



FINAL BASELINE REPORT

February 2024

Created For:



Prepared By:

Rick Engineering Company

Supported By:

Dudek, Mead & Hunt, Coffman Engineering, and Railpros

TABLE OF CONTENTS

TABLE OF CONTENTS.....	1
List of Appendices.....	v
List of Figures.....	v
List Of Tables.....	vi
1. INTRODUCTION.....	1
1.1. PURPOSE AND INTENT OF THE BASELINE REPORT.....	1
1.2. IMPERIAL VALLEY BACKGROUND AND SETTING.....	1
1.2.1. History.....	1
1.2.2. Regulatory Setting.....	5
1.2.3. Physical Conditions.....	5
1.3. REPORT ORGANIZATION.....	6
1.4. EXECUTIVE SUMMARY.....	6
2. LAND USE.....	11
2.1. EXISTING CONDITIONS.....	11
2.1.1. Applicable Regulations.....	11
2.1.2. Related Planning Documents.....	12
2.1.3. Neighboring Communities.....	14
2.1.4. Land Ownerships.....	17
2.1.5. Natural Environment and Scenic Resources.....	17
2.1.6. Land Use Designations and Overlays.....	20
2.2. CONSTRAINTS.....	27
2.3. OPPORTUNITIES.....	29
2.4. RECOMMENDATIONS.....	29
3. MARKET CONDITIONS.....	30
3.1. EXISTING CONDITIONS.....	30
3.1.1. Existing Economic Framework.....	30
3.1.2. Lithium Extraction.....	32
3.1.3. Battery Production.....	35
3.1.4. Solar and Wind Renewable Power.....	36
3.1.5. Geothermal Energy Development.....	39
3.2. CONSTRAINTS.....	40
3.3. OPPORTUNITIES.....	40
3.4. RECOMMENDATIONS.....	41
4. SOCIAL CONDITIONS.....	42
4.1. EXISTING CONDITIONS.....	42
4.1.1. Applicable Regulations.....	42
4.1.2. Demographics.....	44
4.1.3. Environmental Justice.....	55
4.2. CONSTRAINTS.....	61
4.3. OPPORTUNITIES.....	63
4.4. RECOMMENDATIONS.....	64
5. PUBLIC SERVICES AND RESOURCES.....	64
5.1. EXISTING CONDITIONS.....	64
5.1.1. Applicable Regulations.....	65
5.1.2. Police.....	66

1. Introduction

1.1. PURPOSE AND INTENT OF THE BASELINE REPORT

The purpose of the Lithium Valley Baseline Report (Baseline Report) is to establish an inventory of existing conditions within the Study Area. The existing conditions may be regulatory, physical, demographic, and industry trends. The Baseline Report analyzes the existing conditions for an approximate area of 51,786 acres, located adjacent to the southeastern bend of the Salton Sea in Imperial County, California. This area makes up the Lithium Valley Specific Plan Study Area (Study Area), which is comprised of mostly unincorporated Imperial County land and a small piece of land incorporated by the City of Calipatria. See Figure 1-1, Vicinity, and Figure 1-2, Study Area, for the geographic location.

The drafting of this Baseline Report serves as a starting point for identifying possible implementation strategies for future programs and projects. The Baseline Report in tandem with the Lithium Valley Infrastructure Assessment Appendix A Infrastructure Assessment will help generate discussion between all stakeholders, staff, consultants, and decision makers that will help shape future development within the Study Area. The intent is to build from the analysis of the Baseline Report in the following phases of the Lithium Valley Specific Plan and Programmatic Environmental Impact Report (Project).

1.2. IMPERIAL VALLEY BACKGROUND AND SETTING

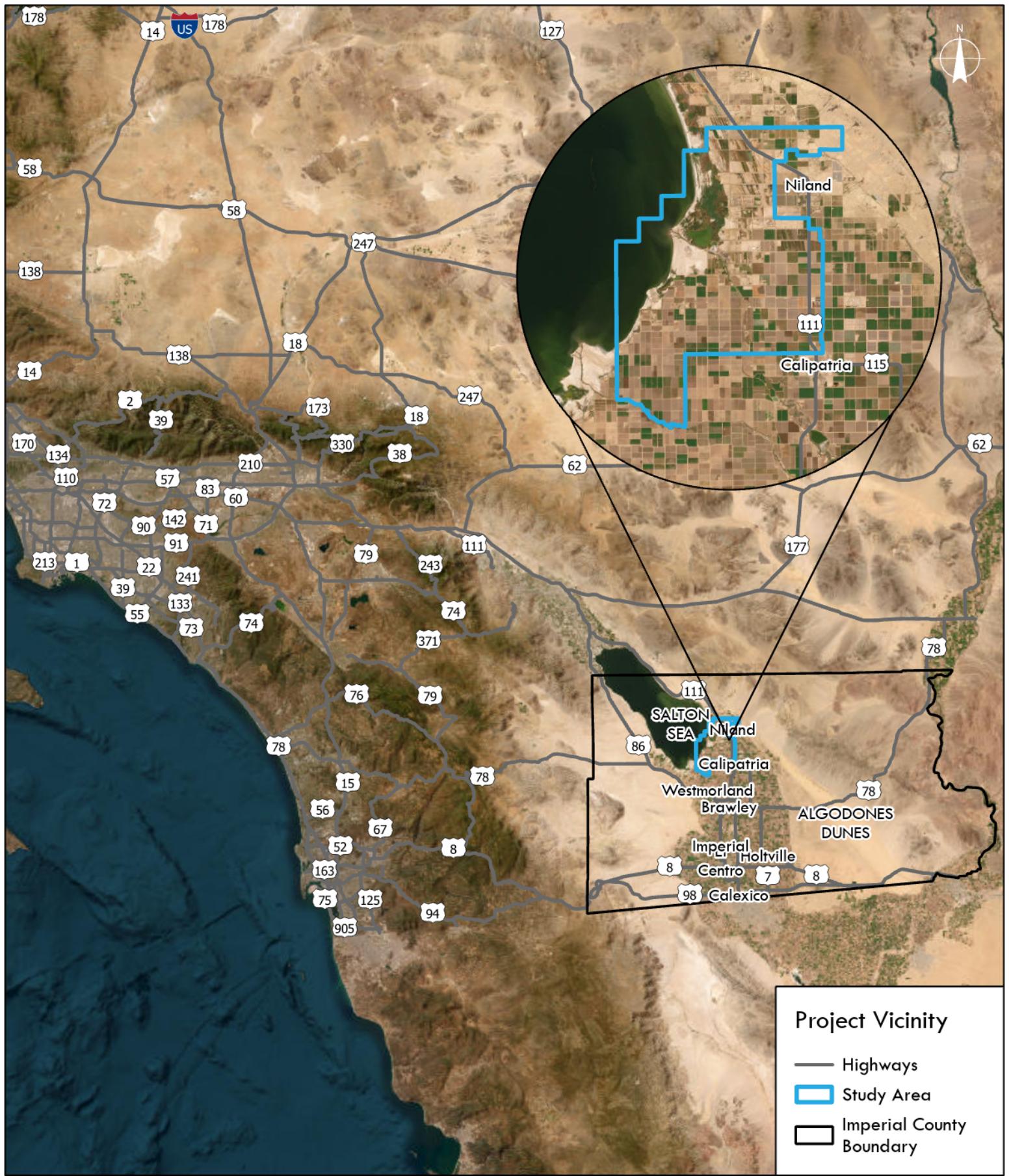
1.2.1. History

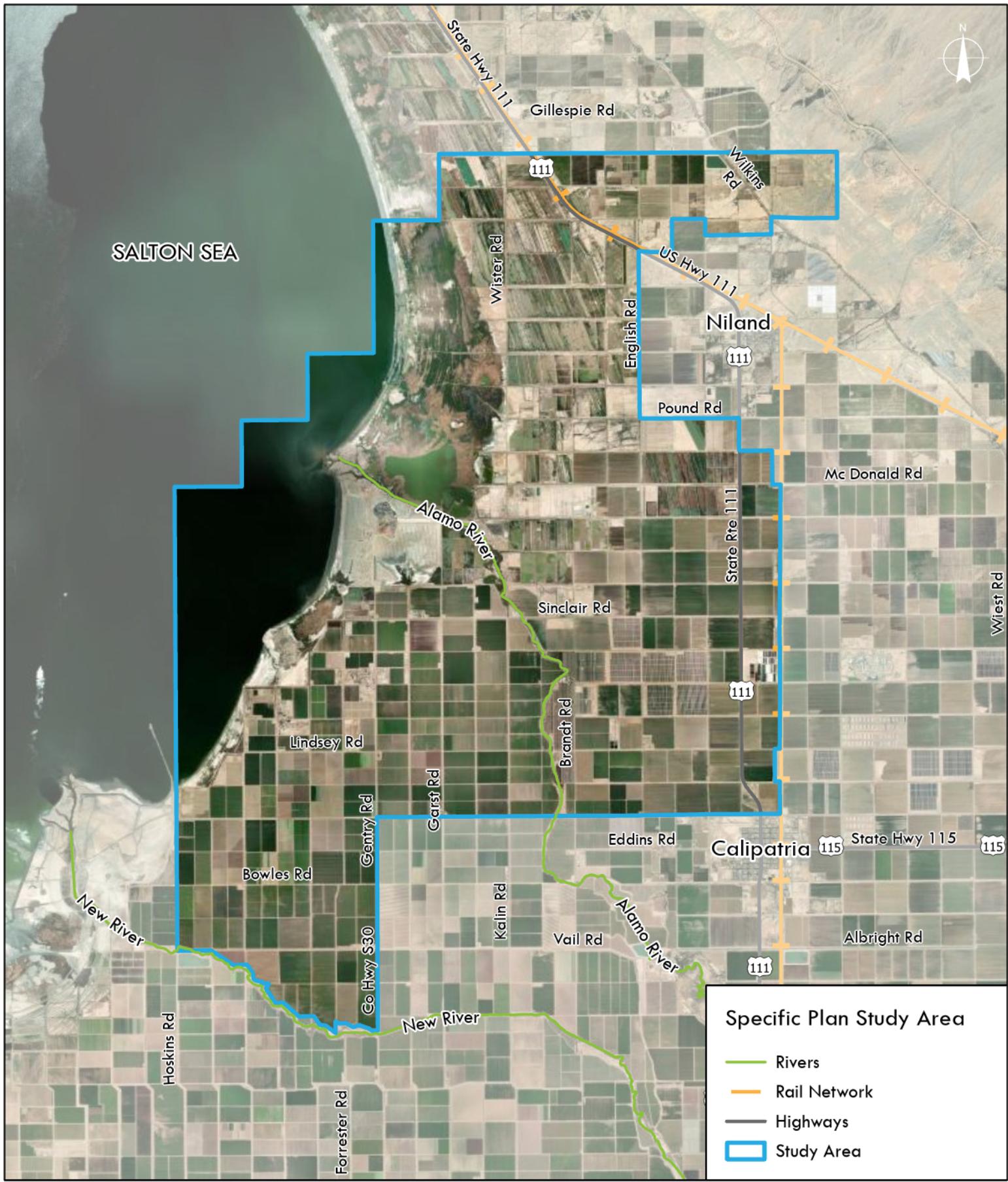
Salton Sea History

The Salton Sea is one of many bodies of water to occupy the Salton Basin, flooded by the Colorado River. According to the Salton Sea Authority, it is uncertain as to how many times water has filled the Salton Basin over the centuries, but human interventions responsible for flooding the basin only once, thus creating the Salton Sea (Salton Sea Authority 2017). The Salton Sea has become a key component to the Colorado River's delta.

The Salton Sea is maintained by agricultural runoff from the Imperial and Coachella valleys, that now supports an ecosystem that attracts hundreds of migratory bird species and other wildlife. The Salton Sea is a vital piece of the Pacific Flyway, a major north-south flyway for migratory birds in North and South America.

In 1928, the United States Congress authorized the construction of the Boulder Dam and the All American Canal that would supply water to the Valley and control flooding of the Colorado River. In the 1950s and 1960s, the salinity levels of the Salton Sea were lower and the Sea was a popular tourist spot. However, by the 1970s salinity levels and environmental toxins had devastated the fish and bird populations. Since then, restoration efforts have been launched by local authorities. Groups such as the Salton Sea Authority, the Bureau of Reclamation, the Salton Sea Task Force, Salton Community Services District have all contributed to efforts to restore the Sea. Imperial County has a rich agricultural heritage, producing an abundance of winter vegetables, dependent on imported water sources.





1.3. REPORT ORGANIZATION

The Baseline Report is broken into nine chapters based on each topic. Each chapter describes the topics existing conditions, constraints, opportunities, and recommendations. Analysis of each topic is communicated via text, tables, and graphics. Chapters include:

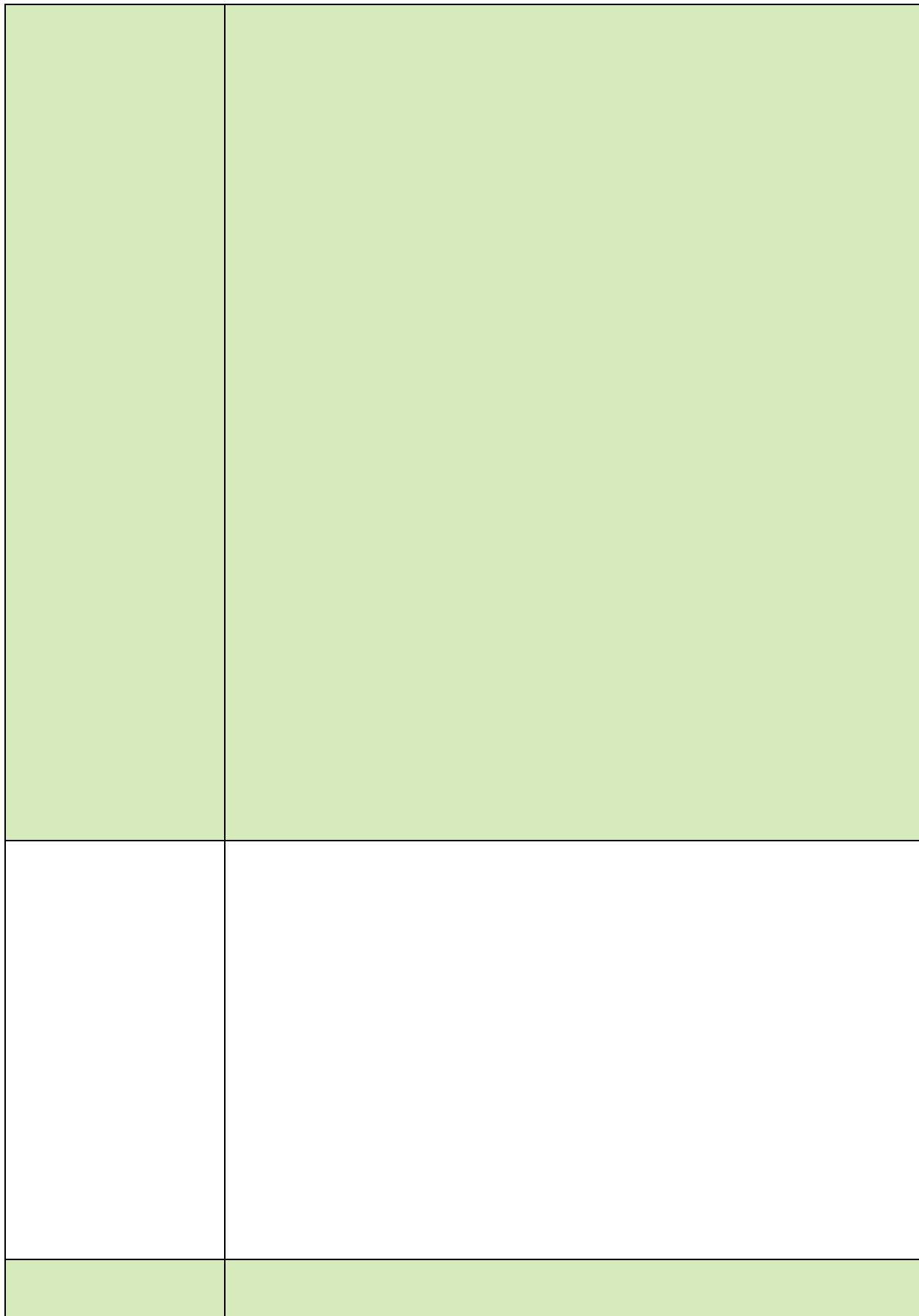
- ☒ Chapter 1 Introduction
- ☒ Chapter 2 Land Use
- ☒ Chapter 3 Market Conditions
- ☒ Chapter 4 Social Conditions
- ☒ Chapter 5 Public Services and Resources
- ☒ Chapter 6 Utilities
- ☒ Chapter 7 Renewable Resources
- ☒ Chapter 8 Circulation and Goods Movement
- ☒ Chapter 9 Other Environmental Resources
- ☒ Chapter 10 References

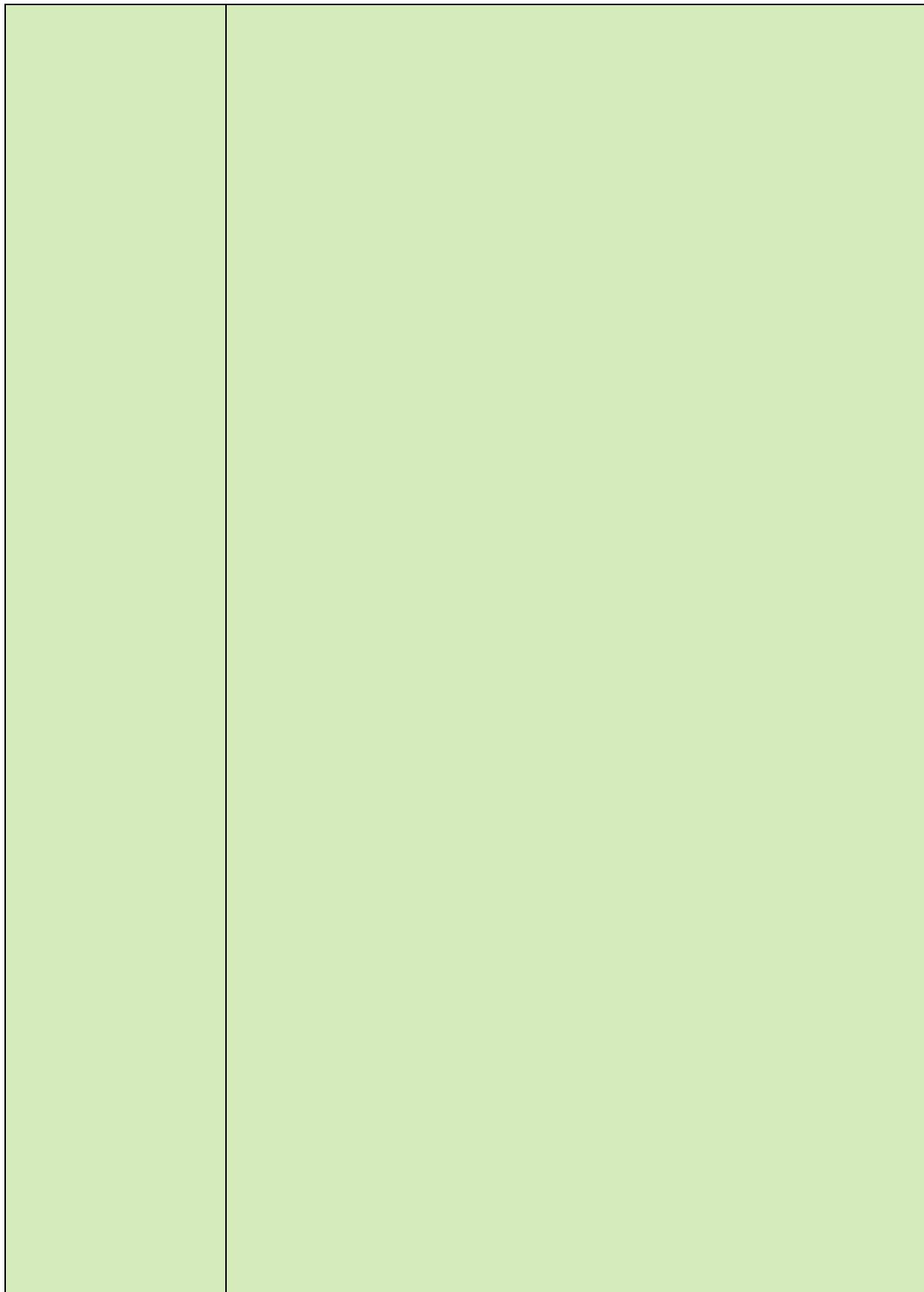
1.4. EXECUTIVE SUMMARY

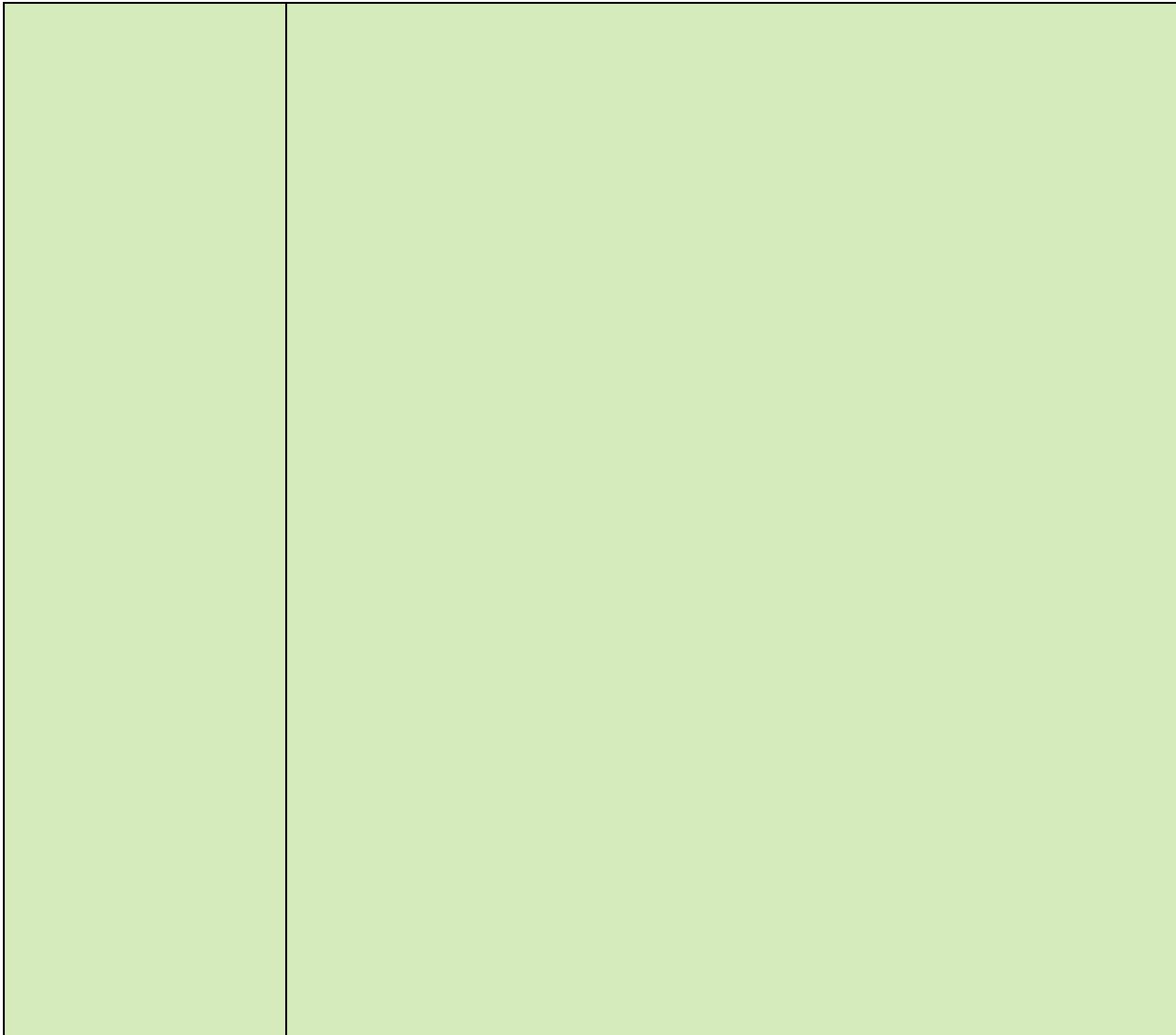
Table 1-1, Executive Summary, below provides the key findings for each topic discussed within this Baseline Report. See specific sections for each topic for further information.

Table 1-1, Executive Summary

Topic	Key Findings
Land Use	<ul style="list-style-type: none">☒ There are many landowners in the Study Area, both public agencies and private ownerships. Future changes to land uses will require additional evaluation to ensure compatibility with the other agencies general plans, master plans, protection laws, etc.☒ Innovative land use policy implementation and coordination between stakeholder agencies will be necessary for the successful development of renewable energy resource generation in the Study Area.







2. Land Use

2.1. EXISTING CONDITIONS

The Study Area is predominantly unincorporated with a small piece of land incorporated by the City of Calipatria, which mostly presides over land outside of the Study Area. The City of Calipatria developed the 2016 Sphere of Influence (SOI) for the General Plan, which represents the geographic extent to which a city can expand by annexation. The City of Calipatria's Sphere of Influence extends into the Study Areas Southeastern corner. The Study Areas adjacency to the Salton Sea, proximity to National Wildlife Refuges and abundance of open space, focuses on primarily recreational and commercial farming activities.

2.1.1. Applicable Regulations

California Government Code Section 65450 mandates every planning agency to prepare and adopt a comprehensive, long-term General Plan intended to guide development of the community through



Table 2-1, Study Area Land Ownership Distribution

Ownership	Acreage	Percent of Study Area
Private/Unknown	33,577	64.8
Local Government	13,213	25.5
State	4,588	8.9
U.S. Fish and Wildlife Service(USFW)	166	0.3
Bureau of Reclamation (USBR)	161	0.3
Bureau of Land Management (BLM)	80	0.2
Total	51,786	100

Source: Bureau of Land Management(BLM) Surface Management AgencyOwnership

BLM-managed lands near the Salton Sea may have restrictions on offroad vehicle use, camping, and other recreational activities to protect sensitive desert ecosystems and cultural resources. Permits also may be required for certain activities. CDFW manages wildlife areas and ecological reserves near the Salton Sea, implementing regulations to protect habitat for various species of birds, fish, and other wildlife. Access restrictions and permit requirements may be in place to protect sensitive habitats, particularly during nesting seasons for migratory birds. USFWS also manages wildlife refuges and conservation areas near the Salton Sea, implementing regulations to protect habitat for migratory birds and endangered species. Access to certain areas may be restricted during critical times, such as nesting or feeding periods for wildlife.

2.1.5. Natural Environment and Scenic Resources

The Study Areas natural environment and scenic resources include a distinct desert landscape and notable topographic features, including prime soils, Colorado River water and significant sunlight which drive the regions prominent agricultural activity. County-wide, native vegetation communities are highly diverse with terrestrial, wetland and aquatic habitats being reflected by rare, biodiverse species populations which inhabit the region. As discussed in Section 9.4 Biological Resources, vegetation communities that cover the Study Area include but are not limited to: agriculture, desert scrub, freshwater pond, freshwater emergent wetland, Salton Sea playa, and Salton Sea open water.

The Clean Water Act, established by the U.S. Environmental Protection Agency (EPA), imposes regulations on discharges of pollutants into navigable waters, aiming to maintain water quality and protect aquatic ecosystems. Areas within the Study Area have been designated as environmentally sensitive areas by various public agencies or entities. These include the US Fish & Wildlife Service (USFWS) Sonny Bono Salton Sea National Wildlife Refuge, wilderness and wildlife areas, State parks, and other protective designations by Federal and State agencies.

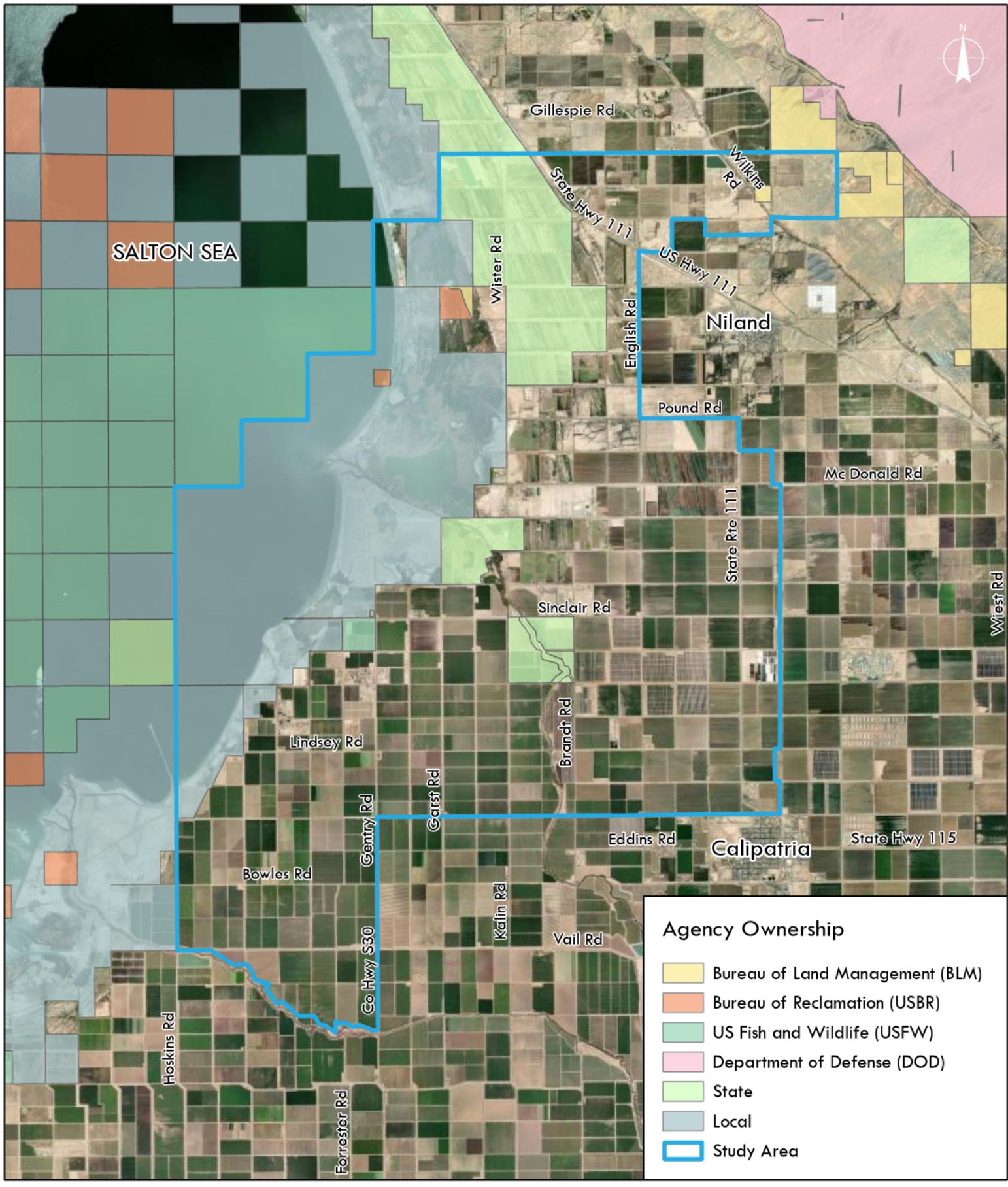


Table 2-2, Study Area General Plan Land Use Designations (Acres)

Land Use Designation	Acreage	Percent of Study Area
Agriculture	34,369	66.4
Water (Salton Sea)	12,451	24
Government/Special Public	3,313	6.4
Recreation/Open Space	1,316	2.5
Urban Area	337	0.7
Total	51,786	100

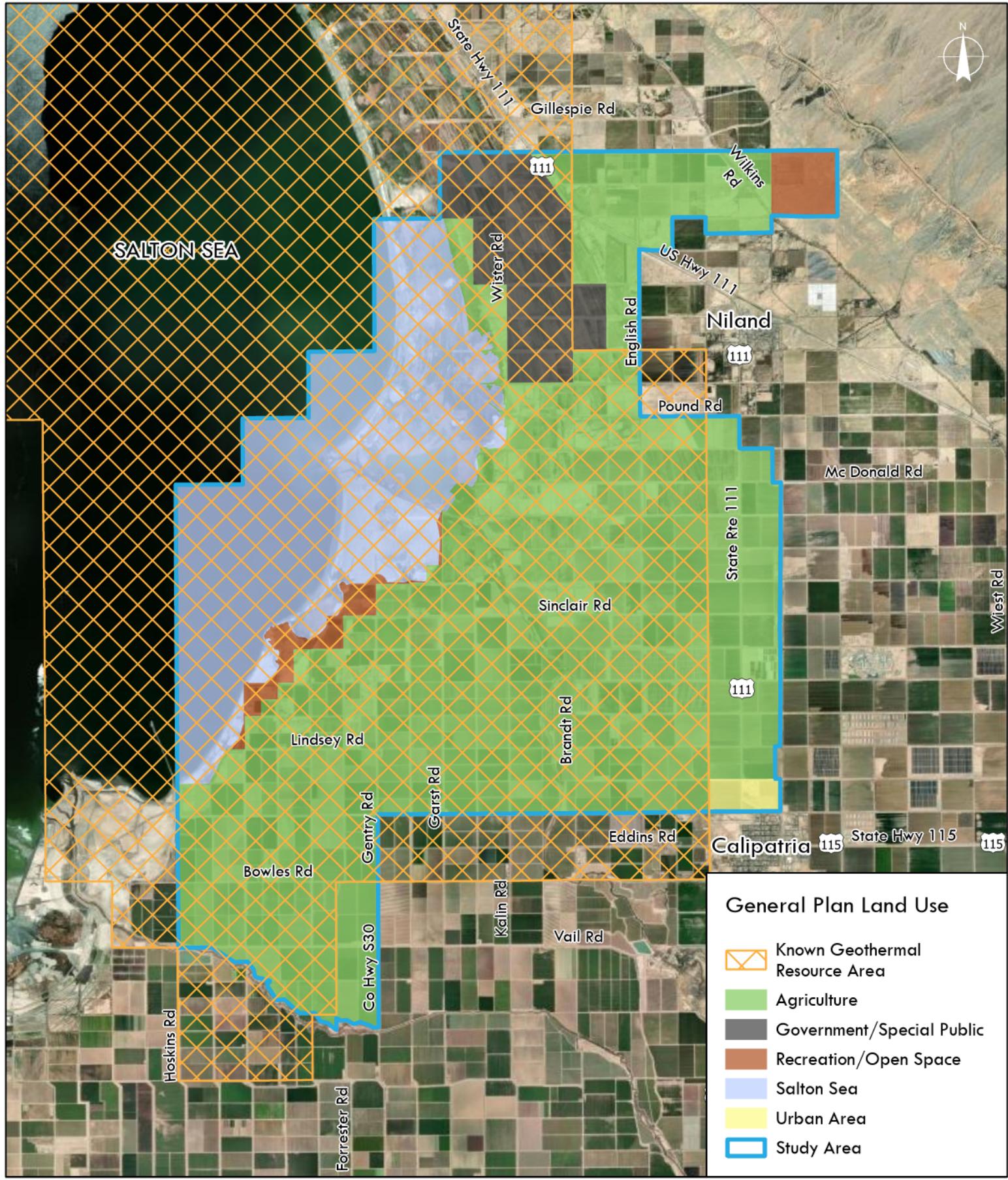
Source: Imperial County Planning and Development Services General Plan Land Use Element Land Use Desginations (2015)

The Southern California Association of Governments (SCAG) collects regional data throughout the Southern California region. SCAG provides public datasets containing existing land use data. SCAG published a 2019 Annual Land Use dataset at a parcellevel using their own land use classifications. A complete list of acreages and percentages of land use designationfrom SCAGs 2019 Annual Report are shown in Table 2-3, Study Area SCAG Existing Land Use Distribution below. See Figure 2-4, Existing SCAG Land Use, to see these land uses distributed within the Study Area.

Table 2-3, Study Area SCAG Existing Land Use Distribution (Acres)

Land Use	Acreage	Percent of Study Area
Agriculture	31,875	61.6
Water	13,206	25.5
Open Space and Recreation	1,958	3.8
Vacant	1,609	3.1
Transportation, Communications, and Utilities	1,553	3
Mobile Homes and Trailer Parks	325	0.6
Industrial	299	0.6
Rural Residential	166	0.3
Single Family Residential	159	0.3
Facilities	74	0.1
Commercial and Services	15	0.03
None	548	1.1
Total	51,786	100

Source: Southern California Association of Government (SCAG) 2019 Annual Land UsDistribution



0 2 4 Miles

SOURCE: Imperial County



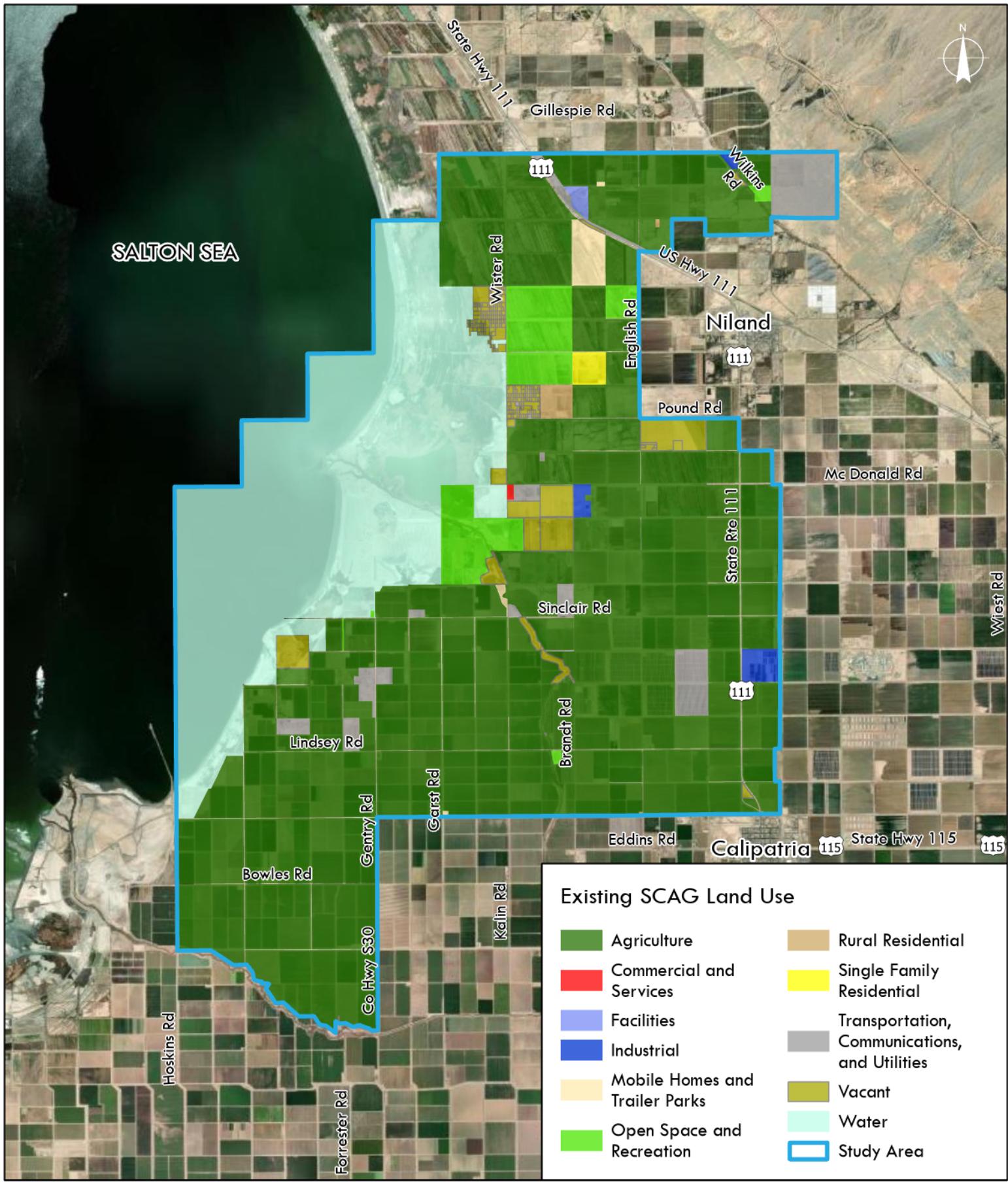


Table 2-4, Imperial County 2019 Agricultural Production Summary

Category	Harvested Acres		Changes in Harvested Acres	Changes in Gross Value		Changes in Gross Value
	2018	2019		2018	2019	
Livestock				490,633,000	527,490,000	7.5
Field Crops	331,173	348,5.53	5.25	444,693,000	522,502,000	17.5
Vegetable & Melon Crops	104,235	125,623	20.52	895,978,000	1,039,092,000	16
Fruit & Nut Crops	10,844	10,655	-1.74	94,574,000	75,573,000	-20.1
Seed & Nursery Products	48,427	54,798	13.16	95,330,000	117,650,000	23.4
Apiary Products	-	-	-	5,219,000	5,005,000	-4.1
Total	494,679	539,629	9.09	2,026,427,000	2,287,312,000	12.9

Source: Imperial County 2021 Agricultural Crop & Livestock Report

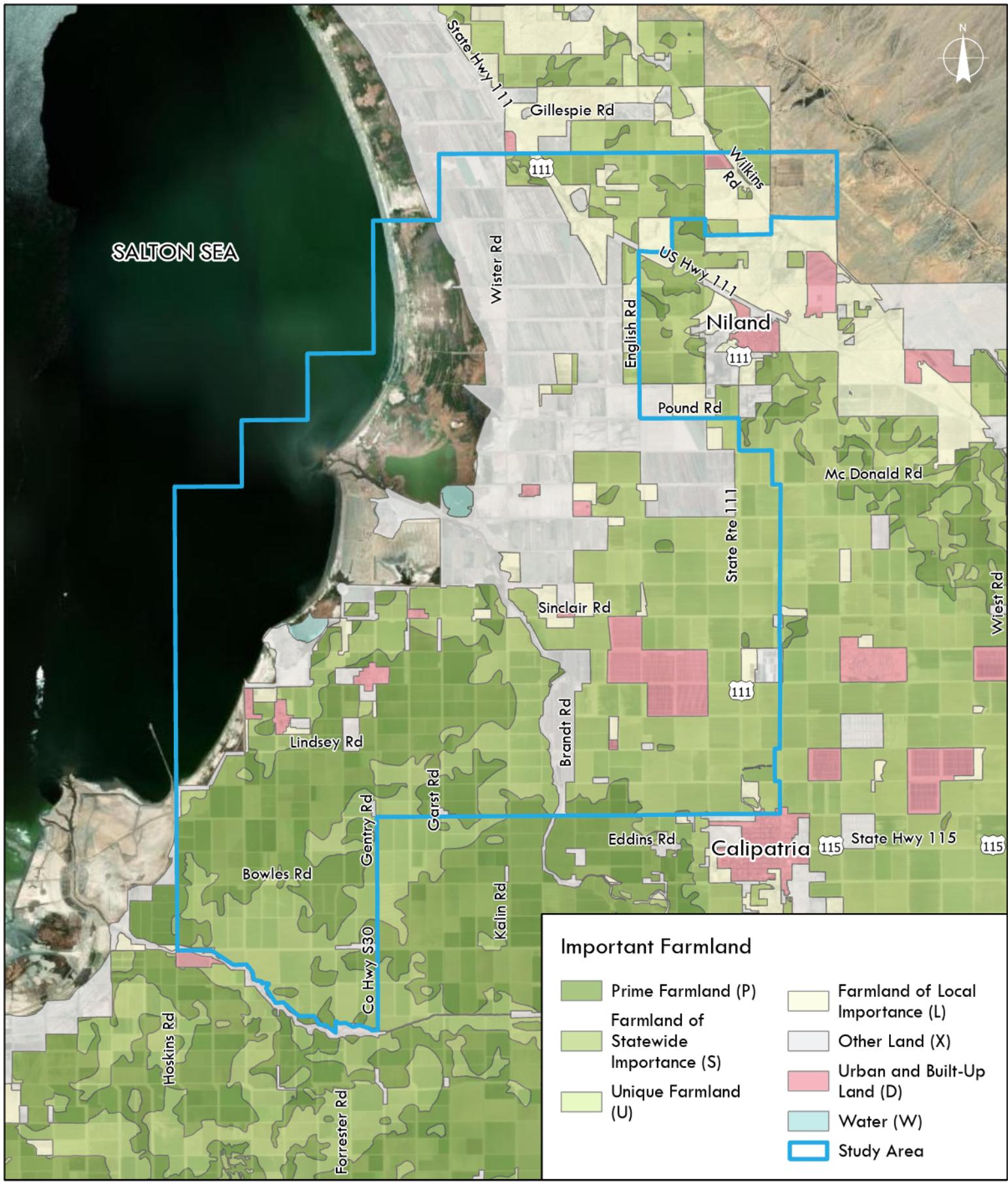


Table 2-5, Top Ten Ranked Crops in Study Area

2021 Rank	2020 Rank	Crop Type	Crop Description	Acres	
1	1	Field	Alfalfa (All)	147,405	31.8
2	2	Field	Bermudagrass (All)	74,737	16.1
3	3	Field	Sudangrass (All)	39,406	8.5
4	4	Garden	Lettuce (All)	25,279	5.5
5	5	Field	Sugarbeets	25,212	5.4
6	6	Field	Kleingrass	19,691	4.2
7	9	Field	Wheat	16,599	3.6
8	8	Garden	Onions (All)	14,326	3.1
9	7	Garden	Carrots (All)	12,988	2.9
10	11	Permanent	Duck Ponds	9,888	2.1

Source: Imperial Irrigation District Water Department 2021 Crop Rank and Acreage

Residential in Agricultural Land Use Designations

A variety of existing residential uses occur within a small portion of the agriculture land use designation within the Study Area, consisting of approximately 650 acres in the Northern area of the boundary. Proximity between agricultural and residential land uses initiates the potential for conflict between residents and agricultural operators. The County intends to designate future land uses to ensure compatibility and reduce the opportunity for conflict.

According to the County General Plan, residential development standards under the agricultural land use category are as follows:

- ☒ Very-low density residential land uses with not more than 1 single family dwelling unit per 40 acres or per legal parcel.
- ☒ Land shall not be subdivided for residential development.
- ☒ Agricultural employee housing may be permitted with a Conditional Use Permit and environmental review to determine that continued agricultural use will not be adversely impacted.
- ☒ Building height maximum of 35 feet.

In A-1 (Limited Agriculture) zones within urban boundaries, A2 (General Agricultural/Rural Zone), and M-1 (Light Industrial) zones, regulations allow for employee housing. However, it's essential for property owners and developers to comply with specific zoning regulations and permitting requirements outlined by local authorities to ensure lawful construction and occupation of employee housing units.

2.2. CONSTRAINTS

The Study Area presents a unique economic and social investment opportunity for Imperial County. However, there are specific constraints identified regarding existing and future land uses and compatibility with renewable energy land use designations.

2.3. OPPORTUNITIES

Listed below are the land use opportunities identified within the 51,768-acre Study Area to support future renewable development and supportive uses:

- ☒ Nearly 42,750 acres of the 51,768-acre Study Area is a Known Geothermal Resource Area which will support site selection for potential renewable energy extraction facilities
- ☒ Existing County land use and zoning development standards support the transition from agriculture to renewable land use designations
- ☒ Support existing residential land uses and encourage expansion of housing developments through designating compatible land uses adjacent to the cities of Niland and Calipatria.
- ☒ Follow zoning compliance requirements and land use designations to ensure compatibility and reduce conflict
- ☒ Evaluate and enforce Development Impact Fees to be issued to contribute to recreation and conservation efforts
- ☒ Occupy vacant parcels with necessary developments to support renewable energy, workforce development or recreational interests

2.4. RECOMMENDATIONS

Upon evaluation of the constraints and opportunities regarding land use, the following recommendations have been identified for the Study Area.

- ☒ In the Specific Plan, consider expanding the RE Overlay Zone or using another mechanism to eliminate Conditional Use Permits for specific types of renewable energy development.
- ☒ It is in the County's best interest to support and expand agricultural operations to continue driving development and economic viability while expanding the renewable energy industry in the Study Area. The continued support of agricultural operations will require maintaining compatibility with agricultural land uses and ensuring that any development projects will not impede them. Strengthening the local economy through continued agricultural activity will encourage development and ensure retention of industrial business in the Study Area.
- ☒ Future growth of the workforce population may put pressure on residential development in communities surrounding the Study Area. Since there are no significant planned residential land uses designated by the County General Plan within the Study Area, collaboration between the County, municipalities, and service districts will support residential development to accommodate for population growth. Consideration of applicable city general plans, service area plans, specific plans and spheres of influence will reduce conflict and better inform project stakeholders to understand the full picture of the Study Area. In

3. Market Conditions

3.1. EXISTING CONDITIONS

This section outlines the existing economic picture for Imperial County and the potential for various renewable energy and related manufacturing industries, based upon global and national trends, including:

- Existing Economic Framework
- Lithium Extraction
- Battery Production
- Solar and Wind Renewable Power
- Geothermal Energy Development

The section concludes with a discussion of potential Constraints and Opportunities facing the Salton Sea area and the development of these industries over the next decade.

3.1.1. Existing Economic Framework

According to the Centers of Excellence for Labor Market Research (COE), Imperial County had a population of 177,936 and a total of 70,389 jobs in 2020(Table 3-1, Total Employment 2020-2030). The COE projects that employment in the county will grow by nearly 5,500 positions during the decade of the 2020s to a total of nearly 76,000 positions in 2030, representing a total growth of 8 percent for the ten-year period. In comparison, the COE projects that total employment in San

Table 3-1, Total Employment 2020 -2030

	Jobs, 2020	Jobs, 2030	Jobs Change, 2020 2030	Projected Change
Imperial County	70,389	75,854	5,465	8
San Diego County	1,743,087	1,840,067	96,980	6
California	19,831,760	21,212,782	1,381,022	7

Source: Imperial County Regional Profile, Centers of Excellence for Labor Market Research, July 2021

Table 3-2, Imperial County Employment by Industry Section, 2020-2030 details projections for changes in employment in Imperial County between 2020 and 2030, by industry sector. Projections included in Table 3-2 do not include employment that may be introduced as a result of the Lithium Valley Specific Plan and PEIR.

Table 3-2, Imperial County Employment by Industry Sector, 2020 - 2030

	Jobs, 2020	Jobs, 2030	Projected Change
Government	19,210	20,334	6
Agriculture, Forestry, Fishing & Hunting	11,232	9,956	-11
Health Care & Social Assistance	9,858	13,540	37
Retail Trade	8,129	8,552	5
Accommodation& Food Services	4,050	4,393	8
Administrative & Support & Waste Management/Remedi- ation Services	2,662	3,100	16
Construction	2,458	2,628	7
Transportation & Warehousing	2,239	2,238	0
Other Services (except Public Administration)	2,072	2,001	-3
Wholesale Trade	1,900	1,826	-4
Manufacturing	1,863	2,406	29
Professional, Scientific, & Technical Services	1,184	1,246	5
Finance & Insurance	881	877	0

Lithium-Based Battery Supply Chain

UPSTREAM

- Mining and extraction of materials including lithium, cobalt, nickel, and graphite



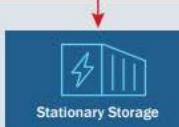
MIDSTREAM

- Additional processing for battery-grade materials
- Cathode/anode powder production
- Separator production
- Electrolyte production
- Electrode and cell manufacturing



DOWNTREAM

- Pack manufacturing
- End-of-life recycling and reuse



3.2. CONSTRAINTS

The following highlight potential constraints limiting the potential of the Salton Sea area to explore and capitalize on the various renewable energy and manufacturing opportunities.

- ☒ The development of battery manufacturing and various renewable energy resources will require the hiring of numerous engineering and specialized positions. Given the labor shortages present across the country across various industries, this factor poses a risk to the development of resource-oriented industries in the Salton Sea area.
- ☒ Operating a wider range of resourcebased industries in the Salton Sea area will require adding employment across a range of technical fields. This may require bringing in workers from outside the local area and this in turn may create the need to generate additional affordably priced housing for this new workforce. If the local area is unable to create sufficient housing for workers or is otherwise unable to attract the necessary workforce, this would present significant constraints on industry expansion.
- ☒ Potential developers of battery manufacturing, solar, wind, and other natural resources may elect to develop in other states with less burdensome regulatory frameworks for permitting and approvals, compared to California. For example, several states with less regulation across the South and Midwest have attracted battery manufacturing facilities over the last year and many of these same states have offered significant incentives to attract these industries.
- ☒ Potential supply chain issues for raw materials and construction components could limit the potential growth of manufacturing and natural resource production across the Salton Sea area.
- ☒ Potential limits on water supplies, resulting from the megadrought across the West and potential curtailments of water allocations from the Colorado River basin to the state of California, could present issues in the development of geothermal projects across the Imperial Valley area.

3.3. OPPORTUNITIES

- ☒ The massive demand for additional lithium resources and the presence of the nations largest potential deposits of lithium in the local area present a tremendous opportunity for new economic development in the Salton Sea vicinity.

3.4. RECOMMENDATIONS

To maximize the potential opportunities resulting from renewable energy and related types of development, the County of Imperial should pursue the following actions.

- ☒ Completion of formalized planning efforts with local educational institutions to identify the training programs necessary to provide an adequate workforce for the potential jobs created by renewable energy and related industries. The planning efforts should identify in greater detail the technical skills needed and identify how specific programs and classes will provide the necessary training.
- ☒ Consult with local schools and higher education to educate staff and students about the types of job opportunities being promised, as well as the skills and trainings needed for these jobs. Outreach with educational institutions can occur throughout the project process.
- ☒ Consider including policies and programs related to preapprenticeships, trainings, and certifications in Imperial County and Mexicali.
- ☒ Given the scale of potential operations spurred by renewable energy, the County should conduct a more detailed analysis of housing needed for potential workers. For example, an electric battery plant employing 3,000 people would clearly result in additional needs for housing. A more detailed housing analysis would help determine the types of housing and the price points needed to house the local workforce.
- ☒ The County should complete more detailed, and regionally coordinated, planning for transportation to serve emerging renewable energy industries. The studies should examine the rail and roadway capacities needed to connect industries in Imperial County to markets both domestically and internationally.

4. Social Conditions

4.1. EXISTING CONDITIONS

This section provides an overview of demographic conditions in the Study Area and surrounding communities. This section also provides a summary of how the State defines environmental justice and how that definition applies to the Study Area. Constraints and opportunities included in this report related to environmental justice take into consideration the comments heard at various community engagement efforts. Community engagement is ongoing to fully understand the environmental justice issues within the Study Area and the ongoing public health concerns in nearby communities.

4.1.1. Applicable Regulations

California Government Code Section 65040.12

Government Code Section 65040.12(e) defines environmental justice as the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies.

Environmental justice includes, but is not limited to, all of the following:

- (A) The availability of a healthy environment for all people.
- (B) The deterrence, reduction, and elimination of pollution burdens for populations and communities experiencing the adverse effects of that pollution, so that the effects of the pollution are not disproportionately borne by those populations and communities.
- (C) Governmental entities engaging and providing technical assistance to populations and communities most impacted by pollution to promote their meaningful participation in all phases of the environmental and land use decisionmaking process.
- (D) At a minimum, the meaningful consideration of recommendations from populations and communities most impacted by pollution into environmental and land use decisions.

Senate Bill (SB) 1000

SB 1000 of 2016 was signed into law by Governor Brown to require local governments to identify environmental justice communities (called disadvantaged communities) in their jurisdictions and address environmental justice in their general plans. SB 1000 requires local governments to address pollution and other hazards that disproportionately impact low-income communities and communities of color in their jurisdiction by identifying any disadvantaged communities within its Study Area.

SB 1000 defines disadvantaged communities as either:

Table 4-1, Population Demographics and Characteristics

Population	County Estimate	Calipatria	Brawley	Westmorland	Census Tract Study Area
Population (Census 2020)	179,702	6,515	26,416	2,014	8,237
Population (Census 2010)	174,528	7,705	24,953	2,225	9,608
Population, percent change (Census 2010 Census 2020)	3.0	-15.4	5.9	-9.5	-14.3
Veterans, 2016-2020	5,749	159	697	N/A	384 (Total)
Foreign born persons, percent, 2016-2020	30.1	16.1	26.6	N/A	14.9

Source: 2016-2020 American Community Survey (ACS) 5 Year Estimates

Age and Health Circumstances

In 2020, 53 of Imperial County's population was under 35 years old . 31 of the population is under 20 years old, representing the largest portion of the population(San Diego-Imperial Center of Excellence for Labor Market Research, 2021).According to the Bureau of Labor Statistics, the prime -working age is between 25 and 54 years old. In 2020, 38 of Imperial County's population was classified within the prime-working age and projections suggest that this percentage will remain stable through 2030(San Diego-Imperial Center of Excellence for Labor Market Research, 2021). See Table 4-2, Age, for comparative statistics on age between geographic areasAs shown in Table 4-3, Health Circumstances, approximately 814 of people in incorporated and unincorporated areas of Imperial County have a disability, while the national average is 8.7(U.S. Census Bureau, 2021).

Table 4-2, Age

	Imperial County	Imperial	Calipatria	Brawley	Census Tract Study Area
Persons under 5 years, percent	8.0	11.6	3.4	10.6	5.1
Persons under 18 years, percent	28.7	37.4	13.4	33.3	16.5
Persons 65 years & over, percent	12.9	9.3	5.7	11.6	6.2

Source: 2016-2020 American Community Survey (ACS) 5 Year Estimates

Table 4-3, Health Circumstances

	National Estimate	Imperial County	Imperial	Calipatria	Brawley	Census Tract Study Area
With a disability, under age 65 years, percent, 2016-2020	8.7	11.2	8.0	8.5	13.5	12.8
Persons without health insurance, under age 65 years, percent	9.8	8.0	4.0	6.4	5.8	5.9

Source: 2016-2020 American Community Survey (ACS) 5 Year Estimates, 2017-2021 American Community Survey (ACS) 5 Year Estimates

It should be noted that the public health metrics shown in Table 43 may not include the undocumented population within Imperial County and may be underestimated.

Ethnicity

As demonstrated in Table 44, Ethnicity Demographics, in 2020, the U.S. Census reported that 85 of the total population in Imperial County reported their ethnicity as Hispanic or Latino, representing 153,027 total residents. In contrast, neighboring San Diego County is estimated to have 35 of their residents from Hispanic origin and 52 in Riverside County. The remainder of Imperial County population is made up of White alone, not Hispanic or Latino (9), Black or African American (3), Asian (2) or Two or More Races (2).

The composition of racial and ethnic groups in Imperial County indicates a difference in household characteristics, income and cultural practices. The attitudes toward housing density and costs may vary across these groups. The Study Areas tract average for race and Hispanic origin demographics indicates that approximately 74 of the population is of Hispanic or Latino origin. Approximately 15 of the Study Area are Black or African American alone while 9 are white, not Hispanic or Latino. Finally, around 5 are of two or more races.

Table 4-4, Ethnicity Demographics

Demographics	County Estimate	Calipatria	Brawley	Census Tract Study Area
Black or African American alone, percent	2.6	16.8	1	5.5
American Indian and Alaska Native alone, percent	1.2	1.3	1.4	1.1
Asian alone, percent	1.4	1.1	0.4	2.6
Native Hawaiian and Other Pacific Islander alone, percent	0.1	0.5	0.2	0.4

Table 4-5, Education Levels

	National Estimate	County Estimate	Imperial	Calipatria	Brawley	Census Tract Study Area
High school graduate or higher, percent of persons age 25 years, 2016-2020	88.9	70.2	79.8	59.2	72.8	60.7
Bachelors degree or higher, percent of persons age 25 years, 2016-2020	33.7	15.4	20.0	1.7	15	1.5

Source: 2016-2020 American Community Survey (ACS) 5Year Estimates 2017-2021 American Community Survey (ACS) 5-Year Estimates

As shown in Table 4-6, Computer and Internet Use, metrics in Imperial County and Brawley are at least 5 less than the national estimates. Similarly, there are at least 8 less households with a computer and at least 10 less households with a broadband Internet subscription in Calipatria and the Census Tract Study Area compared to Imperial County. Access to technology can also serve as indicators for education and employment opportunities. Students can use computers and the Internet as a study resource while facilitating work from home employment models. In addition, students seeking higher education attainment may require computers and internet subscriptions to earn their degree. According to SCAGs Broadband Speed Test Map by Zip Code for Imperial County, the Study Area experiences download speeds between 425Mbps and upload speeds of 0-3 Mbps, unlike cities of El Centro, Brawley and Imperial which all experience upload speeds above

Table 4-6, Computer and Internet Use

	National Estimate	County Estimate	Calipatria	Brawley	Census Tract Study Area
Households with a computer, percent, 2016-2020	93.1	88.8	77.8	88.9	80.1
Households with a broadband Internet subscription, percent, 2016-2020	87.0	81.8	69.5	82.5	72.0

Source: 2016-2020 American Community Survey (ACS) 5 Year Estimates

Income and Home Ownership

As shown by Table 4-7, Housing Characteristics, the median value of owner-occupied housing units is considerably less in the Calipatria and the Census Tract Study Area by nearly 50,000 compared to Imperial County and Brawley. Total housing units shown by the table demonstrate the current housing availability within the County and the Census Tract Study Area currently has approximately 2,000 housing units within the Census Tract Study Area, which is 3.5 of the County estimate. Additionally, the Census Tract Study Area also has significantly less of a median gross rent, reduced by 300 compared to Calipatria, Brawley and the County.

Table 4-7, Housing Characteristics

	County Estimate	Calipatria	Brawley	Census Tract Study Area
Housing units, July 1, 2021, (V2021)	57,855	1,333	8,331	2,029 (Total)
Owner-occupied housing unit rate, 2016-2020	58.1	62.1	52.9	52.9
Median value of owner-occupied housing units, 2016-2020	206,700	144,200	214,900	144,000 N/A for 01
Median selected monthly owner costs -with a mortgage, 2016-2020	1,463	1,270	1,520	1,192 N/A for 01

Table 4-8, Household Size by Tenure

Household Size	Unincorporated County		Total County	
	Number	Percentage	Number	Percentage
Owner-occupied	3,155	68.5	26,156	58.3
1-person	1,285	40.7	5,022	19.2
2-persons	1,008	31.9	7,579	29.0
3-persons	382	12.1	4,382	16.8
4-or-more persons	480	15.2	9,173	35.1
Renter-occupied	1,452	31.5	18,673	41.7
1-person	339	23.3	4,213	22.6
2-persons	290	20.0	4,054	21.7
3-persons	362	25.0	3,465	18.6
4-or-more persons	461	31.7	6,941	37.2
Total Households	4,607	100.0	45	100.0

Source: 2015-2019 American Community Survey (ACS) 5Year Estimates

Housing tenure, reflecting whether a housing unit is owner-occupied or renter-occupied, is influenced by demographic factors like household composition, income, and age, as well as housing costs. In unincorporated Imperial County, approximately 68.0 of occupied housing units were owner-occupied in 2019, a higher rate than the county's overall ownership rate of 38.9. Vacancy rates, indicating housing supply and demand, were notably high, with a 32.0 vacancy rate in the

Table 4-9, Tenure and Vacancy

Tenure and Vacancy Status	Unincorporated County		Total County	
	Number	Percentage	Number	Percentage
Occupied Housing Units	4,607	68.0	44,829	38.9
Owner-occupied	3,155	46.6	26,156	22.7
Renter-occupied	1,452	21.4	18,673	16.2
Vacant Housing Units	2,170	32.0	12,861	11.1
For rent	74	1.1	764	0.7
For sale	78	1.2	397	0.3
Rented or sold, not occupied	94	1.4	342	0.3
For seasonal, recreational, or occasional use	833	12.3	2,603	2.3
For migrant workers	20	0.3	56	0.0
Other	1,071	15.8	8,699	7.5
Total Housing Units	6,777	100.0	57,690	100.0

Source: 2015-2019 American Community Survey (ACS) 5Year Estimates

Table 4-10, Families and Living Arrangements, provides information on Families and Living Arrangements. Imperial County, Calipatria and Brawley all have on average at least three persons per household, while the Census Tract Study Areas average persons per household is about two. Additionally, the table indicates that nearly 75 of County residents speak a language other than English at home. Calipatria, Brawley and the Census Tract Study Area have lower percentages than the County average, with the Census Tract Study Area showing around 60 of the population speaking a language other than English spoken at home.

Table 4-10, Families and Living Arrangements

	County Estimate	Calipatria	Brawley	Census Tract Study Area
Households, 2016-2020	45,768	955	6,957	1,477 (Total)

Table 4-11, Income & Poverty

	County Estimate	Calipatria	Brawley	Census Tract Study Area
Median household income (in 2020 dollars), 2016-2020	46,222	37,196	46,177	18,387
Per capita income in past 12 months (in 2020 dollars), 2016-2020	18,064	6,632	19,222	6,927
Persons in poverty, percent	22.5	35.4	31.4	41.9

Source: 2016-2020 American Community Survey (ACS) 5 Year Estimates

Gender and Labor Force

As shown in Table 4-12, Labor Force, it is estimated that approximately 48 of females age 16 years within the population of the Census Tract Study Area participate in the civilian labor force. For reference, the entire total percent of population also only has approximately 30 of the population within the civilian work force, which represents the noninstitutionalized population. For reference, the percent of female population within the civilian labor force fall between 45-50 for the County, city of Brawley and city of Calipatria. These metrics indicate that the Study Area has lower employment within the civilian work force overall as well as for women specifically.

Table 4-12, Labor Force

	County Estimate	Calipatria	Brawley	Census Tract Study Area
In civilian labor force, total, percent of population age 16 years, 2016-2020	51.2	18.5	53.2	24.2
In civilian labor force, female, percent of population age 16 years, 2016-2020	49.3	45.5	45.8	48.3

Source: 2016-2020 American Community Survey (ACS) 5-Year Estimates

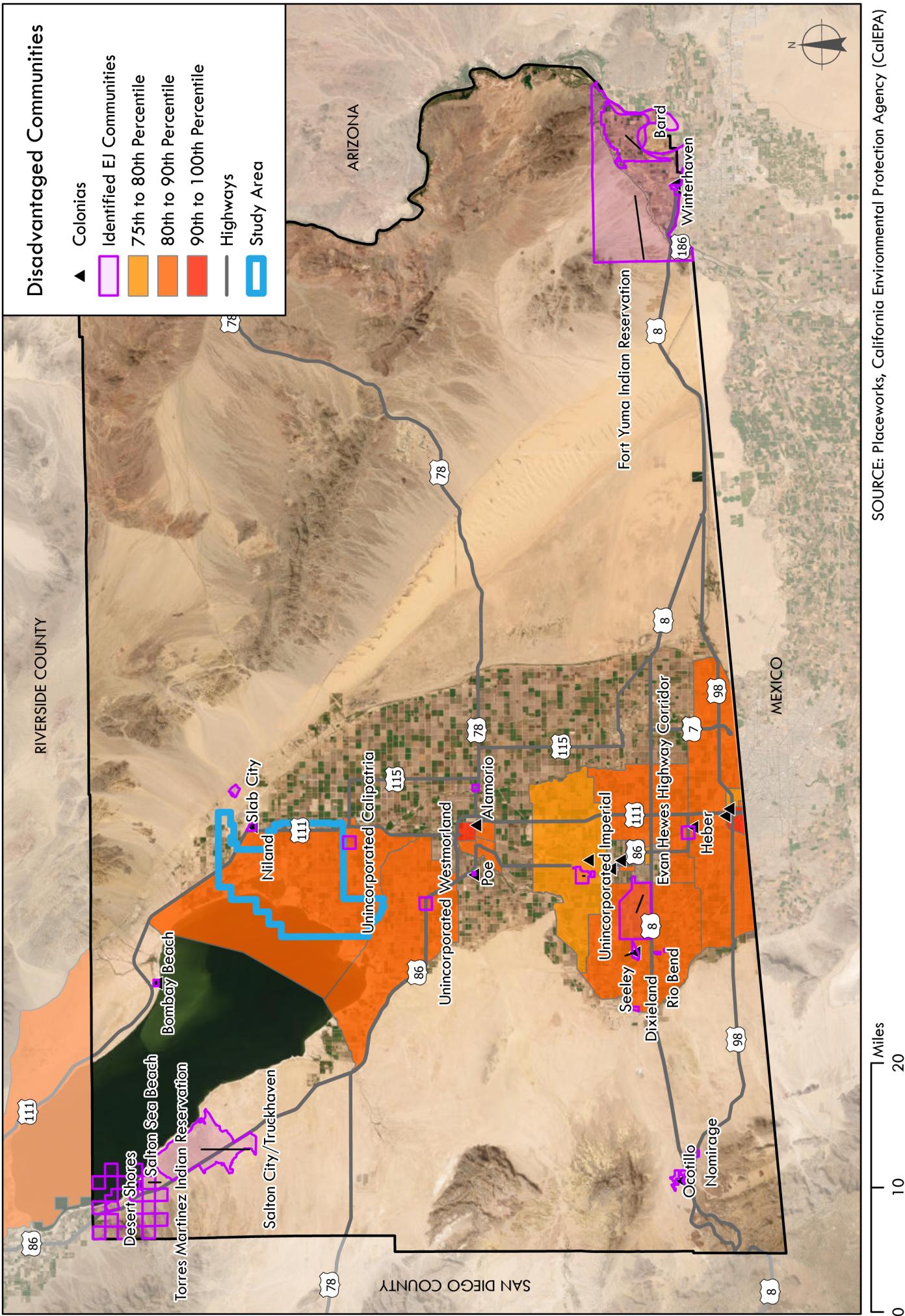
According to SCAG and the 2017 U.S. Department of Agriculture (USDA) Census of Agriculture, Imperial County has a significant farming workforce, with approximately 945 residents identified as farmers. As shown in Table 4-13, the majority of hired farm workers (7,934) in both incorporated and unincorporated areas are permanent employees (4,634), while others are seasonal (3,714) or migrant (1,057). Average hourly wages for agricultural workers in Imperial County were 14.14 in the first quarter of 2020, with many being of Hispanic descent.

The County's proximity to Mexicali, Mexico, where a portion of the farm labor pool resides, allows workers to commute daily, reducing the seasonal housing demand. The Imperial Valley Housing Authority (IVHA) operates four farmworker housing complexes in El Centro, Brawley, and Heber, regulated by the USDA's Rural Development. This housing arrangement helps address the fluctuating demand for rental units, particularly during the winter and spring months when demand is highest.

Table 4-13, Farm Workers

	Imperial County
Hired Farm Workers	7,934
Permanent Employees (more than 150 days)	4,634
Seasonal Employees (less than 150 days)	3,330
Migrant Workers	1,057

Source: USDA 2017 Census of Agriculture



SOURCE: Placeworks, California Environmental Protection Agency (CalEPA)



4.2. CONSTRAINTS

Establishing a baseline for the social conditions provides context for the potential constraints to future uses under the Lithium Valley Specific Plan. The following constraints were identified through this process:

- ☒ Unincorporated areas lack comparable information on demographics, housing and economic indicators in comparison to urban areas in other words, comparing the Study Area to cities like Brawley and Calipatria can misrepresent the social conditions currently ~~being~~ experienced in this area, and therefore must be included in analysis with this consideration in mind.
- ☒ The Study Areas proximity to the US-Mexico border brings undocumented individuals into the region, who may not be represented in the US Census data.
- ☒ A population decline of 15 in the Study Area and the City of Calipatria may indicate a reduction in the adjacent workforce population.

4.3. OPPORTUNITIES

While there are several constraints to renewable energy development in the Study Area, specific opportunities were realized through the development of baseline social conditions. The opportunities identified are as follows:

- ☒ Designation as a disadvantaged community makes the Census Tract Study Area eligible for priority investment opportunities through SB 535 and AB 1550.
- ☒ Increasing population in neighboring city of Brawley and Imperial County overall to support development of a renewable energy workforce
- ☒ The percentage of population at prime-working age expected to remain stable until 2030.
- ☒ Relatively low monthly rent costs in the Census Tract Study Area can attract working individuals seeking low-income housing
- ☒ Concerns about pollution and associated public health impacts could benefit from shifting from an agriculture centric economy to green energy where people are less prone to dust exposure by working inside a facility instead of outside
- ☒ Reinvestment in the Study Area and contributions from Development Impact Fees can contribute to restoration of the Salton Sea which may reduce public health impacts from pollution
- ☒ Increasing the demand for workforce housing can result in new residential development in and around the Study Area

4.4. RECOMMENDATIONS

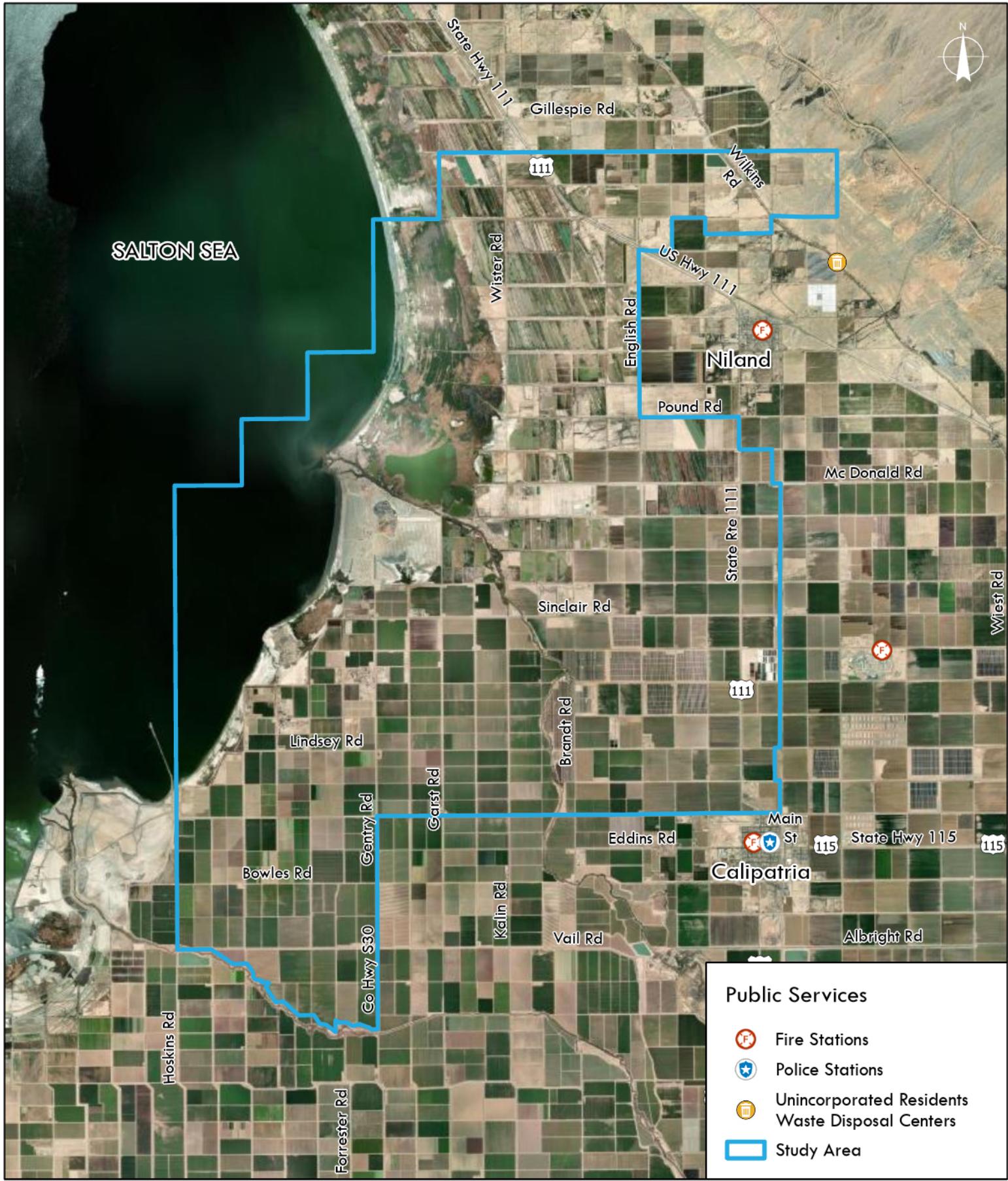
Upon identification of constraints and opportunities to renewable energy development in the Study Area, the following recommendations have been provided for the County:

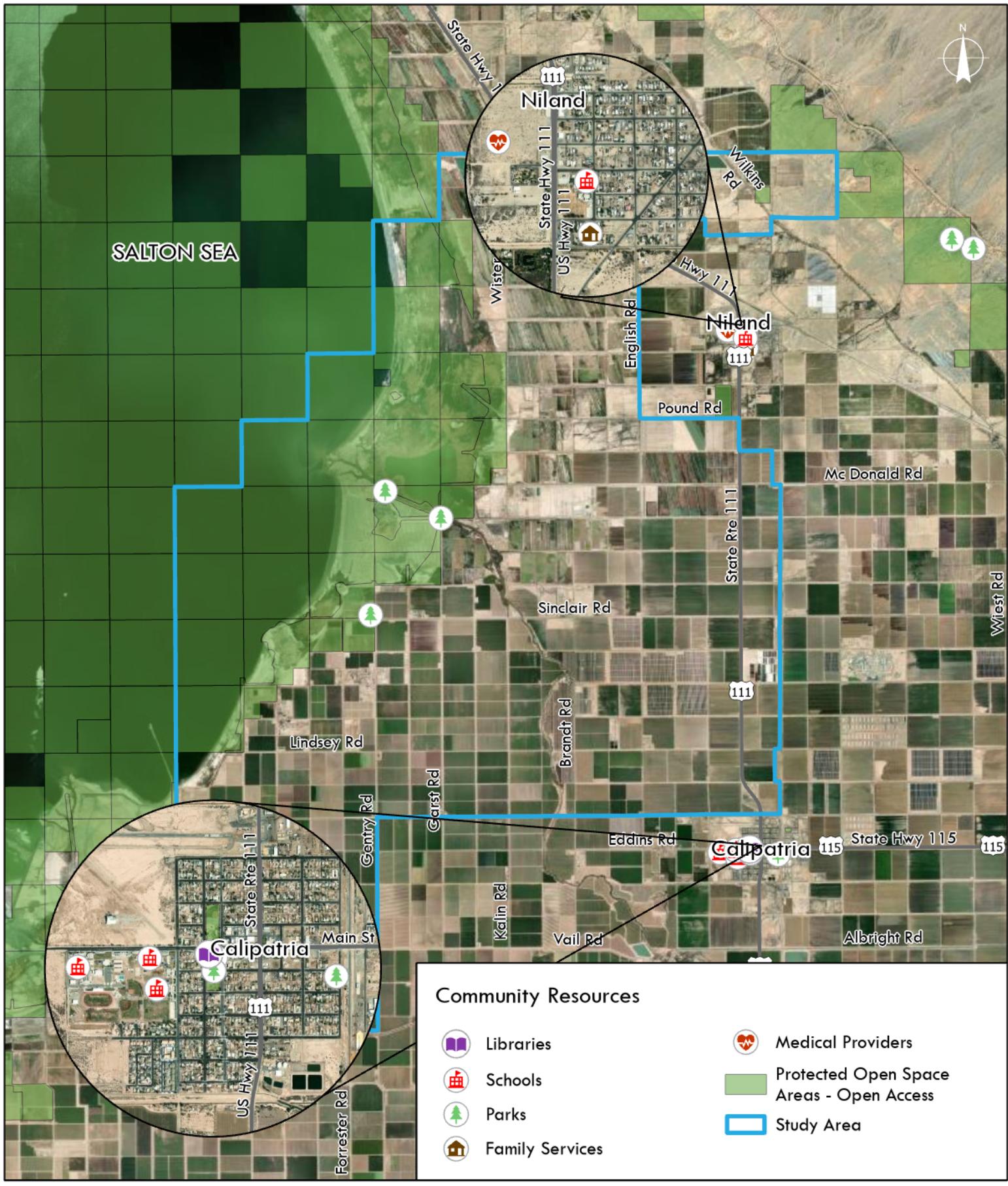
- ☒ Senate Bill 535 and Assembly Bill 1550 designate priority investment opportunities. The County should leverage these funding resources to support the growth of renewable energy development in the Study Area.
- ☒ The County should conduct the assessment necessary for the Study Area to be designated as a disadvantaged unincorporated community(DUC) .
- ☒ Continue collecting and regulating Development Impact Fees (DIFs) from developers to contribute to reinvestment into the Study Area and provide funding for Salton Sea restoration. Restoring the Salton Sea could reduce pollution and public health impacts concerning the community.
- ☒ Consider establishing a system for monitoring the allocation and utilization of DIFs, conduct regular audits, establish reporting mechanisms, and perform community engagement for implementation of accountability measures
- ☒ To ensure Imperial County will capture the economic boost of future development, there are opportunities to incorporate geothermal, solar, lithium and the like, into elementary, junior, and high school education programs, as well as高等教育 programs. Continue coordination with Imperial Valley College SDSU and other academic institutions in the region on their new technical programs related to geothermal power plants.
- ☒ Increase low-income residential housing opportunities to accommodate growing workforce population.
- ☒ Increase employment opportunities and grow other industries in Imperial Valley to supplement the seasonal job market for agriculture and transition to renewable energy development
- ☒ Consider a program that earmarks a certain percentage of tax revenue to go to research and monitoring of health and environmental conditions.

5. Public Services and Resources

5.1. EXISTING CONDITIONS

As a predominately unincorporated area, the availability of public services within the Study Area relies heavily on the provision of services by Imperial County and neighboring communities such as Niland and Calipatria. The Study Area consists of primarily agricultural and Salton Sea land uses (e.g., open water, playa). Due to this, adequate public services and infrastructure are necessary to support industrial operations while ensuring public safety and access to community resources. This chapter





5.2. CONSTRAINTS

Based on the existing conditions of public services and resources in the Study Area, the following constraints were identified as obstacles to the growth of the renewable resource industry:

- ☒ Unincorporated areas often lack dedicated public services and resources. There is a lack of existing infrastructure to provide public services, such as water for fire protection.
- ☒ Upholding and maintaining performance standards for rapid emergency response times may be challenging without dedicated agencies overseeing the area.
- ☒ Population growth will require an expansion of public services and facilities, which can be difficult to finance without dedicated funding sources.
- ☒ Ongoing coordination and collaboration between multiple authorities and agencies will be necessary to maintain a high level of service to the community.

As an unincorporated area, residents within the Study Area rely on the provision of services by neighboring cities, special districts, and the County. The County is responsible for providing police and fire protection services but maintains agreements with the City of Calipatria and Brawley to oversee the unincorporated Study Area. Responding to service calls is the primary mechanism by which the County upholds the police and fire protection services in the Study Area.

While it is the responsibility of the County to uphold fast response times when attending service calls to residents, existing agencies like the Calipatria Police Department provide insight into the performance standards for response. It is standard practice for emergency responders to arrive at sites within three minutes of the service call. As population in and around the Study Area grows with the expansion of employment opportunities, maintaining the standard response time will become more difficult without more staff or additional public facilities.

As an area that is primarily unincorporated, preparing for a growing population will require an expansion of existing public services and resources. Without a dedicated funding source, however, it is difficult to acquire the necessary funding to achieve these objectives. Another challenge is the lack of existing infrastructure to support the expansion of public services and resources. Water availability is restricted to provisions by the Imperial Irrigation District (IID). Coordination between the utility, municipalities and the County would be required to ensure that water can be accessed to support fire protection. There are currently no agreements with incorporated cities for utility services.

Neighboring incorporated cities can be useful for supporting public services and resources in the Study Area, as they already oversee dedicated agencies which provide these services to the community. Agreements between cities, special districts and the County have provided and will be necessary to continue to provide the necessary level of public services to residents as demand grows.

Access to education in the Study Area is dependent upon the CUSD public school system, which serves the communities of Calipatria, Niland, and Bombay Beach in Imperial County. Currently, the Study Area does not have any educational facilities within its boundary, however the city of Calipatria and community of Niland have all four schools within CUSD. Demand on public education

5.3. OPPORTUNITIES

While there are several constraints, there are also certain opportunities to expand public services and resources in the Study Area. The following opportunities will assist in accommodating for population growth and the development of an industrialbased economy In Imperial Valley:

- ☒ Coordination and collaboration between the County, existing public agencies and local governments will be critical for expanding essential public services to the Study Area to prepare for a higher demand on services
- ☒ Upholding and maintaining rapid emergency response times demonstrates capacity to expand public services and accommodate for increasing demand.
- ☒ Maintaining agreements between city departments, specialdistricts, and the County to provide police and fire protection support unincorporated areas.
- ☒ Provision of police, fire, and other public services by the County to help supplement and meet projected demand for services in incorporated areas.
- ☒ State funding sources dedicated toward financing education can be leveraged to expand educational facilities,provide additional resourcesand recruit staff to accommodate for a growing student population.
- ☒ Workforce growthand population projections can help determine what the future demand will be for public services, allowing the County to develop the necessary facilities, infrastructure and staff to provide them.
- ☒ By increasing the presence of emergency medical services in the region, residents would benefit from reduced travel times to healthcare facilities, addressing the 20minute disparity

5.4. RECOMMENDATIONS

Based upon the assessment of constraints and opportunities regarding public services in the Study Area, its recommended that the County:

- ☒ Maintain the agreements currently held to continue providing fire and police protection in the Study Area. It is recommended to maintain the agreement between the Calipatria Fire Department and the County to oversee approximately 250 square miles of unincorporated area.
- ☒ Improvements to the service call response time will indicate effective investment in the Study Area and will demonstrate a high standard for public safety.
- ☒ Expand emergency response resources, facilities and staff as higher demand for services and resources occur.
- ☒ Meet or improve upon performance standards for emergency response time through effective training and staff recruitment
- ☒ Target state and local funding towards educational improvements and expansion of available educational resources. This includes recruiting additional school and district staff, expanding available facilities, and providing materials to support the student populations success
- ☒ Collect and reassess DIFs to ensure new developments can connect with existing utility infrastructure and provide the same standard of living to residents in an incorporated area.
- ☒ Establish EMT stations strategically located around the Study Area and expand healthcare services in Calipatria and Niland to ensure timely access to medical interventions. This would improve emergency preparedness and address the constraints identified, promoting equitable healthcare access and enhancing the overall health outcomes of the incoming populations to inhabit Calipatria and Niland.
- ☒ Reinforce existing medical centers at Pioneers Memorial Hospital and ECRM to benefit the populations in Calipatria and Niland, as well as the Imperial Valley region as a whole. Strategically investing in these medical facilities create an opportunity to enhance overall healthcare capacity, improve infrastructure, and expand critical medical services currently unavailable in Imperial County.

6. Utilities

6.1. EXISTING CONDITIONS

This section includes an assessment of the existing water and wastewater systems. Utilities and service systems include water supply and treatment and wastewater treatment facilities.

6.2. CONSTRAINTS

Constraints related to utilities include:

- ☒ Existing Colorado River Water Rights Long standing appropriations dating back to 1914 define the amount of water allocated to the various stakeholders including Arizona, New Mexico and Imperial County.
- ☒ Reliability on the IID for increasing water demand. Alternative sources to access freshwater are limited due to the water distribution supply delivered by IIDUnder current IID policy all new development is subject to the IWSP and the generation of conservation water to meet the projected water supply demand is required. As such, the Lithium Valley Specific Plan PEIR must consider water conservation programs and/or projects to meet projected demand that would also need to be environmentally assessed
- ☒ Improvements proposed for the Study Area will require that water connections/lines be constructed for the undeveloped parcels including transmission lines, service laterals, booster pumps and associated appurtenances.
- ☒ There is a potential need for a regional storage water facility, considering the IID canals/laterals have historically experienced up to 5day outages.
- ☒ The existing system is comprised of main and supply canals with diversions to lateral canals, and from lateral canals into customers head ditches. These supply canals and lateral canals will need to remain operational for all existing development not impacted by proposed improvements.
- ☒ IIDs Present Perfected Right to use Colorado River consists of an annual diversion of 2.6 million acre-feet from the mainstream or the quantity of mainstream necessary to supply the consumptive use required for irrigation of 424,145 acres and the satisfaction of related uses,

6.3. OPPORTUNITIES

Opportunities related to utilities include:

- ☒ Since there is limited existing water infrastructure within the Study Area, future development within this area will not be constrained due to other existing infrastructure.

6.4. RECOMMENDATIONS

Recommendations related to utilities include:

- ☒ Future programmatic water and wastewater studies should be completed to determine viability of existing infrastructure, feasibility of future infrastructure development and tie in points.
- ☒ Once a preferred land use plan is developed, further recommendations may be provided related to assessing electrical and telecommunication services to the Study Area.

7. Low-Carbon Energy Resources

7.1. EXISTING CONDITIONS

The Salton Sea region is a leading area for California renewable energy production, especially solar and geothermal energy (CEC 2022). Imperial County's climate with minimal precipitation and warm temperatures makes it very suitable for these types of renewables.

The low-carbon energy resources section of this report documents the existing renewable energy sources located within the Study Area and the County. This section also intends to document typical low-carbon energy resources that have potential to exist within the Study Area and the trends of those resources at the national and global scale. This section also identifies the major providers of these resources to understand the potential players and stakeholders as preparation of the Lithium Valley Specific Plan progresses.

7.1.1. Applicable Regulations

Governor Executive Orders

Governor Gavin Newsom's Executive Order, B-55-18, of September 2018, establishes the statewide goal to achieve carbon neutrality by 2045 and maintain net negative emissions thereafter (State of California 2018).

Governor Gavin Newsom's Executive Order, N-79-20, of September 2020, sets forth an aggressive zero-emission transportation goal which requires that all new passenger vehicles sold are zero emission by 2035, all drayage trucks shall be zero-emission by 2035 and all medium and heavy-duty vehicles in California are to be zero-emission by 2045 where feasible (State of California 2020). The Executive Order also tasked CARB to develop and propose regulations that require increasing volumes of zero-emission passenger vehicles, medium and heavy-duty vehicles, drayage trucks, and off-road vehicles toward their corresponding targets of 100 percent zero-emission by 2035 or 2045, as listed above.

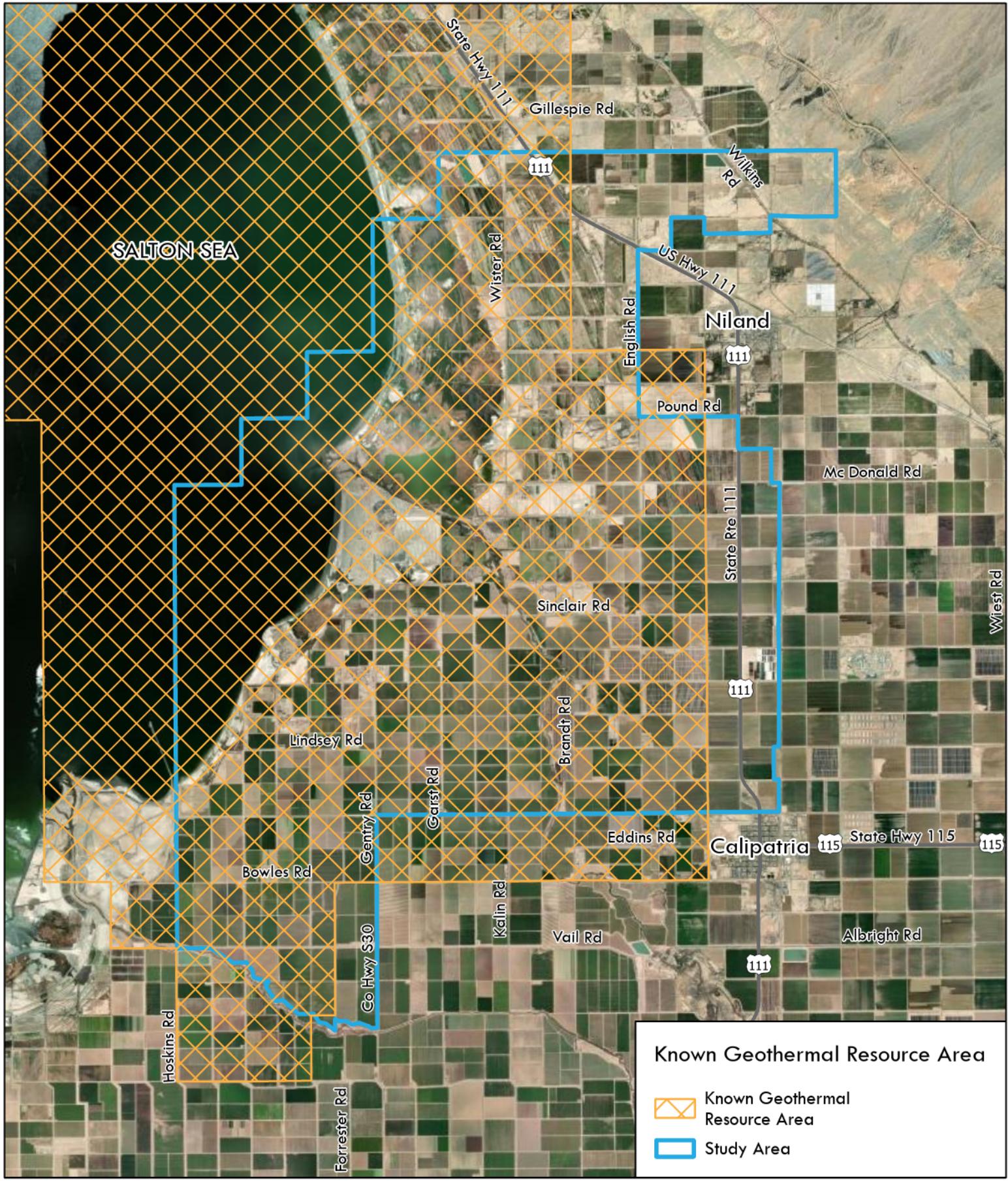
SB 100

SB 100 establishes a 2045 goal requiring that all retail electricity sold in California and for state agency facilities be powered by eligible renewable and zero-carbon resources. SB 100 requires at least 60 percent of the state's electricity come from eligible renewable energy resources by 2030 (State of California 2021a). Eligible renewable energy resources include solar, wind, geothermal, bioenergy, fuel cells, existing hydroelectric, and existing nuclear.

AB 1757

Signed in September 2022, this bill requires the California Natural Resources Agency (CNRA) to collaborate with other agencies to develop targets for carbon sequestration and emission reductions on natural and working lands. The bill also requires the state board to develop methods for state agencies to track greenhouse gas emissions and reductions by January 1, 2025.

AB 1657



SOURCE: Imperial County



Table 7-1, Geothermal Providers and Production

Imperial County		Study Area	
Provider	Existing and Approved Production Capacity (megawatts)	Provider	Existing and Approved Production Capacity (megawatts)
CalEnergy	344	CalEnergy	344
Ormat	174	Ormat	--
Energy Source	49	Energy Source	49
Total MW	567 (2018) 1,388 (2023)	Total MW	393 (2018)

Source: BHE 2022 Imperial County Planning and Development Services

Trends

Because of the relatively high startup and maintenance costs of geothermal energy, the growth of geothermal electric power generation in California has been slowed by the widespread availability and low costs of solar and wind power (OEERE 2022). Therefore, the majority of existing geothermal plants within the Study Area are between 20 and 38 years old (OEERE 2022). Currently the world's lithium production comes from China, Australia, Chile and Argentina through pit mining and evaporation ponds. However, with the world demand for lithium expected to grow significantly, the lithium-rich geothermal brine in Imperial County has made geothermal energy more financially enticing because of the additional revenue that will be generated by lithium extraction and other strategic minerals.

The geothermal energy providers are investing tens of millions of dollars, supplemented by millions of dollars from State and Federal grants, to extract lithium from the geothermal brine (OEERE 2022). Three of the companies mentioned above are in the process of developing projects to recover lithium from geothermal brine at existing or new geothermal power plants in Imperial County using direct lithium extraction (DLE) technologies.

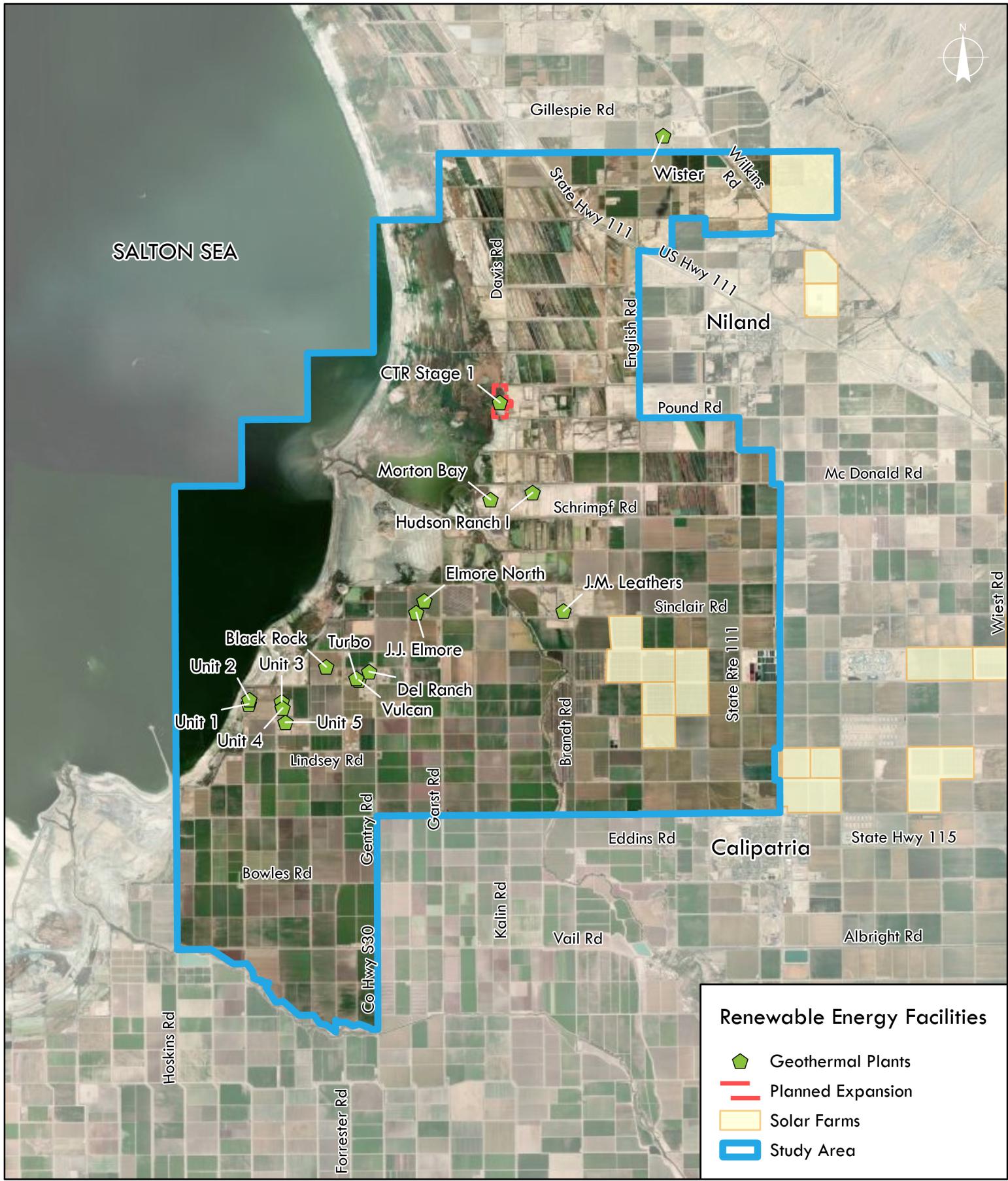


Table 7-2, Solar Production Scale & Intensity

Imperial County		Study Area	
Provider	Existing and Approved Production Capacity (megawatts)	Provider	Existing and Approved Production Capacity (megawatts)
Southern Power	330	Southern Power	20
ZGlobal	120	ZGlobal	120
Ormat	147	Ormat	40
Other	5,371	--	--
Total	5,968		180

Source: Imperial County Planning and Development Services

Trends

The solar energy industry in the United States has experienced significant growth over the past decade. Strong federal policies and rapidly declining costs have led to a 33% growth rate since 2012 (SEIA 2022). Of all the solar projects accounted for in Imperial County, approximately 30% of the total project solar project land acreage are either pending entitlements, approved but not built, or approved and under construction (Imperial County 2022). This demonstrates that solar projects are a growing industry with gaining interest and action in Imperial County. Demand for utility-scale solar should remain strong as the Inflation Reduction Act brings certainty and supply stability as more states, utilities and corporations seek to fulfill their clean energy goals (Imperial County 2022). It is anticipated that over the next five years, the solar industry is expected to install nearly 200 GW of new solar capacity across the U.S., which is more than double the amount of solar currently installed today (Imperial County 2022). There are increasing incentives and financial support for innovative land use practices such as revegetation of sites with pollinators or growing agriculture and generating power on the same parcels.

7.1.4. Wind Energy

Wind energy refers to the process of creating electricity using the wind or air flows that occur naturally in the earth's atmosphere. As wind blows across the blades of the wind turbines, the wind turbines capture kinetic energy from the wind to generate electricity.

Current Providers

There is only one windfarm in Imperial County, Ocotillo Express Windfarm. The Ocotillo Express Windfarm is owned by Pattern Energy (Ocotillo LLC) and produces all wind energy for Imperial County. The facility utilizes 112 wind turbines and is the first renewable energy project to transmit power over the Sunrise Powerlink transmission line that connects San Diego with Imperial Valley (Pattern Energy 2022). The facility includes twenty full-time on-site personnel that operate and maintain the site, in addition to the use of contractors and seasonal workers. It is estimated that the facility generates electricity equal to the needs of approximately 300,000 Californians each year. The facility sells its energy to San Diego Gas & Electric (SDG&E) through a 20-year Power Purchase Agreement.

Table 7-3, California Hydrogen Production Facilities

Producer	City	Technology	Capacity (tons/year)	Industry
Air Products	Sacramento	SMR	2,023	Multiple
Praxair	Ontario	SMR	7,276	Multiple
Air Liquide	El Segundo	SMR	75,643	Oil Refining
Air Liquide	Rodeo	SMR	105,547	Oil Refining
Air Products	Carson	SMR	87,956	Oil Refining
Air Products	Martinez	SMR	77,402	Oil Refining

Table 7-4, Proposed Renewable (Green) Hydrogen Plants in California

Producer	City	Technology	Capacity (tons/year)	Deployment Year
Air Liquide	California (undetermined)	Landfill-derived methane	10,950	2022
Air Products	California (undetermined)	Electrolysis (Wind/Solar)	Unknown	2021
Fuel Cell Energy and Toyota	Long Beach	Electrolysis	483	2020
Stratos Fuels and Hydrogenics	Palm Springs	Electrolysis	365	Phase I - construction
H2B2	Kings County	Electrolysis	365	2020
SGH2	Lancaster	Recycled mixed paper waste Gasification	4,015	2022
Sunline	Palm Springs	Electrolysis	328	2018

Source: Gilani and Sanchez 2020.

The following are some of the primary organizations that identify, evaluate and deploy technologies to produce hydrogen in California:

NuFuels is a sustainable energy provider with the goal of providing commercially deployable renewable green hydrogen using Biomass Gasification technology. Biomass gasification uses a controlled process involving heat, steam, and oxygen to convert biomass to hydrogen and other products, without combustion. Biomass can include agriculture crop residue~~forest residues~~, special crops grown specifically for energy use (such as switchgrass or willow trees), organic municipal solid

Table 7-5, California Fuel Ethanol Plant Production Capacity

Respondent	City	Capacity (millions of gallons/year)
Aemetis Advanced Fuels Keyes Inc	Keyes	70
Calgren Renewable Fuels LLC	Pixley	55
Parallel Products	Rancho Cucamonga	3
Pelican Renewables LLC	Stockton	60
Total		188

Source: EIA 2022

Ethanol Plants are expanding across the United States and Imperial Valley is no exception. Sugar Valley Energy (California Ethanol & Power, LLC) plans to develop a facility that produces ethanol fuel, electricity and biomethane. Located in Brawley, the plant is expected to produce 68 million gallons of low-carbon, fuel-grade ethanol, 40 MW of electricity, and 737,000 cubic feet (737 MCF) of biomethane. It is intended to use by-product of sugarcane plants from local farmers as feedstock.

Algae Biofuel

Imperial County is home to Viridos, a California-based biotechnology company in partnership with ExxonMobil. Their initial deployment is a scalable platform for low-carbon intensity biofuel to fuel heavy transportation. As the company moves towards commercialization, they estimate the productivity of engineered microalgae will be 20x times greater than any existing terrestrial crop (Viridos 2022). This pilot project has not yet produced biofuel at a commercial scale.

Biomass

There are about 30 direct-combustion biomass facilities in operation with a capacity of 640 MW (CEC 2023c). Greenleaf Powers Desert View Power facility in Riverside County is a biomass facility that consumes between 360,000 and 390,000 tons of woody biomass diverted from regional landfills, providing more than 350,000 megawatthours annually. This facility is California's largest biomass-fueled generation facility (Greenleaf Power 2021). Dynalelectric had an 18MW biomass power plant in Imperial County south of Brawley, that consumed 420 tons of recycled wood a day to generate 18 MW of renewable energy (EMCOR 2023). However, the facility was damaged by an earthquake in April 2010, which rendered it unprofitable and the owner is looking to sell it.

Oberon Fuels will be operating a demonstration project of Sunvapors solar steam and thermal battery technology at its Maverick Innovation Center in Brawley. This project will harness solar energy to produce steam and high pressure required to further lower the carbon intensity and renewable dimethyl ether (DME) to replace traditional fossil propane (Oberon Fuels 2023).

7.2. CONSTRAINTS

The Study Area presents a unique economic investment opportunity related to renewable resources. However, even though some of these renewable resources production methods have been around for decades, there are constraints associated with each of these topics.

Geothermal/Lithium Recovery

- ☒ Geothermal and lithium recovery operations can have intensive water demands, compared to other energy sources (both renewable and nonrenewable), however the data remains uncertain on what the true water demand may be for future geothermal and lithium recovery operations. Additional collaboration with agencies and operators is needed.
- ☒ Compared to other energy sources, the development of geothermal power has longer lead times and higher capital costs compared to those intermittent renewable energy resources.
- ☒ Geothermal power is limited to sites with specific characteristics, thus limited the land use designations.
- ☒ Geothermal production requires expensive chemical engineering, mainly the addition of a reactor/clarifier circuit to remove solids from reinjected brines.
- ☒ For decades, geothermal energy production by itself was not seen as an economical source of renewable energy in the United States.
- ☒ There is potential for subsidence associated with geothermal energy extraction. Further study is needed to forecast the subsidence and seismicity magnitude associated with geothermal and lithium extraction.
- ☒ Freshwater is currently purchased from the IID and treated onsite to achieve the water quality needed for geothermal and lithium extraction i.e., clean water is necessary to keep the equipment from deteriorating. Therefore, a local supply of clean water is needed to fulfill future water demands.
- ☒ Additional research and development are being performed to demonstrate the durability of lithium extraction methods at commercial scales (CEC 2020).

Solar

- ☒ Solar power generation facilities are limited to zones that allow this use, such as the Renewable Energy Overlay Zone.
- ☒ Utility-scale solar energy production requires large amounts of land.
- ☒ Utility-scale solar energy production has historically been replacing agricultural land that once provided agricultural jobs thus has a limited benefit on the local economy.
- ☒ Photovoltaics may pose threat to migratory birds.
- ☒ Utility-scale solar may be constrained by the capacity of transmission lines in the area and greater region.

7.3. OPPORTUNITIES

Geothermal/Lithium Recovery

- ☒ The Salton Sea Geothermal Field is estimated to contain a proven lithium resource of 4.1 million metric tons of lithium carbonate equivalent (LCE) and a probable lithium resource of 18 million metric tons of LCE (Dobson et al. 2023). The region could be a substantial domestic supplier of lithium to the U.S. and help meet its green energy needs over the remainder of the 21st century.
- ☒ Geothermal can be designed to be integrated with pumped storage to make it more attractive to utility companies facing large fluctuations in daily electrical demand-to-supply ratios.
- ☒ Geothermal can be placed on uneven desert land where solar would be much more challenging to install.
- ☒ Additional geothermal energy sources would assist IIDs Salton Sea Restoration and Renewable Energy Initiation meet its greenhouse gas emission reduction goals.
- ☒ By supplementing geothermal energy production with lithium recovery methods, geothermal energy production becomes far more economical due to the value of lithium carbonate and lithium hydroxide for lithium batteries.
- ☒ Lithium was listed in the Federal Register as a critical mineral essential to the economic and national security of the United States pursuant to the 2017 presidential Executive Order Number 13817 titled A Federal Strategy to Ensure Secure and Reliable Supplies of Critical Minerals. Developing a domestic supply of lithium can support national security.
- ☒ Any significant production of lithium, manganese and zinc from geothermal brines could reduce the United States large import reliance on these minerals, as well as provide corresponding commodity tax revenues to local, state and federal governments. The Study Area could potentially become a major supplier of lithium or other valuable minerals to the global market, eliminating imports of this strategic metal from South America and China.
- ☒ California's 2022-2023 budget provisions include a lithium extraction tax that would support Salton Sea restoration projects as well as support the Imperial County communities (SB25).

7.4. RECOMMENDATIONS

Renewable resources recommendations for the Study Area include:

- ☒ The Lithium Valley Specific Plan PEIR shall provide a Water Supply Assessment (WSA) discussing whether the total projected water supplies, determined to be available by the County for the project during normal, single dry, and multiple dry water years during a 20 year projection, will meet the projected water demand associated with the proposed project, in addition to the public water systems existing and planned future uses, including agricultural and industrial uses.
- ☒ Evaluate Imperial County's existing land use and zoning regulations for ways to strategically expand permitted uses in appropriate areas to allow for renewable resource production and processing.
- ☒ Consider the effects of replacing farmland with renewable energy production on the local farmers and the workforce. Quantify the potential number of jobs generated for local workers.
- ☒ Consider requirements for best practices to avoid avian solar conflicts for all new renewables development.
- ☒ Continue to avoid wind energy production in the Study Area due to the potential adverse effect on migratory birds.
- ☒ Engage with stakeholders such as renewable resource providers in the region that can specify the constraints and opportunities within the Study Area.
- ☒ Understand the ways existing agriculture practices can contribute to biofuels and renewable energy production.

8. Circulation and Goods Movement

8.1. EXISTING CONDITIONS

The Study Area mobility network is comprised of roadways and limited public transit, bicycle and pedestrian infrastructure. The Study Area is generally located between the Salton Sea shoreline and State Highway 111 near the communities of Niland and Calipatria. The northern section of the Study Area extends east of Highway 111 to Wilkins Road, and the southernmost section is bounded by the New River. Although visitors and residents of the Study Area rely primarily on private automobiles, public transit opportunities are available in the form of bus routes.

The Circulation and Goods Movement chapter analyzes the current state, regional, and local land use regulatory environment and existing conditions related to local and regional mobility and circulation. This section presents the physical and operational conditions of the existing circulation network in the Study Area, including an evaluation of streets, pedestrian and bicycle facilities, and public transit.

8.1.1. Applicable Regulations

Federal

Congestion Management Process

Federal Highway Administration (FHWA) 23 Code of Federal Regulations (CFR) 450.320 requires that all transportation management areas address congestion management through a process involving an analysis of multimodal metropolitanwide strategies that are developed to enhance safety and integrated management of new and existing transportation facilities eligible for federal funding. The Imperial County Transportation Commission (ICTC) has been designated as having jurisdiction over the transportation management areas for the Imperial County region.

Highway Capacity Manual

The Federal Highway Capacity Manual, 6th Edition, adopted in 2016, is a publication of the Transportation Research Board of the National Academies of Science in the United States. It contains concepts, guidelines, and procedures for computing the capacity and quality of service of various highway facilities, including freeways, highways, arterial roads, roundabouts, signalized and unsignalized intersections, and rural highways, and the effects of mass transit, pedestrians, and bicycles on the performance of these systems.

Table 8-1, LOS Criteria for Intersections

LOS	Control Delay (sec/veh)		Description
	Signalized Intersections	Unsignalized Intersections	
A	-10	-10	Operations with very low delay and most vehicles do not stop.

	-	-	
	-	-	
	-	-	
	-	-	

Table 8-2 Existing Conditions Intersection Operations

Intersection / Peak Hour		Control	Movement	Existing (2022) Operations	
				DELAY ¹	LOS ²
Highway 111 / Davis Rd					
1	AM Peak Hour	Uncontrolled	NBL	0.0	A
		(OWSC)	EBL/R	9.4	A
	PM Peak Hour	Uncontrolled	NBL	7.5	A
		(OWSC)	EBL/R	8.9	A
Highway 111 / English Rd					
2	AM Peak Hour	(TWSC)	NBL/T/R	9.4	A
		(TWSC)	SBL/T/R	7.5	A
		Uncontrolled	EBL/T/R	0.0	A
		Uncontrolled	WBL/T/R	0.0	A
	PM Peak Hour	(TWSC)	NBL/T/R	8.9	A
		(TWSC)	SBL/T/R	9.1	A
		Uncontrolled	EBL/T/R	7.5	A
		Uncontrolled	WBL/T/R	0.0	A
Highway 111 / Main St (Niland)					
3	AM Peak Hour	Uncontrolled	SBL	0.0	A
		(OWSC)	WBL/R	9.5	A
	PM Peak Hour	Uncontrolled	SBL	0.0	A
		(OWSC)	WBL/R	9.1	A
Highway 111 / Sinclair Rd					
4	AM Peak Hour	Uncontrolled	NBL	0.0	A
		Uncontrolled	SBL	0.0	A
		(TWSC)	EBL/T/R	10.7	B
		(TWSC)	WBL/T/R	10.3	B
	PM Peak Hour	Uncontrolled	NBL	0.0	A
		Uncontrolled	SBL	0.0	A
		(TWSC)	EBL/T/R	9.6	A
		(TWSC)	WBL/T/R	9.2	A
Highway 111 / Main St (Calipatria)					
5	AM Peak Hour	(AWSC)	Overall	12.0	B
	PM Peak Hour	(AWSC)	Overall	12.4	B

Table 8-3, LOS Criteria for Roadway Segments

ROADWAY CLASSIFICATION	X-SECTION	LEVEL OF SERVICE (LOS)				
		A	B	C	D	E
Expressway	154/210	30,000	42,000	60,000	70,000	80,000
Prime Arterial	106/136	22,200	37,000	44,600	50,000	57,000
Minor Arterial	82/102	14,800	24,700	29,600	33,400	37,000
Major Collector (Collector)	64/84	13,700	22,800	27,400	30,800	34,200
Minor Collector (Local Collector)	40/70	1,900	4,100	7,100	10,900	16,200
Local County (Residential)	40/60			1,500		
Local County (Residential Cul-de- Sac or Loop Street)	40/60			200		
Major Industrial Collector (Industrial)	76/96	5,000	10,000	14,000	17,000	20,000
Industrial Local	44/64	2,500	5,000	7,000	8,500	10,000

Source: Imperial County General Plan Circulation and Scenic Highways Element (January 29, 2008)

The existing roadway level of service results are based on existing daily traffic volumes and roadway capacity. Table 8-4 summarizes the existing conditions roadway segment capacity analysis results. As shown in the table, all study roadway segments currently operate at an acceptable level of service (LOS C or better).

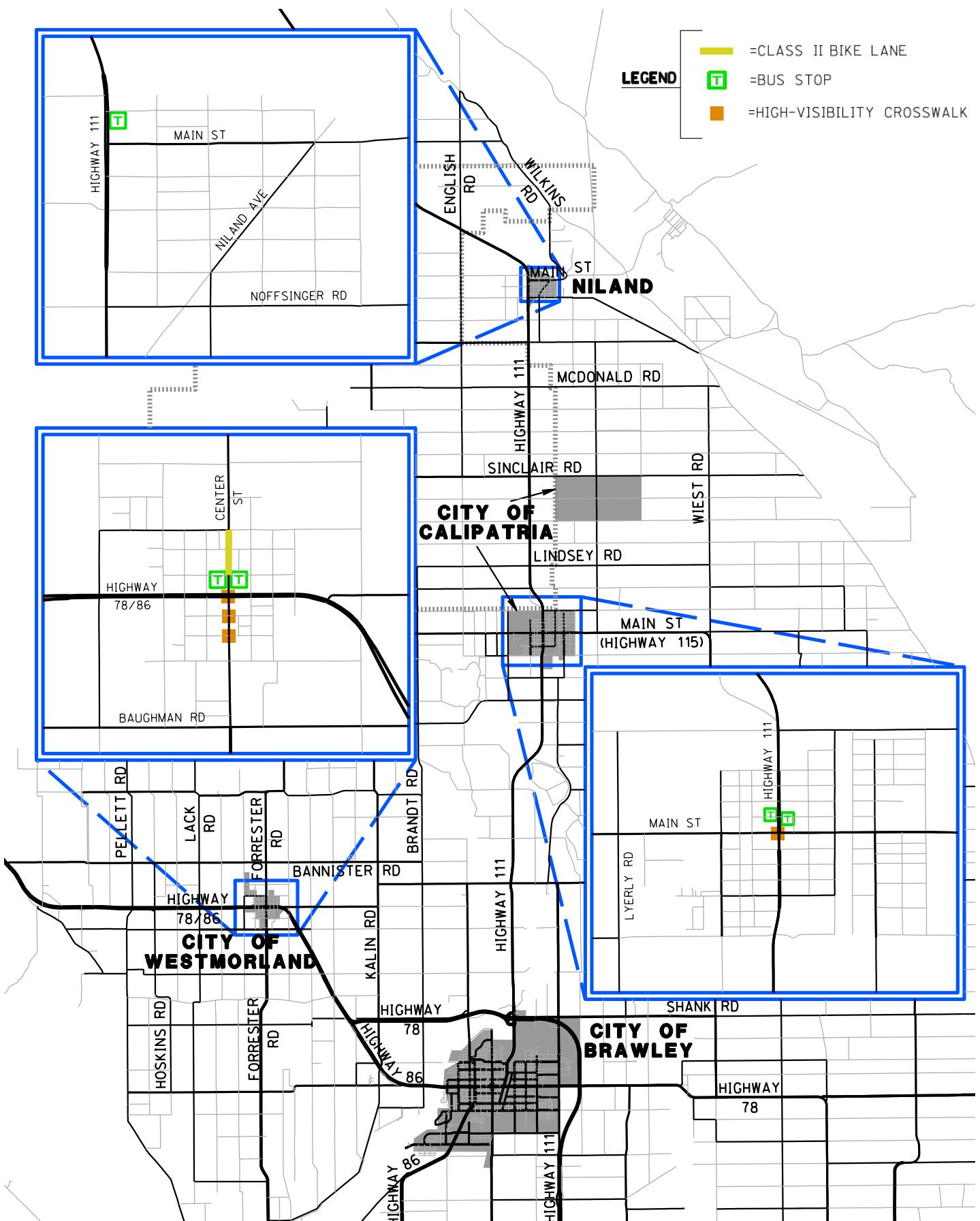
Table 8-4 Existing Conditions Roadway Segment Operations

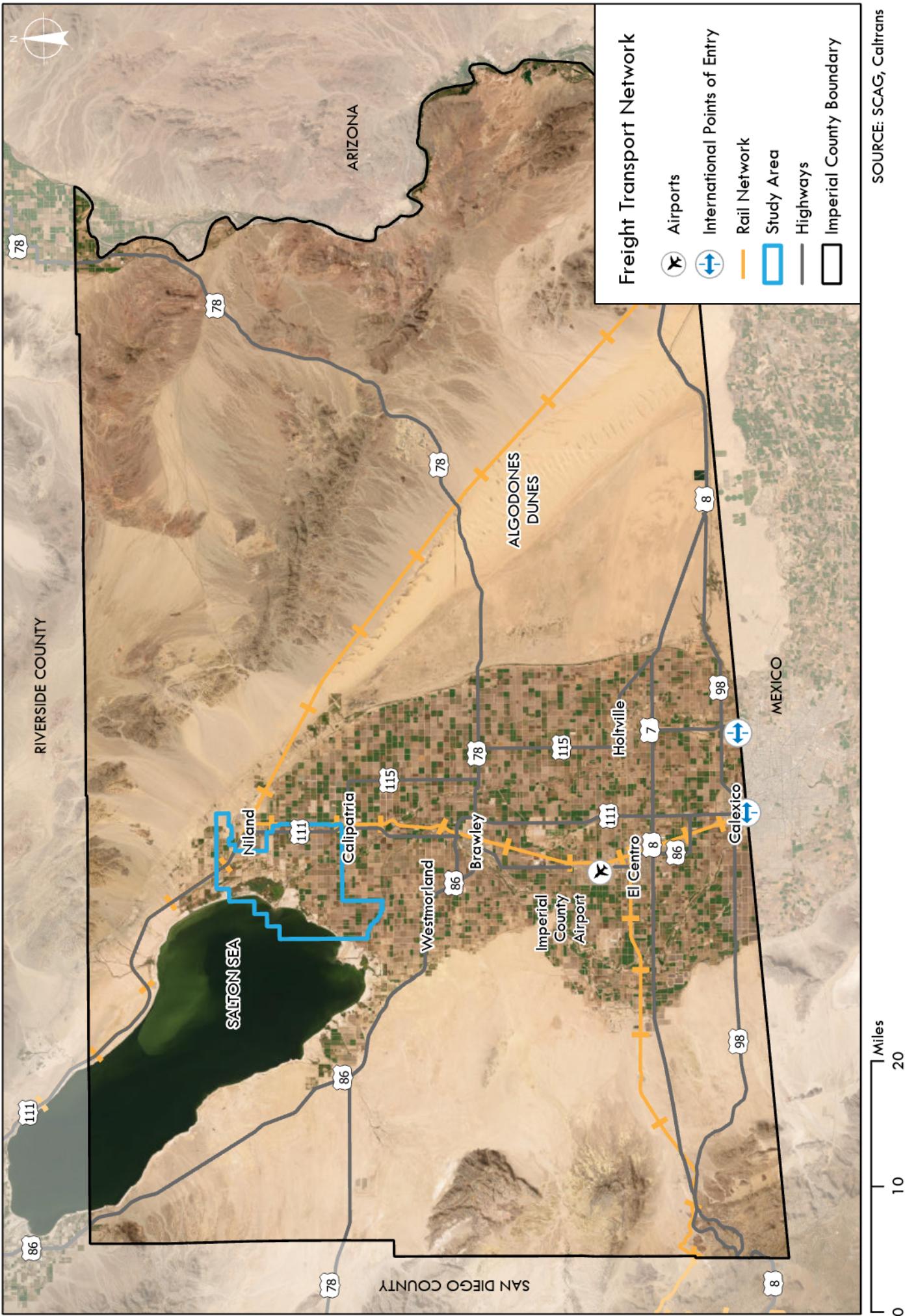
	ROADWAY SEGMENT	EXISTING/ FUNCTIONAL CLASSIFICATION	ROADWAY CAPACITY (LOS C)^a
1	Highway 111, between Davis Road and Main Street Niland	2-Lane State Highway	20,000
2	Highway 111, between MainStreet Niland and Sinclair Road	2-Lane State Highway	20,000
3	Highway 111, between Sinclair Road and Main Street Calipatria	2-Lane State Highway	20,000
4	Highway 111, between Yocum Road and Ruegger Road	2-Lane State Highway	20,000
5	English Road, north of Highway 111	2-Lane Road	7,100
6	Wilkins Road, between Beal Road and Gillespie Road	2-Lane Road	7,100
7	Main Street (Niland), between Commercial Avenue and Railroad Tracks	2-Lane Road	7,100
8	Sinclair Road, between Brandt Road and Highway 111	2-Lane Road	7,100
9	Eddins Road, between Brandt Road and Highway 111	2-Lane Road	7,100
10	Highway 115, between Northeast Avenue and Blair Road	2-Lane State Highway	20,000
11	Highway 78/86, between Lack Road and Martin Road	4-Lane Divided Highway	40,000
12	Kalin Road, between Sinclair Road and Eddins Road	2-Lane Road	7,100
13	Gentry Road, between Sinclair Road and Eddins Road	2-Lane Road	7,100
14	Lack Road, between New River and Bannister Road	2-Lane Road	7,100
15	Forrester Road, between New River and Bannister Road	2-Lane Road	7,100
16	Brandt Road, north of Vail Road	2-Lane Road	7,100
17	Brandt Road, between Swink Road and Hovley Road	2-Lane Road	7,100

Notes:

- a. Roadway capacity sourced from the Imperial County General Plan Circulation and Scenic Highways Element (January 29, 2008 LOS C or better for roadway operations as identified in the Circulation Element.

Roadway capacity sourced from the Imperial County General Plan Circulation and Scenic Highways Element (January 29, 2008 LOS C or better for roadway operations as identified in the Circulation Element.





SOURCE: SCAG, Caltrans

8.2. CONSTRAINTS

Based on the aforementioned traffic and circulation data, descriptions, and existing conditions analysis completed for the Lithium Valley Study Area, a number of issues and constraints related to mobility within the Study Area have been identified, and are as follows:

- ☒ The majority of existing roads within the Specific Plan boundary are currently unpaved, which limits the areas where access is readily available without significant improvement costs.
- ☒ Nearly all of the existing roadways in the northern half of the Study Area (north of Sinclair Road) are currently unpaved, and paved access in this area is generally not provided.
- ☒ With the exception of the State Highways (78, 86, 111 and 115), the current pavement conditions are fair to poor on the majority of paved roads in the Study Area. Pavement conditions are generally poor along Wilkins Road and Brandt Road.
- ☒ None of the Study Area roadways are built to General Plan Circulation Element standards based on their classification types.

8.3. OPPORTUNITIES

Based on the aforementioned traffic and circulation data, descriptions, and existing conditions analysis completed for the Lithium Valley Study Area, a number of opportunities related to mobility within the Study Area have been identified, and are as follows:

- ☒ Although many existing roadways are unpaved, there is an extensive roadway network within the Specific Plan boundary and within the Study Area. In addition, most existing roads in the Study Area, whether paved or unpaved, are identified in the County's General Plan Circulation Element.
- ☒ Most of the roadway network is configured in a grid pattern, and the flat terrain provides less constraint for roadway improvements.
- ☒ Existing traffic volumes in the Study Area are relatively low, and there is sufficient capacity on the existing roadways to accommodate additional traffic from new development.
- ☒ All bridges in the Study Area can accommodate the legal load limits of Type 3, Type 3S2 and Type 3-3 trucks.
- ☒ Forrester Road between SR78/86 and I-8 is planned to be improved to a 4-lane Expressway, and construction is expected to be completed in 2024. Forrester Road provides the most direct north-south route between the Study Area and Interstate 8.
- ☒ Federal funding of up to 4 million is secured to replace the 72-year-old Brandt Road bridge over the Alamo River with a new singlespan bridge.
- ☒ The Imperial County Pedestrian Master Plan (2021) recommended several pedestrian facility improvements in the unincorporated community of Niland that is located adjacent to the Study Area.
- ☒ Enhanced sidewalks have already been installed along several blocks of Highway 111 and Main Street in the City of Calipatria, and along Center Street in the City of Westmorland.
- ☒ Imperial County Regional Active Transportation Plan (2022) recommended pedestrian crossings along Highway 78/86 plus additional sidewalks in the City of Westmorland, which is located just south of the Study Area.
- ☒ The Imperial County Regional Active Transportation Plan (2022) recommends several Class II and Class IV bike lanes throughout the Study Area which would establish a bicycle network in an area that is currently lacking such a network.

8.4. RECOMMENDATIONS

Based on the findings of the existing conditions infrastructure and baseline assessments, including the constraints and opportunities described above, the following are recommended:

9. Other Environmental Resources

9.1. AESTHETICS

9.1.1. Introduction

The purpose of this section is to provide information to establish the existing conditions for aesthetic resources in the Study Area of the County of Imperial (County) Lithium Valley Specific Plan (Specific Plan Project). This Aesthetics Resources Existing Conditions section will support development of the Specific Plan and associated environmental document.

9.1.2. Methodology and Sources

The existing conditions described in this section were developed from a combination of review of aerial photography and street view imagery and planning documents.

Review of Satellite and Street View Imagery

The visual landscape of the Project Area was reviewed and investigated through the use of the Google Earth computer program. Satellite imagery of the area was reviewed to better understand the land use and development pattern in the Project Area and street view imagery was utilized to inform three-dimensional aspects of structures, vegetation and landforms.

Review of Planning Documents

Local planning documents (namely, the Conservation and Open Space Element of the Imperial County General Plan (Imperial County 2016) were reviewed to identify particular policies or regulations related to view/scenic preservation (or similar) that would form the existing conditions

9.2. AGRICULTURE / FORESTRY RESOURCES

9.2.1. Introduction

The purpose of this section is to provide information to establish the existing conditions for agricultural resources in the Study Area of the County of Imperial (County) Lithium Valley Specific Plan (Specific Plan Project). This section supports development of the Specific Plan and associated environmental document.

9.2.2. Methodology and Sources

This Agricultural Resources section is a compilation of existing information about agricultural resources and implementation of the Specific Plan. The information in this section is largely based on publications and web resources from the California Department of Conservation, USDA Natural Resources Conservation Service, and the Imperial County General Plan.

9.2.3. Applicable Regulations

State

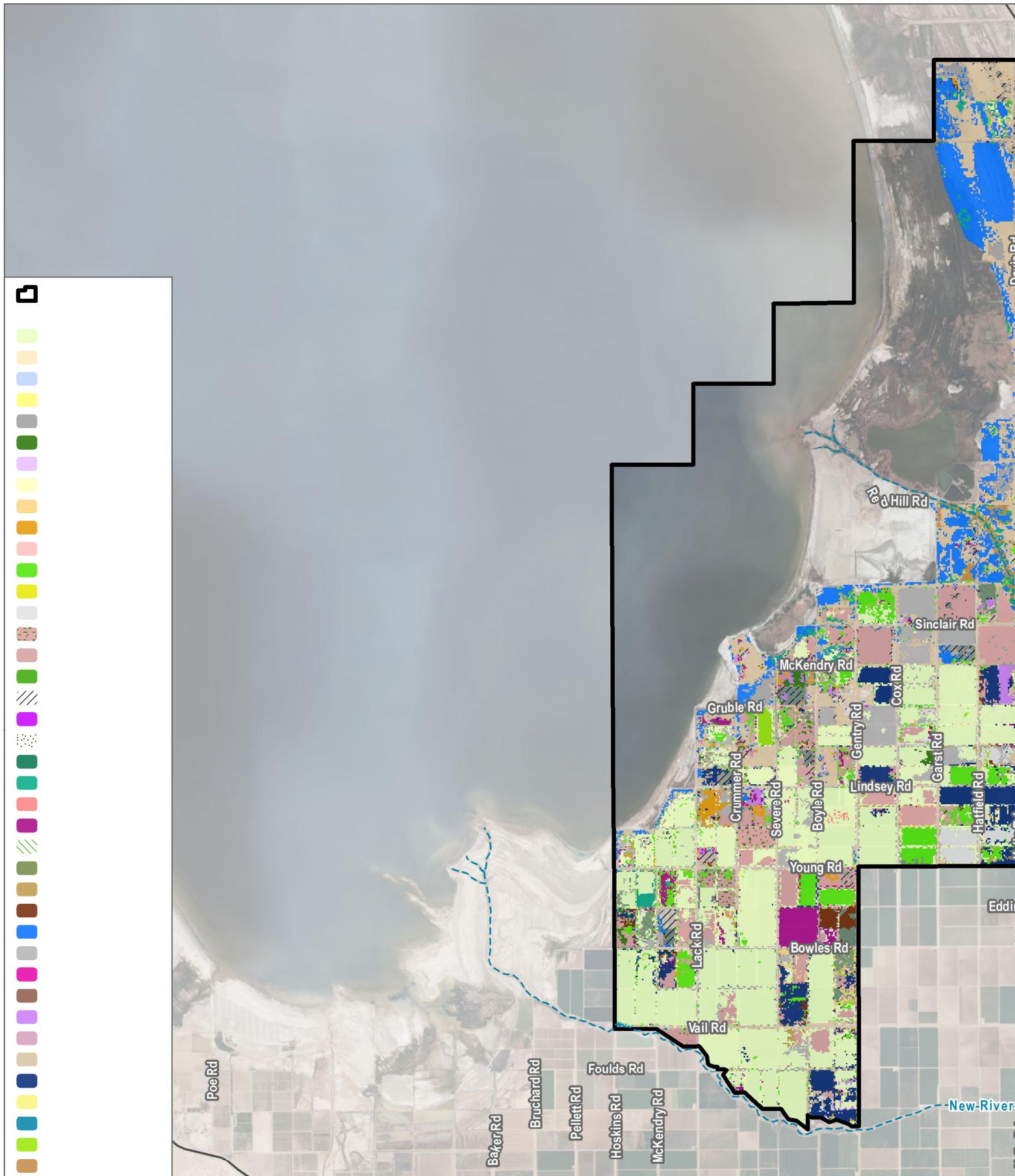


Table 9.2-1. Farmland Mapping and Monitoring

Farmland Mapping and Monitoring Classification	Study Area Acreage	Percentage of Specific Study Area
Prime Farmland	7782.21	15.0
Farmland of Statewide Importance	16012.86	30.9
Unique Farmland	12.26	0.02
Farmland of Local Importance	2286.80	4.4
Other Land	24123.58	46.6
Urban and Built-Up Land	1342.02	2.6
Water Area	226.64	0.4

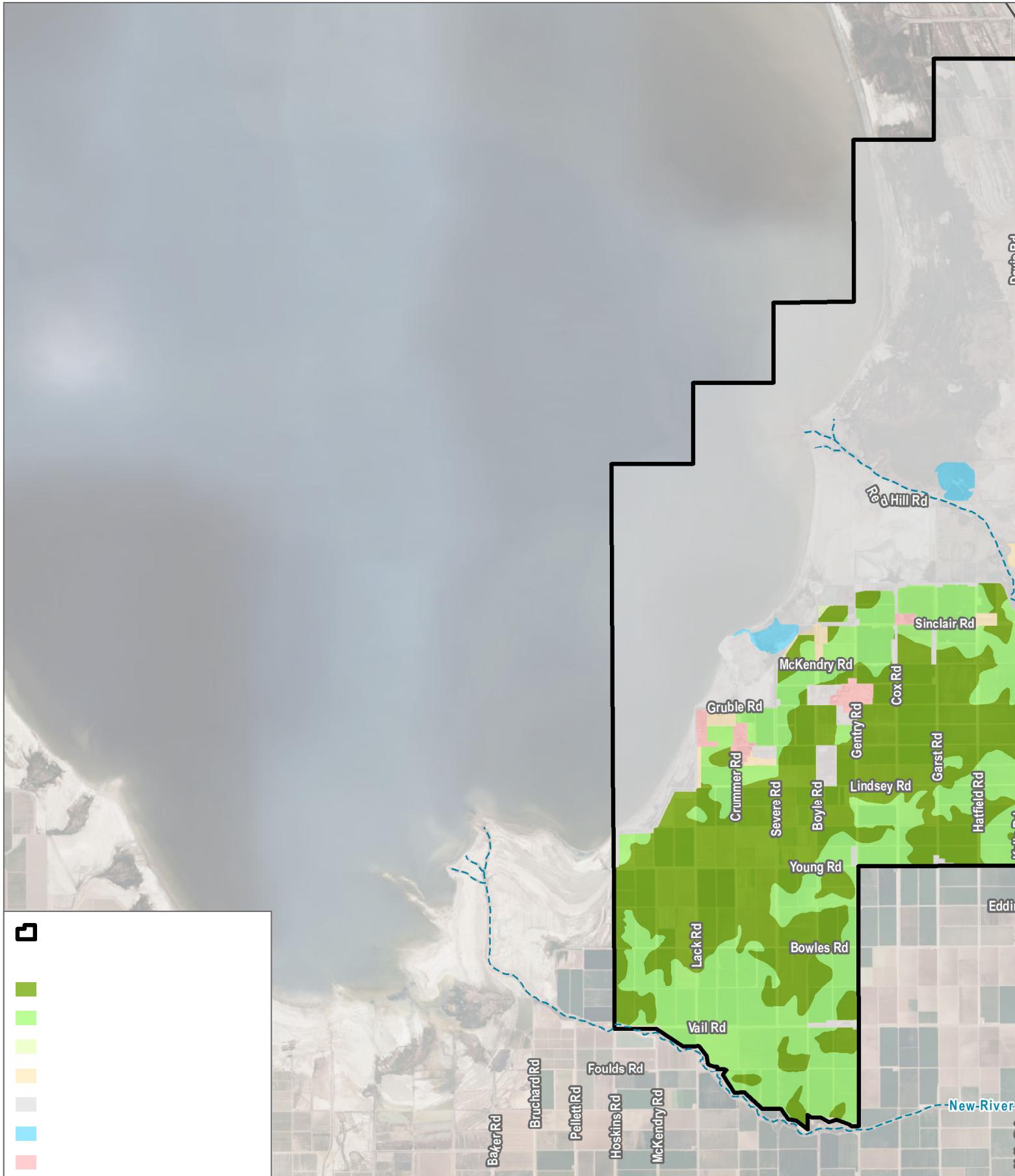
Source: DOC 2023

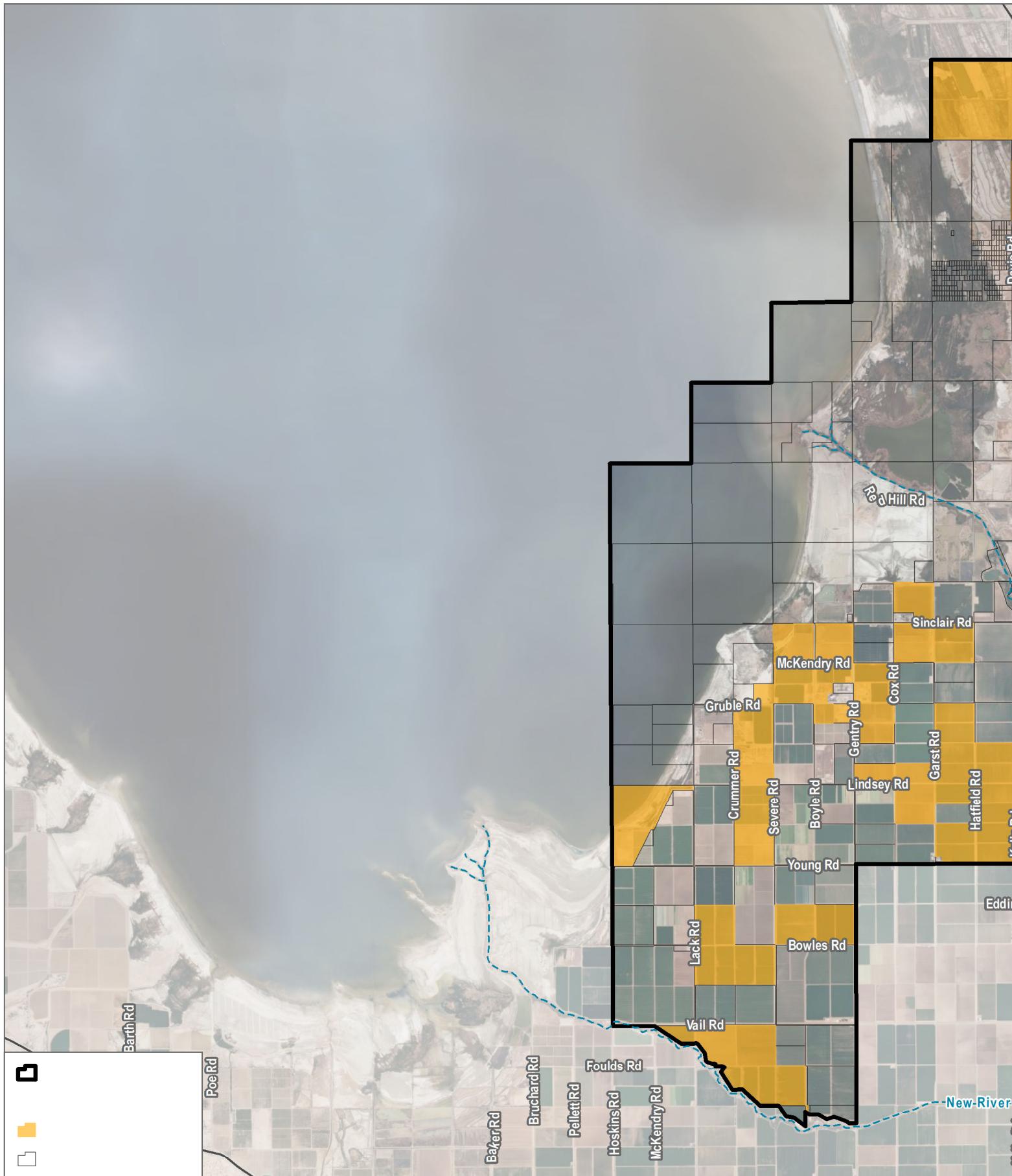
Williamson Act

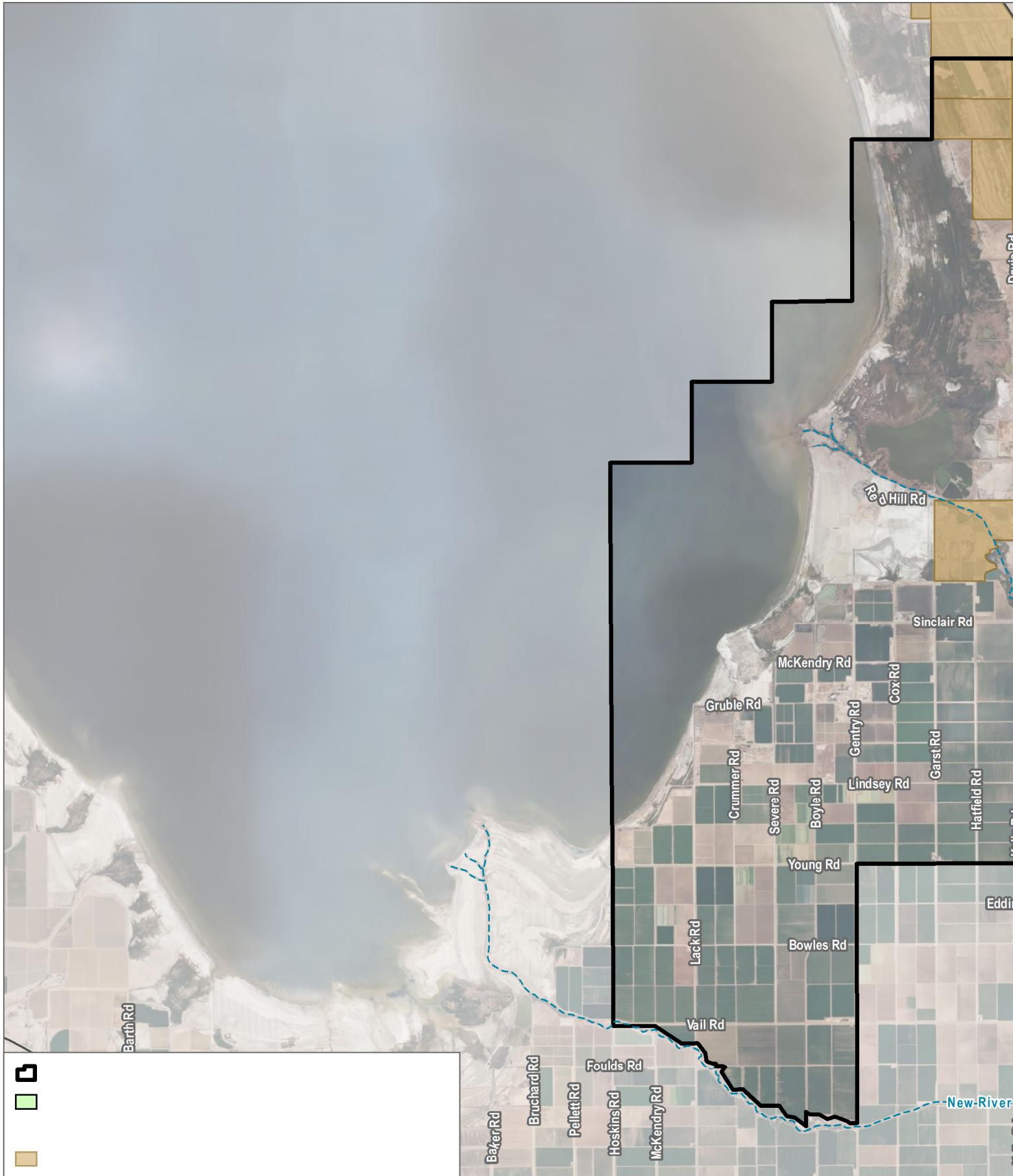
As described above, The Williamson Act operates through 10-year contracts with agricultural landowners that confirm that agricultural land is being preserved. As discussed above, the County placed all Williamson Act contracts into nonrenewal in 2011. There are currently no contracted lands within the County. Figure 9.23 shows the former Williamson Act properties

Forestland

No forestland is located within the study area







9.3. AIR QUALITY

9.3.1. Introduction

The purpose of this section is to provide information to establish the existing conditions for air quality in the Study Area.

Pollutants and Effects

Criteria Air Pollutants

Criteria air pollutants are defined as pollutants for which the federal and state governments have established ambient air quality standards, or criteria, for outdoor concentrations to protect public health. The national and California standards have been set, with an adequate margin of safety, at levels above which concentrations could be harmful to human health and welfare. These standards are designed to protect persons from illness or discomfort. Pollutants of concern include O₃, nitrogen dioxide (NO₂), CO, sulfur dioxide (SO₂), PM₁₀, PM_{2.5}, and lead. In California, sulfates, vinyl chloride, hydrogen sulfide, and visibility-reducing particles are also regulated as criteria air pollutants. These pollutants, as well as TACs, are discussed in the following paragraphs.⁴

Ozone. O₃ is a strong-smelling, pale blue, reactive, toxic chemical gas consisting of three oxygen atoms. It is a secondary pollutant formed in the atmosphere by a photochemical process involving the sun's energy and O₃ precursors. These precursors are mainly NO and ROGs. The maximum effects of precursor emissions on O₃ concentrations usually occur several hours after they are emitted and many miles from the source. Meteorology and terrain play major roles in O₃ formation, and ideal conditions occur during summer and early autumn on days with low wind speeds or stagnant air, warm temperatures, and cloudless skies. O₃ exists in the upper atmosphere ozone layer (stratospheric O₃) and at the Earth's surface in the troposphere (ground-level O₃).^{1–3} The O₃ that the U.S. Environmental Protection Agency (EPA) and the California Air Resources Board (CARB) regulate as a criteria air pollutant is produced close to the ground level, where people live, exercise, and breathe. Ground-level O₃ is a harmful air pollutant that causes numerous adverse health effects and is thus considered bad O₃. Stratospheric, or good, O₃ occurs naturally in the upper atmosphere, where it reduces the amount of ultraviolet light (i.e., solar radiation) entering the Earth's atmosphere. Without the protection of the beneficial stratospheric O₃ layer, plant and animal life would be seriously harmed.

O₃ in the troposphere causes numerous adverse health effects short-term exposures (lasting for a few hours) to O₃ at levels typically observed in Southern California can result in breathing pattern

Table 9.3-1. Ambient Air Quality Standards

Pollutant	Averaging Time	CAAQS ^a	NAAQS ^b	
		Concentration ^c	Primary ^{c,d}	Secondary ^{c,e}
O ₃	1 hour	0.09 ppm (180 mg/m ³)		Same as primary standard ^f
	8 hours	0.070 ppm (137 mg/m ³)	0.070 ppm (137 mg/m ³)	
NO ₂ ^g	1 hour	0.18 ppm (339 mg/m ³)	0.100 ppm (188 mg/m ³)	Same as primary standard

--	--	--	--	--

Table 9.3-2. Local Ambient Air Quality Data

Averaging Time	Unit	Agency/Method	Ambient Air Quality Standard	Measured Concentration by Year			Exceedances by Year		
				2019	2020	2021	2019	2020	2021
Ozone (O₃) Westmorland First Street									
Maximum 1-hour concentration	ppm	California	0.12	0.071	0.067	0.081	0	0	0
Maximum 8-hour concentration	ppm	California	0.070	0.061	0.059	0.073	0	0	1
		National	0.070	0.060	0.059	0.072	0	0	1
Ozone (O₃) Niland English Road									
Maximum 1-hour concentration	ppm	California	0.12	0.060	0.054	0.065	0	0	0

Table 9.3-3. Salton Sea Air Basin Attainment Classification

Pollutant	Designation/Classification	
	NAAQS	CAAQS
Ozone (O_3), 1-hour	No NAAQS	Nonattainment
Ozone (O_3), 8-hour	Nonattainment marginal	Nonattainment
Nitrogen dioxide (NO_2)	Unclassifiable/attainment	Attainment
Carbon monoxide (CO)	Unclassifiable/attainment	Attainment
Sulfur dioxide (SO_2)	Unclassifiable/attainment	Attainment
Coarse particulate matter (PM_{10})	Nonattainment- serious	Nonattainment
Fine particulate matter ($PM_{2.5}$)	Unclassifiable/attainment	Attainment
Lead	Unclassifiable/attainment	Attainment
Hydrogen sulfide	No NAAQS	Unclassified
Sulfates	No NAAQS	Attainment
Visibility-reducing particles	No NAAQS	Unclassified
Vinyl chloride	No NAAQS	No designation

Sources: EPA 2023 (NAAQS) CARB 2020 (CAAQS).

Table notes

NAAQS National Ambient Air Quality Standards CAAQS California Ambient Air Quality Standards bold text not in attainment attainment meets the standards attainment/maintenance achieves the standards after a nonattainment designation nonattainment does not meet the standards unclassified or unclassifiable insufficient data to classify unclassifiable/attainment meets the standard or is expected to be meet the standard despite a lack of monitoring data.

Table 9.3-4. ICAPCD Air Quality Significance Thresholds

Criteria Pollutants Mass Daily Thresholds		
Pollutant	Construction (Pounds per Day)	Operation (Pounds per Day)
ROGs	75	137
NO _x	100	137
CO	550	550
SO _x	N/A	150
PM ₁₀	150	150
PM _{2.5}	N/A	550
TACs and Odor Thresholds		
TACs ^a	Maximum incremental cancer risk ≤ 10 in 1 million Chronic and acute hazard index ≤ 1.0 (project increment)	



9.4. BIOLOGICAL RESOURCES

9.4.1. Introduction

Purpose

The purpose of this section is to provide information to establish the existing conditions for biological resources in the Study Area of the County of Imperial (County) Lithium Valley Specific

Table 9.4-1, Soil Surface Texture Types

Soil Surface Texture ⁴	Study Area Acreage
clay loam	513
gravelly sand	1,825
loam	779
silty clay	22,453
silty clay loam	11,490
very fine sandy loam	1,199
undesignated/unmapped	13,529
Total	51,786

Source: USDA Soil Survey Geographic Database (SSURGO)

¹ Mapped soil types summarized by soil surface texture. In the Study Area, clay loam includes Glenbar Clay Loam, gravelly sand includes Niland Gravelly Sand and Niland Imperial Complex loam includes Glenbar Complex, Indio Loam, Indio-Vint Complex, and Meloland and Holtville Loams silty clay includes Holtville Silty Clay and Imperial Silty Clay, silty clay loam includes Imperial-Glenbar Silty Clay Loams very fine sandy loam includes Meloland Very Fine Sandy Loam and Vint and Indio Very Fine Sandy Loams and undesignated/unmapped includes Badlands, Fluviaquents Saline, Torriorthents-Rock Outcrop Complex, Water, and unmapped areas including those within the Salton Sea.

Land Ownership and Use

The majority of the agricultural lands and the other undeveloped areas of the Study Area are private lands. Public lands include Imperial Irrigation District (IID) lands, state lands (CDFW Imperial Wildlife Area, Wister Unit), USFWS lands (Salton Sea Sonny Bono Wildlife Refuge), and U.S. Bureau of Land Management lands. The majority of the private lands are in agricultural uses but also include renewable energy, industrial, commercial, residential, and transportation uses. The public lands are generally open space, including the Salton Sea itself and associated lands.

Vegetation Communities and Land Cover Types

The study area is characterized by a highly modified landscape influenced by human activities and disturbance. The Salton Sea itself, surrounding agricultural uses and associated irrigation system, and the other extensive land uses, including geothermal facilities, solar fields, and roads and urban areas have transformed the vegetation communities and land cover of the Study Area. As such for the purposes of this planning level description of existing conditions, vegetation communities and land cover types are described using broad, general categories suited best for planning purposes. The vegetation community and land cover mapping and type descriptions are based primarily on the best available existing sources and field reconnaissance⁸. Field-based mapping of vegetation types

⁸ Based on a review of available existing data sources for vegetation communities and land cover mapping, there was no single data source that provided detailed, comprehensive coverage of the Study Area suitable for this planning effort. Therefore, the land cover mapping for the Study Area was developed from the assembly of the best available existing data from multiple sources, including USFWS National Wetland Inventory dataset (USFWS 2022) for the wetland and riparian areas, Department of Water Resources Statewide Crop mapping dataset (DWR 2018) for agricultural lands, the IID canals and drains dataset (IID 2014) and existing site-specific biological resources reports. These existing data

Table 9.4-2, Vegetation Communities and Land Cover Types

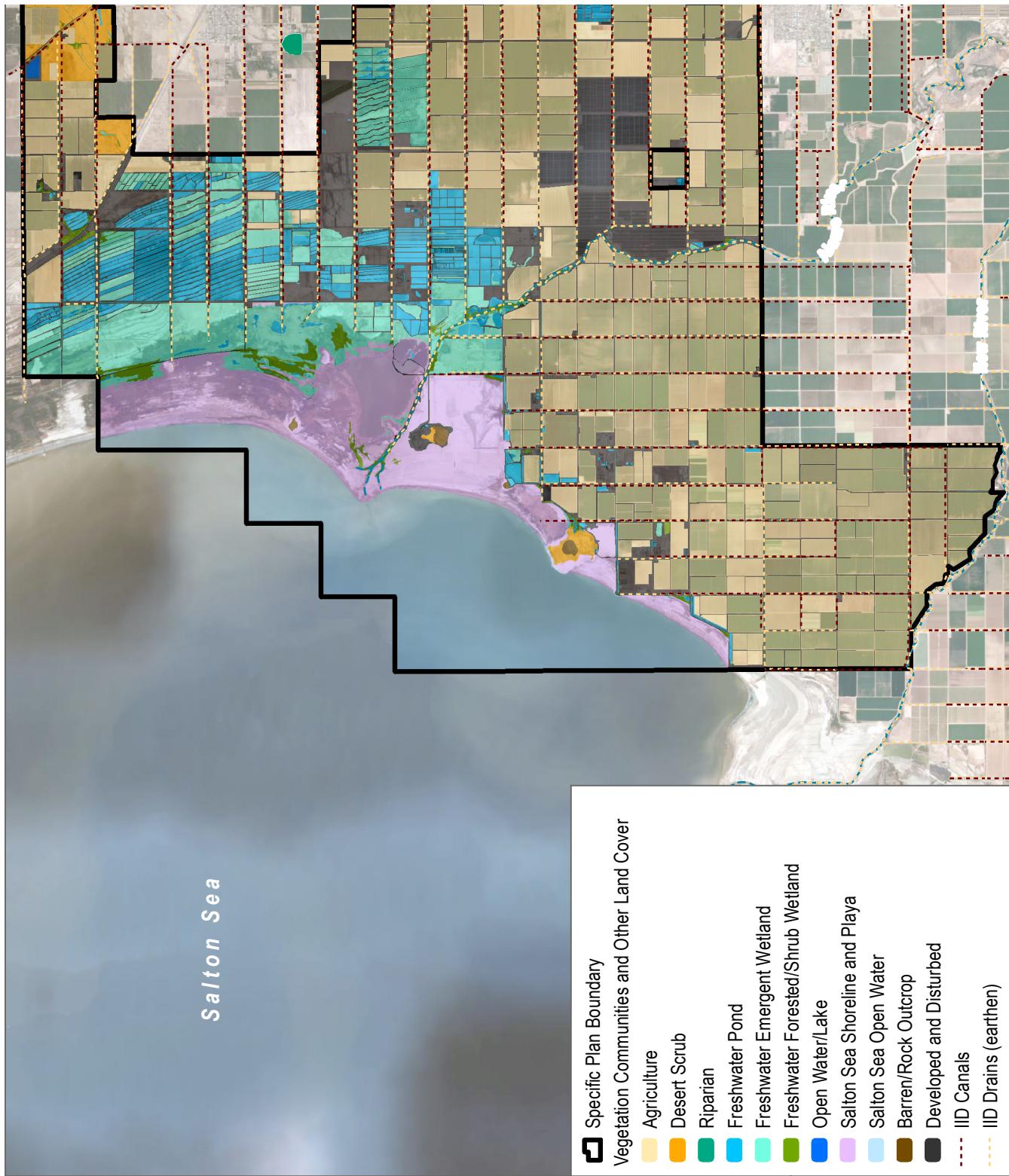
General Vegetation Community/Land Cover Type	Study Area Acreage
Salton Sea open water	6,480
Salton Sea shoreline and playa	4,920
Wetland communities freshwater emergent wetland	4,639
Wetland communities freshwater forested/shrub wetland	436
Wetland communities freshwater pond	3,017
Wetland communities open water/lake	26
Riparian communities	480
Desert scrub communities	1,295
Barren/rock outcrop	60
Agricultural lands	21,978
Developed and disturbed areas	8,456
Total	51,786

Source: USFWS National Wetland Inventory dataset for California wetlands (USFWS 2022), Department of Water Resources Statewide Crop mapping dataset (DWR 2018), the IID canals and drains dataset (IID 2014),⁹ existing site-specific biological resources reports and refinements using aerial imagery from Bing, Google, and USDA National Agriculture Imagery Program (NAIP) from 2020 for Salton Sea open water and Salton Sea shoreline and playa areas (to account for land cover changes due to the receding sea level) and/or areas of desert scrub, barren/rock outcrop, and developed/disturbed. IID canals/drains are linear features that occur within developed and disturbed areas and along riparian areas.

sources were supplemented by using aerial imagery from Bing, Google, and USDA National Agriculture Imagery Program (NAIP) from 2020 to make land cover refinements for Salton Sea open water and Salton Sea shoreline and playa areas (to account for land cover changes due to the receding sea level) and to map areas of desert scrub, barren/rock outcrop, and developed/disturbed.

⁹ Project-level standards typically entails field-based mapping using the California Natural Community List (CDFW 2022a) and descriptions from the Manual of California Vegetation Online (CNPS 2021) per the Survey of California Vegetation Classification and Mapping Standards (CDFW 2020).

Salton Sea

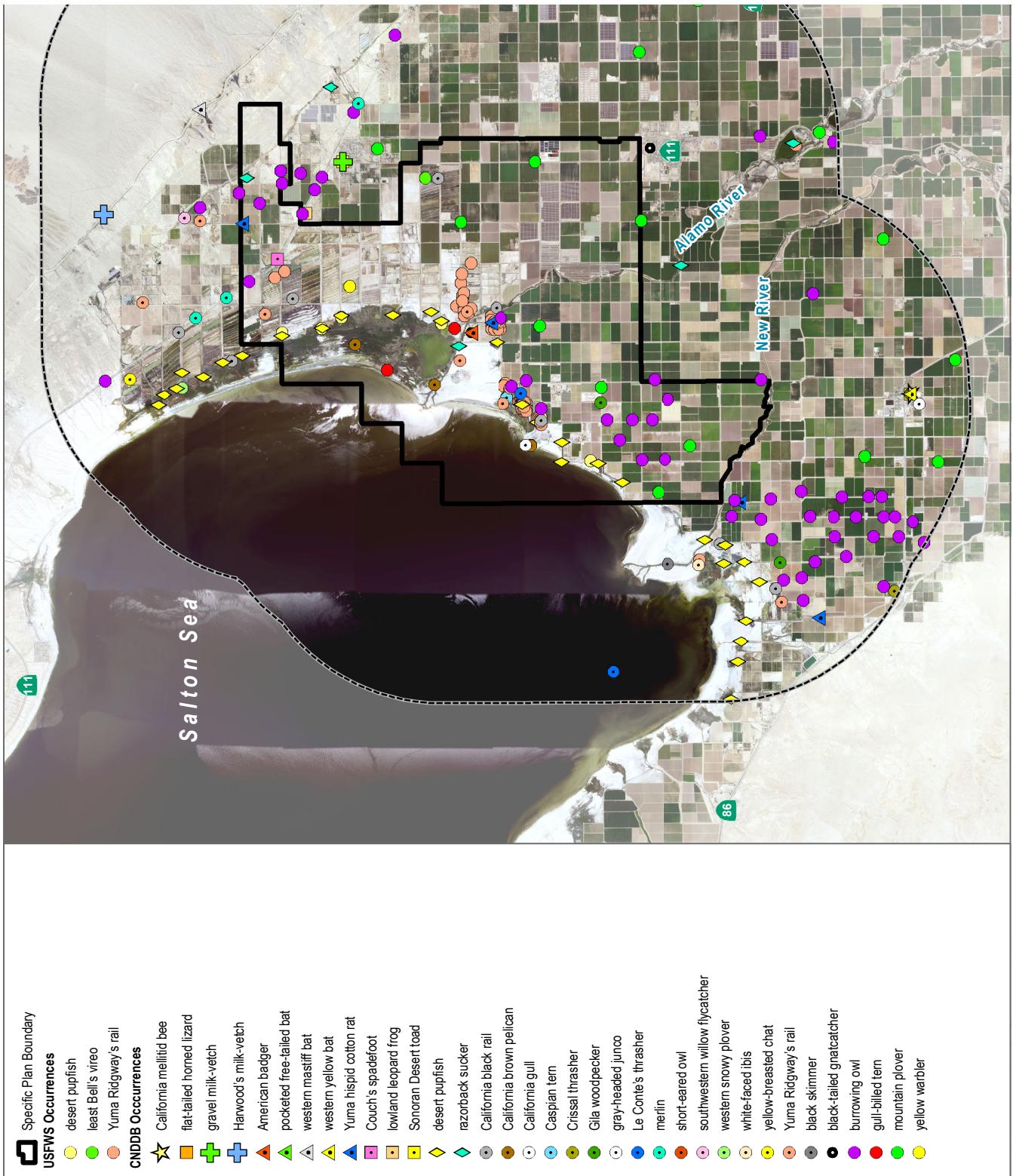


SOURCE: USWFS NWI; CA Dept. Water Resources 2018; Open Street Map; Bing Maps (2022-12-06)

DUDEK

0 1 2 Miles

Vegetation C



SOURCE: USFWS NWI; CA Dept. Water Resources 2018; Open Street Map; NAIP 2020

DUDEK

Special-Sta





9.5. CULTURAL RESOURCES

9.5.1. Introduction

Cultural Resources generally fall into two categories: archaeological and built environment. Archaeological resources are places that contain the remnants or traces left by past prehistoric and

Table 9.5.1 Previous Cultural Resources Studies within the Study Area

SCIC Report ID	Year	Author	Report Title
IM-00089	1977	Von Werlhof, Jay and Sherilee Von Werlhof	Archaeological Examinations of Ten Proposed Geothermal Drill Test Sites Near Salton Sea
IM-00104	1977	Von Werlhof, Jay and Sherilee Von Werlhof	Archaeological Examinations of a Waste-Water Treatment System for the City Of Calipatria
IM-00109	1977	Von Werlhof, Jay, Sherilee Von Werlhof, and Morlin Childers	Archaeological Examinations of the Obsidian Butte Quarry Site, Imperial County
IM-00136	1978	Von Werlhof, Jay and Sherilee Von Werlhof	Archaeological Examinations of Two Geothermal Test Hole Sites, Westmorland, Imperial County
IM-00140	1978	Von Werlhof, Jay and Sherilee Von Werlhof	Archaeological Examinations of Ten Geothermal Test Sites Near Salton Sea
IM-00160	1978	Von Werlhof, Jay	Archaeological Examinations of Republic Geothermal Sweetwater Drill Sites
IM-00163	1978	Imperial County Planning Department	Final Environmental Impact Report for Geothermal Exploratory Operations in the Salton Sea Prospect
IM-00183	1979	Imperial County Planning Department	Environmental Impact Report 211-78 For Forty Nine Megawatt Geothermal Power Plant & Facilities Niland Area

Table 9-5.2 Previously Recorded Cultural Resources within the Study Area

Primary Number	Trinomial	Resource Type	Description	Evaluation Status
P-13-000068	CA-IMP-000068	Multicomponent	Prehistoric village site prehistoric scatter	Unevaluated

Table 9.5.5 CalTrans Bridges Located Within the Specific Study Area

Type	Bridge Number	Name	Year Built	Year Reconstructed	Caltrans Historic Code
State	58 0145	Kuehn Draw Bridge	1950	1986	5: Bridge is not eligible for the NRHP.
State	58 0146	Chico Wash Bridge	1950	1986	5: Bridge is not eligible for the NRHP.
State	58 0147	Brawley Wash Bridge	1950	1986	5: Bridge is not eligible for the NRHP.
State	58 0148	Phil Wash Bridge	1950	1986	5: Bridge is not eligible for the NRHP.
State	58 0152	Cattail Wash Bridge	1950	1986	5: Bridge is not eligible for the NRHP.

Table 9.5-6 Water Conveyance Structures Within the Study Area

Resource Type	Resource Name	Age, date developed
Lake	Salton Sea	116, 1905-1907
River	Alamo River	116, 1905-1907
River	New River	116, 1905-1907
Canal	Niland Canal	More Research Required
Canal	Vail Canal	More Research Required
Irrigation System	E Spill Drain	More Research Required
Irrigation System	F Spill Drain	More Research Required
Irrigation System	G Spill Drain	More Research Required
Irrigation System	H Spill Drain	More Research Required
Irrigation System	I Spill Drain	More Research Required
Irrigation System	J Spill Drain	More Research Required
Irrigation System	K Spill Drain	More Research Required
Irrigation System	L Spill Drain	More Research Required
Irrigation System	M Spill Drain	More Research Required
Irrigation System	N Spill Drain	More Research Required
Irrigation System	O Spill Drain	More Research Required
Irrigation System	P Spill Drain	More Research Required
Irrigation System	Q Spill Drain	More Research Required
Irrigation System	R Spill Drain	More Research Required
Irrigation System	S Spill Drain	More Research Required
Irrigation System	T Spill Drain	More Research Required

9.6. GEOLOGY/SOILS

9.6.1. Introduction

This section describes the existing geology and soils conditions of the County of Imperial (County) Lithium Valley Specific Plan (Specific Plan Project), identifies associated regulatory requirements, and presents potential constraints based on currently available information and next steps related to the proposed project. This Geology and Soils Existing Conditions section will support development of the Specific Plan and associated environmental document.

9.6.2. Methodology and Sources

The geology and soils environmental setting of the Specific Study Area (SPA) has been prepared using existing geologic soils, and other studies available for the area, including documents and maps available from the California Geological Survey, Southern California Earthquake Data Center, California Department of Conservation Geologic Energy Management Division (CalGEM), California Department of Water Resources, U.S. Geological Survey (USGS), U.S. Department of Agriculture, Imperial County General Plan (Seismic and Public Safety Element and Renewable Energy and Transmission Element), and Imperial County General Plan EIR.

9.6.3. Applicable Regulations

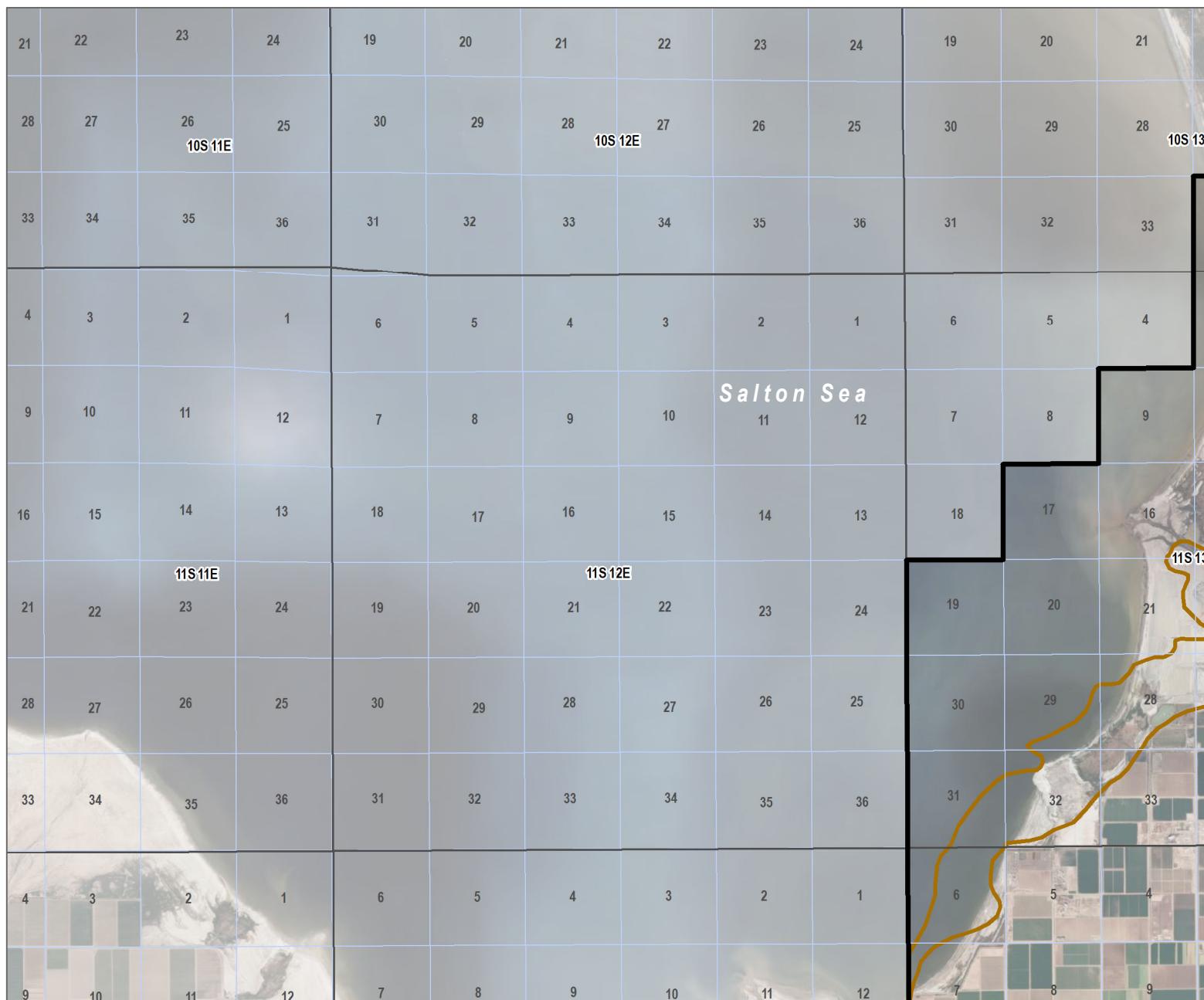
Federal Regulations

Earthquake Hazards Reduction Act

The United States Congress passed the Earthquake Hazards Reduction Act in 1977 to reduce the risks to life and property from future earthquakes in the United States through the establishment and maintenance of an effective earthquake hazards reduction program. To accomplish this goal, the act established the National Earthquake Hazards Reduction Program. This program was substantially amended in November 1990 by the National Earthquake Hazards Reduction Program Act, which refined the description of agency responsibilities, program goals, and objectives.

Occupational Safety and Health Administration Regulations

Excavation and trenching are among the most hazardous construction operations. OSHA Excavation and Trenching Standard, Title 29 of the Code of Federal Regulations, Part 1926, Subpart P, covers requirements for excavation and trenching operations. OSHA requires that all excavations in which employees could potentially be exposed to cave-ins be protected by sloping or benching the sides of the excavation, supporting the sides of the excavation, or placing a shield between the side of the excavation and the work area.



Specific Plan Boundary

General Soils

1 - Imperial: Nearly level, moderately well drained silty clay in the lacustrine basin

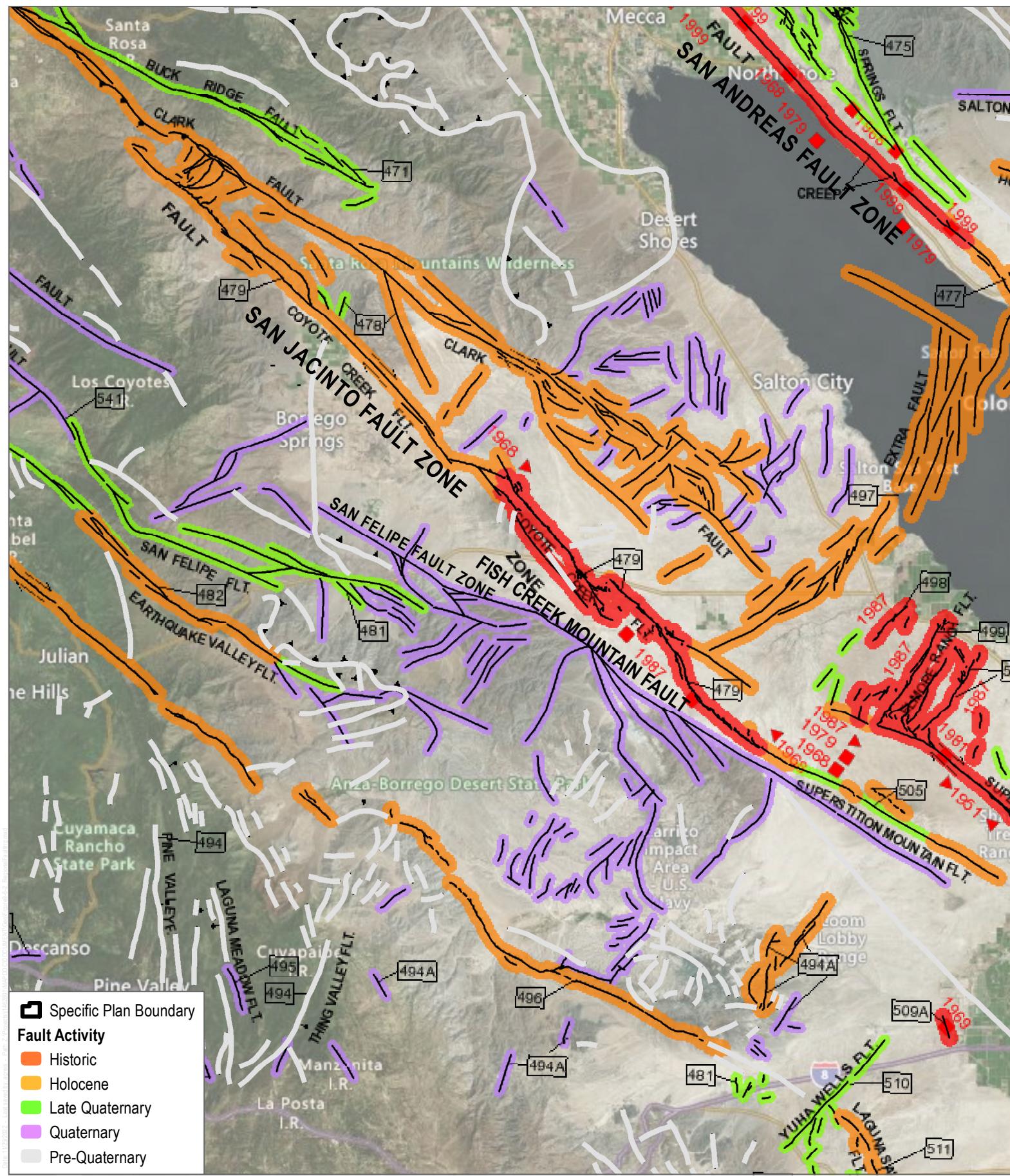
2 - Imperial-Holtville-Glenbar: Nearly level, moderately well drained and well drained silty clay, silty clay loam, and clay loam in the lacustrine basin

3 - Meloland-Vint-Indio: Nearly level, well drained fine sand, loamy very fine sand, fine sandy loam, very fine sandy loam, loam, and silt loam in the lacustrine basin and low alluvial fans

4 - Niland-Imperial: Nearly level, moderately well drained gravelly sand, fine sand, silty clay, and silty clay loam at the edges of the lacustrine basin

5 - Fluvaquents: Nearly level, poorly drained soils of undifferentiated texture in the lacustrine basin

6 - Rositas: Nearly level to moderately steep, somewhat excessively drained sand, fine sand, and silt loam in alluvial basins and on fans and sandhills



SOURCE: USGS 2022; CGS 2022; County of Imperial; Bing Maps

9.7. GREENHOUSE GAS EMISSIONS

9.7.1. Introduction

The purpose of this section is to provide information to establish the existing conditions for greenhouse gas (GHG) emissions and climate change in the Study Area of the County of Imperial (County) Lithium Valley Specific Plan (Specific Plan Project).

Climate Change Overview

■ _____

■ _____

■ _____

■

■

■

■

■

■

■

■

■

Table 9.7-1 Top GHG-Producer Countries and International Organizations

Emitting Countries and International Organizations (Listed in Order of Emissions)	Greenhouse Gas Emissions (MMT CO₂e)
China	14,000
United States	6,600
European Union	4,300
India	3,700
Russian Federation	2,500
Japan	1,400
Total	32,500

Source: PBL 2020

Note: MMT CO₂e million metric tons of carbon dioxide equivalent.

National Inventory

Per the EPA Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990 to 2019 (EPA 2021), total U.S. GHG emissions were approximately 6,558.3 MMT CQe in 2019 (EPA 2021). The primary GHG emitted by human activities in the United States was CQ, which represented approximately

Table 9.7-2. Greenhouse Gas Emissions Sources in California

Source Category	Annual GHG Emissions (MMT CO ₂ e)	Percent of Total ^a
Transportation	166.1	39.7
Industrial	88.2	21.1
Electric power	58.8	14.1
Commercial and residential	43.8	10.5
Agriculture	31.8	7.6
High global-warming potential substances	20.6	4.9
Recycling and waste	8.9	2.1
Total	418.2	100

Source: CARB 2021.

Notes: GHG greenhouse gas MMT CO₂e million metric tons of carbon dioxide equivalent GWP global warming potential.

Emissions reflect 2019 California GHG inventory.

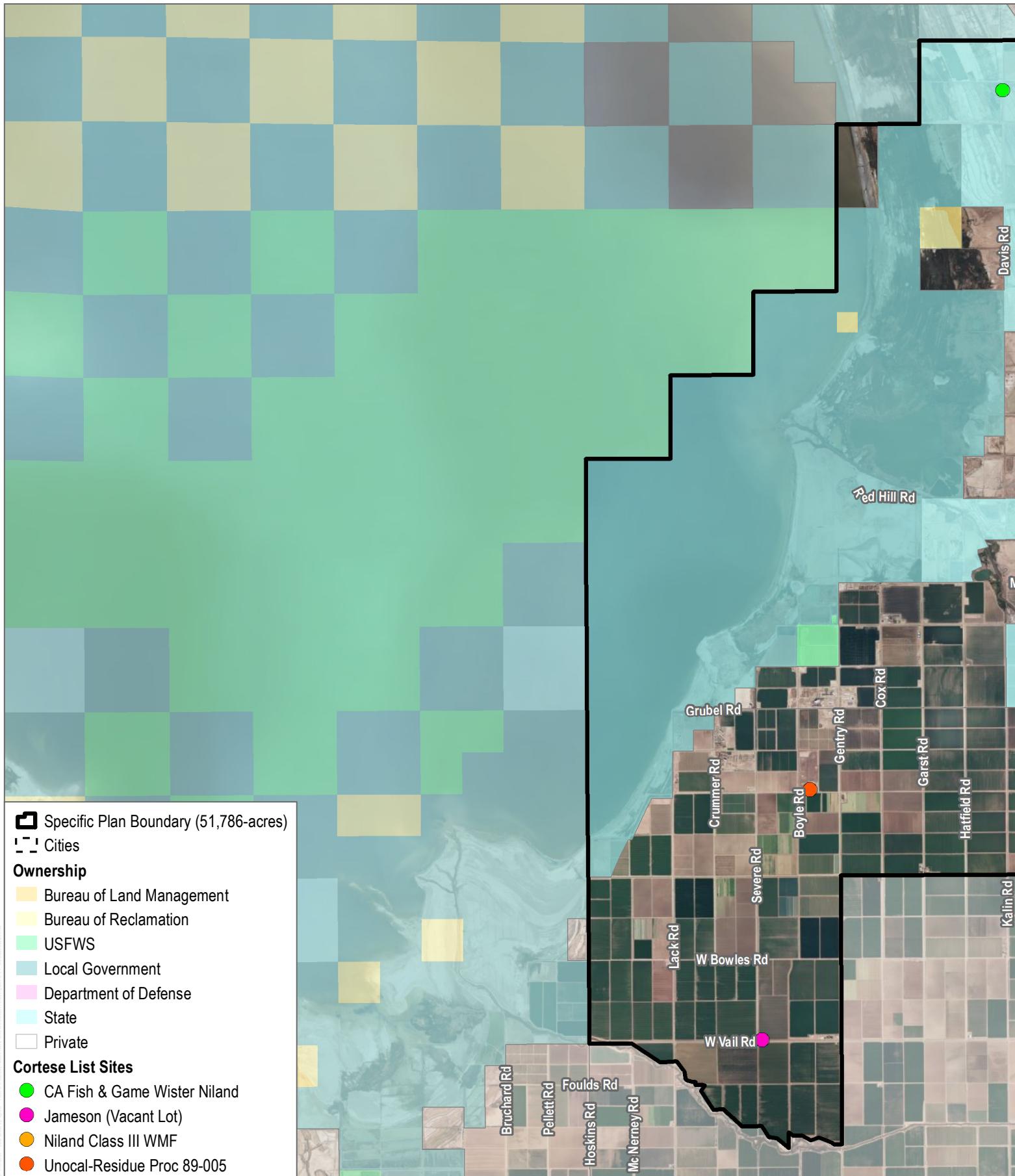
^a Percent of total has been rounded, and total does not sum due to rounding.

Between 2000 and 2019, per capita GHG emissions in California have dropped from a peak of 14.0 MT CO₂e per person in 2001 to 10.5 MT CO₂e per person in 2019, representing an approximate 25% decrease. In addition, total GHG emissions in 2019 were approximately 7 MMT CO₂e lower than 2018 emissions (CARB 2021c).

9.8. HAZARDS AND HAZARDOUS MATERIALS

9.8.1. Introduction

This section of the Baseline Report provides a discussion of the existing hazards and hazardous materials conditions in the Study Area is included in this section to present the environmental baseline for the Specific Plan.



SOURCE: DTSC; BLM; Imperial County; Bing Maps

Table 9.8-1, Cortese Sites

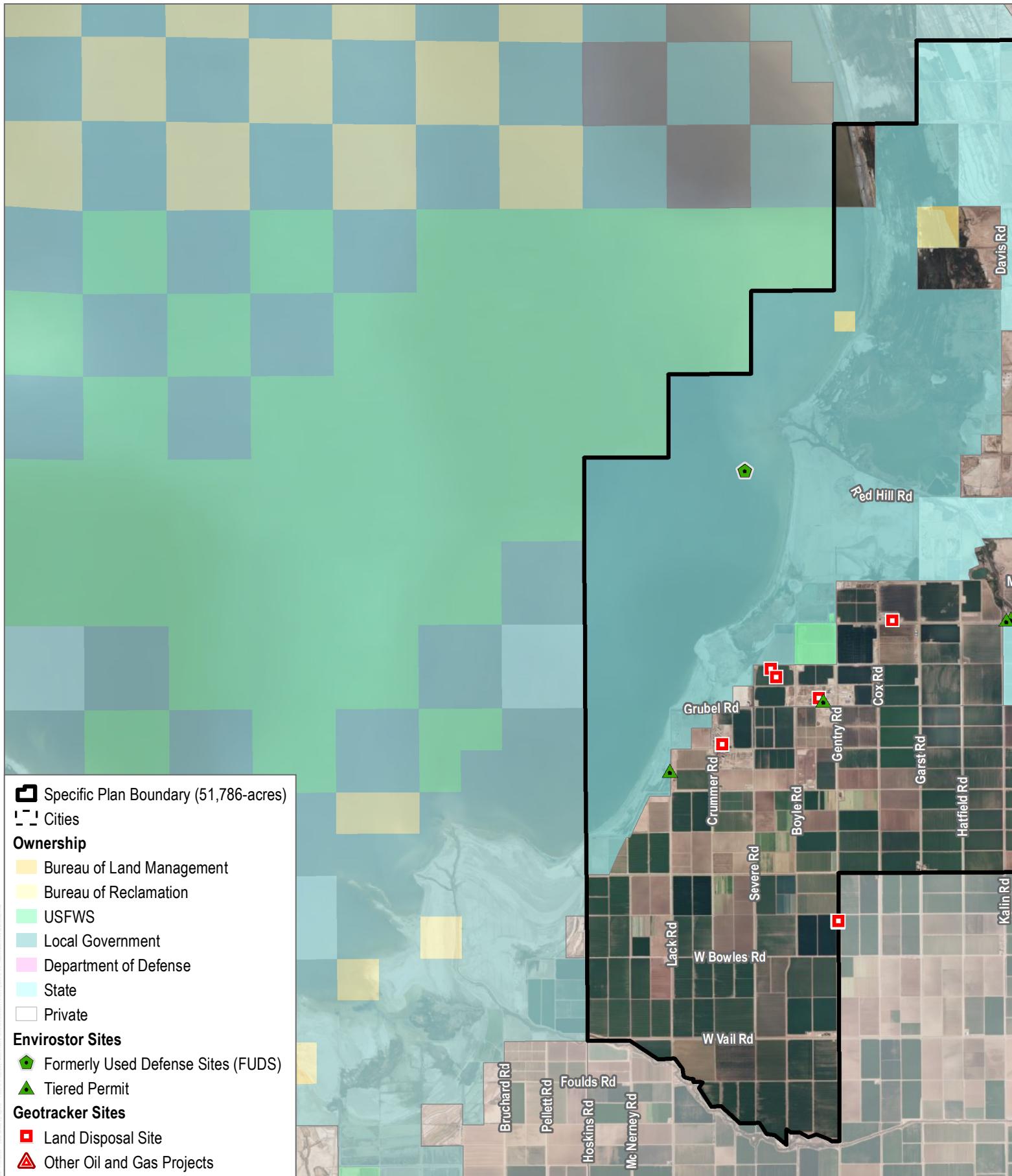
Located Within or Adjacent to Study Area	Site Name	Site Address	Site Summary
Within	Jameson (Vacant Lot)	910 West Vail Road, Calipatria, CA 92233	Diesel impacts to soil from LUST. LUST case closed by RWQCB in 1992 (SWRCB, 2022a)
Within	CA Fish & Game Wister Niland	8700 Davis Road, Niland, CA 92257	Gasoline impacts to soil from LUST. LUST case closed by RWQCB in 1996 (SWRCB, 2022a).
Within	Unocal-Residue Proc 89-005	950 West Lindsay Road, Calipatria, CA 92233	Unocal operated a geothermal power plant and associated salt dissolving and injecting facility. In 1988, 30,000 tons of undissolvable residues with hazardous levels of lead remained. A cleanup and abatement order was issued by the RWQCB. The soils were mixed with cement and placed on the site as the foundation for a storage area. Additional soils were either mixed with cement or disposed of in off-site landfills. A deed restriction was recorded in 1994 prohibiting residential or agricultural use and requiring that runoff be contained on the

Table 9.8-2. Additional GeoTracker Sites

Site Name	Site Address	Database
Black Rock 1, 2, and 3 Geothermal Power Project Brine Ponds	7030 Gentry Road	Land Disposal Site
Black Rock 1, 2, and 3 Geothermal Power Project Wellfield Mud Sumps	7030 Gentry Road	Land Disposal Site
Cal Energy R1, Salton Sea Power Plants Units 1-5	6922 Crummer Road	Land Disposal Site
Cal Energy R2 Vulcan & Del Ranch (Hoch) Power Plants Sis	7001 Gentry Rd	Land Disposal Site
Del Ranch Geo Hldg Bsn 03- 078	7001 Gentry Rd	Land Disposal Site

Table 9.8-3. Additional EnviroStor Sites

Site Name	Site Address	Database
Salton Sea Bomb Targets (12 sites within the Salton Sea Specific Locations Unknown)	Salton Sea	Formerly Used Defense Sites (FUDS)



SOURCE: DTSC Envirostor; BLM; Imperial County; Bing Maps

9.9. HYDROLOGY/WATER QUALITY

9.9.1. Introduction

The Study Area and surrounding region consists of agricultural drains, canals, and the New River and Alamo River. Ultimately, all flows are conveyed into the Salton Sea although most flows no longer reach the Salton Sea. This section discusses the relevant regulations, water quality considerations, existing infrastructure inventory, and floodplain and flood hazards for the area.

9.9.2. Methodology and Sources

The following sources were used in our research to write this section:

- ☒ California Department of Water Resources California Groundwater Bulletin 118 2004.
- ☒ California State Water Resources Control Board (SWRCB) 2009-0009-DWQ Construction General Permit 2010.
- ☒ California SWRCB Industrial General Permit Order 20140057-DWQ. 2018.
- ☒ Colorado River Regional Water Quality Control Board Water Quality Control Plan for the Colorado River Basin Region. 2019.
- ☒ Imperial County Multi-Jurisdictional Hazard Mitigation Plan 2015. Imperial Irrigation District. Salton Sea Hydrology Development 2018.
- ☒ Imperial Irrigation District Imperial Integrated Regional Water Management Plan 2012.
- ☒ Imperial County. Engineering Design Guidelines Manual for the Preparation and Checking of Street Improvement, Drainage and Grading Plans within the Gateway of the Americas Specific Study Area 2004.
- ☒ UC Riverside Salton Sea Task Force. Crisis at the Salton Sea, The Vital Role of Science 2021.

9.9.3. Applicable Regulations

Clean Water Act

The USEPA is the lead federal agency responsible for managing water quality. The Clean Water Act (CWA) of 1972 is the primary federal law that governs and authorizes the USEPA and the states to implement activities to control water quality. The various elements of the CWA that address water quality and that are applicable to the Project are discussed below.

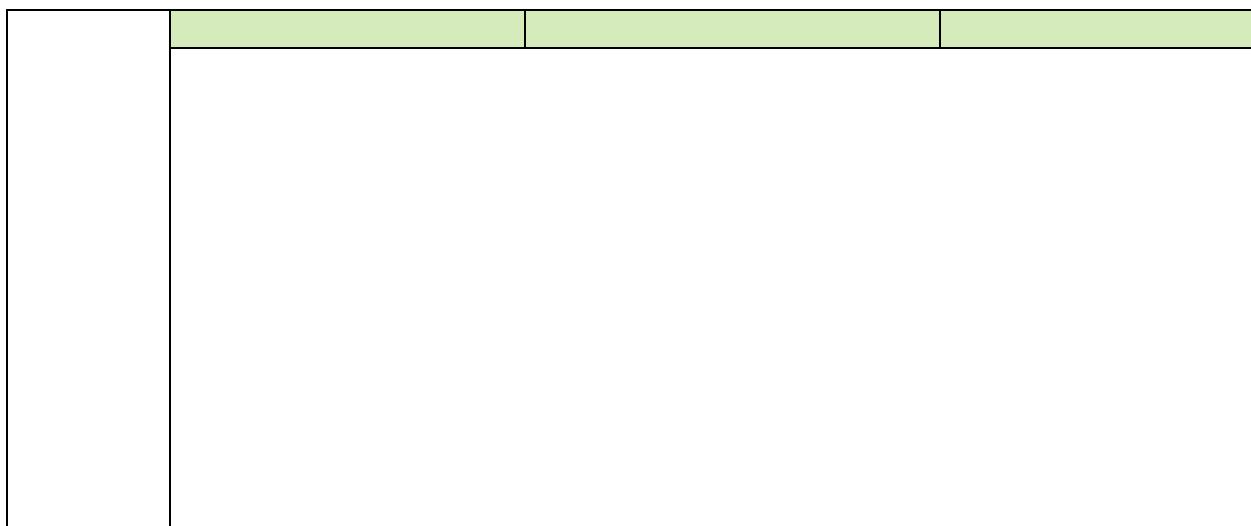
Under federal law, the USEPA has published water quality regulations under Volume 40 of the Code of Federal Regulations (CFR). Section 303 of the CWA allows states to adopt water quality standards for all surface waters of the United States by following the processes outlined in Section 303 and

Table 9.9-1 Alamo River TMDLs

Element	Description								
Problem Statement (impaired water quality standard)	Excess delivery of sediment to the Alamo River has resulted in degraded conditions that impair the following designated beneficial uses: warm freshwater habitat, wildlife habitat preservation of threatened, rare, and endangered species habitat contact and non-contact recreation, freshwater replenishment. As the Alamo River discharges into the Salton Sea, sediment also threatens the same beneficial uses of the Salton Sea. Specifically, sediment serves as a carrier for DDT, DDT metabolites, and other insoluble pesticides including toxaphene, which pose a threat to aquatic and avian communities and people feeding on fish from the Alamo River and suspended solids concentrations, sediment loads, and turbidity levels are in violation of water quality objectives. These current concentrations, loads, and levels are also forming objectionable bottom deposits, which are also adversely affecting the beneficial uses of Alamo River.								
Numeric Target	200 mg/L Total Suspended Solids (annual average) ⁵⁵								
Source Analysis	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">Source</td> <td style="width: 80%;">tons/year</td> </tr> <tr> <td>Agricultural Drain Discharges:</td> <td>322,493</td> </tr> <tr> <td>In-Stream Erosion & Wind Deposition:</td> <td>6,623</td> </tr> <tr> <td>NPDES Permitted Facilities:</td> <td>215</td> </tr> </table>	Source	tons/year	Agricultural Drain Discharges:	322,493	In-Stream Erosion & Wind Deposition:	6,623	NPDES Permitted Facilities:	215
Source	tons/year								
Agricultural Drain Discharges:	322,493								
In-Stream Erosion & Wind Deposition:	6,623								
NPDES Permitted Facilities:	215								

Table 9.9-3 TMDLs for the New River

Element	Description		
Problem Statement (Impaired water quality standard)	The New River headwaters start about 1216 miles south of Calexico in the Mexicali Valley, Mexico. Bacteria, which are pathogen indicator organisms, impair the entire segment of the New River in the United States. Pollution is severest at the International Boundary due to discharges of wastes from Mexico. The bacterial concentrations exceed the water quality objectives established to protect mainly the water contact and noncontact water recreational beneficial uses of the New River.		
Numeric Target	The following are the instream numeric water quality targets for this TMDL:		
	<u>Indicator Parameters</u>	<u>30-Day Geometric Mean⁵⁰</u>	<u>Maximum</u>
	Fecal Coliforms	200 MPN ⁵¹ /100 ml	52
	E. Coli	126 MPN/100 ml	400 MPN/100 ml
	Enterococci	33 MPN/100 ml	100 MPN/100 ml
Source Analysis	The main sources of pathogens as indicated by fecal coliforms and E. coli bacteria in the New River are discharges of municipal wastes from the Mexicali Valley, Mexico and undisinfected but treated wastewater discharges from five domestic wastewater treatment plants in the Imperial Valley. Natural sources of pathogens appear to play a relatively insignificant role, but their actual contribution, and contributions from other nonpoint sources of pollution in general require proper characterization.		
Allocations and Margin of Safety	Discharges from point sources and nonpoint sources of pollution shall not exceed the following waste load allocations (WLAs) and load allocations (LAs), respectively:		
	<u>Indicator Parameters</u>	<u>30-Day Geometric Mean⁵⁰</u>	<u>Maximum</u>
	Fecal Coliforms	200 MPN ⁵¹ /100 ml	52
	E. Coli	126 MPN/100 ml	400 MPN/100 ml



9.10. MINERAL RESOURCES

9.10.1. Introduction

The purpose of this section is to provide information to establish the existing conditions for mineral resources in the Study Area of the County of Imperial (County) Lithium Valley Specific Plan (Specific Plan Project). This section supports development of the Specific Plan and associated environmental document.

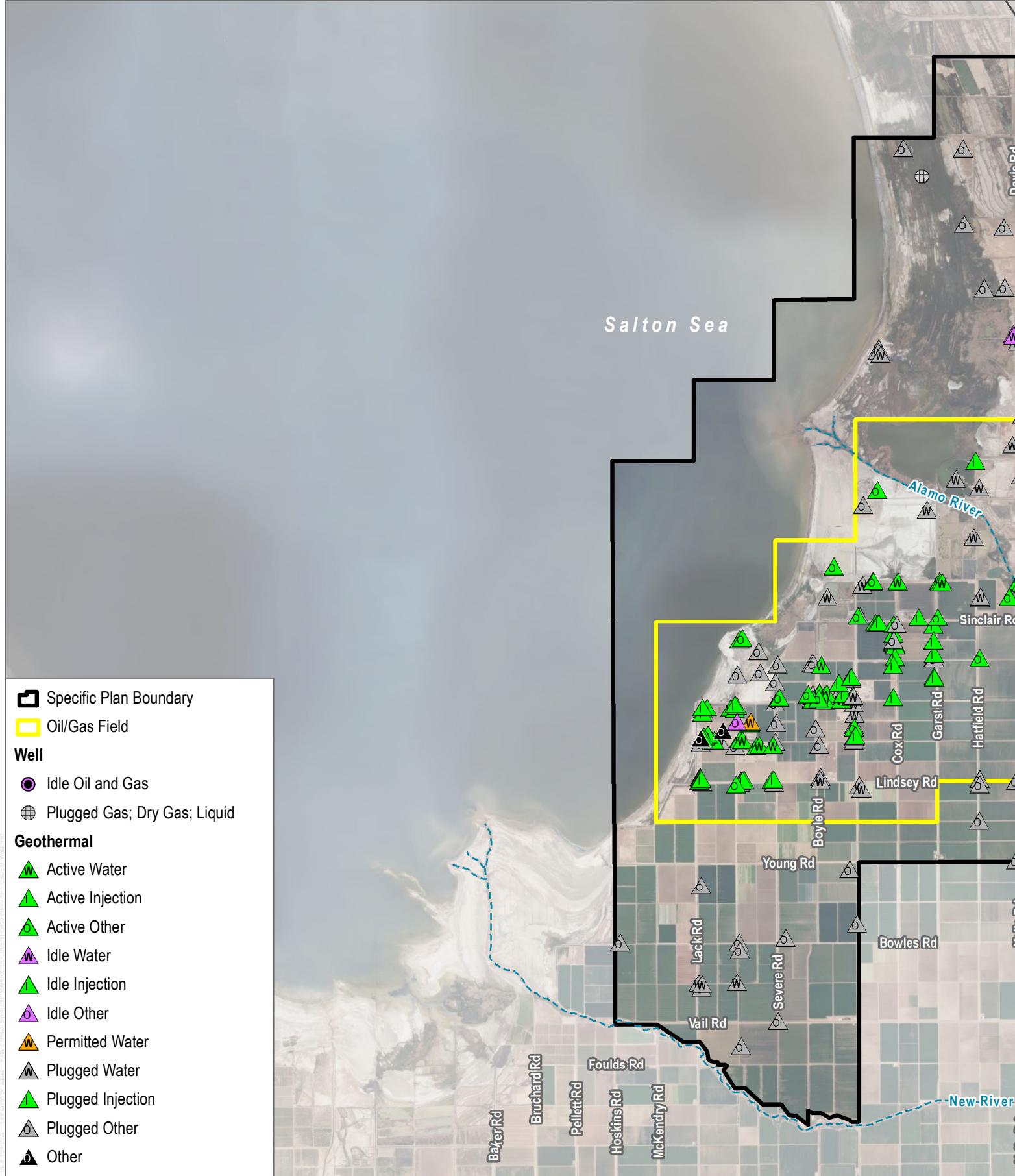
9.10.2. Methodology and Sources

This Mineral Resources section is a compilation of existing information with regard to mineral resources and implementation of the Specific Plan. The information in this section is largely based on publications and web resources from the California Geologic Survey, California Geologic Energy Management Division (CalGEM), and the Imperial County General Plan.

9.10.3. Applicable Regulations

Federal Regulations

Mining Law



SOURCE: CA Department of Conservation; County of Imperial; Bing Maps



A horizontal number line starting at 0 and ending at 2. The segment between 0 and 2 is divided into three equal parts by tick marks. The first tick mark is labeled '1' above the line. The second tick mark is labeled '2' above the line. Below the line, the word 'Miles' is written.

9.11. NOISE

9.11.1. Introduction

The purpose of this section is to provide information to establish the existing conditions for noise resources in the Study Area of the County of Imperial (County) Lithium Valley Specific Plan (Specific Plan Project). This section supports development of the Specific Plan and associated environmental document.

Acoustical Fundamentals

Sound, Noise, and Acoustics

Table 9.11.1, Typical Sound Levels in the Environment and Industry

Common Outdoor Activities	Noise Level (dB)	Common Indoor Activities
Jet fly over at 300 meters (1,000 feet)	110	Rock band
Gas lawn mower at 1 meter (3 feet)	100	Food blender at 1 meter (3 feet)
Diesel truck at 15 meters (50 feet), at 80 kilometers per hour (50 miles per hour)	90	Garbage disposal at 1 meter (3 feet)
Noisy urban area, daytime	80	Vacuum cleaner at 3 meters (10 feet)
Gas lawn mower at 30 meters (100 feet)	70	Normal speech at 1 meter (3 feet)
Commercial area	60	Large business office
Heavy traffic at 90 meters (300 feet)	50	Dishwasher next room
Quiet urban, daytime	40	Theater large conference room (background)
Quiet urban, nighttime	30	Library
Quiet suburban, nighttime	20	Bedroom at night concert hall (background)
Quiet rural, nighttime	10	Broadcast/Recording studio
Lowest threshold of human hearing	0	Lowest threshold of human hearing

Source: Caltrans 2013

Notes: dB decibel

Human Response to Changes in Noise Levels

Under controlled conditions in an acoustics laboratory, the trained, healthy human ear can discern changes in sound levels of 1 dBA when exposed to steady, singlefrequency signals in the mid frequency range. It is widely accepted that the average healthy ear, however, can barely perceive noise level changes of 3 dBA. A change of 5 dBA is readily perceptible, and a change of 10 dBA is perceived as twice or half as loud. A doubling of sound energy results in a 3 dBA increase in sound, which means that a doubling of sound energy (e.g., doubling the volume of traffic on a road) would result in a barely perceptible change in sound level).

Noise Descriptors

Units of measure have been developed to evaluate the longterm characteristics of sound. The equivalent sound level (Leq) is also referred to as the timeaveraged or energyaveraged sound level. It is the equivalent steadystate sound level that in a stated period of timewould contain the same acoustical energy as the timevarying sound level during the same time period. For instance, the 1

Table 9.11-2. FTA Estimated Outdoor Ambient Sound Level (dBA, daytime L_{eq} or CNEL)

Major Surface Transportation Route Type and Distance Range to Studied Receptor	Population Density (people per square mile) in Vicinity of Studied Receptor Location			
	300	1,000	1,000	3,000
<i>Interstate Highway^{1,2}</i>				
10 50 feet	75	75	75	75
50 100 feet	70	70	70	70
100 200 feet	65	65	65	65
200 400 feet	60	60	60	60
400 800 feet	55	55	55	60
800 or more feet	50	50	55	60
<i>Parkway (55 mph) or City Streets (30 mph)^{1,3}</i>				
10 50 feet	70	70	70	70

?

?

?

?

?

?

?

?

?

Table 9.11-3. Land Use Compatibility for Community Noise Environments

Land Use Type	Community Noise Exposure (CNEL)			
	Normally Acceptable ¹	Conditionally Acceptable ²	Normally Unacceptable ³	Clearly Unacceptable ⁴
Residential—low density, single-family, duplex, mobile homes	50 60	55 70	70 75	75 85
Residential—multiple-family	50 65	60 70	70 75	70 85
Transit lodging—motel, hotels	50 65	60 70	70 80	80 85
Schools, libraries, churches, hospitals, nursing homes	50 70	60 70	70 80	80 85
Auditoriums, concert halls, amphitheaters	NA	50 70	NA	65 85
Sports arenas, outdoor spectators sports	NA	50 75	NA	70 85
Playgrounds, neighborhood parks	50 70	NA	67.5 77.5	72.5 85
Golf courses, riding stables, water recreation, cemeteries	50 70	NA	70 80	80 85
Office buildings, business	50 70	67.5 77.5	75 85	NA

□ _____

□ _____

□ _____

□ _____

TABLE 7
NOISE/LAND USE COMPATIBILITY GUIDELINES

Land Use Category	Community Noise Exposure L_{eq} or CNEL, dB					
	55	60	65	70	75	80
Residential						
Transient Lodging-Motels, Hotels						
Schools, Libraries, Churches, Hospitals, Nursing Homes						
Auditoriums, Concert Halls, Amphitheaters						
Sports Arena, Outdoor Spectator Sports						
Playgrounds, Neighborhood Parks						
Golf Courses, Riding Stables, Water Recreation, Cemeteries						
Office Buildings, Business Commercial and Professional						
Industrial, Manufacturing Utilities, Agriculture						

Interpretation (For Land Use Planning Purposes)



Normally Acceptable

Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.



Conditionally Acceptable

New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design.



Normally Unacceptable

New construction or development should be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.



Clearly Unacceptable

New construction or development clearly should not be undertaken.

Table 9.11-4. Imperial County Exterior Noise Limits

Land Use Type(s)	Exterior Noise Limits (L_{eq1hr} , dBA)	
	Daytime ¹	Nighttime ¹
Residential (all zoned R1)	50	45
Residential (all zoned R2)	55	50
Residential (R-3, R-4, and all other residential)	55	50
Commercial	60	55
Manufacturing, all other industrial, including agricultural and extraction industry	70	70
General industrial	75	75

Source: Imperial County

Notes: L_{eq1hr} one -hour energy-equivalent sound level

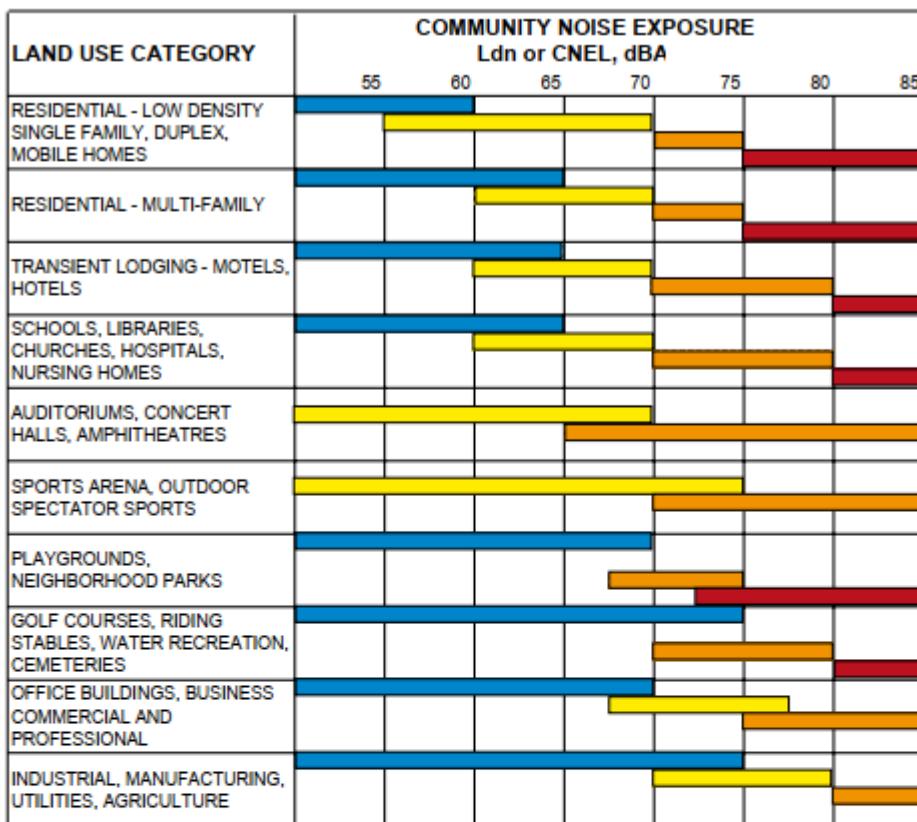
¹ Daytime is defined as 7:00 a.m. to 10:00 p.m.

² Nighttime is defined as 10:00 p.m. to 7:00 a.m.

Per Section 90702.00.B, where two differing land use types adjoin, the sound level limit shall be measured at the property line between the properties. Exclusions to the limits in Table 9.11.4 include Section 90702.E for noise generated by helicopters at heliports or helistops authorized by a conditional use permit.

City of Calipatria General Plan Noise Element

VI. NOISE ELEMENT



 **NORMALLY ACCEPTABLE**
Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.

 **NORMALLY UNACCEPTABLE**
New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

 **CONDITIONALLY ACCEPTABLE**
New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.

 **CLEARLY UNACCEPTABLE**
New construction or development should generally not be undertaken.

Source: *Guidelines for the Preparation and Content of Noise Elements of the General Plan*, California Office of Planning and Research, 2003.

**Land Use Compatibility for
Community Noise Environments**

Figure VI-1

Table 9.11-5, Modeled Existing Operating Industrial Facilities and Major Sound Sources

Facility Name (and tag used in sound propagation model)	Estimated major sound emission sources at each named Facility site (and estimated sound pressure level SPL at indicated distance)
Earthrise Nutritionals (EriseN) and Viridos (Viridos)	pumps (74 dBA at 50 feet) refrigeration compressors and air-cooled condensers (82 dBA at 50 feet) Sonic Sentinel bird -deterrent sound cannon (60 dBA hourly L _{eq} at 50 feet)
Calipatria State Prison (CSP)	pumps (74 dBA at 50 feet) ventilation fans (79 dBA at 50 feet) generator (69 dBA at 50 feet) air compressor (74 dBA at 50 feet)
Hudson Ranch (HR1), Elmore Geothermal Facility (EGF), CalEnergy 1 (CalE1a, CalE1b), CalEnergy 2 (CalE2), CalEnergy 3 (CalE3), CalEnergy 4 (CalE4a, CalE4b, CalE4c), Orni Power Plant Site (Orni21 west and east sites), ATLIS (south and west sites)	pumps (74 dBA at 50 feet) cooling towers (88 dBA at 50 feet) organic vapor turbines (83 dBA at 50 feet) substation transformers (60 dBA at 50 feet)
Brandt Cattle (BrandtC)	pumps (74 dBA at 50 feet) ventilation fans (79 dBA at 50 feet) generator (69 dBA at 50 feet) air compressor (74 dBA at 50 feet)
PV solar electrical generation facility on E. Hoober Road (PVI01 through PVI47)	PV solar inverter (84 dBA at 10 feet)

Sources: FHWA 2006 Dudek 2022 U.S. Department of Energy 2011 Beranek & Ver 1992 Bies & Hansen 1996

Measured Outdoor Ambient Sound

Daytime Samples

S pesse leel S measemets ee te pimate t te Sty ea
 te t atiy a aateie te eisti t amiet ise leels te aea
 iiity ale pies te lati ate a time te ise measemets ee tae at
 st tem S iestiat attee latis as illstate i ie aselie
 t miet S easemet atis e attei De iestiat se a St
 il teati S eel et e S seial me S last iits eippe
 it a ipe plaie ese mipe it pe ampliie e S meets te et
 meia atial Staas stitte S staa a ype peisi s leel mete
 a a its aliat stats ee it a ptale aliat ie a eeee sial eeat
 ee a ate te iel measemet sey

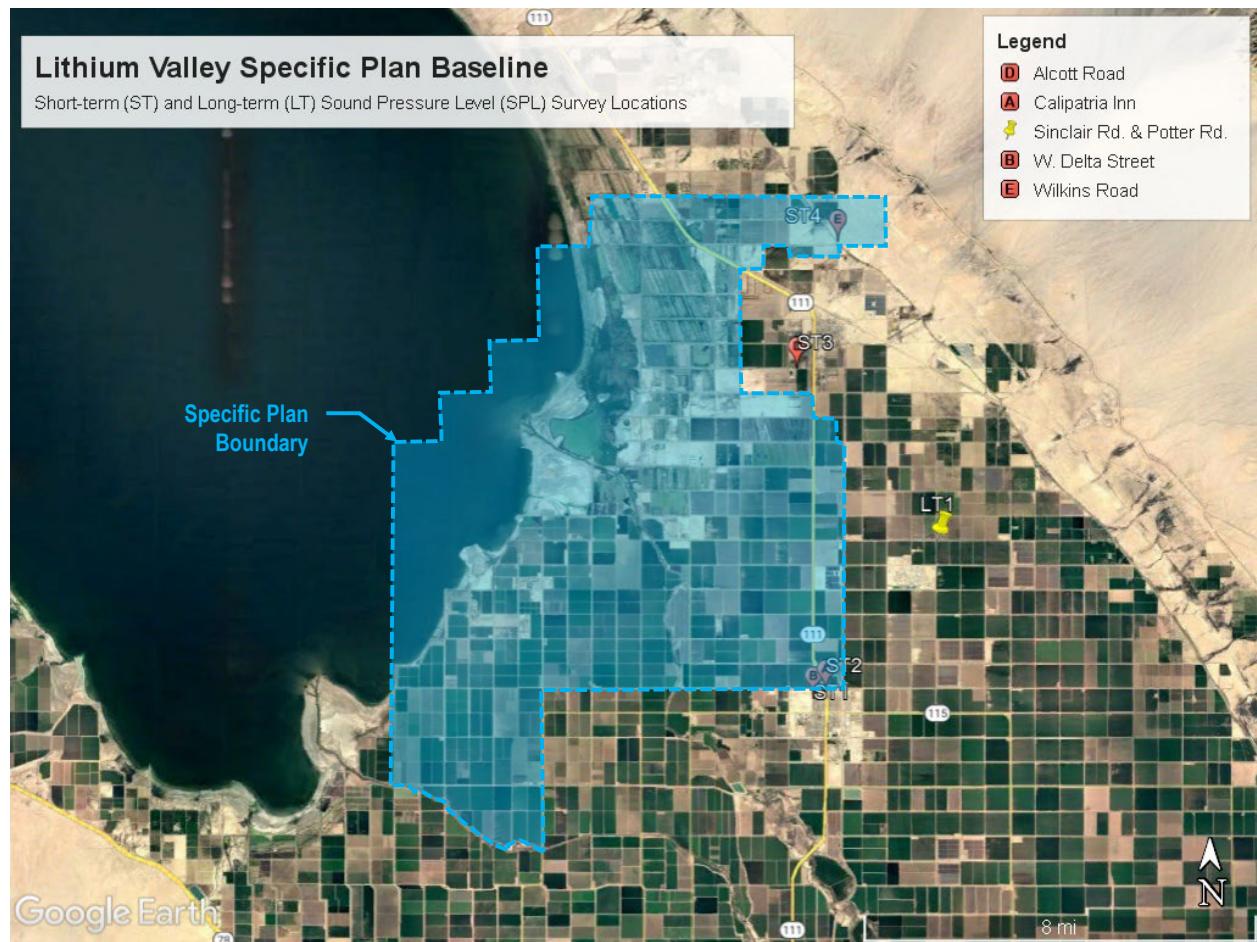
Table 9.11-6, October 27, 2022 Samples of Existing Outdoor Ambient Sound Level

Exhibit A Location Tag	Location Description	Date (mm/dd/yy), Time (hh:mm)	L_{eq}	L_{max}	L_{min}	L₉₀
ST1	West Delta Road	10/27/22, 15:27 to 15:38	52.1	68.5	35.6	41.8
ST2	Calipatria Inn	10/27/22, 15:47 to 15:58	53.2	67.6	36.5	45.1
ST3	Alcott Road	10/27/22, 16:11 to 16:22	62.3	79.8	30.7	36.8
ST4	Wilkins Road	10/27/22, 16:37 to 16:48	60.0	78.5	30.6	42.5

Source: Dudek 2022

Investigator field data sheets, along with field photographs of the ST1 through ST4 positions, can be found in Appendix E Noise Resources. These notes provide important clues on what was actually measured, such as the fly-over of three Huey Cobra helicopters at 4:17 p.m. during the measurement period at ST3 on Alcott Road. The flyover event not only produced a relatively high Lmax value, but it correspondingly raised the Leq value of the approximate ten-minute duration measurement to over 60 dBA, when the Lmin of 30.7 dBA and L90 value of 36.8 dBA indicate the sound environment without the flyover was much quieter.

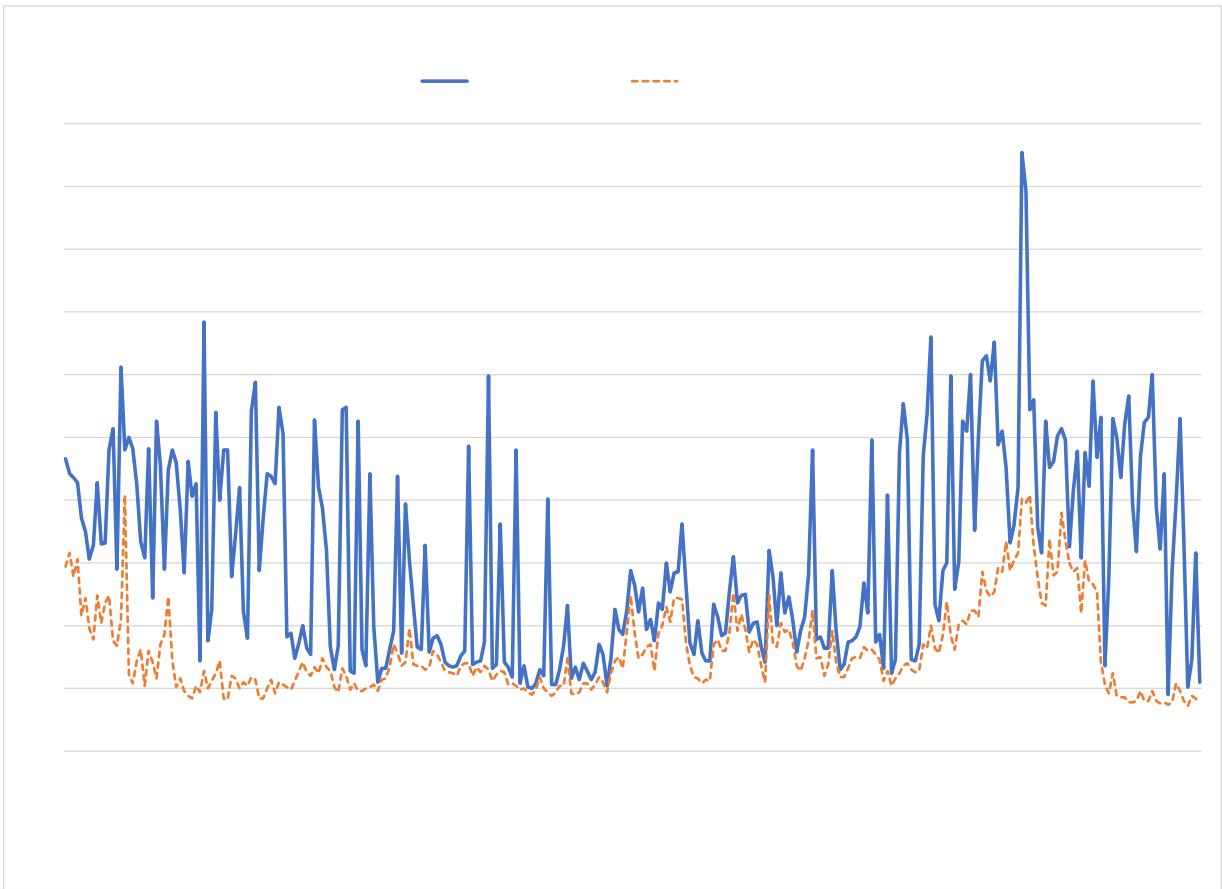
The Calipatria Inn measurement location (ST2) is very comparable to the outdoor ambient noise survey position 1, shown in Figure 9-16, 2012 Outdoor Ambient Sound Level Survey Positions which was performed in 2012 for the City of Calipatria 2035 General Plan Noise Element. The measured Leq value of 66.5 dBA and Lmax of 84.9 dBA from that earlier field survey (City of Calipatria 2013) are comparable to the ST2 metrics presented in Table 9.11-6 from the October 27, 2022 field survey, with the approximate 6 dB differences likely attributed to horizontal distance of the measurement location from the SR111 roadway and traffic flows.



VI. NOISE ELEMENT



Figure VI-2



9.12. TRIBAL CULTURAL RESOURCES

9.12.1. Introduction

This section describes the existing tribal cultural resources (TCRs) conditions of the Specific Plan and vicinity, and identifies associated regulatory requirements, thresholds of significance, impact analysis, cumulative impacts, mitigation measures, level of significance after mitigation, and references. Information contained in this section is based on survey and evaluation of cultural resources within the Study Area and surrounding area.

As part of the public outreach process, the Quechan tribe was engaged to provide input on Lithium Valleys draft report of the Blue Ribbon Commission on Lithium Extraction in California, dated September 21, 2022. In the tribes response letter, the Quechan Tribal President expressed their frustration with the lack of government-to-government tribal consultation conducted by the County. In addition, the tribe states that the draft report should state what impacts to the Salton Sea landscape have already occurred from the current geothermal and lithium extraction facilities in the area.

9.12.2. Methodology and Sources

A project with an effect that may cause a substantial adverse change in the significance of a TCR is a project that may have a significant effect on the environment (PRC Section 21084.2.). AB 52 requires a TCR to have tangible, geographically defined properties that could be impacted by an undertaking. An appropriate approach to potential impacts to TCRs is developed in response to the identified presence of a TCR by California Native American Tribes through the process of

9.13. WILDFIRE

9.13.1. Introduction

The purpose of this section is to provide information to establish the existing conditions for Wildfire in the Study Area of the County of Imperial (County) Lithium Valley Specific Plan (Specific Plan Project). This Wildfire Existing Conditions Technical Report will support development of the Specific Plan and associated environmental document.

9.13.2. Methodology and Sources

The following analysis considers the existing environmental setting and regulatory environment applicable to the Study Area. The analysis determines whether implementation of the Specific Plan could create significant wildfire hazards to the public or the environment. The analysis considers the existing climate, terrain, and vegetation conditions within the Study Area based, in part, on information obtained from the following wildfire-related databases:

- California Department of Forestry and Fire Protection Fire and Resource Assessment Program GIS Data
- Office of the State Fire Marshal Fire Hazard Severity Zone Maps

Additionally, a review of existing documents, literature, and regional data was conducted for this report, including peer-reviewed scientific papers, resource agency documents and data, national, state, regional, and local geographic information system (GIS) datasets, and all other relevant information and data. This section also uses information provided in other sections as they relate to wildfire (ex. Biology, Geology and Soils, etc.). Specific sources used are cited throughout this report with references provided.

9.13.3. Applicable Regulations

Federal Regulations

National Fire Protection Association Codes, Standards, Practices, and Guides

National Fire Protection Association codes, standards, recommended practices, and guides are developed through a consensus standards development process approved by ANSI. This process brings together professionals representing varied viewpoints and interests to achieve consensus on fire and other safety issues. National Fire Protection Association standards are recommended guidelines and nationally accepted good practices in fire protection but are not law or codes unless adopted as such or referenced as such by the California Fire Code (CFC) or the Fire Authority Having Jurisdiction (FAHJ).

Federal Wildland Fire Management Policy

The Federal Wildland Fire Management Policy was developed in 1995 and updated in 2001 and again in 2009 by the National Wildfire Coordinating Group, a federal multi-agency group that establishes consistent and coordinated fire management policy across multiple federal jurisdictions. An important component of the Federal Wildland Fire Management Policy is the acknowledgment

■

■

■

■

■

■

■

■

■

■

■

■

■

■

■

■

■

■

■

■

■

■

■

■

10. References

Land Use

Airport Land Use Commission (1982). *Airport Land Use Compatibility Plan* Retrieved from <https://www.icpds.com/assets/hearings/airportland-use-commission/alue-compatibility-plan-1996-part-1.pdf>.

California Department of Conservation (CA DOC). *Land Conservation (Williamson Act) Questions and Answers* Retrieved from <https://www.conservation.ca.gov/dlrp/wa/Pages/LCAQandA.aspx>

Dobson, P A. Naod, B. Maryjo et. Al. Submitted by Lawrence Berkeley National Laboratory.
Characterizing the Geothermal Lithium Resource at the Salton Sea. November 12, 2023.

Imperial County Planning and Development Services Department (1993). *General Plan Overview*. Retrieved from <https://www.icpds.com/assets/planning/general-plan-overview.pdf>.

Imperial County Planning and Development Services Department (1993). *General Plan, Land Use Element* Retrieved from <https://www.icpds.com/assets/planning/landuse-element/land-use-element-2015.pdf>.

Imperial County Planning and Development Services Department. (1994) *Niland Urban Area Plan*. Retrieved from <https://www.icpds.com/assets/planning/community-plans/niland-urban-area-plan.pdf>.

Imperial County Planning and Development Services Department(2008). *General Plan, Circulation and Scenic Highways Element* Retrieved from <https://www.icpds.com/assets/planning/circulation-scenic-highway-element-2008.pdf>.

Imperial County Planning and Development Services Department (2016). *General Plan, Conservation and Open Space Element*. Retrieved from <https://www.icpds.com/assets/planning/conservation/open-space-element-2016.pdf>.

Imperial County Planning and Development Services Department. (2015). *General Plan, Renewable Energy and Transmission Element*. Retrieved from <https://www.icpds.com/assets/planning/renewable-energy-and-transmission-element-2015.pdf>.

Imperial County Planning and Development Services Department (2015). *General Plan, Agricultural Element*. Retrieved from <https://www.icpds.com/assets/planning/agricultural-element-2015.pdf>.

Imperial County. (2022). *Viking Solar Energy Generation and Storage Project Draft Environmental Impact Report. Volume I*. Retrieved from <https://files.ceqanet opr.ca.gov/2696792/attachment/KzScjjRaS1SS3Zc6jsROREXL7hZ7FGsvGKclmeTwchBi0bc6C27mZ2wGAUX1VmhYC01j3eQ24xbJbXaN0>



11. Acknowledgments

The successful completion of this report is a testament to the collaborative efforts and expertise of many individuals within Imperial County and beyond. The County extends our sincere gratitude to those who have contributed significantly to the development and improvement of this document. Their thoughtful contributions have significantly enriched the content and strengthened the overall quality of our work.

A special thank you to the following Lithium Valley Academic Task Force Members and Technical Advisory Group Members for their thorough examination and constructive comments:

- ☒ James J. A. Blair
- ☒ Dr. Alida Cantor
- ☒ Toni Symonds
- ☒ Ali Sharbat
- ☒ Dustin Mulvaney
- ☒ Kate Berry
- ☒ Michael A. McKibben
- ☒ Felicia Sirchia
- ☒ Chris Benner
- ☒ Jon Trujillo
- ☒ Mariela Moran



APPENDIX A

INFRASTRUCTURE ASSESSMENT

January 2024



PREPARED BY:

RICK ENGINEERING COMPANY

Supported By:

Dudek, Mead & Hunt, Coffman Engineering, Railpros

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

1. Introduction

1.1 PURPOSE AND INTENT OF THE INFRASTRUCTURE ASSESSMENT

1.2 METHODOLOGY



SOURCE: Imperial County

INFRASTRUCTURE ASSESSMENT
FIGURE 1-, Study A rea



1.3 REGIONAL CONTEXT

1.4 EXECUTIVE SUMMARY

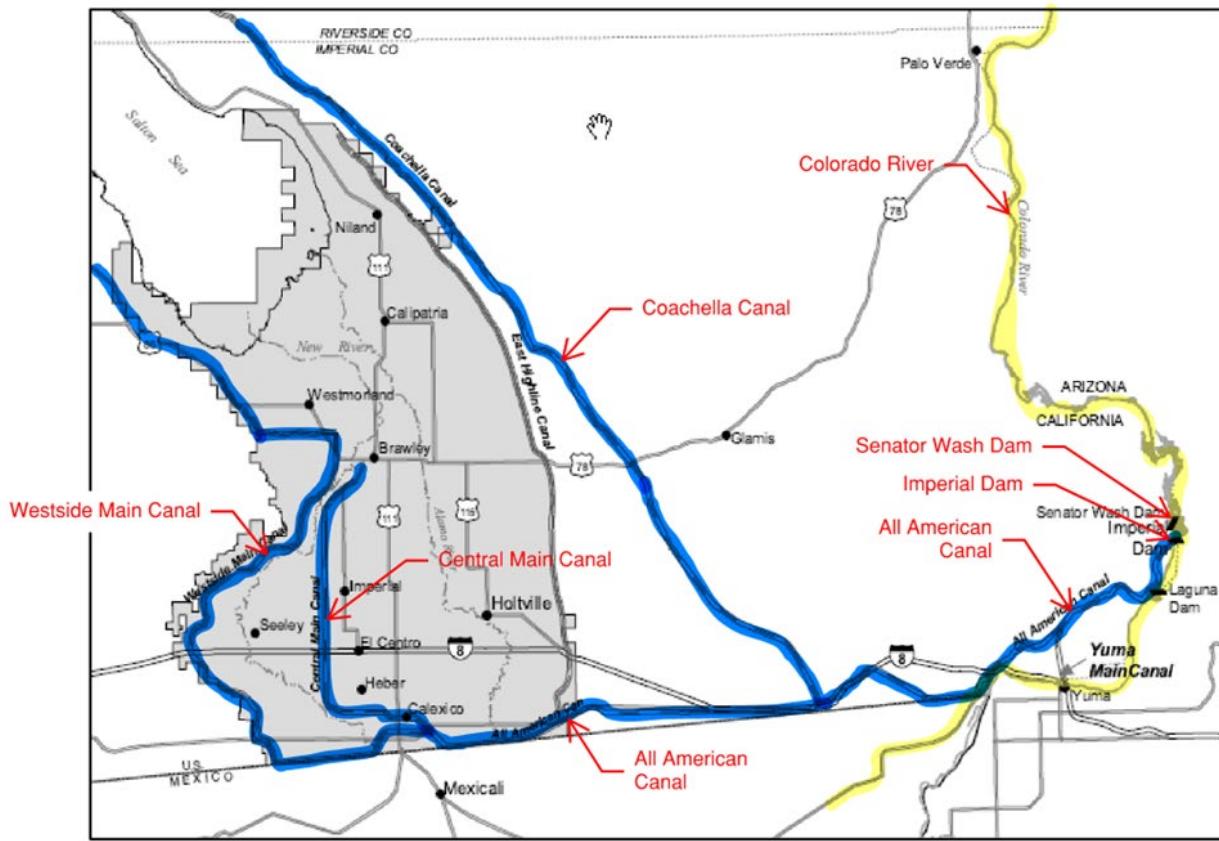
Table 1-1, Executive Summary

	☒

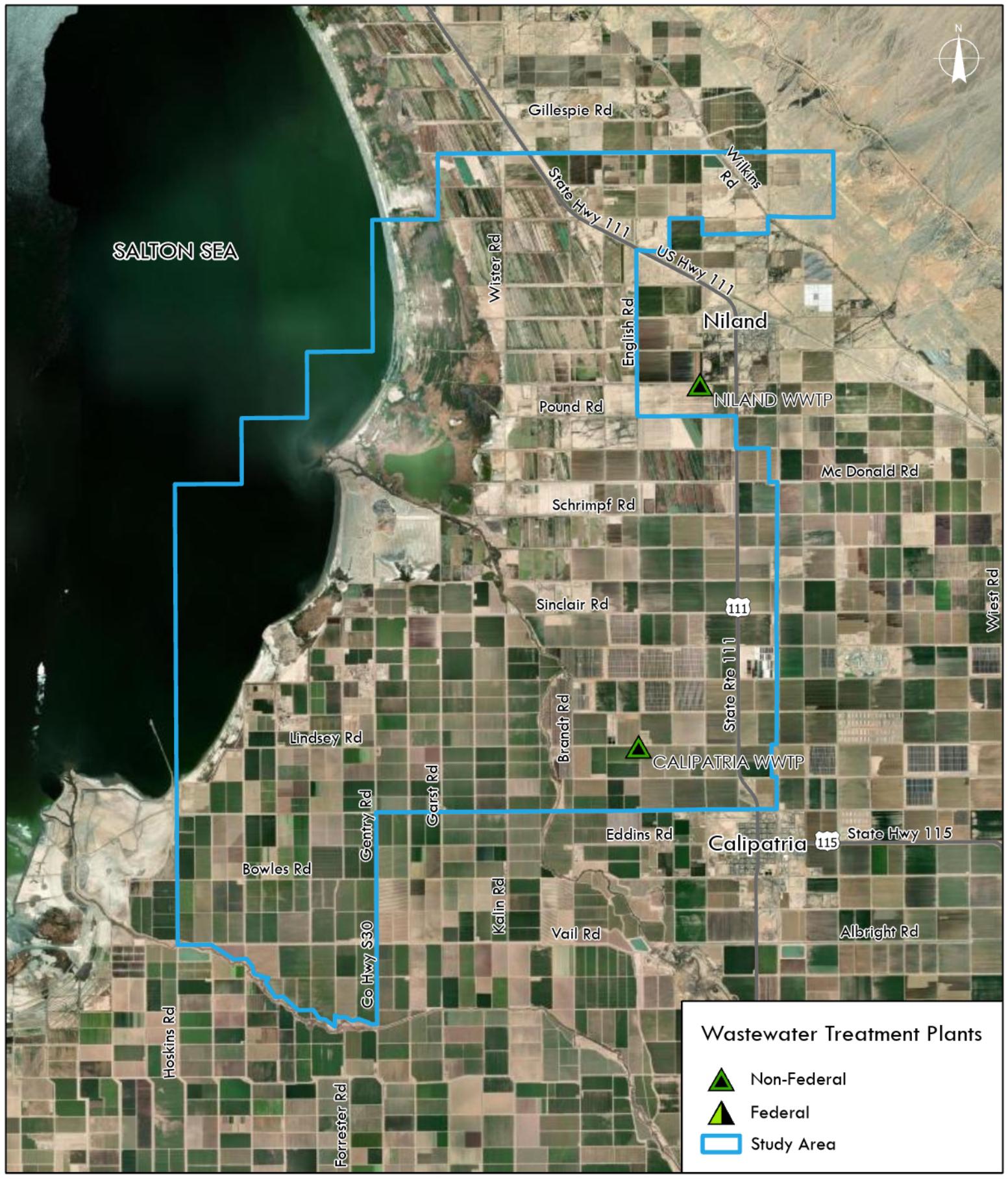
2. Wet Utilities

2.1 WATER SYSTEM

Table 2-1, IID Water Transmission System



2.2 WASTEWATER SYSTEM



SOURCE: US Environmental Protection Agency

INFRASTRUCTURE ASSESSMENT
FIGURE 2-2, Wastewater Treatment Plants



2.3 STORMWATER & DRAINAGE SYSTEM

Table 2-2, Watershed Intersected by the Study Area

Basin (HUC, size)	Subbasin (HUC, size)	Watershed / Sub-watershed (HUC, size)	Study Area, in mi ² (percent of watershed)



INFRASTRUCTURE ASSESSMENT

FIGURE 2-3, Hydraulic Exhibit

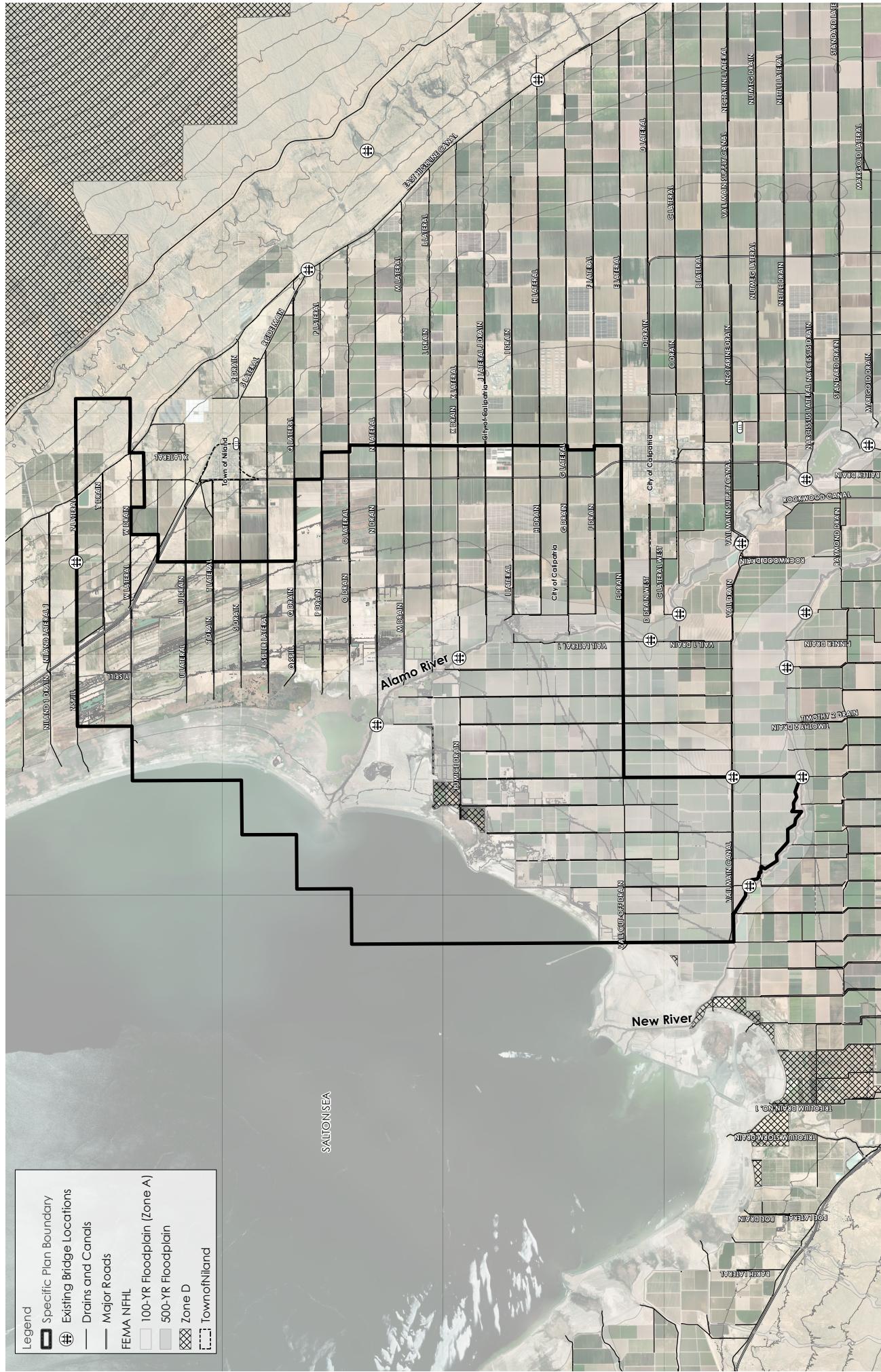


Table 2-3, Waterways and Canals Intersected by the Study Area



INFRASTRUCTURE ASSESSMENT
FIGURE 2-4, Water Quality Exhibit

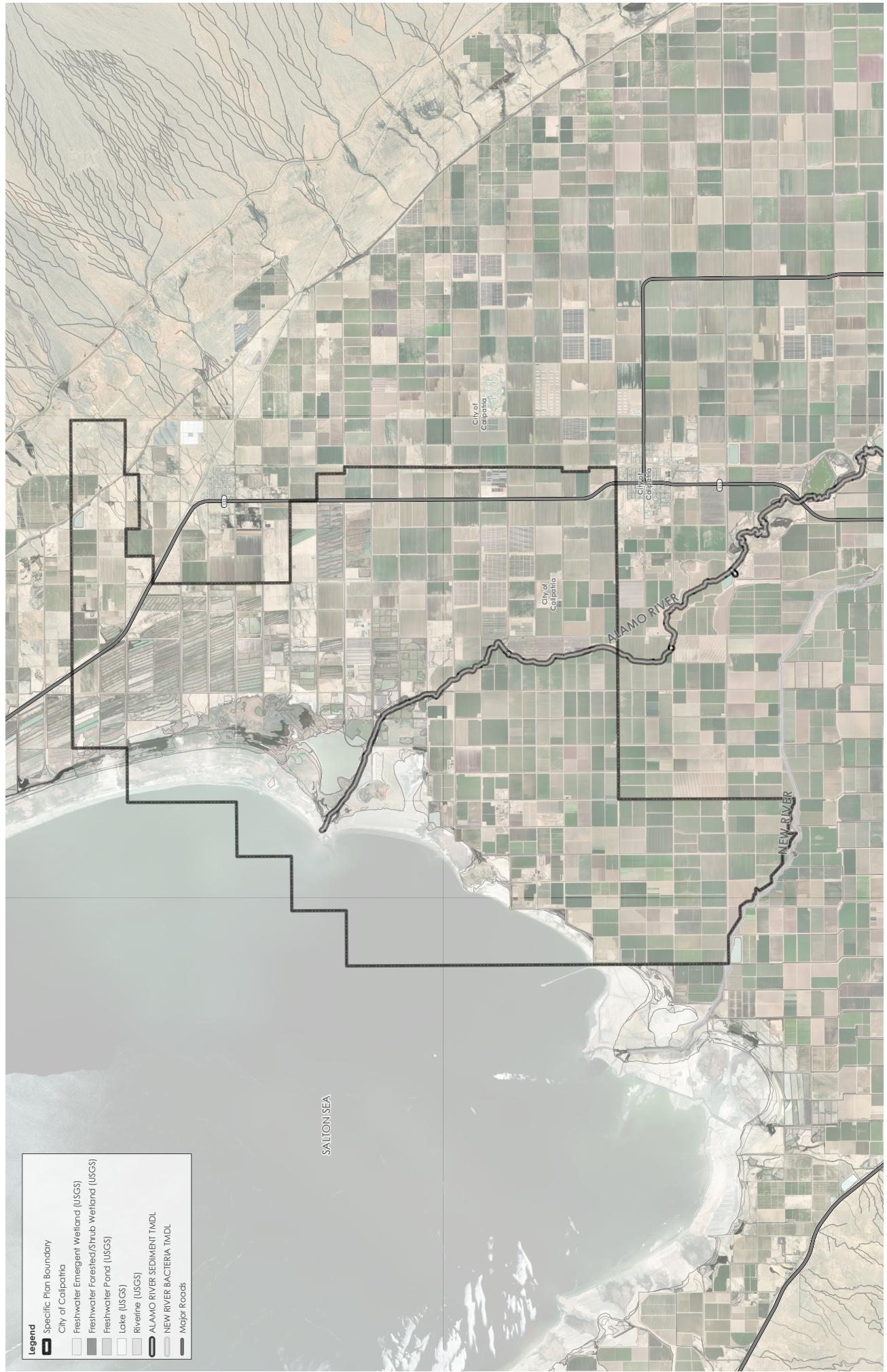


Table 2-4, Alamo River TMDLs

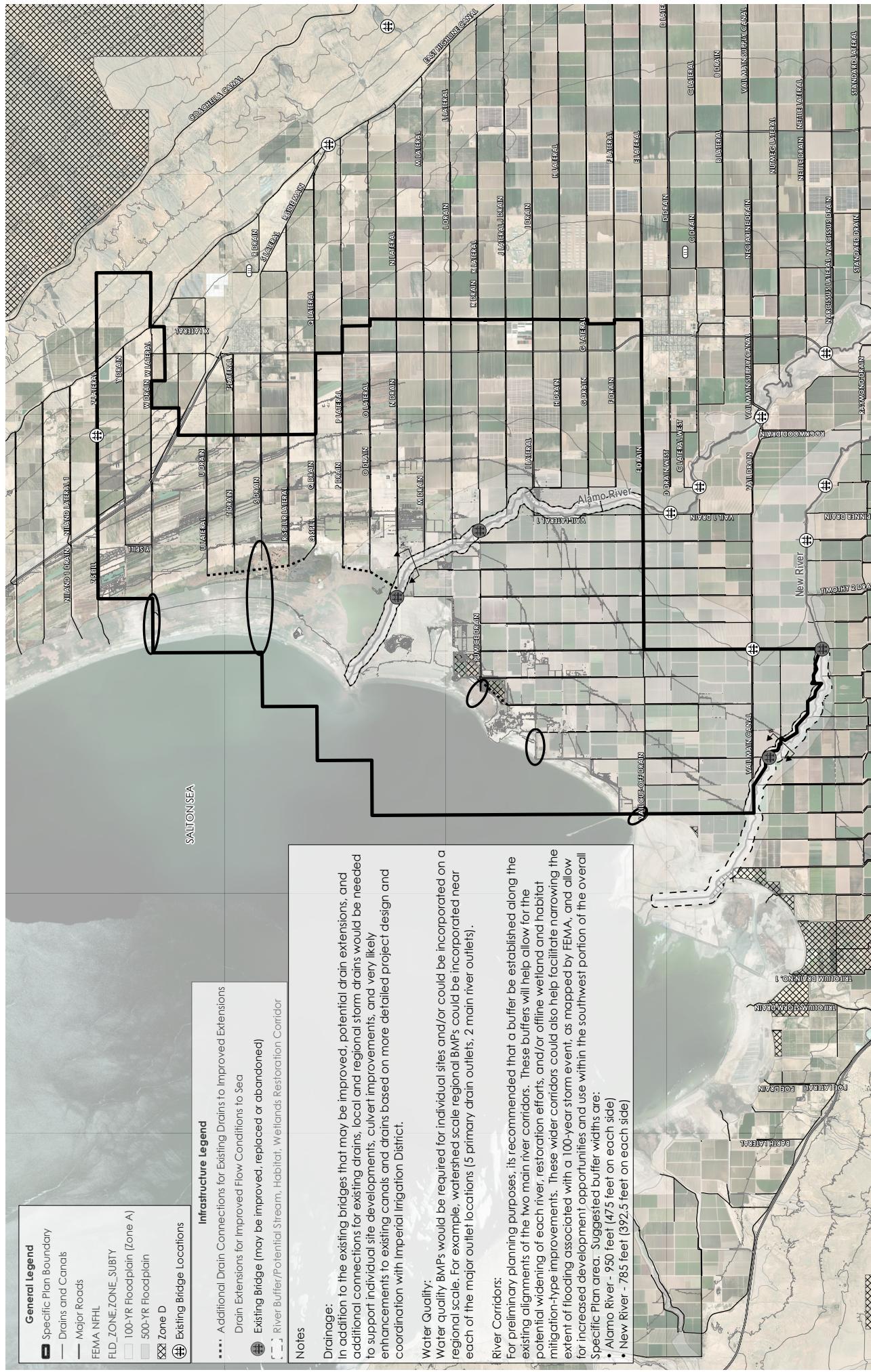
Table 2-5, New River TMDLs

	_____	_____	_____
	_____	_____	_____

μ μ



FIGURE 2-5, Drainage Infrastructure Opportunities

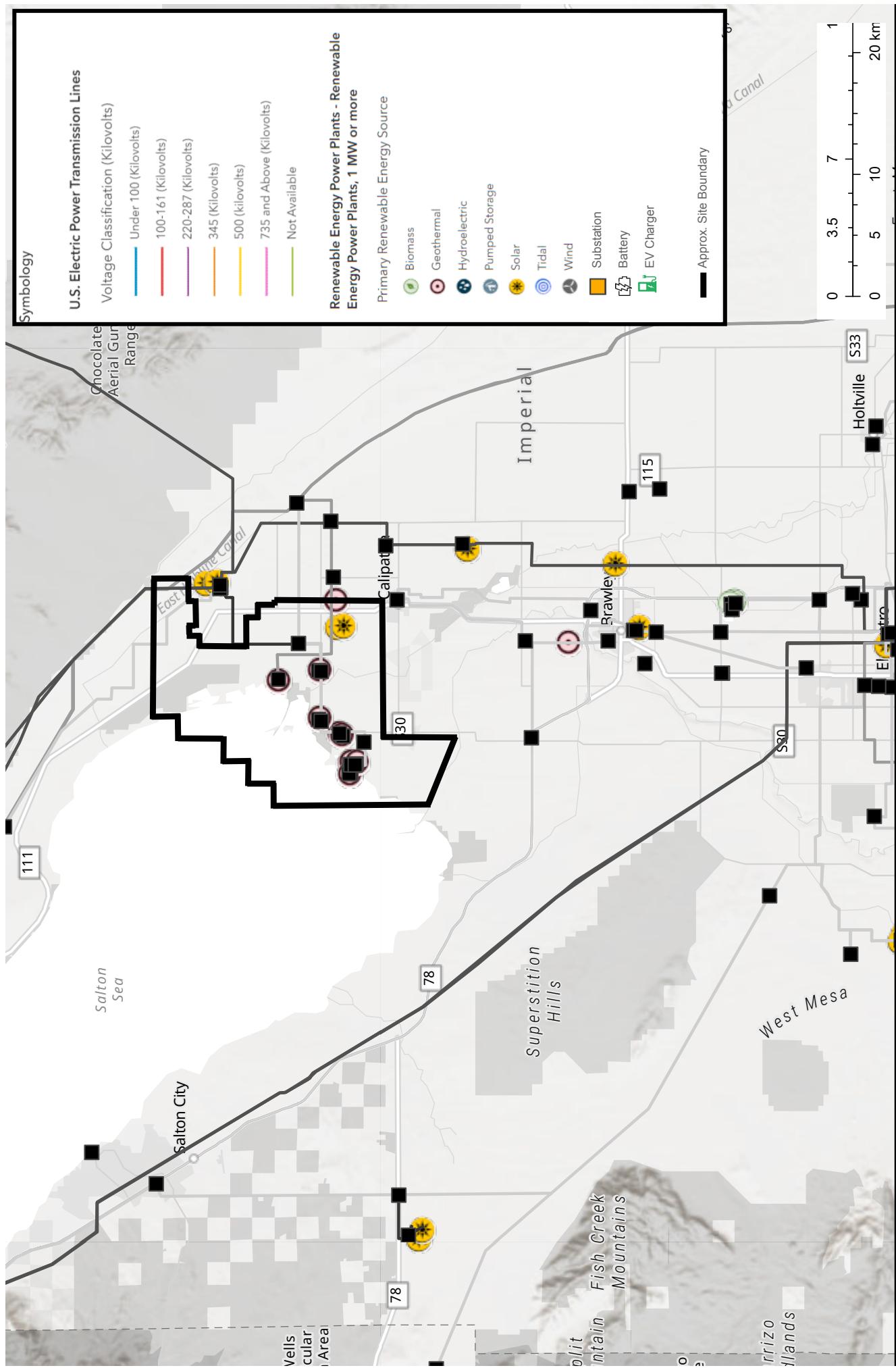


3. Dry Utilities

3.1 ELECTRICITY AND ENERGY GRID



INFRASTRUCTURE ASSESSMENT
Substations, Transmission & Renewables

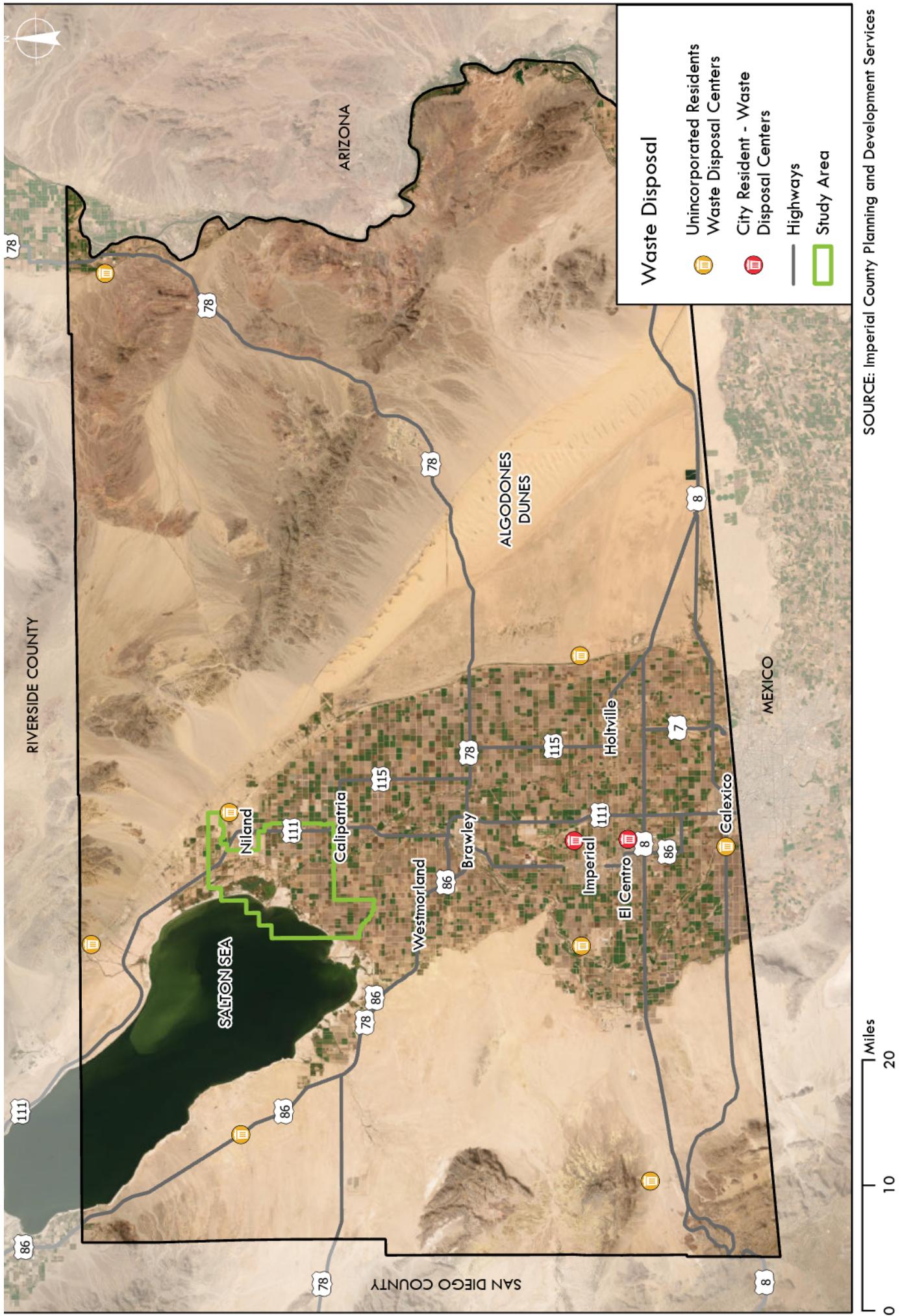


3.2 SOLID WASTE, RECYCLING, AND COMPOSTING

Table 3-1, Functioning Solid Waste Facilities

|--|--|



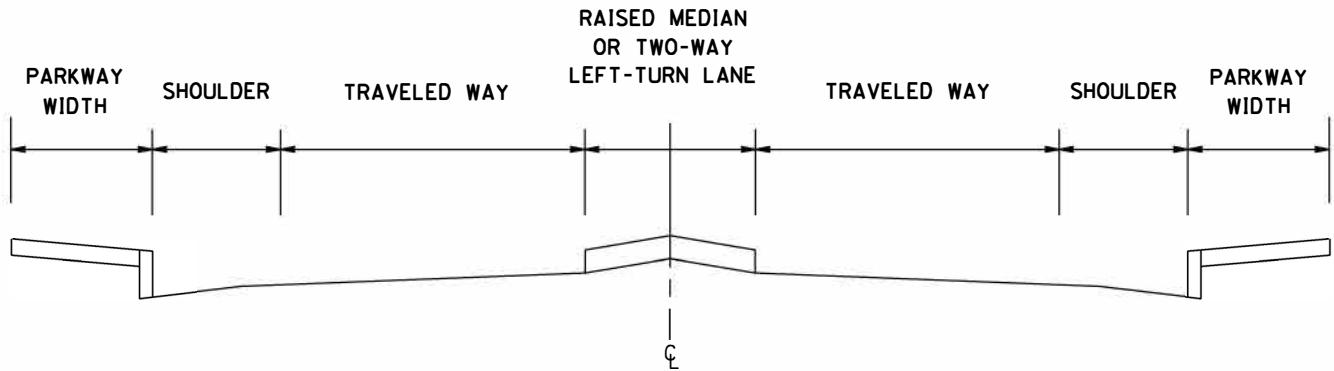


INFRASTRUCTURE ASSESSMENT
FIGURE 3-2, Waste Disposal Sites

3.3 TELECOMMUNICATIONS

4. Roads and Bridges

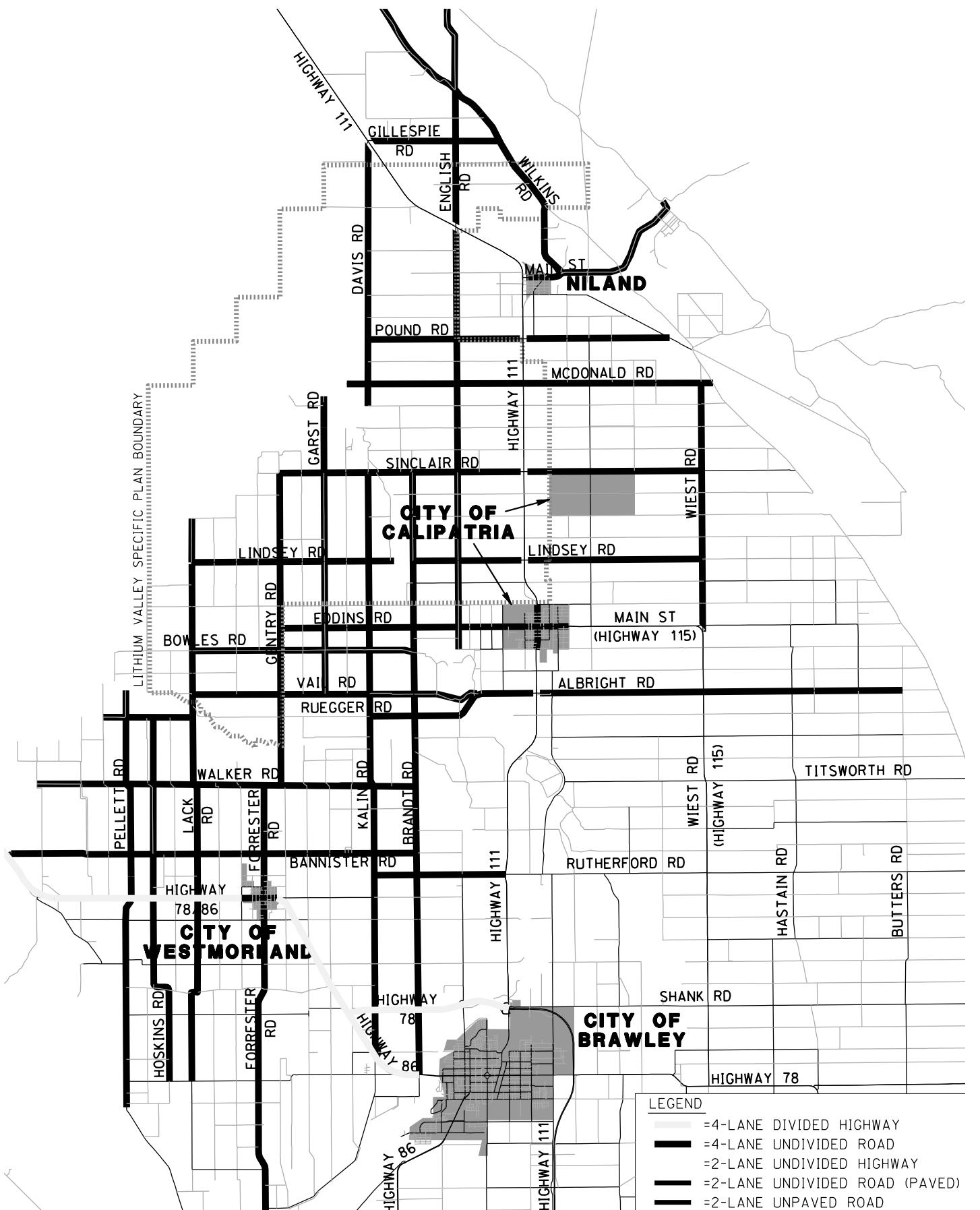
4.1 ROADS



ROADWAY CLASSIFICATION	MEDIAN OR TWTL	TRAVELED WAY	SHOULDER	PARKWAY	CURB TO CURB WIDTH	RIGHT OF WAY
EXPRESSWAY	46'	3 - 12'	8' - MEDIAN 10' - OUTER	28'	154'	210'
PRIME ARTERIAL	18'	3 - 12'	8'	15'	106'	136'
MINOR ARTERIAL	18'	2 - 12'	8'	10'	82'	102'
COLLECTOR	-	2 - 12'	8'	12'	60'	84'
MINOR COLLECTOR	-	1 - 12'	8'	15'	40'	70'
INDUSTRIAL COLLECTOR	12'	2 - 12'	9'	10'	78'	98'
INDUSTRIAL MINOR	-	1 - 13'	9'	10'	44'	64'
LOCAL COUNTY	-	1 - 12'	8'	10'	40'	60'

INFRASTRUCTURE ASSESSMENT
FIGURE 4-1, Typical Cross-Sections by Roadway Classification Type

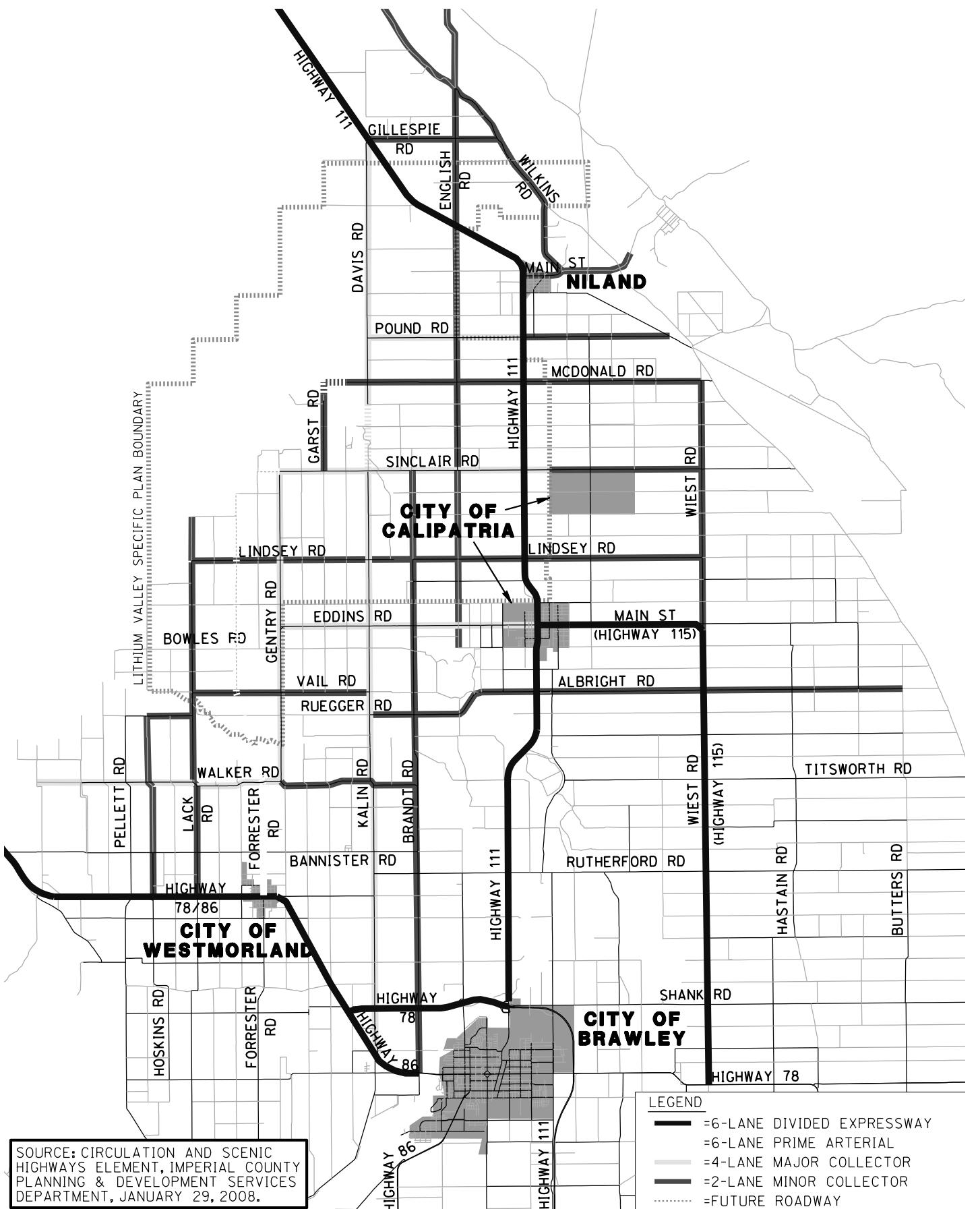




INFRASTRUCTURE ASSESSMENT

FIGURE 4-2, Existing Roadway Configurations in Transportation Study Area

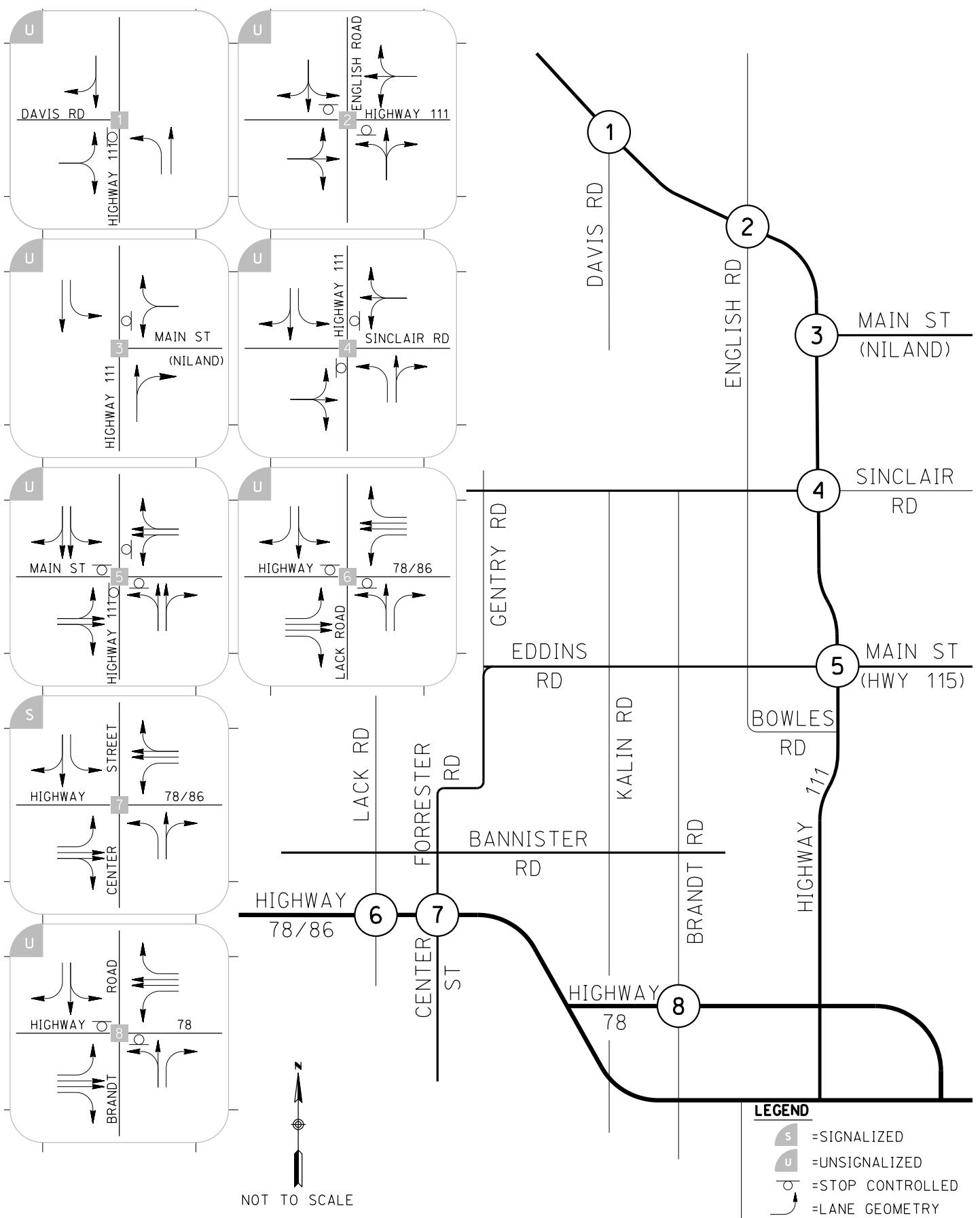




INFRASTRUCTURE ASSESSMENT

FIGURE 4-3, General Plan Circulation Element Roadway Classifications in Transportation Study Area

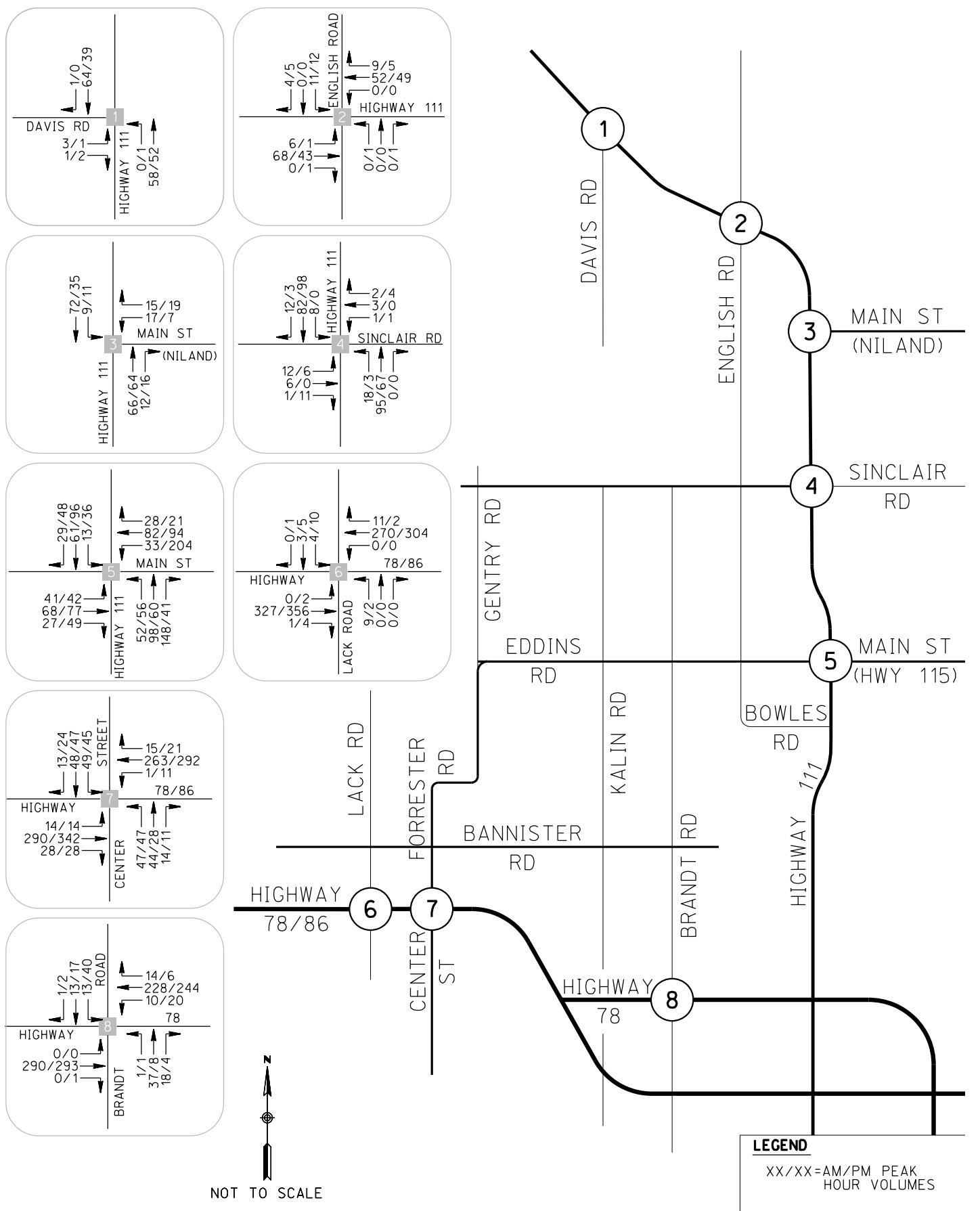




INFRASTRUCTURE ASSESSMENT

FIGURE 4-4, Existing Study Intersection Lane Geometry and Traffic Controls

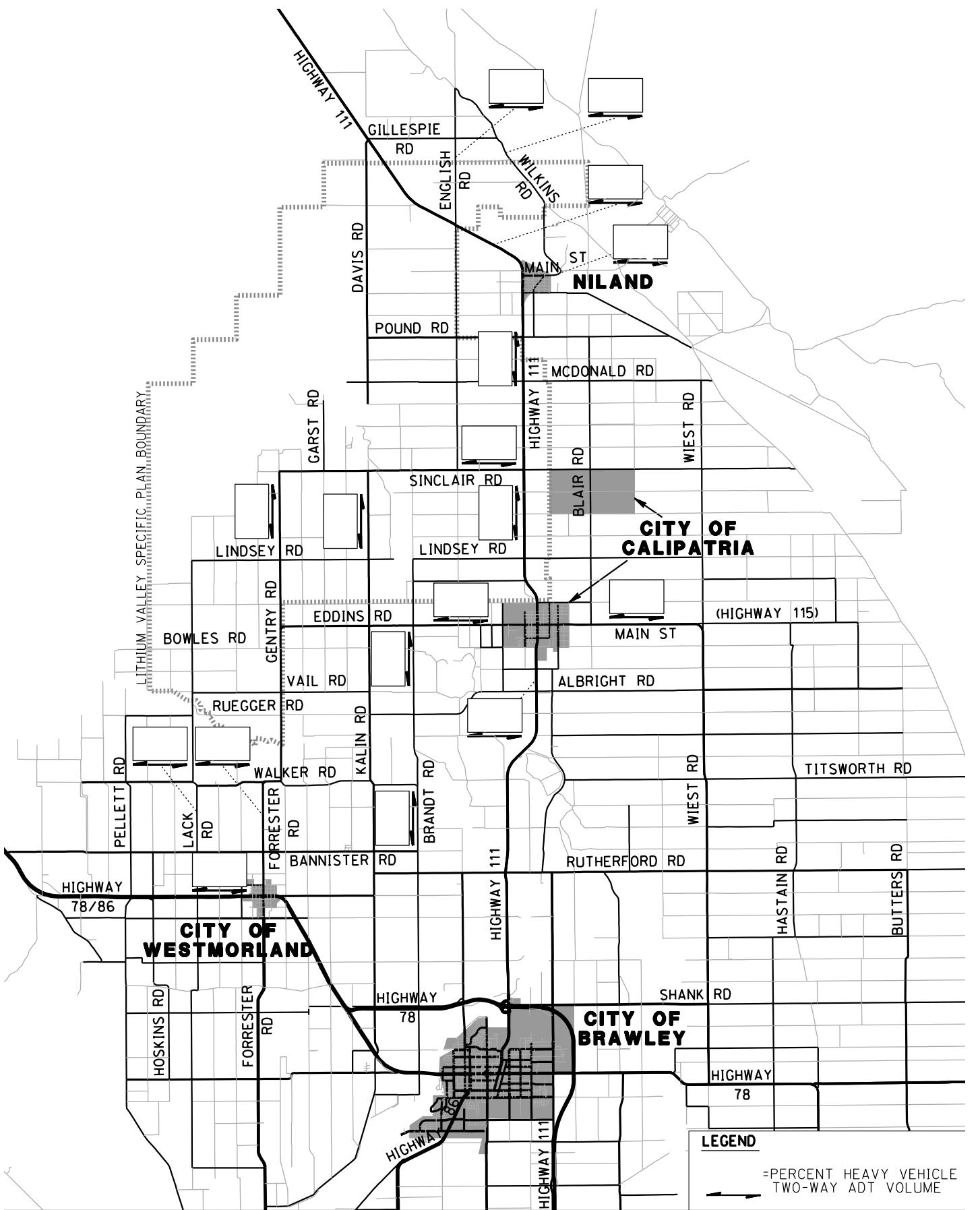




INFRASTRUCTURE ASSESSMENT

FIGURE 4-5, Existing Conditions Intersection Volumes In Transportation Study Area





INFRASTRUCTURE ASSESSMENT

FIGURE 4-6, Existing Conditions Roadway Segment Volumes In Transportation Study Area



Table 4-1, LOS Criteria for Intersections

	\leq	\leq	

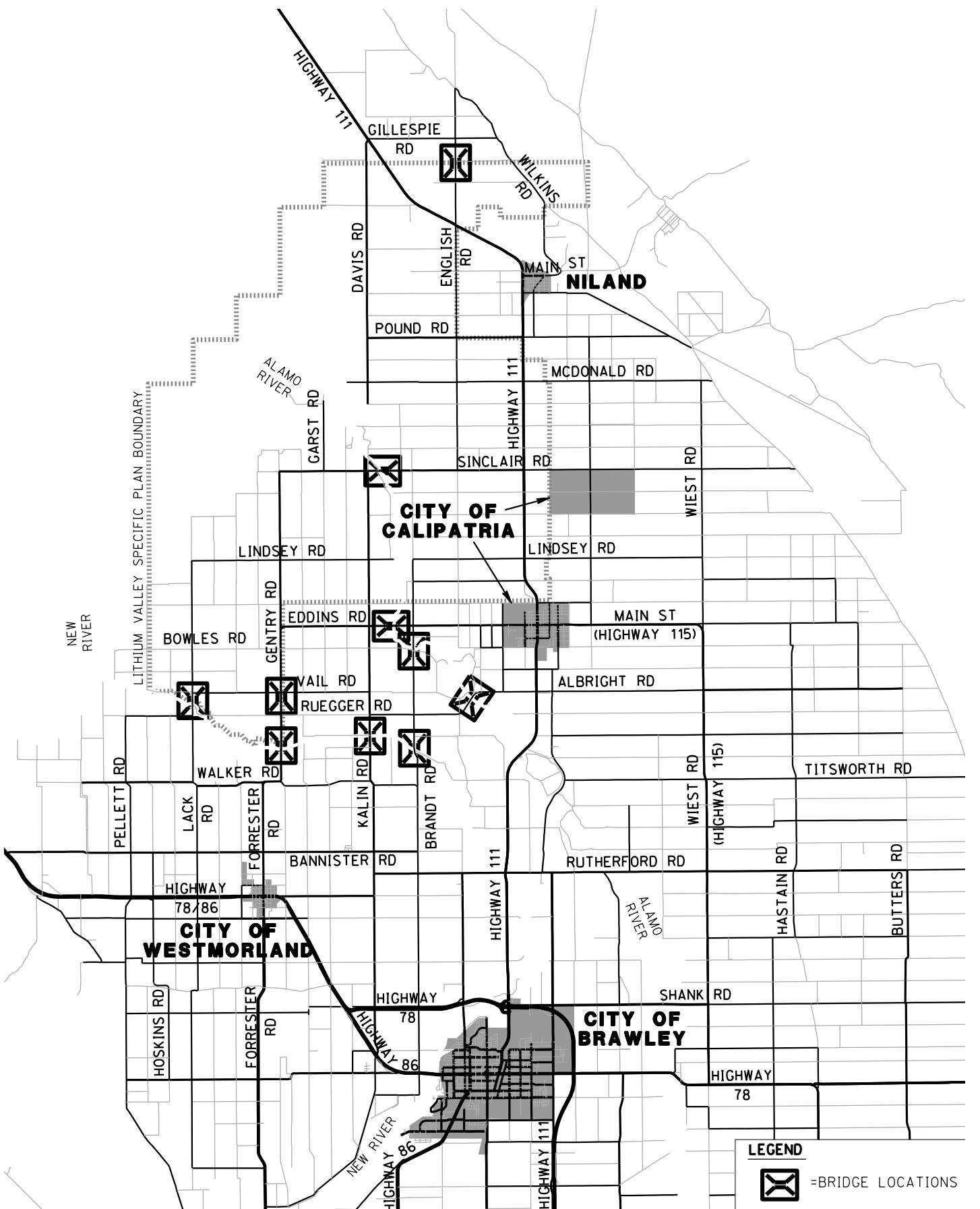
Table 4-2, Existing Conditions Intersection Operations

Table 4-3, LOS Criteria For Roadway Segments

Table 4-4, Existing Conditions Roadway Segment Operations

Table 4-5, Existing Roadway Inventory and Conditions

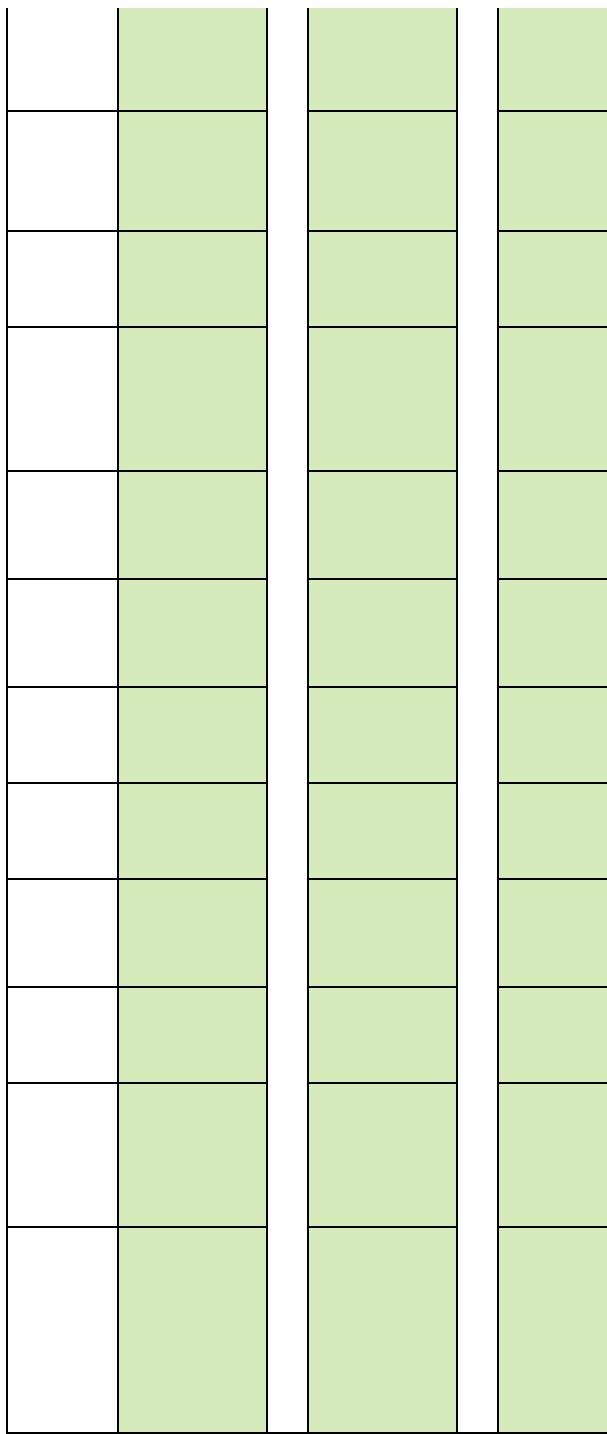
4.2 BRIDGES



INFRASTRUCTURE ASSESSMENT
FIGURE 4-7, Existing Bridges in Transportation Study Area



Table 4-6, Existing Bridge Inventory and Conditions



5. Rail

5.1 RAIL



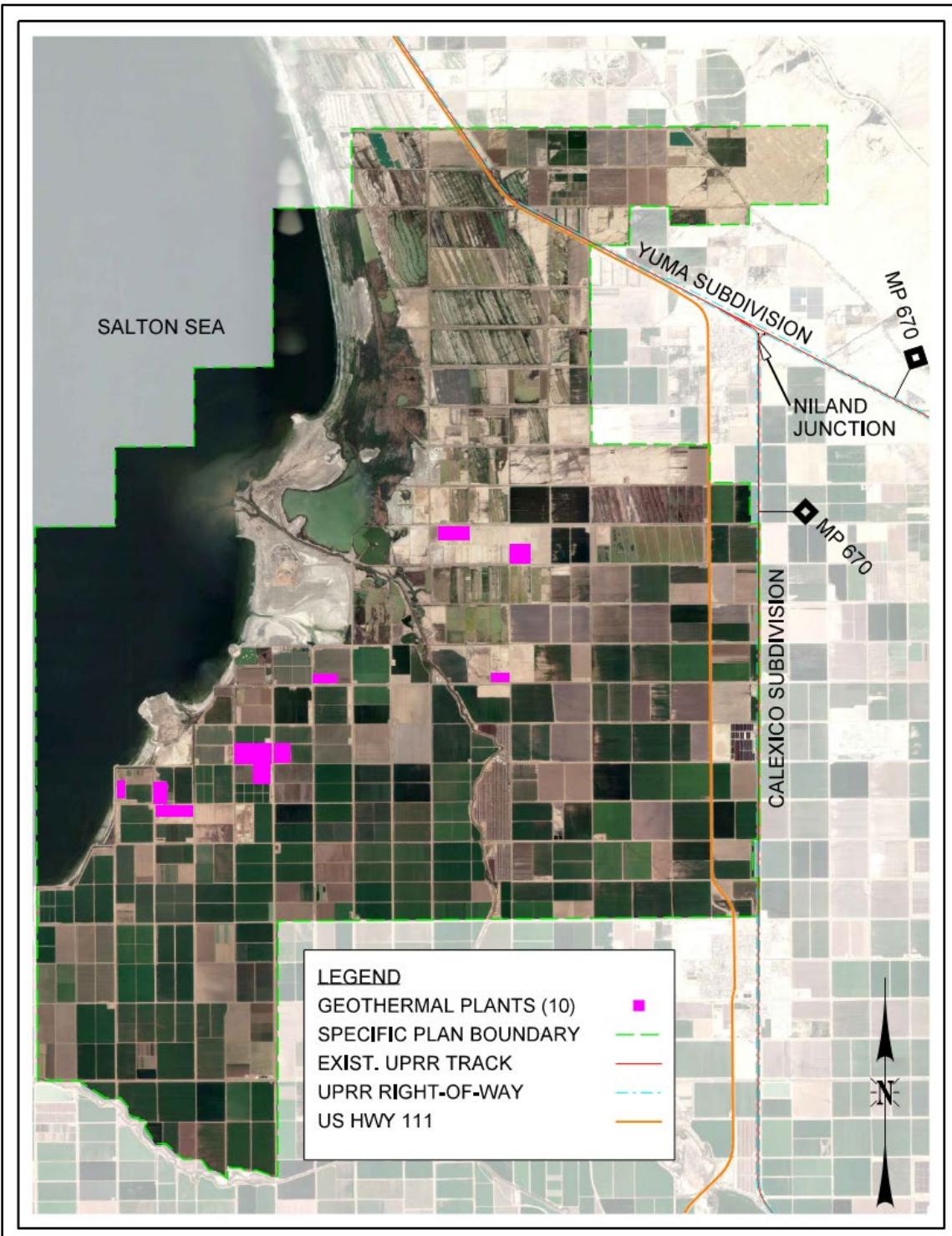
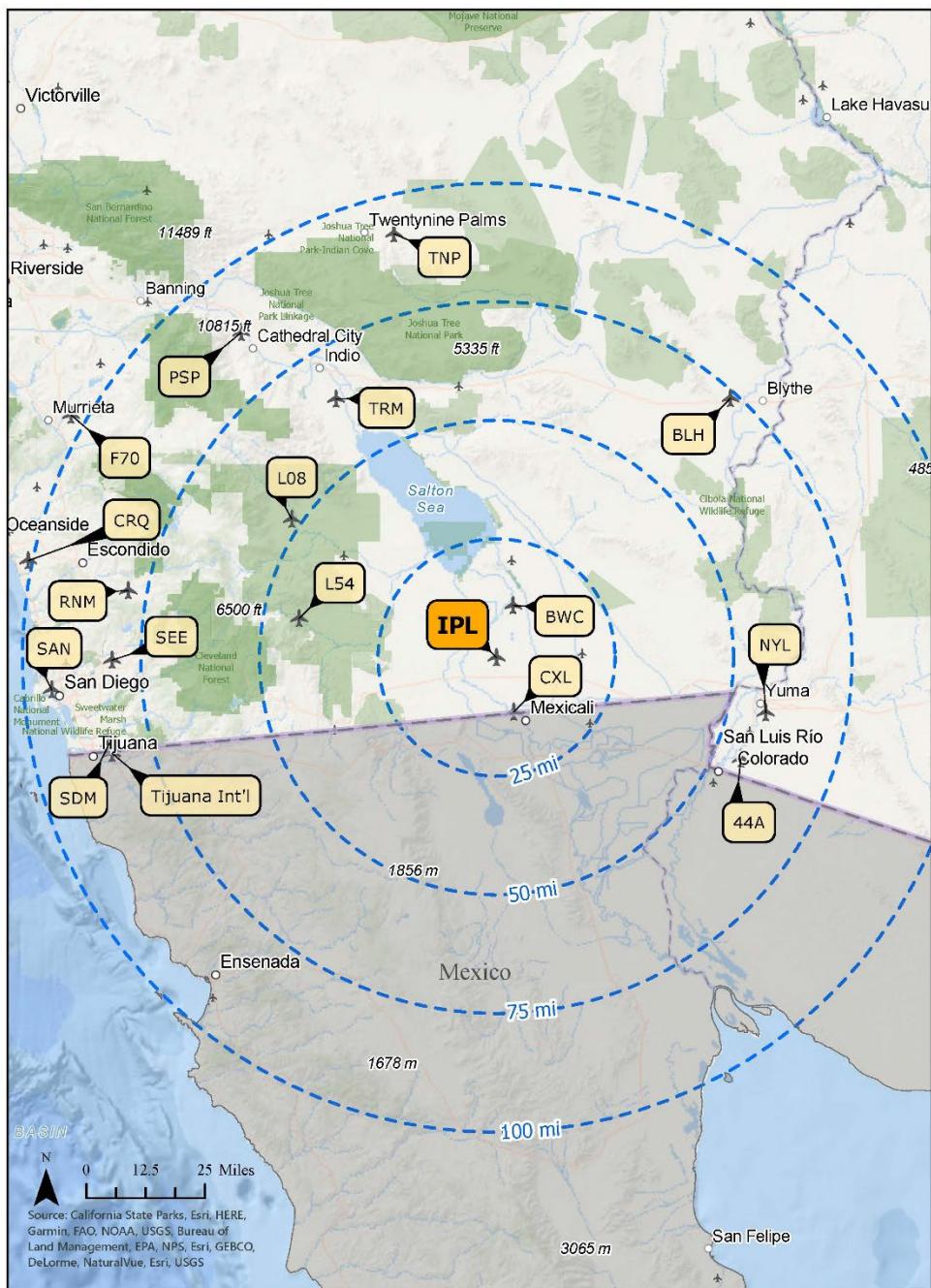


Table 5-1, Union Pacific Railroad (UPRR) Corridor Data

6. Airports



6.1 IMPERIAL COUNTY AIRPORT (IPL)

Table 6-1, Aircraft Category

Table 6-2, Aircraft Group

FIGURE 6-2, IPL Airport Property Inventory Map



Table 6-3, IPL Runway Attributes

INFRASTRUCTURE ASSESSMENT
Existing Critical Airport Runway and Taxiway Design Standards



Table 6-4, IPL Instrument Flight Procedures



INFRASTRUCTURE ASSESSMENT
FIGURE 6-4, Current Aircraft Use Limitations

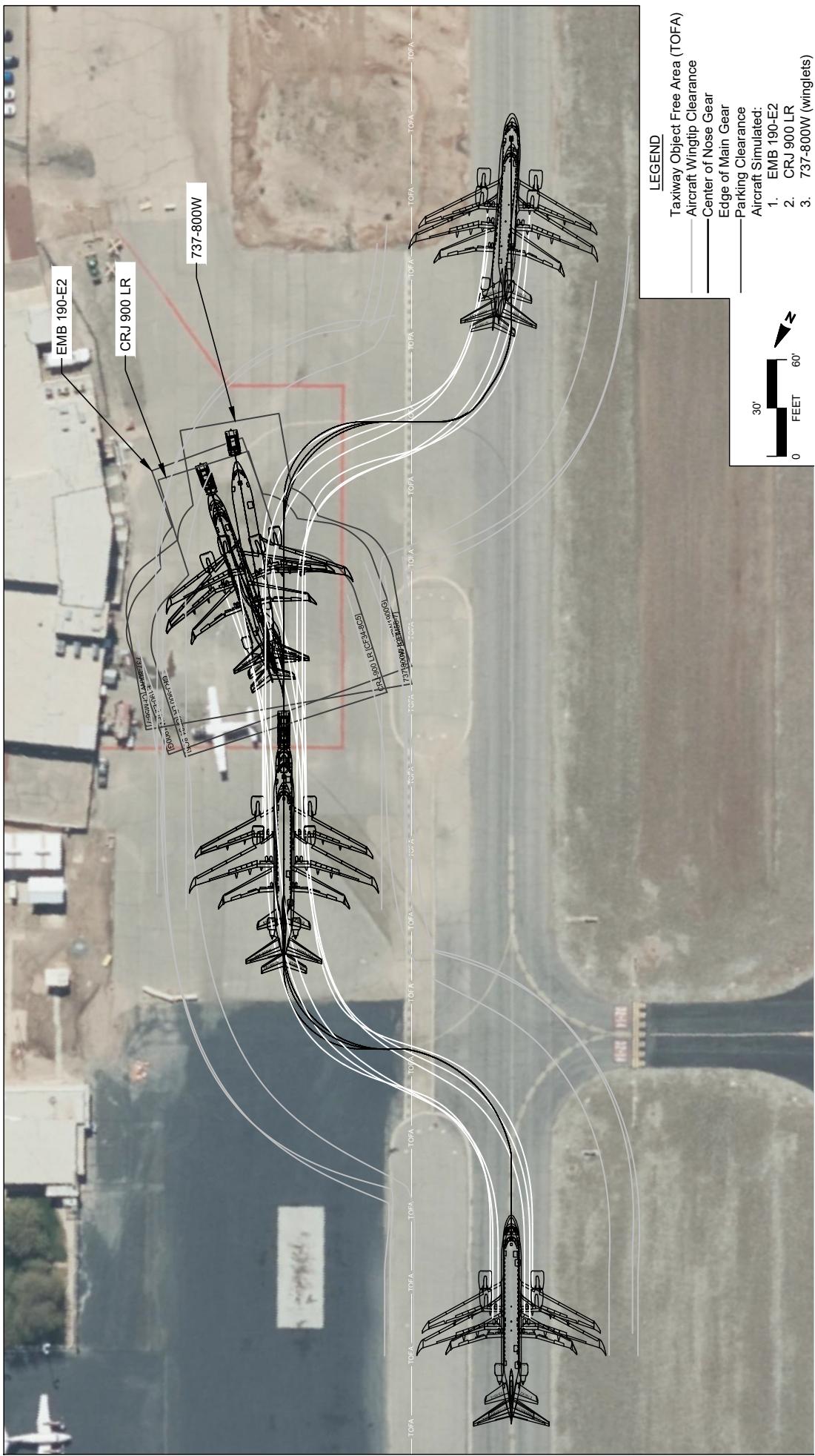


Table 6-5, IPL Aircraft Types



Beech Baron 55
Cessna 172
Piper Archer
Cirrus SR 20/22

A-I



Lear 25, 35, 55
Israeli Westwind
HS 125
Piaggio Aero
Aero Commander

C-I, D-I



Beech Baron 58
Cessna 300, 400
Piper Cheyenne
King Air 90
Phenom 100
Cessna Citation CJ1

B-I <12.5k



Challenger 600, 800
Embraer 145
Legacy 450, 550
Gulfstream 450

C-II, D-II



Super King Air 300
Beech 1900
Falcon 10, 20, 50
Falcon 200, 900
Citation II, III, IV, V
Saab 340
Embraer 120
Beechcraft 400

B-II >12.5k



EMB 190
CRJ 900
Boeing 737-800, 900
Gulfstream 500, 600
Airbus A319, 320, 321

C-III, D-III



DHC Dash 7, 8
DC-3
Convair 580
Fokker F-27
ATR 72
ATP

A-III, B-III



B-757, 767
DC-8-70, 10
MD-11
Boeing 747, 777, 787

C-IV, D-IV, V

Note: Aircraft pictured identified in bold.

Table 6-6, IPL Annual Aircraft Operations



INFRASTRUCTURE ASSESSMENT FIGURE 6-6, Cargo Aircraft Capacity Analysis

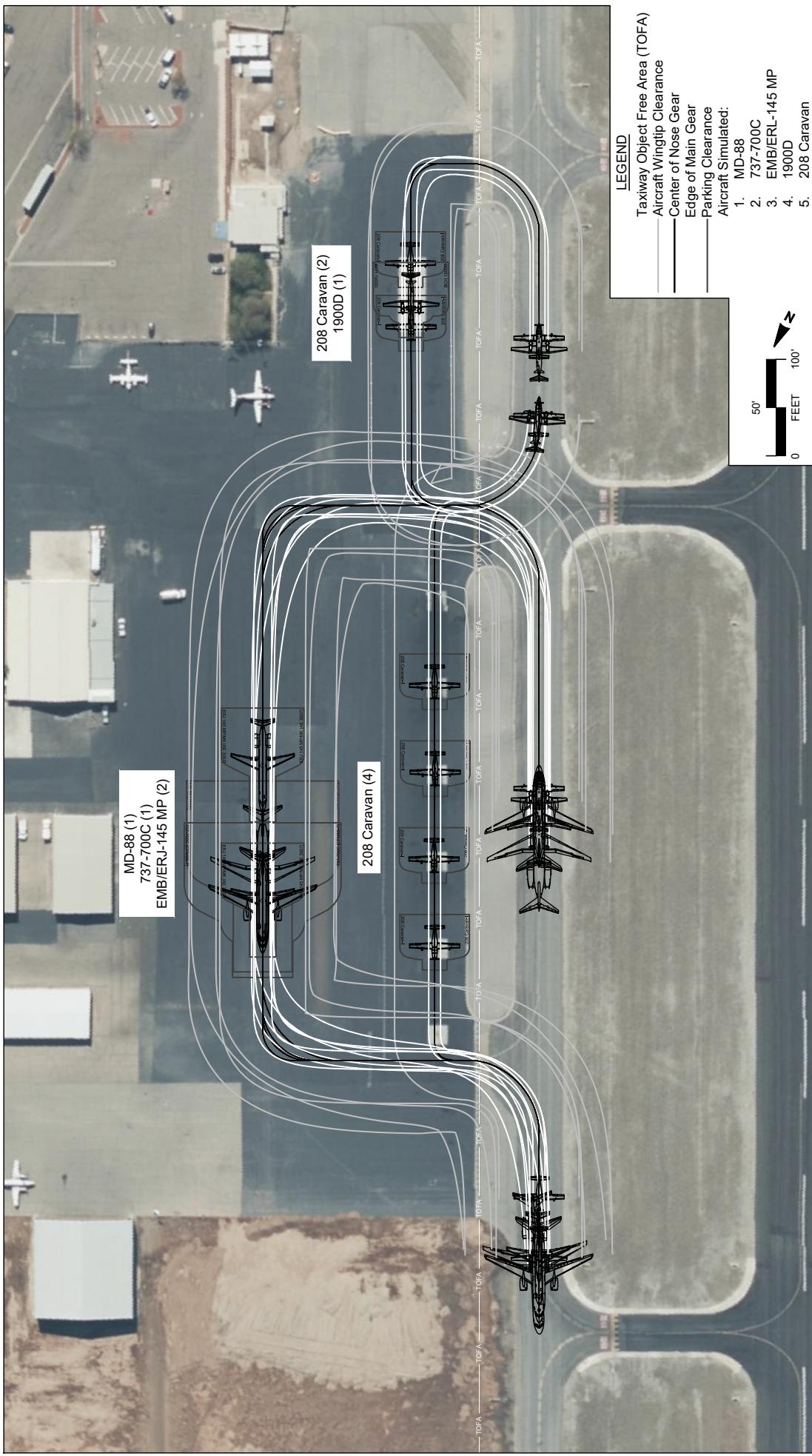
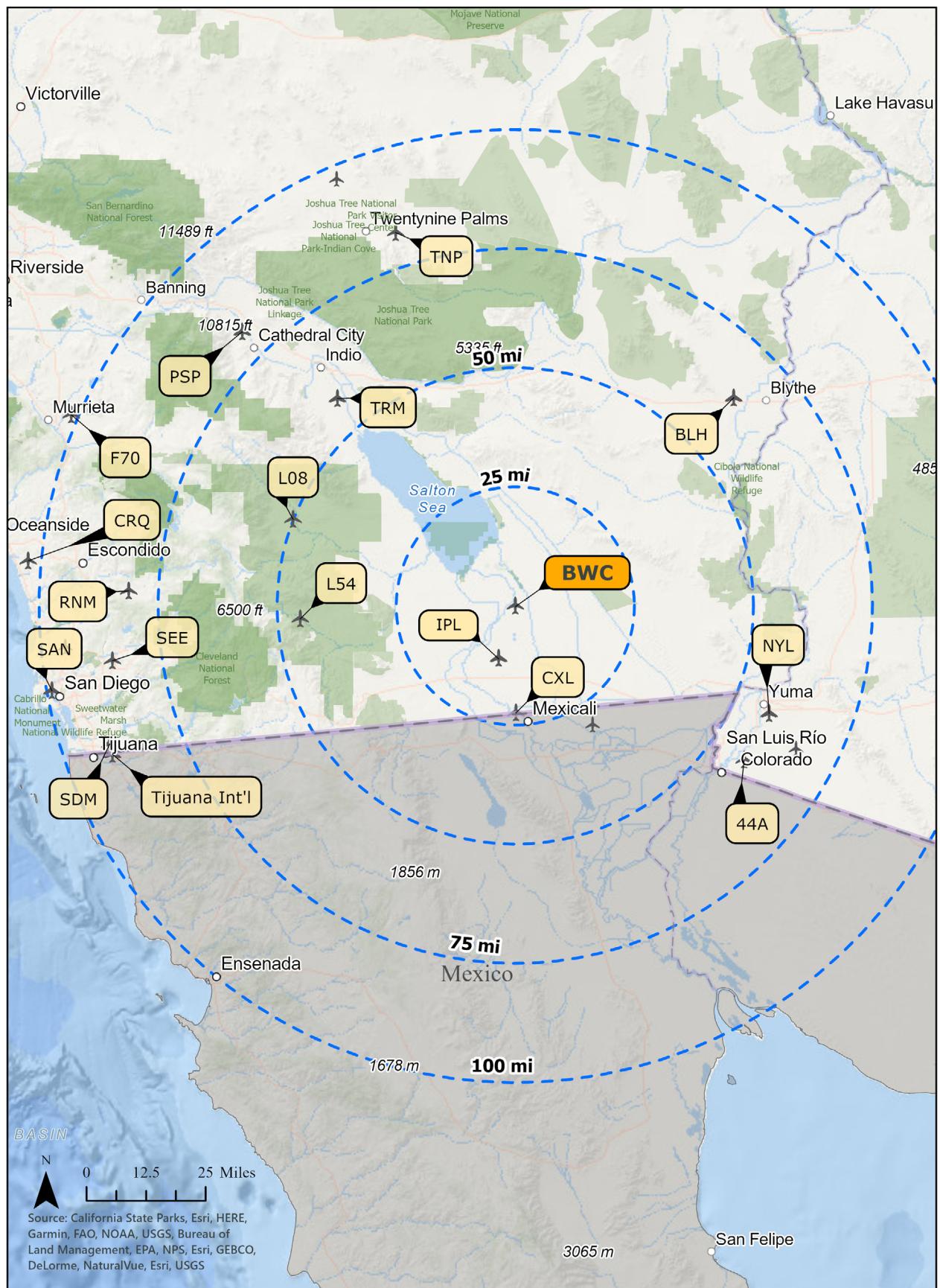


Table 6-7, Cargo Aircraft Operability Limiting Factors

	Yellow		Yellow	Red	
	Yellow		Yellow	Red	
	Yellow		Yellow	Red	
	Green		Red	Red	

Table 6-8, Final IPL Airport Analysis Summary

6.2 BRAWLEY MUNICIPAL AIRPORT (BWC)



INFRASTRUCTURE ASSESSMENT
FIGURE 6-7, Airports within 100 Miles of BWC



FIGURE 6-8, BWC Airport Layout Plan

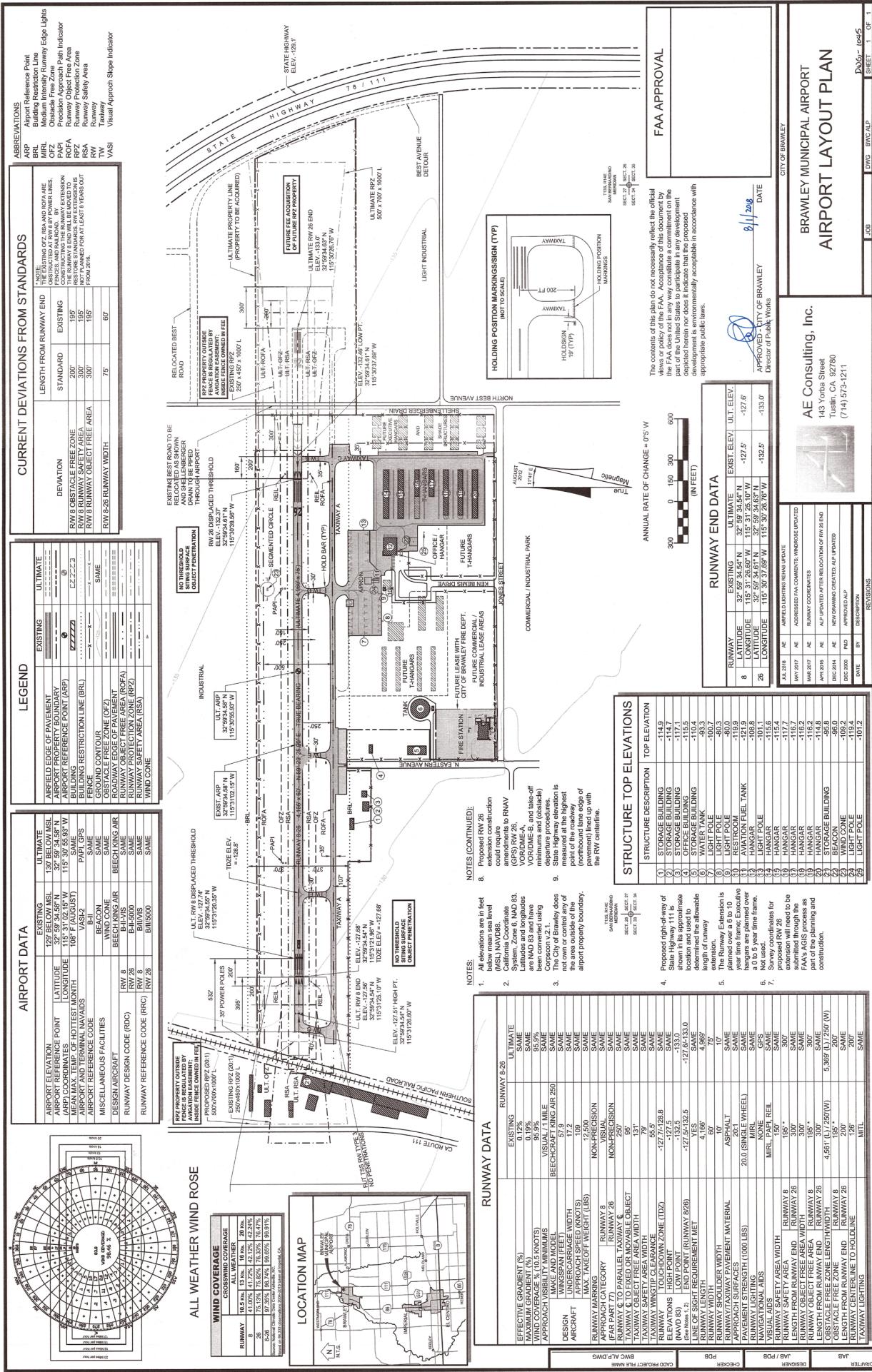


Table 6-9, IPL Runway Attributes

INFRASTRUCTURE ASSESSMENT
FIGURE 6-9, BWC Existing Critical Airport Runway and Taxiway Design Standards

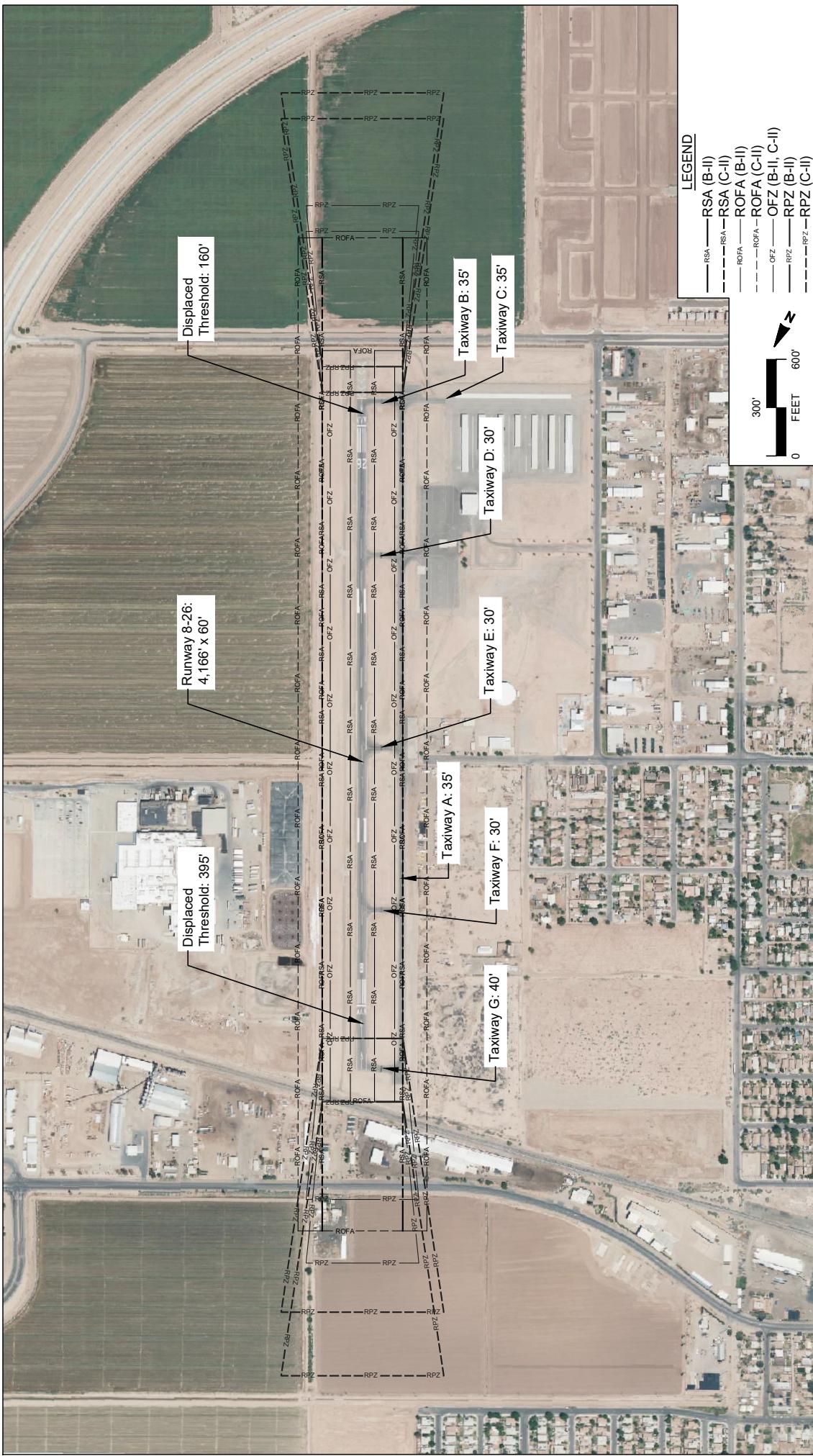


Table 6-10, BWC Instrument Flight Procedures



Beech Baron 55
Cessna 172
Piper Archer
Cirrus SR 20/22

A-I



Lear 25, 35, 55
Israeli Westwind
HS 125
Piaggio Aero
Aero Commandair

C-I, D-I



Beech Baron 58
Cessna 300, 400
Piper Cheyenne
King Air 90
Phenom 100
Cessna Citation CJ1

B-I <12.5k



Challenger 600, 800
Embraer 145
Legacy 450, 550
Gulfstream 450

C-II, D-II



Super King Air 300
Beech 1900
Falcon 10, 20, 50
Falcon 200, 900
Citation II, III, IV, V
Saab 340
Embraer 120
Beechcraft 400

B-II >12.5k



EMB 190
CRJ 900
Boeing 737-800, 900
Gulfstream 500, 600
Airbus A319, 320, 321

C-III, D-III



DHC Dash 7, 8
DC-3
Convair 580
Fokker F-27
ATR 72
ATP

A-III, B-III



B-757, 767
DC-8-70, 10
MD-11
Boeing 747, 777, 787

C-IV, D-IV, V

Note: Aircraft pictured identified in bold.

INFRASTRUCTURE ASSESSMENT
FIGURE 6-10, BWC Aircraft Types



Table 6-11, BWC Aircraft Types

Table 6-12, IPL Annual Aircraft Operations

Table 6-13, Final BWC Airport Analysis Summary

--	--	--	--

7. Quality of Life

7.1 PARKS AND RECREATION

Table 7-1, Imperial County Parks and Recreation

Table 7-2, Other Parks and Recreation Areas not Operated by County

7.2 PEDESTRIAN AND BICYCLE FACILITIES

7.3 COMMUNITY RESOURCES (SHELTERS, COOL ZONES, ETC.)

INFRASTRUCTURE ASSESSMENT Imperial County Community Resources



SOURCE: Imperial County

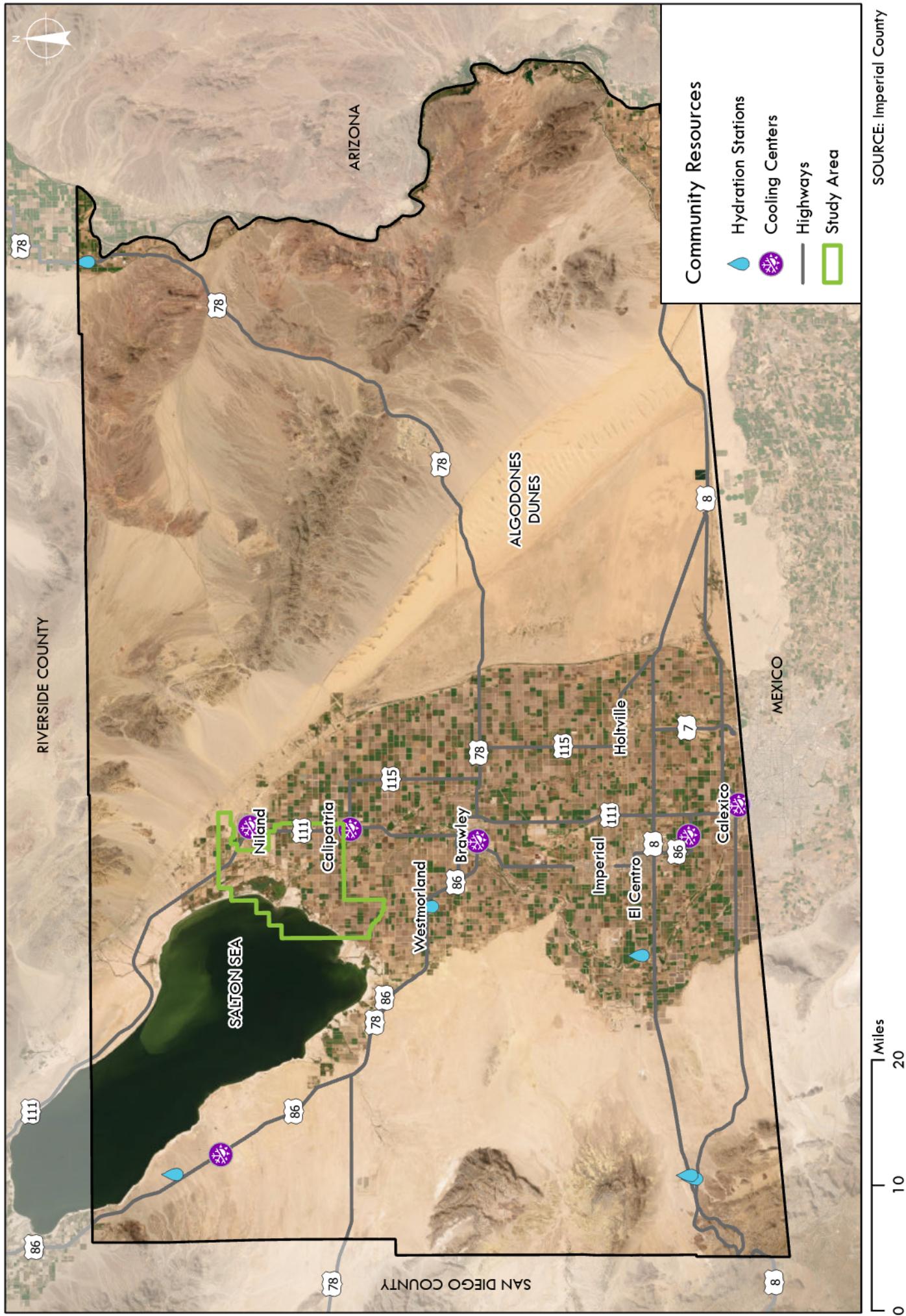


Table 7-3, Imperial County Community Resources

8. References

APPENDIX B

TRANSPORTATION STUDIES

January 2024



PREPARED BY:
RICK ENGINEERING COMPANY

APPENDIX B, Part 1

TRAFFIC COUNTS

INTERSECTIONS

Counts Unlimited, Inc.
 PO Box 1178
 Corona, CA 92878
 (951)268-6268

County of Imperial
 N/S: Highway 111
 E/W: Davis Road
 Weather: Clear

File Name : 01_CIM_111_Davis AM
 Site Code : 221001
 Start Date : 11/9/2022
 Page No : 1

Groups Printed- Total Volume

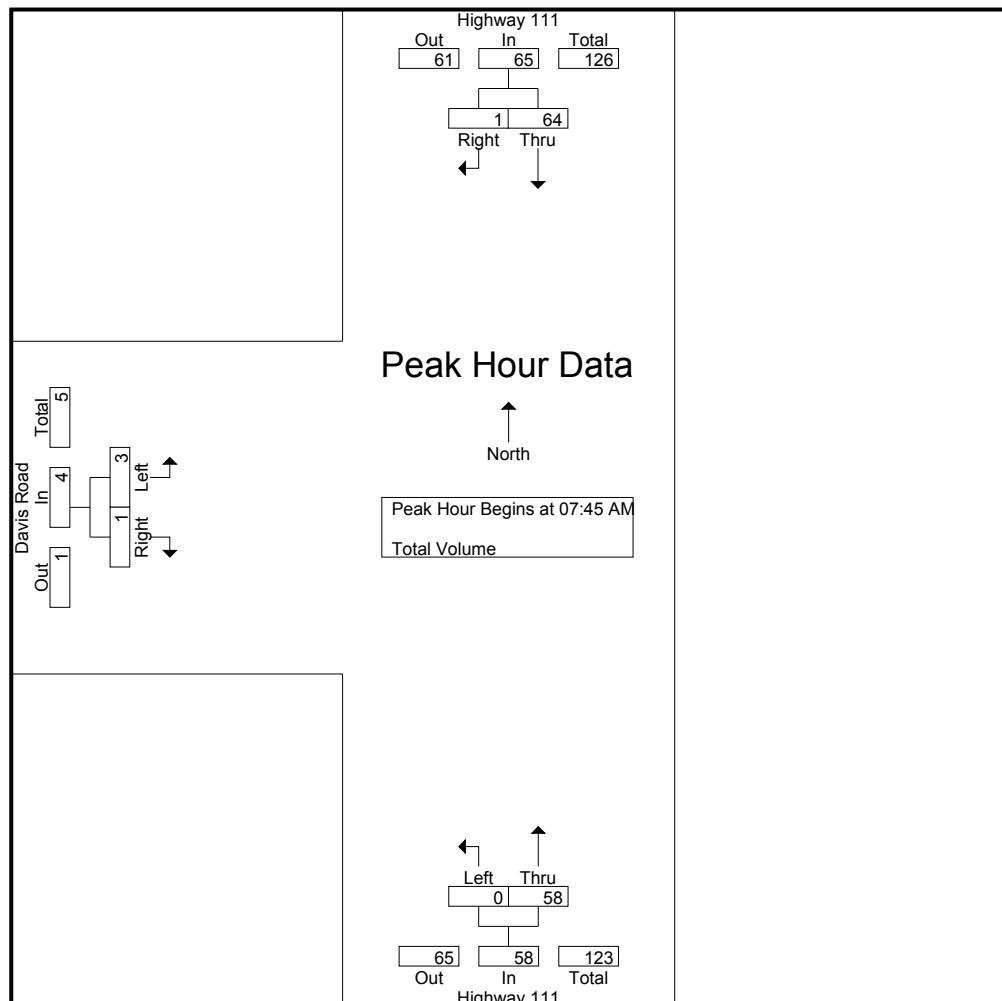
Start Time	Highway 111 Southbound			Highway 111 Northbound			Davis Road Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
07:00 AM	12	1	13	0	14	14	0	0	0	27
07:15 AM	15	0	15	0	9	9	0	1	1	25
07:30 AM	14	0	14	2	6	8	0	1	1	23
07:45 AM	9	0	9	0	18	18	2	0	2	29
Total	50	1	51	2	47	49	2	2	4	104
08:00 AM	16	1	17	0	15	15	0	0	0	32
08:15 AM	15	0	15	0	14	14	0	1	1	30
08:30 AM	24	0	24	0	11	11	1	0	1	36
08:45 AM	16	0	16	0	13	13	0	0	0	29
Total	71	1	72	0	53	53	1	1	2	127
Grand Total	121	2	123	2	100	102	3	3	6	231
Apprch %	98.4	1.6		2	98		50	50		
Total %	52.4	0.9	53.2	0.9	43.3	44.2	1.3	1.3	2.6	

Start Time	Highway 111 Southbound			Highway 111 Northbound			Davis Road Eastbound			Int. Total	
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total		
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1											
Peak Hour for Entire Intersection Begins at 07:45 AM											
07:45 AM	9	0	9	0	18	18	2	0	2	29	
08:00 AM	16	1	17	0	15	15	0	0	0	32	
08:15 AM	15	0	15	0	14	14	0	1	1	30	
08:30 AM	24	0	24	0	11	11	1	0	1	36	
Total Volume	64	1	65	0	58	58	3	1	4	127	
% App. Total	98.5	1.5		0	100		75	25			
PHF	.667	.250	.677	.000	.806	.806	.375	.250	.500	.882	

Counts Unlimited, Inc.
 PO Box 1178
 Corona, CA 92878
 (951)268-6268

County of Imperial
 N/S: Highway 111
 E/W: Davis Road
 Weather: Clear

File Name : 01_CIM_111_Davis AM
 Site Code : 221001
 Start Date : 11/9/2022
 Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	08:00 AM			07:45 AM			07:00 AM		
+0 mins.	16	1	17	0	18	18	0	0	0
+15 mins.	15	0	15	0	15	15	0	1	1
+30 mins.	24	0	24	0	14	14	0	1	1
+45 mins.	16	0	16	0	11	11	2	0	2
Total Volume	71	1	72	0	58	58	2	2	4
% App. Total	98.6	1.4		0	100		50	50	
PHF	.740	.250	.750	.000	.806	.806	.250	.500	.500

Counts Unlimited, Inc.
 PO Box 1178
 Corona, CA 92878
 (951)268-6268

County of Imperial
 N/S: Highway 111
 E/W: Davis Road
 Weather: Clear

File Name : 01_CIM_111_Davis PM
 Site Code : 221001
 Start Date : 11/9/2022
 Page No : 1

Groups Printed- Total Volume

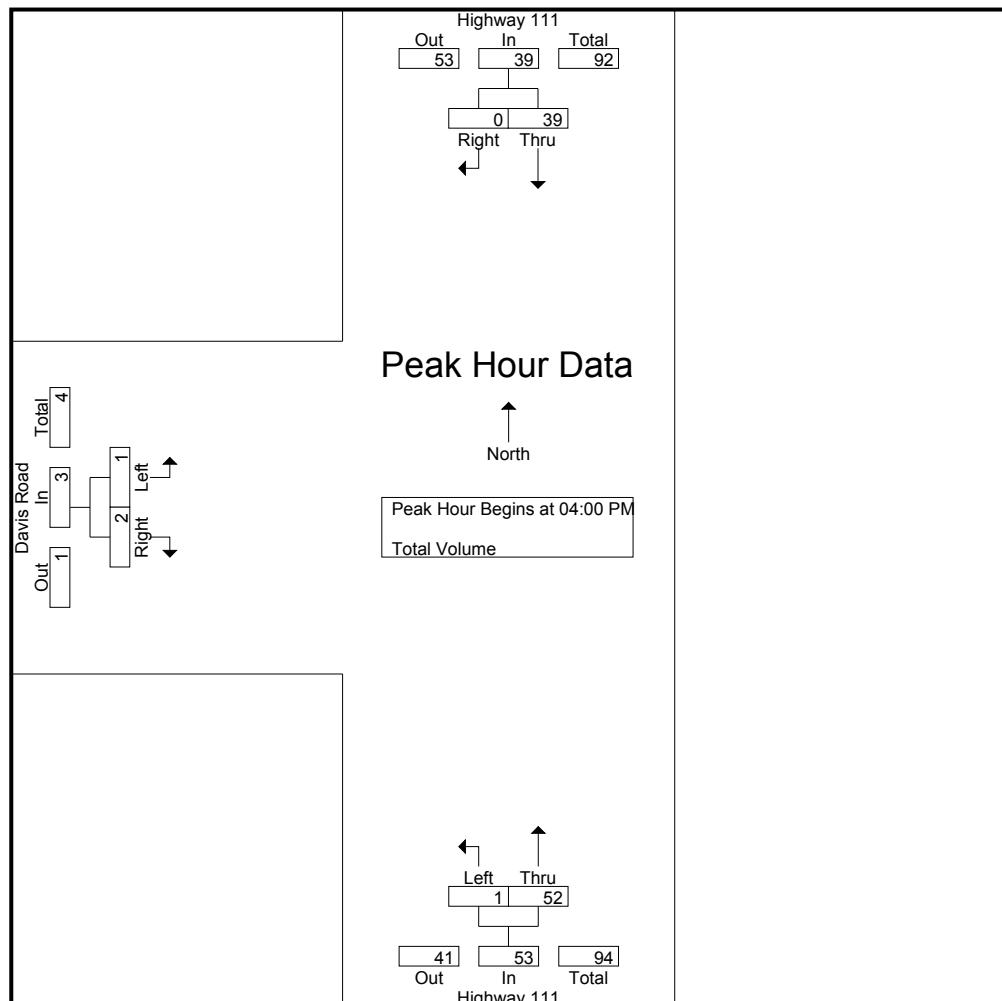
	Highway 111 Southbound			Highway 111 Northbound			Davis Road Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
04:00 PM	14	0	14	0	10	10	0	0	0	24
04:15 PM	8	0	8	1	15	16	0	1	1	25
04:30 PM	8	0	8	0	15	15	0	0	0	23
04:45 PM	9	0	9	0	12	12	1	1	2	23
Total	39	0	39	1	52	53	1	2	3	95
05:00 PM	5	2	7	0	15	15	1	0	1	23
05:15 PM	9	0	9	0	14	14	3	0	3	26
05:30 PM	5	0	5	0	5	5	0	2	2	12
05:45 PM	2	0	2	0	15	15	0	0	0	17
Total	21	2	23	0	49	49	4	2	6	78
Grand Total	60	2	62	1	101	102	5	4	9	173
Apprch %	96.8	3.2		1	99		55.6	44.4		
Total %	34.7	1.2	35.8	0.6	58.4	59	2.9	2.3	5.2	

	Highway 111 Southbound			Highway 111 Northbound			Davis Road Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	14	0	14	0	10	10	0	0	0	24
04:15 PM	8	0	8	1	15	16	0	1	1	25
04:30 PM	8	0	8	0	15	15	0	0	0	23
04:45 PM	9	0	9	0	12	12	1	1	2	23
Total Volume	39	0	39	1	52	53	1	2	3	95
% App. Total	100	0		1.9	98.1		33.3	66.7		
PHF	.696	.000	.696	.250	.867	.828	.250	.500	.375	.950

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

County of Imperial
N/S: Highway 111
E/W: Davis Road
Weather: Clear

File Name : 01_CIM_111_Davis PM
Site Code : 221001
Start Date : 11/9/2022
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

Location: County of Imperial
N/S: Highway 111
E/W: Davis Road



Date: 11/9/2022
Day: Wednesday

PEDESTRIANS

	North Leg Highway 111 Pedestrians	East Leg Dead End Pedestrians	South Leg Highway 111 Pedestrians	West Leg Davis Road Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

	North Leg Highway 111 Pedestrians	East Leg Dead End Pedestrians	South Leg Highway 111 Pedestrians	West Leg Davis Road Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

Location: County of Imperial
 N/S: Highway 111
 E/W: Davis Road



Date: 11/9/2022
 Day: Wednesday

BICYCLES

	Southbound Highway 111			Westbound Dead End			Northbound Highway 111			Eastbound Davis Road		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0

	Southbound Highway 111			Westbound Dead End			Northbound Highway 111			Eastbound Davis Road		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0

Counts Unlimited, Inc.
 PO Box 1178
 Corona, CA 92878
 (951)268-6268

County of Imperial
 N/S: English Road
 E/W: Highway 111
 Weather: Clear

File Name : 08_CIM_Eng_111 AM
 Site Code : 221001
 Start Date : 11/17/2022
 Page No : 1

Groups Printed- Total Volume

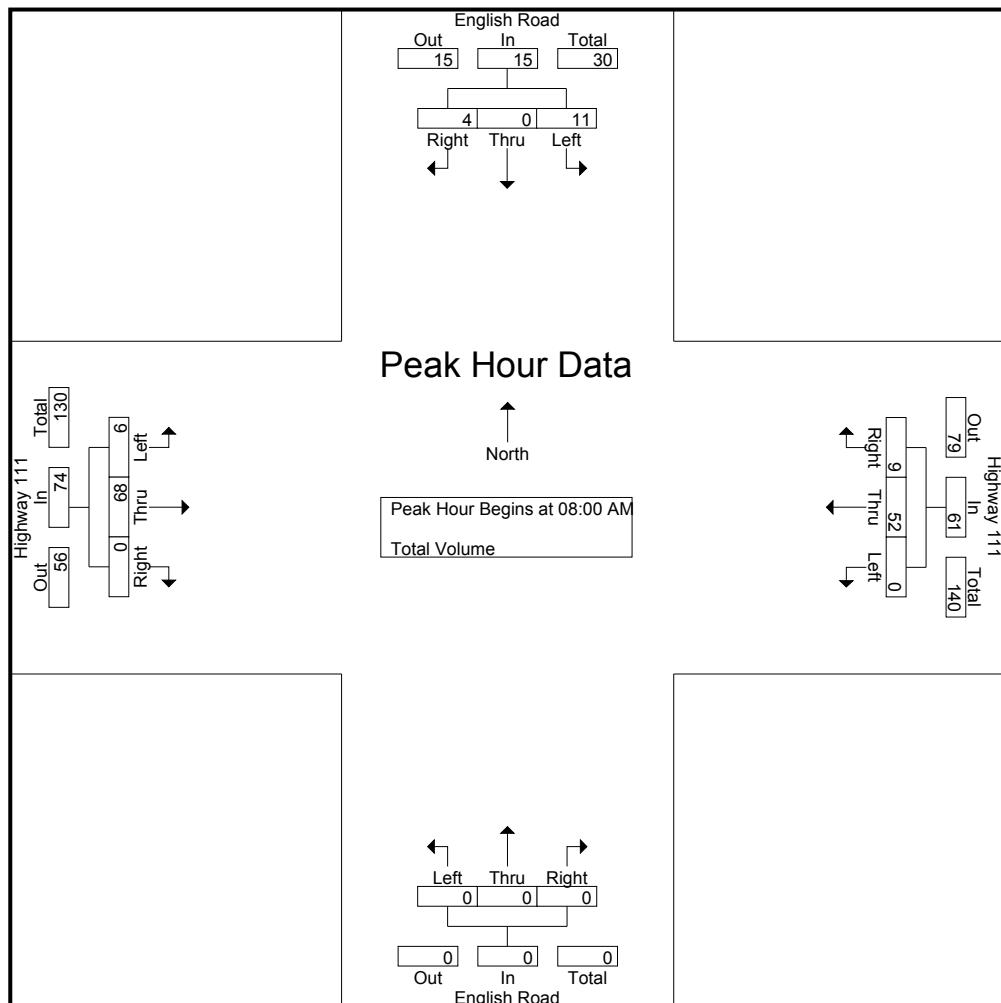
Start Time	English Road Southbound				Highway 111 Westbound				English Road Northbound				Highway 111 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	2	0	0	2	0	12	1	13	0	0	0	0	0	12	0	12	27
07:15 AM	0	0	0	0	0	9	3	12	0	0	0	0	1	16	0	17	29
07:30 AM	1	0	0	1	0	12	1	13	0	0	0	0	1	13	0	14	28
07:45 AM	0	0	0	0	0	17	7	24	0	0	0	0	1	11	0	12	36
Total	3	0	0	3	0	50	12	62	0	0	0	0	3	52	0	55	120
08:00 AM	4	0	0	4	0	16	0	16	0	0	0	0	0	16	0	16	36
08:15 AM	2	0	0	2	0	12	3	15	0	0	0	0	3	14	0	17	34
08:30 AM	1	0	0	1	0	14	2	16	0	0	0	0	1	21	0	22	39
08:45 AM	4	0	4	8	0	10	4	14	0	0	0	0	2	17	0	19	41
Total	11	0	4	15	0	52	9	61	0	0	0	0	6	68	0	74	150
Grand Total	14	0	4	18	0	102	21	123	0	0	0	0	9	120	0	129	270
Apprch %	77.8	0	22.2		0	82.9	17.1		0	0	0	0	7	93	0		
Total %	5.2	0	1.5	6.7	0	37.8	7.8	45.6	0	0	0	0	3.3	44.4	0	47.8	

Start Time	English Road Southbound				Highway 111 Westbound				English Road Northbound				Highway 111 Eastbound				Int. Total	
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total		
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																		
Peak Hour for Entire Intersection Begins at 08:00 AM																		
08:00 AM	4	0	0	4	0	16	0	16	0	0	0	0	0	16	0	16	36	
08:15 AM	2	0	0	2	0	12	3	15	0	0	0	0	3	14	0	17	34	
08:30 AM	1	0	0	1	0	14	2	16	0	0	0	0	1	21	0	22	39	
08:45 AM	4	0	4	8	0	10	4	14	0	0	0	0	2	17	0	19	41	
Total Volume	11	0	4	15	0	52	9	61	0	0	0	0	6	68	0	74	150	
% App. Total	73.3	0	26.7		0	85.2	14.8		0	0	0	0	8.1	91.9	0			
PHF	.688	.000	.250	.469	.000	.813	.563	.953	.000	.000	.000	.000	.500	.810	.000	.841	.915	

Counts Unlimited, Inc.
 PO Box 1178
 Corona, CA 92878
 (951)268-6268

County of Imperial
 N/S: English Road
 E/W: Highway 111
 Weather: Clear

File Name : 08_CIM_Eng_111 AM
 Site Code : 221001
 Start Date : 11/17/2022
 Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	08:00 AM			07:45 AM			07:00 AM			08:00 AM						
+0 mins.	4	0	0	4	0	17	7	24	0	0	0	0	0	16	0	16
+15 mins.	2	0	0	2	0	16	0	16	0	0	0	0	3	14	0	17
+30 mins.	1	0	0	1	0	12	3	15	0	0	0	0	1	21	0	22
+45 mins.	4	0	4	8	0	14	2	16	0	0	0	0	2	17	0	19
Total Volume	11	0	4	15	0	59	12	71	0	0	0	0	6	68	0	74
% App. Total	73.3	0	26.7		0	83.1	16.9		0	0	0	0	8.1	91.9	0	
PHF	.688	.000	.250	.469	.000	.868	.429	.740	.000	.000	.000	.000	.500	.810	.000	.841

Counts Unlimited, Inc.
 PO Box 1178
 Corona, CA 92878
 (951)268-6268

County of Imperial
 N/S: English Road
 E/W: Highway 111
 Weather: Clear

File Name : 08_CIM_Eng_111 PM
 Site Code : 221001
 Start Date : 11/17/2022
 Page No : 1

Groups Printed- Total Volume

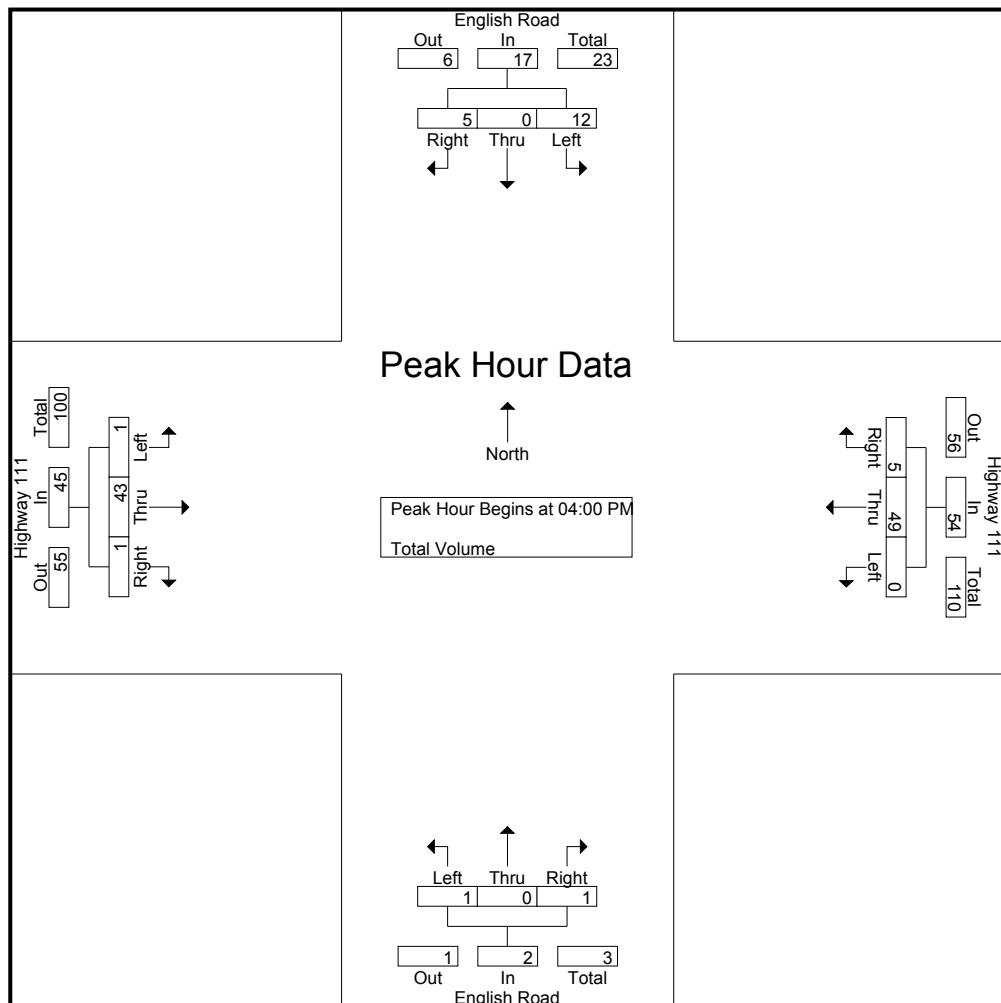
Start Time	English Road Southbound				Highway 111 Westbound				English Road Northbound				Highway 111 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	4	0	0	4	0	9	1	10	1	0	0	1	0	15	1	16	31
04:15 PM	4	0	2	6	0	14	1	15	0	0	0	0	1	8	0	9	30
04:30 PM	2	0	2	4	0	13	1	14	0	0	1	1	0	9	0	9	28
04:45 PM	2	0	1	3	0	13	2	15	0	0	0	0	0	11	0	11	29
Total	12	0	5	17	0	49	5	54	1	0	1	2	1	43	1	45	118
05:00 PM	2	0	0	2	0	14	0	14	0	0	0	0	0	4	0	4	20
05:15 PM	4	0	0	4	0	13	1	14	0	0	0	0	0	10	0	10	28
05:30 PM	0	0	0	0	0	11	1	12	0	0	0	0	0	7	0	7	19
05:45 PM	0	0	0	0	1	14	0	15	0	0	1	1	0	0	0	0	16
Total	6	0	0	6	1	52	2	55	0	0	1	1	0	21	0	21	83
Grand Total	18	0	5	23	1	101	7	109	1	0	2	3	1	64	1	66	201
Apprch %	78.3	0	21.7		0.9	92.7	6.4		33.3	0	66.7		1.5	97	1.5		
Total %	9	0	2.5	11.4	0.5	50.2	3.5	54.2	0.5	0	1	1.5	0.5	31.8	0.5	32.8	

Start Time	English Road Southbound				Highway 111 Westbound				English Road Northbound				Highway 111 Eastbound				Int. Total	
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total		
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																		
Peak Hour for Entire Intersection Begins at 04:00 PM																		
04:00 PM	4	0	0	4	0	9	1	10	1	0	0	1	0	15	1	16	31	
04:15 PM	4	0	2	6	0	14	1	15	0	0	0	0	1	8	0	9	30	
04:30 PM	2	0	2	4	0	13	1	14	0	0	1	1	0	9	0	9	28	
04:45 PM	2	0	1	3	0	13	2	15	0	0	0	0	0	11	0	11	29	
Total Volume	12	0	5	17	0	49	5	54	1	0	1	2	1	43	1	45	118	
% App. Total	70.6	0	29.4		0	90.7	9.3		50	0	50		2.2	95.6	2.2			
PHF	.750	.000	.625	.708	.000	.875	.625	.900	.250	.000	.250	.500	.250	.717	.250	.703	.952	

Counts Unlimited, Inc.
 PO Box 1178
 Corona, CA 92878
 (951)268-6268

County of Imperial
 N/S: English Road
 E/W: Highway 111
 Weather: Clear

File Name : 08_CIM_Eng_111 PM
 Site Code : 221001
 Start Date : 11/17/2022
 Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM			04:15 PM			04:00 PM			04:00 PM		
+0 mins.	4	0	0	4	0	14	1	15	1	0	0	1
+15 mins.	4	0	2	6	0	13	1	14	0	0	0	1
+30 mins.	2	0	2	4	0	13	2	15	0	0	1	0
+45 mins.	2	0	1	3	0	14	0	14	0	0	0	11
Total Volume	12	0	5	17	0	54	4	58	1	0	1	2
% App. Total	70.6	0	29.4		0	93.1	6.9		50	0	50	2.2
PHF	.750	.000	.625	.708	.000	.964	.500	.967	.250	.000	.250	.500
											.250	.717
											.250	.703

Location: County of Imperial
N/S: English Road
E/W: Highway 111



Date: 11/17/2022
Day: Thursday

PEDESTRIANS

	North Leg English Road Pedestrians	East Leg Highway 111 Pedestrians	South Leg English Road Pedestrians	West Leg Highway 111 Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

	North Leg English Road Pedestrians	East Leg Highway 111 Pedestrians	South Leg English Road Pedestrians	West Leg Highway 111 Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

Location: County of Imperial
 N/S: English Road
 E/W: Highway 111



Date: 11/17/2022
 Day: Thursday

BICYCLES

	Southbound English Road			Westbound Highway 111			Northbound English Road			Eastbound Highway 111			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

	Southbound English Road			Westbound Highway 111			Northbound English Road			Eastbound Highway 111			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

Counts Unlimited, Inc.
 PO Box 1178
 Corona, CA 92878
 (951)268-6268

County of Imperial
 N/S: Highway 111
 E/W: Main Street
 Weather: Clear

File Name : 02_CIM_111_Main AM
 Site Code : 221001
 Start Date : 11/9/2022
 Page No : 1

Groups Printed- Total Volume

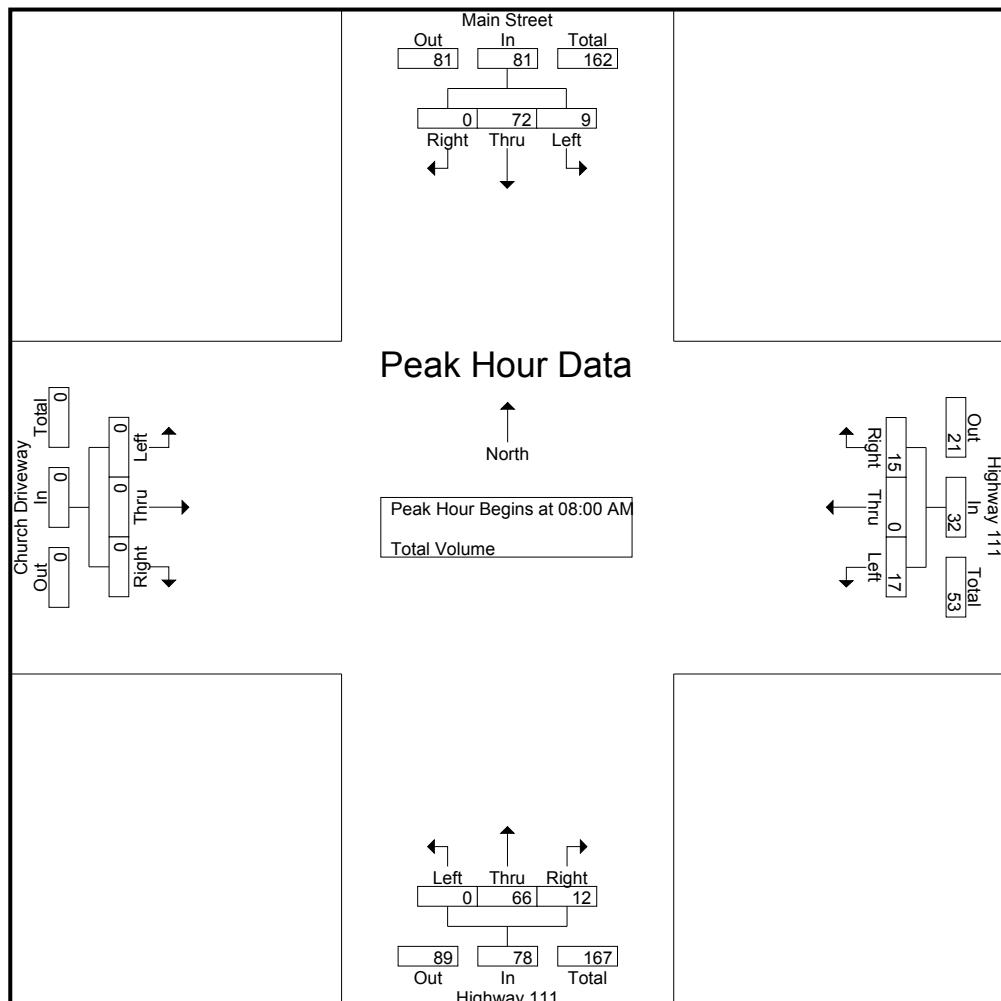
Start Time	Main Street Southbound				Highway 111 Westbound				Highway 111 Northbound				Church Driveway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	13	0	13	0	0	0	0	0	8	1	9	0	0	0	0	22
07:15 AM	0	19	0	19	2	0	1	3	0	14	0	14	0	0	0	0	36
07:30 AM	1	18	0	19	2	0	0	2	0	17	1	18	0	0	0	0	39
07:45 AM	0	13	0	13	2	0	4	6	0	23	0	23	0	0	0	0	42
Total	1	63	0	64	6	0	5	11	0	62	2	64	0	0	0	0	139
08:00 AM	0	18	0	18	9	0	4	13	0	15	5	20	0	0	0	0	51
08:15 AM	2	14	0	16	2	0	3	5	0	14	4	18	0	0	0	0	39
08:30 AM	5	23	0	28	3	0	3	6	0	21	1	22	0	0	0	0	56
08:45 AM	2	17	0	19	3	0	5	8	0	16	2	18	0	0	0	0	45
Total	9	72	0	81	17	0	15	32	0	66	12	78	0	0	0	0	191
Grand Total	10	135	0	145	23	0	20	43	0	128	14	142	0	0	0	0	330
Apprch %	6.9	93.1	0		53.5	0	46.5		0	90.1	9.9		0	0	0	0	
Total %	3	40.9	0	43.9	7	0	6.1	13	0	38.8	4.2	43	0	0	0	0	

Start Time	Main Street Southbound				Highway 111 Westbound				Highway 111 Northbound				Church Driveway Eastbound				Int. Total	
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total		
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																		
Peak Hour for Entire Intersection Begins at 08:00 AM																		
08:00 AM	0	18	0	18	9	0	4	13	0	15	5	20	0	0	0	0	51	
08:15 AM	2	14	0	16	2	0	3	5	0	14	4	18	0	0	0	0	39	
08:30 AM	5	23	0	28	3	0	3	6	0	21	1	22	0	0	0	0	56	
08:45 AM	2	17	0	19	3	0	5	8	0	16	2	18	0	0	0	0	45	
Total Volume	9	72	0	81	17	0	15	32	0	66	12	78	0	0	0	0	191	
% App. Total	11.1	88.9	0		53.1	0	46.9		0	84.6	15.4		0	0	0	0		
PHF	.450	.783	.000	.723	.472	.000	.750	.615	.000	.786	.600	.886	.000	.000	.000	.000	.853	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

County of Imperial
N/S: Highway 111
E/W: Main Street
Weather: Clear

File Name : 02_CIM_111_Main AM
Site Code : 221001
Start Date : 11/9/2022
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

Counts Unlimited, Inc.
 PO Box 1178
 Corona, CA 92878
 (951)268-6268

County of Imperial
 N/S: Highway 111
 E/W: Main Street
 Weather: Clear

File Name : 02_CIM_111_Main PM
 Site Code : 221001
 Start Date : 11/9/2022
 Page No : 1

Groups Printed- Total Volume

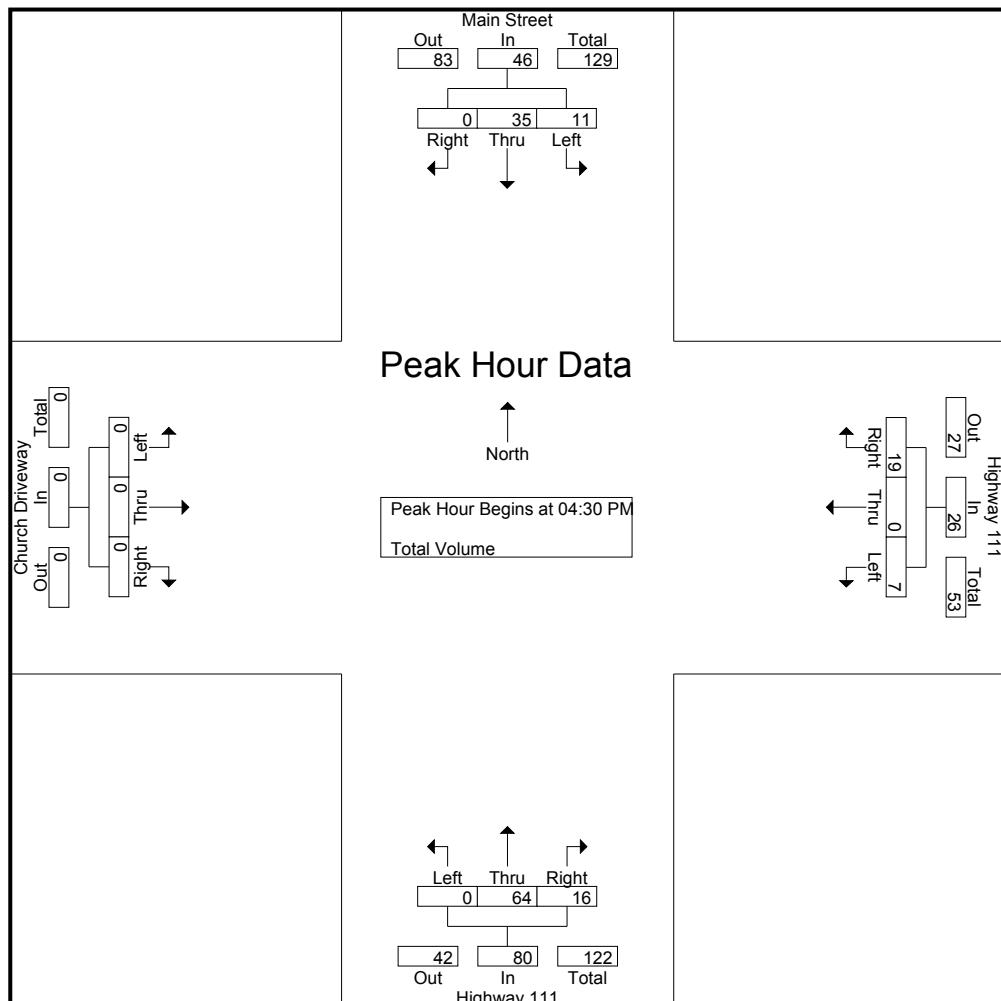
Start Time	Main Street Southbound				Highway 111 Westbound				Highway 111 Northbound				Church Driveway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	2	20	0	22	4	0	6	10	0	10	0	10	0	0	0	0	42
04:15 PM	2	13	0	15	1	0	4	5	0	10	0	10	0	0	0	0	30
04:30 PM	4	6	0	10	0	0	8	8	0	11	3	14	0	0	0	0	32
04:45 PM	2	8	0	10	1	0	6	7	0	20	4	24	0	0	0	0	41
Total	10	47	0	57	6	0	24	30	0	51	7	58	0	0	0	0	145
05:00 PM	2	13	0	15	3	0	2	5	0	20	5	25	0	0	0	0	45
05:15 PM	3	8	0	11	3	0	3	6	0	13	4	17	0	0	0	0	34
05:30 PM	2	14	0	16	0	0	3	3	0	12	1	13	0	0	0	0	32
05:45 PM	0	1	0	1	1	0	4	5	0	17	0	17	0	0	0	0	23
Total	7	36	0	43	7	0	12	19	0	62	10	72	0	0	0	0	134
Grand Total	17	83	0	100	13	0	36	49	0	113	17	130	0	0	0	0	279
Apprch %	17	83	0		26.5	0	73.5		0	86.9	13.1		0	0	0	0	
Total %	6.1	29.7	0	35.8	4.7	0	12.9	17.6	0	40.5	6.1	46.6	0	0	0	0	

Start Time	Main Street Southbound				Highway 111 Westbound				Highway 111 Northbound				Church Driveway Eastbound				Int. Total	
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total		
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																		
Peak Hour for Entire Intersection Begins at 04:30 PM																		
04:30 PM	4	6	0	10	0	0	8	8	0	11	3	14	0	0	0	0	32	
04:45 PM	2	8	0	10	1	0	6	7	0	20	4	24	0	0	0	0	41	
05:00 PM	2	13	0	15	3	0	2	5	0	20	5	25	0	0	0	0	45	
05:15 PM	3	8	0	11	3	0	3	6	0	13	4	17	0	0	0	0	34	
Total Volume	11	35	0	46	7	0	19	26	0	64	16	80	0	0	0	0	152	
% App. Total	23.9	76.1	0		26.9	0	73.1		0	80	20		0	0	0	0		
PHF	.688	.673	.000	.767	.583	.000	.594	.813	.000	.800	.800	.800	.000	.000	.000	.000	.844	

Counts Unlimited, Inc.
 PO Box 1178
 Corona, CA 92878
 (951)268-6268

County of Imperial
 N/S: Highway 111
 E/W: Main Street
 Weather: Clear

File Name : 02_CIM_111_Main PM
 Site Code : 221001
 Start Date : 11/9/2022
 Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM			04:00 PM			04:30 PM			04:00 PM			
+0 mins.	2	20	0	22	4	0	6	10	0	11	3	14	0
+15 mins.	2	13	0	15	1	0	4	5	0	20	4	24	0
+30 mins.	4	6	0	10	0	0	8	8	0	20	5	25	0
+45 mins.	2	8	0	10	1	0	6	7	0	13	4	17	0
Total Volume	10	47	0	57	6	0	24	30	0	64	16	80	0
% App. Total	17.5	82.5	0		20	0	80		0	80	20		0
PHF	.625	.588	.000	.648	.375	.000	.750	.750	.000	.800	.800	.800	.000

Location: County of Imperial
N/S: Highway 111
E/W: Main Street



Date: 11/9/2022
Day: Wednesday

PEDESTRIANS

	North Leg Highway 111 Pedestrians	East Leg Main Street Pedestrians	South Leg Highway 111 Pedestrians	West Leg Church Driveway Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	1	0	0	1
8:00 AM	2	1	0	0	3
8:15 AM	0	1	0	0	
8:30 AM	1	3	1	0	5
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	3	6	1	0	10

	North Leg Highway 111 Pedestrians	East Leg Main Street Pedestrians	South Leg Highway 111 Pedestrians	West Leg Church Driveway Pedestrians	
4:00 PM	0	1	0	0	1
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	1	0	0	1
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	2	0	0	2

Location: County of Imperial
 N/S: Highway 111
 E/W: Main Street



Date: 11/9/2022
 Day: Wednesday

BICYCLES

Southbound Highway 111			Westbound Main Street			Northbound Highway 111			Eastbound Church Driveway			
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	1	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	1	0	0	0	0	0	1

Southbound Highway 111			Westbound Main Street			Northbound Highway 111			Eastbound Church Driveway			
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	1	0	0	0	0	0	0	1	0	0	0	2
4:15 PM	0	1	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	1	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	1	1	0	0	0	1	0	1	0	0	0	4

Counts Unlimited, Inc.
 PO Box 1178
 Corona, CA 92878
 (951)268-6268

County of Imperial
 N/S: Highway 111
 E/W: Sinclair Road
 Weather: Clear

File Name : 03_CIM_111_Sinc AM
 Site Code : 221001
 Start Date : 11/9/2022
 Page No : 1

Groups Printed- Total Volume

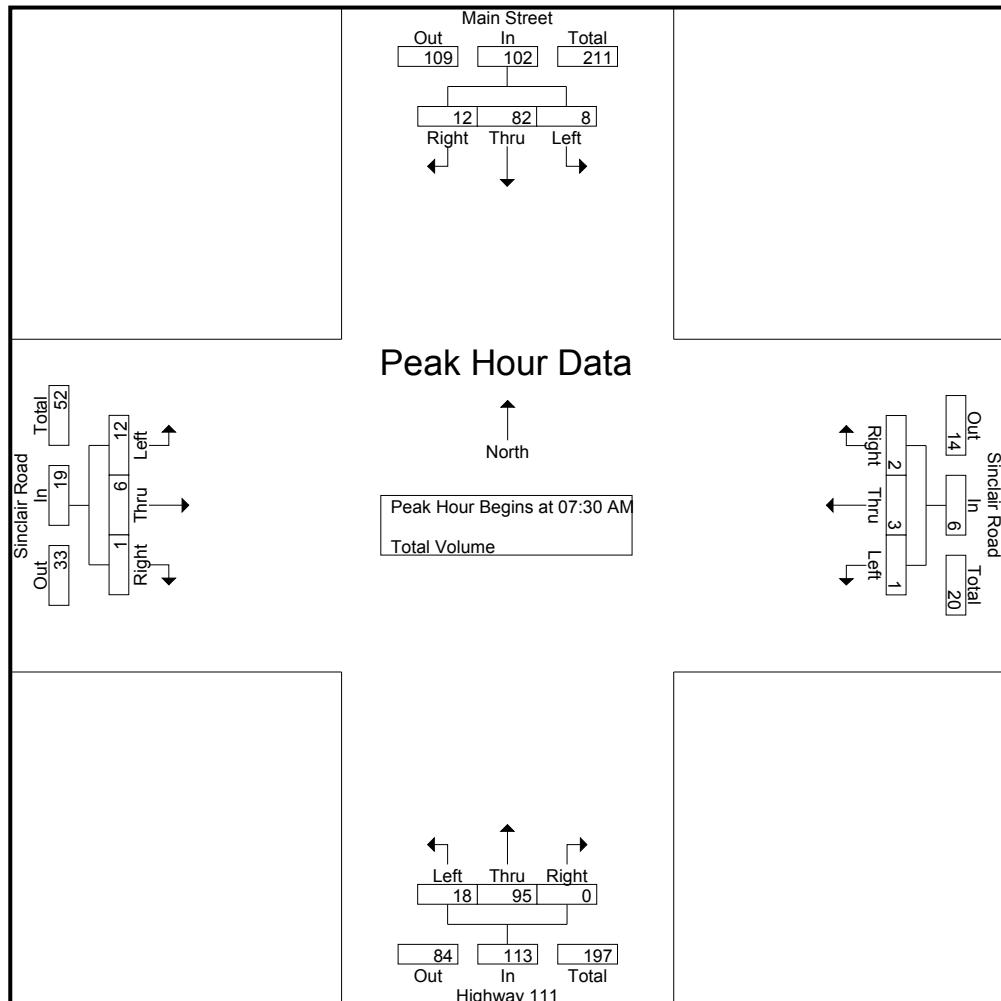
Start Time	Main Street Southbound				Sinclair Road Westbound				Highway 111 Northbound				Sinclair Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	3	15	1	19	0	0	0	0	0	16	0	16	6	1	0	7	42
07:15 AM	3	15	2	20	1	1	1	3	3	18	0	21	1	2	2	5	49
07:30 AM	3	21	2	26	0	0	1	1	11	19	0	30	4	2	0	6	63
07:45 AM	4	22	1	27	0	1	0	1	1	29	0	30	4	1	1	6	64
Total	13	73	6	92	1	2	2	5	15	82	0	97	15	6	3	24	218
08:00 AM	0	17	4	21	0	2	0	2	3	28	0	31	2	0	0	2	56
08:15 AM	1	22	5	28	1	0	1	2	3	19	0	22	2	3	0	5	57
08:30 AM	1	22	4	27	0	0	1	1	0	18	0	18	3	1	0	4	50
08:45 AM	0	29	2	31	0	1	2	3	0	14	1	15	2	0	0	2	51
Total	2	90	15	107	1	3	4	8	6	79	1	86	9	4	0	13	214
Grand Total	15	163	21	199	2	5	6	13	21	161	1	183	24	10	3	37	432
Apprch %	7.5	81.9	10.6		15.4	38.5	46.2		11.5	88	0.5		64.9	27	8.1		
Total %	3.5	37.7	4.9	46.1	0.5	1.2	1.4	3	4.9	37.3	0.2	42.4	5.6	2.3	0.7	8.6	

Start Time	Main Street Southbound				Sinclair Road Westbound				Highway 111 Northbound				Sinclair Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	3	21	2	26	0	0	1	1	11	19	0	30	4	2	0	6	63
07:45 AM	4	22	1	27	0	1	0	1	1	29	0	30	4	1	1	6	64
08:00 AM	0	17	4	21	0	2	0	2	3	28	0	31	2	0	0	2	56
08:15 AM	1	22	5	28	1	0	1	2	3	19	0	22	2	3	0	5	57
Total Volume	8	82	12	102	1	3	2	6	18	95	0	113	12	6	1	19	240
% App. Total	7.8	80.4	11.8		16.7	50	33.3		15.9	84.1	0		63.2	31.6	5.3		
PHF	.500	.932	.600	.911	.250	.375	.500	.750	.409	.819	.000	.911	.750	.500	.250	.792	.938

Counts Unlimited, Inc.
 PO Box 1178
 Corona, CA 92878
 (951)268-6268

County of Imperial
 N/S: Highway 111
 E/W: Sinclair Road
 Weather: Clear

File Name : 03_CIM_111_Sinc AM
 Site Code : 221001
 Start Date : 11/9/2022
 Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				07:30 AM				07:00 AM			
+0 mins.	0	17	4	21	0	2	0	2	11	19	0	30	6	1	0	7
+15 mins.	1	22	5	28	1	0	1	2	1	29	0	30	1	2	2	5
+30 mins.	1	22	4	27	0	0	1	1	3	28	0	31	4	2	0	6
+45 mins.	0	29	2	31	0	1	2	3	3	19	0	22	4	1	1	6
Total Volume	2	90	15	107	1	3	4	8	18	95	0	113	15	6	3	24
% App. Total	1.9	84.1	14		12.5	37.5	50		15.9	84.1	0		62.5	25	12.5	
PHF	.500	.776	.750	.863	.250	.375	.500	.667	.409	.819	.000	.911	.625	.750	.375	.857

Counts Unlimited, Inc.
 PO Box 1178
 Corona, CA 92878
 (951)268-6268

County of Imperial
 N/S: Highway 111
 E/W: Sinclair Road
 Weather: Clear

File Name : 03_CIM_111_Sinc PM
 Site Code : 221001
 Start Date : 11/9/2022
 Page No : 1

Groups Printed- Total Volume

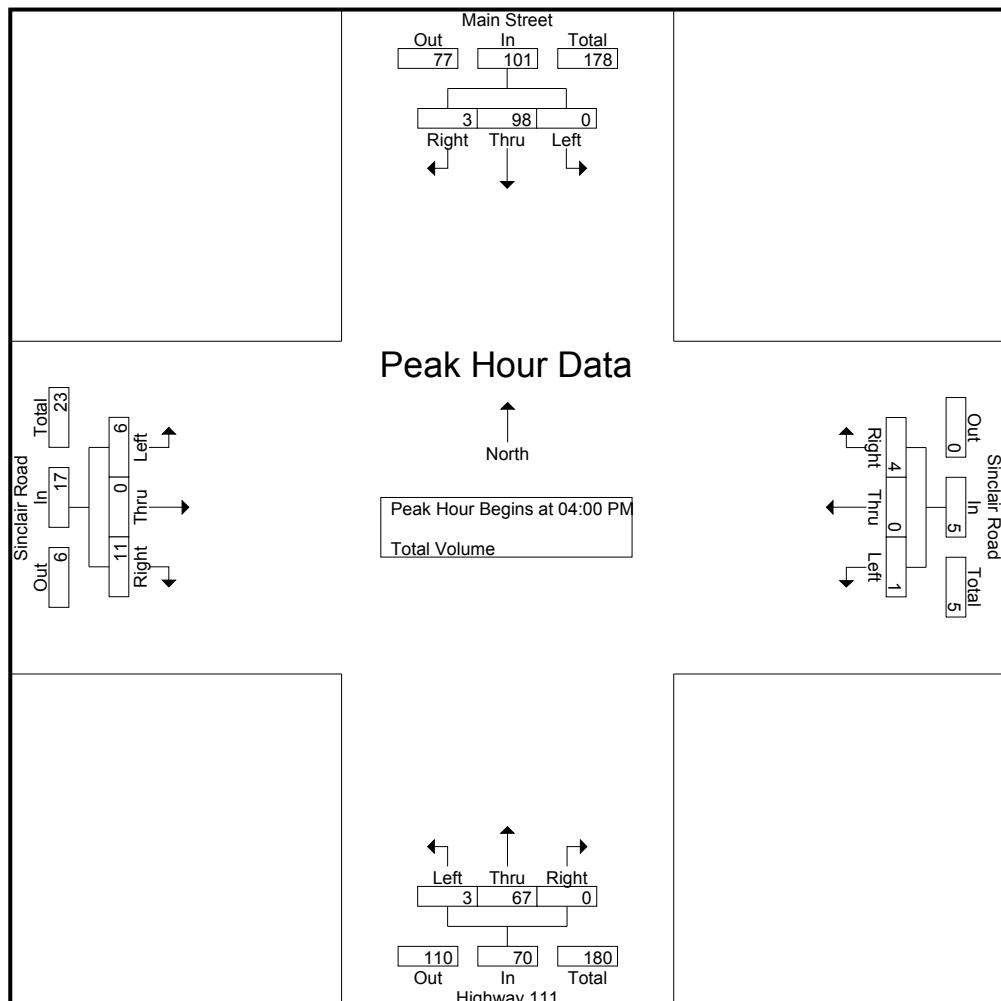
Start Time	Main Street Southbound				Sinclair Road Westbound				Highway 111 Northbound				Sinclair Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	34	1	35	1	0	1	2	0	17	0	17	1	0	6	7	61
04:15 PM	0	27	2	29	0	0	0	0	2	17	0	19	2	0	2	4	52
04:30 PM	0	16	0	16	0	0	0	0	0	14	0	14	2	0	2	4	34
04:45 PM	0	21	0	21	0	0	3	3	1	19	0	20	1	0	1	2	46
Total	0	98	3	101	1	0	4	5	3	67	0	70	6	0	11	17	193
05:00 PM	0	15	2	17	0	0	0	0	1	34	0	35	3	0	2	5	57
05:15 PM	0	19	1	20	0	0	0	0	1	16	0	17	2	1	1	4	41
05:30 PM	0	17	2	19	0	0	0	0	0	22	1	23	4	0	0	4	46
05:45 PM	0	14	1	15	0	1	0	1	0	19	0	19	2	0	1	3	38
Total	0	65	6	71	0	1	0	1	2	91	1	94	11	1	4	16	182
Grand Total	0	163	9	172	1	1	4	6	5	158	1	164	17	1	15	33	375
Apprch %	0	94.8	5.2		16.7	16.7	66.7		3	96.3	0.6		51.5	3	45.5		
Total %	0	43.5	2.4	45.9	0.3	0.3	1.1	1.6	1.3	42.1	0.3	43.7	4.5	0.3	4	8.8	

Start Time	Main Street Southbound				Sinclair Road Westbound				Highway 111 Northbound				Sinclair Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	34	1	35	1	0	1	2	0	17	0	17	1	0	6	7	61
04:15 PM	0	27	2	29	0	0	0	0	2	17	0	19	2	0	2	4	52
04:30 PM	0	16	0	16	0	0	0	0	0	14	0	14	2	0	2	4	34
04:45 PM	0	21	0	21	0	0	3	3	1	19	0	20	1	0	1	2	46
Total Volume	0	98	3	101	1	0	4	5	3	67	0	70	6	0	11	17	193
% App. Total	0	97	3		20	0	80		4.3	95.7	0		35.3	0	64.7		
PHF	.000	.721	.375	.721	.250	.000	.333	.417	.375	.882	.000	.875	.750	.000	.458	.607	.791

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

County of Imperial
N/S: Highway 111
E/W: Sinclair Road
Weather: Clear

File Name : 03_CIM_111_Sinc PM
Site Code : 221001
Start Date : 11/9/2022
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 Peak Hour for Each Approach Begins at:

Each Hour for Each Approach Begins at:				04:00 PM				04:45 PM				04:00 PM				
+0 mins.	0	34	1	35	1	0	1	2	1	19	0	20	1	0	6	7
+15 mins.	0	27	2	29	0	0	0	0	1	34	0	35	2	0	2	4
+30 mins.	0	16	0	16	0	0	0	0	1	16	0	17	2	0	2	4
+45 mins.	0	21	0	21	0	0	3	3	0	22	1	23	1	0	1	2
Total Volume	0	98	3	101	1	0	4	5	3	91	1	95	6	0	11	17
% App. Total	0	97	3		20	0	80		3.2	95.8	1.1		35.3	0	64.7	
PHF	.000	.721	.375	.721	.250	.000	.333	.417	.750	.669	.250	.679	.750	.000	.458	.607

Location: County of Imperial
N/S: Highway 111
E/W: Sinclair Road



Date: 11/9/2022
Day: Wednesday

PEDESTRIANS

	North Leg Highway 111 Pedestrians	East Leg Sinclair Road Pedestrians	South Leg Highway 111 Pedestrians	West Leg Sinclair Road Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

	North Leg Highway 111 Pedestrians	East Leg Sinclair Road Pedestrians	South Leg Highway 111 Pedestrians	West Leg Sinclair Road Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

Location: County of Imperial
 N/S: Highway 111
 E/W: Sinclair Road



Date: 11/9/2022
 Day: Wednesday

BICYCLES

	Southbound Highway 111			Westbound Sinclair Road			Northbound Highway 111			Eastbound Sinclair Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

	Southbound Highway 111			Westbound Sinclair Road			Northbound Highway 111			Eastbound Sinclair Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

Counts Unlimited, Inc.
 PO Box 1178
 Corona, CA 92878
 (951)268-6268

County of Calipatria
 N/S: Highway 111
 E/W: Main Street
 Weather: Clear

File Name : 04_CPA_111_Main AM
 Site Code : 221001
 Start Date : 11/9/2022
 Page No : 1

Groups Printed- Total Volume

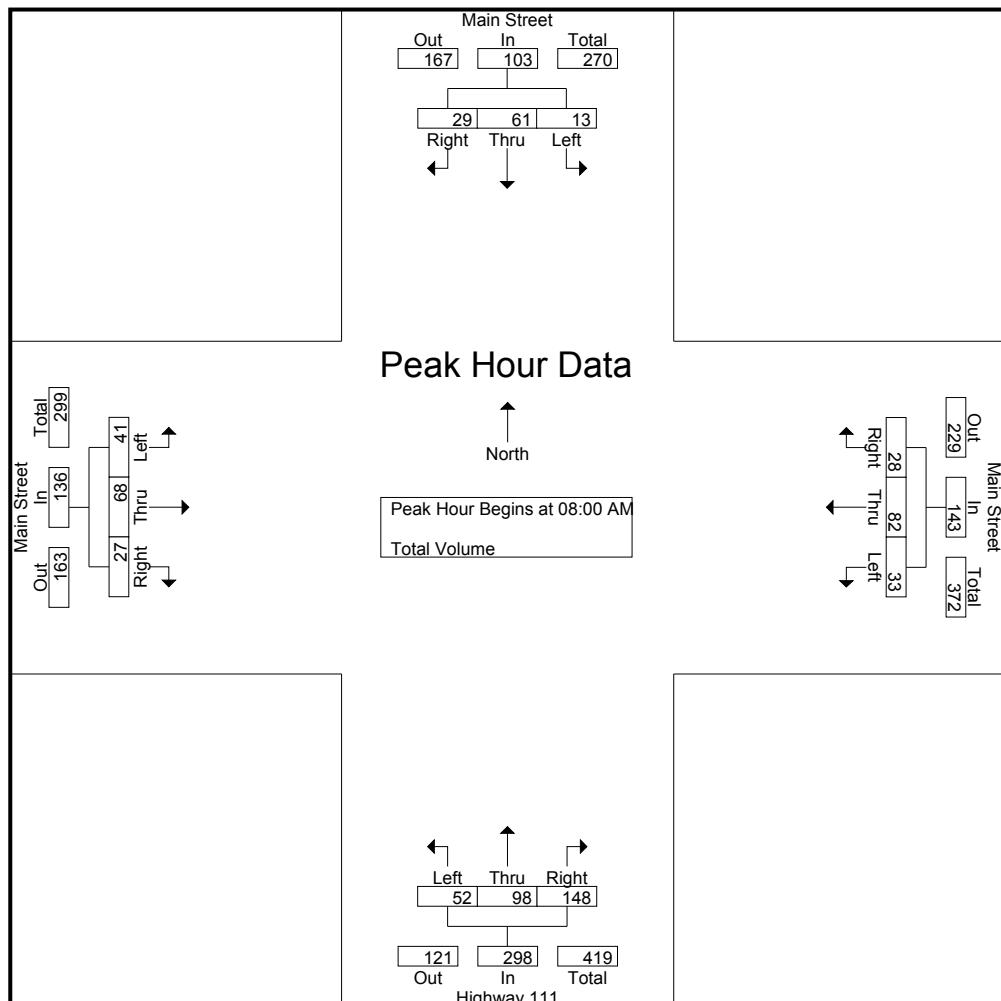
Start Time	Main Street Southbound				Main Street Westbound				Highway 111 Northbound				Main Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	4	10	4	18	26	9	2	37	6	16	13	35	5	12	3	20	110
07:15 AM	5	7	5	17	13	5	4	22	3	9	13	25	7	7	2	16	80
07:30 AM	1	12	4	17	4	8	2	14	9	17	29	55	10	5	1	16	102
07:45 AM	2	19	5	26	7	11	4	22	5	20	56	81	5	13	4	22	151
Total	12	48	18	78	50	33	12	95	23	62	111	196	27	37	10	74	443
08:00 AM	1	17	3	21	6	5	4	15	7	14	15	36	11	9	2	22	94
08:15 AM	1	16	6	23	8	7	9	24	5	20	41	66	7	16	7	30	143
08:30 AM	6	15	7	28	7	23	6	36	13	34	37	84	12	13	4	29	177
08:45 AM	5	13	13	31	12	47	9	68	27	30	55	112	11	30	14	55	266
Total	13	61	29	103	33	82	28	143	52	98	148	298	41	68	27	136	680
Grand Total	25	109	47	181	83	115	40	238	75	160	259	494	68	105	37	210	1123
Apprch %	13.8	60.2	26		34.9	48.3	16.8		15.2	32.4	52.4		32.4	50	17.6		
Total %	2.2	9.7	4.2	16.1	7.4	10.2	3.6	21.2	6.7	14.2	23.1	44	6.1	9.3	3.3	18.7	

Start Time	Main Street Southbound				Main Street Westbound				Highway 111 Northbound				Main Street Eastbound				Int. Total	
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total		
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																		
Peak Hour for Entire Intersection Begins at 08:00 AM																		
08:00 AM	1	17	3	21	6	5	4	15	7	14	15	36	11	9	2	22	94	
08:15 AM	1	16	6	23	8	7	9	24	5	20	41	66	7	16	7	30	143	
08:30 AM	6	15	7	28	7	23	6	36	13	34	37	84	12	13	4	29	177	
08:45 AM	5	13	13	31	12	47	9	68	27	30	55	112	11	30	14	55	266	
Total Volume	13	61	29	103	33	82	28	143	52	98	148	298	41	68	27	136	680	
% App. Total	12.6	59.2	28.2		23.1	57.3	19.6		17.4	32.9	49.7		30.1	50	19.9			
PHF	.542	.897	.558	.831	.688	.436	.778	.526	.481	.721	.673	.665	.854	.567	.482	.618	.639	

Counts Unlimited, Inc.
 PO Box 1178
 Corona, CA 92878
 (951)268-6268

County of Calipatria
 N/S: Highway 111
 E/W: Main Street
 Weather: Clear

File Name : 04_CPA_111_Main AM
 Site Code : 221001
 Start Date : 11/9/2022
 Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	1	17	3	21	6	5	4	15	7	14	15	36	11	9	2	22
+15 mins.	1	16	6	23	8	7	9	24	5	20	41	66	7	16	7	30
+30 mins.	6	15	7	28	7	23	6	36	13	34	37	84	12	13	4	29
+45 mins.	5	13	13	31	12	47	9	68	27	30	55	112	11	30	14	55
Total Volume	13	61	29	103	33	82	28	143	52	98	148	298	41	68	27	136
% App. Total	12.6	59.2	28.2		23.1	57.3	19.6		17.4	32.9	49.7		30.1	50	19.9	
PHF	.542	.897	.558	.831	.688	.436	.778	.526	.481	.721	.673	.665	.854	.567	.482	.618

Counts Unlimited, Inc.
 PO Box 1178
 Corona, CA 92878
 (951)268-6268

County of Calipatria
 N/S: Highway 111
 E/W: Main Street
 Weather: Clear

File Name : 04_CPA_111_Main PM
 Site Code : 221001
 Start Date : 11/9/2022
 Page No : 1

Groups Printed- Total Volume

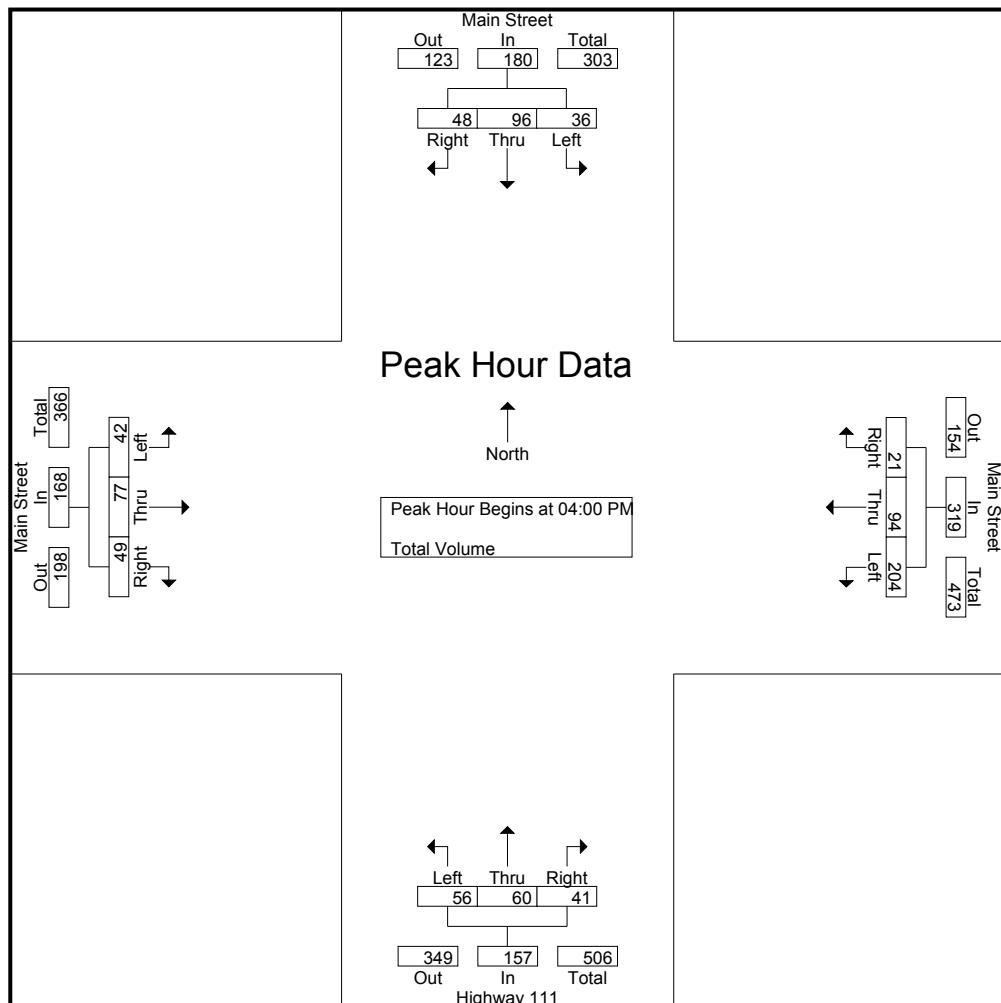
Start Time	Main Street Southbound				Main Street Westbound				Highway 111 Northbound				Main Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	7	23	11	41	69	31	3	103	12	14	16	42	15	16	21	52	238
04:15 PM	9	32	18	59	41	19	5	65	18	10	8	36	9	19	10	38	198
04:30 PM	7	23	8	38	29	19	5	53	14	19	10	43	12	17	6	35	169
04:45 PM	13	18	11	42	65	25	8	98	12	17	7	36	6	25	12	43	219
Total	36	96	48	180	204	94	21	319	56	60	41	157	42	77	49	168	824
05:00 PM	9	45	4	58	48	24	6	78	17	14	7	38	4	16	14	34	208
05:15 PM	11	28	10	49	18	12	7	37	16	24	9	49	4	16	10	30	165
05:30 PM	8	33	11	52	29	21	3	53	17	19	11	47	11	20	8	39	191
05:45 PM	3	28	8	39	13	16	9	38	9	17	10	36	12	11	8	31	144
Total	31	134	33	198	108	73	25	206	59	74	37	170	31	63	40	134	708
Grand Total	67	230	81	378	312	167	46	525	115	134	78	327	73	140	89	302	1532
Apprch %	17.7	60.8	21.4		59.4	31.8	8.8		35.2	41	23.9		24.2	46.4	29.5		
Total %	4.4	15	5.3	24.7	20.4	10.9	3	34.3	7.5	8.7	5.1	21.3	4.8	9.1	5.8		19.7

Start Time	Main Street Southbound				Main Street Westbound				Highway 111 Northbound				Main Street Eastbound				Int. Total	
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total		
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																		
Peak Hour for Entire Intersection Begins at 04:00 PM																		
04:00 PM	7	23	11	41	69	31	3	103	12	14	16	42	15	16	21	52	238	
04:15 PM	9	32	18	59	41	19	5	65	18	10	8	36	9	19	10	38	198	
04:30 PM	7	23	8	38	29	19	5	53	14	19	10	43	12	17	6	35	169	
04:45 PM	13	18	11	42	65	25	8	98	12	17	7	36	6	25	12	43	219	
Total Volume	36	96	48	180	204	94	21	319	56	60	41	157	42	77	49	168	824	
% App. Total	20	53.3	26.7		63.9	29.5	6.6		35.7	38.2	26.1		25	45.8	29.2			
PHF	.692	.750	.667	.763	.739	.758	.656	.774	.778	.789	.641	.913	.700	.770	.583	.808	.866	

Counts Unlimited, Inc.
 PO Box 1178
 Corona, CA 92878
 (951)268-6268

County of Calipatria
 N/S: Highway 111
 E/W: Main Street
 Weather: Clear

File Name : 04_CPA_111_Main PM
 Site Code : 221001
 Start Date : 11/9/2022
 Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:45 PM				04:00 PM				04:45 PM				04:00 PM			
	13	18	11	42	69	31	3	103	12	17	7	36	15	16	21	52
+0 mins.	13	18	11	42	69	31	3	103	12	17	7	36	15	16	21	52
+15 mins.	9	45	4	58	41	19	5	65	17	14	7	38	9	19	10	38
+30 mins.	11	28	10	49	29	19	5	53	16	24	9	49	12	17	6	35
+45 mins.	8	33	11	52	65	25	8	98	17	19	11	47	6	25	12	43
Total Volume	41	124	36	201	204	94	21	319	62	74	34	170	42	77	49	168
% App. Total	20.4	61.7	17.9		63.9	29.5	6.6		36.5	43.5	20		25	45.8	29.2	
PHF	.788	.689	.818	.866	.739	.758	.656	.774	.912	.771	.773	.867	.700	.770	.583	.808

Location: Calipatria
N/S: Highway 111
E/W: Main Street



Date: 11/9/2022
Day: Wednesday

PEDESTRIANS

	North Leg Highway 111 Pedestrians	East Leg Main Street Pedestrians	South Leg Highway 111 Pedestrians	West Leg Main Street Pedestrians	
7:00 AM	0	0	1	0	1
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	2	0	2
8:15 AM	0	0	2	0	2
8:30 AM	3	0	3	2	8
8:45 AM	0	0	6	2	8
TOTAL VOLUMES:	3	0	14	4	21

	North Leg Highway 111 Pedestrians	East Leg Main Street Pedestrians	South Leg Highway 111 Pedestrians	West Leg Main Street Pedestrians	
4:00 PM	0	0	0	2	2
4:15 PM	1	0	1	2	4
4:30 PM	0	0	0	2	2
4:45 PM	2	0	1	1	4
5:00 PM	1	0	0	0	1
5:15 PM	1	3	2	0	6
5:30 PM	1	2	3	0	6
5:45 PM	1	0	2	0	3
TOTAL VOLUMES:	7	5	9	7	28

Location: Calipatria
 N/S: Highway 111
 E/W: Main Street



Date: 11/9/2022
 Day: Wednesday

BICYCLES

Southbound Highway 111			Westbound Main Street			Northbound Highway 111			Eastbound Main Street			
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	1	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	1	0	0	0	0	0	0	1

Southbound Highway 111			Westbound Main Street			Northbound Highway 111			Eastbound Main Street			
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	1	0	0	0	0	0	1	0	2
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	1	0	0	1
5:00 PM	0	0	0	1	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	2	0	0	0	0	1	0	1	4

Counts Unlimited, Inc.
 PO Box 1178
 Corona, CA 92878
 (951)268-6268

County of Imperial
 N/S: Lack Road
 E/W: SR-78
 Weather: Clear

File Name : 07_CIM_Lack_78 AM
 Site Code : 221001
 Start Date : 11/9/2022
 Page No : 1

Groups Printed- Total Volume

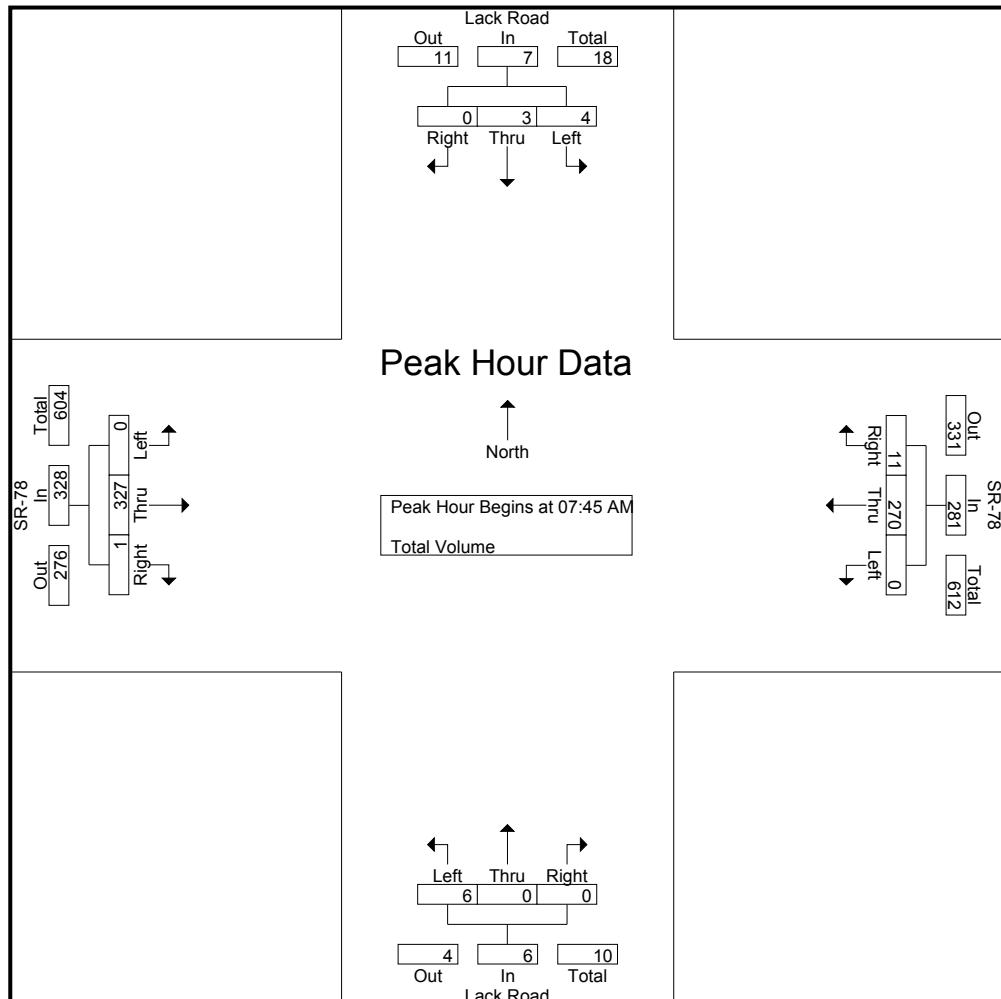
Start Time	Lack Road Southbound				SR-78 Westbound				Lack Road Northbound				SR-78 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	1	0	1	2	0	69	1	70	2	3	0	5	0	53	0	53	130
07:15 AM	0	0	2	2	0	68	2	70	2	0	0	2	0	72	1	73	147
07:30 AM	0	1	0	1	0	85	1	86	1	0	0	1	1	63	0	64	152
07:45 AM	2	2	0	4	0	66	2	68	1	0	0	1	0	82	0	82	155
Total	3	3	3	9	0	288	6	294	6	3	0	9	1	270	1	272	584
08:00 AM	0	0	0	0	0	63	6	69	1	0	0	1	0	84	1	85	155
08:15 AM	1	1	0	2	0	65	3	68	3	0	0	3	0	78	0	78	151
08:30 AM	1	0	0	1	0	76	0	76	1	0	0	1	0	83	0	83	161
08:45 AM	1	1	0	2	0	64	3	67	2	2	0	4	0	70	0	70	143
Total	3	2	0	5	0	268	12	280	7	2	0	9	0	315	1	316	610
Grand Total	6	5	3	14	0	556	18	574	13	5	0	18	1	585	2	588	1194
Apprch %	42.9	35.7	21.4		0	96.9	3.1		72.2	27.8	0		0.2	99.5	0.3		
Total %	0.5	0.4	0.3	1.2	0	46.6	1.5	48.1	1.1	0.4	0	1.5	0.1	49	0.2	49.2	

Start Time	Lack Road Southbound				SR-78 Westbound				Lack Road Northbound				SR-78 Eastbound				Int. Total	
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total		
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																		
Peak Hour for Entire Intersection Begins at 07:45 AM																		
07:45 AM	2	2	0	4	0	66	2	68	1	0	0	1	0	82	0	82	155	
08:00 AM	0	0	0	0	0	63	6	69	1	0	0	1	0	84	1	85	155	
08:15 AM	1	1	0	2	0	65	3	68	3	0	0	3	0	78	0	78	151	
08:30 AM	1	0	0	1	0	76	0	76	1	0	0	1	0	83	0	83	161	
Total Volume	4	3	0	7	0	270	11	281	6	0	0	6	0	327	1	328	622	
% App. Total	57.1	42.9	0		0	96.1	3.9		100	0	0		0	99.7	0.3			
PHF	.500	.375	.000	.438	.000	.888	.458	.924	.500	.000	.000	.500	.000	.973	.250	.965	.966	

Counts Unlimited, Inc.
 PO Box 1178
 Corona, CA 92878
 (951)268-6268

County of Imperial
 N/S: Lack Road
 E/W: SR-78
 Weather: Clear

File Name : 07_CIM_Lack_78 AM
 Site Code : 221001
 Start Date : 11/9/2022
 Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:45 AM			
+0 mins.	1	0	1	2	0	69	1	70	2	3	0	5	0	82	0	82
+15 mins.	0	0	2	2	0	68	2	70	2	0	0	2	0	84	1	85
+30 mins.	0	1	0	1	0	85	1	86	1	0	0	1	0	78	0	78
+45 mins.	2	2	0	4	0	66	2	68	1	0	0	1	0	83	0	83
Total Volume	3	3	3	9	0	288	6	294	6	3	0	9	0	327	1	328
% App. Total	33.3	33.3	33.3		0	98	2		66.7	33.3	0		0	99.7	0.3	
PHF	.375	.375	.375	.563	.000	.847	.750	.855	.750	.250	.000	.450	.000	.973	.250	.965

Counts Unlimited, Inc.
 PO Box 1178
 Corona, CA 92878
 (951)268-6268

County of Imperial
 N/S: Lack Road
 E/W: SR-78
 Weather: Clear

File Name : 07_CIM_Lack_78 PM
 Site Code : 221001
 Start Date : 11/9/2022
 Page No : 1

Groups Printed- Total Volume

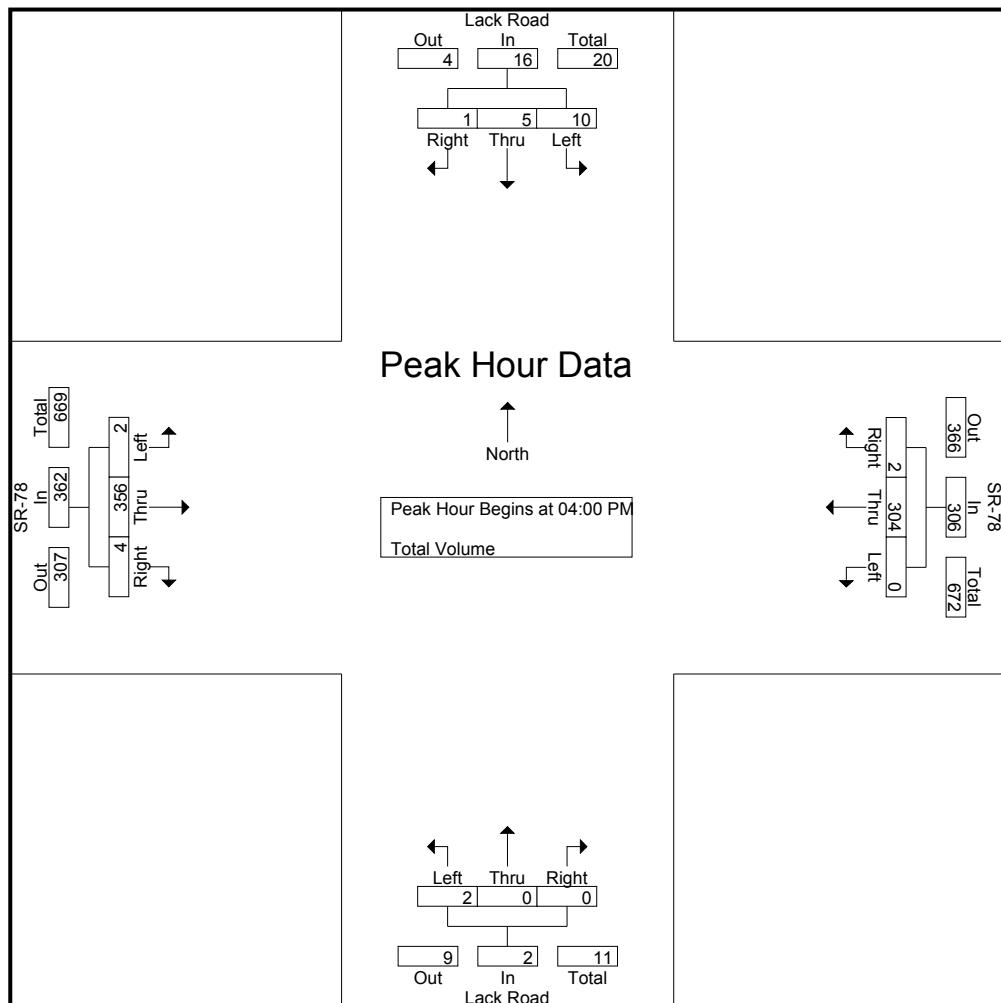
Start Time	Lack Road Southbound				SR-78 Westbound				Lack Road Northbound				SR-78 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	6	2	0	8	0	91	0	91	0	0	0	0	1	94	1	96	195
04:15 PM	2	0	0	2	0	73	0	73	1	0	0	1	1	88	0	89	165
04:30 PM	0	1	1	2	0	85	1	86	0	0	0	0	0	79	1	80	168
04:45 PM	2	2	0	4	0	55	1	56	1	0	0	1	0	95	2	97	158
Total	10	5	1	16	0	304	2	306	2	0	0	2	2	356	4	362	686
05:00 PM	2	0	0	2	0	62	1	63	0	0	0	0	0	110	1	111	176
05:15 PM	0	1	0	1	0	65	1	66	0	0	0	0	0	74	4	78	145
05:30 PM	2	0	1	3	0	67	0	67	0	0	0	0	0	63	2	65	135
05:45 PM	2	0	0	2	0	53	0	53	0	1	0	1	0	77	0	77	133
Total	6	1	1	8	0	247	2	249	0	1	0	1	0	324	7	331	589
Grand Total	16	6	2	24	0	551	4	555	2	1	0	3	2	680	11	693	1275
Apprch %	66.7	25	8.3		0	99.3	0.7		66.7	33.3	0	0.3	98.1	1.6			
Total %	1.3	0.5	0.2	1.9	0	43.2	0.3	43.5	0.2	0.1	0	0.2	0.2	53.3	0.9	54.4	

Start Time	Lack Road Southbound				SR-78 Westbound				Lack Road Northbound				SR-78 Eastbound				Int. Total	
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total		
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																		
Peak Hour for Entire Intersection Begins at 04:00 PM																		
04:00 PM	6	2	0	8	0	91	0	91	0	0	0	0	1	94	1	96	195	
04:15 PM	2	0	0	2	0	73	0	73	1	0	0	1	1	88	0	89	165	
04:30 PM	0	1	1	2	0	85	1	86	0	0	0	0	0	79	1	80	168	
04:45 PM	2	2	0	4	0	55	1	56	1	0	0	1	0	95	2	97	158	
Total Volume	10	5	1	16	0	304	2	306	2	0	0	2	2	356	4	362	686	
% App. Total	62.5	31.2	6.2		0	99.3	0.7		100	0	0	0	0.6	98.3	1.1			
PHF	.417	.625	.250	.500	.000	.835	.500	.841	.500	.000	.000	.500	.500	.937	.500	.933	.879	

Counts Unlimited, Inc.
 PO Box 1178
 Corona, CA 92878
 (951)268-6268

County of Imperial
 N/S: Lack Road
 E/W: SR-78
 Weather: Clear

File Name : 07_CIM_Lack_78 PM
 Site Code : 221001
 Start Date : 11/9/2022
 Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:15 PM				
+0 mins.	6	2	0	8	0	91	0	91	0	0	0	0	0	1	88	0	89
+15 mins.	2	0	0	2	0	73	0	73	1	0	0	0	1	0	79	1	80
+30 mins.	0	1	1	2	0	85	1	86	0	0	0	0	0	0	95	2	97
+45 mins.	2	2	0	4	0	55	1	56	1	0	0	0	1	0	110	1	111
Total Volume	10	5	1	16	0	304	2	306	2	0	0	0	2	1	372	4	377
% App. Total	62.5	31.2	6.2		0	99.3	0.7		100	0	0	0	0.3	98.7	1.1		
PHF	.417	.625	.250	.500	.000	.835	.500	.841	.500	.000	.000	.500	.250	.845	.500	.849	

Location: County of Imperial
N/S: Lack Road
E/W: SR-78



Date: 11/9/2022
Day: Wednesday

PEDESTRIANS

	North Leg Lack Road Pedestrians	East Leg SR-78 Pedestrians	South Leg Lack Road Pedestrians	West Leg SR-78 Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

	North Leg Lack Road Pedestrians	East Leg SR-78 Pedestrians	South Leg Lack Road Pedestrians	West Leg SR-78 Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

Location: County of Imperial
 N/S: Lack Road
 E/W: SR-78



Date: 11/9/2022
 Day: Wednesday

BICYCLES

Southbound Lack Road			Westbound SR-78			Northbound Lack Road			Eastbound SR-78			
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0

Southbound Lack Road			Westbound SR-78			Northbound Lack Road			Eastbound SR-78			
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0

Counts Unlimited, Inc.
 PO Box 1178
 Corona, CA 92878
 (951)268-6268

City of Westmorland
 N/S: Center Street
 E/W: SR-78 (Main Street)
 Weather: Clear

File Name : 05_WMD_Cent_78 AM
 Site Code : 221001
 Start Date : 11/9/2022
 Page No : 1

Groups Printed- Total Volume

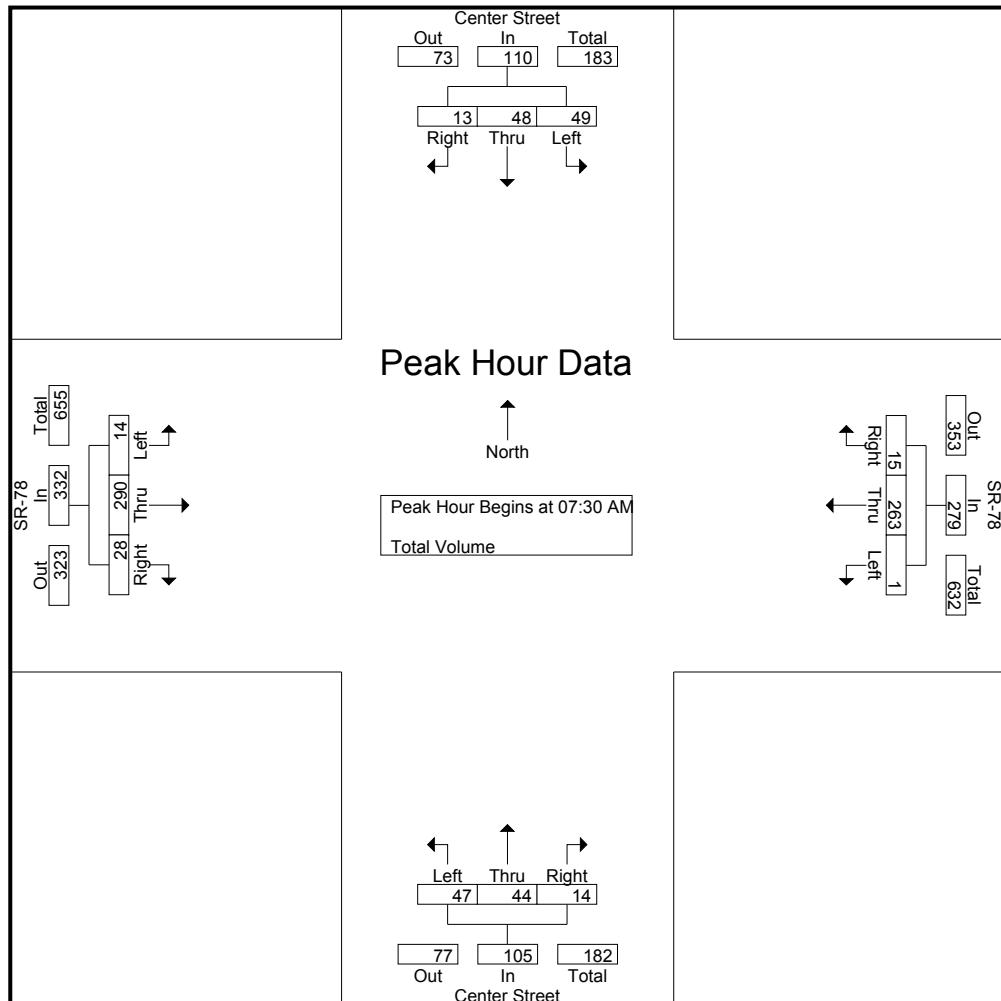
Start Time	Center Street Southbound				SR-78 Westbound				Center Street Northbound				SR-78 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	11	9	5	25	0	65	5	70	9	2	3	14	9	61	10	80	189
07:15 AM	7	9	3	19	0	54	5	59	10	6	1	17	2	75	5	82	177
07:30 AM	10	10	3	23	0	69	4	73	18	13	2	33	2	54	6	62	191
07:45 AM	18	20	1	39	0	61	4	65	12	13	3	28	4	81	5	90	222
Total	46	48	12	106	0	249	18	267	49	34	9	92	17	271	26	314	779
08:00 AM	13	10	5	28	0	69	3	72	9	9	6	24	4	79	10	93	217
08:15 AM	8	8	4	20	1	64	4	69	8	9	3	20	4	76	7	87	196
08:30 AM	8	10	4	22	4	60	3	67	5	6	0	11	1	76	6	83	183
08:45 AM	7	6	1	14	2	51	6	59	9	5	3	17	6	61	5	72	162
Total	36	34	14	84	7	244	16	267	31	29	12	72	15	292	28	335	758
Grand Total	82	82	26	190	7	493	34	534	80	63	21	164	32	563	54	649	1537
Apprch %	43.2	43.2	13.7		1.3	92.3	6.4		48.8	38.4	12.8		4.9	86.7	8.3		
Total %	5.3	5.3	1.7	12.4	0.5	32.1	2.2	34.7	5.2	4.1	1.4	10.7	2.1	36.6	3.5	42.2	

Start Time	Center Street Southbound				SR-78 Westbound				Center Street Northbound				SR-78 Eastbound				Int. Total	
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total		
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																		
Peak Hour for Entire Intersection Begins at 07:30 AM																		
07:30 AM	10	10	3	23	0	69	4	73	18	13	2	33	2	54	6	62	191	
07:45 AM	18	20	1	39	0	61	4	65	12	13	3	28	4	81	5	90	222	
08:00 AM	13	10	5	28	0	69	3	72	9	9	6	24	4	79	10	93	217	
08:15 AM	8	8	4	20	1	64	4	69	8	9	3	20	4	76	7	87	196	
Total Volume	49	48	13	110	1	263	15	279	47	44	14	105	14	290	28	332	826	
% App. Total	44.5	43.6	11.8		0.4	94.3	5.4		44.8	41.9	13.3		4.2	87.3	8.4			
PHF	.681	.600	.650	.705	.250	.953	.938	.955	.653	.846	.583	.795	.875	.895	.700	.892	.930	

Counts Unlimited, Inc.
 PO Box 1178
 Corona, CA 92878
 (951)268-6268

City of Westmorland
 N/S: Center Street
 E/W: SR-78 (Main Street)
 Weather: Clear

File Name : 05_WMD_Cent_78 AM
 Site Code : 221001
 Start Date : 11/9/2022
 Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:45 AM			
	Out	In	Total	Approach	Out	In	Total	Approach	Out	In	Total	Approach	Out	In	Total	Approach
+0 mins.	10	10	3	23	0	69	4	73	18	13	2	33	4	81	5	90
+15 mins.	18	20	1	39	0	61	4	65	12	13	3	28	4	79	10	93
+30 mins.	13	10	5	28	0	69	3	72	9	9	6	24	4	76	7	87
+45 mins.	8	8	4	20	1	64	4	69	8	9	3	20	1	76	6	83
Total Volume	49	48	13	110	1	263	15	279	47	44	14	105	13	312	28	353
% App. Total	44.5	43.6	11.8		0.4	94.3	5.4		44.8	41.9	13.3		3.7	88.4	7.9	
PHF	.681	.600	.650	.705	.250	.953	.938	.955	.653	.846	.583	.795	.813	.963	.700	.949

Counts Unlimited, Inc.
 PO Box 1178
 Corona, CA 92878
 (951)268-6268

City of Westmorland
 N/S: Center Street
 E/W: SR-78 (Main Street)
 Weather: Clear

File Name : 05_WMD_Cent_78 PM
 Site Code : 221001
 Start Date : 11/9/2022
 Page No : 1

Groups Printed- Total Volume

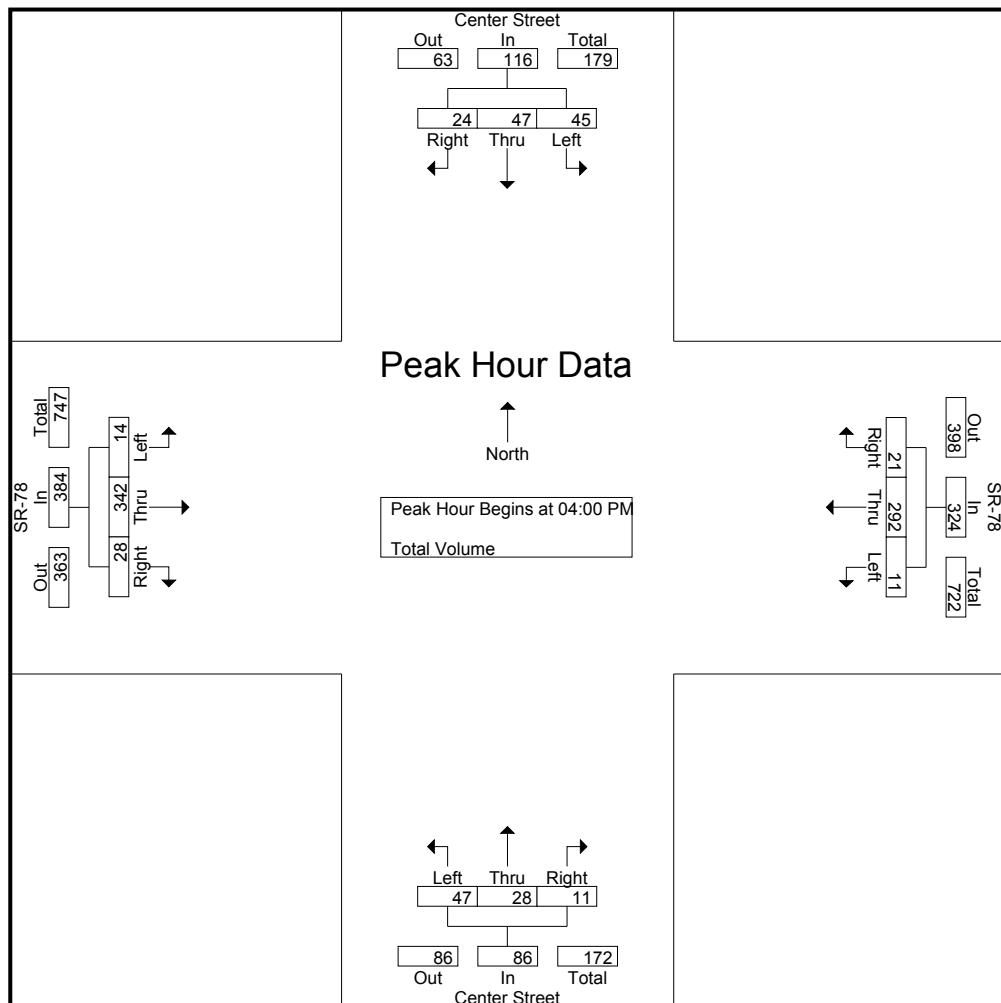
Start Time	Center Street Southbound				SR-78 Westbound				Center Street Northbound				SR-78 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	9	10	9	28	4	84	1	89	13	10	1	24	4	98	10	112	253
04:15 PM	7	11	5	23	0	73	11	84	14	9	3	26	2	89	5	96	229
04:30 PM	16	13	4	33	1	65	7	73	10	5	4	19	3	69	10	82	207
04:45 PM	13	13	6	32	6	70	2	78	10	4	3	17	5	86	3	94	221
Total	45	47	24	116	11	292	21	324	47	28	11	86	14	342	28	384	910
05:00 PM	14	12	5	31	1	75	1	77	15	10	0	25	2	91	5	98	231
05:15 PM	14	11	3	28	1	68	6	75	10	5	3	18	3	80	9	92	213
05:30 PM	9	4	8	21	1	72	7	80	12	6	1	19	4	58	3	65	185
05:45 PM	16	8	5	29	1	71	3	75	6	10	2	18	5	73	2	80	202
Total	53	35	21	109	4	286	17	307	43	31	6	80	14	302	19	335	831
Grand Total	98	82	45	225	15	578	38	631	90	59	17	166	28	644	47	719	1741
Apprch %	43.6	36.4	20		2.4	91.6	6		54.2	35.5	10.2		3.9	89.6	6.5		
Total %	5.6	4.7	2.6	12.9	0.9	33.2	2.2	36.2	5.2	3.4	1	9.5	1.6	37	2.7	41.3	

Start Time	Center Street Southbound				SR-78 Westbound				Center Street Northbound				SR-78 Eastbound				Int. Total	
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total		
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																		
Peak Hour for Entire Intersection Begins at 04:00 PM																		
04:00 PM	9	10	9	28	4	84	1	89	13	10	1	24	4	98	10	112	253	
04:15 PM	7	11	5	23	0	73	11	84	14	9	3	26	2	89	5	96	229	
04:30 PM	16	13	4	33	1	65	7	73	10	5	4	19	3	69	10	82	207	
04:45 PM	13	13	6	32	6	70	2	78	10	4	3	17	5	86	3	94	221	
Total Volume	45	47	24	116	11	292	21	324	47	28	11	86	14	342	28	384	910	
% App. Total	38.8	40.5	20.7		3.4	90.1	6.5		54.7	32.6	12.8		3.6	89.1	7.3			
PHF	.703	.904	.667	.879	.458	.869	.477	.910	.839	.700	.688	.827	.700	.872	.700	.857	.899	

Counts Unlimited, Inc.
 PO Box 1178
 Corona, CA 92878
 (951)268-6268

City of Westmorland
 N/S: Center Street
 E/W: SR-78 (Main Street)
 Weather: Clear

File Name : 05_WMD_Cent_78 PM
 Site Code : 221001
 Start Date : 11/9/2022
 Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:30 PM				04:00 PM				04:15 PM				04:00 PM			
+0 mins.	16	13	4	33	4	84	1	89	14	9	3	26	4	98	10	112
+15 mins.	13	13	6	32	0	73	11	84	10	5	4	19	2	89	5	96
+30 mins.	14	12	5	31	1	65	7	73	10	4	3	17	3	69	10	82
+45 mins.	14	11	3	28	6	70	2	78	15	10	0	25	5	86	3	94
Total Volume	57	49	18	124	11	292	21	324	49	28	10	87	14	342	28	384
% App. Total	46	39.5	14.5		3.4	90.1	6.5		56.3	32.2	11.5		3.6	89.1	7.3	
PHF	.891	.942	.750	.939	.458	.869	.477	.910	.817	.700	.625	.837	.700	.872	.700	.857

Location: Westmorland
N/S: Center Street
E/W: SR-78



Date: 11/9/2022
Day: Wednesday

PEDESTRIANS

	North Leg Center Street Pedestrians	East Leg SR-78 Pedestrians	South Leg Center Street Pedestrians	West Leg SR-78 Pedestrians	
7:00 AM	0	0	0	1	1
7:15 AM	0	2	0	1	3
7:30 AM	0	0	0	4	4
7:45 AM	0	4	0	16	20
8:00 AM	0	2	0	0	2
8:15 AM	0	0	0	1	1
8:30 AM	0	0	0	3	3
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	8	0	26	34

	North Leg Center Street Pedestrians	East Leg SR-78 Pedestrians	South Leg Center Street Pedestrians	West Leg SR-78 Pedestrians	
4:00 PM	4	0	0	7	11
4:15 PM	0	1	0	0	1
4:30 PM	0	1	0	1	2
4:45 PM	0	0	0	2	2
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	1	1
5:30 PM	0	0	0	0	0
5:45 PM	0	2	0	1	3
TOTAL VOLUMES:	4	4	0	12	20

Location: Westmorland
 N/S: Center Street
 E/W: SR-78



Date: 11/9/2022
 Day: Wednesday

BICYCLES

Southbound Center Street			Westbound SR-78			Northbound Center Street			Eastbound SR-78			
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	1	0	0	0	0	0	0	1
TOTAL VOLUMES:	0	0	0	0	1	0	0	0	0	0	0	1

Southbound Center Street			Westbound SR-78			Northbound Center Street			Eastbound SR-78			
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	1	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	1	1	2

Counts Unlimited, Inc.
 PO Box 1178
 Corona, CA 92878
 (951)268-6268

County of Imperial
 N/S: Brandt Road
 E/W: SR-78
 Weather: Clear

File Name : 06_CIM_Bran_78 AM
 Site Code : 221001
 Start Date : 11/9/2022
 Page No : 1

Groups Printed- Total Volume

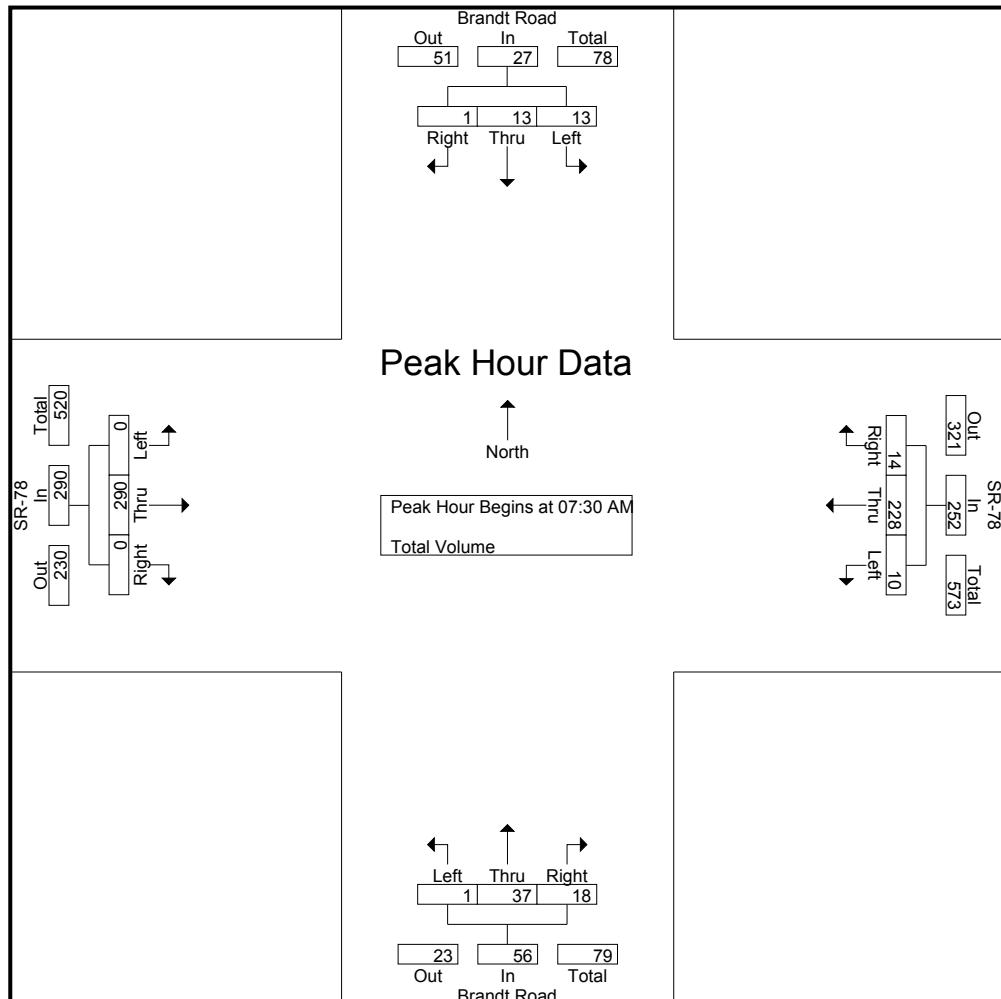
Start Time	Brandt Road Southbound				SR-78 Westbound				Brandt Road Northbound				SR-78 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	3	0	0	3	1	54	2	57	0	4	2	6	0	60	0	60	126
07:15 AM	1	1	0	2	1	57	2	60	0	10	3	13	1	66	0	67	142
07:30 AM	3	1	0	4	0	57	0	57	1	13	1	15	0	63	0	63	139
07:45 AM	2	1	0	3	0	59	10	69	0	15	9	24	0	88	0	88	184
Total	9	3	0	12	2	227	14	243	1	42	15	58	1	277	0	278	591
08:00 AM	7	3	0	10	3	58	2	63	0	8	7	15	0	70	0	70	158
08:15 AM	1	8	1	10	7	54	2	63	0	1	1	2	0	69	0	69	144
08:30 AM	4	1	0	5	4	56	2	62	1	3	1	5	1	56	0	57	129
08:45 AM	3	4	0	7	2	54	3	59	1	5	2	8	0	53	0	53	127
Total	15	16	1	32	16	222	9	247	2	17	11	30	1	248	0	249	558
Grand Total	24	19	1	44	18	449	23	490	3	59	26	88	2	525	0	527	1149
Apprch %	54.5	43.2	2.3		3.7	91.6	4.7		3.4	67	29.5		0.4	99.6	0		
Total %	2.1	1.7	0.1	3.8	1.6	39.1	2	42.6	0.3	5.1	2.3	7.7	0.2	45.7	0	45.9	

Start Time	Brandt Road Southbound				SR-78 Westbound				Brandt Road Northbound				SR-78 Eastbound				Int. Total	
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total		
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																		
Peak Hour for Entire Intersection Begins at 07:30 AM																		
07:30 AM	3	1	0	4	0	57	0	57	1	13	1	15	0	63	0	63	139	
07:45 AM	2	1	0	3	0	59	10	69	0	15	9	24	0	88	0	88	184	
08:00 AM	7	3	0	10	3	58	2	63	0	8	7	15	0	70	0	70	158	
08:15 AM	1	8	1	10	7	54	2	63	0	1	1	2	0	69	0	69	144	
Total Volume	13	13	1	27	10	228	14	252	1	37	18	56	0	290	0	290	625	
% App. Total	48.1	48.1	3.7		4	90.5	5.6		1.8	66.1	32.1		0	100	0			
PHF	.464	.406	.250	.675	.357	.966	.350	.913	.250	.617	.500	.583	.000	.824	.000	.824	.849	

Counts Unlimited, Inc.
 PO Box 1178
 Corona, CA 92878
 (951)268-6268

County of Imperial
 N/S: Brandt Road
 E/W: SR-78
 Weather: Clear

File Name : 06_CIM_Bran_78 AM
 Site Code : 221001
 Start Date : 11/9/2022
 Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	08:00 AM				07:45 AM				07:15 AM				07:30 AM			
+0 mins.	7	3	0	10	0	59	10	69	0	10	3	13	0	63	0	63
+15 mins.	1	8	1	10	3	58	2	63	1	13	1	15	0	88	0	88
+30 mins.	4	1	0	5	7	54	2	63	0	15	9	24	0	70	0	70
+45 mins.	3	4	0	7	4	56	2	62	0	8	7	15	0	69	0	69
Total Volume	15	16	1	32	14	227	16	257	1	46	20	67	0	290	0	290
% App. Total	46.9	50	3.1		5.4	88.3	6.2		1.5	68.7	29.9		0	100	0	
PHF	.536	.500	.250	.800	.500	.962	.400	.931	.250	.767	.556	.698	.000	.824	.000	.824

Counts Unlimited, Inc.
 PO Box 1178
 Corona, CA 92878
 (951)268-6268

County of Imperial
 N/S: Brandt Road
 E/W: SR-78
 Weather: Clear

File Name : 06_CIM_Bran_78 PM
 Site Code : 221001
 Start Date : 11/9/2022
 Page No : 1

Groups Printed- Total Volume

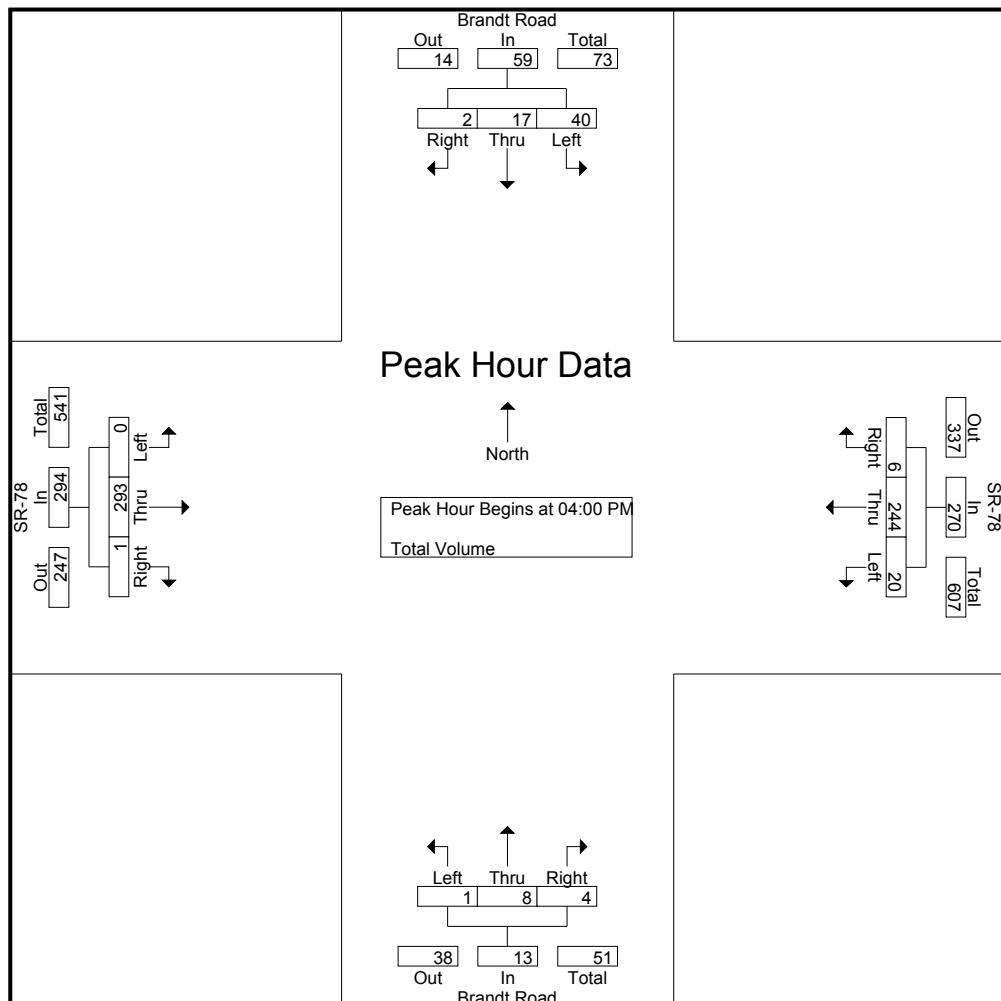
Start Time	Brandt Road Southbound				SR-78 Westbound				Brandt Road Northbound				SR-78 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	10	3	0	13	3	68	1	72	1	3	1	5	0	89	1	90	180
04:15 PM	9	5	1	15	3	58	3	64	0	4	2	6	0	69	0	69	154
04:30 PM	14	5	1	20	6	66	2	74	0	0	1	1	0	59	0	59	154
04:45 PM	7	4	0	11	8	52	0	60	0	1	0	1	0	76	0	76	148
Total	40	17	2	59	20	244	6	270	1	8	4	13	0	293	1	294	636
05:00 PM	1	5	0	6	4	61	1	66	0	1	2	3	0	84	0	84	159
05:15 PM	2	2	0	4	4	58	0	62	0	1	2	3	0	62	0	62	131
05:30 PM	0	3	0	3	2	58	3	63	0	3	1	4	0	63	0	63	133
05:45 PM	3	2	0	5	2	69	2	73	0	1	2	3	0	55	0	55	136
Total	6	12	0	18	12	246	6	264	0	6	7	13	0	264	0	264	559
Grand Total	46	29	2	77	32	490	12	534	1	14	11	26	0	557	1	558	1195
Apprch %	59.7	37.7	2.6		6	91.8	2.2		3.8	53.8	42.3		0	99.8	0.2		
Total %	3.8	2.4	0.2	6.4	2.7	41	1	44.7	0.1	1.2	0.9	2.2	0	46.6	0.1	46.7	

Start Time	Brandt Road Southbound				SR-78 Westbound				Brandt Road Northbound				SR-78 Eastbound				Int. Total	
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total		
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																		
Peak Hour for Entire Intersection Begins at 04:00 PM																		
04:00 PM	10	3	0	13	3	68	1	72	1	3	1	5	0	89	1	90	180	
04:15 PM	9	5	1	15	3	58	3	64	0	4	2	6	0	69	0	69	154	
04:30 PM	14	5	1	20	6	66	2	74	0	0	1	1	0	59	0	59	154	
04:45 PM	7	4	0	11	8	52	0	60	0	1	0	1	0	76	0	76	148	
Total Volume	40	17	2	59	20	244	6	270	1	8	4	13	0	293	1	294	636	
% App. Total	67.8	28.8	3.4		7.4	90.4	2.2		7.7	61.5	30.8		0	99.7	0.3			
PHF	.714	.850	.500	.738	.625	.897	.500	.912	.250	.500	.500	.542	.000	.823	.250	.817	.883	

Counts Unlimited, Inc.
 PO Box 1178
 Corona, CA 92878
 (951)268-6268

County of Imperial
 N/S: Brandt Road
 E/W: SR-78
 Weather: Clear

File Name : 06_CIM_Bran_78 PM
 Site Code : 221001
 Start Date : 11/9/2022
 Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	10	3	0	13	3	68	1	72	1	3	1	5	0	89	1	90
+15 mins.	9	5	1	15	3	58	3	64	0	4	2	6	0	69	0	69
+30 mins.	14	5	1	20	6	66	2	74	0	0	1	1	0	59	0	59
+45 mins.	7	4	0	11	8	52	0	60	0	1	0	1	0	76	0	76
Total Volume	40	17	2	59	20	244	6	270	1	8	4	13	0	293	1	294
% App. Total	67.8	28.8	3.4		7.4	90.4	2.2		7.7	61.5	30.8		0	99.7	0.3	
PHF	.714	.850	.500	.738	.625	.897	.500	.912	.250	.500	.500	.542	.000	.823	.250	.817

Location: County of Imperial
N/S: Brandt Road
E/W: SR-78



Date: 11/9/2022
Day: Wednesday

PEDESTRIANS

	North Leg Brandt Road Pedestrians	East Leg SR-78 Pedestrians	South Leg Brandt Road Pedestrians	West Leg SR-78 Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

	North Leg Brandt Road Pedestrians	East Leg SR-78 Pedestrians	South Leg Brandt Road Pedestrians	West Leg SR-78 Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

Location: County of Imperial
 N/S: Brandt Road
 E/W: SR-78



Date: 11/9/2022
 Day: Wednesday

BICYCLES

	Southbound Brandt Road			Westbound SR-78			Northbound Brandt Road			Eastbound SR-78			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

	Southbound Brandt Road			Westbound SR-78			Northbound Brandt Road			Eastbound SR-78			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

ROADWAY SEGMENTS

Counts Unlimited, Inc.

PO Box 11178

Corona, CA 92878

Phone: (951) 268-6268

email: counts@countsunlimited.com

County of Imperial
Beal Road
B/ Commercial Avenue - Railroad Tracks
24 Hour Directional Classification Count

Eastbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi
11/17/22	0	1	0	0	0	0	0	0	0	0	0
01:00	0	0	1	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	1	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0
04:00	0	3	2	1	0	1	0	2	0	0	0
05:00	0	0	5	0	0	0	0	0	1	0	0
06:00	0	5	7	0	3	0	0	0	1	0	0
07:00	0	4	11	0	2	0	0	2	1	0	0
08:00	0	9	8	1	8	1	1	0	0	0	0
09:00	0	7	10	0	2	1	0	0	0	0	0
10:00	1	5	8	0	0	0	0	1	2	0	0
11:00	3	24	21	0	5	1	0	0	4	2	0
12 PM	0	16	16	0	5	0	0	0	1	1	0
13:00	0	8	13	0	2	1	0	0	0	0	0
14:00	1	14	10	0	0	0	0	1	0	0	0
15:00	1	13	7	1	5	1	0	0	0	0	0
16:00	0	17	12	0	7	0	0	0	0	0	0
17:00	0	8	7	0	3	0	0	0	0	0	0
18:00	0	2	5	0	0	0	0	0	0	0	0
19:00	0	10	1	0	0	0	0	0	0	0	0
20:00	0	1	3	0	0	0	0	0	0	0	0
21:00	0	3	3	0	1	0	0	0	0	0	0
22:00	0	2	0	0	0	0	0	0	0	0	0
23:00	0	3	2	0	2	0	0	0	1	0	0
Total	6	155	152	3	46	6	0	13	10	0	0
Percent	1.5%	39.6%	38.9%	0.8%	11.8%	1.5%	0.0%	3.3%	2.6%	0.0%	0.0%
AM Peak Vol.	11:00	11:00	11:00	04:00	08:00	04:00	04:00	04:00	10:00	2	2
PM Peak Vol.	14:00	16:00	12:00	15:00	16:00	13:00	12:00	12:00	12:00	4	2
Grand Total	6	155	152	3	46	6	0	13	10	0	0
Percent	1.5%	39.6%	38.9%	0.8%	11.8%	1.5%	0.0%	3.3%	2.6%	0.0%	0.0%

Counts Unlimited, Inc.

PO Box 11178
Corona, CA 92878

Phone: (951) 268-6268

email: counts@countsunlimited.com

County of Imperial
Beal Road
B/ Commercial Avenue - Railroad Tracks
24 Hour Directional Classification Count
Westbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi
11/17/22	0	0	0	0	0	0	0	0	0	0	0
01:00	0	1	0	0	0	0	0	0	0	0	0
02:00	0	0	1	0	0	0	0	0	0	0	0
03:00	1	0	0	1	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0
05:00	1	2	4	0	1	0	0	0	0	0	0
06:00	0	0	3	0	3	0	0	0	1	0	0
07:00	2	6	3	0	4	1	0	0	0	0	0
08:00	0	8	10	0	6	0	0	1	0	0	0
09:00	1	8	12	2	8	1	0	0	0	0	0
10:00	1	11	16	0	14	1	0	3	1	0	0
11:00	0	13	10	1	4	1	0	2	1	0	0
12 PM	0	13	13	0	6	1	0	1	1	0	0
13:00	0	12	9	0	10	0	0	0	0	0	0
14:00	1	14	13	0	7	0	0	1	1	0	0
15:00	0	12	11	0	8	0	0	0	0	0	1
16:00	0	5	7	1	5	0	0	0	0	0	0
17:00	0	10	3	0	8	0	0	0	0	0	0
18:00	0	5	2	0	4	0	0	0	0	0	0
19:00	0	4	3	0	6	0	0	0	0	0	0
20:00	0	1	2	0	0	0	0	0	0	0	0
21:00	0	1	2	0	0	0	0	0	0	0	0
22:00	0	3	1	0	0	0	0	0	0	0	0
23:00	0	4	0	0	0	0	0	0	0	0	0
Total	7	133	126	5	94	6	0	10	5	0	1
Percent	1.8%	34.4%	32.6%	1.3%	24.3%	1.6%	0.0%	2.6%	1.3%	0.0%	0.3%
AM Peak Vol.	07:00	11:00	10:00	09:00	10:00	05:00	05:00	10:00	06:00		
PM Peak Vol.	14:00	14:00	12:00	16:00	13:00	14	1	3	1		
Grand Total	7	133	126	5	94	6	0	10	5	0	1
Percent	1.8%	34.4%	32.6%	1.3%	24.3%	1.6%	0.0%	2.6%	1.3%	0.0%	0.3%

Counts Unlimited, Inc.

PO Box 11178
Corona, CA 92878
Phone: (951) 268-6268

email: counts@countsunlimited.com

County of Imperial
Beal Road
B/ Commercial Avenue - Railroad Tracks
24 Hour Directional Classification Count
Eastbound, Westbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi
11/17/22	0	1	0	0	0	0	0	0	0	0	0
01:00	0	1	1	0	0	0	0	0	0	0	0
02:00	0	0	1	0	0	1	0	0	0	0	0
03:00	1	0	1	0	0	0	0	0	0	0	0
04:00	0	3	2	9	0	1	0	0	2	0	0
05:00	1	2	9	0	6	0	0	0	1	0	0
06:00	0	5	10	0	6	1	0	0	2	1	0
07:00	2	10	14	0	6	1	0	2	1	0	0
08:00	0	17	18	1	14	1	0	2	0	0	0
09:00	1	15	22	2	10	2	0	1	1	0	0
10:00	2	16	24	0	14	1	0	4	3	0	0
11:00	3	37	31	1	9	2	0	2	2	0	0
12 PM	0	29	29	0	11	1	0	5	3	0	0
13:00	0	20	22	0	12	1	0	2	2	0	0
14:00	2	28	23	0	7	0	0	2	0	0	0
15:00	1	25	18	1	13	1	0	0	0	0	1
16:00	0	22	19	1	12	0	0	0	0	0	0
17:00	0	18	10	0	11	0	0	0	0	0	0
18:00	0	7	7	0	4	0	0	0	0	0	0
19:00	0	14	4	0	6	0	0	0	0	0	0
20:00	0	2	5	1	0	0	0	0	0	0	0
21:00	0	4	5	0	1	0	0	0	0	0	0
22:00	0	5	1	0	0	0	0	0	0	0	0
23:00	0	7	2	0	2	0	0	0	1	0	0
Total	13	288	278	8	140	12	0	23	15	0	1
Percent	1.7%	37.0%	35.7%	1.0%	18.0%	1.5%	0.0%	3.0%	1.9%	0.0%	0.1%
AM Peak Vol.	11:00	37	31	2	14	2	0:00	10:00	10:00	4	3
PM Peak Vol.	14:00	29	1	13	1	12:00		12:00	12:00	5	3
Grand Total	13	288	278	8	140	12	0	23	15	0	1
Percent	1.7%	37.0%	35.7%	1.0%	18.0%	1.5%	0.0%	3.0%	1.9%	0.0%	0.1%

Counts Unlimited, Inc.

PO Box 11178
Corona, CA 92878

Phone: (951) 268-6268

email: counts@countsunlimited.com

County of Imperial
Brandt Road
B/ Swink Road - Hovley Road
24 Hour Directional Classification Count
Northbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi
11/09/22	0	5	1	0	0	0	0	0	0	0	0
01:00	0	1	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0
03:00	0	1	0	0	0	0	0	0	0	0	0
04:00	0	2	0	0	0	0	0	0	0	0	0
05:00	0	3	0	0	0	0	0	0	0	0	0
06:00	0	5	6	0	0	1	0	0	0	0	0
07:00	0	2	8	0	1	0	0	0	0	2	0
08:00	0	7	11	0	0	0	0	0	0	0	0
09:00	0	3	10	3	1	0	0	0	0	1	0
10:00	0	5	8	3	0	0	0	0	0	0	0
11:00	0	4	13	0	3	0	0	0	0	1	1
12 PM	0	3	17	0	0	8	1	0	0	0	0
13:00	0	16	11	0	0	1	0	0	0	0	0
14:00	0	40	25	0	0	0	0	0	0	0	0
15:00	0	11	12	0	5	0	0	0	0	2	0
16:00	0	16	6	0	1	0	0	0	0	0	0
17:00	0	11	2	0	0	0	0	0	0	0	0
18:00	0	12	0	0	0	0	0	0	0	0	0
19:00	0	4	2	0	0	0	0	0	0	0	0
20:00	0	2	0	0	0	0	0	0	0	0	0
21:00	0	4	0	0	0	0	0	0	0	0	0
22:00	0	1	0	0	0	0	0	0	0	0	0
23:00	0	6	0	0	0	0	0	0	0	0	0
Total	0	164	132	6	12	9	1	1	9	0	0
Percent	0.0%	49.1%	39.5%	1.8%	3.6%	2.7%	0.3%	0.3%	2.7%	0.0%	0.0%
AM Peak Vol.	08:00	7	13	3	3	3	1	11:00	07:00	2	2
PM Peak Vol.	14:00	40	25	5	5	8	1	12:00	15:00	2	2
Grand Total	0	164	132	6	12	9	1	1	9	0	0
Total Percent	0.0%	49.1%	39.5%	1.8%	3.6%	2.7%	0.3%	0.3%	2.7%	0.0%	0.0%

Counts Unlimited, Inc.

PO Box 11178
Corona, CA 92878

Phone: (951) 268-6268

email: counts@countsunlimited.com

County of Imperial
Brandt Road
B/ Swink Road - Hovley Road
24 Hour Directional Classification Count

Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi
11/09/22	0	1	0	0	0	0	0	0	0	0	0
01:00	0	4	0	0	0	0	0	0	0	0	0
02:00	0	3	0	0	0	0	0	0	0	0	0
03:00	0	6	0	0	0	0	0	0	0	0	0
04:00	0	33	0	0	0	0	0	0	0	0	0
05:00	0	66	18	0	1	0	0	0	0	0	0
06:00	0	14	14	0	2	0	0	0	0	0	0
07:00	0	24	19	0	2	0	1	0	0	0	0
08:00	0	9	18	0	3	1	0	0	1	0	0
09:00	0	4	10	0	1	0	0	0	1	2	0
10:00	0	4	11	0	2	0	0	0	0	2	0
11:00	0	3	7	0	2	1	0	0	0	0	0
12 PM	0	4	11	0	2	0	0	0	0	0	0
13:00	0	4	16	0	0	1	0	0	0	0	0
14:00	0	5	12	0	0	0	0	0	0	0	0
15:00	0	4	9	0	0	0	0	0	0	2	0
16:00	0	13	9	0	0	0	0	0	0	0	0
17:00	0	9	1	0	0	0	0	0	0	0	0
18:00	0	4	1	0	0	0	0	0	0	0	0
19:00	1	1	1	0	0	0	0	0	0	1	0
20:00	0	3	0	0	0	0	0	0	0	0	0
21:00	0	5	1	0	0	0	0	0	0	0	0
22:00	0	4	0	0	0	0	0	0	0	0	0
23:00	0	3	0	0	0	0	0	0	0	0	0
Total	1	230	158	0	13	5	0	3	11	1	0
Percent	0.2%	54.5%	37.4%	0.0%	3.1%	1.2%	0.0%	0.7%	2.6%	0.2%	0.0%
AM Peak Vol.	05:00	66	07:00	19	08:00	3	07:00	07:00	05:00	06:00	
PM Peak Vol.	19:00	1	16:00	13:00	12:00	2	13:00	13:00	15:00	1	2
Grand Total	1	230	158	0	13	5	0	3	11	1	0
Percent	0.2%	54.5%	37.4%	0.0%	3.1%	1.2%	0.0%	0.7%	2.6%	0.2%	0.0%

County of Imperial
 Brandt Road
 B/ Swink Road - Hovley Road
 24 Hour Directional Classification Count

Northbound, Southbound

Counts Unlimited, Inc.

PO Box 11178
 Corona, CA 92878
 Phone: (951) 268-6268

email: counts@countsunlimited.com

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi
11/09/22	0	6	1	0	0	0	0	0	0	0	0
01:00	0	5	0	0	0	0	0	0	0	0	0
02:00	0	3	0	0	0	0	0	0	0	0	0
03:00	0	7	0	0	0	0	0	0	0	0	0
04:00	0	35	0	0	0	0	0	0	0	0	0
05:00	0	69	18	0	1	0	0	0	0	0	0
06:00	0	19	20	0	0	0	0	0	0	0	0
07:00	0	26	27	0	1	2	0	1	2	0	0
08:00	0	16	29	0	3	1	0	0	2	0	0
09:00	0	7	20	3	2	0	0	1	2	0	0
10:00	0	9	19	3	2	0	0	0	2	0	0
11:00	0	7	20	0	5	1	0	1	1	0	0
12 PM	0	7	28	0	2	8	1	0	1	0	0
13:00	0	20	27	0	0	2	0	1	0	0	0
14:00	0	45	37	0	0	0	0	0	0	0	0
15:00	0	15	21	0	5	0	0	0	0	4	0
16:00	0	29	15	0	1	0	0	0	0	0	0
17:00	0	20	3	0	0	0	0	0	0	0	0
18:00	0	16	1	0	0	0	0	0	0	0	0
19:00	1	5	3	0	0	0	0	0	0	1	0
20:00	0	5	0	0	0	0	0	0	0	1	0
21:00	0	9	1	0	0	0	0	0	0	0	0
22:00	0	5	0	0	0	0	0	0	0	0	0
23:00	0	9	0	0	0	0	0	0	0	0	0
Total	1	394	290	6	25	14	1	4	20	1	0
Percent	0.1%	52.1%	38.4%	0.8%	3.3%	1.9%	0.1%	0.5%	2.6%	0.1%	0.0%
AM Peak Vol.	05:00	69	29	3	5	2	07:00	07:00	05:00	06:00	
PM Peak Vol.	19:00	1	45	37	5	8	12:00	13:00	15:00	4	1
Grand Total	1	394	290	6	25	14	1	4	20	1	0
Percent	0.1%	52.1%	38.4%	0.8%	3.3%	1.9%	0.1%	0.5%	2.6%	0.1%	0.0%

Counts Unlimited, Inc.

PO Box 11178
Corona, CA 92878

Phone: (951) 268-6268

email: counts@countsunlimited.com

County of Imperial
Brandt Road
N/Vail Road
24 Hour Directional Classification Count

Northbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi
11/09/22	0	1	0	0	0	0	0	0	0	0	0
01:00	0	2	0	0	0	0	0	0	0	0	0
02:00	0	1	0	0	0	0	0	0	0	0	0
03:00	0	4	0	0	0	0	0	0	0	0	0
04:00	0	25	0	0	0	0	0	0	0	0	0
05:00	0	40	9	0	0	1	0	0	1	0	0
06:00	0	7	15	0	0	0	0	0	0	1	0
07:00	0	18	9	0	0	0	0	0	0	0	0
08:00	0	8	12	0	2	1	0	0	1	1	0
09:00	0	5	10	0	0	0	0	1	1	1	0
10:00	0	1	10	0	0	0	0	0	0	0	0
11:00	0	2	6	0	0	1	0	0	0	0	0
12 PM	0	2	2	0	0	0	0	0	0	0	0
13:00	0	4	12	0	1	0	0	0	0	0	0
14:00	0	3	7	0	1	0	0	0	0	0	0
15:00	0	1	10	0	0	0	0	0	0	0	0
16:00	0	6	2	0	0	0	0	0	0	0	0
17:00	0	8	0	0	0	0	0	0	0	0	0
18:00	0	5	0	0	0	0	0	0	0	0	0
19:00	0	4	0	0	0	0	0	0	0	1	0
20:00	0	3	1	0	0	0	0	0	0	0	0
21:00	0	3	1	0	0	0	0	0	0	0	0
22:00	0	2	0	0	0	0	0	0	0	0	0
23:00	0	5	0	0	0	0	0	0	0	0	0
Total	0	160	106	0	5	4	0	2	5	1	0
Percent	0.0%	56.5%	37.5%	0.0%	1.8%	1.4%	0.0%	0.7%	1.8%	0.4%	0.0%
AM Peak Vol.	05:00	40	15	06:00	08:00	05:00	09:00	05:00	06:00	1	1
PM Peak Vol.	17:00	8	12	13:00	13:00	1	1	1	19:00	1	1
Grand Total Percent	0	160	106	0	5	4	0	2	5	1	0
0.0%	56.5%	37.5%	0.0%	1.8%	1.4%	0.0%	0.7%	1.8%	0.4%	0.0%	0.0%

County of Imperial
Brandt Road
N/Vail Road
24 Hour Directional Classification Count

Counts Unlimited, Inc.

PO Box 11178
Corona, CA 92878
Phone: (951) 268-6268

email: counts@countsunlimited.com

Southbound		24 Hour Directional Classification Count											
Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi		
11/09/22	0	3	0	0	0	0	0	0	0	0	0		
01:00	0	1	0	0	0	0	0	0	0	0	0		
02:00	0	0	0	0	0	0	0	0	0	0	0		
03:00	0	0	0	0	0	0	0	0	0	0	0		
04:00	0	2	0	0	0	0	0	0	0	0	0		
05:00	0	4	0	0	0	0	0	0	0	0	0		
06:00	0	6	7	0	0	0	0	0	0	0	1		
07:00	0	1	4	1	0	0	0	0	1	0	0		
08:00	0	5	10	0	0	0	0	0	0	0	0		
09:00	0	2	7	0	0	0	0	1	0	0	0		
10:00	0	2	5	0	0	0	0	0	0	0	0		
11:00	0	3	7	0	0	1	0	0	2	1	0		
12 PM	0	4	11	0	0	0	0	1	0	0	0		
13:00	0	16	8	0	0	1	0	0	0	0	0		
14:00	0	19	12	0	0	1	0	0	0	0	0		
15:00	0	10	11	0	0	0	0	0	0	2	0		
16:00	0	13	10	0	0	0	0	0	0	0	0		
17:00	0	5	5	0	0	0	0	0	0	0	0		
18:00	0	2	8	0	0	0	0	0	0	0	0		
19:00	0	2	1	0	0	0	0	0	0	0	0		
20:00	0	1	0	0	0	0	0	0	0	0	0		
21:00	0	3	0	0	0	0	0	0	0	0	0		
22:00	0	0	0	0	0	0	0	0	0	0	0		
23:00	0	4	0	0	0	0	0	0	0	0	0		
Total	0	108	106	0	5	1	1	3	5	0	2		
Percent	0.0%	46.8%	45.9%	0.0%	2.2%	0.4%	0.4%	1.3%	2.2%	0.0%	0.9%		
AM Peak Vol.	06:00	6	10	08:00	1	07:00	1	11:00	2	08:00	1	05:00	
PM Peak Vol.	14:00	19	12	14:00	1	14:00	1	13:00	1	12:00	2	15:00	
Grand Total	0	108	106	0	5	1	1	3	5	0	2		
Percent	0.0%	46.8%	45.9%	0.0%	2.2%	0.4%	0.4%	1.3%	2.2%	0.0%	0.9%		

Counts Unlimited, Inc.

PO Box 11178

Corona, CA 92878

Phone: (951) 268-6268

email: counts@countsunlimited.com

County of Imperial
Brandt Road
N/Vail Road
24 Hour Directional Classification Count

Northbound, Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi
11/09/22	0	4	0	0	0	0	0	0	0	0	0
01:00	0	3	0	0	0	0	0	0	0	0	0
02:00	0	1	0	0	0	0	0	0	0	0	0
03:00	0	4	0	0	0	0	0	0	0	0	0
04:00	0	27	0	0	0	0	0	0	0	0	0
05:00	0	44	9	0	0	1	0	0	1	0	1
06:00	0	13	22	0	0	0	0	0	0	0	0
07:00	0	19	13	0	1	0	0	0	0	0	0
08:00	0	13	22	0	2	1	0	0	2	0	0
09:00	0	7	17	0	0	0	0	1	1	0	0
10:00	0	3	15	0	1	0	0	2	1	0	0
11:00	0	5	13	0	1	1	0	2	1	0	0
12 PM	0	6	13	0	0	0	0	1	0	0	0
13:00	0	20	20	0	1	2	0	0	0	0	0
14:00	0	22	19	0	2	0	0	0	0	0	0
15:00	0	11	21	0	1	0	0	0	2	0	0
16:00	0	19	12	0	0	0	0	0	0	0	0
17:00	0	13	5	0	0	0	0	0	0	0	0
18:00	0	7	8	0	0	0	0	0	0	0	0
19:00	0	6	1	0	0	1	0	0	0	1	0
20:00	0	4	1	0	0	0	0	0	0	0	0
21:00	0	6	1	0	0	0	0	0	0	0	0
22:00	0	2	0	0	0	0	0	0	0	0	0
23:00	0	9	0	0	0	0	0	0	0	0	0
Total	0	268	212	0	10	5	1	5	10	1	2
Percent	0.0%	52.1%	41.2%	0.0%	1.9%	1.0%	0.2%	1.0%	1.9%	0.2%	0.4%
AM Peak Vol.	05:00	44	22	06:00	08:00	05:00	08:00	10:00	08:00	06:00	05:00
PM Peak Vol.	14:00	22	21	15:00	14:00	13:00	12:00	2	2	1	1
Grand Total	0	268	212	0	10	5	1	5	10	1	2
Percent	0.0%	52.1%	41.2%	0.0%	1.9%	1.0%	0.2%	1.0%	1.9%	0.2%	0.4%

County of Imperial
English Road
N/ Highway 111
24 Hour Directional Classification Count

Northbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi
11/17/22	0	1	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0
02:00	0	1	1	0	0	1	0	0	0	0	0
03:00	0	1	1	0	0	0	0	0	0	0	0
04:00	0	2	0	0	0	0	0	0	0	0	0
05:00	0	11	2	0	0	0	0	0	0	0	0
06:00	0	4	10	0	0	0	0	0	0	0	0
07:00	0	4	5	0	0	1	4	0	0	0	0
08:00	0	3	12	0	0	0	0	0	0	0	0
09:00	0	2	9	0	0	0	0	0	0	0	0
10:00	0	6	8	0	0	0	0	0	0	0	0
11:00	0	2	3	0	0	0	0	0	0	0	0
12 PM	0	9	4	0	0	0	0	0	0	0	0
13:00	0	3	2	2	0	0	1	0	0	0	1
14:00	0	2	2	0	0	0	0	0	0	0	0
15:00	0	2	5	0	0	1	0	0	0	0	0
16:00	0	6	0	0	0	0	0	0	0	0	0
17:00	0	1	0	0	0	0	1	0	0	0	0
18:00	0	3	0	0	0	0	0	0	0	0	0
19:00	0	2	0	0	0	0	0	0	0	0	0
20:00	0	2	0	0	0	0	0	0	0	0	0
21:00	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0
Total	0	67	63	0	4	5	0	0	4	0	0
Percent	0.0%	46.9%	44.1%	0.0%	2.8%	3.5%	0.0%	0.0%	2.8%	0.0%	0.0%
AM Peak Vol.	05:00	11	08:00	12	02:00	1	07:00	4	07:00	1	0
PM Peak Vol.	12:00	9	15:00	5	15:00	1	13:00	1	12:00	1	0
Grand Total Percent	0	67	63	0	4	5	0	0	4	0	0
Total Percent	0.0%	46.9%	44.1%	0.0%	2.8%	3.5%	0.0%	0.0%	2.8%	0.0%	0.0%

Counts Unlimited, Inc.

PO Box 11178

Corona, CA 92878

Phone: (951) 268-6268

email: counts@countsunlimited.com

County of Imperial
English Road
N/ Highway 111
24 Hour Directional Classification Count

Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi
11/17/22	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	1	0	0	0	0	0	0	0	0
03:00	0	1	0	0	0	0	0	0	1	0	0
04:00	0	1	1	0	0	0	0	0	2	0	0
05:00	0	2	0	0	0	0	0	0	0	0	0
06:00	0	0	0	0	0	0	0	0	0	0	0
07:00	0	2	0	0	0	0	0	0	0	0	0
08:00	0	7	5	0	0	0	0	0	1	0	0
09:00	0	4	3	0	1	0	0	1	0	0	0
10:00	0	4	6	0	0	1	0	0	0	1	0
11:00	0	1	7	0	0	0	0	0	0	0	0
12 PM	0	3	1	0	0	0	0	0	0	0	0
13:00	0	2	6	4	0	0	3	0	0	0	0
14:00	0	3	4	0	0	0	0	0	0	0	0
15:00	0	7	8	0	0	0	0	0	0	0	0
16:00	0	8	9	0	0	0	0	0	0	0	0
17:00	0	4	2	0	0	0	0	0	0	0	0
18:00	0	3	0	0	0	0	0	0	0	0	0
19:00	0	1	0	0	0	0	0	0	0	0	0
20:00	0	0	0	0	0	0	0	0	0	0	0
21:00	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0
Total	0	53	53	1	4	4	0	2	5	1	0
Percent	0.0%	43.1%	43.1%	0.8%	3.3%	3.3%	0.0%	1.6%	4.1%	0.8%	0.0%
AM Peak Vol.	08:00	11:00	11:00	09:00	10:00	10:00	09:00	09:00	04:00	11:00	
PM Peak Vol.	16:00	16:00	16:00	13:00	13:00	14:00	13:00	13:00	2	1	
Grand Total	0	53	53	1	4	4	0	2	5	1	0
Percent	0.0%	43.1%	43.1%	0.8%	3.3%	3.3%	0.0%	1.6%	4.1%	0.8%	0.0%

Counts Unlimited, Inc.

PO Box 11178

Corona, CA 92878

Phone: (951) 268-6268

email: counts@countsunlimited.com

Counts Unlimited, Inc.

PO Box 11178
Corona, CA 92878
Phone: (951) 268-6268

email: counts@countsunlimited.com

County of Imperial
English Road
N/ Highway 111
24 Hour Directional Classification Count

Northbound, Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi
11/17/22	0	1	0	0	0	0	0	0	0	0	0
01:00	0	0	1	1	0	0	0	0	0	0	0
02:00	0	1	2	1	0	0	0	0	0	0	0
03:00	0	2	3	1	0	0	0	0	0	0	0
04:00	0	3	13	2	0	0	0	0	0	0	0
05:00	0	13	4	10	0	0	0	0	0	0	0
06:00	0	6	5	5	0	1	4	0	0	2	0
07:00	0	10	17	0	0	0	0	0	0	1	0
08:00	0	6	12	0	1	0	0	0	0	0	0
09:00	0	6	14	0	0	1	0	0	0	1	0
10:00	0	10	10	10	0	1	0	0	0	0	0
11:00	0	3	10	0	0	1	0	0	0	0	0
12 PM	0	12	5	5	0	0	0	0	0	1	0
13:00	0	5	5	8	1	1	0	1	1	1	0
14:00	0	5	6	0	0	3	0	0	0	0	0
15:00	0	9	13	0	2	0	0	0	0	0	0
16:00	0	9	14	9	0	0	0	0	0	0	0
17:00	0	5	2	0	1	0	0	0	0	0	0
18:00	0	6	0	0	0	0	0	0	0	0	0
19:00	0	3	0	0	0	0	0	0	0	0	0
20:00	0	2	0	0	0	0	0	0	0	0	0
21:00	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0
Total	0	120	116	1	8	9	0	2	9	1	0
Percent	0.0%	45.1%	43.6%	0.4%	3.0%	3.4%	0.0%	0.8%	3.4%	0.4%	0.0%
AM Peak Vol.	05:00	13	17	08:00	02:00	07:00	09:00	04:00	11:00		
PM Peak Vol.	16:00	14	13	15:00	13:00	15:00	14:00	13:00	12:00	1	1
Grand Total	0	120	116	1	8	9	0	2	9	1	0
Percent	0.0%	45.1%	43.6%	0.4%	3.0%	3.4%	0.0%	0.8%	3.4%	0.4%	0.0%

Counts Unlimited, Inc.

PO Box 11178
Corona, CA 92878
Phone: (951) 268-6268

email: counts@countsunlimited.com

County of Imperial
Forrester Road
B/ New River - Bannister Road
24 Hour Directional Classification Count

Northbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi
11/09/22	0	0	1	0	2	0	0	0	0	0	0
01:00	0	4	6	0	0	0	0	0	1	0	0
02:00	0	2	1	0	0	0	0	0	0	0	0
03:00	0	2	2	0	5	0	0	0	0	0	0
04:00	0	16	13	2	5	0	0	0	0	0	0
05:00	0	51	29	0	26	1	0	2	0	0	0
06:00	0	24	8	2	12	0	0	0	1	0	1
07:00	0	21	12	1	8	0	0	4	3	1	0
08:00	1	9	10	1	7	0	0	2	1	0	3
09:00	0	9	9	1	12	0	0	3	0	0	1
10:00	0	7	9	0	8	1	0	1	1	1	1
11:00	0	14	9	0	8	0	0	1	0	0	0
12 PM	0	12	4	1	9	0	0	0	2	0	0
13:00	0	10	15	1	4	0	0	0	0	1	0
14:00	0	1	6	1	3	0	0	2	2	0	0
15:00	0	10	8	0	5	0	0	0	1	0	0
16:00	0	14	2	1	12	0	0	0	1	0	1
17:00	0	13	1	1	3	0	0	0	1	0	0
18:00	0	6	4	1	3	0	0	0	0	0	0
19:00	0	5	2	0	0	0	0	0	0	0	0
20:00	0	1	0	1	0	0	0	0	0	0	0
21:00	0	1	1	0	0	0	0	0	0	0	0
22:00	0	1	0	0	0	0	0	0	0	0	0
23:00	0	1	3	0	1	0	0	0	0	0	0
Total	1	234	155	14	133	2	0	16	13	3	8
Percent	0.2%	40.0%	26.5%	2.4%	22.7%	0.3%	0.0%	2.7%	2.2%	0.5%	1.4%
AM Peak Vol.	08:00	05:00	05:00	04:00	05:00	05:00	05:00	07:00	07:00	07:00	08:00
PM Peak Vol.	16:00	13:00	12:00	16:00	12			4	3	1	3
Grand Total	1	234	155	14	133	2	0	16	13	3	8
Percent	0.2%	40.0%	26.5%	2.4%	22.7%	0.3%	0.0%	2.7%	2.2%	0.5%	1.4%

Counts Unlimited, Inc.

PO Box 11178
Corona, CA 92878
Phone: (951) 268-6268

County of Imperial
Forrester Road
B/ New River - Bannister Road

24 Hour Directional Classification Count

Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi
11/09/22	0	1	0	0	1	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0
02:00	0	3	0	0	0	0	0	0	0	0	0
03:00	0	2	1	0	0	0	0	0	0	0	0
04:00	0	9	4	0	2	0	0	0	0	0	0
05:00	0	16	6	0	0	0	0	0	1	0	0
06:00	0	11	8	1	5	0	0	1	1	0	3
07:00	0	8	9	1	4	1	0	0	1	0	1
08:00	0	8	10	0	4	0	0	0	4	1	1
09:00	0	4	13	0	15	1	0	0	2	3	0
10:00	1	9	9	1	6	1	0	3	1	0	1
11:00	0	7	17	0	10	0	0	1	3	0	0
12 PM	0	15	21	1	6	0	0	2	3	0	3
13:00	0	14	8	0	5	0	0	2	1	0	1
14:00	1	35	17	0	2	0	0	0	1	0	0
15:00	1	25	19	0	9	1	0	2	1	0	1
16:00	1	40	16	0	10	1	0	0	1	0	0
17:00	0	21	10	1	6	0	0	1	0	0	1
18:00	0	5	4	1	5	0	0	0	0	0	0
19:00	1	5	2	0	3	0	0	0	0	0	0
20:00	0	3	3	0	0	0	0	0	0	0	0
21:00	0	2	0	0	0	0	0	0	0	0	0
22:00	0	6	3	0	2	0	0	0	0	0	0
23:00	0	1	2	0	1	0	0	0	1	0	0
Total	5	250	182	6	97	5	0	14	22	1	15
Percent	0.8%	40.9%	29.8%	1.0%	15.9%	0.8%	0.0%	2.3%	3.6%	0.2%	2.5%
AM Peak Vol.	10:00	05:00	11:00	06:00	09:00	07:00		10:00	08:00	08:00	06:00
PM Peak Vol.	14:00	16:00	12:00	12:00	16:00	15:00	1	15	3	4	3
Grand Total	5	250	182	6	97	5	0	14	22	1	15
Percent	0.8%	40.9%	29.8%	1.0%	15.9%	0.8%	0.0%	2.3%	3.6%	0.2%	2.5%

Counts Unlimited, Inc.

PO Box 11178
Corona, CA 92878
Phone: (951) 268-6268

email: counts@countsunlimited.com

County of Imperial
Forrester Road
B/ New River - Bannister Road
24 Hour Directional Classification Count

Northbound, Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi
11/09/22	0	1	1	0	3	0	0	0	0	0	0
01:00	0	4	6	0	0	0	0	0	1	0	0
02:00	0	5	1	0	0	0	0	0	0	0	0
03:00	0	4	3	0	6	0	0	0	0	0	0
04:00	0	25	17	2	7	0	0	0	0	0	0
05:00	0	67	35	0	26	1	0	2	1	0	0
06:00	0	35	16	3	17	0	0	1	2	0	3
07:00	0	29	21	2	12	1	0	4	4	1	2
08:00	1	17	20	1	11	0	0	2	5	1	4
09:00	0	13	22	1	27	1	0	5	3	0	3
10:00	1	16	18	1	14	2	0	4	2	1	2
11:00	0	21	26	0	18	0	0	2	3	0	1
12 PM	0	27	25	2	15	0	0	2	5	0	3
13:00	0	24	23	1	9	0	0	2	1	1	0
14:00	1	36	23	1	5	0	0	2	3	0	1
15:00	1	35	27	0	14	1	0	2	2	0	1
16:00	1	54	18	1	22	1	0	1	1	0	1
17:00	0	34	11	2	9	0	0	1	1	0	1
18:00	0	11	8	2	8	0	0	0	0	0	0
19:00	1	10	4	0	3	0	0	0	0	0	0
20:00	0	4	3	1	0	0	0	0	0	0	0
21:00	0	3	1	0	0	0	0	0	0	0	0
22:00	0	7	3	0	2	0	0	0	0	0	0
23:00	0	2	5	0	2	0	0	0	1	0	0
Total	6	484	337	20	230	7	0	30	35	4	23
Percent	0.5%	40.5%	28.2%	1.7%	19.2%	0.6%	0.0%	2.5%	2.9%	0.3%	1.9%
AM Peak Vol.	08:00	05:00	05:00	06:00	09:00	10:00	09:00	08:00	07:00	08:00	08:00
PM Peak Vol.	14:00	16:00	15:00	12:00	16:00	15:00	12:00	5	5	1	4
Grand Total	6	484	337	20	230	7	0	30	35	4	23
Percent	0.5%	40.5%	28.2%	1.7%	19.2%	0.6%	0.0%	2.5%	2.9%	0.3%	1.9%

Counts Unlimited, Inc.

PO Box 11178

Corona, CA 92878

Phone: (951) 268-6268

email: counts@countsunlimited.com

County of Imperial
Gentry Road
B/West Sinclair Road - West Eddins Road
24 Hour Directional Classification Count

Northbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi
11/09/22	0	0	2	0	1	0	0	0	1	0	0
01:00	0	7	1	0	0	0	0	0	0	0	0
02:00	0	1	2	0	0	0	0	0	0	0	0
03:00	0	0	0	0	5	0	0	2	1	0	0
04:00	0	10	5	1	11	0	0	0	0	0	0
05:00	0	25	16	6	31	0	0	1	1	0	0
06:00	0	17	16	1	8	0	0	2	1	0	0
07:00	0	20	9	1	15	0	0	5	1	0	0
08:00	0	6	5	2	6	0	0	1	3	0	0
09:00	0	3	6	0	19	1	0	1	0	0	1
10:00	0	4	3	0	12	0	0	0	2	0	0
11:00	0	3	3	0	8	1	1	0	1	0	0
12 PM	0	6	11	0	8	0	0	0	1	0	0
13:00	0	3	2	0	5	0	0	0	0	0	0
14:00	0	2	5	0	3	0	0	0	1	0	0
15:00	0	3	3	0	8	0	0	0	0	0	0
16:00	0	11	3	0	6	0	0	0	1	0	0
17:00	0	10	2	0	4	0	0	0	0	1	0
18:00	0	2	5	0	2	0	0	0	0	0	0
19:00	0	2	1	0	0	0	0	0	0	0	0
20:00	0	0	0	0	1	0	0	0	0	0	0
21:00	0	0	0	0	1	0	0	0	0	1	0
22:00	0	0	0	0	0	0	0	0	0	0	0
23:00	0	1	0	0	1	0	0	0	0	1	0
Total Percent	0	136	100	11	155	2	1	14	15	0	1
AM Peak Vol.	05:00	25	16	6	31	1	1	11:00	07:00	08:00	09:00
PM Peak Vol.	16:00	11	11	8				14:00	12:00	5	3
Grand Total	0	136	100	11	155	2	1	14	15	0	1
Percent	0.0%	31.3%	23.0%	2.5%	35.6%	0.5%	0.2%	3.2%	3.4%	0.0%	0.2%

Counts Unlimited, Inc.

PO Box 11178
Corona, CA 92878

Phone: (951) 268-6268

email: counts@countsunlimited.com

County of Imperial
Gentry Road
B/West Sinclair Road - West Eddins Road
24 Hour Directional Classification Count

Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi
11/09/22	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0
02:00	0	2	0	0	0	0	0	0	0	0	0
03:00	0	1	0	0	0	0	0	0	0	0	0
04:00	0	13	7	0	2	0	0	0	0	0	0
05:00	0	9	3	0	1	0	0	0	0	0	0
06:00	0	1	4	0	5	0	0	0	0	0	0
07:00	1	5	1	6	1	0	0	1	0	0	0
08:00	0	7	8	3	7	0	0	0	1	0	0
09:00	0	2	5	0	10	3	0	0	3	1	0
10:00	0	5	9	0	5	0	0	0	0	2	0
11:00	1	6	8	0	5	1	0	0	1	2	0
12 PM	1	6	10	0	9	1	0	1	1	0	0
13:00	0	11	6	1	2	0	0	0	0	0	0
14:00	1	22	15	0	5	1	0	0	3	0	0
15:00	2	11	16	0	6	1	0	0	1	0	0
16:00	0	48	18	0	10	0	0	0	0	0	0
17:00	0	13	9	0	5	0	0	0	1	0	0
18:00	0	4	4	0	2	0	0	0	0	0	0
19:00	0	2	1	0	2	0	0	0	0	0	0
20:00	0	3	2	0	0	0	0	0	0	0	0
21:00	0	2	0	0	1	0	0	0	0	0	0
22:00	0	3	2	0	3	0	0	0	0	0	0
23:00	1	0	1	0	0	0	1	0	0	1	0
Total	7	176	133	5	86	9	1	11	7	0	3
Percent	1.6%	40.2%	30.4%	1.1%	19.6%	2.1%	0.2%	2.5%	1.6%	0.0%	0.7%
AM Peak Vol.	07:00	04:00	10:00	08:00	09:00	09:00	09:00	09:00	10:00	11:00	
PM Peak Vol.	15:00	16:00	16:00	13:00	16:00	12:00	12:00	14:00	23:00	17:00	
Grand Total	7	176	133	5	86	9	1	11	7	0	3
Percent	1.6%	40.2%	30.4%	1.1%	19.6%	2.1%	0.2%	2.5%	1.6%	0.0%	0.7%

Counts Unlimited, Inc.

PO Box 11178
Corona, CA 92878

Phone: (951) 268-6268

email: counts@countsunlimited.com

County of Imperial
Gentry Road
B/West Sinclair Road - West Eddins Road
24 Hour Directional Classification Count

Northbound, Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi
11/09/22	0	0	2	0	1	0	0	0	1	0	0
01:00	0	7	1	0	0	0	0	0	0	0	0
02:00	0	3	2	0	0	0	0	0	0	0	0
03:00	0	1	0	0	5	0	0	2	1	0	0
04:00	0	23	12	1	13	0	0	0	0	0	0
05:00	0	34	19	6	32	0	0	1	1	0	0
06:00	0	18	20	1	13	0	0	2	1	0	0
07:00	1	25	14	2	21	1	0	6	1	0	0
08:00	0	13	13	5	13	0	0	4	1	0	0
09:00	0	5	11	0	29	4	0	0	4	1	0
10:00	0	9	12	0	17	0	0	0	4	0	0
11:00	1	9	11	0	13	2	1	1	3	0	1
12 PM	1	12	21	0	17	1	1	1	1	0	0
13:00	0	14	8	1	7	0	0	0	0	0	0
14:00	1	24	20	0	8	1	0	4	0	0	0
15:00	2	14	19	0	14	1	0	1	0	0	0
16:00	0	59	21	0	16	0	0	1	0	0	0
17:00	0	23	11	0	9	0	0	0	1	0	1
18:00	0	6	9	0	4	0	0	0	0	0	1
19:00	0	4	2	0	2	0	0	0	0	0	0
20:00	0	3	2	0	1	0	0	0	0	0	0
21:00	0	2	0	0	2	0	0	0	0	1	0
22:00	0	3	2	0	3	0	0	0	0	0	0
23:00	1	1	1	0	1	1	0	0	2	0	0
Total	7	312	233	16	241	11	2	25	22	0	4
Percent	0.8%	35.7%	26.7%	1.8%	27.6%	1.3%	0.2%	2.9%	2.5%	0.0%	0.5%
AM Peak Vol.	07:00	05:00	06:00	05:00	05:00	09:00	11:00	07:00	08:00	09:00	09:00
PM Peak Vol.	15:00	16:00	12:00	13:00	12:00	12:00	12:00	14:00	23:00	17:00	1
Grand Total	7	312	233	16	241	11	2	25	22	0	4
Percent	0.8%	35.7%	26.7%	1.8%	27.6%	1.3%	0.2%	2.9%	2.5%	0.0%	0.5%

Counts Unlimited, Inc.

PO Box 11178
Corona, CA 92878

Phone: (951) 268-6268

email: counts@countsunlimited.com

County of Imperial
Highway 78
B/Lack Road - Forrester Road
24 Hour Directional Classification Count
Easatbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi
11/09/22	0	49	1	0	1	0	0	0	0	63	0
01:00	0	25	3	0	2	0	0	0	45	0	2
02:00	0	22	1	0	2	0	0	0	48	0	2
03:00	0	35	3	0	3	0	0	0	47	0	2
04:00	0	33	0	0	4	0	0	0	56	0	0
05:00	0	74	11	0	5	1	0	0	55	0	4
06:00	0	60	44	2	5	4	0	3	81	1	24
07:00	0	125	53	0	9	4	0	1	65	0	12
08:00	1	153	74	0	17	2	0	7	58	1	11
09:00	3	151	70	1	6	1	0	0	9	51	2
10:00	0	137	61	0	8	0	0	7	75	1	16
11:00	2	119	77	0	12	3	0	0	9	83	2
12 PM	10	137	82	0	8	5	0	11	125	2	8
13:00	6	176	82	0	10	1	1	14	111	1	6
14:00	5	195	70	0	10	4	10	7	87	3	5
15:00	9	204	86	1	2	3	1	17	93	1	11
16:00	2	178	75	7	12	2	0	5	79	0	6
17:00	20	218	33	3	2	0	0	7	57	0	6
18:00	0	151	18	3	4	0	0	6	54	0	3
19:00	0	115	16	0	1	0	0	7	44	0	4
20:00	0	98	15	0	1	2	0	4	56	0	2
21:00	0	108	19	0	1	0	0	6	53	0	6
22:00	0	83	15	0	2	0	0	7	62	0	5
23:00	0	66	9	0	0	1	0	9	57	0	0
Total	58	2712	918	17	127	33	12	136	1605	14	141
Percent	1.0%	46.7%	15.8%	0.3%	2.2%	0.6%	0.2%	2.3%	27.6%	0.2%	2.4%
AM Peak Vol.	09:00	08:00	11:00	06:00	08:00	06:00	06:00	09:00	11:00	09:00	06:00
PM Peak Vol.	17:00	17:00	15:00	16:00	12:00	4	4	9	83	2	24
Grand Total	58	2712	918	17	127	33	12	136	1605	14	141
Percent	1.0%	46.7%	15.8%	0.3%	2.2%	0.6%	0.2%	2.3%	27.6%	0.2%	2.4%

Counts Unlimited, Inc.

PO Box 11178
Corona, CA 92878
Phone: (951) 268-6268

email: counts@countsunlimited.com

County of Imperial
Highway 78
B/Lack Road - Forrester Road
24 Hour Directional Classification Count

Westbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi
11/09/22	3	44	0	0	2	6	0	0	33	0	0
01:00	0	15	0	0	5	2	0	0	40	0	0
02:00	1	31	0	0	3	1	0	0	32	0	5
03:00	2	53	2	0	2	2	0	0	40	0	7
04:00	0	97	10	1	7	1	0	0	56	0	9
05:00	0	211	12	0	2	3	0	0	59	0	15
06:00	1	121	79	0	11	6	1	5	48	2	9
07:00	0	108	70	9	17	5	1	6	76	0	6
08:00	0	108	51	3	10	8	0	4	83	0	11
09:00	0	112	47	0	13	4	0	3	54	0	8
10:00	1	108	64	0	15	4	0	7	73	0	6
11:00	0	112	67	0	8	6	0	3	74	0	2
12 PM	2	128	73	0	6	2	0	6	70	0	6
13:00	0	158	55	0	14	3	0	2	68	0	8
14:00	2	154	92	1	21	0	0	3	67	0	1
15:00	0	163	63	0	8	4	0	3	77	0	1
16:00	1	170	55	0	9	2	0	6	79	0	2
17:00	0	159	11	0	10	6	0	1	78	0	0
18:00	0	165	5	0	10	1	0	2	95	0	3
19:00	0	122	1	0	9	2	0	2	99	0	0
20:00	0	105	0	0	8	0	0	1	94	0	0
21:00	0	84	6	0	6	0	0	1	69	0	0
22:00	0	56	0	0	0	1	0	0	39	0	7
23:00	0	58	0	0	2	0	0	2	29	1	4
Total	13	2642	763	14	198	69	3	57	1532	3	110
Percent	0.2%	48.4%	14.0%	0.3%	3.6%	1.3%	0.1%	1.0%	28.1%	0.1%	2.0%
AM Peak Vol.	00:00	05:00	06:00	07:00	08:00	09:00	10:00	08:00	10:00	08:00	05:00
PM Peak Vol.	12:00	16:00	14:00	14:00	17:00	22:00	12:00	7	83	2	15
Grand Total	13	2642	763	14	198	69	3	57	1532	3	110
Percent	0.2%	48.4%	14.0%	0.3%	3.6%	1.3%	0.1%	1.0%	28.1%	0.1%	2.0%

Counts Unlimited, Inc.

PO Box 11178
Corona, CA 92878
Phone: (951) 268-6268

email: counts@countsunlimited.com

County of Imperial
Highway 78
B/Lack Road - Forrester Road
24 Hour Directional Classification Count
Easatbound, Westbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi
11/09/22	3	93	1	0	3	6	0	0	96	0	0
01:00	0	40	3	0	7	2	0	0	85	0	2
02:00	1	53	1	0	5	1	0	0	80	0	7
03:00	2	88	5	0	5	2	0	0	87	0	9
04:00	0	130	10	1	11	1	0	0	112	0	9
05:00	0	285	23	0	7	4	0	0	114	0	19
06:00	1	181	123	2	16	10	1	8	129	3	33
07:00	0	233	123	9	26	9	1	7	141	0	18
08:00	1	261	125	3	27	10	0	11	141	1	22
09:00	3	263	117	1	19	5	0	12	105	2	10
10:00	1	245	125	0	23	4	0	14	148	1	22
11:00	2	231	144	0	20	9	0	12	157	2	6
12 PM	12	265	155	0	14	7	0	17	195	2	14
13:00	6	334	137	0	24	4	1	16	179	1	14
14:00	7	349	162	1	31	4	10	10	154	3	6
15:00	9	367	149	1	10	7	1	20	170	1	12
16:00	3	348	130	7	21	4	0	11	158	0	8
17:00	20	377	44	3	12	6	0	8	135	0	6
18:00	0	316	23	3	14	1	0	8	149	0	6
19:00	0	237	17	0	10	2	0	9	143	0	4
20:00	0	203	15	0	9	2	0	5	150	0	2
21:00	0	192	25	0	7	0	0	7	122	0	6
22:00	0	139	15	0	2	1	1	7	101	0	12
23:00	0	124	9	0	2	1	0	11	86	1	4
Total	71	5354	1681	31	325	102	15	193	3137	17	251
Percent	0.6%	47.5%	14.9%	0.3%	2.9%	0.9%	0.1%	1.7%	27.8%	0.2%	2.2%
AM Peak Vol.	0:00:00	05:00:00	11:00:00	07:00:00	08:00:00	06:00:00	06:00:00	10:00:00	11:00:00	06:00:00	06:00:00
PM Peak Vol.	17:00:00	17:00:00	14:00:00	16:00:00	14:00:00	12:00:00	14:00:00	15:00:00	12:00:00	14:00:00	12:00:00
Grand Total	71	5354	1681	31	325	102	15	193	3137	17	251
Percent	0.6%	47.5%	14.9%	0.3%	2.9%	0.9%	0.1%	1.7%	27.8%	0.2%	2.2%

Counts Unlimited, Inc.

PO Box 11178
Corona, CA 92878
Phone: (951) 268-6268

email: counts@countsunlimited.com

County of Imperial
Highway 111
B/ Davis Road - Main Street
24 Hour Directional Classification Count
Eastbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi
11/09/22	0	6	0	0	0	0	0	0	0	0	0
01:00	0	4	0	0	0	0	0	0	0	0	0
02:00	0	3	1	0	0	0	0	0	2	0	0
03:00	0	7	0	0	1	0	0	0	1	0	0
04:00	0	7	1	0	2	0	0	0	2	0	0
05:00	0	19	0	0	0	0	0	0	3	0	2
06:00	0	11	8	0	0	0	0	0	7	0	9
07:00	0	19	17	1	1	0	0	1	5	0	7
08:00	0	38	12	0	1	0	0	0	11	0	8
09:00	0	23	14	0	1	0	0	0	4	0	12
10:00	0	32	24	0	1	0	0	0	7	0	8
11:00	1	20	17	0	4	1	0	1	5	1	8
12 PM	0	26	17	0	5	3	2	1	13	0	0
13:00	0	27	14	1	3	0	0	0	9	0	2
14:00	1	34	17	0	1	3	0	0	6	0	1
15:00	0	40	22	2	1	0	0	0	1	0	0
16:00	0	34	15	0	2	0	0	0	3	0	0
17:00	0	22	3	1	0	0	0	0	2	0	0
18:00	0	23	0	0	0	0	0	0	2	0	0
19:00	0	15	0	0	0	0	0	0	4	0	0
20:00	0	7	0	0	0	0	0	0	0	0	0
21:00	0	9	0	0	0	0	0	0	0	0	0
22:00	0	9	1	0	0	0	0	0	0	0	1
23:00	0	4	0	0	0	0	0	0	0	0	0
Total	2	439	183	5	23	8	2	5	87	1	59
Percent	0.2%	53.5%	22.3%	0.6%	2.8%	1.0%	0.2%	0.6%	10.6%	0.1%	7.2%
AM Peak Vol.	11:00	08:00	10:00	07:00	11:00	08:00	08:00	07:00	08:00	11:00	09:00
PM Peak Vol.	14:00	15:00	15:00	15:00	12:00	12:00	12:00	12:00	12:00	11:00	12:00
Grand Total	2	439	183	5	23	8	2	5	87	1	59
Percent	0.2%	53.5%	22.3%	0.6%	2.8%	1.0%	0.2%	0.6%	10.6%	0.1%	7.2%

Counts Unlimited, Inc.

PO Box 11178
Corona, CA 92878

Phone: (951) 268-6268

email: counts@countsunlimited.com

County of Imperial
Highway 111
B/ Davis Road - Main Street
24 Hour Directional Classification Count
Westbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi
11/09/22	0	4	0	0	0	0	0	0	1	0	0
01:00	0	3	0	0	0	0	0	0	2	0	0
02:00	0	8	0	0	0	0	0	0	2	0	1
03:00	0	12	1	0	0	0	0	0	1	0	0
04:00	0	18	1	0	0	0	0	0	0	0	0
05:00	1	32	3	0	0	0	0	0	5	0	1
06:00	0	24	16	1	0	0	0	0	7	0	2
07:00	0	20	14	1	4	7	1	0	10	0	4
08:00	0	17	23	1	0	0	0	2	8	0	7
09:00	0	15	18	0	1	0	0	0	2	0	4
10:00	2	24	22	0	0	1	0	1	5	0	3
11:00	1	29	19	0	0	0	0	0	8	0	9
12 PM	1	23	16	0	3	0	0	0	8	0	1
13:00	0	32	17	0	0	1	0	0	9	0	0
14:00	0	48	24	1	1	0	0	2	6	0	1
15:00	0	33	22	0	3	0	0	0	3	0	4
16:00	0	37	9	0	2	0	0	0	5	0	1
17:00	0	40	3	0	2	0	0	0	10	0	0
18:00	1	28	0	0	1	0	0	0	6	0	0
19:00	0	15	0	0	0	0	0	0	1	0	0
20:00	0	12	0	0	0	0	0	0	2	0	0
21:00	0	8	0	0	0	0	0	0	0	0	0
22:00	0	14	0	0	0	0	0	0	0	0	0
23:00	0	2	0	0	0	0	0	0	2	0	0
Total	6	498	208	4	16	11	1	14	106	0	38
Percent	0.7%	54.8%	22.9%	0.4%	1.8%	1.2%	0.1%	1.5%	11.7%	0.0%	4.2%
AM Peak Vol.	10:00	05:00	08:00	06:00	07:00	07:00	07:00	08:00	07:00	07:00	11:00
PM Peak Vol.	12:00	14:00	14:00	14:00	12:00	16:00	7	1	6	10	9
Grand Total	6	498	208	4	16	11	1	14	106	0	38
Percent	0.7%	54.8%	22.9%	0.4%	1.8%	1.2%	0.1%	1.5%	11.7%	0.0%	4.2%

Counts Unlimited, Inc.

PO Box 11178
Corona, CA 92878

Phone: (951) 268-6268

email: counts@countsunlimited.com

County of Imperial
Highway 111
B/ Davis Road - Main Street
24 Hour Directional Classification Count
Eastbound, Westbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi
11/09/22	0	10	0	0	0	0	0	0	1	0	0
01:00	0	7	0	0	0	0	0	0	2	0	0
02:00	0	11	1	0	1	0	0	0	4	0	1
03:00	0	19	1	0	0	2	0	0	2	0	0
04:00	0	25	2	0	0	0	0	0	2	0	0
05:00	1	51	3	0	0	0	0	0	8	0	3
06:00	0	35	24	1	0	0	0	0	14	0	11
07:00	0	39	31	2	5	7	1	1	15	0	11
08:00	0	55	35	1	1	0	0	0	6	16	0
09:00	0	38	32	0	2	0	0	2	12	0	16
10:00	2	56	46	0	1	1	0	1	12	0	11
11:00	2	49	36	0	4	1	0	1	13	1	17
12 PM	1	49	33	0	8	3	2	1	21	0	2
13:00	0	59	31	1	3	1	0	2	18	0	0
14:00	1	82	41	1	2	3	0	2	12	0	3
15:00	0	73	44	2	4	0	0	2	4	0	5
16:00	0	71	24	0	2	2	0	1	8	0	1
17:00	0	62	6	1	2	0	0	0	12	0	0
18:00	1	51	0	0	1	0	0	0	8	0	0
19:00	0	30	0	0	0	0	0	0	5	0	0
20:00	0	19	0	0	0	0	0	0	2	0	0
21:00	0	17	0	0	0	0	0	0	0	0	0
22:00	0	23	1	0	0	0	0	0	0	0	1
23:00	0	6	0	0	0	0	0	0	2	0	0
Total	8	937	391	9	39	19	3	19	193	1	97
Percent	0.5%	54.2%	22.6%	0.5%	2.3%	1.1%	0.2%	1.1%	11.2%	0.1%	5.6%
AM Peak Vol.	10:00	10:00	10:00	07:00	07:00	07:00	07:00	08:00	08:00	11:00	11:00
PM Peak Vol.	12:00	14:00	15:00	12:00	12:00	12:00	12:00	13:00	12:00	15:00	15:00
Grand Total	8	937	391	9	39	19	3	19	193	1	97
Percent	0.5%	54.2%	22.6%	0.5%	2.3%	1.1%	0.2%	1.1%	11.2%	0.1%	5.6%

Counts Unlimited, Inc.

PO Box 11178
Corona, CA 92878

Phone: (951) 268-6268

email: counts@countsunlimited.com

County of Imperial
Highway 111
B/ Main Street - Sinclair Road
24 Hour Directional Classification Count

Northbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi
11/09/22	0	6	0	0	0	0	0	0	1	0	0
01:00	0	8	0	1	0	0	0	0	1	0	0
02:00	0	11	0	0	0	0	0	0	2	0	0
03:00	0	15	0	0	1	0	0	0	1	0	0
04:00	0	25	0	0	0	0	0	0	2	0	0
05:00	1	46	9	1	0	0	0	0	7	0	2
06:00	0	34	22	4	2	1	0	0	6	0	3
07:00	1	40	23	4	5	7	1	2	11	0	4
08:00	0	39	32	1	0	0	0	1	7	0	8
09:00	2	30	23	2	5	2	0	5	4	0	8
10:00	1	42	31	0	1	1	0	0	3	6	4
11:00	1	51	18	0	2	0	0	0	1	5	15
12 PM	0	47	18	1	3	0	0	0	5	0	4
13:00	1	59	22	3	5	2	0	2	10	0	1
14:00	0	79	33	2	1	0	0	0	6	0	1
15:00	0	51	22	2	3	0	0	0	4	0	2
16:00	1	55	9	1	2	3	0	0	1	5	0
17:00	1	75	14	1	0	0	0	0	7	0	2
18:00	0	46	3	1	0	0	0	0	5	0	0
19:00	0	38	1	0	1	0	0	0	2	0	0
20:00	0	25	1	0	0	0	0	0	2	0	0
21:00	0	25	1	0	0	0	0	0	0	0	0
22:00	0	19	0	0	0	0	0	0	0	0	0
23:00	1	9	1	0	0	0	1	0	0	2	0
Total	10	875	283	24	31	18	1	16	101	0	55
Percent	0.7%	61.5%	19.9%	1.7%	2.2%	1.3%	0.1%	1.1%	7.1%	0.0%	3.9%
AM Peak Vol.	09:00	11:00	08:00	06:00	07:00	07:00	09:00	09:00	07:00	07:00	11:00
PM Peak Vol.	13:00	14:00	14:00	13:00	13:00	16:00	13:00	13:00	13:00	13:00	15:15
Grand Total	10	875	283	24	31	18	1	16	101	0	55
Percent	0.7%	61.5%	19.9%	1.7%	2.2%	1.3%	0.1%	1.1%	7.1%	0.0%	3.9%

Counts Unlimited, Inc.

PO Box 11178
Corona, CA 92878
Phone: (951) 268-6268

email: counts@countsunlimited.com

County of Imperial
Highway 111
B/ Main Street - Sinclair Road
24 Hour Directional Classification Count

Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi
11/09/22	0	7	0	0	0	0	0	0	0	0	0
01:00	0	5	0	0	0	0	0	0	0	0	0
02:00	0	8	0	0	0	0	0	0	0	0	0
03:00	0	9	2	0	0	0	0	0	1	0	0
04:00	0	25	0	0	0	1	0	0	0	0	1
05:00	0	42	8	0	0	0	0	0	3	0	4
06:00	0	24	16	3	0	0	0	0	5	0	7
07:00	0	53	20	4	1	0	0	0	8	0	7
08:00	0	61	20	1	3	2	0	2	10	0	6
09:00	1	46	31	1	3	0	0	2	9	0	8
10:00	0	60	30	0	1	1	0	0	13	0	5
11:00	1	52	23	2	6	2	0	2	3	0	6
12 PM	0	47	40	1	5	5	2	0	9	0	4
13:00	1	55	23	0	5	1	0	0	5	0	6
14:00	2	54	35	3	4	3	0	0	4	0	1
15:00	0	73	27	4	4	2	0	0	3	0	1
16:00	1	56	27	1	2	0	0	1	3	0	0
17:00	0	47	11	1	1	4	0	1	2	0	0
18:00	0	35	4	1	2	0	0	0	1	0	0
19:00	0	24	7	0	1	0	0	0	2	0	0
20:00	0	15	0	0	0	0	0	0	1	0	0
21:00	0	13	1	0	0	0	0	0	0	0	0
22:00	0	10	1	0	0	0	0	0	1	0	0
23:00	0	4	0	0	0	0	0	0	0	0	1
Total	6	825	326	22	39	21	2	8	84	0	57
Percent	0.4%	59.0%	23.3%	1.6%	2.8%	1.5%	0.1%	0.6%	6.0%	0.0%	4.1%
AM Peak Vol.	09:00	08:00	09:00	07:00	11:00	08:00	08:00	08:00	10:00	09:00	09:00
PM Peak Vol.	14:00	15:00	12:00	15:00	12:00	12:00	12:00	12:00	12:00	13:00	8
Grand Total	6	825	326	22	39	21	2	8	84	0	57
Percent	0.4%	59.0%	23.3%	1.6%	2.8%	1.5%	0.1%	0.6%	6.0%	0.0%	4.1%

Counts Unlimited, Inc.

PO Box 11178
Corona, CA 92878
Phone: (951) 268-6268

email: counts@countsunlimited.com

County of Imperial
Highway 111
B/ Main Street - Sinclair Road
24 Hour Directional Classification Count
Northbound, Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi
11/09/22	0	13	0	0	0	0	0	0	1	0	0
01:00	0	13	0	1	0	0	0	0	1	0	0
02:00	0	19	0	0	0	0	0	0	3	0	0
03:00	0	24	2	0	0	1	0	0	2	0	0
04:00	0	50	0	0	0	0	0	0	2	0	1
05:00	1	88	17	1	1	1	0	0	10	0	6
06:00	0	58	38	7	2	1	0	0	11	0	10
07:00	1	93	43	8	6	7	1	2	19	0	11
08:00	0	100	52	2	3	2	0	3	17	0	14
09:00	3	76	54	3	8	2	0	7	13	0	16
10:00	1	102	61	0	2	2	0	3	19	0	9
11:00	2	103	41	2	8	2	0	3	8	0	21
12 PM	0	94	58	2	8	5	2	1	14	0	8
13:00	2	114	45	3	10	3	0	2	15	0	7
14:00	2	133	68	5	5	3	0	0	10	0	2
15:00	0	124	49	6	7	2	0	0	7	0	3
16:00	2	111	36	2	4	3	0	2	8	0	1
17:00	1	122	25	2	1	4	0	1	9	0	2
18:00	0	81	7	2	2	0	0	0	6	0	0
19:00	0	62	8	0	2	0	0	0	4	0	0
20:00	0	40	1	0	0	0	0	0	3	0	0
21:00	0	38	2	0	0	0	0	0	0	0	0
22:00	0	29	1	0	0	0	0	0	1	0	0
23:00	1	13	1	0	0	1	0	0	2	0	1
Total	16	1700	609	46	70	39	3	24	185	0	112
Percent	0.6%	60.3%	21.6%	1.6%	2.5%	1.4%	0.1%	0.9%	6.6%	0.0%	4.0%
AM Peak Vol.	09:00	11:00	10:00	07:00	09:00	07:00	07:00	09:00	07:00	07:00	11:00
PM Peak Vol.	13:00	14:00	14:00	15:00	13:00	12:00	12:00	13:00	13:00	19	21
Grand Total	16	1700	609	46	70	39	3	24	185	0	112
Percent	0.6%	60.3%	21.6%	1.6%	2.5%	1.4%	0.1%	0.9%	6.6%	0.0%	4.0%

County of Imperial
 Highway 111
 B/ Sinclair Road - Main Street
 24 Hour Directional Classification Count

Northbound

Counts Unlimited, Inc.

PO Box 11178
 Corona, CA 92878
 Phone: (951) 268-6268

email: counts@countsunlimited.com

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi
11/09/22	0	5	0	0	0	0	0	0	1	0	0
01:00	0	6	0	0	0	0	0	0	1	0	0
02:00	0	9	0	0	0	0	2	0	2	0	0
03:00	0	18	0	0	0	0	1	0	0	2	0
04:00	0	36	0	0	0	0	1	0	1	0	0
05:00	3	78	9	1	0	0	0	0	0	0	3
06:00	1	39	25	4	0	1	0	0	3	0	4
07:00	1	48	33	4	2	5	1	2	7	0	1
08:00	0	42	34	1	3	0	0	1	5	0	6
09:00	3	29	26	2	4	2	0	4	4	0	6
10:00	1	42	37	0	2	1	0	2	4	0	3
11:00	0	49	20	0	1	0	0	0	6	0	9
12 PM	0	47	19	2	2	0	0	0	1	10	0
13:00	1	57	25	3	2	1	0	2	10	0	4
14:00	0	61	28	2	0	0	0	0	7	0	2
15:00	0	52	19	1	1	0	0	0	1	3	0
16:00	0	44	10	1	2	3	0	0	1	4	0
17:00	2	77	4	1	1	0	0	0	0	6	0
18:00	0	45	4	1	0	0	0	0	4	0	0
19:00	0	34	4	0	1	0	0	0	1	0	0
20:00	0	23	1	0	0	0	0	0	2	0	0
21:00	0	23	1	0	0	0	0	0	0	0	0
22:00	0	16	0	0	0	0	0	0	0	0	0
23:00	0	9	1	0	0	0	0	0	2	0	0
Total	12	889	300	23	21	17	1	14	87	0	53
Percent	0.8%	62.3%	21.0%	1.6%	1.5%	1.2%	0.1%	1.0%	6.1%	0.0%	3.7%
AM Peak Vol.	05:00	05:00	10:00	06:00	09:00	07:00	07:00	09:00	07:00	09:00	05:00
PM Peak Vol.	17:00	17:00	14:00	13:00	12:00	16:00	5	1	4	7	11
Grand Total	12	889	300	23	21	17	1	14	87	0	53
Percent	0.8%	62.3%	21.0%	1.6%	1.5%	1.2%	0.1%	1.0%	6.1%	0.0%	3.7%

County of Imperial
 Highway 111
 B/ Sinclair Road - Main Street
 24 Hour Directional Classification Count

Counts Unlimited, Inc.

PO Box 11178
 Corona, CA 92878
 Phone: (951) 268-6268

email: counts@countsunlimited.com

Southbound		24 Hour Directional Classification Count											
Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi		
11/09/22	0	9	0	0	0	0	0	0	0	0	0	0	0
01:00	0	3	0	0	0	0	0	0	0	0	0	0	0
02:00	0	9	0	0	0	0	0	0	0	0	0	0	0
03:00	0	7	1	0	0	0	0	0	0	1	0	0	0
04:00	0	15	0	0	1	0	0	0	0	1	0	0	1
05:00	0	20	5	0	0	0	0	0	0	2	0	0	0
06:00	0	18	16	2	0	0	0	1	5	5	0	0	7
07:00	0	42	18	4	1	0	0	2	5	0	0	2	2
08:00	0	51	24	1	3	1	0	1	7	0	0	3	3
09:00	1	44	23	1	5	0	0	3	6	0	0	6	6
10:00	0	55	31	0	4	1	0	2	9	0	0	5	5
11:00	1	47	19	0	12	2	0	2	4	0	0	3	3
12 PM	0	47	30	1	5	3	1	2	5	0	0	6	3
13:00	1	61	26	0	6	1	0	0	8	0	0	1	6
14:00	3	68	35	3	9	2	0	0	3	0	0	0	3
15:00	0	78	27	3	4	0	0	0	3	0	0	0	0
16:00	1	83	37	1	0	0	0	1	0	0	0	0	0
17:00	0	58	15	0	3	0	0	0	2	0	0	0	0
18:00	0	50	1	2	0	0	0	0	0	0	0	0	1
19:00	0	36	3	0	2	0	0	0	0	1	0	0	0
20:00	0	13	0	0	0	0	0	0	0	0	0	0	0
21:00	0	14	0	0	0	0	0	0	0	0	0	0	0
22:00	0	11	1	0	0	0	0	0	0	0	0	0	1
23:00	0	4	0	0	0	0	0	0	0	0	0	0	1
Total	7	843	312	18	57	10	1	14	63	0	0	40	40
Percent	0.5%	61.4%	22.7%	1.3%	4.2%	0.7%	0.1%	1.0%	4.6%	0.0%	2.9%	0.0%	2.9%
AM Peak Vol.	09:00 1	10:00 55	10:00 31	07:00 4	11:00 12	11:00 2	09:00 3	10:00 9	09:00 3	10:00 9	06:00 7	06:00 7	
PM Peak Vol.	14:00 3	16:00 83	16:00 37	14:00 3	14:00 9	12:00 3	12:00 1	12:00 2	12:00 8	13:00 6	13:00 6		
Grand Total	7	843	312	18	57	10	1	14	63	0	40	40	
Percent	0.5%	61.4%	22.7%	1.3%	4.2%	0.7%	0.1%	1.0%	4.6%	0.0%	2.9%	0.0%	2.9%

County of Imperial
 Highway 111
 B/ Sinclair Road - Main Street
 24 Hour Directional Classification Count

Northbound, Southbound

Counts Unlimited, Inc.

PO Box 11178
 Corona, CA 92878
 Phone: (951) 268-6268

email: counts@countsunlimited.com

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi
11/09/22	0	14	0	0	0	0	0	0	0	1	0
01:00	0	9	0	0	0	0	0	0	0	1	0
02:00	0	18	0	0	0	0	2	0	0	3	0
03:00	0	25	1	0	0	1	1	0	0	3	0
04:00	0	51	0	0	0	1	0	0	0	2	0
05:00	3	98	14	1	0	0	0	0	0	4	4
06:00	1	57	41	6	2	1	0	0	0	4	11
07:00	1	90	51	8	3	5	1	4	12	0	3
08:00	0	93	58	2	6	1	0	2	12	0	9
09:00	4	73	49	3	9	2	0	7	10	0	12
10:00	1	97	68	0	6	2	0	4	13	0	8
11:00	1	96	39	0	13	2	0	2	10	0	12
12 PM	0	94	49	3	7	3	1	3	15	0	7
13:00	2	118	51	3	8	2	0	2	18	0	7
14:00	3	129	63	5	9	2	0	0	10	0	3
15:00	0	130	46	4	5	0	0	1	6	0	1
16:00	1	127	47	2	2	3	0	2	4	0	1
17:00	2	135	19	1	4	0	0	0	8	0	1
18:00	0	95	5	3	0	0	0	0	4	0	1
19:00	0	70	7	0	3	0	0	0	2	0	0
20:00	0	36	1	0	0	0	0	0	2	0	0
21:00	0	37	1	0	0	0	0	0	0	0	0
22:00	0	27	1	0	0	0	0	0	0	0	1
23:00	0	13	1	0	0	0	0	0	2	0	1
Total	19	1732	612	41	78	27	2	28	150	0	93
Percent	0.7%	61.9%	21.9%	1.5%	2.8%	1.0%	0.1%	1.0%	5.4%	0.0%	3.3%
AM Peak Vol.	4	98	68	8	13	5	1	7	13	12	12
PM Peak Vol.	3	135	63	5	9	3	1	3	18	7	12:00
Grand Total	19	1732	612	41	78	27	2	28	150	0	93
Percent	0.7%	61.9%	21.9%	1.5%	2.8%	1.0%	0.1%	1.0%	5.4%	0.0%	3.3%

Counts Unlimited, Inc.

PO Box 11178
 Corona, CA 92878
 Phone: (951) 268-6268

email: counts@countsunlimited.com

County of Imperial
 Highway 111
 B/Yocum Road - Ruegger Road
 24 Hour Directional Classification Count

Northbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi
11/09/22	0	20	0	0	0	0	0	0	0	0	0
01:00	0	12	0	0	0	0	0	0	0	0	0
02:00	0	20	0	0	2	0	0	0	1	0	0
03:00	0	38	0	0	4	0	0	0	0	0	3
04:00	0	58	1	0	4	0	0	1	0	0	4
05:00	2	249	12	1	0	0	0	2	9	0	12
06:00	0	123	65	2	3	3	0	0	5	0	2
07:00	1	223	58	1	6	4	1	3	13	0	0
08:00	0	98	45	3	3	0	0	4	6	0	0
09:00	0	67	33	0	4	2	0	2	11	1	4
10:00	1	79	40	0	3	1	0	2	6	0	5
11:00	0	96	47	0	6	0	0	1	8	0	6
12 PM	0	110	30	2	5	0	1	0	7	0	1
13:00	2	169	59	0	6	1	0	1	4	0	0
14:00	0	136	44	1	0	0	0	0	5	0	0
15:00	0	138	59	1	0	0	0	5	1	0	0
16:00	1	151	46	0	6	0	0	0	3	0	0
17:00	0	171	20	0	1	0	0	0	5	0	1
18:00	1	139	16	0	0	0	0	0	3	0	0
19:00	0	113	6	0	0	0	0	0	1	0	0
20:00	0	106	1	0	0	0	0	0	1	0	0
21:00	0	126	5	0	0	0	0	0	0	0	0
22:00	0	62	1	0	0	1	0	0	0	0	0
23:00	0	59	0	0	1	0	0	0	0	0	0
Total	8	2563	588	11	55	12	2	22	89	1	38
Percent	0.2%	75.4%	17.3%	0.3%	1.6%	0.4%	0.1%	0.6%	2.6%	0.0%	1.1%
AM Peak Vol.	05:00	05:00	06:00	08:00	07:00	07:00	08:00	08:00	07:00	09:00	05:00
PM Peak Vol.	13:00	17:00	13:00	12:00	13:00	13:00	12:00	15:00	12:00	13	12
Grand Total	8	2563	588	11	55	12	2	22	89	1	38
Percent	0.2%	75.4%	17.3%	0.3%	1.6%	0.4%	0.1%	0.6%	2.6%	0.0%	1.1%

Counts Unlimited, Inc.

PO Box 11178
Corona, CA 92878

Phone: (951) 268-6268

email: counts@countsunlimited.com

County of Imperial
Highway 111
B/Yocum Road - Ruegger Road
24 Hour Directional Classification Count

Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi
11/09/22	0	10	2	0	1	0	0	0	0	0	0
01:00	0	4	0	0	0	0	0	0	0	0	0
02:00	0	20	1	0	0	0	0	1	0	0	0
03:00	0	16	0	0	0	0	0	0	1	0	0
04:00	0	38	2	0	0	0	0	0	0	0	0
05:00	0	97	8	0	1	2	0	0	0	0	2
06:00	0	97	31	0	2	0	0	0	4	0	5
07:00	0	139	24	2	1	1	0	2	11	0	1
08:00	0	168	50	1	2	2	0	0	15	0	0
09:00	0	117	48	1	4	2	0	0	15	1	0
10:00	0	103	46	0	1	2	1	2	11	1	4
11:00	1	102	40	0	8	1	0	5	2	0	5
12 PM	2	92	71	0	12	3	1	2	12	0	3
13:00	1	165	52	0	7	1	0	5	5	0	9
14:00	3	265	81	1	8	0	0	0	4	0	2
15:00	1	283	82	2	6	4	0	1	2	0	2
16:00	1	260	47	2	6	0	0	1	0	0	1
17:00	0	152	53	0	0	2	0	1	4	0	0
18:00	1	125	31	0	1	1	0	0	2	0	0
19:00	0	108	22	0	0	0	0	0	0	0	0
20:00	0	50	8	0	0	0	0	0	2	0	0
21:00	0	63	12	0	0	0	0	0	0	0	0
22:00	0	74	6	0	1	0	0	0	0	0	0
23:00	0	16	0	0	0	0	0	0	0	0	0
Total	10	2564	717	9	61	21	3	20	86	2	35
Percent	0.3%	72.6%	20.3%	0.3%	1.7%	0.6%	0.1%	0.6%	2.4%	0.1%	1.0%
AM Peak Vol.	11:00	08:00	08:00	07:00	11:00	05:00	08:00	11:00	09:00	09:00	06:00
PM Peak Vol.	14:00	15:00	15:00	15:00	12:00	15:00	12:00	13:00	12:00	1	5
Grand Total	10	2564	717	9	61	21	3	20	86	2	35
Percent	0.3%	72.6%	20.3%	0.3%	1.7%	0.6%	0.1%	0.6%	2.4%	0.1%	1.0%

Counts Unlimited, Inc.

PO Box 11178
Corona, CA 92878

Phone: (951) 268-6268

email: counts@countsunlimited.com

County of Imperial
Highway 111
B/Yocum Road - Ruegger Road
24 Hour Directional Classification Count

Northbound, Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi
11/09/22	0	30	2	0	1	0	0	0	0	0	0
01:00	0	16	0	0	0	0	0	0	0	0	0
02:00	0	40	1	0	2	0	0	0	2	0	0
03:00	0	54	0	0	4	0	0	0	0	0	3
04:00	0	96	3	0	4	0	0	1	1	0	5
05:00	2	346	20	1	1	2	0	2	9	0	14
06:00	0	220	96	2	5	3	0	0	9	0	7
07:00	1	362	82	3	7	5	1	5	24	0	1
08:00	0	266	95	4	5	2	1	5	16	0	0
09:00	0	184	81	1	8	4	0	2	26	2	4
10:00	1	182	86	0	4	3	1	4	17	1	9
11:00	1	198	87	0	14	1	0	6	10	0	11
12 PM	2	202	101	2	17	3	2	2	19	0	4
13:00	3	334	111	0	13	2	0	6	9	0	9
14:00	3	401	125	2	8	0	0	0	9	0	2
15:00	1	421	141	3	7	4	0	6	3	0	2
16:00	2	411	93	2	12	0	0	1	3	0	1
17:00	0	323	73	0	1	2	0	1	9	0	1
18:00	2	264	47	0	1	1	0	1	5	0	0
19:00	0	221	28	0	0	0	0	0	1	0	0
20:00	0	156	9	0	0	0	0	0	3	0	0
21:00	0	189	17	0	0	0	0	0	0	0	0
22:00	0	136	7	0	1	0	0	0	0	0	0
23:00	0	75	0	0	1	0	0	0	0	0	0
Total	18	5127	1305	20	116	33	5	42	175	3	73
Percent	0.3%	74.0%	18.8%	0.3%	1.7%	0.5%	0.1%	0.6%	2.5%	0.0%	1.1%
AM Peak Vol.	05:00	07:00	06:00	08:00	11:00	07:00	07:00	11:00	09:00	09:00	05:00
PM Peak Vol.	13:00	15:00	15:00	12:00	15:00	15:00	12:00	13:00	12:00	26	14
Grand Total	18	5127	1305	20	116	33	5	42	175	3	73
Percent	0.3%	74.0%	18.8%	0.3%	1.7%	0.5%	0.1%	0.6%	2.5%	0.0%	1.1%

Counts Unlimited, Inc.

County of Imperial
Kalin Road
B/ West Sinclair Road - West Eddins Road
24 Hour Directional Classification Count
Northbound

PO Box 11178
Corona, CA 92878
Phone: (951) 268-6268
counts@countsunlimited.com

email: counts@countsunlimited.com

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi
11/09/22 01:00	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	1	0	0	0	0	0	0	0
03:00	0	0	0	1	0	0	0	0	0	0	0
04:00	0	0	5	0	0	0	0	0	0	0	0
05:00	0	0	9	14	0	0	0	0	0	0	0
06:00	0	0	5	4	2	0	0	0	0	0	0
07:00	0	0	4	2	0	0	3	0	0	0	0
08:00	0	0	6	2	1	0	0	0	0	0	0
09:00	0	0	2	1	0	4	1	0	0	0	0
10:00	0	0	0	1	1	2	0	0	0	0	0
11:00	0	0	1	1	1	1	0	0	0	0	1
12 PM	0	0	0	0	0	0	0	0	0	0	0
13:00	0	0	0	0	0	2	0	0	0	0	0
14:00	0	0	0	1	0	4	0	0	0	0	0
15:00	0	0	1	1	0	1	0	0	0	0	0
16:00	0	0	1	1	0	0	2	0	0	0	0
17:00	0	0	0	1	0	0	0	0	0	0	0
18:00	0	0	0	1	0	0	0	0	0	0	0
19:00	0	0	1	0	1	0	0	0	0	0	0
20:00	0	0	0	1	0	0	0	0	0	0	0
21:00	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0
Total	0	34	33	3	36	1	0	1	0	0	1
Percent	0.0%	31.2%	30.3%	2.8%	33.0%	0.9%	0.0%	0.9%	0.0%	0.0%	0.9%
AM Peak Vol.	05:00	05:00	05:00	10:00	05:00	09:00	06:00	06:00	06:00	06:00	0.9%
PM Peak Vol.	16:00	14:00	19:00	14:00	11	1	1	1	1	1	12:00
Grand Total	0	34	33	3	36	1	0	1	0	0	1
Percent	0.0%	31.2%	30.3%	2.8%	33.0%	0.9%	0.0%	0.9%	0.0%	0.0%	0.9%

Counts Unlimited, Inc.

PO Box 11178

Corona, CA 92878

Phone: (951) 268-6268

email: counts@countsunlimited.com

County of Imperial
Kalin Road
B/West Sinclair Road - West Eddins Road
24 Hour Directional Classification Count

Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi
11/09/22	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	3	0	0	1	0	0	0	0	0
06:00	0	0	0	1	0	0	0	0	0	0	0
07:00	0	0	1	0	0	0	0	0	0	0	0
08:00	0	0	2	0	0	3	0	0	0	0	0
09:00	0	0	0	1	0	0	0	1	0	0	0
10:00	0	0	2	3	0	2	0	0	0	0	0
11:00	0	0	0	2	0	4	0	0	0	0	0
12 PM	0	0	1	0	0	3	0	0	0	0	0
13:00	0	0	0	11	7	0	0	0	0	0	0
14:00	0	0	2	5	0	0	0	0	0	0	0
15:00	0	0	12	3	0	3	0	0	0	0	0
16:00	0	0	3	0	0	2	0	0	0	0	0
17:00	0	0	1	1	0	1	0	0	0	0	0
18:00	0	0	2	0	0	0	0	0	0	0	0
19:00	0	0	0	0	0	0	0	0	0	0	0
20:00	0	0	2	1	0	0	0	0	0	0	0
21:00	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0
Total	1	40	25	1	27	1	0	4	0	0	0
Percent	1.0%	40.0%	25.0%	1.0%	27.0%	1.0%	0.0%	4.0%	0.0%	0.0%	0.0%
AM Peak Vol.	05:00	10:00		11:00	09:00		08:00				
PM Peak Vol.	16:00	16:00	14:00	20:00	12:00		13:00	1			
Grand Total	1	40	25	1	27	1	0	4	0	0	0
Percent	1.0%	40.0%	25.0%	1.0%	27.0%	1.0%	0.0%	4.0%	0.0%	0.0%	0.0%

Counts Unlimited, Inc.

PO Box 11178

Corona, CA 92878

Phone: (951) 268-6268

email: counts@countsunlimited.com

County of Imperial
Kalin Road
B/West Sinclair Road - West Eddins Road
24 Hour Directional Classification Count

Northbound, Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi
11/09/22	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	1	0	0	0	0	0	0	0	0
02:00	0	0	1	0	0	0	0	0	0	0	0
03:00	0	0	1	0	0	0	0	0	0	0	0
04:00	0	5	0	0	1	0	0	0	0	0	0
05:00	0	12	14	0	0	0	0	0	0	0	0
06:00	0	5	5	2	0	3	0	0	0	0	0
07:00	0	5	2	0	0	0	0	0	0	0	0
08:00	0	8	2	0	0	8	0	0	1	0	0
09:00	0	2	2	0	4	2	0	0	0	0	0
10:00	0	2	4	1	4	0	0	0	0	0	0
11:00	0	1	3	1	5	0	0	0	0	0	0
12 PM	0	1	0	0	3	0	0	0	0	0	1
13:00	0	0	0	0	5	0	0	0	0	0	0
14:00	0	11	8	0	0	7	0	0	0	1	0
15:00	0	2	6	0	0	1	0	0	0	0	0
16:00	1	13	4	0	3	0	0	0	0	0	0
17:00	0	3	0	0	4	0	0	0	0	0	0
18:00	0	1	2	0	0	1	0	0	0	0	0
19:00	0	3	0	1	0	0	0	0	0	0	0
20:00	0	0	3	1	0	0	0	0	0	0	0
21:00	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0
Total	1	74	58	4	63	2	0	5	0	0	1
Percent	0.5%	35.4%	27.8%	1.9%	30.1%	1.0%	0.0%	2.4%	0.0%	0.0%	0.5%
AM Peak Vol.	05:00	12	14	1	12	2	0	0	06:00	1	
PM Peak Vol.	16:00	16:00	14:00	19:00	14:00	7		13:00	1	12:00	1
Grand Total	1	74	58	4	63	2	0	5	0	0	1
Percent	0.5%	35.4%	27.8%	1.9%	30.1%	1.0%	0.0%	2.4%	0.0%	0.0%	0.5%

Counts Unlimited, Inc.

PO Box 11178
Corona, CA 92878

Phone: (951) 268-6268

email: counts@countsunlimited.com

County of Imperial
Lack Road
B/ New River - Bannister Road
24 Hour Directional Classification Count

Northbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi
11/09/22	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	1	0	0	0	0	0
04:00	0	2	4	0	0	0	0	0	0	0	0
05:00	0	11	6	0	2	1	0	0	0	0	0
06:00	0	2	2	6	0	0	0	0	0	0	0
07:00	0	0	4	3	0	0	0	3	0	0	0
08:00	0	1	2	0	8	0	0	0	0	0	0
09:00	0	0	3	0	4	0	0	1	0	0	0
10:00	0	1	2	0	2	0	0	3	1	0	0
11:00	0	1	2	0	4	0	0	2	0	0	0
12 PM	0	0	2	2	0	0	0	0	0	0	0
13:00	0	2	0	0	4	0	0	3	0	0	0
14:00	0	0	0	0	4	1	0	0	0	0	1
15:00	0	1	0	0	2	0	0	0	0	0	0
16:00	0	0	0	0	2	0	0	0	0	0	0
17:00	0	1	0	0	1	0	0	0	0	0	0
18:00	0	1	2	0	0	1	0	0	0	0	0
19:00	0	2	0	0	0	1	0	0	0	0	0
20:00	0	0	0	0	0	0	0	0	0	0	0
21:00	0	1	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	1	0	0	0	0	0
Total	0	26	29	1	50	2	0	13	1	1	1
Percent	0.0%	21.0%	23.4%	0.8%	40.3%	1.6%	0.0%	10.5%	0.8%	0.8%	0.8%
AM Peak Vol.	05:00	11	6	1	07:00	08:00	05:00	07:00	10:00	08:00	
PM Peak Vol.	13:00	2	2	2	13:00	12:00	14:00	13:00	3	1	1
Grand Total	0	26	29	1	50	2	0	13	1	1	1
Total Percent	0.0%	21.0%	23.4%	0.8%	40.3%	1.6%	0.0%	10.5%	0.8%	0.8%	0.8%

Counts Unlimited, Inc.

PO Box 11178

Corona, CA 92878

Phone: (951) 268-6268

email: counts@countsunlimited.com

County of Imperial
Lack Road
B/ New River - Bannister Road
24 Hour Directional Classification Count

Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi
11/09/22	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	1	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0
06:00	0	0	1	2	0	0	0	0	1	0	0
07:00	0	0	1	1	2	0	0	0	1	0	0
08:00	0	0	1	3	0	0	0	1	0	0	0
09:00	0	0	1	4	0	0	0	0	0	0	0
10:00	0	0	0	4	1	2	0	0	1	0	0
11:00	0	0	1	4	1	2	0	0	0	0	0
12 PM	0	0	3	5	0	0	0	0	0	0	0
13:00	0	0	6	4	1	1	1	0	0	0	0
14:00	0	12	5	0	2	0	0	0	0	0	0
15:00	0	3	3	0	2	0	0	0	0	0	0
16:00	0	1	7	0	2	0	0	0	0	0	0
17:00	0	3	2	0	2	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0	0	0	0
19:00	0	1	0	0	0	1	0	0	0	0	0
20:00	0	1	0	0	0	0	0	0	0	0	0
21:00	0	1	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0
23:00	0	1	1	0	0	0	0	0	0	0	0
Total	0	37	46	1	24	1	0	5	1	0	0
Percent	0.0%	31.6%	39.3%	0.9%	20.5%	0.9%	0.0%	4.3%	0.9%	0.0%	0.0%
AM Peak Vol.	06:00	09:00	11:00	08:00				06:00			
PM Peak Vol.	14:00	16:00	15:00	14:00	14:00	14:00	14:00	19:00	16:00	16:00	16:00
Grand Total	0	37	46	1	24	1	0	5	1	0	0
Percent	0.0%	31.6%	39.3%	0.9%	20.5%	0.9%	0.0%	4.3%	0.9%	0.0%	0.0%

Counts Unlimited, Inc.

PO Box 11178

Corona, CA 92878

Phone: (951) 268-6268

email: counts@countsunlimited.com

County of Imperial
Lack Road
B/ New River - Bannister Road
24 Hour Directional Classification Count

Northbound, Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi
11/09/22	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	1	0	0	0	0	0
04:00	0	2	5	0	0	0	0	0	0	0	0
05:00	0	11	6	0	3	1	0	0	0	0	0
06:00	0	3	4	1	8	0	0	1	0	0	0
07:00	0	1	5	0	5	0	0	4	0	0	0
08:00	0	2	5	0	0	0	0	1	0	0	0
09:00	0	1	7	0	0	0	0	1	0	0	0
10:00	0	1	6	0	3	0	0	3	1	0	0
11:00	0	2	6	1	6	0	0	3	0	0	0
12 PM	0	3	5	0	5	0	0	1	0	0	0
13:00	0	8	6	0	5	0	0	3	0	0	0
14:00	0	12	5	0	5	2	0	0	0	0	0
15:00	0	4	3	0	4	0	0	0	0	0	0
16:00	0	1	7	0	4	0	0	0	0	0	0
17:00	0	4	2	0	3	0	0	0	0	0	0
18:00	0	1	2	0	1	0	0	0	0	0	0
19:00	0	3	0	0	2	0	0	0	1	0	0
20:00	0	1	0	0	0	0	0	0	0	0	0
21:00	0	2	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0
23:00	0	1	1	0	1	0	0	0	0	0	0
Total	0	63	75	2	74	3	0	18	2	1	1
Percent	0.0%	26.1%	31.1%	0.8%	30.7%	1.2%	0.0%	7.5%	0.8%	0.4%	0.4%
AM Peak Vol.	05:00	11	09:00	07:00	08:00	05:00	07:00	10:00	08:00	1	1
PM Peak Vol.	14:00	12	16:00	7	11	1	1	4	1	14:00	1
Grand Total	0	63	75	2	74	3	0	18	2	1	1
Percent	0.0%	26.1%	31.1%	0.8%	30.7%	1.2%	0.0%	7.5%	0.8%	0.4%	0.4%

County of Imperial
 Main Street
 B/ Northeast Avenue - Blair Road
 24 Hour Directional Classification Count
 Eastbound

Counts Unlimited, Inc.

PO Box 11178
 Corona, CA 92878
 Phone: (951) 268-6268

email: counts@countsunlimited.com

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi
11/09/22	0	1	1	0	0	0	0	0	0	0	0
01:00	0	2	0	0	0	0	0	0	0	0	0
02:00	0	7	0	0	0	0	0	0	0	0	0
03:00	0	25	0	0	0	0	0	0	0	0	0
04:00	0	31	7	0	0	1	0	0	0	0	0
05:00	1	178	46	0	0	0	0	0	0	0	0
06:00	0	98	38	2	2	1	0	1	6	0	0
07:00	0	159	42	0	2	2	0	0	6	0	0
08:00	1	45	30	1	3	0	0	0	6	0	0
09:00	1	20	11	0	3	1	0	1	10	0	0
10:00	0	23	14	0	3	2	0	2	7	0	0
11:00	0	22	20	0	4	1	0	0	9	0	0
12 PM	0	15	11	0	1	0	0	1	8	0	2
13:00	1	92	33	0	0	0	0	1	11	0	0
14:00	0	13	13	0	4	0	0	0	5	0	1
15:00	0	18	18	0	0	1	0	0	8	0	0
16:00	0	19	6	0	0	0	0	0	1	0	0
17:00	0	12	3	0	0	0	0	0	0	0	0
18:00	1	12	1	0	0	0	0	0	1	0	0
19:00	0	5	0	0	0	0	0	0	0	0	0
20:00	0	2	5	0	1	0	0	0	1	0	0
21:00	1	42	7	0	0	0	0	0	1	0	0
22:00	0	2	0	0	1	0	0	0	0	0	0
23:00	0	1	0	0	0	0	0	0	0	0	0
Total	6	844	306	3	28	8	0	8	87	0	3
Percent	0.5%	65.3%	23.7%	0.2%	2.2%	0.6%	0.0%	0.6%	6.7%	0.0%	0.2%
AM Peak Vol.	05:00	05:00	05:00	06:00	11:00	07:00	07:00	10:00	09:00	10:00	10
PM Peak Vol.	13:00	13:00	13:00	14:00	15:00	15:00	12:00	13:00	12:00	13:00	2
Grand Total	6	844	306	3	28	8	0	8	87	0	3
Percent	0.5%	65.3%	23.7%	0.2%	2.2%	0.6%	0.0%	0.6%	6.7%	0.0%	0.2%

Counts Unlimited, Inc.

PO Box 11178
Corona, CA 92878

Phone: (951) 268-6268

email: counts@countsunlimited.com

County of Imperial
Main Street
B/ Northeast Avenue - Blair Road
24 Hour Directional Classification Count
Westbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi
11/09/22	0	1	1	0	0	0	0	0	1	0	0
01:00	0	3	0	0	0	0	0	0	1	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0
04:00	0	12	1	0	0	0	0	0	0	0	0
05:00	0	31	9	0	0	0	0	0	0	0	0
06:00	0	34	15	0	1	1	0	0	1	4	0
07:00	0	13	16	3	1	0	0	0	5	0	0
08:00	0	13	19	0	5	3	0	2	6	0	0
09:00	3	16	19	0	1	1	0	0	1	0	0
10:00	0	16	12	0	2	2	0	0	5	0	0
11:00	0	17	26	0	3	1	0	0	1	5	0
12 PM	1	24	17	0	2	0	0	2	6	0	0
13:00	0	52	25	0	2	0	0	0	1	11	0
14:00	1	143	51	0	2	0	0	0	1	7	0
15:00	1	162	53	0	2	0	0	0	0	0	0
16:00	0	89	12	0	1	4	0	0	0	1	0
17:00	1	36	8	0	0	0	0	0	2	0	0
18:00	0	18	0	0	0	0	0	0	2	0	0
19:00	1	26	3	0	0	0	0	0	1	0	0
20:00	0	4	2	0	0	0	0	0	2	0	0
21:00	1	67	10	0	0	0	0	0	3	0	0
22:00	0	37	5	0	0	0	0	0	0	0	0
23:00	0	1	0	0	0	0	0	0	1	0	0
Total	9	815	304	3	24	12	0	8	65	0	4
Percent	0.7%	65.5%	24.4%	0.2%	1.9%	1.0%	0.0%	0.6%	5.2%	0.0%	0.3%
AM Peak Vol.	09:00	06:00	11:00	07:00	08:00	08:00	08:00	08:00	08:00	08:00	
PM Peak Vol.	12:00	15:00	15:00	3	5	3	2	2	6	14:00	3
Grand Total	9	815	304	3	24	12	0	8	65	0	4
Percent	0.7%	65.5%	24.4%	0.2%	1.9%	1.0%	0.0%	0.6%	5.2%	0.0%	0.3%

Counts Unlimited, Inc.

PO Box 11178

Corona, CA 92878

Phone: (951) 268-6268

email: counts@countsunlimited.com

County of Imperial
Main Street
B/ Northeast Avenue - Blair Road
24 Hour Directional Classification Count
Eastbound, Westbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi
11/09/22	0	2	2	0	0	0	0	0	1	0	0
01:00	0	5	0	0	0	0	0	0	1	0	0
02:00	0	7	0	0	0	1	0	0	3	0	0
03:00	0	25	0	0	0	0	0	0	4	0	0
04:00	0	43	8	0	2	0	0	0	0	0	0
05:00	1	209	55	0	0	0	0	0	0	0	0
06:00	0	132	53	2	3	2	0	2	10	0	0
07:00	0	172	58	3	3	2	0	0	11	0	0
08:00	1	58	49	1	8	3	0	2	12	0	0
09:00	4	36	30	0	4	2	0	1	11	0	0
10:00	0	39	26	0	5	4	0	2	12	0	0
11:00	0	39	46	0	7	2	0	1	14	0	0
12 PM	1	39	28	0	3	0	0	3	14	0	2
13:00	1	144	58	0	5	0	0	2	22	0	0
14:00	1	156	64	0	6	0	0	1	12	0	4
15:00	1	180	71	0	2	1	0	1	8	0	0
16:00	0	108	18	0	4	0	0	1	2	0	0
17:00	1	48	11	0	0	0	0	0	3	0	0
18:00	1	30	1	0	0	0	0	0	3	0	0
19:00	1	31	3	0	0	0	0	0	1	0	0
20:00	0	6	7	0	1	0	0	0	3	0	0
21:00	2	109	17	0	0	0	0	0	4	0	0
22:00	0	39	5	0	1	0	0	0	0	0	0
23:00	0	2	0	0	0	0	0	0	1	0	0
Total	15	1659	610	6	52	20	0	16	152	0	7
Percent	0.6%	65.4%	24.0%	0.2%	2.0%	0.8%	0.0%	0.6%	6.0%	0.0%	0.3%
AM Peak Vol.	09:00	05:00	07:00	08:00	10:00			06:00	11:00		
PM Peak Vol.	21:00	15:00	15:00	14:00	16:00	4		2	14		
Grand Total	15	1659	610	6	52	20	0	16	152	0	7
Percent	0.6%	65.4%	24.0%	0.2%	2.0%	0.8%	0.0%	0.6%	6.0%	0.0%	0.3%

County of Imperial
West Eddins Road
B/ Brandt Road - Highway 111
24 Hour Directional Classification Count

Eastbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	2 Axle Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi
11/09/22	0	2	4	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	1	0	0
02:00	0	1	1	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	1	0	0	0	0	0
04:00	0	5	1	0	0	3	0	0	0	0	3
05:00	0	9	1	0	0	6	0	0	0	0	7
06:00	0	5	6	1	5	0	0	2	0	0	6
07:00	0	16	12	1	9	0	0	0	2	0	8
08:00	1	11	6	3	16	0	0	1	1	0	5
09:00	0	7	5	1	8	1	0	3	2	0	10
10:00	0	7	9	0	12	0	0	5	0	0	8
11:00	0	7	3	0	8	0	0	0	1	0	6
12 PM	0	9	3	1	13	0	0	0	1	0	2
13:00	0	21	9	2	10	1	0	1	0	0	2
14:00	0	23	16	2	14	0	0	1	0	0	1
15:00	0	13	9	0	21	0	0	0	0	0	0
16:00	0	16	6	1	11	0	0	1	0	0	0
17:00	0	8	4	0	7	0	0	0	0	0	0
18:00	0	6	4	3	3	0	0	0	1	0	0
19:00	0	6	1	0	1	0	0	0	0	0	0
20:00	0	1	1	1	3	0	0	0	0	0	0
21:00	0	2	2	1	2	0	0	0	0	0	0
22:00	0	2	0	0	3	0	0	0	0	0	0
23:00	0	4	0	0	2	0	0	0	0	0	0
Total	1	181	103	17	158	2	0	14	9	0	58
Percent	0.2%	33.0%	18.8%	3.1%	28.8%	0.4%	0.0%	2.6%	1.6%	0.0%	10.6%
AM Peak Vol.	08:00	07:00	07:00	08:00	08:00	09:00	09:00	10:00	07:00	09:00	09:00
PM Peak Vol.	14:00	14:00	14:00	18:00	15:00	13:00	13:00	13:00	12:00	12:00	10
Grand Total	1	181	103	17	158	2	0	14	9	0	58
Percent	0.2%	33.0%	18.8%	3.1%	28.8%	0.4%	0.0%	2.6%	1.6%	0.0%	10.6%

County of Imperial
West Eddins Road
B/ Brandt Road - Highway 111
24 Hour Directional Classification Count

Westbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi
11/09/22	0	2	1	0	0	0	0	0	0	0	0
01:00	0	1	0	0	0	0	0	0	0	0	0
02:00	0	1	1	0	0	0	0	0	0	0	0
03:00	0	4	4	0	0	0	0	1	0	0	1
04:00	0	13	7	0	1	0	0	0	0	0	5
05:00	0	33	25	4	13	0	0	1	1	0	5
06:00	0	13	13	1	4	0	0	2	0	0	8
07:00	0	6	5	1	9	0	0	0	0	0	8
08:00	0	13	11	1	2	0	0	0	2	0	7
09:00	0	5	9	0	14	0	0	0	3	2	8
10:00	0	5	10	1	6	0	0	2	0	0	7
11:00	0	6	13	0	7	0	0	0	0	0	7
12 PM	0	12	9	1	8	1	0	1	0	0	2
13:00	0	7	9	1	3	1	0	1	0	0	1
14:00	1	8	14	1	2	0	0	1	0	0	0
15:00	0	15	12	0	5	0	0	0	1	0	1
16:00	0	19	5	0	2	0	0	0	0	0	0
17:00	0	7	5	1	5	0	0	0	0	0	0
18:00	0	5	6	1	2	0	0	0	0	0	0
19:00	1	7	1	1	2	0	0	0	1	0	0
20:00	0	1	0	0	1	0	0	0	0	0	0
21:00	0	1	0	0	2	0	0	0	0	1	0
22:00	0	2	2	0	0	0	0	0	0	0	0
23:00	0	2	0	0	1	0	0	0	0	0	0
Total	2	188	163	14	89	2	0	14	8	0	60
Percent	0.4%	34.2%	29.7%	2.6%	16.2%	0.4%	0.0%	2.6%	1.5%	0.0%	10.9%
AM Peak Vol.	05:00	33	25	4	14	09:00	09:00	09:00	08:00	08:00	06:00
PM Peak Vol.	14:00	16:00	14:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00
Grand Total	2	188	163	14	89	2	0	14	8	0	60
Percent	0.4%	34.2%	29.7%	2.6%	16.2%	0.4%	0.0%	2.6%	1.5%	0.0%	10.9%

Counts Unlimited, Inc.

PO Box 11178

Corona, CA 92878

Phone: (951) 268-6268

email: counts@countsunlimited.com

Counts Unlimited, Inc.

PO Box 11178
 Corona, CA 92878
 Phone: (951) 268-6268

email: counts@countsunlimited.com

County of Imperial
 West Eddins Road
 B/ Brandt Road - Highway 111
 24 Hour Directional Classification Count
 Eastbound, Westbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi
11/09/22	0	4	5	0	0	0	0	0	0	0	0
01:00	0	1	0	0	0	0	0	0	1	0	0
02:00	0	2	2	0	0	0	0	0	0	0	0
03:00	0	4	4	0	1	0	0	1	0	0	1
04:00	0	8	0	4	0	0	0	0	0	0	8
05:00	0	42	26	4	19	0	0	1	1	0	12
06:00	0	18	19	2	9	0	0	4	0	0	14
07:00	0	22	17	2	18	0	0	0	2	0	16
08:00	1	24	17	4	18	0	0	1	3	0	12
09:00	0	12	14	1	22	1	0	0	6	4	0
10:00	0	12	19	1	18	0	0	0	7	0	15
11:00	0	13	16	0	15	0	0	0	1	0	13
12 PM	0	21	12	2	21	1	0	1	2	0	4
13:00	0	28	18	3	13	2	0	0	0	0	3
14:00	1	31	30	3	16	0	0	0	2	0	1
15:00	0	28	21	0	26	0	0	0	1	0	1
16:00	0	35	11	1	13	0	0	1	1	0	0
17:00	0	15	9	1	12	0	0	0	0	0	0
18:00	0	11	10	4	5	0	0	0	1	0	0
19:00	1	13	2	1	3	0	0	0	1	0	0
20:00	0	2	2	1	4	0	0	0	0	0	0
21:00	0	3	2	1	4	0	0	0	1	0	0
22:00	0	4	2	0	3	0	0	0	0	0	0
23:00	0	6	0	0	3	0	0	0	0	0	0
Total	3	369	266	31	247	4	0	28	17	0	118
Percent	0.3%	33.6%	24.2%	2.8%	22.5%	0.4%	0.0%	2.6%	1.5%	0.0%	10.8%
AM Peak Vol.	08:00	05:00	05:00	05:00	09:00	09:00	09:00	10:00	09:00	09:00	09:00
PM Peak Vol.	14:00	16:00	14:00	18:00	15:00	13:00	13:00	13:00	12:00	4	18
Grand Total	3	369	266	31	247	4	0	28	17	0	118
Percent	0.3%	33.6%	24.2%	2.8%	22.5%	0.4%	0.0%	2.6%	1.5%	0.0%	10.8%

Counts Unlimited, Inc.

PO Box 11178
Corona, CA 92878
Phone: (951) 268-6268

email: counts@countsunlimited.com

County of Imperial
West Sinclair Road
B/ Brandt Road - Highway 111
24 Hour Directional Classification Count

Eastbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi
11/09/22	0	0	1	0	0	0	0	0	0	0	0
01:00	0	0	1	1	0	0	0	0	0	0	0
02:00	0	0	1	1	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	2	0	2	0	0	0	0	0
05:00	0	0	6	3	0	0	0	1	0	0	0
06:00	0	0	2	6	1	2	0	0	0	0	0
07:00	0	0	8	4	5	5	0	0	2	0	2
08:00	0	0	2	2	0	8	0	0	1	2	2
09:00	0	0	2	4	0	10	1	0	1	4	0
10:00	0	0	1	8	0	7	0	0	0	3	1
11:00	0	0	2	4	1	6	1	0	0	4	1
12 PM	0	0	3	2	0	4	0	0	0	2	0
13:00	0	0	2	3	0	7	0	0	0	0	0
14:00	1	5	4	0	0	12	0	0	0	0	0
15:00	0	2	3	0	0	3	0	0	0	0	0
16:00	0	10	4	0	0	5	0	0	0	0	0
17:00	0	3	3	0	0	3	0	0	0	1	0
18:00	0	3	0	0	0	0	0	0	0	0	0
19:00	0	2	0	0	0	2	0	0	0	0	0
20:00	0	1	0	0	0	0	0	0	0	0	0
21:00	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0
23:00	0	1	0	0	0	0	0	0	0	0	0
Total	1	55	55	7	78	2	0	4	22	1	9
Percent	0.4%	23.5%	23.5%	3.0%	33.3%	0.9%	0.0%	1.7%	9.4%	0.4%	3.8%
AM Peak Vol.	07:00	10:00	07:00	09:00	09:00	09:00	09:00	05:00	09:00	11:00	10:00
PM Peak Vol.	14:00	16:00	14:00	14:00	14:00	12	1	1	4	1	3
Grand Total	1	55	55	7	78	2	0	4	22	1	9
Percent	0.4%	23.5%	23.5%	3.0%	33.3%	0.9%	0.0%	1.7%	9.4%	0.4%	3.8%

County of Imperial
 West Sinclair Road
 B/ Brandt Lair - Highway 111
 24 Hour Directional Classification Count
 Westbound

Counts Unlimited, Inc.

PO Box 11178
 Corona, CA 92878
 Phone: (951) 268-6268

email: counts@countsunlimited.com

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi
11/09/22	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	1	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	2	0	1	0	0	0	0	0	0
04:00	0	3	3	0	5	0	0	0	0	0	1
05:00	0	4	5	1	7	0	0	0	2	0	0
06:00	1	5	0	0	4	0	0	1	2	0	0
07:00	0	2	2	0	1	0	0	0	6	0	0
08:00	0	3	2	5	1	0	0	0	2	0	2
09:00	0	0	4	0	3	0	0	0	2	0	2
10:00	0	3	5	0	8	0	0	0	3	0	0
11:00	0	1	7	0	6	0	0	0	1	0	4
12 PM	0	3	3	0	11	0	0	1	1	0	1
13:00	1	0	4	0	4	0	0	1	1	0	0
14:00	0	2	4	0	3	0	0	0	2	0	0
15:00	0	2	3	0	4	0	0	0	0	0	0
16:00	0	1	3	1	2	0	0	0	0	0	0
17:00	1	1	3	0	2	1	0	0	0	0	0
18:00	0	1	0	0	0	0	0	0	0	0	1
19:00	0	0	0	0	1	0	0	0	0	0	0
20:00	0	0	0	0	0	0	0	0	0	0	0
21:00	0	0	0	0	1	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0
Total	2	32	48	4	68	2	0	6	22	0	12
Percent	1.0%	16.2%	24.4%	2.0%	34.5%	1.0%	0.0%	3.0%	11.2%	0.0%	6.1%
AM Peak Vol.	06:00	06:00	11:00	08:00	10:00	08:00	08:00	08:00	07:00	07:00	11:00
PM Peak Vol.	17:00	12:00	14:00	16:00	12:00	17:00	17:00	12:00	14:00	14:00	4
Grand Total	2	32	48	4	68	2	0	6	22	0	12
Percent	1.0%	16.2%	24.4%	2.0%	34.5%	1.0%	0.0%	3.0%	11.2%	0.0%	6.1%

County of Imperial
 West Sinclair Road
 B/ Brandt Road - Highway 111
 24 Hour Directional Classification Count
 Eastbound, Westbound

Counts Unlimited, Inc.

PO Box 11178
 Corona, CA 92878
 Phone: (951) 268-6268

email: counts@countsunlimited.com

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi
11/09/22	0	0	1	0	0	0	0	0	0	0	0
01:00	0	0	2	0	0	0	0	0	0	0	0
02:00	0	0	1	0	2	0	0	0	0	0	0
03:00	0	0	2	0	1	0	0	0	0	0	0
04:00	0	3	5	0	7	0	0	0	0	0	1
05:00	0	10	8	1	7	0	0	1	2	0	0
06:00	1	7	6	1	6	0	0	2	5	0	1
07:00	0	10	6	5	6	0	0	0	8	0	2
08:00	0	5	5	2	13	1	0	0	3	4	4
09:00	0	2	8	0	13	1	0	1	6	0	2
10:00	0	4	13	0	15	0	0	0	6	0	3
11:00	0	3	11	1	12	1	0	0	5	1	5
12 PM	0	6	5	0	15	0	0	1	3	0	2
13:00	0	3	3	0	11	0	0	0	1	0	0
14:00	1	7	8	0	15	0	0	0	1	2	0
15:00	0	4	6	0	7	0	0	0	0	0	0
16:00	0	11	7	1	7	0	0	0	0	0	0
17:00	1	4	6	0	5	1	0	0	1	0	0
18:00	0	4	0	0	0	0	0	0	0	0	1
19:00	0	2	0	0	3	0	0	0	0	0	0
20:00	0	1	0	0	0	0	0	0	0	0	0
21:00	0	0	0	0	1	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0
23:00	0	1	0	0	0	0	0	0	0	0	0
Total	3	87	103	11	146	4	0	10	44	1	21
Percent	0.7%	20.2%	23.9%	2.6%	33.9%	0.9%	0.0%	2.3%	10.2%	0.2%	4.9%
AM Peak Vol.	06:00	05:00	10:00	07:00	10:00	08:00	08:00	07:00	11:00	11:00	
PM Peak Vol.	14:00	16:00	14:00	16:00	12:00	17:00	12:00	12:00	12:00	12:00	5
Grand Total	3	87	103	11	146	4	0	10	44	1	21
Percent	0.7%	20.2%	23.9%	2.6%	33.9%	0.9%	0.0%	2.3%	10.2%	0.2%	4.9%

County of Imperial
 Wilkins Road
 B/ Beal Road - Gillespie Road
 24 Hour Directional Classification Count

Northbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi
11/17/22	0	0	0	0	0	0	0	0	0	0	0
01:00	0	1	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	1	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0
04:00	0	3	0	0	0	0	0	0	0	0	0
05:00	0	0	3	0	0	0	0	0	0	0	0
06:00	0	3	1	0	0	1	0	0	0	1	1
07:00	0	3	3	0	0	0	0	0	0	0	0
08:00	0	1	2	0	0	0	0	0	0	0	0
09:00	0	4	1	0	0	0	0	0	0	1	0
10:00	0	2	1	0	0	1	0	0	0	1	0
11:00	0	4	3	0	0	0	0	0	0	0	0
12 PM	0	2	5	0	0	1	0	0	0	1	0
13:00	0	2	2	1	0	0	0	0	0	0	0
14:00	0	1	1	0	0	2	0	0	0	0	0
15:00	0	3	1	0	0	0	0	0	0	0	0
16:00	0	4	5	0	0	4	0	0	0	0	0
17:00	0	2	1	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0	0	0	0
19:00	0	4	0	0	0	0	0	0	0	0	0
20:00	0	1	1	0	0	0	0	0	0	0	0
21:00	0	1	1	0	0	1	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0
23:00	0	1	1	0	0	0	0	0	0	0	0
Total	0	42	32	0	13	0	0	0	1	7	0
Percent	0.0%	44.2%	33.7%	0.0%	13.7%	0.0%	0.0%	0.0%	1.1%	7.4%	0.0%
AM Peak Vol.	09:00	4	3	05:00	02:00	1	1	1	07:00	06:00	0
PM Peak Vol.	16:00	4	5	12:00	16:00	4	4	1	12:00	1	0
Grand Total	0	42	32	0	13	0	0	1	7	0	0
Percent	0.0%	44.2%	33.7%	0.0%	13.7%	0.0%	0.0%	1.1%	7.4%	0.0%	0.0%

Counts Unlimited, Inc.

PO Box 11178

Corona, CA 92878

Phone: (951) 268-6268

email: counts@countsunlimited.com

County of Imperial
 Wilkins Road
 B/ Beal Road - Gillespie Road
 24 Hour Directional Classification Count

Counts Unlimited, Inc.

PO Box 11178
 Corona, CA 92878
 Phone: (951) 268-6268

email: counts@countsunlimited.com

Southbound	Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi
	11/17/22	0	0	0	0	0	0	0	0	0	0	0
01:00		0	0	0	0	0	0	0	0	0	0	0
02:00		0	1	0	0	0	0	0	0	0	0	0
03:00		0	1	0	0	0	0	0	0	0	0	0
04:00		0	0	0	0	0	0	0	0	0	0	0
05:00		0	2	1	0	0	0	0	0	0	0	0
06:00		0	0	2	0	0	0	0	0	0	0	0
07:00		0	1	2	0	1	0	0	0	0	1	0
08:00		0	6	2	4	0	0	0	1	0	0	0
09:00		0	2	0	0	0	0	0	0	0	0	0
10:00		0	1	0	0	3	0	0	0	1	1	0
11:00		0	3	2	0	2	0	0	0	1	0	0
12 PM		0	1	2	0	1	0	0	0	0	1	0
13:00		0	3	3	0	0	0	0	0	0	0	0
14:00		0	3	2	0	0	0	0	0	0	0	0
15:00		0	3	0	0	5	0	0	0	0	0	0
16:00		0	3	0	0	0	0	0	0	0	0	0
17:00		0	5	4	0	2	0	0	0	0	0	0
18:00		0	2	1	0	0	1	0	0	0	0	0
19:00		0	2	0	0	0	3	0	0	0	0	0
20:00		0	1	1	0	0	0	0	0	0	0	0
21:00		0	0	0	0	0	0	0	0	0	0	0
22:00		0	1	0	0	0	0	0	0	0	0	0
23:00		0	0	0	0	0	0	0	0	0	0	0
Total	0	41	31	0	0	15	0	0	1	7	0	0
Percent	0.0%	43.2%	32.6%	0.0%	15.8%	0.0%	0.0%	0.0%	1.1%	7.4%	0.0%	0.0%
AM Peak Vol.	08:00	6	09:00	4		10:00	3		09:00	06:00		
PM Peak Vol.	17:00	5	16:00	5		19:00	3		1	12:00		
Grand Total	0	41	31	0	15	0	0	0	1	7	0	0
Percent	0.0%	43.2%	32.6%	0.0%	15.8%	0.0%	0.0%	0.0%	1.1%	7.4%	0.0%	0.0%

Counts Unlimited, Inc.

PO Box 11178
 Corona, CA 92878
 Phone: (951) 268-6268

email: counts@countsunlimited.com

County of Imperial
 Wilkins Road
 B/ Beal Road - Gillespie Road
 24 Hour Directional Classification Count
 Northbound, Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi
11/17/22	0	0	0	0	0	0	0	0	0	0	0
01:00	0	1	0	0	0	0	0	0	0	0	0
02:00	0	1	0	0	0	1	0	0	0	0	0
03:00	0	1	0	0	0	0	0	0	0	0	0
04:00	0	3	0	0	0	0	0	0	0	0	0
05:00	0	2	4	0	0	0	0	0	0	0	0
06:00	0	3	3	0	0	1	1	0	0	2	0
07:00	0	4	5	0	1	1	0	0	1	2	0
08:00	0	7	4	0	0	0	0	0	0	0	0
09:00	0	6	5	0	1	3	0	0	0	2	0
10:00	0	3	1	0	0	0	0	0	0	0	0
11:00	0	7	5	0	0	3	0	0	0	2	0
12 PM	0	3	7	0	0	2	0	0	0	2	0
13:00	0	5	5	0	0	1	2	0	0	0	0
14:00	0	4	3	0	0	2	0	0	0	0	0
15:00	0	6	1	0	0	1	0	0	0	0	0
16:00	0	7	10	0	0	4	0	0	0	0	0
17:00	0	7	5	0	0	2	0	0	0	0	0
18:00	0	2	1	0	0	1	0	0	0	0	0
19:00	0	6	0	0	0	3	0	0	0	0	0
20:00	0	2	2	0	0	0	0	0	0	0	0
21:00	0	1	1	0	0	1	0	0	0	0	0
22:00	0	1	0	0	0	0	0	0	0	0	0
23:00	0	1	1	0	0	0	0	0	0	0	0
Total	0	83	63	0	28	0	0	0	2	14	0
Percent	0.0%	43.7%	33.2%	0.0%	14.7%	0.0%	0.0%	1.1%	2	7.4%	0.0%
AM Peak Vol.	08:00	7	5	0	10:00	3	0	0	1	06:00	0.0%
PM Peak Vol.	16:00	7	10	4	16:00	4	0	0	2	12:00	0.0%
Grand Total Percent	0	83	63	0	28	0	0	2	14	0	0
Total Percent	0.0%	43.7%	33.2%	0.0%	14.7%	0.0%	0.0%	1.1%	7.4%	0.0%	0.0%

APPENDIX B, Part 2

EXISTING CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W		T	↑	↑	
Traffic Vol, veh/h	3	1	0	58	64	1
Future Vol, veh/h	3	1	0	58	64	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	385	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	20	20	20	20	20	20
Mvmt Flow	3	1	0	66	73	1
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	140	74	74	0	-	0
Stage 1	74	-	-	-	-	-
Stage 2	66	-	-	-	-	-
Critical Hdwy	6.6	6.4	4.3	-	-	-
Critical Hdwy Stg 1	5.6	-	-	-	-	-
Critical Hdwy Stg 2	5.6	-	-	-	-	-
Follow-up Hdwy	3.68	3.48	2.38	-	-	-
Pot Cap-1 Maneuver	812	940	1419	-	-	-
Stage 1	905	-	-	-	-	-
Stage 2	913	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	812	940	1419	-	-	-
Mov Cap-2 Maneuver	785	-	-	-	-	-
Stage 1	905	-	-	-	-	-
Stage 2	913	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	9.4	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1419	-	819	-	-	
HCM Lane V/C Ratio	-	-	0.006	-	-	
HCM Control Delay (s)	0	-	9.4	-	-	
HCM Lane LOS	A	-	A	-	-	
HCM 95th %tile Q(veh)	0	-	0	-	-	

Intersection															
Int Delay, s/veh	1.2														
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR			
Lane Configurations	+	+	+	+	+	+	+	+	+	+	+	+			
Traffic Vol, veh/h	6	68	0	0	52	9	0	0	0	11	0	4			
Future Vol, veh/h	6	68	0	0	52	9	0	0	0	11	0	4			
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0			
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop			
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None			
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-			
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-			
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-			
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92			
Heavy Vehicles, %	20	20	20	20	20	20	8	8	8	8	8	8			
Mvmt Flow	7	74	0	0	57	10	0	0	0	12	0	4			
Major/Minor															
Major1		Major2			Minor1			Minor2							
Conflicting Flow All	67	0	0	74	0	0	152	155	74	150	150	62			
Stage 1	-	-	-	-	-	-	88	88	-	62	62	-			
Stage 2	-	-	-	-	-	-	64	67	-	88	88	-			
Critical Hdwy	4.3	-	-	4.3	-	-	7.18	6.58	6.28	7.18	6.58	6.28			
Critical Hdwy Stg 1	-	-	-	-	-	-	6.18	5.58	-	6.18	5.58	-			
Critical Hdwy Stg 2	-	-	-	-	-	-	6.18	5.58	-	6.18	5.58	-			
Follow-up Hdwy	2.38	-	-	2.38	-	-	3.572	4.072	3.372	3.572	4.072	3.372			
Pot Cap-1 Maneuver	1427	-	-	1419	-	-	802	726	971	804	731	986			
Stage 1	-	-	-	-	-	-	905	810	-	934	832	-			
Stage 2	-	-	-	-	-	-	932	827	-	905	810	-			
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-			
Mov Cap-1 Maneuver	1427	-	-	1419	-	-	796	722	971	801	727	986			
Mov Cap-2 Maneuver	-	-	-	-	-	-	796	722	-	801	727	-			
Stage 1	-	-	-	-	-	-	900	806	-	929	832	-			
Stage 2	-	-	-	-	-	-	928	827	-	900	806	-			
Approach															
EB			WB			NB			SB						
HCM Control Delay, s	0.6		0			0			9.4						
HCM LOS							A			A					
Minor Lane/Major Mvmt															
NBLn1		EBL	EBT	EBR	WBL	WBT	WBR	SBLn1							
Capacity (veh/h)	-	1427	-	-	1419	-	-	843							
HCM Lane V/C Ratio	-	0.005	-	-	-	-	-	0.019							
HCM Control Delay (s)	0	7.5	0	-	0	-	-	9.4							
HCM Lane LOS	A	A	A	-	A	-	-	A							
HCM 95th %tile Q(veh)	-	0	-	-	0	-	-	0.1							

Intersection						
Int Delay, s/veh	1.9					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W	B	T	R	U	↑
Traffic Vol, veh/h	17	15	66	12	9	72
Future Vol, veh/h	17	15	66	12	9	72
Conflicting Peds, #/hr	1	3	0	5	5	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	7	7	14	14	20	20
Mvmt Flow	20	18	78	14	11	85
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	198	93	0	0	97	0
Stage 1	90	-	-	-	-	-
Stage 2	108	-	-	-	-	-
Critical Hdwy	6.47	6.27	-	-	4.3	-
Critical Hdwy Stg 1	5.47	-	-	-	-	-
Critical Hdwy Stg 2	5.47	-	-	-	-	-
Follow-up Hdwy	3.563	3.363	-	-	2.38	-
Pot Cap-1 Maneuver	779	951	-	-	1391	-
Stage 1	921	-	-	-	-	-
Stage 2	904	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	768	944	-	-	1384	-
Mov Cap-2 Maneuver	764	-	-	-	-	-
Stage 1	916	-	-	-	-	-
Stage 2	896	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	9.5	0	0.8			
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT	
Capacity (veh/h)	-	-	839	1384	-	
HCM Lane V/C Ratio	-	-	0.045	0.008	-	
HCM Control Delay (s)	-	-	9.5	7.6	-	
HCM Lane LOS	-	-	A	A	-	
HCM 95th %tile Q(veh)	-	-	0.1	0	-	

Intersection													
Int Delay, s/veh	1.9												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	↔			↔		↑	↑	↑		↑	↑		
Traffic Vol, veh/h	12	6	1	1	3	2	18	95	0	8	82	12	
Future Vol, veh/h	12	6	1	1	3	2	18	95	0	8	82	12	
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None	
Storage Length	-	-	-	-	-	-	240	-	-	290	-	-	
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-	
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-	
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94	
Heavy Vehicles, %	19	19	19	19	19	19	11	11	11	14	14	14	
Mvmt Flow	13	6	1	1	3	2	19	101	0	9	87	13	
Major/Minor													
Minor2		Minor1			Major1			Major2					
Conflicting Flow All	254	251	94	254	257	101	100	0	0	101	0	0	
Stage 1	112	112	-	139	139	-	-	-	-	-	-	-	
Stage 2	142	139	-	115	118	-	-	-	-	-	-	-	
Critical Hdwy	7.29	6.69	6.39	7.29	6.69	6.39	4.21	-	-	4.24	-	-	
Critical Hdwy Stg 1	6.29	5.69	-	6.29	5.69	-	-	-	-	-	-	-	
Critical Hdwy Stg 2	6.29	5.69	-	6.29	5.69	-	-	-	-	-	-	-	
Follow-up Hdwy	3.671	4.171	3.471	3.671	4.171	3.471	2.299	-	-	2.326	-	-	
Pot Cap-1 Maneuver	666	624	918	666	619	910	1438	-	-	1419	-	-	
Stage 1	853	771	-	825	750	-	-	-	-	-	-	-	
Stage 2	822	750	-	850	766	-	-	-	-	-	-	-	
Platoon blocked, %								-	-	-	-	-	
Mov Cap-1 Maneuver	652	612	918	650	607	910	1438	-	-	1419	-	-	
Mov Cap-2 Maneuver	652	612	-	650	607	-	-	-	-	-	-	-	
Stage 1	842	766	-	814	740	-	-	-	-	-	-	-	
Stage 2	806	740	-	837	761	-	-	-	-	-	-	-	
Approach													
EB			WB			NB			SB				
HCM Control Delay, s	10.7		10.3			1.2			0.6				
HCM LOS	B		B										
Minor Lane/Major Mvmt		NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	1438		-	-	649	691	1419	-	-				
HCM Lane V/C Ratio	0.013		-	-	0.031	0.009	0.006	-	-				
HCM Control Delay (s)	7.5		-	-	10.7	10.3	7.6	-	-				
HCM Lane LOS	A		-	-	B	B	A	-	-				
HCM 95th %tile Q(veh)	0		-	-	0.1	0	0	-	-				

Intersection

Intersection Delay, s/veh 12
Intersection LOS B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	41	68	27	33	82	28	52	98	148	13	61	29
Future Vol, veh/h	41	68	27	33	82	28	52	98	148	13	61	29
Peak Hour Factor	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64
Heavy Vehicles, %	17	17	17	8	8	8	5	5	5	11	11	11
Mvmt Flow	64	106	42	52	128	44	81	153	231	20	95	45
Number of Lanes	0	2	0	0	2	0	0	2	0	0	2	0
Approach	EB			WB			NB			SB		
Opposing Approach	WB			EB			SB			NB		
Opposing Lanes	2			2			2			2		
Conflicting Approach Left	SB			NB			EB			WB		
Conflicting Lanes Left	2			2			2			2		
Conflicting Approach Right	NB			SB			WB			EB		
Conflicting Lanes Right	2			2			2			2		
HCM Control Delay	11.6			11.3			13.1			10.6		
HCM LOS	B			B			B			B		

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	51%	0%	55%	0%	45%	0%	30%	0%
Vol Thru, %	49%	25%	45%	56%	55%	59%	70%	51%
Vol Right, %	0%	75%	0%	44%	0%	41%	0%	49%
Sign Control	Stop							
Traffic Vol by Lane	101	197	75	61	74	69	44	60
LT Vol	52	0	41	0	33	0	13	0
Through Vol	49	49	34	34	41	41	31	31
RT Vol	0	148	0	27	0	28	0	29
Lane Flow Rate	158	308	117	95	116	108	68	93
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.285	0.488	0.235	0.175	0.225	0.194	0.131	0.166
Departure Headway (Hd)	6.499	5.705	7.213	6.619	6.998	6.482	6.939	6.439
Convergence, Y/N	Yes							
Cap	551	631	496	539	511	551	515	554
Service Time	4.256	3.461	4.98	4.386	4.764	4.248	4.713	4.212
HCM Lane V/C Ratio	0.287	0.488	0.236	0.176	0.227	0.196	0.132	0.168
HCM Control Delay	11.8	13.8	12.2	10.8	11.8	10.8	10.8	10.5
HCM Lane LOS	B	B	B	B	B	B	B	B
HCM 95th-tile Q	1.2	2.7	0.9	0.6	0.9	0.7	0.4	0.6

Intersection												
Int Delay, s/veh	0.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑	↑	↑	↑↑	↑	↑	↑	↑	↑	↑	↑
Traffic Vol, veh/h	0	327	1	0	270	11	6	0	0	4	3	0
Future Vol, veh/h	0	327	1	0	270	11	6	0	0	4	3	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	665	-	590	665	-	575	-	-	30	-	-	30
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	34	34	34	34	34	34	11	11	11	11	11	11
Mvmt Flow	0	337	1	0	278	11	6	0	0	4	3	0
Major/Minor												
Major1		Major2			Minor1			Minor2				
Conflicting Flow All	289	0	0	338	0	0	478	626	169	447	616	139
Stage 1	-	-	-	-	-	-	337	337	-	278	278	-
Stage 2	-	-	-	-	-	-	141	289	-	169	338	-
Critical Hdwy	4.78	-	-	4.78	-	-	7.72	6.72	7.12	7.72	6.72	7.12
Critical Hdwy Stg 1	-	-	-	-	-	-	6.72	5.72	-	6.72	5.72	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.72	5.72	-	6.72	5.72	-
Follow-up Hdwy	2.54	-	-	2.54	-	-	3.61	4.11	3.41	3.61	4.11	3.41
Pot Cap-1 Maneuver	1067	-	-	1017	-	-	450	381	818	474	386	856
Stage 1	-	-	-	-	-	-	626	618	-	680	657	-
Stage 2	-	-	-	-	-	-	822	650	-	791	617	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1067	-	-	1017	-	-	447	381	818	474	386	856
Mov Cap-2 Maneuver	-	-	-	-	-	-	447	381	-	474	386	-
Stage 1	-	-	-	-	-	-	626	618	-	680	657	-
Stage 2	-	-	-	-	-	-	818	650	-	791	617	-
Approach												
EB			WB			NB			SB			
HCM Control Delay, s	0			0			13.2			13.5		
HCM LOS							B			B		
Minor Lane/Major Mvmt												
Capacity (veh/h)	447	-	1067	-	-	1017	-	-	432	-	-	-
HCM Lane V/C Ratio	0.014	-	-	-	-	-	-	-	0.017	-	-	-
HCM Control Delay (s)	13.2	0	0	-	-	0	-	-	13.5	0	-	-
HCM Lane LOS	B	A	A	-	-	A	-	-	B	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-	0	-	-	0.1	-	-	-

HCM 6th Signalized Intersection Summary
7: Center Street & Highway 78/86

Existing AM
12/16/2022

Movement	EBL	EBT	EBC	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↓		↑	↑↓		↑	↑		↑	↑	
Traffic Volume (veh/h)	14	290	28	1	263	15	47	44	14	49	48	13
Future Volume (veh/h)	14	290	28	1	263	15	47	44	14	49	48	13
Initial Q (Q _b), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00			1.00			0.98		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1396	1396	1396	1396	1396	1396	1752	1752	1752	1752	1752	1752
Adj Flow Rate, veh/h	15	312	30	1	283	16	51	47	15	53	52	14
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	34	34	34	34	34	34	10	10	10	10	10	10
Cap, veh/h	59	693	66	4	619	35	189	363	116	193	384	103
Arrive On Green	0.04	0.28	0.28	0.00	0.24	0.24	0.11	0.29	0.29	0.12	0.29	0.29
Sat Flow, veh/h	1330	2447	234	1330	2553	144	1668	1265	404	1668	1322	356
Grp Volume(v), veh/h	15	168	174	1	146	153	51	0	62	53	0	66
Grp Sat Flow(s), veh/h/ln	1330	1326	1354	1330	1326	1370	1668	0	1668	1668	0	1678
Q Serve(g_s), s	0.7	6.4	6.5	0.0	5.8	5.9	1.7	0.0	1.7	1.8	0.0	1.8
Cycle Q Clear(g_c), s	0.7	6.4	6.5	0.0	5.8	5.9	1.7	0.0	1.7	1.8	0.0	1.8
Prop In Lane	1.00			0.17	1.00		0.10	1.00		0.24	1.00	
Lane Grp Cap(c), veh/h	59	376	383	4	322	332	189	0	479	193	0	487
V/C Ratio(X)	0.26	0.45	0.45	0.23	0.46	0.46	0.27	0.00	0.13	0.27	0.00	0.14
Avail Cap(c_a), veh/h	264	705	720	264	705	729	359	0	871	359	0	876
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	28.6	18.2	18.2	30.8	20.0	20.0	25.1	0.0	16.3	25.0	0.0	16.2
Incr Delay (d2), s/veh	2.3	0.8	0.8	24.4	1.0	1.0	0.8	0.0	0.1	0.8	0.0	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	0.2	1.9	1.9	0.0	1.7	1.8	0.7	0.0	0.6	0.7	0.0	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	30.9	19.0	19.1	55.1	21.0	21.0	25.9	0.0	16.4	25.7	0.0	16.4
LnGrp LOS	C	B	B	E	C	C	C	A	B	C	A	B
Approach Vol, veh/h		357			300			113			119	
Approach Delay, s/veh		19.6			21.1			20.7			20.5	
Approach LOS		B			C			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	4.9	22.6	11.7	22.6	7.4	20.1	11.9	22.5				
Change Period (Y+Rc), s	* 4.7	5.1	* 4.7	* 4.7	* 4.7	5.1	* 4.7	* 4.7				
Max Green Setting (Gmax), s	* 12	32.9	* 13	* 32	* 12	32.9	* 13	* 32				
Max Q Clear Time (g_c+l1), s	2.0	8.5	3.7	3.8	2.7	7.9	3.8	3.7				
Green Ext Time (p_c), s	0.0	2.0	0.1	0.3	0.0	1.7	0.1	0.3				
Intersection Summary												
HCM 6th Ctrl Delay		20.3										
HCM 6th LOS			C									
Notes												

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection												
Int Delay, s/veh	2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑	↑	↑	↑↑	↑	↑	↑↑	↑	↑	↑↑	↑
Traffic Vol, veh/h	0	290	0	10	228	14	1	37	18	13	13	1
Future Vol, veh/h	0	290	0	10	228	14	1	37	18	13	13	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	570	-	570	650	-	650	-	-	30	-	-	30
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	34	34	34	34	34	34	5	5	5	5	5	5
Mvmt Flow	0	341	0	12	268	16	1	44	21	15	15	1
Major/Minor	Major1		Major2		Minor1		Minor2					
Conflicting Flow All	284	0	0	341	0	0	507	649	171	485	633	134
Stage 1	-	-	-	-	-	-	341	341	-	292	292	-
Stage 2	-	-	-	-	-	-	166	308	-	193	341	-
Critical Hdwy	4.78	-	-	4.78	-	-	7.6	6.6	7	7.6	6.6	7
Critical Hdwy Stg 1	-	-	-	-	-	-	6.6	5.6	-	6.6	5.6	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.6	5.6	-	6.6	5.6	-
Follow-up Hdwy	2.54	-	-	2.54	-	-	3.55	4.05	3.35	3.55	4.05	3.35
Pot Cap-1 Maneuver	1073	-	-	1014	-	-	442	381	834	458	389	881
Stage 1	-	-	-	-	-	-	639	630	-	683	662	-
Stage 2	-	-	-	-	-	-	811	651	-	782	630	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1073	-	-	1014	-	-	424	376	834	403	384	881
Mov Cap-2 Maneuver	-	-	-	-	-	-	424	376	-	403	384	-
Stage 1	-	-	-	-	-	-	639	630	-	683	654	-
Stage 2	-	-	-	-	-	-	782	643	-	709	630	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	0			0.3			13.7			14.7		
HCM LOS							B			B		
Minor Lane/Major Mvmt	NBLn1 NBLn2		EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2		
Capacity (veh/h)	377	834	1073	-	-	1014	-	-	393	881		
HCM Lane V/C Ratio	0.119	0.025	-	-	-	0.012	-	-	0.078	0.001		
HCM Control Delay (s)	15.8	9.4	0	-	-	8.6	-	-	14.9	9.1		
HCM Lane LOS	C	A	A	-	-	A	-	-	B	A		
HCM 95th %tile Q(veh)	0.4	0.1	0	-	-	0	-	-	0.3	0		

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W		T	↑	↑	
Traffic Vol, veh/h	1	2	1	52	39	0
Future Vol, veh/h	1	2	1	52	39	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	385	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	20	20	20	20	20	20
Mvmt Flow	1	2	1	55	41	0
Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	98	41	41	0	-	0
Stage 1	41	-	-	-	-	-
Stage 2	57	-	-	-	-	-
Critical Hdwy	6.6	6.4	4.3	-	-	-
Critical Hdwy Stg 1	5.6	-	-	-	-	-
Critical Hdwy Stg 2	5.6	-	-	-	-	-
Follow-up Hdwy	3.68	3.48	2.38	-	-	-
Pot Cap-1 Maneuver	859	981	1460	-	-	-
Stage 1	937	-	-	-	-	-
Stage 2	922	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	858	981	1460	-	-	-
Mov Cap-2 Maneuver	815	-	-	-	-	-
Stage 1	936	-	-	-	-	-
Stage 2	922	-	-	-	-	-
Approach	EB	NB	SB			
HCM Control Delay, s	8.9	0.1	0			
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1460	-	919	-	-	
HCM Lane V/C Ratio	0.001	-	0.003	-	-	
HCM Control Delay (s)	7.5	-	8.9	-	-	
HCM Lane LOS	A	-	A	-	-	
HCM 95th %tile Q(veh)	0	-	0	-	-	

Intersection																			
Int Delay, s/veh	1.5																		
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR							
Lane Configurations	+	+	+	+	+	+	+	+	+	+	+	+							
Traffic Vol, veh/h	1	43	1	0	49	5	1	0	1	12	0	5							
Future Vol, veh/h	1	43	1	0	49	5	1	0	1	12	0	5							
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0							
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop							
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None							
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-							
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-							
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-							
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95							
Heavy Vehicles, %	20	20	20	20	20	20	8	8	8	8	8	8							
Mvmt Flow	1	45	1	0	52	5	1	0	1	13	0	5							
Major/Minor																			
Major1		Major2			Minor1		Minor2												
Conflicting Flow All	57	0	0	46	0	0	105	105	46	103	103	55							
Stage 1	-	-	-	-	-	-	48	48	-	55	55	-							
Stage 2	-	-	-	-	-	-	57	57	-	48	48	-							
Critical Hdwy	4.3	-	-	4.3	-	-	7.18	6.58	6.28	7.18	6.58	6.28							
Critical Hdwy Stg 1	-	-	-	-	-	-	6.18	5.58	-	6.18	5.58	-							
Critical Hdwy Stg 2	-	-	-	-	-	-	6.18	5.58	-	6.18	5.58	-							
Follow-up Hdwy	2.38	-	-	2.38	-	-	3.572	4.072	3.372	3.572	4.072	3.372							
Pot Cap-1 Maneuver	1440	-	-	1454	-	-	861	774	1007	863	776	995							
Stage 1	-	-	-	-	-	-	950	843	-	942	837	-							
Stage 2	-	-	-	-	-	-	940	836	-	950	843	-							
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-							
Mov Cap-1 Maneuver	1440	-	-	1454	-	-	856	773	1007	861	775	995							
Mov Cap-2 Maneuver	-	-	-	-	-	-	856	773	-	861	775	-							
Stage 1	-	-	-	-	-	-	949	842	-	941	837	-							
Stage 2	-	-	-	-	-	-	935	836	-	948	842	-							
Approach																			
EB			WB			NB			SB										
HCM Control Delay, s	0.2		0			8.9			9.1										
HCM LOS	A						A												
Minor Lane/Major Mvmt																			
Capacity (veh/h)	925	1440	-	-	1454	-	-	-	897										
HCM Lane V/C Ratio	0.002	0.001	-	-	-	-	-	-	0.02										
HCM Control Delay (s)	8.9	7.5	0	-	0	-	-	-	9.1										
HCM Lane LOS	A	A	A	-	A	-	-	-	A										
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	-	0.1										

Intersection

Int Delay, s/veh 2.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W	B	T	T	↑	↑
Traffic Vol, veh/h	7	19	64	16	11	35
Future Vol, veh/h	7	19	64	16	11	35
Conflicting Peds, #/hr	0	0	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	84	84	84	84	84	84
Heavy Vehicles, %	7	7	14	14	20	20
Mvmt Flow	8	23	76	19	13	42

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	155	87	0	0	96
Stage 1	87	-	-	-	-
Stage 2	68	-	-	-	-
Critical Hdwy	6.47	6.27	-	-	4.3
Critical Hdwy Stg 1	5.47	-	-	-	-
Critical Hdwy Stg 2	5.47	-	-	-	-
Follow-up Hdwy	3.563	3.363	-	-	2.38
Pot Cap-1 Maneuver	825	958	-	-	1392
Stage 1	924	-	-	-	-
Stage 2	942	-	-	-	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	817	957	-	-	1391
Mov Cap-2 Maneuver	797	-	-	-	-
Stage 1	923	-	-	-	-
Stage 2	934	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.1	0	1.8
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	908	1391	-
HCM Lane V/C Ratio	-	-	0.034	0.009	-
HCM Control Delay (s)	-	-	9.1	7.6	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection												
Int Delay, s/veh	1.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔			↔			↑	↑		↑	↑	
Traffic Vol, veh/h	6	0	11	1	0	4	3	67	0	0	98	3
Future Vol, veh/h	6	0	11	1	0	4	3	67	0	0	98	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	240	-	-	290	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	79	79	79	79	79	79	79	79	79
Heavy Vehicles, %	19	19	19	19	19	19	11	11	11	14	14	14
Mvmt Flow	8	0	14	1	0	5	4	85	0	0	124	4
Major/Minor	Minor2	Minor1			Major1			Major2				
Conflicting Flow All	222	219	126	226	221	85	128	0	0	85	0	0
Stage 1	126	126	-	93	93	-	-	-	-	-	-	-
Stage 2	96	93	-	133	128	-	-	-	-	-	-	-
Critical Hdwy	7.29	6.69	6.39	7.29	6.69	6.39	4.21	-	-	4.24	-	-
Critical Hdwy Stg 1	6.29	5.69	-	6.29	5.69	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.29	5.69	-	6.29	5.69	-	-	-	-	-	-	-
Follow-up Hdwy	3.671	4.171	3.471	3.671	4.171	3.471	2.299	-	-	2.326	-	-
Pot Cap-1 Maneuver	699	651	881	695	649	929	1404	-	-	1439	-	-
Stage 1	839	760	-	874	786	-	-	-	-	-	-	-
Stage 2	870	786	-	831	759	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	693	649	881	682	647	929	1404	-	-	1439	-	-
Mov Cap-2 Maneuver	693	649	-	682	647	-	-	-	-	-	-	-
Stage 1	836	760	-	871	784	-	-	-	-	-	-	-
Stage 2	863	784	-	818	759	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	9.6			9.2			0.3			0		
HCM LOS	A			A			A			A		
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1		SBL	SBT	SBR			
Capacity (veh/h)	1404	-	-	804	866	1439	-	-	-			
HCM Lane V/C Ratio	0.003	-	-	0.027	0.007		-	-	-			
HCM Control Delay (s)	7.6	-	-	9.6	9.2	0	-	-	-			
HCM Lane LOS	A	-	-	A	A	A	-	-	-			
HCM 95th %tile Q(veh)	0	-	-	0.1	0	0	-	-	-			

Intersection

Intersection Delay, s/veh 12.4

Intersection LOS B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	42	77	49	204	94	21	56	60	41	36	96	48
Future Vol, veh/h	42	77	49	204	94	21	56	60	41	36	96	48
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles, %	17	17	17	8	8	8	5	5	5	11	11	11
Mvmt Flow	48	89	56	234	108	24	64	69	47	41	110	55
Number of Lanes	0	2	0	0	2	0	0	2	0	0	2	0
Approach												
Opposing Approach	WB			WB			NB			SB		
Opposing Lanes	2			2			2			2		
Conflicting Approach Left	SB			NB			EB			WB		
Conflicting Lanes Left	2			2			2			2		
Conflicting Approach Right	NB			SB			WB			EB		
Conflicting Lanes Right	2			2			2			2		
HCM Control Delay	10.7			15			10.8			10.9		
HCM LOS	B			B			B			B		

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	65%	0%	52%	0%	81%	0%	43%	0%
Vol Thru, %	35%	42%	48%	44%	19%	69%	57%	50%
Vol Right, %	0%	58%	0%	56%	0%	31%	0%	50%
Sign Control	Stop							
Traffic Vol by Lane	86	71	81	88	251	68	84	96
LT Vol	56	0	42	0	204	0	36	0
Through Vol	30	30	39	39	47	47	48	48
RT Vol	0	41	0	49	0	21	0	48
Lane Flow Rate	99	82	93	101	289	78	97	110
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.192	0.141	0.176	0.173	0.526	0.129	0.186	0.194
Departure Headway (Hd)	6.976	6.234	6.866	6.203	6.569	5.939	6.918	6.345
Convergence, Y/N	Yes							
Cap	513	573	521	576	548	603	518	564
Service Time	4.736	3.993	4.624	3.96	4.317	3.687	4.676	4.102
HCM Lane V/C Ratio	0.193	0.143	0.179	0.175	0.527	0.129	0.187	0.195
HCM Control Delay	11.4	10	11.1	10.3	16.4	9.6	11.3	10.6
HCM Lane LOS	B	A	B	B	C	A	B	B
HCM 95th-tile Q	0.7	0.5	0.6	0.6	3	0.4	0.7	0.7

Intersection												
Int Delay, s/veh	0.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑	↑	↑	↑↑	↑	↑	↑↑	↑	↑	↑↑	↑
Traffic Vol, veh/h	2	356	4	0	304	2	2	0	0	10	5	1
Future Vol, veh/h	2	356	4	0	304	2	2	0	0	10	5	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	665	-	590	665	-	575	-	-	30	-	-	30
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	34	34	34	34	34	34	11	11	11	11	11	11
Mvmt Flow	2	405	5	0	345	2	2	0	0	11	6	1
Major/Minor												
Major1		Major2			Minor1			Minor2				
Conflicting Flow All	347	0	0	410	0	0	585	756	203	552	759	173
Stage 1	-	-	-	-	-	-	409	409	-	345	345	-
Stage 2	-	-	-	-	-	-	176	347	-	207	414	-
Critical Hdwy	4.78	-	-	4.78	-	-	7.72	6.72	7.12	7.72	6.72	7.12
Critical Hdwy Stg 1	-	-	-	-	-	-	6.72	5.72	-	6.72	5.72	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.72	5.72	-	6.72	5.72	-
Follow-up Hdwy	2.54	-	-	2.54	-	-	3.61	4.11	3.41	3.61	4.11	3.41
Pot Cap-1 Maneuver	1008	-	-	947	-	-	376	319	777	398	318	813
Stage 1	-	-	-	-	-	-	567	572	-	620	613	-
Stage 2	-	-	-	-	-	-	783	611	-	750	569	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1008	-	-	947	-	-	370	318	777	397	317	813
Mov Cap-2 Maneuver	-	-	-	-	-	-	370	318	-	397	317	-
Stage 1	-	-	-	-	-	-	566	571	-	619	613	-
Stage 2	-	-	-	-	-	-	775	611	-	749	568	-
Approach												
EB			WB			NB			SB			
HCM Control Delay, s	0			0			14.8			14.9		
HCM LOS							B			B		
Minor Lane/Major Mvmt												
Capacity (veh/h)	370	-	1008	-	-	947	-	-	366	813		
HCM Lane V/C Ratio	0.006	-	0.002	-	-	-	-	-	0.047	0.001		
HCM Control Delay (s)	14.8	0	8.6	-	-	0	-	-	15.3	9.4		
HCM Lane LOS	B	A	A	-	-	A	-	-	C	A		
HCM 95th %tile Q(veh)	0	-	0	-	-	0	-	-	0.1	0		

HCM 6th Signalized Intersection Summary
7: Center Street & Highway 78/86

Existing PM
12/16/2022

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↓		↑	↑↓		↑	↑		↑	↑	
Traffic Volume (veh/h)	14	342	28	11	292	21	47	28	11	45	47	24
Future Volume (veh/h)	14	342	28	11	292	21	47	28	11	45	47	24
Initial Q (Q _b), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1396	1396	1396	1396	1396	1396	1752	1752	1752	1752	1752	1752
Adj Flow Rate, veh/h	16	380	31	12	324	23	52	31	12	50	52	27
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	34	34	34	34	34	34	10	10	10	10	10	10
Cap, veh/h	62	694	56	48	676	48	194	296	115	189	264	137
Arrive On Green	0.05	0.28	0.28	0.04	0.27	0.27	0.12	0.25	0.25	0.11	0.24	0.24
Sat Flow, veh/h	1330	2483	202	1330	2512	177	1668	1198	464	1668	1081	561
Grp Volume(v), veh/h	16	202	209	12	170	177	52	0	43	50	0	79
Grp Sat Flow(s), veh/h/ln	1330	1326	1358	1330	1326	1363	1668	0	1662	1668	0	1643
Q Serve(g_s), s	0.7	7.7	7.8	0.5	6.4	6.5	1.7	0.0	1.2	1.6	0.0	2.3
Cycle Q Clear(g_c), s	0.7	7.7	7.8	0.5	6.4	6.5	1.7	0.0	1.2	1.6	0.0	2.3
Prop In Lane	1.00		0.15	1.00		0.13	1.00		0.28	1.00		0.34
Lane Grp Cap(c), veh/h	62	371	380	48	357	367	194	0	411	189	0	401
V/C Ratio(X)	0.26	0.54	0.55	0.25	0.48	0.48	0.27	0.00	0.10	0.26	0.00	0.20
Avail Cap(c_a), veh/h	275	757	775	275	757	778	346	0	904	346	0	894
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	27.3	18.2	18.2	27.8	18.2	18.2	23.9	0.0	17.3	24.0	0.0	17.8
Incr Delay (d2), s/veh	2.1	1.2	1.2	2.6	1.0	1.0	0.7	0.0	0.1	0.7	0.0	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	0.2	2.2	2.3	0.2	1.8	1.9	0.7	0.0	0.4	0.7	0.0	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	29.4	19.4	19.4	30.5	19.2	19.2	24.7	0.0	17.4	24.8	0.0	18.0
LnGrp LOS	C	B	B	C	B	B	C	A	B	C	A	B
Approach Vol, veh/h		427			359			95			129	
Approach Delay, s/veh		19.8			19.6			21.4			20.7	
Approach LOS		B			B			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.9	21.7	11.6	19.2	7.5	21.1	11.4	19.4				
Change Period (Y+Rc), s	* 4.7	5.1	* 4.7	* 4.7	* 4.7	5.1	* 4.7	* 4.7				
Max Green Setting (Gmax), s	* 12	33.9	* 12	* 32	* 12	33.9	* 12	* 32				
Max Q Clear Time (g_c+l1), s	2.5	9.8	3.7	4.3	2.7	8.5	3.6	3.2				
Green Ext Time (p_c), s	0.0	2.4	0.1	0.4	0.0	2.0	0.0	0.2				

Intersection Summary

HCM 6th Ctrl Delay	20.0
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection												
Int Delay, s/veh	1.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑	↑	↑	↑↑	↑	↑	↑	↑	↑	↑	↑
Traffic Vol, veh/h	0	293	1	20	244	6	1	8	4	40	17	2
Future Vol, veh/h	0	293	1	20	244	6	1	8	4	40	17	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	570	-	570	650	-	650	-	-	30	-	-	30
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	34	34	34	34	34	34	5	5	5	5	5	5
Mvmt Flow	0	333	1	23	277	7	1	9	5	45	19	2
Major/Minor	Major1		Major2		Minor1		Minor2					
Conflicting Flow All	284	0	0	334	0	0	527	663	167	494	657	139
Stage 1	-	-	-	-	-	-	333	333	-	323	323	-
Stage 2	-	-	-	-	-	-	194	330	-	171	334	-
Critical Hdwy	4.78	-	-	4.78	-	-	7.6	6.6	7	7.6	6.6	7
Critical Hdwy Stg 1	-	-	-	-	-	-	6.6	5.6	-	6.6	5.6	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.6	5.6	-	6.6	5.6	-
Follow-up Hdwy	2.54	-	-	2.54	-	-	3.55	4.05	3.35	3.55	4.05	3.35
Pot Cap-1 Maneuver	1073	-	-	1021	-	-	427	374	839	451	377	874
Stage 1	-	-	-	-	-	-	646	635	-	655	641	-
Stage 2	-	-	-	-	-	-	781	637	-	805	634	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1073	-	-	1021	-	-	402	365	839	433	368	874
Mov Cap-2 Maneuver	-	-	-	-	-	-	402	365	-	433	368	-
Stage 1	-	-	-	-	-	-	646	635	-	655	626	-
Stage 2	-	-	-	-	-	-	738	622	-	789	634	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	0		0.6		13.2		15.2					
HCM LOS					B		C					
Minor Lane/Major Mvmt	NBLn1 NBLn2		EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2		
Capacity (veh/h)	369 839		1073	-	-	1021	-	-	411	874		
HCM Lane V/C Ratio	0.028 0.005		-	-	-	0.022	-	-	0.158	0.003		
HCM Control Delay (s)	15 9.3		0	-	-	8.6	-	-	15.4	9.1		
HCM Lane LOS	C A		A	-	-	A	-	-	C	A		
HCM 95th %tile Q(veh)	0.1 0		0	-	-	0.1	-	-	0.6	0		

APPENDIX B, Part 3

REGIONAL AND PROJECT AREA VMT DATA

4.0 Impact Analysis – Proposed Project (Alternative 1)

This chapter focuses on whether the Proposed Project would have a significant impact if proposed new residential, office, or retail land uses would in aggregate exceed the respective VMT by land use thresholds in Table 3.1.

4.1 VMT Impact Analysis

To establish a baseline understanding, **Table 4.1** displays both Imperial County and El Centro's resident and employee VMT efficiency metrics for the Base Year (2014) conditions. As shown, El Centro has more efficient VMT per capita for both residents and employees that are lower when compared to the region, at approximately 70% of the region's resident VMT/capita and just over 60% of region's employee VMT/employee.

Table 4.1 El Centro Base Year VMT Metrics for Transportation Impact Analysis

VMT Metric	Base Year (2014)		% of Regional Base Year
	Region	El Centro	El Centro
Resident VMT/Capita	13.76	9.62	70.0%
Employee VMT/Employee	18.59	11.35	61.1%

Source: ICTM, Iteris, Chen Ryan Associates (2020)

By 2040 with the implementation of the Proposed Project, the VMT efficiency of El Centro substantially improves. **Table 4.2** presents the El Centro average resident and employee VMT for the Proposed Project.

Table 4.2 El Centro Proposed Project VMT Efficiency Metrics for Transportation Impact Analysis of Residential and Employment Uses

VMT Metric	Imperial County Region - Base Year	El Centro - Proposed Project (Alternative 1)	% of Regional Base Year	Significant Impact?
Resident VMT / Capita	13.76	7.93	57.6% (< 85%)	No
Employee VMT / Employee	18.59	8.00	43.0% (< 85%)	No

Source: ICTM, Iteris, Chen Ryan Associates (2020)

Residential and Employment Land Uses Impact?

As shown in the table above, El Centro is projected to have an average Resident VMT per Capita at 7.93 and an average Employee VMT per Employee at 8.00, which are 57.6 percent and 43.0 percent, respectively, of the Base Year regional averages for these efficiency metrics. VMT associated with residential and employment land uses would not exceed the 85 percent thresholds at buildout of the Proposed Project. Therefore, impacts related to VMT for residential and employment land uses would be less than significant.

Retail Land Uses Impact?

Regarding VMT associated with retail land uses, the total regional VMT would increase from 5,507,484 miles under the Base Year conditions to 7,467,309 miles with the implementation of the Proposed Project, an increase of 1,959,825 miles. The VMT associated with retail (home-based shopping) also would increase from 331,912 miles under the base year to 494,465 miles with the implementation of the Proposed Project, an increase of 162,553 miles. According to OPR's recommendations, a retail impact is considered significant when there is a net increase in total regional VMT related to the new retail and commercial uses that could be developed with the adoption of the Proposed Project. Furthermore, the

TAZ	CNTY	RES	Res_VMT_1Res_VMT_1Res_VMT_1Res_VMT_1Res_VMT_1GQ_VMT_(GQ_VMT_1GQ_VMT_(Res_VMT	Res_per_capita_VMT
14013200	1	214	4076.198	1371.848
14013300	1	43	2362.989	146.9543
14016100	1	28	731.5819	137.2357
14016200	1	75	1075.579	737.5247
14016300	1	77	1447.724	577.9738
14062100	1	1394	29476	7441.875
14064100	1	1860	27853.82	7734.097
14064200	1	1883	25634.34	6653.094
14086100	1	11	400.1472	75.97659
14088100	1	0	0	0

32.11 Average VMT per capita for Specific Plan TAZs

APPENDIX B, Part 4

IMPERIAL VALLEY TRANSIT ROUTES AND SCHEDULES

2 SOUTH

Niland - Brawley - El Centro

Monday - Friday

Niland Hwy 111 & Main St.	Calipatria Hwy 111 & Main St.	Westmorland Hwy 86 & Center St.	Brawley E. St & Rio Vista Ave.	Brawley South Plaza	Brawley Main St. & Palm	Brawley Pioneers Hospital	Imperial Downtown	Imperial Transit Center	Imperial IVC	El Centro E. Evan Hewes & Dogwood Rd.	Imperial Aten & La Brucherie Rd.	El Centro Cruickshank Dr. & Walmart	El Centro State St. & 14th St.	El Centro State St. & 7th St.	
6:00	6:10	6:22	6:37	6:40	6:50	7:00	7:12	7:13	7:35	7:45	--	--	--	7:55	
7:28	7:38	7:50	8:05	8:07	8:15	8:25	8:37	8:38	8:50	--	8:58	9:00	9:10	9:20	
--	--	--	9:19	9:21	9:25	9:35	9:47	9:48	10:00	--	10:08	10:10	10:20	10:30	
9:48	9:58	10:10	10:25	10:27	10:35	10:45	10:57	10:58	11:10	--	11:18	11:20	11:30	11:40	
--	--	--	11:39	11:41	11:45	11:55	12:07	12:08	12:20	--	12:28	12:30	12:40	12:50	
12:18	12:28	12:40	12:55	12:57	1:05	1:15	1:27	1:28	1:40	--	1:48	1:50	2:00	2:10	
--	--	--	1:59	2:01	2:05	2:15	2:27	2:28	2:40	--	2:48	2:50	3:00	3:10	
2:28	2:38	2:50	3:05	3:07	3:15	3:25	3:37	3:38	3:50	--	3:58	4:00	4:10	4:20	
--	--	--	4:19	4:21	4:25	4:35	4:47	4:48	5:00	--	5:08	5:10	5:20	5:30	
5:00	5:10	5:22	5:37	5:39	5:47	5:57	6:09	6:10	6:22	--	6:30	6:32	6:42	6:50	
6:10	6:20	6:32	6:47	6:49	7:00	7:10	7:22	7:23	7:35	--	7:43	7:45	7:55	8:00	
										**10:00	--	10:08	10:09	10:15	10:20

Saturday

6:20	6:28	6:42	6:57	6:59	7:05	7:17	7:30	7:31	7:40	--	7:50	7:52	7:55	8:00
7:50	7:58	8:12	8:27	8:29	8:35	8:47	9:00	9:01	9:10	--	9:20	9:22	9:25	9:30
9:30	9:38	9:52	10:07	10:09	10:15	10:27	10:40	10:41	10:50	--	11:00	11:02	11:05	11:10
--	--	--	11:37	11:39	11:45	11:57	12:10	12:11	12:20	--	12:30	12:32	12:35	12:40
12:10	12:18	12:32	12:47	12:49	12:55	1:07	1:20	1:21	1:30	--	1:40	1:42	1:45	1:50
--	--	--	2:27	2:29	2:35	2:47	3:00	3:01	3:10	--	3:20	3:22	3:25	3:30
3:20	3:28	3:42	3:57	3:59	4:05	4:17	4:30	4:31	4:40	--	4:50	4:52	4:55	5:00
--	--	--	5:17	5:19	5:25	5:37	5:50	5:51	6:0	--	6:10	6:12	6:15	6:20
6:00	6:08	6:22	6:37	6:39	6:45	6:57	7:10	7:11	7:20	--	7:30	7:32	7:35	7:40

Sunday

--	--	--	7:15	7:20	7:25	7:35	7:45	7:50	--	--	8:00	8:05	8:10	8:15
--	--	--	9:30	9:35	9:40	9:50	10:00	10:05	--	--	10:15	10:20	10:25	10:30
--	--	--	12:30	12:35	12:40	12:50	1:00	1:05	--	--	1:15	1:20	1:25	1:30
--	--	--	2:50	2:55	3:00	3:10	3:20	3:25	--	--	3:35	3:40	3:45	3:50

**Only when IVC is in session.

(PM - Time is in color)





2 NORTH

El Centro - Brawley - Niland

Monday-Friday

El Centro State St. & 7th St.	El Centro State St. & 14th St.	El Centro Walmart & Bradshaw	El Centro Aten Rd. & LaBrucherie	Imperial IVC	Imperial Transit Center	Imperial Downtown	Brawley Pioneers Hospital	Brawley South Plaza	Brawley Main & Palm	Brawley E St. & Rio Vista	Westmorland Hwy 86 & Center St.	Calipatria Hwy 111 & Main	Niland Hwy 111 & Main
5:45	5:47	5:52	5:55	6:05	6:11	6:13	6:25	6:29	6:33	6:42	6:52	7:07	7:20
8:10	8:12	8:17	8:20	8:30	8:36	8:38	8:50	8:54	8:58	9:07	9:17	9:32	9:45
9:30	9:32	9:37	9:40	9:50	9:56	9:58	10:10	10:14	10:18	10:27	--	--	--
10:40	10:42	10:47	10:50	11:00	11:06	11:08	11:20	11:24	11:28	11:37	11:47	12:02	12:15
11:50	11:52	11:57	12:00	12:10	12:16	12:18	12:30	12:34	12:38	12:47	--	--	--
12:50	12:52	12:57	1:00	1:10	1:16	1:18	1:30	1:34	1:38	1:47	1:57	2:12	2:25
2:10	2:12	2:17	2:20	2:30	2:36	2:38	2:50	2:54	2:58	3:07	--	--	--
3:20	3:22	3:27	3:30	3:40	3:46	3:48	4:00	4:04	4:08	4:17	4:27	4:42	4:55
4:35	4:37	4:42	4:45	4:55	5:01	5:03	5:15	5:19	5:23	5:32	5:42	5:57	6:10
5:40	5:42	5:47	5:50	6:00	6:06	6:08	6:20	6:24	6:28	6:37	--	--	--
6:50	6:52	6:57	7:00	7:10	7:16	7:18	7:30	7:34	7:38	7:47	7:59	8:15	8:25
**9:40	9:42	9:47	9:50	10:00	10:06	10:10	10:23	10:27	10:33	10:45	--	--	--

Saturday

6:00	6:02	6:07	6:10	6:20	6:26	6:28	6:40	6:44	6:48	7:00	7:10	8:26	7:28
7:20	7:22	7:27	7:30	7:40	7:46	7:48	8:00	8:04	8:08	8:20	8:30	8:46	9:00
9:20	9:22	9:27	9:30	9:40	9:46	9:48	10:00	10:04	10:08	10:20	--	--	--
10:20	10:22	10:27	10:30	10:40	10:46	10:48	11:00	11:04	11:08	11:20	11:30	11:46	11:58
11:50	11:52	11:57	12:00	12:10	12:16	12:18	12:30	12:34	12:38	12:50	--	--	--
1:30	1:32	1:37	1:40	1:50	1:56	1:58	2:10	2:14	2:18	2:30	2:40	2:56	3:08
3:00	3:02	3:07	3:10	3:20	3:26	3:28	3:40	3:44	3:48	4:00	--	--	--
4:10	4:12	4:17	4:20	4:30	4:36	4:38	4:50	4:54	4:58	5:10	5:20	5:36	5:48
5:50	5:52	5:57	6:00	6:10	6:16	6:18	6:30	6:34	6:38	6:50	7:00	7:16	7:28
7:20	7:22	7:27	7:30	7:40	7:46	7:48	7:48	8:00	8:08	8:20	--	--	--

Sunday

8:25	8:28	8:35	8:38	--	8:48	8:50	9:00	9:05	9:10	9:25	--	--	--
10:45	10:48	10:55	10:58	--	11:08	11:10	11:20	11:25	11:30	11:45	--	--	--
1:40	1:43	1:50	1:53	--	2:03	2:05	2:15	2:20	2:25	2:40	--	--	--
4:00	4:03	4:10	4:13	--	4:23	4:25	4:35	4:30	4:45	5:00	--	--	--

**Only when IVC is in session.

(PM - Time is in color)





22 IVC EXPRESS

Niland - IVC

Only operates when IVC is in session.

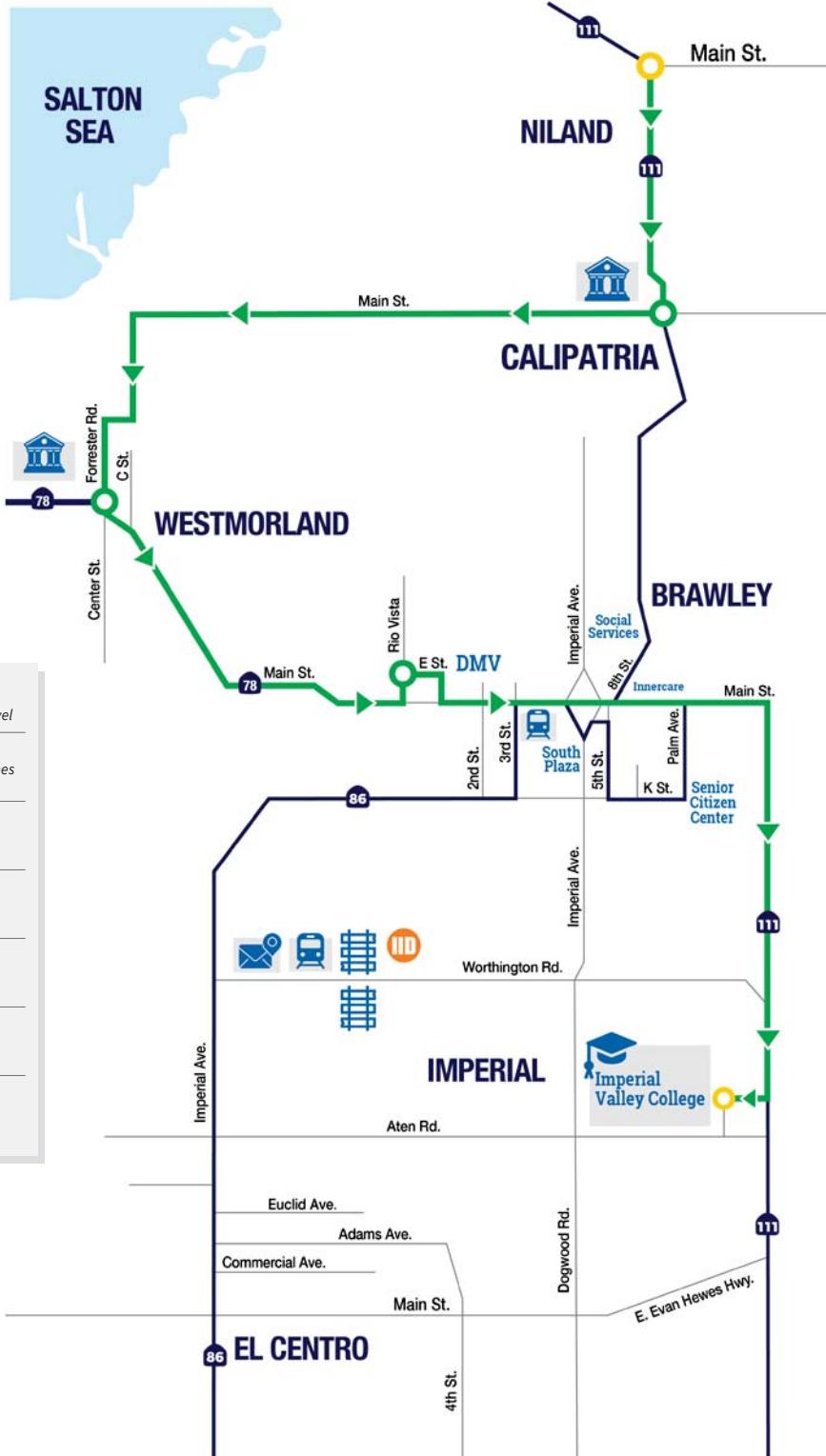
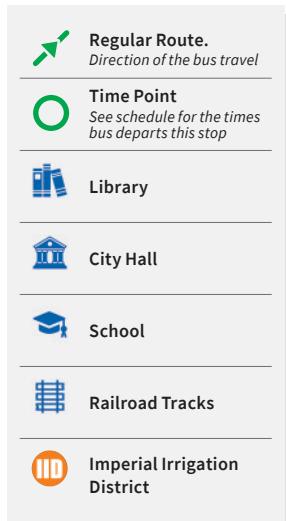
AM

Niland	Calipatria	Westmorland	Brawley	Brawley	Imperial
Hwy 111 & Main	Hwy 111 & Main	Hwy 86 & Center St.	E St. & Rio Vista	Main & Palm	IVC
6:20	6:30	6:45	7:00	7:05	7:30
8:45	8:55	9:13	9:25	9:30	9:50

PM

Imperial	Brawley	Brawley	Westmorland	Calipatria	Niland
IVC	Main & Palm	E St. & Rio Vista	Hwy 86 & Center St.	Hwy 111 & Main	Hwy 111 & Main
2:00	2:28	2:31	2:43	3:01	3:11
4:00	4:28	4:31	4:43	5:01	5:11

(PM - Time is in color)



41S BRAWLEY FAST

Brawley - El Centro

Brawley South Plaza	Imperial Post Office	El Centro 7th St & State
6:42	6:55	7:10

41N BRAWLEY FAST

El Centro - Brawley

El Centro 7th St & State	Brawley South Plaza

45W HOLTVILLE FAST

Holtville - El Centro

Holtville 5th St & Holt	El Centro 7th St & State
6:40	7:00

45E HOLTVILLE FAST

El Centro - Holtville

El Centro 7th St & State	Holtville 5th St & Holt
--	--

51S SLAB CITY- BOMBAY BEACH - BRAWLEY

Thursdays Only

Slab City	Niland	Bombay Beach	Bashford Spa	Imperial Spa	Fountain of Youth Spa	Lark Spa	Niland Hwy 111 & Main	Calipatria Hwy 111 & Main	Brawley South Plaza
8:35	8:50	9:10	9:20	9:25	9:30	9:35	9:50	10:00	10:30

51N SLAB CITY- BOMBAY BEACH - BRAWLEY

Thursdays Only

Brawley South Plaza	Calipatria Hwy 111 & Main	Niland Hwy 111 & Main	Lark Spa	Fountain of Youth Spa	Imperial Spa	Bashford Spa	Bombay Beach	Niland	Slab City
4:28	4:45	5:00	5:13	5:27	5:32	5:35	5:45	6:20	6:35

(PM - Time is in color)



51S SLAB CITY- BOMBAY BEACH - BRAWLEY



Regular Route	Library	City Hall
Time Point <i>See schedule for the times bus departs this stop</i>	Post Office	Station

51N BRAWLEY - BOMBAY BEACH - SLAB CITY



APPENDIX C

BIOLOGICAL STUDIES

January 2024



PREPARED BY:

DUDEK

Special-Status Plant Species Potential to Occur in the Planning Area

Special-Status Plant Species Potential to Occur in the Planning Area

Special-Status Plant Species Potential to Occur in the Planning Area

Special-Status Wildlife Species Potential to Occur in the Planning Area

<i>Incilius alvarius</i>					
<i>Lithobates yavapaiensis</i>					
<i>Scaphiopus couchii</i>					
			<i>Antigone canadensis</i> canadensis		
				<i>Antigone canadensis</i> tabida)	

Special-Status Wildlife Species Potential to Occur in the Planning Area

Special-Status Wildlife Species Potential to Occur in the Planning Area

<i>Charadrius nivosus nivosus</i>				
<i>Circus hudsonius</i>				
	<i>Coccyzus americanus occidentalis</i>			
		<i>Dendrocygna bicolor</i>		

Special-Status Wildlife Species Potential to Occur in the Planning Area

<i>Elanus leucurus</i>	<i>Empidonax tridactylus extimus</i>	<i>Falco peregrinus anatum</i>	<i>Gelochelidon nilotica</i>	<i>Haliaeetus leucocephalus</i>	

Special-Status Wildlife Species Potential to Occur in the Planning Area

<i>Icteria virens</i>					
<i>Ixobrychus exilis</i>					
<i>Lanius ludovicianus</i>					
<i>Laterallus jamaicensis coturniculus</i>					
<i>Melanerpes uropygialis</i>					

Special-Status Wildlife Species Potential to Occur in the Planning Area

	<i>Mycteria americana</i>			
	<i>Passerculus sandwichensis</i> <i>rostratus</i>			
	<i>Pelecanus erythrorhynchos</i>			
	<i>Pelecanus occidentalis</i> <i>californicus</i>			

Special-Status Wildlife Species Potential to Occur in the Planning Area

<i>Rallus obsoletus</i> <i>yumanensis</i>	<i>Scirpus</i> <i>Schoenoplectus</i> <i>Bolboschoenus</i>	<i>Rynchops niger</i>	<i>Setophaga petechia</i>	<i>Toxostoma crissale</i>	<i>Toxostoma lecontei</i>
--	---	-----------------------	---------------------------	---------------------------	---------------------------

Special-Status Wildlife Species Potential to Occur in the Planning Area

<i>Vireo bellii pusillus</i>				
<i>Xanthocephalus xanthocephalus</i>				
<i>Cyprinodon macularius</i>				
<i>Xyrauchen texanus</i>				

Special-Status Wildlife Species Potential to Occur in the Planning Area

Special-Status Wildlife Species Potential to Occur in the Planning Area

<i>Gopherus agassizii</i>			
<i>Phrynosoma mcallii</i>			

APPENDIX E

NOISE RESOURCES

January 2024



PREPARED BY:

DUDEK

FIELD NOISE MEASUREMENT DATA										DUDEK
PROJECT <u>LITHIUM VALLEY (BASELINE SPL SURVEY)</u> SITE ID <u>B</u> SITE ADDRESS <u>W. DELTA ST. & INTERSTATE 10</u> START DATE <u>10/27/22</u> END DATE <u>10/27/22</u> START TIME _____ END TIME _____					PROJECT # <u>14628</u> OBSERVER(S) <u>M. SPARM</u> GPS COORDS OF SURV: <u>33° 7' 48.32" N</u> <u>115° 31' 8.83" W</u>					
METEOROLOGICAL CONDITIONS TEMP <u>80° F</u> HUMIDITY <u>12%</u> R.H. WINDSPD <u>N S</u> MPH DIR. N NE S SE S SW W NW SKY <u>SUNNY</u> OVERCAST PRTLY CLDY FOG RAIN										
ACOUSTIC MEASUREMENTS MEAS. INSTRUMENT <u>ACOUSTI</u> TYPE 1 (2) CALIBRATOR <u>NC-74</u> CALIBRATION CHECK PRE-MEASUREMENT <u>94</u> dBA SPL POST-MEASUREMENT <u>-</u> dBA SPL WINDSCRN <u>✓</u> SETTINGS A-WTD SLOW FAST FRONTAL RANDOM ANSI OTHER: <u>10-SEC INTV</u>										
REC. # <u>1-70</u>	BEGIN <u>3:27 PM</u>	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC)	
COMMENTS										
SOURCE INFO AND TRAFFIC COUNTS PRIMARY NOISE SOURCE TRAFFIC AIRCRAFT RAIL INDUSTRIAL OTHER: ROADWAY TYPE: DIST. TO RDWY C/L OR EOP: TRAFFIC COUNT DURATION: MIN SPEED DIST. TO RDWY C/L OR EOP: DIRECTION NB/EB SB/WB NB/EB SB/WB COUNT 1 (OR RDWY 1) AUTOS IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE COUNT 2 (OR RDWY 2) MIN SB/WB NB/EB SB/WB MED TRKS HVY TRKS BUSES MOTRCLS SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE POSTED SPEED LIMIT SIGNS SAY: <u>25 MPH</u> OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES DIST. BARKING DOGS BIRDS DIST. INDUSTRIAL DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DIST. GARDENERS/LANDSCAPING NOISE OTHER: <u>HEAVY TRAFFIC NOISE, AIRCRAFT JET (DISTANT) INTERFAIRHS COMMON</u> <u>SUCHM AUDIBLE FREQUENCIES/SEED NOISE.</u>										
DESCRIPTION / SKETCH TERRAIN <u>HARD</u> SOFT MIXED FLAT OTHER: PHOTOS _____ OTHER COMMENTS / SKETCH  <u>3:28 PM CAR PASS BY X2</u> <u>3:31 PM + "</u> <u>3:32 PM AIRCRAFT OVERFLY X2</u> <u>3:33 PM CAR PASS BY - CAR HONK</u> <u>3:35 PM CAR PASS BY</u> <u>3:36 PM CAR NEAR (1012).</u>										

10/27/22 - Fieldnotes at Survey Position ST1 (West Delta Road)

FIELD NOISE MEASUREMENT DATA

DUDEK

PROJECT	LITHIUM VALLEY (BASELINE SURVEY)			PROJECT #	14628
SITE ID	"A" (160' FROM HWY 111 LINE)				
SITE ADDRESS	CALIFORNIA INN			OBSERVER(S)	M. STARIN
START DATE	10/27/22	END DATE	10/27/22	GPS: 33° 7' 55.41"N; 115° 3' 53.22"W	
START TIME					

METEOROLOGICAL CONDITIONS									
TEMP	~80	F	HUMIDITY	12	% R.H.	WIND	CALM	LIGHT	Moderate
WINDSPD	-5	MPH	DIR.	N	NE S SE S SW W NW	VARIABLE	STEADY		
SKY	SUNNY			OVERCAST	PRTLY CLDY	FOG	RAIN		GUSTY
ACOUSTIC MEASUREMENTS									
MEAS. INSTRUMENT	PC1000 II			TYPE	1	(2)	SERIAL #	0207	
CALIBRATOR	NC-74			PRE-MEASUREMENT	94	DBA SPL	POST-MEASUREMENT	—	DBA SPL
CALIBRATION CHECK							WINDSCRN		
SETTINGS	A-WTD	SLOW	FAST	FRONTAL	RANDOM	ANSI	OTHER:	10-SEC 10dBV	
REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC)
71-138	3:47 PM								
COMMENTS									
3:54P SAME PICKUP DRIVES BY INN									
3:53P - PICKUP TRUCK RE-STARTS + DRIVES TO OTHER SIDE OF INN BLDG. (NORTH)									
3:50PM PICKUP TRUCK PARKS AT LIBBY OF INN									
3:48P COULD THAT PERSON? TALKS, DIES WHAT'S LONG ON (I SAY TRAFFIC NOISE SURVEY) OCASIONAL DISTANT WIND BLOW?									

SOURCE INFO AND TRAFFIC COUNTS										
PRIMARY NOISE SOURCE			TRAFFIC	AIRCRAFT	RAIL	INDUSTRIAL	OTHER:			
ROADWAY TYPE: HWY 111			DIST. TO RDWY C/L OR EOP:							
TRAFFIC COUNT DURATION:			MIN	SPEED				MIN	SPEED	
COUNT 1 (OR RDWY 1)	DIRECTION	NB/EB	SB/WB	NB/EB	SB/WB	IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE	NB/EB	SB/WB	NB/EB	SB/WB
	AUTOS	THU THU	THU THU	THU THU	THU THU					
	MED-TRKS	THU	THU	THU	THU					
	HVY-TRKS	THU	THU	THU	THU					
BUSES	—	—	—	—	—	—	—	—	—	
MOTRELS	—	—	—	—	—	—	—	—	—	
SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE										
POSTED SPEED LIMIT SIGNS SAY: HWY 111										
OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES DIST. BARKING DOGS BIRDS DIST. INDUSTRIAL										
DIST. KIDS PLAYING DIST. CONVRSTNS YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE										
OTHER:										

DESCRIPTION / SKETCH										
TERRAIN	HARD	SOFT	MIXED	FLAT	OTHER:					
PHOTOS										
OTHER COMMENTS / SKETCH										
										

10/27/22 – Fieldnotes at Survey Position ST2 (Calipatria Inn)

FIELD NOISE MEASUREMENT DATA										DUDEK		
PROJECT <u>LITHIUM VALLEY / BASELINE SURVEY)</u>					PROJECT # <u>14628</u>							
SITE ID	<u>"D" (NEAR 1,800' W. OF HWY 111)</u>											
SITE ADDRESS	<u>ALCOTT ROAD - NEAR 111 MILANO NW PLANE</u>									OBSERVER(S) <u>M. STURM</u>		
START DATE	<u>10-27-22</u>	END DATE	<u>10-27-22</u>								GPS: <u>33° 13' 38.06"N; 115° 31' 29.84"W</u>	
START TIME					END TIME							
METEOROLOGICAL CONDITIONS												
TEMP	<u>80</u>	F	HUMIDITY	<u>12</u>	% R.H.	WIND	CALM	<u>LIGHT</u>	MODERATE			
WINDSPD	<u>5</u>	MPH	DIR. N	N	E	S	SE	S	SW	<u>W NW</u>		
SKY	<u>SUNNY</u>	CLEAR	OVCAST	PRTLY CLDY	FOG	RAIN	VARIABLE	<u>STEADY</u>	GUSTY			
ACOUSTIC MEASUREMENTS												
MEAS. INSTRUMENT	<u>PKUOLOT II</u>				TYPE 1 (2)					SERIAL # <u>0201</u>		
CALIBRATOR	<u>NC-74</u>									SERIAL # <u>7529</u>		
CALIBRATION CHECK	PRE-MEASUREMENT <u>94</u>			dba SPL	POST-MEASUREMENT <u>-</u>			dba SPL	WINDSCRN			
SETTINGS	A-WTD	SLOW	FAST	FRONTAL	RANDOM	ANSI	OTHER:					
REC. #	BEGIN <u>139-202</u>	END <u>4:11 PM</u>	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC)			
<p>COMMENTS</p> <p><u>VERY QUIET - WASSE WATER PLANT IN ADOBBUE - 0100AM HWY 111 TRAFFIC</u> <u>4:17 PM: 3 HELICOPTERS PASS OVERHEAD</u> <u>4:18 PM: CAR PASS BY ON ALCOTT ROAD</u></p>												
SOURCE INFO AND TRAFFIC COUNTS												
PRIMARY NOISE SOURCE			TRAFFIC	AIRCRAFT	RAIL	INDUSTRIAL	OTHER:					
ROADWAY TYPE:			DIST. TO RDWY C/L OR EOP:									
TRAFFIC COUNT DURATION:			MIN	SPEED	DIST. TO RDWY C/L OR EOP:			MIN SPEED				
COUNT 1 (OR RDWY 1)	DIRECTION	NB/EB	SB/WB	NB/EB	SB/WB	IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE	COUNT 2 (OR RDWY 2)	NB/EB	SB/WB	NB/EB	SB/WB	
	AUTOS											
	MED TRKS											
	HVY TRKS											
	BUSES											
SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE												
POSTED SPEED LIMIT SIGNS SAY: <u>HWY 111</u>												
OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT <u>INSECTS</u> DIST. BARKING DOGS <u>BIRDS</u> DIST. INDUSTRIAL												
DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DIST. GARDENERS/LANDSCAPING NOISE												
OTHER:												
DESCRIPTION / SKETCH												
TERRAIN	HARD	SOFT	MIXED	FLAT	OTHER:							
PHOTOS												
OTHER COMMENTS / SKETCH												
												

10/27/22 – Fieldnotes at Survey Position **ST3** (Alcott Road)

FIELD NOISE MEASUREMENT DATA										DUDEK
PROJECT # <u>LITHIUM VALLEY / BASELINE SPL SURVEY</u> SITE ID <u>R</u> SITE ADDRESS <u>WILKINS ROAD (NORTH OF BEAT RD.)</u> START DATE <u>10/27/22</u> END DATE <u>10/27/22</u> START TIME <u></u> END TIME <u></u>					PROJECT # <u>14628</u> OBSERVER(S) <u>M. STORM</u> GPS: <u>33° 15' 52.62" N; 115° 32' 38.24" W</u>					
METEOROLOGICAL CONDITIONS TEMP <u>80</u> F HUMIDITY <u>17</u> % R.H. WINDSPD <u>5-10</u> MPH DIR. N NE S SE S SW W NW SKY <u>SUNNY</u> CLEAR OVCLOUD PRTLY CLDY FOG RAIN										
ACOUSTIC MEASUREMENTS MEAS. INSTRUMENT <u>PICCOLI II</u> TYPE <u>1</u> (2) CALIBRATOR <u>NC-74</u> SERIAL # <u>0207</u> CALIBRATION CHECK PRE-MEASUREMENT <u>94</u> dBA SPL POST-MEASUREMENT <u>93.0</u> dBA SPL WINDSCRN <u>V</u> (RECAL'D TO <u>94.0</u>) SETTINGS A-WTD SLOW FAST FRONTAL RANDOM ANSI OTHER: REC. # BEGIN END Leq Lmax Lmin L90 L50 L10 OTHER (SPECIFY METRIC) <u>203-270 4:37 PM 4:47 PM</u>										
COMMENTS <u>4:39 PM CAR PASSBY; 110 TRUCK PASS-BY</u> <u>4:42 P CLIPBOARD COVER PLASTIC ROTATE</u> <u>4:40 P "</u> <u>4:43-44 P CAR PASSBY - 110 TRUCK PASSBY</u> <u>4:41 P 10M DRIVING AWAY; 2 CAR PASS-BY</u> <u>4:45 P 10M RETURN TO SLM</u> <u>4:41-42 P CAR PASS BY</u> <u>4:46 P " 10M</u>										
SOURCE INFO AND TRAFFIC COUNTS PRIMARY NOISE SOURCE TRAFFIC AIRCRAFT RAIL INDUSTRIAL OTHER: ROADWAY TYPE: DIST. TO RDWY C/L OR EOP: TRAFFIC COUNT DURATION: MIN SPEED DIST. TO RDWY C/L OR EOP: COUNT 1 (OR RDWY 1) DIRECTION NB/EB SB/WB NB/EB SB/WB IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE COUNT 2 (OR RDWY 2) NB/EB MIN SPEED SB/WB NB/EB SB/WB AUTOS MED TRKS HVY TRKS BUSES MOTRCLS										
SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE POSTED SPEED LIMIT SIGNS SAY:										
OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES DIST. BARKING DOGS BIRDS DIST. INDUSTRIAL DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE OTHER:										
DESCRIPTION / SKETCH TERRAIN HARD SOFT MIXED FLAT OTHER: PHOTOS OTHER COMMENTS / SKETCH										
										

10/27/22 – Fieldnotes at Survey Position ST4 (Wilkins Road)

Imperial County Lithium Valley Specific Plan
Noise Resources Existing Conditions Technical Report - DRAFT

Photographs of Baseline Measurement



2333 - Looking north

Dudek P#: 14628

10/27/22 - Sound Level Meter (SLM) at Position **ST1** (West Delta Road)
(photo file ID# and view direction noted above; SLM encircled in yellow dashes)



2335 - Looking south

Imperial County Lithium Valley Specific Plan
Noise Resources Existing Conditions Technical Report - DRAFT

Photographs of Baseline Measurement



Dudek P#: 14628

10/27/22

- Sound Level Meter (SLM) at Position **ST2** (Calipatria Inn)
(photo file ID# and view direction noted above; SLM encircled in yellow dashes)



Imperial County Lithium Valley Specific Plan
Noise Resources Existing Conditions Technical Report - DRAFT

Photographs of Baseline Measurement



2341 - Looking east

Dudek P#: 14628

10/27/22 - Sound Level Meter (SLM) at Position **ST3** (Alcott Road)
(photo file ID# and view direction noted above; SLM encircled in yellow dashes)



2343 - Looking southwest

Imperial County Lithium Valley Specific Plan
Noise Resources Existing Conditions Technical Report - DRAFT

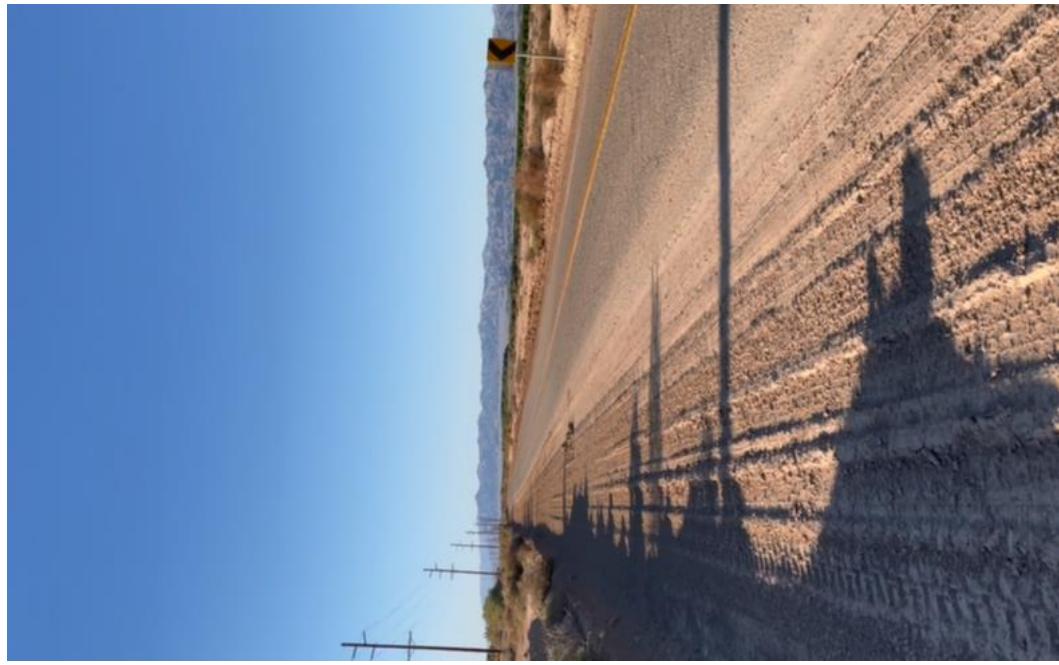
Photographs of Baseline Measurement



2346 - Looking east

Dudek P#: 14628

10/27/22 - Sound Level Meter (SLM) at Position **ST4** (Wilkins Road)
(photo file ID# and view direction noted above; SLM encircled in yellow dashes)



2345 - Looking northwest