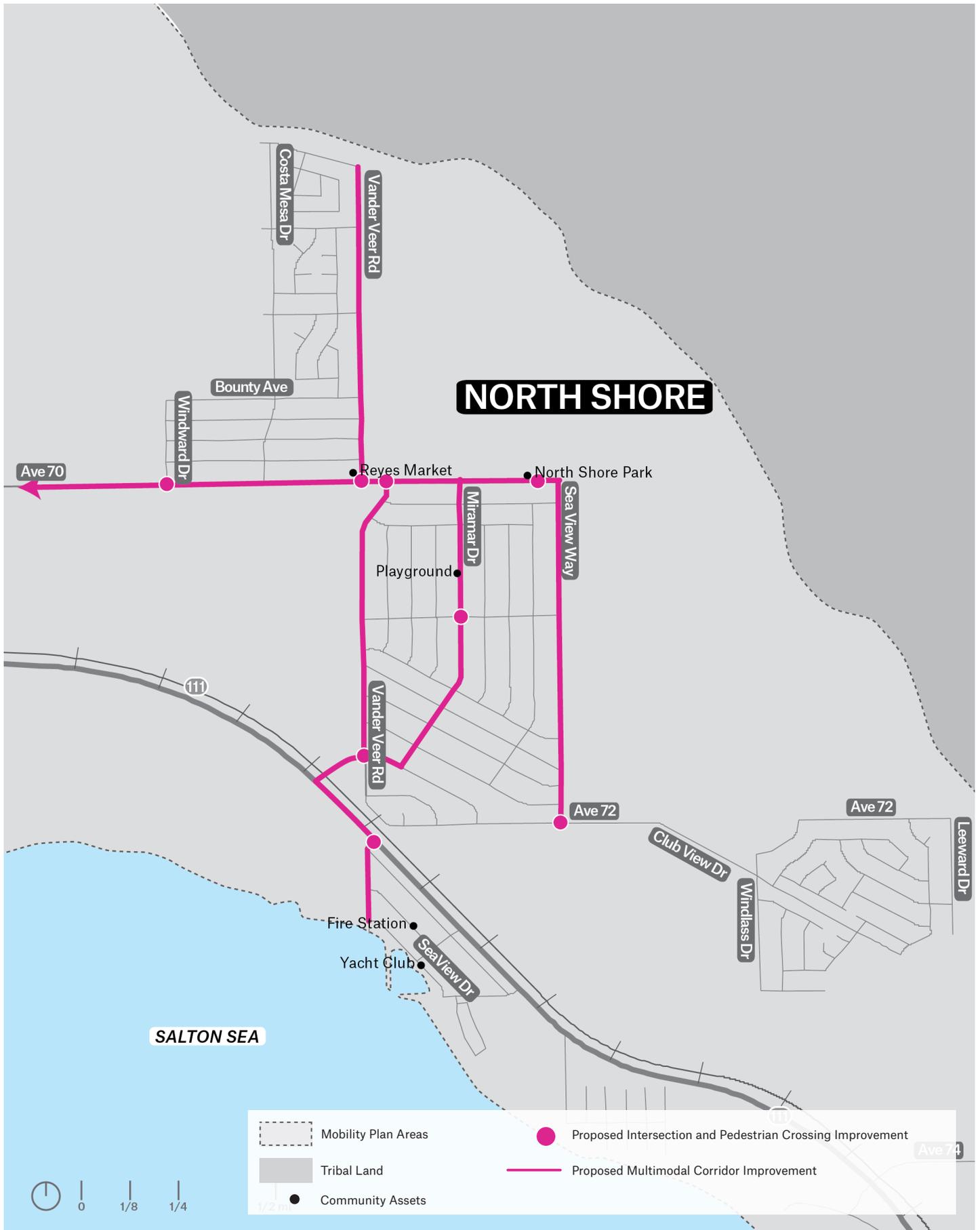


Figure 46. Proposed Neighborhood Facility Improvements: Short Term (Phase 1), North Shore

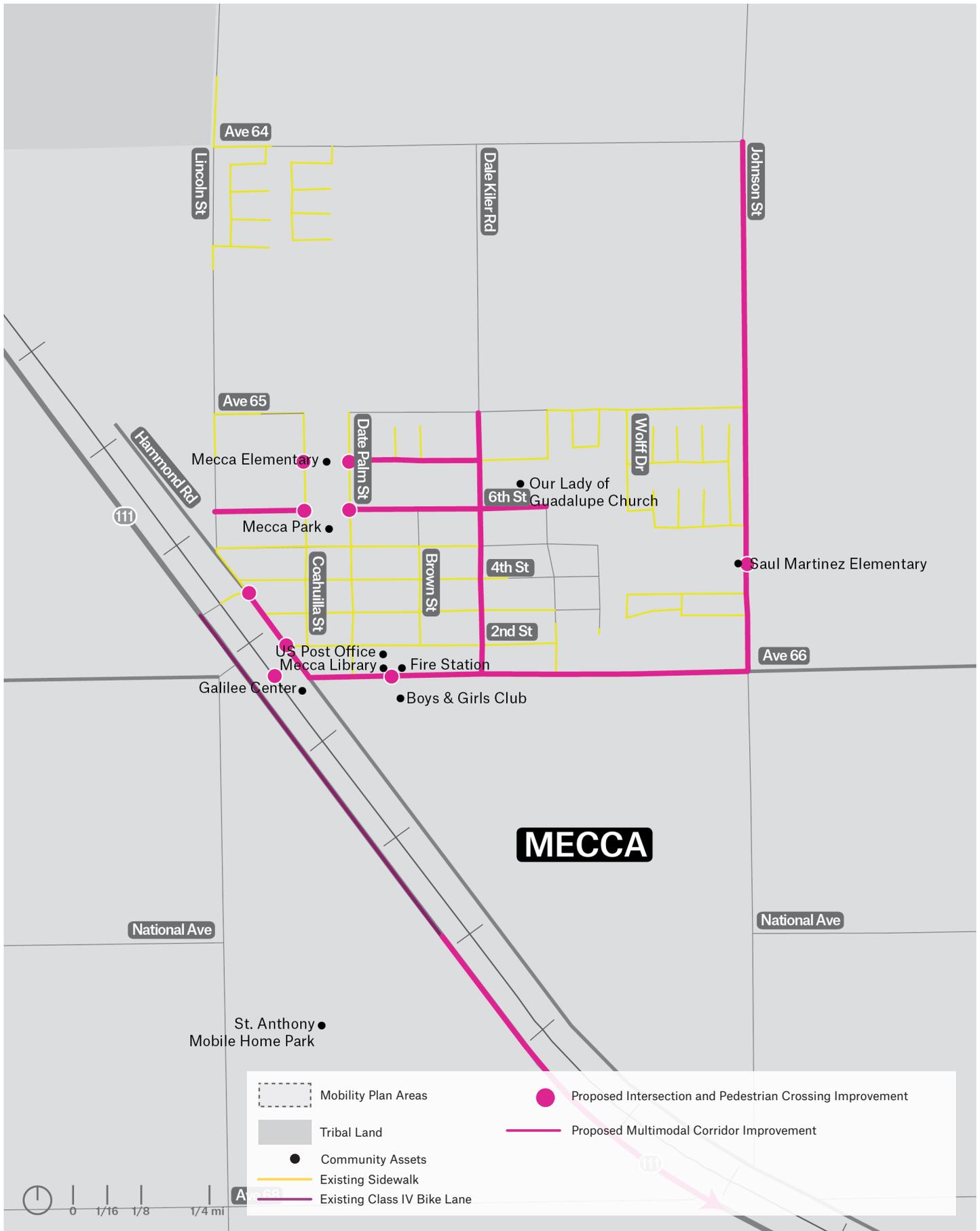


Figure 47. Proposed Neighborhood Facility Improvements: Short Term (Phase 1), Mecca

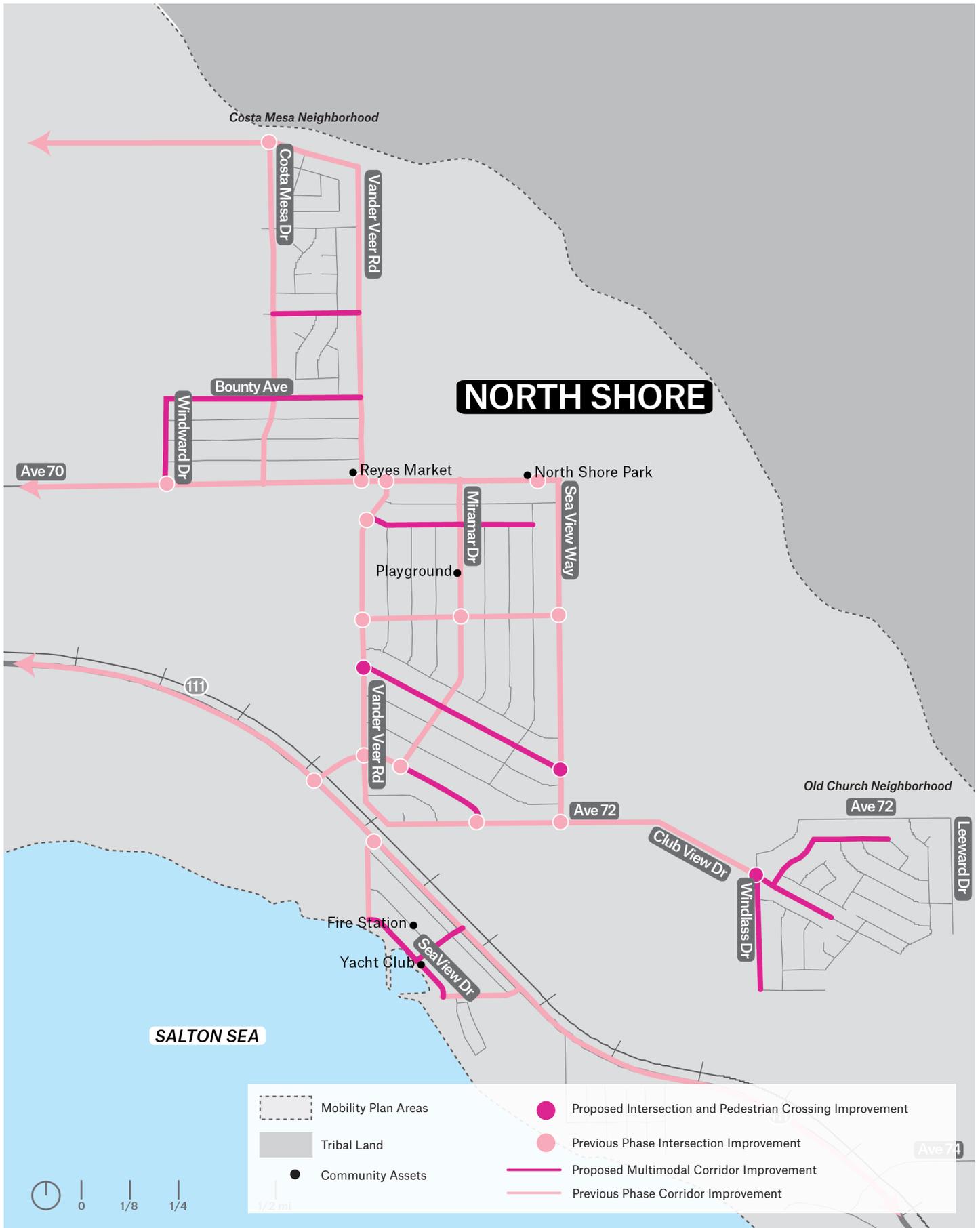


Figure 48. Proposed Neighborhood Facility Improvements: Medium Term (Phase 2), North Shore

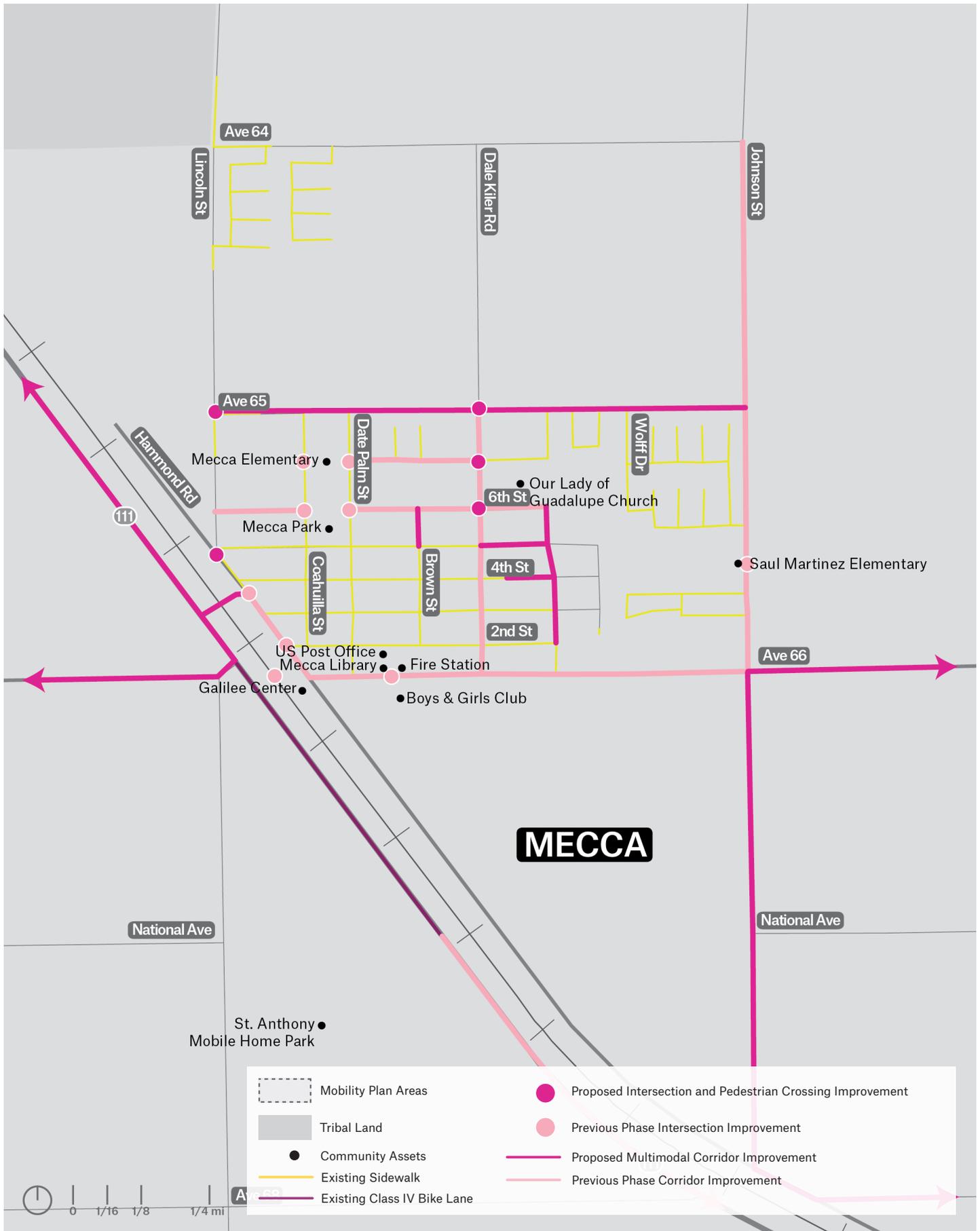


Figure 49. Proposed Neighborhood Facility Improvements: Medium Term (Phase 2), Mecca

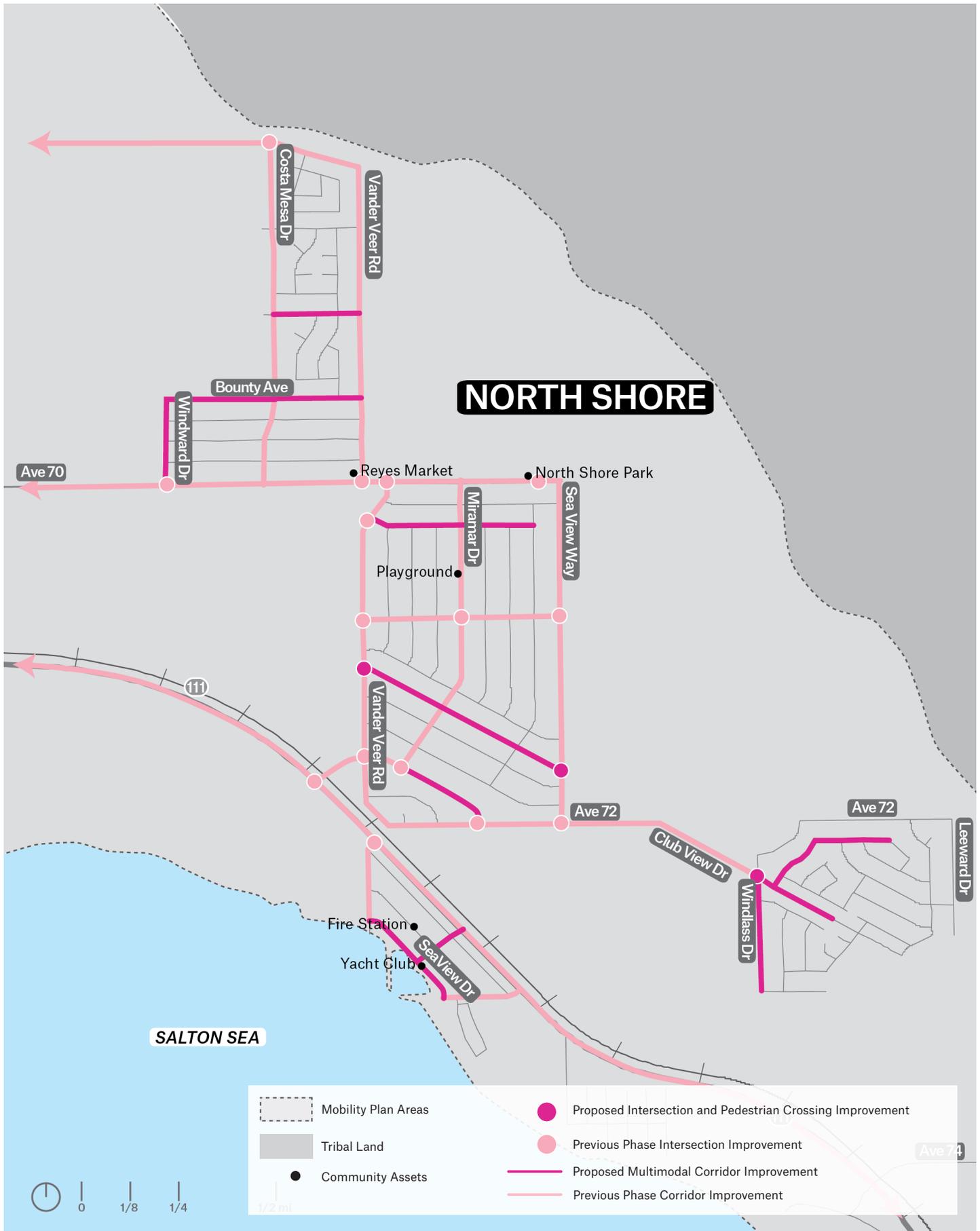


Figure 50. Proposed Neighborhood Facility Improvements: Long Term (Phase 3), North Shore

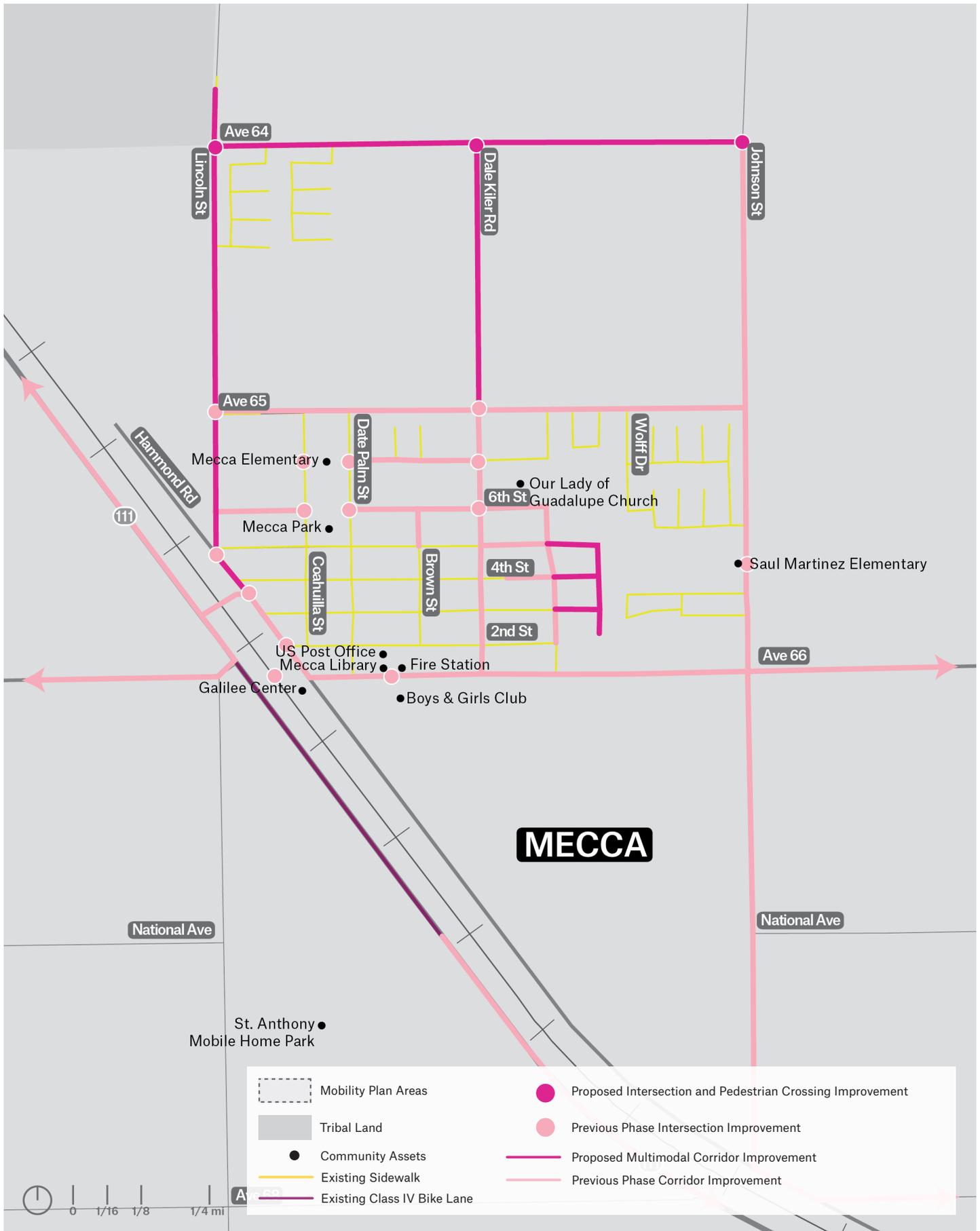


Figure 51. Proposed Neighborhood Facility Improvements: Long Term (Phase 3), Mecca

IX. References

- California Department of Transportation, Highway Design Manual, Chapter 1000, 6th Edition (2018), <http://www.dot.ca.gov/design/manuals/hdm/chp1000.pdf>
- California Department of Transportation, 2014 Manual of Uniform Traffic Control Devices, Revision 3 (2018), http://www.dot.ca.gov/trafficops/camutcd/docs/2014r3/CAMUTCD2014_rev3.pdf
- California Department of Transportation, Design Information Bulletin 89-01 (2018), <http://www.dot.ca.gov/design/stp/dib/dib89-01.pdf>
- California Department of Transportation, Division of Local Assistance, *Local Assistance Program Guidelines: Processing Procedures for Implementing Federal and/or State Funded Local Public Transportation Projects* (2008), <http://www.dot.ca.gov/hq/LocalPrograms/lam/lapg.htm>
- California Office of Environmental Health Hazard Assessment, CalEnviroScreen 3.0 (2017) <https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-30>
- Coachella Valley Association of Governments, Coachella Valley Link Master Plan (2016), http://www.cvag.org/library/pdf_files/trans/CV_Link_MP/CV_Link_MP_Vol_1_v47.pdf
- Coachella Valley Association of Governments, Active Transportation Plan (2016), http://www.cvag.org/library/pdf_files/trans/Transportation_Documents/CVAG%20ATP%202016-06-20%20rev2017-06-07.pdf
- Coachella Valley Association of Governments, Transportation Project Prioritization Study (2017), http://www.cvag.org/library/pdf_files/trans/Transportation_Documents/CVAG%20TPPS%202017-04-27%20rev2017-06-26.pdf
- Cohen, Michael, *Hazard's Toll: The Costs of Inaction at the Salton Sea* (2014), https://pacinst.org/wp-content/uploads/2014/09/PacInst_HazardsToll.pdf
- Health Assessment and Research for Communities, Coachella Valley Community Health Survey (2016), <http://harcdata.org/coachella-valley-community-health-survey/executive-report/2016-executive-report-survey/>
- London, J., Greenfield, T., Zagofsky T. (2013). *Revealing the Invisible Coachella Valley: Putting Cumulative Environmental Vulnerabilities on the Map*. Davis CA: UC Davis Center for Regional Change. https://humanecology.ucdavis.edu/sites/g/files/dgvnsk161/files/inline-files/limited_dist_14_revealing_invisible_coachella_valley.pdf
- Los Angeles Metro, Safe Routes to School Resource Manual (2016), https://media.metro.net/projects_studies/srts/images/srts_Resource_Manual_2016-10.pdf
- Riverside County Department of Planning, Riverside County General Plan, <http://planning.rctlma.org/ZoningInformation/GeneralPlan.aspx>
- Riverside County Department of Planning, Thermal Design Guidelines (2009), http://planning.rctlma.org/Portals/0/devproc/guidelines/thermal/thermal_dg.pdf

Riverside County Department of Planning, Specific Plans, <http://planning.rctlma.org/SpecificPlans/ApprovedSpecificPlansDocuments.aspx>

Riverside County Department of Transportation, Neighborhood Mobility Plan for the Communities of Thermal and Oasis, https://rctlma.org/Portals/7/documents/181207_RCTLMA_TOMP_Final%20Report-web.pdf

Riverside County Department of Transportation, Regional Mobility Plan for the Unincorporated Communities of the Eastern Coachella Valley, forthcoming.

Riverside County Department of Transportation, Transportation Improvement Program FY 2017-18, https://rctlma.org/Portals/7/documents/TIP/TIP%202019-20%20Annual%20Report_1.pdf?ver=2019-12-18-111001-090

Riverside County Department of Transportation, Riverside County Projects Portal, <http://rcprojects.org/>

Riverside County Transportation Commission, Riverside County Strategic Assessment, Task 2: Existing and Future Transportation Conditions (2015), http://www.rctcdev.info/uploads/media_items/rctc-strategic-plan-task-2-tech-memo-103015-clean-reduced-size.original.pdf

Riverside University Health System Public Health, Safe Routes to School Program, <http://www.rivcoips.org/Safe-Routes-to-School/About-SRTS>

Shared-Use Mobility Center, "CARB announces \$17 million award to put cleaner, healthier, high-tech transportation in reach for all Californians" Press Release (15 April 2019), <https://sharedusemobilitycenter.org/carb-announces-17-million-award-to-put-cleaner-healthier-high-tech-transportation-in-reach-for-all-californians/>

Southern California Association of Governments, Regional Transportation Plan and Sustainable Communities Strategy (2012), <http://rtpscs.scag.ca.gov/Documents/2012/final/f2012RTPSCS.pdf>

Southern California Association of Governments, Regional Housing Needs Assessment (2012), <http://rtpscs.scag.ca.gov/Pages/Regional-Housing-Needs-Assessment.aspx>

SunLine Transit Agency, Short Range Transit Plan FY 2017-2018, <https://www.sunline.org/sites/default/files/SRTP%20FY17-18%20FINAL%2020170530.pdf>

SunLine Transit Agency, Short Range Transit Plan FY 2018-2019, <https://www.sunline.org/sites/default/files/STA%20Short%20Range%20Transit%20Plan%20SRTP%20FY18-19%204Mb.pdf>

SunLine Transit Agency, SunLine Transit Routes Line 91, www.sunline.org/transit_routes/route/line91

University of California, Berkeley, Institute of Transportation Studies, Torres Martinez Desert Cahuilla Indians Tribal Transportation Safety Assessment Technical Report, March 2016

US Census Bureau, American Community Survey, 2013-2017 5-Year Estimates

US Federal Highway Administration, Designing Sidewalks and Trails for Access (1999), https://www.fhwa.dot.gov/environment/bicycle_pedestrian/publications/sidewalks/sidewalks.pdf

US Federal Highway Administration, Interim Approval 21 (2018), https://mutcd.fhwa.dot.gov/resources/interim_approval/ia21/ia21.pdf

US Federal Highway Administration, Traffic Calming ePrimer, Module 3 (2017), https://safety.fhwa.dot.gov/speedmgt/ePrimer_modules/module3pt2.cfm

X. Menu of Design Options

PEDESTRIAN FACILITY OPTIONS

PEDESTRIAN FACILITY OPTIONS	MULTI-USE PATH	SIDEWALK	ROADWAY	
	MULTI-USE PATH	STRAIGHT SIDEWALK	RAISED MEDIAN	PROVISIONAL "PROTECTED WALKING LANE"
SPACE REQUIRED	<ul style="list-style-type: none"> 15 foot minimum 	<ul style="list-style-type: none"> 5 ft minimum 	<ul style="list-style-type: none"> 6-8 foot minimum 	<ul style="list-style-type: none"> 5-10 ft minimum / width flexible
REQUIRED COMPONENTS	<ul style="list-style-type: none"> Minimum 10 ft paved surface for travel Minimum 5 ft buffer separation from vehicle traffic 	<ul style="list-style-type: none"> Curb for safety and separation from the roadway Gutter for stormwater runoff 	<ul style="list-style-type: none"> Raised median with pedestrian refuge Raised area a minimum of 7 inches above roadway 	<ul style="list-style-type: none"> Concrete curb separator to prevent vehicle entry
RECOMMENDED COMPONENTS	<ul style="list-style-type: none"> Colored pavement and/or other markings to distinguish for users and vehicles Landscaping or other such elements to provide shade Additional pedestrian amenities such as benches, wayfinding, and lighting 	<ul style="list-style-type: none"> Landscaping or other such elements to provide shade Additional pedestrian amenities such as benches and lighting Can be designed as a full sidewalk or ribbon sidewalk 	<ul style="list-style-type: none"> Landscaping (if wider median) or other such elements to provide shade Crossing signage with lighting to allow for visibility to vehicles 	<ul style="list-style-type: none"> Colored pavement and/or other markings to distinguish for users and vehicles Clear signage to indicate the intended usage of the lane
IDEAL APPLICATION	<ul style="list-style-type: none"> High speed streets with relatively high traffic volumes Main corridors with wider ROW 	<ul style="list-style-type: none"> Narrow / low speed streets meeting residential district criteria (25 MPH speed limit) Corridors with narrow ROW Ideal on both sides of street, but could be implemented on one initially 	<ul style="list-style-type: none"> Street having limited access points to fronting properties Main corridors 	<ul style="list-style-type: none"> Temporary antecedent for areas with planned future improvements Available paved area: existing paved shoulder or lanes that could be narrowed Low to medium speed road
ADVANTAGES	<ul style="list-style-type: none"> Safe separation from vehicles Multi-use for pedestrian and bicyclists Comfortable for a variety of users and age groups 	<ul style="list-style-type: none"> Safely separated from vehicles Alleviates drainage issues 	<ul style="list-style-type: none"> Reduces risk of left-turn and head-on collisions Equally accessible to both sides of the street Reduces crossover traffic Channelizes pedestrian crossings to limited locations Traffic calming effects 	<ul style="list-style-type: none"> Low cost adaptation of existing facility Quick implementation option
DISADVANTAGES	<ul style="list-style-type: none"> Requires wide ROW 	<ul style="list-style-type: none"> Narrow walking surface that can only accommodate smaller groups of people 	<ul style="list-style-type: none"> Ongoing maintenance and operations cost 	<ul style="list-style-type: none"> Pedestrians close to vehicular traffic
GUIDELINES	<ul style="list-style-type: none"> See California MUTCD: Section 9C.03 (p. 1379) and Figure 9C-2 See California HDM: Section 1003.1 	<ul style="list-style-type: none"> See FHWA Designing Sidewalks and Trails for Access: Chapter 4 	<ul style="list-style-type: none"> See California MUTCD: Section 3I.06 (p. 814) 	<ul style="list-style-type: none"> See https://usa.streetsblog.org/2018/02/01/a-quick-and-dirty-fix-for-sidewalkless-streets/
PRECEDENT IMAGE				

BICYCLE FACILITY OPTIONS

	CLASS I	CLASS II	CLASS IV
	MULTIMODAL PATH	BUFFERED LANE	SEPARATED BIKEWAY
SPACE REQUIRED	<ul style="list-style-type: none"> 15 foot minimum 	<ul style="list-style-type: none"> 8 ft minimum 	<ul style="list-style-type: none"> 8 foot minimum
REQUIRED COMPONENTS	<ul style="list-style-type: none"> Minimum 10 ft paved surface for travel Minimum 5 ft buffer separation from vehicle traffic Buffer could be: vegetated swale, earthwork berm, at least 10 ft of flat earth 	<ul style="list-style-type: none"> Minimum 5 ft wide bicycle lane with 3 ft wide buffer Non-vertical separators in buffer, such as rumble strips 	<ul style="list-style-type: none"> Minimum 5 ft bicycle lane with 3 ft wide buffer Physical separators in buffer, such as concrete curbs or flexible delineators
RECOMMENDED COMPONENTS	<ul style="list-style-type: none"> Colored pavement and/or other markings to distinguish for users and vehicles Landscaping or other such elements to provide shade Additional pedestrian amenities such as benches, wayfinding, and lighting 	<ul style="list-style-type: none"> Colored pavement to increase visibility Reflective markers for nighttime visibility 	<ul style="list-style-type: none"> Colored pavement to increase visibility Reflective markers for nighttime visibility
IDEAL APPLICATION	<ul style="list-style-type: none"> High speed streets with relatively high traffic volumes Main corridors with wider ROW 	<ul style="list-style-type: none"> Lower speed streets or residential streets 	<ul style="list-style-type: none"> Lower speed streets
ADVANTAGES	<ul style="list-style-type: none"> Safe separation from vehicles Multi-use for pedestrian and bicyclists Comfortable for a variety of users and age groups 	<ul style="list-style-type: none"> Buffer zone enhances comfort for cyclists Appropriate for narrow ROW Convenient access to destinations Allows for roadside parking 	<ul style="list-style-type: none"> Safe separation from vehicles and buffer zone enhances comfort for cyclists Appropriate for narrow ROW Convenient access to destinations
DISADVANTAGES	<ul style="list-style-type: none"> Requires wide ROW 	<ul style="list-style-type: none"> Perceived as less safe than separated paths Requires enough paved area to accommodate an extra lane of bicycle traffic, or additional pavement is needed 	<ul style="list-style-type: none"> Separators can complicate access Requires enough paved area to accommodate an extra lane of bicycle traffic, or additional pavement is needed
GUIDELINES	<ul style="list-style-type: none"> See California MUTCD: Section 9C.03 (p. 1379) and Figure 9C-2 See California HDM: Section 1003.1 	<ul style="list-style-type: none"> See California MUTCD: Section 9C.04-42 (p. 1383) and Figure 9C-104 (CA) See California HDM: Section 1003.2 	<ul style="list-style-type: none"> See California MUTCD: Section 9C.102 (p. 1386) and Figure 9C-110 (CA) See Caltrans Design Information Bulletin 89-01
PRECEDENT IMAGE			

INTERSECTION + TRAFFIC CALMING OPTIONS

	SIGNAGE		CROSSWALKS		ROADWAY
	SOLAR FLASHING STOP SIGNS	RECTANGULAR RAPID FLASHING BEACONS (RRFB)	RAISED CROSSWALKS	MARKED CROSSWALKS	ROUNDBABOUTS
DESCRIPTION	<ul style="list-style-type: none"> Installing flashing components at stop controlled intersections 	<ul style="list-style-type: none"> Installing RRFBs in addition to crosswalk components 	<ul style="list-style-type: none"> Raising crosswalks above street level so that passing vehicles need to slow down Typically 10-15 feet in width 	<ul style="list-style-type: none"> Lateral or longitudinal lines (or other markings) to highlight pedestrian crossing Often accompanied by a pedestrian crossing sign 	<ul style="list-style-type: none"> Slow-speed, one-way intersection around a central circle Can vary in size to accommodate up to two lanes of traffic Mountable truck apron is used to accommodate larger vehicles
IDEAL APPLICATION	<ul style="list-style-type: none"> Stop controlled intersections with high traffic volumes and/or high speed traffic 	<ul style="list-style-type: none"> Stop controlled intersections with high pedestrian traffic and/or high speed traffic 	<ul style="list-style-type: none"> Areas with high crossing demand Crosswalks near a school Trail crossings 	<ul style="list-style-type: none"> At stop-, yield-, or signal-controlled intersections At intersections without stop or signal controls if study finds they are necessary 	<ul style="list-style-type: none"> Intersections that have at least three approaches and high vehicle volumes To create a slow-speed gateway entering a neighborhood or community To avoid creating lanes at an intersection to accommodate turning movements
ADVANTAGES	<ul style="list-style-type: none"> Can improve safety at stop controlled intersections Low maintenance costs of solar lighting 	<ul style="list-style-type: none"> Can improve pedestrian safety at crossings Relatively low cost 	<ul style="list-style-type: none"> Improved safety for crossing pedestrians through improving driver's awareness of crossing Encourages slower traffic speeds 	<ul style="list-style-type: none"> Provides guidance to pedestrians of preferred crossing locations To alert motorists to the presence of pedestrians 	<ul style="list-style-type: none"> Reduces vehicular speeds Eliminates the possibility of head-on collisions Enhances pedestrian safety by slowing vehicle speeds and keeping crossing short with median refuge island
DISADVANTAGES	<ul style="list-style-type: none"> Not as reliable as traditional powered lighting 	<ul style="list-style-type: none"> Slightly higher maintenance costs 	<ul style="list-style-type: none"> Higher cost of implementation May impact street drainage 	<ul style="list-style-type: none"> Less significant safety improvement than other options Maintenance required 	<ul style="list-style-type: none"> High upfront investment in infrastructure May require increased spatial footprint for the intersection
GUIDELINES	<ul style="list-style-type: none"> See California MUTCD: Section 4L.05 (p. 982) 	<ul style="list-style-type: none"> See FHWA Interim Approval 21 	<ul style="list-style-type: none"> See FHWA Traffic Calming ePrimer 3.14 	<ul style="list-style-type: none"> See California MUTCD: Section 3B.18 (p. 682) 	<ul style="list-style-type: none"> See California MUTCD: Chapter 3C (p. 769) and 4C (p. 827)
PRECEDENT IMAGE					

[PAGE INTENTIONALLY LEFT BLANK]

[PAGE INTENTIONALLY LEFT BLANK]

