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# TABLE OF CONTENTS

Executive Summary.............................................................................................................................. vii

I. Introduction ................................................................................................................................... 1

II. Goals and Objectives.................................................................................................................. 5

III. Existing Conditions.................................................................................................................... 7
   A. Interregional Transportation.................................................................................................... 7
      1. Transportation System........................................................................................................ 7
      2. Current Conditions........................................................................................................... 13
      3. Profile of I-8 Corridor Travelers...................................................................................... 22
   B. Population, Housing, and Employment .................................................................................. 31
      1. Population........................................................................................................................... 35
      2. Housing............................................................................................................................ 40
      3. Employment....................................................................................................................... 44
   C. Land Use and Environmental Resources.............................................................................. 47
      1. Land Uses Adjacent to the I-8 Corridor .......................................................................... 47
      2. Noteworthy Land Uses...................................................................................................... 53
      3. Environmental Resources Adjacent to the I-8 Corridor .................................................. 57
   D. Looking Ahead ........................................................................................................................... 58
      1. Projected Growth................................................................................................................ 58
      2. Planned Improvements...................................................................................................... 60
      3. Projected Levels of Service............................................................................................... 61
      4. Other Considerations......................................................................................................... 61

IV. Interregional Public Survey......................................................................................................... 69
   A. Overview............................................................................................................................... 69
   B. Methodology......................................................................................................................... 69
   C. Findings: Residential Survey................................................................................................ 70
      1. Profile of Residents Surveyed.......................................................................................... 71
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Quality of Life in Imperial County</td>
<td>73</td>
</tr>
<tr>
<td>3. Current Commute Patterns</td>
<td>81</td>
</tr>
<tr>
<td>4. Future Commute Patterns</td>
<td>83</td>
</tr>
<tr>
<td>5. Super Commuters</td>
<td>84</td>
</tr>
<tr>
<td>6. Non-Work Travel</td>
<td>84</td>
</tr>
<tr>
<td>D. Findings: I-8 Traveler Survey</td>
<td>86</td>
</tr>
<tr>
<td>1. Overview of I-8 Travel</td>
<td>86</td>
</tr>
<tr>
<td>2. Profile of the I-8 Traveler</td>
<td>90</td>
</tr>
<tr>
<td>3. Current Commute Patterns</td>
<td>91</td>
</tr>
<tr>
<td>4. Future Commute Patterns</td>
<td>93</td>
</tr>
<tr>
<td>5. Super Commuters</td>
<td>93</td>
</tr>
<tr>
<td>E. Interregional Public Survey Conclusions</td>
<td>95</td>
</tr>
<tr>
<td>V. Key Findings and Recommendations</td>
<td>97</td>
</tr>
<tr>
<td>A. Key Findings</td>
<td>97</td>
</tr>
<tr>
<td>B. Early Actions and Interregional Strategies</td>
<td>97</td>
</tr>
<tr>
<td>C. Future Study Needs</td>
<td>101</td>
</tr>
<tr>
<td>VI. References</td>
<td>103</td>
</tr>
<tr>
<td>VII. Appendices</td>
<td>105</td>
</tr>
<tr>
<td>A. APPENDIX A: Residential Survey Instrument with Frequencies</td>
<td>105</td>
</tr>
<tr>
<td>B. APPENDIX B: I-8 Traveler Survey Instrument with Frequencies</td>
<td>121</td>
</tr>
<tr>
<td>C. APPENDIX C: Joint Technical Advisory Group Agenda Packet Recipients</td>
<td>145</td>
</tr>
<tr>
<td>D. APPENDIX D: Comments Received and Responses on Draft Strategic Plan</td>
<td>146</td>
</tr>
<tr>
<td>E. APPENDIX E: Joint Technical Advisory Group, Joint Policy Advisory Group, and Public Meeting Summaries</td>
<td>146</td>
</tr>
</tbody>
</table>
**TABLE OF CONTENTS**

**FIGURES**

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Study Area</td>
</tr>
<tr>
<td>3</td>
<td>Existing Rail Service (2008)</td>
</tr>
<tr>
<td>5</td>
<td>Interstate 8 Average Daily Truck Traffic (2006)</td>
</tr>
<tr>
<td>6</td>
<td>Level of Service Definitions</td>
</tr>
<tr>
<td>7</td>
<td>Existing Level of Service (2007)</td>
</tr>
<tr>
<td>8</td>
<td>San Diego County Workers: Commute from San Diego County / Commute to San Diego County (2000)</td>
</tr>
<tr>
<td>9</td>
<td>Imperial County Workers: Commute from Imperial County / Commute to Imperial County (2000)</td>
</tr>
<tr>
<td>10</td>
<td>Mean Travel Time to Work in Minutes (2005 - 2007)</td>
</tr>
<tr>
<td>12</td>
<td>Means of Transportation to Work (2005 - 2007)</td>
</tr>
<tr>
<td>13</td>
<td>Households by Census Block (2000)</td>
</tr>
<tr>
<td>15</td>
<td>Imperial County Population Estimates (2000 - 2008)</td>
</tr>
<tr>
<td>16</td>
<td>Annual Population Growth Rate (2000 - 2008)</td>
</tr>
<tr>
<td>17</td>
<td>Age Distribution (2005 - 2007)</td>
</tr>
<tr>
<td>18</td>
<td>Education Attainment (2005 - 2007)</td>
</tr>
<tr>
<td>19</td>
<td>San Diego County Housing Units (2000 - 2008)</td>
</tr>
<tr>
<td>20</td>
<td>Imperial County Housing Units (2000 - 2008)</td>
</tr>
<tr>
<td>21</td>
<td>Housing Unit Growth Rate (2000 - 2008)</td>
</tr>
<tr>
<td>22</td>
<td>San Diego County Labor Force and Employed Workers (2000 - 2008)</td>
</tr>
<tr>
<td>23</td>
<td>Imperial County Labor Force and Employed Workers (2000 - 2008)</td>
</tr>
<tr>
<td>24</td>
<td>Unemployment Rate (2000 - 2008)</td>
</tr>
<tr>
<td>25</td>
<td>Unemployment Rates by County (2008)</td>
</tr>
<tr>
<td>26</td>
<td>Generalized Land Use (2006)</td>
</tr>
<tr>
<td>27</td>
<td>Projected San Diego County Population Growth (2000 - 2050)</td>
</tr>
</tbody>
</table>

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**Imperial Valley Association of Governments**  
**San Diego-Imperial County I-8 Corridor**  
**February 2009**  
**Strategic Plan**  

iii
TABLE OF CONTENTS

<p>| Figure 28 | Projected Imperial County Population Growth (2000 – 2050) .................................................. 59 |
| Figure 29 | Future Job – Housing Balance (2030) .......................................................................................... 59 |
| Figure 30 | Future Level of Service (2030) with Planned Improvements .......................................................... 63 |
| Figure 31 | Sunrise Powerlink .......................................................................................................................... 65 |
| Figure 32 | Income Distribution of Respondents Sampled: Respondents Overall (2008) ................................. 71 |
| Figure 33 | Educational Level of Respondents Sampled: Respondents Overall (2008) ....................................... 72 |
| Figure 34 | Age of Respondents Sampled: Respondents Overall (2008) ............................................................. 73 |
| Figure 35 | Reasons for Moving to Imperial County: Imperial County Residents (2008) ................................. 74 |
| Figure 36 | Overall Quality of Life in Imperial County: Imperial County Residents (2008) ......................... 75 |
| Figure 37 | Proportion of Residents Rating Each Attribute “Good” or “Excellent”: Imperial County Residents (2008) .................................................................................................................. 76 |
| Figure 38 | Proportion of Residents Rating Each Attribute “Very Important” or “Extremely Important”: Imperial County Residents (2008) .................................................................................................................. 77 |
| Figure 39 | Performance Ratings of Those Attributes Ranked Most Important: Imperial County Residents (2008) .................................................................................................................. 78 |
| Figure 40 | Proportion of Residents Planning to Move from Area: Imperial County Residents (2008) .......... 79 |
| Figure 41 | Reasons for Moving from Imperial County: Imperial County Residents (2008) ......................... 80 |
| Figure 42 | Frequency of Work Trips: Imperial County Commuters (2008) ..................................................... 81 |
| Figure 43 | Travel Mode for Work Trips: Imperial County Commuters (2008) .................................................. 82 |
| Figure 44 | Likelihood of Using Alternative Modes of Transportation: Imperial County Commuters (2008) ........ 83 |
| Figure 45 | Purpose of Non-Work Travel: Imperial County Residents (2008) .................................................. 84 |
| Figure 46 | Frequency of Non-Work Trips: Imperial County Residents (2008) .................................................. 85 |
| Figure 47 | Trip Purpose Weekday: I-8 Travelers (2008) .................................................................................. 86 |
| Figure 48 | Trip Origin: I-8 Travelers (2008) ..................................................................................................... 87 |
| Figure 49 | Trip Destination: I-8 Travelers (2008) ............................................................................................. 87 |
| Figure 50 | Perceived Traffic Congestion: I-8 Travelers (2008) ........................................................................ 88 |
| Figure 51 | Trip Frequency: I-8 Travelers, Non-Truck Drivers (2008) ................................................................. 89 |
| Figure 52 | Trip Length (Recorded in Minutes): I-8 Travelers, Non-Truck Drivers (2008) ............................... 90 |
| Figure 53 | Trip Length (Recorded in Minutes): I-8 Commuters (2008) ............................................................ 91 |
| Figure 54 | Level of Satisfaction with Current Commute: I-8 Commuters (2008) ............................................. 92 |</p>
<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 55</td>
<td>Likelihood of Using Alternative Modes of Transportation: I-8 Commuters (2008)</td>
<td>93</td>
</tr>
<tr>
<td>Figure 56</td>
<td>Likelihood of Using Alternative Modes of Transportation: I-8 Super Commuters (2008)</td>
<td>94</td>
</tr>
</tbody>
</table>
TABLE OF CONTENTS

TABLES

Table 1  Incoming Truck Crossing from Mexico into Selected Ports of Entry (1996 - 2007) ........... 11
Table 2  Annual Average Daily Traffic (in thousands) on I-8 Corridor (1992 - 2007) ...................... 17
Table 3  Annual Average Daily Truck Traffic and Trucks as a Percentage of All Traffic (1996 and 2006) ............................................................................................................................................. 18
Table 4  Work Location of San Diego County Residents (1990 – 2000) ............................................ 25
Table 5  Residence Location of San Diego County Workers (1990 – 2000) ..................................... 25
Table 6  Work Location of Imperial County Residents (1990 – 2000) ................................................ 27
Table 7  Residence Location of Imperial County Workers (1990 – 2000) ......................................... 27
Table 8  San Diego and Imperial Counties Travel Time to Work (1990 – 2000) ................................. 29
Table 9  Means of Transportation to Work (1990 – 2000) .................................................................. 31
Table 10 Population of Selected Cities in Imperial and San Diego Counties (2008) ......................... 36
Table 11 Hispanic or Latino Ethnicity and Race (2005 – 2007) .......................................................... 37
Table 12 Types of Households (2005 – 2007) ..................................................................................... 38
Table 13 Student Enrollment (2007) .................................................................................................. 40
Table 14 Housing Units of Selected Cities in Imperial and San Diego Counties (2008) ...................... 42
Table 15 Percent Paying 30 Percent or More of Income for Housing (2005 – 2007) ......................... 43
Table 16 San Diego-Carlsbad-San Marcos MSA Employment by Industry (1992 – 2007) ............... 46
Table 17 El Centro MSA Employment by Industry (1992 – 1997) ..................................................... 46
Table 18 San Diego County Land Uses Within One Half-Mile Radius of I-8 (2008) ......................... 51
Table 19 Imperial County Land Uses Within One Half-Mile Radius of I-8 (2008) ......................... 52
Table 20 Characteristics of Tribal Casinos Along I-8 Corridor (2007) ............................................... 53
Table 21 Peak Attendance at Imperial Sand Dunes Recreation Area (2000 – 2001) ......................... 55
Table 22 Ports of Entry Traffic Volumes (2007) .................................................................................. 56
Table 23 Major Employers Along I-8 Corridor (2007) ..................................................................... 56
Table 24 Distribution of I-8 Traveler Surveys Collected by Day and Time: Respondents Overall (2008) ........................................................................................................................................... 70
Table 25 Ethnic Distribution of Respondents Sampled: Respondents Overall (2008) ...................... 71
EXECUTIVE SUMMARY

The Imperial Valley Association of Governments (IVAG), in collaboration with the San Diego Association of Governments (SANDAG) and California Department of Transportation (Caltrans) District 11, developed the San Diego-Imperial County I-8 Corridor Strategic Plan as the first phase of a planning effort to improve mobility for people and goods along the Interstate 8 (I-8) freeway corridor between San Diego and Imperial counties. The Strategic Plan recognizes that traffic is the result of a complex interaction of economic, growth, environmental, and other dynamics. As a result, it looks holistically at these traffic-related issues and provides direction for future phases of this planning effort that will lead to detailed implementation plans.

By working with a consortium of public and private sector interests, the Strategic Plan also sets the stage for the interregional partnerships that will be critical to implementing short- and long-term solutions. Policy guidance was provided by SANDAG’s Borders Committee and Joint Policy Advisory Group, the IVAG Regional Council, and Tribal Nations along the I-8 corridor. Technical guidance was provided by a Joint Technical Advisory Group, comprised of staff from several interested public agencies, Tribal Nations, and representatives of private-sector stakeholders. Many of these stakeholders will need to be involved in future planning and implementation of Strategic Plan recommendations.

Ultimately, this Plan looks proactively at how to move the Imperial and San Diego regions toward actions that will avert future problems before they become problems. As such, it was guided by several goals for the I-8 corridor itself:

- Improve interregional collaboration
- Maintain and improve mobility for people and goods
- Enhance the quality of life in the Imperial Valley and San Diego County
- Improve the economic vitality of Imperial Valley and San Diego County
- Minimize negative impacts of growth and transportation improvements on the environment

The Strategic Plan recommendations were based in part on an interregional survey of the traveling public. This was vital to crafting strategies that respond to the needs or motivations for those who either use the freeway or could use the freeway in the future. Two opinion surveys were conducted in August and September of 2008. The first study, a survey of Imperial County residents, was conducted using traditional telephone interviewing methods and was designed to address: (1) perceived quality of life in Imperial County; (2) current commute patterns; (3) future commute patterns; and (4) non work-related travel. While this survey recognized that the majority of residents do not use the I-8 freeway for interregional travel, the intent was to gain insight into any issues that could change their travel behavior and turn them into long-distance users of the I-8 freeway in the future. The second study, an automated telephone survey or Interactive Voice Response (IVR) survey, specifically targeted users of I-8, the primary corridor linking Imperial and San Diego counties. This was a direct attempt to understand who uses the freeway and what motivates those to the long, 100 plus mile one-way travel associated with driving between San Diego and Imperial counties, and vice-versa.
The following general findings were drawn:

- **The Imperial Valley is Currently Not a Bedroom Community for San Diego County.** While interregional commuting between Imperial Valley and San Diego County grew between 1990 and 2000, the sheer distance between the two counties and the jobs/housing balance in Imperial County results in a minimal number of commuters traveling to San Diego County for jobs.

- **There is General Satisfaction with the Current State of the I-8 Freeway Commute.** Imperial Valley residents are very satisfied with their quality of life and residents of both Imperial and San Diego are satisfied with their commutes along the I-8 corridor.

- **As Congestion Increases on the I-8 in the Future, It Will Be Worst in San Diego County.** While traffic volumes are growing along the entire corridor, existing and projected congestion levels (e.g., Level of Service E or worse) are confined to the San Diego County portion of the corridor (generally west of El Cajon).

- **Up to Half of I-8 Commuters Would Consider Some Form of Ridesharing.** Just under half of commuters surveyed, report that they would consider a carpool, vanpool, or use public transportation in the future. Despite this willingness to consider ridesharing, two-thirds of super commuters who face particularly long commutes are equally unlikely to move closer to their work locations or to take lower-paying jobs closer to where they currently live. Even if gas prices exceed $6 a gallon, findings suggest that it is unlikely to persuade super commuters to abandon their current commute.

- **As the Imperial Valley Matures, Its Economy Will Diversify and Reduce the Need for Interregional Commutes to San Diego County.** Imperial Valley employment has been, and is, projected to continue to diversify and shift away from an agriculturally-based economy.

The Strategic Plan ultimately identifies a number of short-term early actions and longer-term interregional strategies that were developed through a consensus process. These recommendations are intended to serve as a general road map for subsequent efforts in addressing the long-term needs for the I-8 corridor and are not intended to be exhaustive of all potential solutions.

**Goal 1: Improve Interregional Collaboration**

- **Strategy 1a:** Improve interregional and regional information sharing regarding on-going studies to maximize the benefits and minimize duplication of effort.

- **Strategy 1b:** Continue to integrate Tribal Nations into overall planning process for the I-8 corridor.

- **Strategy 1c:** Collaborate on cross border people and goods movement issues, including recommendations and projects identified in the California-Baja California Border Master Plan.

**Goal 2: Maintain and improve mobility for people and goods**

- **Strategy 2a:** Maintain key capital investments identified in SANDAG’s 2030 Regional Transportation Plan and the Imperial County 2007 Transportation Plan Highway Element.
to improve mobility for people and goods on I-8, including widening the I-8 from four to six lanes between El Cajon to Alpine (2nd Street to Los Coches Road) and widening the I-8 within Imperial Valley between SR-111 and Forrester Road.

- Strategy 2b: Explore opportunities to expand ridesharing.
- Strategy 2c: Explore the feasibility of promoting telecommuting programs at government agencies and other large employers.

**Goal 3: Enhance the quality of life in the Imperial Valley and San Diego County**

- Strategy 3a: Support pro-active, comprehensive planning.
- Strategy 3b: Explore means of preserving what people like about the Imperial Valley.
- Strategy 3c: Explore local access to medical and dental care, including specialized care and hospitalization.

**Goal 4: Improve the economic vitality of Imperial Valley and San Diego County**

- Strategy 4: Support economic development focusing on job creation, particularly on higher paying jobs.

**Goal 5: Minimize negative impacts of growth and transportation improvements on the environment**

- Strategy 5a: Preserve I-8 transportation corridor right of way.
- Strategy 5b: Monitor related interregional issues and identify impacts to the corridor, if any.
I. INTRODUCTION

The Imperial Valley Association of Governments (IVAG), in collaboration with the San Diego Association of Governments (SANDAG) and California Department of Transportation (Caltrans) District 11, developed the San Diego-Imperial County I-8 Corridor Strategic Plan as the first phase of a planning effort to improve mobility for people and goods along the Interstate 8 (I-8) freeway corridor between San Diego and Imperial counties. The study area for the Strategic Plan spans a 153-mile portion of the I-8 freeway from the 2nd Street interchange in El Cajon on the west to the Arizona border on the east (see Figure 1).

The Strategic Plan recognizes that traffic is the result of a complex interaction of economic, growth, environmental, and other dynamics. As a result, it looks holistically at these traffic-related issues and provides direction for future phases of this planning effort that will lead to detailed implementation plans. By working with a consortium of public and private sector interests, the plan also sets the stage for the interregional partnerships that will be critical to implementing short- and long-term solutions. Ultimately, the plan looks proactively at how to move the Imperial and San Diego regions toward actions that will avert future problems before they become problems.

The Strategic Plan is organized into four chapters that provide the information needed to assess the challenge and define solutions, including:

- **Goals and Objectives.** This section outlines the mobility, economic, and other goals and objectives that set the direction and focus for the Strategic Plan.

- **Existing Conditions.** This chapter includes an assessment of the capital infrastructure in place and the nature of travel on the I-8 freeway. It also provides an assessment of economic, environmental, and land use conditions and potential issues that could affect future mobility if left unchecked.

- **Interregional Public Survey.** To enhance the understanding of existing issues along the I-8 corridor, a public survey helps to profile the traffic characteristics of Imperial Valley residents and I-8 users. This section provides a better understanding of the factors that contribute to traffic congestion and interregional commuting along the I-8 corridor.

- **Early Actions and Interregional Strategies.** Early actions and interregional strategies respond to the Plan’s goals and objectives and serve as a general road map for subsequent efforts in addressing the long-term needs for the I-8 corridor.

The Strategic Plan was developed by IVAG, in collaboration with SANDAG and Caltrans over the course of nine months. In addition, policy guidance was provided by SANDAG’s Borders Committee and Joint Policy Advisory Group, the IVAG Regional Council, and Tribal Nations along the I-8 corridor. Technical guidance was provided by a Joint Technical Advisory Group, comprised of staff from several interested public agencies, Tribal Nations, and representatives of private-sector stakeholders.
Source: ESRI, 2008; Caltrans, 2007; PMC, 2008

Figure 1

Legend
- Port of Entry
- I-8 Corridor Study Area

Study Area

Start: 2nd Street Interchange
End: Arizona Border
II. GOALS AND OBJECTIVES

The following represent goals and objectives for ultimately addressing issues along the I-8 corridor. These were used to guide the development of the early actions and interregional strategies discussed herein and will also help guide the development of future phases of planning for the I-8 corridor. Goals represent the desirable results of the planning process, while objectives represent the quantitative or qualitative measuring sticks that gauge whether the goals have been achieved.

**Goal 1:** Improve interregional collaboration.

Objective 1a: Establishment of partnerships or a structural framework for addressing interregional concerns.

Objective 1b: Establishment of a collaborative process between I-8 stakeholders, including Caltrans, SANDAG, IVAG, Tribal Nations, Imperial and San Diego County and other local governments to address issues of common concern.

**Goal 2:** Maintain and improve mobility for people and goods.

Objective 2a: Adequate levels of service on the I-8 over the next 20 years and beyond.

Objective 2b: Improved travel times along the I-8 corridor.

Objective 2c: Reduced dependency on single occupant vehicles.

Objective 2d: Implementation of strategies that reduce the growth in congestion, while improving air quality.

Objective 2e: Implementation of strategies that incorporate the management and operations of the transportation system with the overall planning process.

**Goal 3:** Enhance the quality of life in the Imperial Valley and San Diego County.

Objective 3a: Improved jobs and housing balance in the Imperial Valley and San Diego County (by developing more efficient land use patterns that accommodate a sufficient housing supply to match population increases and workforce needs for the full spectrum of the population).

Objective 3b: Implementation of neighborhood and project designs that promote more walking and biking for healthier communities.

Objective 3c: Implementation of smart growth principles such as transit-oriented development around major transit hubs and minimizing of growth in areas that are disconnected from adequate local or regional transportation options.

Objective 3d: Implementation of strategies that improve address transportation safety and security through improved integration of these issues into the transportation planning process.
II. GOALS AND OBJECTIVES

Objective 3e: Implementation of strategies that preserve the unique and rural character and viability of communities along the I-8 corridor.

Goal 4: Improve the economic vitality of Imperial Valley and San Diego County.

Objective 4a: Increase in the number and diversity of employment opportunities in the Imperial Valley and San Diego County.

Objective 4b: Increased supply of workforce housing to support a diversified job market.

Objective 4c: Increased collaborative economic strategies that build on the assets of the two regions.

Goal 5: Minimize negative impacts of growth and transportation improvements on the environment.

Objective 5a: Improved strategies that protect habitat and environmentally sensitive lands.

Objective 5b: Implementation of climate action strategies that reduce the carbon footprint of growth and traffic from the Imperial Valley and greater San Diego region.

Objective 5c: Improved mitigation of environmentally sensitive lands along the I-8 corridor.

Objective 5d: Implementation of strategies that preserve the scenic value of the I-8 corridor.
III. EXISTING CONDITIONS

Current congestion on the I-8 freeway through the study area is limited generally to intra-regional travel within San Diego and Imperial counties. This is not surprising, given the 100-mile distance between the urbanized portions of each county that make interregional travel a logistical challenge. However, there are economic, land use, environmental, and other related issues that exist that could pose future challenges to mobility along the corridor that are important to recognize.

A. INTERREGIONAL TRANSPORTATION

1. Transportation System

Interstate 8

The Interstate 8 (I-8) freeway is a 172-mile facility that runs from Sunset Cliffs Boulevard in San Diego to the Arizona border. Caltrans officially calls it the “Border Friendship Route”, which reflects its importance as an east-west corridor running parallel to the international border between the United States and Mexico.1 Further east, the I-8 freeway in Arizona provides access to Yuma and indirect access to Phoenix and Tucson.

The San Diego-Imperial County I-8 Corridor Strategic Plan analyzes interregional and intraregional traffic on a 153-mile portion of the I-8 freeway from the 2nd Street interchange in El Cajon on the west to the Arizona border on the east. The primary purpose of I-8 in the San Diego area is to provide for east-west movement of commuter and intraregional traffic.2 The primary purpose of the I-8 east of the San Diego urban area through Imperial County is for interregional goods movement and for interregional access to mountain and desert recreational areas. The majority of the freeway serves rural or semi-rural lands, with urbanized areas west of the study area in San Diego and smaller communities like La Mesa and El Cajon on the west and El Centro on the east.

The I-8 is generally a four-lane facility (two lanes in each direction) from the Plan’s western limit in El Cajon to the Arizona border. When traversing through the steep grades at the summits of the Laguna Mountain Range in eastern San Diego County, there is an additional intermittent climbing lane designed for slow moving vehicles. The speed limit is generally 70 miles per hour throughout the study area.

I-8 connects with a number of north-south State Routes (SR) through the study area, including:

- SR-79. In the community of Descano, the I-8 connects to the southern terminus of SR-79, which accesses the areas of Julian and Pine Hills and provides further travel to Beaumont and Riverside County to the north.

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2 Transportation Concept Report for I-8, 1996.
III. EXISTING CONDITIONS

- **Forrester Road.** This north-south arterial runs parallel to SR-111 from SR-78 to SR-98. While currently constructed as a two-lane roadway, planned improvements will upgrade this facility to a six-lane prime arterial.

- **SR-86.** Within Imperial County, the I-8 connects near the southern terminus of SR-86 and accesses Calexico to the south and Indio and Riverside County to the north.

- **SR-111.** This major north-south freeway connects to the I-8 in El Centro and accesses the international Port of Entry (POE) at Calexico to the south and the Coachella Valley to the north.

- **SR-115.** This primarily north-south route begins at the junction with I-8 east of Holtville, and ends at the junction with SR-111 in Calipatria. SR-115 includes a segment that shares alignment with SR-78. It is typically constructed as a two lane conventional highway.

- **SR-7.** This facility runs in a north-south orientation from the Calexico East POE to I-8, covering a distance of approximately 6.7 miles. SR-7 is constructed as a four lane highway with access control at the East Calexico POE, SR-98 and direct access to I-8.

- **SR-186.** This facility is a 2.1 mile north-south route from the Andrade POE in the easternmost portion of Imperial County to the interchange with I-8. SR-186 is constructed as a two lane conventional highway and provides access to the Andrade/Algodones POE.

**Parallel Routes**

In addition to the north-south highways through the study area, there are several east-west highways that serve as parallel routes for local travel through portions of the corridor. However, no single facility parallels the I-8 through the entire corridor. Given this lack of redundancy, the viability of existing routes to address closures due to roadway incidents are limited to those identified below.

The following facilities parallel the I-8 and in most cases connect to the I-8 freeway:

- **SR-94.** In San Diego County, the SR-94 connects to I-8 via SR-125 west of the Plan’s western limit and reconnects to the I-8 near Boulevard, 65 miles to the east in Imperial County. SR-94 also provides access to the Tecate Port of Entry (POE) via SR-188. Traffic volumes on SR-94 range from about 1,300 daily vehicles where SR-94 meets I-8 to 87,000 daily vehicles at the interchange with SR-125.

- **Old Highway 80.** This highway runs north of I-8 from SR-79 to Pine Valley, where it passes under and to the south side of I-8 and continues on and reconnects with I-8 east of Jacumba.

- **SR-98.** This is 58-mile highway generally is a two-lane facility, with four lanes through the City of Calexico. SR-98 spans from I-8 near Ocotillo to I-8 near Midway Well, passing through the southern portion of the Imperial Valley.

- **Evan Hewes Highway.** This is a four-lane facility spanning from I-8 near Ocotillo to I-8 east of Holtville. Evan Hewes Highway is classified as a four-lane major arterial in the Imperial County Circulation Element.
Transit System

Throughout the 153-mile study area, there is both public and private transit service that provides both intra- and interregional travel options to driving on the I-8 freeway:

- **San Diego Metropolitan Transit System (MTS).** MTS operates two routes along the I-8 corridor:
  - Route 864 operates between the El Cajon Transit Center in the west, to the Viejas Reservation in the east. Route 864 operates seven days a week between the hours of 5:00 am and 11:00 pm with weekday headways of approximately one half-hour and weekend headways of approximately an hour.
  - Route 888 operates only on Monday and Friday between El Cajon and Jacumba, with one westbound trip operated during morning and one eastbound trip in the afternoon.

- **Imperial Valley Transit.** Imperial Valley Transit operates four routes, which follow two paths along the I-8 corridor:
  - Route 300 operates along I-8 from El Centro eastbound to Holtville. Route 350 operates westbound from Holtville to El Centro. Both Route 300 and Route 350 initial morning trips connect with Winterhaven. Route 300 (eastbound) has two morning trips and three afternoon trips. Route 350 (westbound) has two morning and three afternoon trips. Saturday special schedules start in Holtville rather than Winterhaven, then proceed to El Centro.
  - Route 400 operates along I-8 within Imperial Valley from El Centro westbound to Seeley. Route 400 (westbound) has two morning trips, and three afternoon trips. Route 450 follows the same path, but running eastbound from Seeley to El Centro. Route 450 (eastbound) has one morning trip and three afternoon trips.

- **Med-Express.** The Med-Express is a non-emergency medical transportation service connecting communities in Imperial County and the large hospitals and medical facilities in San Diego County. The service is designed to provide persons with disabilities, low income residents and transit dependent persons access to medical facilities and services not available within Imperial County. The service is subsidized by IVAG, administered by the Imperial County Department of Public Works, and is operated by a private non-profit transportation carrier. Demand-responsive service is provided four days a week, with three pick up spots in Brawley, El Centro, and Calexico. Pick-up service is available on a limited basis from the home for an additional fare.

- **Greyhound.** This private operator provides four (eight buses, four each way) lines between El Centro and San Diego. Each line runs once per day, and has a 2:30 hour travel time.

- **RideLink.** RideLink is a San Diego regional transportation assistance program managed by SANDAG. RideLink promotes alternatives to driving alone, including supporting vanpool service along the I-8 corridor.

- **Casino Shuttles.** Many of the casinos located along the I-8 corridor provide shuttle service as an alternative to driving for both employees and visitors. For example, the
Barona Valley Ranch Resort and Casino operates five different shuttle routes, three of which link the casino with other San Diego County areas including El Cajon, Keamy Mesa, Mira Mesa, Chula Vista, and National City; one provides transportation between south Los Angeles County and the casino and the other provides transportation between Orange County and the casino. The Sycuan Casino and Viejas Casino also provide shuttle service between the casinos and other parts of San Diego County.

Goods Movement

The I-8 serves as a major east-west facility for the movement of freight that is facilitated by both truck and rail. This is because of the I-8’s strategic location as the exclusive major east-west freeway south of the Los Angeles metropolitan region and its proximity to key activity centers for the transport, distribution, processing, or consumption of goods. These goods originate from several sources and are distributed domestically to San Diego, the Los Angeles metropolitan region, the Imperial Valley, Yuma, and throughout the country. International freight to and from Mexico also uses the I-8 to transport goods. The Calexico-East Port of Entry (POE) accounts for almost 30 percent of the value of U.S.-Mexican trade through California land ports of entry at almost $9 billion. The Tecate POE, with access to I-8 via SR-188 to SR-94 or SR-94 to Buckman Springs Road, accounts for over a $1 billion worth of goods moved between the two counties.

Trucks

The I-8 is a designated National Network truck route (i.e., a federal highway that allows doubles with 28.5-foot trailers, singles with 48-foot semi-trailers and unlimited kingpin-to-rear axle distance, unlimited length for both vehicle combinations, and widths up to 102 inches) along the entire length of the corridor. In addition, the parallel facilities SR-94 and SR-98 are designated California Legal Advisory truck route (i.e., a State highway that allows trucks no larger than 14 feet high, 102 inches wide and 40 feet long if a single vehicle, and 65 feet long if a combination vehicle. An overall length exception to 75 feet is given for truck tractor - semitrailer - trailer combinations (doubles) if each trailer is no more than 28 feet six inches long) and Terminal Access truck route (i.e., a State highway allowing the same size truck as on the National Network but providing access to truck’s operating facilities, a facility where freight originates, terminates, or is handled in the transportation process), respectively. I-8 also connects with SR-86, SR-111, SR-115, SR-7, and SR-186, which are designated Terminal Access truck routes.

Trucks that use the I-8 to access San Diego, the Imperial Valley, Arizona, and connecting north-south facilities share the two mixed-flow lanes that exist through most of the freeway corridor.

Truck traffic on the I-8 originates from several key sources, including:

- Commercial POEs within San Diego County (Otay Mesa and Tecate),
- The San Diego International Airport at Lindbergh Field,
- The Port of San Diego,
- Agricultural goods produced in the Imperial Valley/Mexicali, and
- Commercial POEs within Imperial County (Calexico East).

The flow of trucks on the I-8 corridor is composed of two key components. The first key movement of trucks is the local movement between the Ports of Entry (POE) and San Diego and
III. EXISTING CONDITIONS

Imperial counties. The nearest POE to the I-8 corridor and the number of trucks crossing from Mexico into California are show in Table 1. Between 1996 and 2007, the annual number of trucks from the listed POEs have increased by about 180,000.

Caltrans traffic count data suggest that about 20 percent of the trucks coming north from the Tecate POE head east on SR-94 toward I-8. While the December 1996 opening of the Calexico-East POE shifted truck traffic eastward from the old Calexico POE, about 85 percent of the trucks heading northbound from Calexico toward I-8 along SR-111 continue past I-8, continuing on SR-111.

### TABLE 1

Incoming Truck Crossing from Mexico into Selected Ports of Entry (1996 – 2007)

<table>
<thead>
<tr>
<th>Year</th>
<th>Tecate</th>
<th>Calexico-West</th>
<th>Calexico-East</th>
<th>Andrade</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count</td>
<td>Percent Change</td>
<td>Count</td>
<td>Percent Change</td>
</tr>
<tr>
<td>1996</td>
<td>49,423</td>
<td>N/A</td>
<td>170,526</td>
<td>N/A</td>
</tr>
<tr>
<td>1997</td>
<td>67,277</td>
<td>36.1%</td>
<td>33,611</td>
<td>-80.3%</td>
</tr>
<tr>
<td>1998</td>
<td>50,805</td>
<td>-24.5%</td>
<td>2</td>
<td>-100.0%</td>
</tr>
<tr>
<td>1999</td>
<td>59,606</td>
<td>17.3%</td>
<td>-</td>
<td>-100.0%</td>
</tr>
<tr>
<td>2000</td>
<td>62,878</td>
<td>5.5%</td>
<td>-</td>
<td>N/A</td>
</tr>
<tr>
<td>2001</td>
<td>60,887</td>
<td>-3.2%</td>
<td>-</td>
<td>N/A</td>
</tr>
<tr>
<td>2002</td>
<td>57,655</td>
<td>-5.3%</td>
<td>-</td>
<td>N/A</td>
</tr>
<tr>
<td>2003</td>
<td>59,363</td>
<td>3.0%</td>
<td>-</td>
<td>N/A</td>
</tr>
<tr>
<td>2004</td>
<td>69,670</td>
<td>17.4%</td>
<td>-</td>
<td>N/A</td>
</tr>
<tr>
<td>2005</td>
<td>69,586</td>
<td>-0.1%</td>
<td>-</td>
<td>N/A</td>
</tr>
<tr>
<td>2006</td>
<td>73,441</td>
<td>5.5%</td>
<td>-</td>
<td>N/A</td>
</tr>
<tr>
<td>2007</td>
<td>77,320</td>
<td>5.3%</td>
<td>-</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Source: U.S. Bureau of Transportation Statistics

The second key truck movement is the interstate movement of trucks, from all POEs along the California-Baja California border to the rest of the U.S. and Canada. This distribution is illustrated in Figure 2. An important consideration with this movement of trucks is that it is generally a through movement along the I-8 corridor rather than a localized movement of trucks.
III. EXISTING CONDITIONS

FIGURE 2
INTERNATIONAL TRUCK FLOWS FOR SOUTHERN CALIFORNIA BORDER CROSSINGS: 1998

The San Diego and Arizona Eastern Railway is the sole east-west rail line that provides freight movement service between San Diego and Imperial counties. The railroad’s alignment connects to the Burlington Northern and Santa Fe near downtown San Diego and travels south to the southern fringes of Tijuana, then heads northeast through Tecate, then north across the border to Campo, eventually connecting with a Union Pacific line in Plaster City in the east, and then heads east again to El Centro (see Figure 3).

In 2005, after being closed since 1983 due to needed repairs to tunnels, trestles, and tracks, the Tecate to Plaster City portion of the alignment (“the Desert Line”) reopened for revenue service but east-west traffic remains light and is unprofitable to date.3

3 SANDAG 2030 RTP.
The rail system throughout the study area is limited but may provide a viable east-west alignment for transport of goods between the two regions with upgrades and modernization. There is no commuter rail service that connects San Diego and Imperial counties. Instead, the alignment reflects the need to connect major freight distribution centers in California and Mexico.

2. Current Conditions

Average Daily Vehicle and Truck Traffic

The I-8 generally does not have significant congestion through most of the study area. Existing (2007) daily traffic volumes on the I-8 range from 12,000 vehicles a day in both directions in the eastern Imperial Valley to near 90,000 on the western limit of the corridor in El Cajon (Figure 4 and Table 2). Traffic volumes drop significantly through the rural, middle segment of the study area to as little as 15,000 trips daily west of SR-98. It should be noted that these data include both passenger vehicle and truck traffic.

It should also be noted that most of the volumes at the western and eastern terminus of the I-8 freeway are intra-regional trips that don't make the 153-mile journey from one region to the next. Within the Imperial Valley, the segment between Imperial Avenue and SR-111 is mostly utilized for intra-county trips.

Historically, traffic volumes have grown modestly along the I-8 freeway. The eastern Imperial Valley portion of the corridor experienced the greatest percentage increase in traffic between 1992 and 2007, growing from 7,800 vehicles a day to 15,100 vehicles a day (a 94 percent increase). However, the greatest increase in total vehicles occurred along the western limit of the corridor adjacent to the growing San Diego region, where volumes increased by 27,000 vehicles (or 43 percent increase) from 1992 through 2007.

As illustrated in Table 3 and Figure 5, the existing (2006) daily truck volumes along the I-8 Corridor range from 2,000 trucks a day near the border between San Diego and Imperial counties to over
III. EXISTING CONDITIONS

4,000 trucks a day at either end of the corridor. Generally, trucks account for at least ten percent of the overall traffic along the corridor, except where the much higher number of non-trucks along western extent of the corridor reduces the percentage of trucks to total traffic to less than ten percent.
### Table 2

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>SD</td>
<td>17.4-21.5</td>
<td>2nd Street to Los Coches Road</td>
<td>62.3</td>
<td>75.3</td>
<td>89.0</td>
<td>89.3</td>
<td>27.0</td>
<td>43%</td>
</tr>
<tr>
<td>SD</td>
<td>21.5-28.5</td>
<td>Los Coches Road to Tavern Road</td>
<td>36.8</td>
<td>52.0</td>
<td>62.7</td>
<td>62.7</td>
<td>25.9</td>
<td>70%</td>
</tr>
<tr>
<td>SD</td>
<td>28.5-37.8</td>
<td>Tavern Road to SR-79</td>
<td>18.9</td>
<td>24.1</td>
<td>30.3</td>
<td>30.3</td>
<td>11.4</td>
<td>60%</td>
</tr>
<tr>
<td>SD</td>
<td>37.8-48.8</td>
<td>SR-79 to Buckman Springs Road</td>
<td>12.8</td>
<td>14.8</td>
<td>18.9</td>
<td>19.7</td>
<td>6.9</td>
<td>54%</td>
</tr>
<tr>
<td>SD</td>
<td>48.8-61.2</td>
<td>Buckman Springs Road to Crestwood Road</td>
<td>10.4</td>
<td>11.5</td>
<td>14.6</td>
<td>16.9</td>
<td>6.5</td>
<td>63%</td>
</tr>
<tr>
<td>SD/IMP</td>
<td>61.2-10.0</td>
<td>Crestwood Road to SR-98</td>
<td>9.6</td>
<td>11.0</td>
<td>14.3</td>
<td>15.3</td>
<td>5.7</td>
<td>59%</td>
</tr>
<tr>
<td>IMP</td>
<td>10.0-37.0</td>
<td>SR-98 to Imperial Avenue</td>
<td>9.4</td>
<td>11.0</td>
<td>13.9</td>
<td>14.8</td>
<td>5.4</td>
<td>57%</td>
</tr>
<tr>
<td>IMP</td>
<td>37.0-40.9</td>
<td>Imperial Avenue to SR-111</td>
<td>26.3</td>
<td>22.8</td>
<td>30.7</td>
<td>35.2</td>
<td>8.9</td>
<td>34%</td>
</tr>
<tr>
<td>IMP</td>
<td>40.9-47.8</td>
<td>SR-111 to Orchard Road</td>
<td>7.8</td>
<td>9.4</td>
<td>12.4</td>
<td>15.1</td>
<td>7.3</td>
<td>94%</td>
</tr>
<tr>
<td>IMP</td>
<td>47.8-65.8</td>
<td>Orchard Road to SR-98</td>
<td>6.5</td>
<td>7.7</td>
<td>10.3</td>
<td>12.0</td>
<td>5.5</td>
<td>85%</td>
</tr>
<tr>
<td>IMP</td>
<td>65.8-90.7</td>
<td>SR-98 to SR-186</td>
<td>10.4</td>
<td>9.8</td>
<td>11.7</td>
<td>14.9</td>
<td>4.5</td>
<td>43%</td>
</tr>
<tr>
<td>IMP</td>
<td>90.7-97.0</td>
<td>SR-186 to Arizona State Line</td>
<td>14.7</td>
<td>14.8</td>
<td>14.9</td>
<td>18.8</td>
<td>4.1</td>
<td>28%</td>
</tr>
</tbody>
</table>

*Source: California Department of Transportation*
### TABLE 3
Annual Average Daily Truck Traffic and Trucks as a Percentage of All Traffic (1996 and 2006)

<table>
<thead>
<tr>
<th>County</th>
<th>Post Mile</th>
<th>Location</th>
<th>1996</th>
<th>Percent of All Traffic</th>
<th>2006</th>
<th>Percent of All Traffic</th>
<th>1996-2006</th>
<th>Percent of All Traffic</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Trucks</td>
<td></td>
<td>Trucks</td>
<td></td>
<td>Trucks</td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td>15.8-18.7</td>
<td>SR-67 to Greenfield Drive</td>
<td>3,248</td>
<td>2.9%</td>
<td>4,176</td>
<td>2.9%</td>
<td>928</td>
<td>0.0%</td>
</tr>
<tr>
<td>SD</td>
<td>18.7-37.9</td>
<td>Greenfield Drive SR-79</td>
<td>3,596</td>
<td>8.1%</td>
<td>4,751</td>
<td>8.1%</td>
<td>1,156</td>
<td>0.0%</td>
</tr>
<tr>
<td>SD</td>
<td>37.9-65.9</td>
<td>SR-79 to SR-94</td>
<td>1,524</td>
<td>12.0%</td>
<td>2,574</td>
<td>13.7%</td>
<td>1,050</td>
<td>1.7%</td>
</tr>
<tr>
<td>SD/IMP</td>
<td>65.9-10.0</td>
<td>SR-94 to SR-98</td>
<td>1,278</td>
<td>12.0%</td>
<td>2,182</td>
<td>14.0%</td>
<td>904</td>
<td>2.0%</td>
</tr>
<tr>
<td>IMP</td>
<td>10.0-38.0</td>
<td>SR-98 to SR-86</td>
<td>1,342</td>
<td>14.2%</td>
<td>2,089</td>
<td>15.7%</td>
<td>747</td>
<td>1.5%</td>
</tr>
<tr>
<td>IMP</td>
<td>38.0-40.9</td>
<td>SR-86 to SR-111</td>
<td>2,330</td>
<td>10.0%</td>
<td>3,609</td>
<td>10.0%</td>
<td>1,279</td>
<td>0.0%</td>
</tr>
<tr>
<td>IMP</td>
<td>40.9-53.5</td>
<td>SR-111 to SR-115</td>
<td>1,469</td>
<td>17.8%</td>
<td>3,799</td>
<td>26.0%</td>
<td>2,330</td>
<td>8.2%</td>
</tr>
<tr>
<td>IMP</td>
<td>53.5-65.8</td>
<td>SR-115 to SR-98</td>
<td>1,832</td>
<td>23.2%</td>
<td>3,498</td>
<td>26.5%</td>
<td>1,666</td>
<td>3.3%</td>
</tr>
<tr>
<td>IMP</td>
<td>65.8-97.0</td>
<td>SR-98 to Arizona State Line</td>
<td>2,136</td>
<td>19.9%</td>
<td>4,217</td>
<td>23.9%</td>
<td>2,081</td>
<td>4.0%</td>
</tr>
</tbody>
</table>

Source: California Department of Transportation
Figure 5
Interstate 8 Average Daily Truck Traffic

Legend
- Port of Entry

I-8 Average Daily Truck Traffic
- 2089 - 2182
- 2183 - 2754
- 2755 - 3799
- 3800 - 4217
- 4218 - 4751

Start: 2nd Street Interchange
End: Arizona Border

Source: ESRI, 2008; Caltrans, 2007; PMC, 2008

T:\_GIS\SAN_DIEGO_COUNTY\MXDS\I8_CORRIDOR\AADT_TRUCK_TRAFFIC_COUNTS.MXD - 7/22/2008 @ 2:48:58 PM
Levels of Service

As shown in Figure 6, level of service is a performance measure that describes how well traffic on a roadway is flowing. For freeways, level of service is measured by the average speeds for vehicles at key points throughout an average day. Measuring congestion on a freeway takes into account that larger trucks carrying freight take up more capacity on a roadway than a passenger vehicle.

<table>
<thead>
<tr>
<th>Level of service</th>
<th>Flow conditions</th>
<th>Technical Descriptors</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Highest quality of service. Free traffic flow, low volumes and densities. Little or no restriction on maneuverability or speed.</td>
<td>Operating speed 55+ Delay None Service rating Good</td>
</tr>
<tr>
<td>B</td>
<td>Stable traffic flow, speed becoming slightly restricted. Low restriction on maneuverability.</td>
<td>Operating speed 50 Delay None Service rating Good</td>
</tr>
<tr>
<td>C</td>
<td>Stable traffic flow, but less freedom to select speed, change lanes, or pass. Density increasing.</td>
<td>Operating speed 45 Delay Minimal Service rating Adequate</td>
</tr>
<tr>
<td>D</td>
<td>Approaching unstable flow. Speeds tolerable but subject to sudden and considerable variation. Less maneuverability and driver comfort.</td>
<td>Operating speed 40 Delay Minimal Service rating Adequate</td>
</tr>
<tr>
<td>E</td>
<td>Unstable traffic flow with rapidly fluctuating speeds and flow rates. Short headways, low maneuverability and low driver comfort.</td>
<td>Operating speed 35 Delay Significant Service rating Poor</td>
</tr>
<tr>
<td>F</td>
<td>Forced traffic flow. Speed and flow may drop to zero with high densities.</td>
<td>Operating speed &lt;20 Delay Considerable Service rating Poor</td>
</tr>
</tbody>
</table>

Source: SANDAG
With one exception, the I-8 corridor currently operates at acceptable levels of service (D or better), where average speeds exceed 55 miles per hour. In El Cajon, the westbound segment from Los Coches Road Interchange to the Main Street Interchange currently operates at level of service F, with congested flow up to two hours per day, as modeled by SANDAG (Figure 7). In addition, data collected for SANDAG’s 2008 Congestion Management Program indicate that the western end of the corridor operates at level of service E from the western limit at 2nd Street to Lake Jennings Road.

Existing congestion on the eastern end of the I-8 study area is negligible. For example, the Imperial County 2007 Transportation Plan Highway Element reports the highest volume section between SR-111 and Forrester Road currently operates at level of service A during the peak hour of the day.

Although not resulting in an identified degradation in operating level of service, the westbound immigration checkpoint located in the Pine Valley area and the eastbound checkpoint in the In-Ko-Pah area experience regular backups due to the constriction of the freeway to one lane in each direction while the checkpoint is in operation.

As such, typical traffic on the I-8 has not produced an existing, recurrent congestion problem. However, the I-8 does appear to experience short-term, periodic congestion problems associated with special events and seasonal activities. These non-recurrent activities are generally not factored into the data collected on congestion. For example, recreational travel destined to the Imperial Sand Dune Recreation area can reach up to 36,000 vehicles over a single holiday weekend. In addition, even less frequent roadway incidents on the I-8 can create major congestion. These incidents highlight the lack of redundancy and alternatives for east-west travel between the two regions.

3. Profile of I-8 Corridor Travelers

In addition to the interregional survey data discussed in Chapter IV, there is U.S. Census data that provides insight into the nature of intra- and interregional travel on the I-8.

County to County Work Flows

Utilizing U.S. Census journey to work data, Table 4, Table 5, and Figure 8 provide a profile of where San Diego County residents work and where San Diego County workers live. As is shown in the tables and figure, 97 percent of San Diego County residents work in San Diego County. Although the number of San Diego County residents who work in Imperial County doubled between 1990 and 2000, the 793 residents who commuted to Imperial County represent less than one percent of all San Diego County workers.

Subsequent data collection by the U.S. Census through the American Community Survey, which currently provides a three-year estimate of data between 2005 and 2007, indicate that 96 percent of San Diego County residents currently work in San Diego County.
TABLE 4
WORK LOCATION OF SAN DIEGO COUNTY RESIDENTS (1990 – 2000)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count</td>
<td>Percent</td>
<td>Count</td>
</tr>
<tr>
<td>Arizona</td>
<td>614</td>
<td>0.0%</td>
<td>799</td>
</tr>
<tr>
<td>Yuma County</td>
<td>214</td>
<td>0.0%</td>
<td>132</td>
</tr>
<tr>
<td>Other Arizona Counties</td>
<td>400</td>
<td>0.0%</td>
<td>667</td>
</tr>
<tr>
<td>California</td>
<td>1,220,271</td>
<td>99.2%</td>
<td>1,286,954</td>
</tr>
<tr>
<td>Imperial County</td>
<td>369</td>
<td>0.0%</td>
<td>793</td>
</tr>
<tr>
<td>Los Angeles County</td>
<td>8,281</td>
<td>0.7%</td>
<td>7,768</td>
</tr>
<tr>
<td>Orange County</td>
<td>12,402</td>
<td>1.0%</td>
<td>12,277</td>
</tr>
<tr>
<td>Riverside County</td>
<td>5,747</td>
<td>0.5%</td>
<td>5,882</td>
</tr>
<tr>
<td>San Bernardino County</td>
<td>1,003</td>
<td>0.1%</td>
<td>2,373</td>
</tr>
<tr>
<td>San Diego County</td>
<td>1,187,997</td>
<td>96.6%</td>
<td>1,253,629</td>
</tr>
<tr>
<td>Other California Co.</td>
<td>4,472</td>
<td>0.4%</td>
<td>4,232</td>
</tr>
<tr>
<td>Nevada</td>
<td>287</td>
<td>0.0%</td>
<td>412</td>
</tr>
<tr>
<td>Other State/Country</td>
<td>8,073</td>
<td>0.7%</td>
<td>8,806</td>
</tr>
<tr>
<td>Mexico</td>
<td>1,201</td>
<td>0.1%</td>
<td>2,532</td>
</tr>
<tr>
<td>Total</td>
<td>1,230,446</td>
<td>100.0%</td>
<td>1,299,503</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau

TABLE 5
RESIDENCE LOCATION OF SAN DIEGO COUNTY WORKERS (1990 – 2000)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count</td>
<td>Percent</td>
<td>Count</td>
</tr>
<tr>
<td>Arizona</td>
<td>645</td>
<td>0.1%</td>
<td>675</td>
</tr>
<tr>
<td>Yuma County</td>
<td>75</td>
<td>0.0%</td>
<td>99</td>
</tr>
<tr>
<td>Other Arizona Co.</td>
<td>570</td>
<td>0.0%</td>
<td>576</td>
</tr>
<tr>
<td>California</td>
<td>1,208,087</td>
<td>99.4%</td>
<td>1,288,255</td>
</tr>
<tr>
<td>Imperial County</td>
<td>217</td>
<td>0.0%</td>
<td>418</td>
</tr>
<tr>
<td>Los Angeles County</td>
<td>3,685</td>
<td>0.3%</td>
<td>4,639</td>
</tr>
<tr>
<td>Orange County</td>
<td>5,589</td>
<td>0.5%</td>
<td>6,786</td>
</tr>
<tr>
<td>Riverside County</td>
<td>6,964</td>
<td>0.6%</td>
<td>18,641</td>
</tr>
<tr>
<td>San Bernardino Co.</td>
<td>1,076</td>
<td>0.1%</td>
<td>1,797</td>
</tr>
<tr>
<td>San Diego County</td>
<td>1,187,997</td>
<td>97.7%</td>
<td>1,253,629</td>
</tr>
<tr>
<td>Other California Co.</td>
<td>2,559</td>
<td>0.2%</td>
<td>2,345</td>
</tr>
<tr>
<td>Nevada</td>
<td>219</td>
<td>0.0%</td>
<td>275</td>
</tr>
<tr>
<td>Other State/Country</td>
<td>6,807</td>
<td>0.6%</td>
<td>4,735</td>
</tr>
<tr>
<td>Total</td>
<td>1,215,758</td>
<td>100.0%</td>
<td>1,293,940</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau
Note: Identified values represent the work location of San Diego County residents / residence location of San Diego County workers in 2000. Values listed for Baja California is inclusive of all of Mexico.

Source: U.S. Census Bureau

Table 6, Table 7, and Figure 9 provide a profile of where Imperial County residents work and where Imperial County workers live. As is shown in the tables and figure, 93 percent of Imperial County residents work in Imperial County. Just as the number of San Diego County residents who work in Imperial County doubled between 1990 and 2000, the number of Imperial County residents who work in San Diego County doubled between 1990 and 2000. However, Imperial County residents commuting to San Diego County represent one percent of all Imperial County workers.

ACS three-year estimate data between 2005 and 2007 indicate that 92 percent of Imperial County residents currently work in Imperial County.
### Table 6
**Work Location of Imperial County Residents (1990 – 2000)**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count</td>
<td></td>
<td>Count</td>
<td></td>
<td>Count</td>
<td></td>
</tr>
<tr>
<td>Arizona</td>
<td>516</td>
<td>1.4%</td>
<td>857</td>
<td>2.0%</td>
<td>341</td>
<td>66.1%</td>
</tr>
<tr>
<td>Yuma County</td>
<td>516</td>
<td>1.4%</td>
<td>796</td>
<td>1.8%</td>
<td>280</td>
<td>54.3%</td>
</tr>
<tr>
<td>Other Arizona Counties</td>
<td>-</td>
<td>0.0%</td>
<td>61</td>
<td>0.1%</td>
<td>61</td>
<td>100.0%</td>
</tr>
<tr>
<td>California</td>
<td>35,165</td>
<td>97.9%</td>
<td>41,705</td>
<td>96.5%</td>
<td>6,540</td>
<td>18.6%</td>
</tr>
<tr>
<td>Imperial County</td>
<td>33,685</td>
<td>93.8%</td>
<td>40,181</td>
<td>93.0%</td>
<td>6,496</td>
<td>19.3%</td>
</tr>
<tr>
<td>Los Angeles County</td>
<td>51</td>
<td>0.4%</td>
<td>68</td>
<td>0.2%</td>
<td>-83</td>
<td>-55.0%</td>
</tr>
<tr>
<td>Orange County</td>
<td>18</td>
<td>0.1%</td>
<td>29</td>
<td>0.1%</td>
<td>11</td>
<td>61.1%</td>
</tr>
<tr>
<td>Riverside County</td>
<td>586</td>
<td>1.6%</td>
<td>690</td>
<td>1.6%</td>
<td>104</td>
<td>17.7%</td>
</tr>
<tr>
<td>San Bernardino County</td>
<td>50</td>
<td>0.1%</td>
<td>59</td>
<td>0.1%</td>
<td>9</td>
<td>18.0%</td>
</tr>
<tr>
<td>San Diego County</td>
<td>217</td>
<td>0.6%</td>
<td>418</td>
<td>1.0%</td>
<td>201</td>
<td>92.6%</td>
</tr>
<tr>
<td>Other California Co.</td>
<td>458</td>
<td>1.3%</td>
<td>260</td>
<td>0.6%</td>
<td>-198</td>
<td>-43.2%</td>
</tr>
<tr>
<td>Nevada</td>
<td>18</td>
<td>0.1%</td>
<td>82</td>
<td>0.2%</td>
<td>64</td>
<td>355.6%</td>
</tr>
<tr>
<td>Other State/Country</td>
<td>25</td>
<td>0.1%</td>
<td>134</td>
<td>0.3%</td>
<td>90</td>
<td>204.5%</td>
</tr>
<tr>
<td>Mexico</td>
<td>181</td>
<td>0.5%</td>
<td>459</td>
<td>1.1%</td>
<td>278</td>
<td>153.6%</td>
</tr>
<tr>
<td>Total</td>
<td>35,905</td>
<td>100.0%</td>
<td>43,204</td>
<td>100.0%</td>
<td>14,180</td>
<td>39.5%</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau

### Table 7
**Residence Location of Imperial County Workers (1990 – 2000)**

<table>
<thead>
<tr>
<th>Residence Location</th>
<th>1990</th>
<th>Percent</th>
<th>2000</th>
<th>Percent</th>
<th>1990-2000</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count</td>
<td></td>
<td>Count</td>
<td></td>
<td>Count</td>
<td></td>
</tr>
<tr>
<td>Arizona</td>
<td>872</td>
<td>2.4%</td>
<td>1,085</td>
<td>2.5%</td>
<td>213</td>
<td>24.4%</td>
</tr>
<tr>
<td>Yuma County</td>
<td>828</td>
<td>2.3%</td>
<td>951</td>
<td>2.2%</td>
<td>123</td>
<td>14.9%</td>
</tr>
<tr>
<td>Other Arizona Counties</td>
<td>44</td>
<td>0.1%</td>
<td>134</td>
<td>0.3%</td>
<td>90</td>
<td>204.5%</td>
</tr>
<tr>
<td>California</td>
<td>35,092</td>
<td>97.0%</td>
<td>42,199</td>
<td>96.8%</td>
<td>7,107</td>
<td>20.3%</td>
</tr>
<tr>
<td>Imperial County</td>
<td>33,685</td>
<td>93.2%</td>
<td>40,181</td>
<td>92.2%</td>
<td>6,496</td>
<td>19.3%</td>
</tr>
<tr>
<td>Los Angeles County</td>
<td>197</td>
<td>0.5%</td>
<td>406</td>
<td>0.9%</td>
<td>209</td>
<td>106.1%</td>
</tr>
<tr>
<td>Orange County</td>
<td>127</td>
<td>0.4%</td>
<td>157</td>
<td>0.4%</td>
<td>30</td>
<td>23.6%</td>
</tr>
<tr>
<td>Riverside County</td>
<td>229</td>
<td>0.6%</td>
<td>424</td>
<td>1.0%</td>
<td>195</td>
<td>85.2%</td>
</tr>
<tr>
<td>San Bernardino County</td>
<td>165</td>
<td>0.5%</td>
<td>179</td>
<td>0.4%</td>
<td>14</td>
<td>8.5%</td>
</tr>
<tr>
<td>San Diego County</td>
<td>369</td>
<td>1.0%</td>
<td>793</td>
<td>1.8%</td>
<td>424</td>
<td>114.9%</td>
</tr>
<tr>
<td>Other California Co.</td>
<td>320</td>
<td>0.9%</td>
<td>59</td>
<td>0.1%</td>
<td>-261</td>
<td>-81.6%</td>
</tr>
<tr>
<td>Nevada</td>
<td>-</td>
<td>0.0%</td>
<td>8</td>
<td>0.0%</td>
<td>8</td>
<td>100.0%</td>
</tr>
<tr>
<td>Other State</td>
<td>195</td>
<td>0.5%</td>
<td>310</td>
<td>0.7%</td>
<td>115</td>
<td>59.0%</td>
</tr>
<tr>
<td>Total</td>
<td>36,159</td>
<td>100.0%</td>
<td>43,594</td>
<td>100.0%</td>
<td>14,763</td>
<td>40.8%</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau
FIGURE 9
IMPERIAL COUNTY WORKERS: COMMUTE FROM IMPERIAL COUNTY / COMMUTE TO IMPERIAL COUNTY (2000)

Note: Identified values represent the work location of Imperial County residents / residence location of Imperial County workers in 2000. Values listed for Baja California is inclusive of all of Mexico.
Source: U.S. Census Bureau

Travel Time

Existing traffic volumes and other data suggest that there are not a lot of interregional commuters traveling between Imperial Valley and San Diego County to work using the I-8. This can be explained by a number of factors, one of which is the travel time associated with traveling approximately 100 miles one-way from one region to the next, which would involve a “super commute” traveling over an hour and a half each direction.

In 2000, 83 percent of San Diego County commuters’ travel time to work was less than 40 minutes, dropping from 88 percent of commuters in 1990 (Table 8). Imperial County experienced a similar decline in commuters with less than 40 minute commutes, from 93 percent in 1990 to 90 percent of commuters in 2000. ACS data three-year between 2005 and 2007, indicate 82 percent of San Diego County commuters’ current travel time to work continues to be less than 40 minutes, while 92 percent of Imperial County commuters’ current travel time to work continues to be less than 40 minutes. Commuters with travel times of an hour or more increased in both counties between 1990 and 2000 by about two percentage points. This last group of an hour or more commute times would include any interregional “super commuters” traveling between Imperial Valley and San Diego County (and other similar interregional commutes) but not exclusively.
### Table 8
**San Diego and Imperial Counties Travel Time to Work (1990 – 2000)**

<table>
<thead>
<tr>
<th>Travel Time to Work</th>
<th>San Diego County</th>
<th></th>
<th>Imperial County</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count</td>
<td>Percent</td>
<td>Count</td>
<td>Percent</td>
</tr>
<tr>
<td>Less than 20 minutes</td>
<td>536,010</td>
<td>45.8%</td>
<td>518,176</td>
<td>41.7%</td>
</tr>
<tr>
<td></td>
<td>23,647</td>
<td>67.7%</td>
<td>25,820</td>
<td>61.6%</td>
</tr>
<tr>
<td>20 to less than 40 minutes</td>
<td>487,215</td>
<td>41.7%</td>
<td>517,394</td>
<td>41.6%</td>
</tr>
<tr>
<td></td>
<td>8,803</td>
<td>25.2%</td>
<td>11,966</td>
<td>28.5%</td>
</tr>
<tr>
<td>40 to less than 60 minutes</td>
<td>97,320</td>
<td>8.3%</td>
<td>127,260</td>
<td>10.2%</td>
</tr>
<tr>
<td></td>
<td>1,240</td>
<td>3.6%</td>
<td>1,986</td>
<td>4.7%</td>
</tr>
<tr>
<td>60 or more minutes</td>
<td>48,616</td>
<td>4.2%</td>
<td>79,491</td>
<td>6.4%</td>
</tr>
<tr>
<td></td>
<td>1,226</td>
<td>3.5%</td>
<td>2,146</td>
<td>5.1%</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau

**Figure 10** demonstrates that Imperial County had the shortest mean travel time to work among Southern California counties between 2005 and 2007.

**Figure 10**
**Mean Travel Time to Work in Minutes (2005 – 2007)**
As with the mean travel time to work, Imperial County had the lowest percentage of commuters traveling an hour or more to work between 2005 and 2007 among Southern California counties, the minimum time needed to travel between major activities centers in San Diego and Imperial counties (see Figure 11).

![Figure 11: Sixty Minutes Plus Travel Time to Work: Percent of All Journey to Work Trips (2005 – 2007)](source: U.S. Census Bureau)

Means of Transportation to Work

On an average day, several hundred residents of Imperial and San Diego counties do an interregional “super-commute” to jobs in the other region. The following describes the general means of transportation to work for the two counties as a whole, while for the “super-commuters” drive-alone and carpool are the only alternatives today.

Between 1990 and 2000, the share of San Diego County commuters who drive alone increased by about three percentage points, while the share of Imperial County commuters who drive alone decreased by about two percentage points (Table 9). Both counties either maintained or increased the percentage of commuters traveling by carpool and public transportation.
TABLE 9
MEANS OF TRANSPORTATION TO WORK (1990 – 2000)

<table>
<thead>
<tr>
<th>Means of Transportation to Work</th>
<th>San Diego County</th>
<th></th>
<th>Imperial County</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count</td>
<td>Percent</td>
<td>Count</td>
<td>Percent</td>
</tr>
<tr>
<td>Drove Alone</td>
<td>880,634</td>
<td>71.6%</td>
<td>964,430</td>
<td>74.2%</td>
</tr>
<tr>
<td>Carpoled</td>
<td>169,326</td>
<td>13.8%</td>
<td>169,340</td>
<td>13.0%</td>
</tr>
<tr>
<td>Public Transportation</td>
<td>40,378</td>
<td>3.3%</td>
<td>43,757</td>
<td>3.4%</td>
</tr>
<tr>
<td>Other</td>
<td>78,823</td>
<td>6.4%</td>
<td>64,794</td>
<td>5.0%</td>
</tr>
<tr>
<td>Worked at Home</td>
<td>61,285</td>
<td>5.0%</td>
<td>57,182</td>
<td>4.4%</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau

With 13 percent of commuters traveling to work via carpool between 2005 and 2007, Imperial County was third behind Riverside and San Bernardino counties with 17 and 15 percent, respectively, of commuters carpooling (Figure 12). Conversely, Imperial County had the highest percentage of drive alone commuters at 82 percent compared Los Angeles County with the lowest percentage of drive alone commuters at 76 percent.

FIGURE 12
MEANS OF TRANSPORTATION TO WORK (2005 – 2007)

Source: U.S. Census Bureau

B. POPULATION, HOUSING, AND EMPLOYMENT

Traffic and resulting congestion are generally the result of human activities that center on population, housing, employment density and location. As such, understanding the characteristics of population, housing, and employment in an area is critical to devising strategies that will ultimately reduce traffic congestion. For example, Figure 13 illustrates household density within five miles of the I-8 freeway by Census Block from the 2000 Census. Similar to previous figures regarding I-8 traffic volumes and congestion, the western portion of the corridor also has the highest household densities.
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Figure 13
Households by Census Block (2000)

Legend
- 5 Mile Buffer of I-8 Corridor Study Area
- I-8 Corridor Study Area

Households by Census Block (Census 2000)
Number of Households
- Green: 0 - 18
- Yellow: 19 - 68
- Orange: 69 - 157
- Red: 158 - 280
- Purple: 281 - 491
- Pink: 492 - 1291

Start: 2nd Street Interchange
End: Arizona Border
1. Population

Figure 14 and Figure 15 illustrate population estimates for San Diego and Imperial counties, respectively from 2000 through 2008. Both regions have seen steady growth in population over time, a trend mirrored throughout California and the nation. While San Diego County’s population (estimated at 3,146,000 in 2008) is significantly greater than Imperial County’s, Imperial County’s population (estimated at 177,000 in 2008) is growing at double the rate of San Diego’s. Between 2000 and 2008, San Diego County’s population increased by 12 percent while Imperial County’s population increased by 24 percent.

**Figure 14**


---

**Source:** California Department of Finance

**Figure 15**


---

**Source:** California Department of Finance

Figure 16 highlights this trend of higher population increases in Imperial County between 2000 and 2008, although Imperial County’s growth rate slowed between 2007 and 2008. Conversely,
San Diego County's growth rate decreased from 2002 through 2004 and has accelerated since 2006.

**Figure 16**


![Graph showing annual population growth rate from 2000 to 2008 for Imperial County, San Diego County, and California.](image)

Source: California Department of Finance

**Table 10** illustrates the 2000 and 2008 population in the cities within Imperial County and San Diego County cities near the I-8 corridor. As indicated in the table, the City of Imperial with a 69 percent increase in population accounted for the largest percentage change of all Imperial County cities but Calexico's 11,600 additional persons was responsible for 42 percent of the countywide population change over the time period. While San Diego County cities did not generally experience as large of percentage increases in population as Imperial County cities, the population increase in the City of San Diego alone was four times the countywide increase in Imperial County.

**Table 10**

**Population of Selected Cities in Imperial and San Diego Counties (2008)**

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2008</th>
<th>Change</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Imperial County Cities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brawley</td>
<td>22,052</td>
<td>26,513</td>
<td>4,461</td>
<td>20.2%</td>
</tr>
<tr>
<td>Calexico</td>
<td>27,109</td>
<td>38,733</td>
<td>11,624</td>
<td>42.9%</td>
</tr>
<tr>
<td>Calipatria</td>
<td>7,289</td>
<td>7,774</td>
<td>485</td>
<td>6.7%</td>
</tr>
<tr>
<td>El Centro</td>
<td>38,025</td>
<td>43,316</td>
<td>5,291</td>
<td>13.9%</td>
</tr>
<tr>
<td>Holtville</td>
<td>5,612</td>
<td>6,467</td>
<td>855</td>
<td>15.2%</td>
</tr>
<tr>
<td>Imperial</td>
<td>7,560</td>
<td>12,752</td>
<td>5,192</td>
<td>68.7%</td>
</tr>
<tr>
<td>Westmorland</td>
<td>2,131</td>
<td>2,406</td>
<td>275</td>
<td>12.9%</td>
</tr>
<tr>
<td>Rest of County</td>
<td>32,583</td>
<td>32,098</td>
<td>-485</td>
<td>-1.5%</td>
</tr>
<tr>
<td><strong>San Diego County Cities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>El Cajon</td>
<td>94,869</td>
<td>97,934</td>
<td>3,065</td>
<td>3.2%</td>
</tr>
</tbody>
</table>
Demographics

Though they are neighboring counties, Imperial and San Diego counties have a decidedly different demographic profile that ultimately influences some of the travel characteristics of the I-8 freeway. As is shown in **Table 11**, San Diego County was narrowly a non-Hispanic, white majority population between 2005 and 2007, while Imperial County was a Hispanic or Latino (of any race) majority. When looking at race alone (independently of Hispanic or Latino ethnicity), Imperial County was 71 percent white and San Diego County was 70 percent white.

<table>
<thead>
<tr>
<th>Race / Ethnicity</th>
<th>San Diego County</th>
<th>Imperial County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hispanic or Latino (of any race)</td>
<td>882,287</td>
<td>119,215</td>
</tr>
<tr>
<td>White alone</td>
<td>1,525,155</td>
<td>27,010</td>
</tr>
<tr>
<td>Black or African American alone</td>
<td>147,056</td>
<td>5,205</td>
</tr>
<tr>
<td>American Indian and Alaska Native alone</td>
<td>14,091</td>
<td>1,835</td>
</tr>
<tr>
<td>Asian alone</td>
<td>296,519</td>
<td>2,749</td>
</tr>
<tr>
<td>Native Hawaiian and Other Pacific Islander alone</td>
<td>11,359</td>
<td>106</td>
</tr>
<tr>
<td>Some other race alone</td>
<td>7,698</td>
<td>380</td>
</tr>
<tr>
<td>Two or more races</td>
<td>70,795</td>
<td>1,329</td>
</tr>
<tr>
<td><strong>Total Population</strong></td>
<td><strong>2,954,960</strong></td>
<td><strong>157,829</strong></td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau

ACS three year estimate data between 2005 and 2007 indicated that San Diego County was evenly split between males and females while males accounted for 52 percent of the population in Imperial County. San Diego County and Imperial County had media age of 34 and 31, respectively. **Figure 17** shows age distribution for each county between 2005 and 2007.
Between 2005 and 2007, there were about 1.042 million households in San Diego County and 46,000 households in Imperial County. The average household size was 2.7 people in San Diego County and 3.2 people in Imperial County. Families made up 66 percent of the households in San Diego County and 82 percent of the households in Imperial County. Non-family households (households occupied by people living alone or by unrelated people) made up 34 percent of all household in San Diego County and 20 percent of all households in Imperial County, most which were people living alone (see Table 12).

### Table 12
TYPES OF HOUSEHOLDS (2005 – 2007)

<table>
<thead>
<tr>
<th>Household Type</th>
<th>San Diego County</th>
<th>Imperial County</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count</td>
<td>Percent</td>
</tr>
<tr>
<td>Married-couple families</td>
<td>512,946</td>
<td>49.2%</td>
</tr>
<tr>
<td>Other families</td>
<td>171,786</td>
<td>16.5%</td>
</tr>
<tr>
<td>People living alone</td>
<td>268,314</td>
<td>25.8%</td>
</tr>
<tr>
<td>Other non-family households</td>
<td>88,744</td>
<td>8.5%</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau

### Income

Between 2005 and 2007 the median income of households in San Diego County was $60,970. Eighty-three percent of the households received earnings and 17 percent received retirement income other than Social Security. Twenty-three percent of the households received Social Security. The average income from Social Security was $14,034. These income sources are not mutually exclusive; that is, some households received income from more than one source.
The median income of households in Imperial County was $35,933. Seventy-six percent of the households received earnings and 12 percent received retirement income other than Social Security. Thirty-one percent of the households received Social Security. The average income from Social Security was $12,494. These income sources are not mutually exclusive; that is, some households received income from more than one source.

Between 2005 and 2007, 11 percent of San Diego County residents and 21 percent of Imperial County residents were in poverty. Additionally, 15 percent of San Diego County related children under 18 and 27 percent of Imperial County related children under 18 were below the poverty level compared with eight percent and 12 percent of people 65 years old and over in San Diego and Imperial counties, respectively. Eight percent of all San Diego County families and 19 percent of all Imperial County families were below the poverty. For households headed by a female with no husband present, 22 percent and 39 percent were below the poverty level in San Diego and Imperial counties, respectively.

Educational Attainment

Figure 18 illustrates the distribution of education attainment for each county. Between 2005 and 2007, 15 percent of San Diego County residents 25 and older had less than a high school diploma, while 38 percent of Imperial County residents over 25 did not have a high school diploma. Twenty-one percent of San Diego County residents' and 26 percent of Imperial County residents' highest education attainment was a high school diploma or equivalent. Likewise, about 20 percent of each county's residents had attained some college but did not receive a degree.

Poverty is defined by the U.S. Census Bureau using a set of dollar value thresholds that vary by family size and composition to determine who is in poverty. To determine a person's poverty status, one compares the person's total family income in the last 12 months with the poverty threshold appropriate for that person's family size and composition. If the total income of that person's family is less than the threshold appropriate for that family, then the person is considered "below the poverty level," together with every member of his or her family.
Table 13 summarizes the 2007 number of schools and enrollment for elementary, secondary, and college students in San Diego and Imperial Counties. During the 2006-2007 academic year, San Diego County had a high school graduation rate of 82.4 percent and awarded 7,247 associate’s degrees, 17,347 bachelor’s degrees, and 9,179 graduate degrees. During the same time period, Imperial County had a high school graduate rate of 89.5 percent and awarded 403 associate’s degrees, 187 bachelor’s degrees, and 19 graduate degrees.

### Table 13
**STUDENT ENROLLMENT (2007)**

<table>
<thead>
<tr>
<th>Student Enrollment</th>
<th>San Diego County</th>
<th>Imperial County</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Enrollment</td>
</tr>
<tr>
<td>Elementary Schools</td>
<td>431</td>
<td>232,046</td>
</tr>
<tr>
<td>Middle/Junior High Schools</td>
<td>101</td>
<td>91,897</td>
</tr>
<tr>
<td>High Schools</td>
<td>98</td>
<td>150,533</td>
</tr>
<tr>
<td>K-12</td>
<td>14</td>
<td>7,230</td>
</tr>
<tr>
<td>Special Education</td>
<td>13</td>
<td>1,223</td>
</tr>
<tr>
<td>Continuation</td>
<td>21</td>
<td>3,840</td>
</tr>
<tr>
<td>Other</td>
<td>53</td>
<td>7,247</td>
</tr>
<tr>
<td>Community Colleges</td>
<td>8</td>
<td>169,729</td>
</tr>
<tr>
<td>Four-Year and Graduate Colleges</td>
<td>7</td>
<td>108,386</td>
</tr>
</tbody>
</table>

Source: San Diego State University, California Postsecondary Education Commission; National Center for Education Statistics

2. **Housing**

Figure 19 and Figure 20 show the composition of housing units in San Diego and Imperial counties from 2000 through 2008. While San Diego County has substantially more housing (about 1.12 million units in 2008) than Imperial County (about 56,000 in 2008), both counties' housing stock is composed of about 60 percent single family housing. While San Diego County’s non-single family housing is composed primarily of multiple family housing (35 percent versus four percent for mobile homes), Imperial County’s non-single family housing is more evenly distributed between multiple family units (21 percent) and mobile homes (16 percent).

Figure 21 illustrates the substantially higher rate of increase in housing units in Imperial County through 2006. After 2006, Imperial County’s housing grow rate dropped to near San Diego County’s growth rate in 2008.
**FIGURE 19**

![SAN DIEGO COUNTY HOUSING UNITS (2000 – 2008)](chart19.png)

- Single Family Detached
- Single Family Attached
- 2 - 4 Unit Multiple Family
- 5 Plus Multiple Family
- Mobile Homes

*Source: California Department of Finance*

**FIGURE 20**

![IMPERIAL COUNTY HOUSING UNITS (2000 – 2008)](chart20.png)

- Single Family Detached
- Single Family Attached
- 2 - 4 Unit Multiple Family
- 5 Plus Multiple Family
- Mobile Homes

*Source: California Department of Finance*
Between 2000 and 2008, the housing vacancy rate remained at about four percent for San Diego County and about ten percent for Imperial County.

Table 14 illustrates the 2000 and 2008 housing units in the cities within Imperial County and San Diego County cities near the I-8 corridor. The City of Imperial with a 71 percent increase in housing units accounted for the largest percentage change of all Imperial County cities but Calexico’s 3,100 additional units was responsible for 42 percent of the countywide housing unit change over the time period. While San Diego County cities did not generally experience as large of percentage increases in housing units as Imperial County cities, the increase in the City of San Diego alone was three times the countywide increase in Imperial County.

<table>
<thead>
<tr>
<th>Cities</th>
<th>2000</th>
<th>2008</th>
<th>Change</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Imperial County Cities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brawley</td>
<td>7,038</td>
<td>8,577</td>
<td>1,539</td>
<td>21.9%</td>
</tr>
<tr>
<td>Calexico</td>
<td>6,983</td>
<td>10,101</td>
<td>3,118</td>
<td>44.7%</td>
</tr>
<tr>
<td>Calipatria</td>
<td>961</td>
<td>1,084</td>
<td>123</td>
<td>12.8%</td>
</tr>
<tr>
<td>El Centro</td>
<td>12,323</td>
<td>14,138</td>
<td>1,815</td>
<td>14.7%</td>
</tr>
<tr>
<td>Holtville</td>
<td>1,617</td>
<td>1,891</td>
<td>274</td>
<td>16.9%</td>
</tr>
<tr>
<td>Imperial</td>
<td>2,385</td>
<td>4,082</td>
<td>1,697</td>
<td>71.2%</td>
</tr>
<tr>
<td>Westmorland</td>
<td>667</td>
<td>756</td>
<td>89</td>
<td>13.3%</td>
</tr>
<tr>
<td>Rest of County</td>
<td>11,917</td>
<td>14,970</td>
<td>3,053</td>
<td>25.6%</td>
</tr>
<tr>
<td><strong>San Diego County Cities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>El Cajon</td>
<td>35,190</td>
<td>35,545</td>
<td>355</td>
<td>1.0%</td>
</tr>
<tr>
<td>La Mesa</td>
<td>24,943</td>
<td>25,279</td>
<td>336</td>
<td>1.3%</td>
</tr>
<tr>
<td>Lemon Grove</td>
<td>8,722</td>
<td>8,778</td>
<td>56</td>
<td>0.6%</td>
</tr>
<tr>
<td>San Diego</td>
<td>469,964</td>
<td>505,422</td>
<td>35,458</td>
<td>7.5%</td>
</tr>
</tbody>
</table>
### Cities 2000 2008 Change Percent Change

<table>
<thead>
<tr>
<th>Cities</th>
<th>2000</th>
<th>2008</th>
<th>Change</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Santee</td>
<td>18,824</td>
<td>19,528</td>
<td>704</td>
<td>3.7%</td>
</tr>
<tr>
<td>Rest of County</td>
<td>482,776</td>
<td>544,305</td>
<td>61,529</td>
<td>12.7%</td>
</tr>
</tbody>
</table>

Source: California Department of Finance

### Housing Affordability

The median price of existing homes sold in San Diego County was $300,000 and $175,000 in December 2008. Median monthly mortgages between 2005 and 2007 for San Diego County were $2,309 and $1,440 for Imperial County. Median monthly rent between 2005 and 2007 for San Diego County was $1,155 and $643 for Imperial County. Although housing was less expensive in Imperial County than in San Diego County, the percent of both owners and renters spending more than 30 percent of their income on housing was only slightly lower in Imperial County between 2005 and 2007 (see Table 15.)

### TABLE 15

**Percent Paying 30 Percent or More of Income for Housing (2005 – 2007)**

<table>
<thead>
<tr>
<th>Owners / Renters</th>
<th>San Diego County</th>
<th>Imperial County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owners with mortgage</td>
<td>52%</td>
<td>48%</td>
</tr>
<tr>
<td>Owners without mortgage</td>
<td>15%</td>
<td>13%</td>
</tr>
<tr>
<td>Renters</td>
<td>53%</td>
<td>51%</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau
3. Employment

Figure 22 and Figure 23 show the 2000 through 2008 labor forces and employed workers for San Diego and Imperial counties. While both counties experienced an overall upward trend in the size of the labor force (estimated at 1.57 million for San Diego County and 74,000 for Imperial County in 2008) and employed workers (estimated at 1.47 million for San Diego County and 57,000 for Imperial County in 2008), Imperial County’s labor force has continued to experience high rates of unemployment (see Figure 24). While Imperial County’s unemployment rate since 2000 was well below that experienced in the 1990s, the county’s unemployment rate is substantially above that of both San Diego County and California as a whole.

**Figure 22**


**Figure 23**

Imperial County Labor Force and Employed Workers (2000 – 2008)

Source: California Employment Development Department
While unemployment rates were higher in 2008 throughout southern California and southwestern Arizona, Imperial County had the highest unemployment rate (see Figure 25).

**Figure 25**

**Unemployment Rates by County (2008)**

Source: Arizona Department of Commerce and California Employment Development Department
Table 16 and Table 17 illustrate the employment by industry for the San Diego-Carlsbad-San Marcos Metropolitan Statistical Area (MSA) and El Centro MSA, respectively, from 1992 to 2007. Key differences between the two region’s employment distributions include:

- Farm employment accounts for 20 percent of the Imperial Valley’s jobs and one percent of the San Diego region’s;

- Goods producing (including manufacturing, accounts for 14 percent of the San Diego region’s jobs and eight of Imperial Valley’s;

- One-third of the Imperial Valley’s workers are employed by government, while 17 percent of the San Diego region are government employees; and

- Professional and business services account for 16 percent of the San Diego region’s jobs and five percent of the Imperial Valley.

**Table 16**


<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Farm</td>
<td>10,600</td>
<td>10,800</td>
<td>11,000</td>
<td>10,800</td>
<td>200</td>
</tr>
<tr>
<td>Goods Producing</td>
<td>157,200</td>
<td>169,300</td>
<td>189,000</td>
<td>189,700</td>
<td>32,500</td>
</tr>
<tr>
<td>Trade, Transportation and Utilities</td>
<td>168,700</td>
<td>187,700</td>
<td>208,600</td>
<td>223,000</td>
<td>54,300</td>
</tr>
<tr>
<td>Information</td>
<td>22,200</td>
<td>30,600</td>
<td>37,700</td>
<td>38,000</td>
<td>15,800</td>
</tr>
<tr>
<td>Financial Activities</td>
<td>61,100</td>
<td>62,300</td>
<td>75,000</td>
<td>80,400</td>
<td>19,300</td>
</tr>
<tr>
<td>Professional and Business Services</td>
<td>123,100</td>
<td>155,200</td>
<td>201,700</td>
<td>216,500</td>
<td>93,400</td>
</tr>
<tr>
<td>Educational and Health Services</td>
<td>92,900</td>
<td>102,900</td>
<td>119,700</td>
<td>128,800</td>
<td>35,900</td>
</tr>
<tr>
<td>Leisure and Hospitality</td>
<td>109,200</td>
<td>116,200</td>
<td>133,800</td>
<td>160,900</td>
<td>51,700</td>
</tr>
<tr>
<td>Other Services</td>
<td>34,000</td>
<td>38,000</td>
<td>45,600</td>
<td>48,800</td>
<td>14,800</td>
</tr>
<tr>
<td>Government</td>
<td>179,300</td>
<td>192,000</td>
<td>219,700</td>
<td>222,100</td>
<td>42,800</td>
</tr>
</tbody>
</table>

Source: California Employment Development Department

**Table 17**

**EL CENTRO MSA EMPLOYMENT BY INDUSTRY (1992 – 1997)**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Farm</td>
<td>12,000</td>
<td>13,900</td>
<td>10,100</td>
<td>11,800</td>
<td>-200</td>
</tr>
<tr>
<td>Goods Producing</td>
<td>3,700</td>
<td>3,000</td>
<td>4,300</td>
<td>4,500</td>
<td>800</td>
</tr>
<tr>
<td>Trade, Transportation and Utilities</td>
<td>8,500</td>
<td>8,400</td>
<td>9,600</td>
<td>11,100</td>
<td>2,600</td>
</tr>
<tr>
<td>Information</td>
<td>400</td>
<td>500</td>
<td>400</td>
<td>400</td>
<td>0</td>
</tr>
<tr>
<td>Financial Activities</td>
<td>1,300</td>
<td>1,300</td>
<td>1,400</td>
<td>1,400</td>
<td>100</td>
</tr>
<tr>
<td>Professional and Business Services</td>
<td>2,300</td>
<td>2,200</td>
<td>2,100</td>
<td>2,700</td>
<td>400</td>
</tr>
</tbody>
</table>
C. LAND USE AND ENVIRONMENTAL RESOURCES

1. Land Uses Adjacent to the I-8 Corridor

The land uses along the 153-mile I-8 study corridor range from suburban communities bordering the San Diego metropolitan region to the west, to public lands and Indian tribal lands through the majority of the central segment, to rural and urbanizing communities in the Imperial Valley (see Figure 26). Table 18 and Table 19 provide a listing of land uses within a half-mile radius on either side (north and south) of I-8 from the 2nd Street in El Cajon to the Arizona border by for San Diego and Imperial counties, respectively. The following summarizes the existing land uses by county:

- **San Diego County.** From the 2nd Street Interchange to the Los Coches Interchange, the surrounding area is developed with dense residential, commercial, and industrial uses typical of most urban areas. Further east the land uses transitions to a predominantly rural residential setting with more schools and open space mixed in with ranch style properties. The rural character continues east to approximately the West Willows Road Interchange exit where the Viejas Indian lands begin. Besides the area immediately surrounding the Viejas casino and Pine Valley, sparse residential properties and open space exist along the I-8 corridor, including the mountainous areas of Cleveland National Forest, until it leads into Imperial County.

- **Imperial County.** The I-8 winds through the hills and valleys of Anza Borrego State Park as it descends into Imperial County. As the corridor straightens out into the valley, the land is generally undeveloped desert with the exception of the small town of Ocotillo and the occasional single family home or mobile home. Agricultural uses are predominant at the Dunaway Road Interchange in the town of Thermal, and continuing east along the corridor for several miles until I-8 enters into the City of El Centro where the land uses are urbanized and include residential, commercial, and industrial uses. Agriculture land uses persist further east of El Centro until SR-98 where the desert is undeveloped for many miles. This area contains barren desert land and dunes until the corridor passes SR-186 and approaches Winterhaven Drive in the City of Winterhaven. Land uses outside Winterhaven primarily consists of agricultural uses. Within the city, single-family residential uses are located to the north and a small RV park is located to the south. From SR-186 to the Arizona border, the Colorado River runs parallel and to the south of I-8, as well as an open space buffer.

### Table 18

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Educational and Health Services</td>
<td>1,800</td>
<td>2,200</td>
<td>2,400</td>
<td>2,900</td>
<td>1,100</td>
</tr>
<tr>
<td>Leisure and Hospitality</td>
<td>2,600</td>
<td>2,800</td>
<td>2,900</td>
<td>3,500</td>
<td>900</td>
</tr>
<tr>
<td>Other Services</td>
<td>800</td>
<td>700</td>
<td>1,000</td>
<td>1,200</td>
<td>400</td>
</tr>
<tr>
<td>Government</td>
<td>10,800</td>
<td>14,000</td>
<td>16,700</td>
<td>18,200</td>
<td>7,400</td>
</tr>
</tbody>
</table>

Source: California Employment Development Department
This page intentionally left blank.
Figure 26

Generalized Land Use

Legend
- 5 Mile Buffer of I-8 Corridor Study Area
- I-8 Corridor Study Area

Generalized Land Use
- Residential
- Commercial and Office
- Industrial
- Public Facilities and Utilities
- Open Space/Parks
- Agriculture
- Undeveloped
- Water

Source: ESRI, 2008; Caltrans, 2007; PMC, 2008; Census, 2000; SANDAG, 2008; Imperial County, 2007

T:\_GIS\SAN_DIEGO_COUNTY\MXDS\I8 CORRIDOR\LAND_USE.MXD - 8/25/2008 @ 1:59:25 PM

Start: 2nd Street Interchange

End: Arizona Border

5 0 5 MILES
TABLE 18
SAN DIEGO COUNTY LAND USES WITHIN ONE HALF-MILE RADIUS OF I-8 (2008)

<table>
<thead>
<tr>
<th>Limits</th>
<th>North Side</th>
<th>South Side</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenfield Drive to Los Coches Road</td>
<td>SRR, SFD, SFA, MH, MF, CO, TCU, I, R, OSP, U</td>
<td>SRR, SFD, SFA, SC, CO, R OSP, U</td>
</tr>
<tr>
<td>Los Coches Road to Lake Jennings Park Road</td>
<td>SRR, SFD, SFA, MH, CO, HI, LI, TCU, I, R, IA, EA, U</td>
<td>SRR, SFD, SFA, MF, SC, CO, I, R, OSP, IA, U</td>
</tr>
<tr>
<td>Lake Jennings Park Road to Harbison Canyon Lane</td>
<td>SRR, SFD, MH, CO, HI, LI, TCU, I, R, IA, EA, U</td>
<td>SRR, SFD, MH, CO, HI, LI, E, R, OSP, U</td>
</tr>
<tr>
<td>Harbison Canyon Lane to Tavern Road</td>
<td>SRR, CO, LI, EI, TCU, E, I, R, OSP, IA, U</td>
<td>SRR, SFD, MF, CO, LI, E, I, U</td>
</tr>
<tr>
<td>West Willows Road to East Willows Road</td>
<td>SRR, SFD, MH, CO, I, R (Viejas Casino), OSP, EA, U</td>
<td>SRR, OSP, U</td>
</tr>
<tr>
<td>East Willows Road to Japatul Valley Road (SR-79)</td>
<td>SRR, EA, U</td>
<td>SRR, I, U</td>
</tr>
<tr>
<td>Japatul Valley Road (SR-79) to Pine Valley Road</td>
<td>SRR, SFD (Pine Valley), I, EA, U</td>
<td>TCU, OSP, EA, U</td>
</tr>
<tr>
<td>Pine Valley Road to Sunrise Highway</td>
<td>SFD, CO, E, I, OSP, EA, U</td>
<td>U</td>
</tr>
<tr>
<td>Sunrise Highway to Buckman Springs Road</td>
<td>U</td>
<td>TCU, I, U</td>
</tr>
<tr>
<td>Buckman Springs Road to Kitchen Creek Road</td>
<td>EA, U</td>
<td>R, EA, U</td>
</tr>
<tr>
<td>Kitchen Creek Road to Crestwood Road</td>
<td>SRR, I, OSP, EA, U</td>
<td>SRR, CO, OSP, EA, U</td>
</tr>
<tr>
<td>Crestwood Road to SR-94</td>
<td>SRR, EA, U</td>
<td>SRR, CO, R, EA, U</td>
</tr>
<tr>
<td>SR 94 to Carrizo Jorge Road</td>
<td>SRR, R, OSP, U</td>
<td>SRR, CO, TCU, I, R, EA, U</td>
</tr>
<tr>
<td>Carrizo Jorge Road to In-Ko-Pah Park Road</td>
<td>OSP, U</td>
<td>OSP, U</td>
</tr>
</tbody>
</table>

SRR – Spaced Rural Residential; SFD – Single Family Detached; SFA – Single Family Attached; MH – Mobile Homes; MF – Multiple Family; SC – Shopping Center; CO – Commercial/Office; HI – Heavy Industrial; LI – Light Industrial; EI – Extractive Industry; TCU – Transportation, Communications, Utilities; E – Education; I – Institutional; M – Military; R – Recreation; OSP – Open Space Parks; IA – Intensive Agriculture; EA – Extensive Agriculture; U – Undeveloped; W – Water
### Table 19
**Imperial County Land Uses Within One Half-Mile Radius of I-8 (2008)**

<table>
<thead>
<tr>
<th>Limits</th>
<th>North Side</th>
<th>South Side</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-Ko-Pah Park Road to Mountain Springs Road</td>
<td>CA (Anza Borrego State Park / desert wilderness)</td>
<td>CA (Anza Borrego State Park / desert wilderness)</td>
</tr>
<tr>
<td>Mountain Springs Road to SR-98</td>
<td>CA (Anza Borrego State Park / desert wilderness)</td>
<td>CA (Anza Borrego State Park / desert wilderness)</td>
</tr>
<tr>
<td>SR-98 to Imperial Highway</td>
<td>CA (Ocotillo located at I-8 and Imperial Highway; single family residential)</td>
<td>CA (Undeveloped except for a few residential units)</td>
</tr>
<tr>
<td>Imperial Highway to Dunaway Road</td>
<td>CA (undeveloped), R/OS</td>
<td>CA (undeveloped), R/OS</td>
</tr>
<tr>
<td>Dunaway Road to Drew Road</td>
<td>R/OS, A</td>
<td>R/OS, A</td>
</tr>
<tr>
<td>Drew Road to Forrester Road</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Forrester Road to Imperial Avenue</td>
<td>A, UA (El Centro; Single Family, Multiple Family, Educational, Commercial, and Light Industrial)</td>
<td>A, UA (Only one single family residential development just before Imperial Avenue)</td>
</tr>
<tr>
<td>Imperial Avenue to 4th Street</td>
<td>UA (El Centro continues)</td>
<td>UA (Lower density than north; Single Family, Commercial and Undeveloped)</td>
</tr>
<tr>
<td>4th Street to Dogwood Road</td>
<td>UA (Single Family and Undeveloped)</td>
<td>UA (Commercial and Undeveloped)</td>
</tr>
<tr>
<td>Dogwood Road to SR-111</td>
<td>UA (Rural Residential and Agriculture)</td>
<td>UA, SPA (Rural Residential and Agriculture)</td>
</tr>
<tr>
<td>SR-111 to Bowker Road</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Bowker Road to Orchards Road</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Orchards Road to Bonds Corner Road</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Bonds Corner Road to SR-115</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>SR-115 to SR-98</td>
<td>A, R/OS (Desert Lands)</td>
<td>A, R/OS (Desert Lands)</td>
</tr>
<tr>
<td>SR-98 to Brock Center Road</td>
<td>R/OS</td>
<td>R/OS</td>
</tr>
<tr>
<td>Brock Center Road to Gordon Well Road</td>
<td>R/OS</td>
<td>R/OS</td>
</tr>
<tr>
<td>Gordon Well Road to Ogilby Road</td>
<td>R/OS (Dunes)</td>
<td>R/OS (Dunes)</td>
</tr>
<tr>
<td>Ogilby Road to Sidewinder Road</td>
<td>R/OS (With a few parcels of Agriculture)</td>
<td>R/OS</td>
</tr>
<tr>
<td>Sidewinder Road to SR-186 (South Algodones Road)</td>
<td>R/OS</td>
<td>R/OS</td>
</tr>
<tr>
<td>SR-186 (South Algodones Road) to Winterhaven Drive</td>
<td>R/OS, A</td>
<td>R/OS, A (Undeveloped open space as buffer for Colorado River)</td>
</tr>
<tr>
<td>Winterhaven Drive to 4th Avenue</td>
<td>A, UA (Mostly Agriculture with small area of Single Family Residential; Winterhaven)</td>
<td>A, UA (Small RV park and undeveloped open space around Colorado River)</td>
</tr>
<tr>
<td>4th Avenue to Arizona Border</td>
<td>A</td>
<td>A</td>
</tr>
</tbody>
</table>

A – Agriculture; CA – Community Area; R/OS – Recreation/Open Space; SPA – Special Plan Area; UA – Urban Area
2. Noteworthy Land Uses

There are a number of land uses worthy of note along the I-8 corridor that are major vehicle trip generators and/or attractors. These include Tribal Casinos, the Imperial San Dunes Recreation Area, U.S.-Mexico Ports of Entry, and major employers. Each provides a unique profile of traffic, economic, and other issues that affect the I-8 corridor.

**Tribal Casinos**

SANDAG has identified seven tribal governments in San Diego County that use the I-8 as their primary corridor for accessing their reservations:

- Barona Band of Mission Indians,
- Campo Band of Kumeyaay Indians,
- Ewiiaapaayp Band of Kumeyaay Indians,
- Jamul Indian Village, La Posta Band of Mission Indians,
- Manzanita Band of Kumeyaay Indians,
- Sycuan Band of the Kumeyaay Nation, and
- Viejas Band of Kumeyaay Indians.

In addition, the freeway bisects the Fort Yuma Quechan Indian Reservation at the eastern end of the I-8 corridor in Imperial County.

In addition to the general travel needs of residents of these reservations, these casinos also employ over 9,000 workers, many of whom use the I-8 for intra- and interregional travel needs (see **Table 20**). This workforce is the equivalent of 15 percent of all Imperial County jobs.

<table>
<thead>
<tr>
<th>Tribe</th>
<th>Casino Name</th>
<th>Year Opened</th>
<th>Operation Square Footage</th>
<th>Restaurants</th>
<th>Gaming Floor Square Footage</th>
<th>Gaming Machines; Tables</th>
<th>Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barona Band of Mission Indians</td>
<td>Barona Valley Ranch Resort and Casino</td>
<td>1994</td>
<td>712,000</td>
<td>9</td>
<td>310,000</td>
<td>2,000; 63</td>
<td>3,500</td>
</tr>
<tr>
<td>Campo Band of Kumeyaay Indians</td>
<td>Golden Acorn Casino</td>
<td>2001</td>
<td>60,000</td>
<td>1</td>
<td>40,000</td>
<td>750; 12</td>
<td>485</td>
</tr>
</tbody>
</table>

---

<table>
<thead>
<tr>
<th>Tribe</th>
<th>Casino Name</th>
<th>Year Opened</th>
<th>Operation Square Footage</th>
<th>Restaurants</th>
<th>Gaming Floor Square Footage</th>
<th>Gaming Machines; Tables</th>
<th>Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>La Posta Band of Kumeyaay Indians</td>
<td>La Posta Casino</td>
<td>2007</td>
<td>TBD</td>
<td>2</td>
<td>20,000</td>
<td>349; TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>Quechan Tribe of the Fort Yuma Quechan Indian Reservation</td>
<td>Paradise Casino</td>
<td>TBD</td>
<td>TBD</td>
<td>1</td>
<td>TBD</td>
<td>425; TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>Quechan Tribe of the Fort Yuma Quechan Indian Reservation</td>
<td>Quechan Casino Resort</td>
<td>Est. 2009</td>
<td>265,000</td>
<td>4</td>
<td>TBD</td>
<td>990; 24; TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>Sycuan Band of the Kumeyaay Nation</td>
<td>Sycuan Casino and Resort</td>
<td>1983</td>
<td>233,000</td>
<td>6</td>
<td>115,000</td>
<td>2,000; 63; 2,500</td>
<td>2,500</td>
</tr>
<tr>
<td>Viejas Band of Kumeyaay Indians</td>
<td>Viejas Casino and Turf Club</td>
<td>1991</td>
<td>285,000</td>
<td>5</td>
<td>95,000</td>
<td>2,240; 96; 2,800</td>
<td>2,800</td>
</tr>
</tbody>
</table>

Source: SANDAG 2007 Regional Transportation Plan Issue Paper: Tribal Nations and Regional Transportation Planning. October 26, 2006; 500nations.com; quechancasinosresort.com
Imperial Sand Dunes Recreation Area

There are significant sand dune recreational areas northeast of El Centro that represent a seasonal destination for off-road enthusiasts. About seven percent of the average annual daily traffic along I-8 west of the dunes and about one percent of the average annual daily traffic along I-8 east of the dunes are recreation users coming to or from Imperial Dunes Recreation Area. The impact of dunes users on I-8 is greater than that suggested by the annual averages, given that usage of the dunes is generally limited to between mid-October and mid-April. Table 21 shows that the six peak holiday seasons accounted to 50 percent of the visits, with the Thanksgiving week accounting for twelve percent of the annual attendance.

In a study prepared for the United Desert Gateway and the U.S. Bureau of Land Management, a profile of current visitors to the Imperial Sand Dunes Recreation Area was created. The typical visitor to the dunes:

- will visit the dune multiple times (almost six visits per year on average);
- will spend considerable time (18 days on average) at the dunes;
- has been visiting the dunes for a considerable number of years (14 years on average);
- will travel with others (four people per vehicle on average).

**Table 21**

<table>
<thead>
<tr>
<th>Peak Period</th>
<th>Duration (Days)</th>
<th>Percent of Annual Attendance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Halloween</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Thanksgiving</td>
<td>8</td>
<td>12</td>
</tr>
<tr>
<td>New Year</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>Martin Luther King’s Birthday</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>Presidents’ Day</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>Easter</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>Non-holiday (October - May)</td>
<td>n/a</td>
<td>50</td>
</tr>
</tbody>
</table>

Source: U.S. Bureau of Land Management

Based on this data, substantial congestion during the off-road season could occur as visitors arrive and leave from the recreational area. For example, activities during the Thanksgiving weekend could draw about 36,000 vehicles, assuming 1.2 million annual visitors and an average occupancy of four persons per vehicle.

6 Environmental documents for the Imperial Dunes Recreation Area Management Plan.
Border Crossing

In 2004, 10 million passenger vehicles entered into Imperial County via Ports of Entry along the U.S.-Mexico border. Table 22 lists personal vehicles, pedestrians, and trucks at Ports of Entry along the I-8 corridor in 2007.

According to an economic impacts analysis of Mexican visitors to the U.S., shopping is the primary reason to cross for more than two-thirds of Mexican nationals, spending a little over $1 billion in Imperial County.7 Other reasons for crossing the border include social activities such as visiting family and friends, or are work related. Around 80 percent of crossers enter in their private vehicles since a car allows them freedom of movement between different shopping locations in the U.S. as well as enough room to handle the volume of their purchases.

Although the number of visitors and their spending has a substantial impact on the Imperial County economy, the related traffic impacts along the I-8 corridor are minimized by the location of shopping opportunities between the border and the freeway (e.g., Calexico and the Imperial Valley Mall) and the long border wait times that restrict the flow of incoming vehicles.

### Table 22
**Ports of Entry Traffic Volumes (2007)**

<table>
<thead>
<tr>
<th>Port of Entry</th>
<th>Personal Vehicles</th>
<th>Pedestrians</th>
<th>Trucks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tecate-Tecate</td>
<td>872,943</td>
<td>547,290</td>
<td>77,320</td>
</tr>
<tr>
<td>Calexico-Mexicali</td>
<td>5,747,309</td>
<td>5,290,977</td>
<td>-</td>
</tr>
<tr>
<td>Calexico East-Mexicali</td>
<td>3,417,977</td>
<td>9,429</td>
<td>323,348</td>
</tr>
<tr>
<td>Andrade-Algodones</td>
<td>546,648</td>
<td>1,538,028</td>
<td>478</td>
</tr>
</tbody>
</table>

Source: U.S. Department of Transportation, Bureau of Transportation Statistics

Major Employers

Table 23 lists the largest employers in along the I-8 corridor, which represent other important trip generators.

### Table 23
**Major Employers Along I-8 Corridor (2007)**

<table>
<thead>
<tr>
<th>Employer Name</th>
<th>Location</th>
<th>Industry</th>
<th>Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barona Valley Ranch and Casino</td>
<td>Lakeside</td>
<td>Casinos</td>
<td>1,000-4,999</td>
</tr>
<tr>
<td>Sycuan Casino and Resort</td>
<td>El Cajon</td>
<td>Casinos</td>
<td>1,000-4,999</td>
</tr>
<tr>
<td>B C Harvesting</td>
<td>Holtville</td>
<td>Harvesting Contract</td>
<td>500-999</td>
</tr>
<tr>
<td>Brawley Beef</td>
<td>Brawley</td>
<td>Meat Packers</td>
<td>500-999</td>
</tr>
<tr>
<td>Centinela State Prison</td>
<td>Imperial</td>
<td>State Government – Correctional Institutions</td>
<td>1,000-4,999</td>
</tr>
</tbody>
</table>

3. Environmental Resources Adjacent to the I-8 Corridor

The I-8 freeway corridor is rich in environmental resources that must be considered as transportation, land use, or economic development strategies are considered. For example, there are abundant natural lands that are home to indigenous wildlife. These environmental resources include:\(^8\)

- **Vegetation**: In the Cleveland National Forest and Laguna Mountains, there are sage scrub, chaparral, grassland, oak, Jeffrey pine, and riparian and mountain alder woodlands. Once in the desert, the vegetation primarily consists of creosote, saltbush and cholla-prickly pear.

- **Architectural, Archeological, and Native American Resources**: The I-8 corridor runs adjacent to the Viejas Indian Reservation and crosses the La Posta and Campo Indian Reservations. Prehistoric archeological resources located along this corridor include habitation sites, temporary camps, rock shelters, rock art sites, lithic and ceramic scatters, bedrock milling features, ceremonial features, and isolated finds. Historic archeological resources consist of trash scatters and dumps, foundations, stacked rock walls, machinery, dams and segments of Old Highway 80. The Corridor’s eastern segment transects the Table Mountain Area of Critical Environmental Concern (ACEC) which has archeological resources and the Yuha Basin ACEC, which has prehistoric and historic cultural attributes including geoglyphs which are particularly significant. An area of noteworthy geoglyphs is located just west of the proposed Imperial Valley airport site. In addition, the Yuha Basin ACEC is valued for Spanish explorer Juan Bautista de Anza’s 1770’s expeditions of the region.

- **Visual Resources**: The western segment of the corridor is largely urbanized and visually dominated by the built environment: buildings, roadways, structures and ornamental landscaping. Uninterrupted or unobstructed view sheds are relatively limited. As the corridor moves eastward, the visual setting is more suburban and rural in nature, with

views characterized primarily by undeveloped natural topography and structures that are primarily residential or business/retail centers. This view shed is observed by motorists, business patrons and residents. In the far easterly segment, the visual setting is dominated by undeveloped, natural lands and an unobstructed view shed observed primarily by motorists.

- **Biological Section 4(f) Resources:** The I-8 corridor extends through numerous areas with 4(f) resources, including the City of San Diego Urban Area and Eastern Area Multi-Habitat Planning Areas (MHPAs), Mission Trails Regional Park, East County Multiple Species Conservation Program (MSCP) Subarea Plan, Cleveland National Forest, Carrizo Gorge Wilderness Area, Anza Borrego Desert State Park, and BLM public lands, including the Jacumba National Cooperative Land and Wildlife Management Area, and Table Mountain ACEC. Imperial County includes the BLM’s Yuha Basin ACEC, which was designated to protect and prevent irreparable damage to important historic, cultural, or scenic and wildlife resources. The Yuha Basin ACEC hosts the flat-tailed horned lizard management area.

D. **LOOKING AHEAD**

1. **Projected Growth**

As is illustrated in Figure 27 and Figure 28, the combined populations of San Diego and Imperial counties are projected to approach five million people by 2050. This represents a 160 percent increase of the 2000 San Diego County population (to a projected 4.5 million in 2050) and a 270 percent increase of Imperial County’s 2000 population to almost 388,000 people by 2050.

![Figure 27: Projected San Diego County Population Growth (2000 – 2050)](image)

*Source: California Department of Finance*
Although SCAG and SANDAG forecasts do not extend to the 2050 horizon illustrated in the projection of future population provided by the California Department of Finance, projects for related housing and jobs indicate that San Diego County and Imperial County are projected to continue to balance job and housing growth into the future (post 2030) (see Figure 29).
2. Planned Improvements

Planned improvements along the I-8 corridor will help to improve the capacity along this vital east-west route. These commitments have been formalized in SANDAG's 2030 Regional Transportation Plan: Pathways for the Future (2030 RTP) and Imperial County's 2007 Transportation Plan Highway Element. In addition, SANDAG's 2008 Regional Transportation Improvement Program has identified construction of a third eastbound lane from 2nd Street to Greenfield Drive, which is anticipated to begin construction in late summer 2009. Key improvements along the I-8 corridor identified in the above listed transportation plans are summarized below.

SANDAG 2030 RTP

SANDAG’s 2030 RTP identified two widening projects along I-8. The first project listed under the “Reasonably Expected Revenue Scenario,” would widen I-8 from four to six lanes from 2nd Street to Los Coches Road by 2030. The second project is listed under the “Unconstrained Needs Network,” and would widen I-8 to six lanes from Los Coches Road to Dunbar Road.

Imperial County 2007 Transportation Plan Highway Element

The Imperial County 2007 Transportation Plan Highway Element identifies four near-term (through 2015) and mid-term (2015 through 2025) interchange projects that would impact the I-8 corridor and one long-term (post-2025) interchange project. In addition, Imperial County’s Highway Element calls for widening I-8 to six lanes from Forrester Road to SR-111 after 2025 and moving ahead on several interchange projects.

Near-term interchange projects:

- Dogwood Road / I-8 Interchange: This project will provide a full interchange at Dogwood Road and I-8. The existing facility consists of a two-lane bridge over I-8, and access to and from I-8 via single lane at-grade ramps. The project will provide a four-lane bridge and expanded width ramps according to modern standards. This project will also accommodate the future expansion of Dogwood Road to a four-lane prime arterial.

- Imperial Avenue / I-8 – full interchange: This project will provide a full interchange at Imperial Avenue and I-8. The existing facility consists of a two-lane bridge over I-8, and single-lane at-grade access ramps. The project will provide access to the segment of Imperial Avenue south of I-8, where there is currently no access. The project will provide a four-lane bridge and expanded width ramps according to modern standards. This project will also accommodate the Imperial Avenue connection to the north.

Mid-term interchange projects:

- Austin Road / I-8 – construct full interchange: This project will provide a full interchange at Austin Road and I-8. Currently, there is no access to I-8 at Austin Road. The Austin Road existing facility consists of a two-lane roadway passing under I-8, immediately west of the I-8 bridges that cross over an irrigation canal.

- Bowker Road / I-8 – improve interchange: This project will provide improvements to the interchange at Bowker Road and I-8. The existing facility consists of a two-lane bridge over I-8, and single-lane at-grade access ramps.
Long-term interchange projects:

- SR-186 / I-8 – interchange improvements (funded through the Fort Yuma Quechan Indian Reservation – Quechan Indian Casino Project): This project will provide improvements to the interchange at SR-186 and I-8. The existing facility consists of a two-lane bridge over I-8, and single-lane at-grade access ramps.

3. Projected Levels of Service

While future traffic volumes on the I-8 are projected to increase, planned improvements are expected to help maintain acceptable levels of service (LOS D or better) through nearly all of the I-8 corridor study area. At the western end of the study area in San Diego County, the segment from Main Street to 2nd Street is projected to operate at level of service E/F in 2030. However, the segment from the Los Coches Road Interchange to the Main Street Interchange would operate at level of service D or better in 2030 (see Figure 30) with the implementation of SANDAG’s planned widening of I-8 from 2nd Street to Los Coches.

4. Other Considerations

The following possible developments, if implemented, are anticipated to worsen traffic conditions on the I-8 corridor. These developments are not factored into future traffic conditions described in Section 3.

Mega-Region Initiative

The Mega-Region Initiative is an economic development initiative, developed by collaboration between San Diego and Imperial counties and Baja California. The Mega-Region Initiative analyzed the infrastructure and workforce needs for the following five target industry sectors: 1) Cleantech (Alternative and Renewable Energy), 2) Logistics (Warehousing and Transportation), 3) Specialized Manufacturing, 4) Construction Materials, and 5) Applied Biotech (Biotechnology, Bio-Agriculture and Medical Devices).

Funded through a grant from the U.S. Department of Commerce’s Economic Development Administration that expires in April 2009, the Mega-Region Initiative has identified the following action items for the region’s workforce: 1) align educational systems, accreditation and career guidance, emphasizing high-tech and cleantech, with input from industry, 2) reform immigration policies including short- and long-term work visas, 3) create a mega-region biotech center. The following action items have been identified for the region’s infrastructure: 1) create coordinated plan for sustainable energy and water development, 2) make border crossings more secure and efficient (including supporting Smart Border 2010), and 3) coordinate air, road, rail and maritime transportation planning to improve movement of goods. Anticipated next steps for the Mega-Region Initiative include a branding and marketing campaign for San Diego, Imperial Valley, and the Baja California region.

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Comprehensive Economic Development Strategy

The Comprehensive Economic Development Strategy is designed to bring together public and private sectors in the creation of an economic development roadmap for diversifying and strengthening the regional economies of San Diego and Imperial counties. The main focus of the effort is to identify issues and opportunities and create economic strategies based in what San Diego and Imperial counties have in common including but not limited to the international border, the I-8 corridor, job housing-workforce, and shared water source issues.

Funded through a grant from the U.S. Department of Commerce’s Economic Development Administration awarded to the South County [San Diego] Economic Development Council, a draft of the Comprehensive Economic Development Strategy is anticipated to be available in June 2009.

Punta Colonet

The planned maritime port in Punta Colonet, located 70 miles south of Ensenada, Baja California, is envisioned as a facility comparable to the combined Ports of Los Angeles and Long Beach, handling up to 10,000 cargo containers a day. The port would be served by rail that would cross into the U.S. somewhere in the Southwest. While the exact alignment of the connection to the U.S. has not been finalized, a connection to both San Diego and Imperial counties is possible.

Silicon Border

Silicon Border, a planned 10,000 acre high-tech manufacturing complex near Mexicali, is envisioned as a future center for the construction of semiconductors, flat panel displays, and solar industries.

The Mega-region initiative could alter the circulation patterns of domestic and international surface transportation in the study area. These activities need to be monitored and factored into future growth plans for the region.

Jacumba-Jacume Port of Entry Study

The Jacumba-Jacume Port of Entry Study investigated the feasibility of opening an international Port of Entry at Jacumba, where the I-8 freeway is closest to the border in eastern San Diego County. On the Baja California side of the border, Jacume is six miles north of Federal Highway 2, both the older “free” road and the new toll road. The study examined the potential use for the proposed border entry by commercial and passenger vehicles needing easy access to the two major highways. The study recommended continued monitoring of the area for the potential development of a Port of Entry. If implemented, this could bring more traffic to the I-8 corridor. In addition, any future expansion to the Tecate Port of Entry could also generate additional traffic to the I-8 corridor.

SDG&E Powerlink

On December 18, 2008, the California Public Utilities Commission approved SDG&E’s application to construct the Sunrise Powerlink. Figure 31 showing the approved route. SDG&E also received approval from the Bureau of Land Management for the final permits for crossing federal land. It is anticipated that construction of this project will commence in mid-2010. In addition to Sunrise, SDG&E and its parent company, Sempra Energy are working on a number of other projects
Figure 30
Future Level of Service (2030)

Legend
Future Level of Service (2030)
- A-D
- F

Start: SR 67
End: Arizona Border

Source: ESRI, 2008; Caltrans, 2007; SANDAG, 2007; IVAG, 2008; PMC, 2008

T:\_GIS\SAN_DIEGO_COUNTY\MXDS\I8 CORRIDOR\FUTURE LEVEL OF SERVICE.MXD - 8/8/2008 @ 9:56:36 AM
within the I-8 corridor. These would include a number of wind energy projects in the mountain areas of eastern San Diego County and northern Baja California. In order to tie these generation projects into the transmission lines, either Sunrise or the Existing Southwest Powerlink (SWPL), at least one new substation (The Eco-Substation) will be built in eastern San Diego County, as well as expansion of the existing Boulevard Substation. Sempra has applied for a Presidential Permit for the interconnection line from the La Rumorosa wind project, crossing the border to connect with the SWPL line. It is likely that the availability of transmission capacity on both the Sunrise and SWPL lines will spur the development of new renewable generation projects within the I-8 Corridor planning area. Such development, both in the construction and operational phases will undoubtedly create impacts to existing surface transportation infrastructure.

Relocation of Imperial County Airport

A recent study found it is feasible to relocate the existing Imperial County east of El Centro and south of I-8. This facility would provide air cargo, commercial airline service, and general aviation services. Opening of the new airport is anticipated to occur in the next ten years.

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10 Imperial County Airport Feasibility Study/Site Analysis Study. www.coffmanassociates.com.
IV. INTERREGIONAL PUBLIC SURVEY

A. OVERVIEW

To complement the existing conditions data from Chapter III, the Strategic Plan includes a survey of the traveling public to better understand the profile of those who use the I-8 freeway on a recurrent or non-current basis. This is vital to crafting strategies that respond to the needs or motivations for those who either use the freeway or could use the freeway in the future.

To that end, two opinion surveys were conducted in August and September of 2008. The first study, a survey of Imperial County residents, was conducted using traditional telephone interviewing methods and was designed to address: (1) perceived quality of life in Imperial County; (2) current commute patterns; (3) future commute patterns; and (4) non work-related travel. While this survey recognized that the majority of residents do not use the I-8 freeway for interregional travel, the intent was to gain insight into any issues that could change their travel behavior and turn them into long-distance users of the I-8 freeway in the future.

The second study, an automated telephone survey or Interactive Voice Response (IVR) survey, specifically targeted users of the I-8, the primary corridor linking Imperial and San Diego counties. This was a direct attempt to understand who uses the freeway and what motivates those to the long, 100 plus mile one-way travel associated with driving between San Diego and Imperial counties, and vice-versa.

B. METHODOLOGY

The Imperial County Residential Survey included interviews with 401 Imperial County residents, yielding an overall margin of error of +/-5 percent at the 95 percent confidence level. The margin of error was larger for some analyses, depending on the number of respondents who answered particular questions. A total of 264 surveys were conducted with English-speaking residents and 137 with Spanish-speaking residents. Telephone numbers were generated using random-digit-dialing, whereby telephone prefixes for the county were identified and the remaining four digits were randomly generated. All respondents were 18 years or older. The telephone survey was conducted between August 6 and September 1, 2008.

The I-8 Traveler Survey included automated telephone interviews with 486 drivers, also yielding an overall margin of error of +/-5 percent at the 95 percent confidence level. The margin of error was larger for some analyses, depending on the number of respondents who answered particular questions. A total of 457 surveys were conducted with English-speaking drivers and 29 with Spanish-speaking drivers. Postcards inviting drivers to call a toll free telephone number were distributed at the Homeland Security’s Customs and Border Protection Checkpoint located near Pine Valley during the morning and afternoon peak periods from Tuesday, September 9th through Thursday September 11. Survey times were selected to target I-8 commuters, individuals who regularly travel the corridor and whose behavior might be addressed by public policy. A total of 5,125 invitations were distributed, and 486 collected, yielding a response rate of 9 percent. This response rate is likely under-estimated since invitation postcards may have been distributed to respondents who had already completed the survey.

All respondents who completed the survey were entered to win a drawing for a $500 gas card.
IV. INTERREGIONAL PUBLIC SURVEY

Completed surveys were screened to determine whether any of the completed surveys came from the same telephone number. A total of 45 cases were removed from the original database of 531, determined to be duplicate cases.

Table 24 presents the number of surveys completed during each time period.

<table>
<thead>
<tr>
<th></th>
<th>a.m. shift</th>
<th>p.m. shift</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuesday</td>
<td>132</td>
<td>78</td>
<td>210</td>
</tr>
<tr>
<td>Wednesday</td>
<td>69</td>
<td>93</td>
<td>162</td>
</tr>
<tr>
<td>Thursday</td>
<td>52</td>
<td>62</td>
<td>114</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>253</strong></td>
<td><strong>233</strong></td>
<td><strong>486</strong></td>
</tr>
</tbody>
</table>

Table 24
DISTRIBUTION OF I-8 TRAVELER SURVEYS COLLECTED BY DAY AND TIME: RESPONDENTS OVERALL (2008)

Report Organization

Findings for the Residential Survey are presented first, followed by findings for the I-8 Traveler Survey.

The Residential Survey findings are organized as follows:

- Profile of residents surveyed;
- Current commute patterns;
- Future commute patterns;
- Super commuters; and,
- Non-work travel.

The I-8 Traveler Survey findings are organized as follows:

- Overview of I-8 travel;
- Current commute patterns;
- Future commute patterns; and,
- Super commuters.

C. FINDINGS: RESIDENTIAL SURVEY

The following section presents a demographic profile of Imperial County residents surveyed in 2008, followed by detailed findings regarding residents’ perceived quality of life in Imperial County and residents’ travel patterns.
IV. INTERREGIONAL PUBLIC SURVEY

1. Profile of Residents Surveyed

Table 25 presents the ethnic distribution of residents’ surveyed. A total of 71 percent of respondents identified themselves as Hispanic/Latino, 24 percent as Caucasian, 2 percent as African-American, and less than 1 percent as Asian. Countywide, Hispanic residents compose 76 percent of the population, Caucasian residents 17 percent, African-American residents 4 percent, and Asian residents 2 percent, indicating that the sample accurately reflects the general ethnic distribution of the County (U.S. Census Bureau State and County Quick Facts).

<table>
<thead>
<tr>
<th></th>
<th>Hispanic/Latino</th>
<th>Caucasian</th>
<th>African-American</th>
<th>Asian</th>
<th>Other</th>
<th>Refused</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008 (n = 401)</td>
<td>71%</td>
<td>24%</td>
<td>2%</td>
<td>&lt;1%</td>
<td>1%</td>
<td>1%</td>
</tr>
</tbody>
</table>

*Table based on: Q43: “Would you please tell me what ethnic group you identify with?” Base includes all respondents who answered question.

As seen in Figure 32, a total of 55 percent of the households surveyed in 2008 had incomes below the median household income for Imperial County ($34,000), and 45 percent had incomes above.11

Figure 32 presents the income distribution of respondents sampled. A total of 28 percent of respondents reported incomes less than $20,000, 21 percent reported incomes between $20,000 and $35,000, 12 percent reported incomes between $35,000 and $50,000, 13 percent reported incomes between $50,000 and $75,000, 8 percent reported incomes between $75,000 and $100,000, 7 percent reported incomes between $100,000 and $150,000, 3 percent reported incomes between $150,000 and $200,000, and 2 percent reported incomes over $200,000.

*Chart based on: Q44: “I am going to read some categories of household income. Please stop me when I reach the category of your total 2007 annual household income, before taxes.” Base excludes respondents who answered, “don’t know/refused.”

11 U.S. Census Bureau State and County Quick Facts, compiled 2004.
**IV. INTERREGIONAL PUBLIC SURVEY**

**Figure 33** presents the educational level of respondents, which was higher than the County average. The highest level of education for 22 percent of the residents surveyed was a college or graduate degree. According to the 2000 Census, only 10 percent of Imperial County residents have a Bachelor’s degree or higher. Approximately half of all residents surveyed (48 percent) reported having a high school diploma or less.

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**Figure 33**

**Educational Level of Respondents Sampled: Respondents Overall (2008)**

- Grades 1-8: 15%
- Grades 9-11: 10%
- High School Graduate/ GED: 23%
- Some College/Vocational Training: 30%
- College Graduate: 15%
- Post Graduate/Professional School: 7%

*Chart based on: Q42: “What is the highest level of school you have completed?" Base excludes respondents who answered, "don’t know/refused."*
Figure 34 presents the age distribution among respondents. Approximately one-third of respondents were between the ages of 30 and 49, one-quarter between the ages of 50 and 64, and one-quarter 65 and older. A total of 17 percent of the sample were between 18 and 29 years old. When compared with the U.S. Census Bureau, 2006 American Community Survey, the surveyed population was found to be slightly older than the actual population of Imperial County. A total of 14 percent of Imperial County residents are 65 years and over, compared to 26 percent in the sample.

Finally, the sample of residents was evenly divided between men and women. One-third of all interviews were conducted in Spanish.

2. Quality of Life in Imperial County

A key objective of the Residential Survey was to determine why residents move to Imperial County, how they perceive the overall quality of life in those communities, and under what circumstances they would consider moving.

Many communities in Imperial County retain aspects of a “small town” environment with the majority of residents reporting that they were born and raised in the area (37 percent) or relocated to be closer to friends and family (20 percent). Another 21 percent of residents surveyed moved to the area to pursue a job. Only 5 percent of residents surveyed reported that they moved to Imperial County to find affordable housing. Results are presented in Figure 35.
**FIGURE 35**

*REASONS FOR MOVING TO IMPERIAL COUNTY: IMPERIAL COUNTY RESIDENTS (2008)*

- **I didn't move here, always lived here**: 37%
- **Job in/near Imperial County**: 21%
- **Family/friends in area**: 20%
- **Quality of life/lifestyle**: 10%
- **Affordable housing**: 5%
- **Other**: 7%

*Chart based on: Q7: “What is the main reason you decided to move to Imperial County?” Base excludes respondents who answered, “don’t know/refused.”*
When asked to rate the overall quality of life on a scale of one-to-four, where four is “excellent” and one is “poor,” the majority of Imperial County residents rated the overall quality of life in their communities as “good” or “excellent” (61 percent), with fewer than 10 percent rating the quality of life as “poor.” Results are presented in Figure 36.

**Figure 36**

**Overall Quality of Life in Imperial County: Imperial County Residents (2008)**

*Chart based on: Q3: “How would you rate the overall quality of life in your city or community? Base excludes respondents who answered, “don’t know/refused.” Numbers do not add to 100% due to rounding error.*
Residents were also asked to rate specific attributes of Imperial County including education, shopping, and recreational activities, among other indicators. As seen in Figure 37, Imperial County residents are most satisfied with the lack of traffic congestion, commute time, personal safety, the ability to walk to neighborhood schools, and the quality of education. At least two thirds of residents rated these top five attributes as “good” or “excellent.”

![Figure 37: Proportion of Residents Rating Each Attribute “Good” or “Excellent”](image)

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ability to drive without traffic congestion</td>
<td>76%</td>
</tr>
<tr>
<td>Commute time</td>
<td>69%</td>
</tr>
<tr>
<td>Personal safety</td>
<td>67%</td>
</tr>
<tr>
<td>Ability to walk to neighborhood schools</td>
<td>67%</td>
</tr>
<tr>
<td>Quality of education</td>
<td>66%</td>
</tr>
<tr>
<td>Nearby shopping</td>
<td>56%</td>
</tr>
<tr>
<td>Affordable housing</td>
<td>48%</td>
</tr>
<tr>
<td>Access to medical care</td>
<td>45%</td>
</tr>
<tr>
<td>Public transportation</td>
<td>42%</td>
</tr>
<tr>
<td>Ability to walk to shopping/recreation</td>
<td>33%</td>
</tr>
<tr>
<td>Nearby recreation</td>
<td>34%</td>
</tr>
<tr>
<td>Climate</td>
<td>27%</td>
</tr>
<tr>
<td>Job opportunities</td>
<td>15%</td>
</tr>
</tbody>
</table>

*Attributes that are circled were rated statistically higher than all other attributes at the .05 level. Chart based on: Q5: "Thinking about your community, how would you rate ____? Would you say it’s Excellent, Good, Fair or Poor?" Respondents who answered “don’t know/refused” were excluded from the percentage base. Sample size for each attribute ranged from 343 to 399.
To identify priorities, residents were asked to rank the importance of each attribute on a scale of one-to-five, where five is “extremely important” and one is “not at all important.” As seen in Figure 38, personal safety, medical care, education, housing, and job opportunities were ranked as top priorities over traffic congestion, commute time, walkability, climate, recreation, public transportation, and shopping.

**Figure 38**
PROPORTION OF RESIDENTS RATING EACH ATTRIBUTE “VERY IMPORTANT” OR “EXTREMELY IMPORTANT”: IMPERIAL COUNTY RESIDENTS (2008)

*Attributes that are circled were rated statistically higher in importance than all other attributes at the .05 level. Chart based on: Q10: “Please tell me whether each of the following is extremely important, very important, somewhat important, not too important, not at all important.” Respondents who answered “don’t know/refused” were excluded from the percentage base. Sample size for each attribute ranged from 377 to 398.*
Among those attributes ranked as priorities by Imperial County residents, personal safety and education received high satisfaction scores; however, affordable housing, medical care, and nearby job opportunities received low scores. As seen in Figure 39, two-thirds of residents surveyed rated personal safety and the quality of education in Imperial County as “very good” or excellent; but less than half gave similar ratings for medical care, housing, or job opportunities.

Job opportunities received the lowest rating of all attributes measured. Less than one-in-five Imperial County residents (15 percent) rated nearby job opportunities as “good” or “excellent” with only 3 percent giving the top score of “excellent.” A total of 58 percent of residents rated nearby job opportunities as “poor.”

Although housing in Imperial County is more affordable than in neighboring San Diego, more than half Imperial County residents (52 percent) rated the availability of affordable housing as “fair” or “poor.” Among residents with below median income, 59 percent gave similarly low ratings.

Nearly one-third of residents (28 percent) rank access to medical care, including specialized care and hospitalization as “poor.” Low ratings in this area were consistent, regardless of respondents’ age or income.

**Figure 39**

**Performance Ratings of Those Attributes Ranked Most Important:**

*Imperial County Residents (2008)*

*Chart based on: Q5: “Thinking about your community, how would you rate ____? Would you say it’s Excellent, Good, Fair or Poor?” Respondents who answered “don’t know/refused” were excluded from the percentage base.*
Finally, residents were asked if they have considered moving from the area and, if so, why. More than one-quarter of residents currently living in Imperial County (28 percent) reported that they have considered moving within the last two years, as seen in Figure 40.

**Figure 40**
Proportion of Residents Planning to Move from Area:
Imperial County Residents (2008)

*Chart based on: Q8: "have you ever considered moving out of the County?" Respondents who answered "don’t know/refused" were excluded from the percentage base.*
The most frequently cited reason for possibly moving out of the area was lack of employment opportunities or inadequate medical care, consistent with the low satisfaction ratings in these areas, as seen in Figure 41.

**Figure 41**

REASONS FOR MOVING FROM IMPERIAL COUNTY: IMPERIAL COUNTY RESIDENTS (2008)

*Chart based on: Q9: “What was the main reason you considered moving?” Respondents who answered “don’t know/refused” were excluded from the percentage base.*
3. Current Commute Patterns

In addition to quality of life issues, the Residential Survey addressed the commute patterns of Imperial County workers.

More than nine-out-of-ten workers surveyed (91 percent) reported that they work within Imperial County, most frequently in El Centro (45 percent), the City of Calexico (16 percent), Brawley (11 percent), and the City of Imperial (11 percent). Residents who were employed were asked what industry they worked in. Nearly one-fifth of all workers reported that they were employed by a government agency (17 percent). The second most frequently cited industries were education (17 percent) and healthcare (15 percent). Most workers commute five days a week or more (81 percent), as seen in Figure 42.

**Figure 42**

*Frequency of Work Trips: Imperial County Commuters (2008)*

*Chart based on: Q15: “How often do you make that trip?” Respondents who answered “don’t know/refused” were excluded from the percentage base.

Among commuters (defined as workers who travel to a work location at least once a week) more than one-fourth (28 percent) travel along the I-8 as part of their commute. The average commute is 19 minutes, with one-third of commuters reporting that their home-to-work trip takes 10 minutes or less. When asked what the maximum amount of time they would be willing to spend traveling one-way to get to work, commuters answered 29 minutes on average, 10 minutes longer than their current average commute time.
Single occupancy vehicles are the primary mode of transportation for Imperial County commuters. More than eight-out-of-ten commuters drive alone (84 percent), followed by 10 percent who carpool. Only 5 percent of commuters take public transportation, bike, walk, vanpool, or use another mode. Results are presented in Figure 43.

**Figure 43**
**Travel Mode for Work Trips: Imperial County Commuters (2008)**

*Chart based on: Q16: “How do you usually get there?” Respondents who answered “don’t know/refused” were excluded from the percentage base. Numbers do not add to 100% due to rounding error.*
4. Future Commute Patterns

Commuters were asked how likely they would be to adopt alternative modes of transportation including carpools, vanpool, and public transportation. In addition, commuters were asked how likely they would be to work from home if their employer gave them that option. Results are presented in Figure 44. Less than half of all commuters surveyed reported that they would be “very likely” or “somewhat likely” to carpool, vanpool, or take public transportation.

Commuters were statistically more likely to report that they would be willing to work from home than change their mode of transportation. A total of 72 percent of commuters reported that they would be “somewhat likely” or “very likely” to work at home if given the opportunity. Workers with a college degree, English-speaking, earning above median-income were more likely than other groups to be willing to telecommute, likely due to the nature of their employment.

**Figure 44**

**Likelihood of Using Alternative Modes of Transportation: Imperial County Commuters (2008)**

*Chart based on: Q17: “How likely would you be to carpool with a co-worker who lived nearby? Very likely, Somewhat likely, Not too likely, or not at all likely?” Q17a: “How likely would you be to join a vanpool that picked you up from a centralized location and drove you to work for less than you are paying now in travel costs?” Q18: “How likely would you be to take public transportation to work if you could catch a single bus near your home that took you to within a short walk of your work?” Q19: “How likely would you be to work from home if your employer gave you that option? Respondents who answered “don’t know/refused” were excluded from the percentage base.*
5. Super Commuters

Of the 401 Imperial County residents interviewed, 15 were reported that they commute to a job location outside of Imperial County. This group of super commuters reported an average commute time of 41 minutes. Super commuters were more likely than commuters in general to report that they were dissatisfied with their commute; however, more than half of the super commuters surveyed (9 respondents) rated their commute as “good” or “excellent.”

6. Non-Work Travel

In addition to commuter travel, the study addressed non-work travel. The most common reason residents travel outside Imperial County, not including travel for work is to visit family and friends (36 percent), followed by shopping, recreation, and medical/dental appointments. A total of 80 percent of residents use the I-8 for these trips. Results are presented in Figure 45.

FIGURE 45
PURPOSE OF NON-WORK TRAVEL: IMPERIAL COUNTY RESIDENTS (2008)

*Chart based on: Q34 “What is the most common reason you travel outside of Imperial County, not including travel for work?”
Nearly two-thirds of residents report that they travel outside of Imperial County for non-work purposes year round (65 percent), followed by 30 percent who report that they are more likely to travel outside the County during the summer. Two-thirds of residents reported that their primary means of transportation for non-work related trips was driving with other people. As seen in Figure 46, most non-work travel outside of Imperial County is infrequent.

**Figure 46**

**Frequency of Non-Work Trips: Imperial County Residents (2008)**

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Once a year or less</td>
<td>14%</td>
</tr>
<tr>
<td>Several times a year</td>
<td>31%</td>
</tr>
<tr>
<td>Once a month</td>
<td>21%</td>
</tr>
<tr>
<td>Several times a month</td>
<td>17%</td>
</tr>
<tr>
<td>Once a week</td>
<td>10%</td>
</tr>
<tr>
<td>Several times a week</td>
<td>6%</td>
</tr>
<tr>
<td>Five days a week or more</td>
<td>1%</td>
</tr>
</tbody>
</table>

*Chart based on: Q36 “How often do you make that type of trip?” Respondents who answered “don’t know/refused” were excluded from the percentage base.*
D. FINDINGS: I-8 TRAVELER SURVEY

The following section presents an overview of travel on the I-8, followed by detailed findings on commuters, super commuters, and the likelihood that travelers will use alternative modes of transportation.

1. Overview of I-8 Travel

All drivers traveling the I-8 during the survey period had the opportunity to participate in the study, including 58 professional truck drivers. Figures presented in this section include truck drivers, unless otherwise noted.

During the fall, two-thirds of weekday drivers using the I-8 are traveling for work or business (67 percent). Travel for medical or dental services, recreation, or to visit friends and family each make up approximately 7 percent of I-8 traffic. Among Imperial Valley residents travel for medical or dental appointments is the most frequently cited trip purpose, after work. Results are presented in Figure 47.

*Chart based on: Q2b: “What was the main purpose of your trip along the I-8 that day?” Respondents who answered “don’t know/refused” were excluded from the percentage base. Numbers do not add to 100% due to rounding error.
More than three-fourths of all drivers begin their trips in Imperial or San Diego Counties (43 percent, and 35 percent, respectively). Nine-out-of-ten drivers (93 percent) are traveling to a destination within San Diego County. Results are presented in Figures 48 and 49. Most travelers, excluding truck drivers, are coming from the cities of El Centro (24 percent), Boulevard (16 percent), Campo (10 percent), Yuma, (8 percent), and Jacumba (6 percent). The majority of travelers have final destinations in the cities of San Diego (37 percent), El Cajon (17 percent), and Alpine (6 percent).

Figure 48

*Chart based on: Q4b: “What county were you coming from?” Respondents who answered “don’t know/refused” were excluded from the percentage base.

Figure 49
Trip Destination: I-8 Travelers (2008)

*Chart based on: Q7b: “What county were you going to? Respondents who answered “don’t know/refused” were excluded from the percentage base.
Drivers were asked to rate the traffic congestion the day they received the invitation to participate in the survey. As seen in Figure 50, two-thirds of drivers (66 percent) characterized the traffic as “light,” and just under one-third described the traffic as “moderate.” Only 2 percent of those surveyed described the traffic congestion as “heavy.”

*Chart based on: Q16: “How do you usually get there?” Respondents who answered “don’t know/refused” were excluded from the percentage base.*
More than half of drivers surveyed make the same commute at least once a week (52 percent). Another quarter of drivers make the trip several times a year (24 percent), primarily vacation or recreational travelers. (Figures do not include truck drivers.) See Figure 51. Most weekday travel along the I-8 is year-round (90 percent).

**FIGURE 51**

**TRIP FREQUENCY: I-8 TRAVELERS, NON-TRUCK DRIVERS (2008)**

- Five days a week or more: 29%
- Several times a week: 13%
- Once a week: 10%
- Several times a month: 14%
- Several times a year: 28%
- Once a year or less: 9%

*Chart based on: Q9: “How often do you make this trip?” Respondents who answered “don’t know/refused” were excluded from the percentage base.*
More than two-thirds of weekday drivers (68 percent) reported that their one-way trip takes at least one hour. Nearly one-third of those drivers (30 percent) reported that it takes them two hours or more to reach their destination. Results are presented in Figure 52.

**Figure 52**
TRIP LENGTH (RECORDED IN MINUTES): I-8 TRAVELERS, NON-TRUCK DRIVERS (2008)

*Chart based on: Q11: “How many minutes did it take you to make this one-way trip using the I-8?” Respondents who answered “don’t know/refused” were excluded from the percentage base. Numbers do not add to 100% due to rounding error.*

2. **Profile of the I-8 Traveler**

The typical I-8 driver, including truck drivers, is 49 years old, male, employed, with above median income. A total of 70 percent of I-8 drivers live in San Diego County, and 23 percent live in Imperial. A total of 2 percent of drivers surveyed reported living in Los Angeles, Riverside, San Bernardino, or Orange Counties. Less than 1 percent of those surveyed were from Mexicali or Mexico.

Among those respondents currently employed, 20 percent reported working for a government agency, followed by 13 percent who work in construction and 12 percent in healthcare.
3. Current Commute Patterns

Drivers who commute at least once a week for work were examined separately. As seen in Figure 53, the one-way work trip for most commuters (54 percent) is at least one hour and only 3 percent report a one-way commute less than 30 minutes. Commuters travel patterns are consistent regardless of the season, with 98 percent reporting that they make this type of trip year round.

**Figure 53**

**Trip Length (Recorded in Minutes): I-8 Commuters (2008)**

*Chart based on: Q11: “How many minutes did it take you to make this one-way trip using the I-8?” Respondents who answered “don’t know/refused” were excluded from the percentage base.*
Despite the long commute, 90 percent of commuters report that they are “somewhat satisfied” or “very satisfied” with their current commute. Nearly three-fourths of I-8 commuters (71 percent) have been conducting their current commute for more than two years. Of those more than one-third (35 percent) have been making the commute for more than five years. Results are presented in Figure 54.

*Chart based on: Q12: “How satisfied are you with your current commute to work?” Respondents who answered “don’t know/refused” were excluded from the percentage base.*
4. **Future Commute Patterns**

Commuters were asked how likely they would be to use alternative modes of transportation to work, including a carpool, vanpool, and public transportation. Results are presented in **Figure 55**. Less than half of all I-8 commuters reported that they would be “very likely” or “somewhat likely” to use any alternative modes. There were no statistical differences in the proportion of commuters who are willing to opt for one alternative mode over another.

**Figure 55**

**Likelihood of Using Alternative Modes of Transportation: I-8 Commuters (2008)**

[Chart showing likelihood of using different modes of transportation for I-8 commuters, with percentages indicated.]

*Chart based on: Q15: “How likely would you be to carpool with a co-worker who lived nearby? Very likely, Somewhat likely, Not too likely, not at all likely?” Q16 “How likely would you be to join a vanpool that picked you up from a centralized location and drove you to work for less than you are paying now in travel costs?” Q17: “How likely would you be to take public transportation to work if you could catch a single bus near your home that took you to within a short walk of your work?” Respondents who answered “don’t know/refused” were excluded from the percentage base.*

5. **Super Commuters**

Super commuters, defined as commuters traveling between counties, were analyzed separately. Of the 430 non-truck drivers surveyed, 85, or 20 percent, were super commuters.

Super commuters tend to have longer one-way trips than commuters in general, with 91 percent of super commuters reporting that they drive at least an hour one way. More than a quarter of super commuters (26 percent) report that their one-way commute takes at least two hours. A total of 91 percent of super commuters report that they are “somewhat satisfied” or “very satisfied” with their current commute, similar to commuters in general.

Super commuters tend to have higher incomes, are slightly older, and are more likely to be male compared to other commuters.
IV. Interregional Public Survey

There were no statistical differences between super commuters and other commuters with regard to their interest in alternative modes of transportation to work; namely, carpooling, vanpooling, or public transportation.

Super commuters were asked additional questions about how likely they would be to either move closer to their place of work or move closer to their current place of work. More than three-fourths of super commuters report that they would not be likely to move closer to work even if they could find quality housing for only 25 percent more than they pay now. Similarly, 77 percent reported that they would not be likely to take a job that is located closer to their home for 10 percent less pay. Approximately two-thirds of super commuters (65 percent) reported that they would not be likely to move closer to their work even if gas prices exceeded $6 a gallon. Results are presented in Figure 56.

**Figure 56**

Likelihood of Using Alternative Modes of Transportation:
I-8 Super Commuters (2008)

*Chart based on: Q21, Q22, and Q22a. Respondents who answered “don’t know/refused” were excluded from the percentage base.

When asked why they have not moved closer to work, super commuters most frequently cited the constraints of having a partner and/or children tied to work or schools (21 percent), followed by 15 percent who reported that their job was a temporary assignment, 13 percent who reported that they liked the county where they lived, and another 13 percent who cited housing costs. When asked why they have not taken a job closer to their home, one-third cited lack of local employment opportunities, followed by 14 percent who reported that their job was a temporary assignment, and 12 percent who were satisfied with their current job.
E. INTERREGIONAL PUBLIC SURVEY CONCLUSIONS

Survey findings suggest that Imperial Valley residents are very satisfied with their quality of life and residents of both Imperial and San Diego are satisfied with their commutes along the I-8 corridor. Nevertheless, dramatic population growth over the next several decades demands that current travel patterns and quality of life issues be well understood to stem potential problems in the future.

Any strategic plan for the region intent on enhancing the quality of life for Imperial Valley residents will likely need to address the availability of medical services and nearby job opportunities within Imperial County. While the majority of Imperial Valley residents rated the overall quality of life in their communities as “good” or “excellent,” more than one quarter reported that they have considered moving within the last two years. The most frequently cited reason for possibly moving out of the area was lack of employment opportunities and inadequate medical care: two areas that ranked low in general satisfaction. Moreover, Imperial Valley residents reported that access to medical care and job opportunities were among their top priorities.

In addition, survey findings indicate that San Diego County is a primary source of jobs for both San Diego and Imperial Valley residents and accounts for most I-8 traffic. More than two-thirds of weekday traffic on the I-8 is generated by San Diego residents, most of whom are commuting to work locations within San Diego County. Although these drivers are traveling within a single county, their trips are not short; 95 percent of all drivers on the I-8 report that their one-way trip is longer than 30 minutes. Another quarter of I-8 traffic is generated by Imperial County residents, the majority of whom are traveling to San Diego County, primarily for work (59 percent) or medical and dental appointments (26 percent). One-fifth of all weekday traffic along the I-8 is generated by super commuters, individuals traveling for work between Imperial and San Diego Counties.

Findings suggest that efforts to persuade super commuters and commuters in general to adopt alternative modes of transportation or otherwise change their travel patterns will not be sufficient to stem future traffic congestion unless combined with other strategies. The majority of commuters report that they are unlikely to carpool, vanpool, or use public transportation in the future. Super commuters who face particularly long commutes are equally unlikely to move closer to their work locations or to take lower-paying jobs closer to where they currently live. Even if gas prices exceed $6 a gallon, findings suggest that it is unlikely to persuade super commuters to change their travel patterns.

By focusing efforts on increasing job opportunities in Imperial Valley and providing better local access to medical care and hospitalization, regional planners can stem future traffic congestion on the I-8 while improving the quality of life in Imperial County. Since much of the I-8 traffic is generated by San Diego residents traveling to destinations within the county, additional research may be needed to better understand the travel patterns and needs of San Diego residents and to determine whether alternative modes of transportation might be helpful in reducing inter-county traffic on the I-8.
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V. KEY FINDINGS AND RECOMMENDATIONS

A. KEY FINDINGS

Based on the assessment of existing conditions and the two surveys of stakeholders in the Imperial Valley and San Diego County, the following general findings can be drawn.

- **The Imperial Valley is Currently Not a Bedroom Community for San Diego County.** While interregional commuting between Imperial Valley and San Diego County grew between 1990 and 2000, the sheer distance between the two counties and the jobs/housing balance in Imperial County results in a minimal number of commuters traveling to San Diego County for jobs.

- **There is General Satisfaction with the Current State of the I-8 Freeway Commute.** Imperial Valley residents are very satisfied with their quality of life and residents of both Imperial and San Diego are satisfied with their commutes along the I-8 corridor.

- **As Congestion Increases on the I-8 in the Future, It Will Be Worst in San Diego County.** While traffic volumes are growing along the entire corridor, existing and projected congestion levels (e.g., Level of Service E or worse) are confined to the San Diego County portion of the corridor (generally west of El Cajon).

- **Up to Half of I-8 Commuters Would Consider Some Form of Ridesharing.** Just under half of commuters surveyed, report that they would consider a carpool, vanpool, or use public transportation in the future. Despite this willingness to consider ridesharing, two-thirds of super commuters who face particularly long commutes are equally unlikely to move closer to their work locations or to take lower-paying jobs closer to where they currently live. Even if gas prices exceed $6 a gallon, findings suggest that it is unlikely to persuade super commuters to abandon their current commute.

- **As the Imperial Valley Matures, Its Economy Will Diversify and Reduce the Need for Interregional Commutes to San Diego County.** Imperial Valley employment has been and is projected to continue to diversify and shift away from an agriculturally-based economy.

B. EARLY ACTIONS AND INTERREGIONAL STRATEGIES

The following early actions and interregional strategies are a product of an interregional collaborative planning process undertaken by IVAG, Caltrans, and SANDAG, with guidance from members of the Joint Technical Advisory Group, the SANDAG Borders Committee, and the Joint Policy Advisory Group. These recommendations are intended to serve as a general road map for subsequent efforts in addressing the long-term needs for the I-8 corridor and are not intended to be exhaustive of all potential solutions.

The early actions are short-term action items, which can be initiated within the next six month subject to funding availability and that can continue the proactive process of moving toward more specific strategies and, ultimately, implementation of programs and projects that ensure the long-term mobility of the I-8 corridor between the Imperial Valley and San Diego County. Intergovernmental strategies represent mid- to long-term programs that would be the focus of further planning and feasibility studies. Mid-term strategies would tend to fall into the one year to 5 year time frame for initiation, while long-term strategies would span the 20-year horizon of most long-
range plans. These strategies are organized by the goal most directly addressed and identify the key responsible party(ies) for successful implementation of the strategy.

Goal 1: Improve Interregional Collaboration

**Strategy 1a: Improve interregional and regional information sharing regarding on-going studies to maximize the benefits and minimize duplication of effort.** This strategy highlights the considerable number of planned and underway studies to address transportation, quality of life, economic vitality, and the environment along and related to the I-8 corridor. Implementation of this strategy requires regular, on-going discussions among the various stakeholders. As such, utilization of established regional and interregional forums for information sharing would enable immediate implementation of this strategy making this strategy also an early action. Specific examples include the Mega-Region Initiative and Comprehensive Economic Development Strategy.

Key Responsible Parties: IVAG and SANDAG

Time Frame: Early Action

**Strategy 1b: Continue to Integrate Tribal Nations into overall planning process for the I-8 corridor.**

This strategy is aimed at ensuring that Tribal Nations continue to be integrated into the overall planning process for any subsequent interregional planning efforts for the I-8 corridor. While SANDAG’s Interagency Technical Working Group on Tribal Transportation Issues is a good model for an on-going dialogue on overall transportation issues, the inclusion of representatives from Tribal Nations along the I-8 corridor are recommended for any subsequent policy and advisory groups established such as were employed for this study.

Key Responsible Parties: IVAG, SANDAG, Tribal Nations, and Caltrans

Time Frame: Early Action

**Strategy 1c: Collaborate on cross border people and goods movement issues, including recommendations and projects identified in the California-Baja California Border Master Plan.**

This strategy recognizes the unique experience Imperial and San Diego counties share as California’s only border counties with Mexico. This strategy would promote a continuation of the types of international and interregional collaboration utilized in the development of the California-Baja California Border Master Plan, which included policy and technical representation from federal, state, regional, and local jurisdictions, to address shared planning responsibilities. Additionally, this strategy would use the California-Baja California Border Master Plan as framework for POE and related transportation improvements.

Key Responsible Parties: Caltrans, IVAG, and SANDAG

Time Frame: Early Action
Goal 2: Maintain and improve mobility for people and goods

Strategy 2a: Maintain key capital investments identified in SANDAG’s 2030 Regional Transportation Plan and the Imperial County 2007 Transportation Plan Highway Element to improve mobility for people and goods on I-8, including widening the I-8 from four to six lanes between El Cajon to Alpine (2nd Street to Los Coches Road) and widening the I-8 within Imperial Valley between SR-111 and Forrester Road. This strategy recognizes that while this study has generally not found an existing traffic crisis along the I-8 corridor, selected capacity enhancements are needed to maintain acceptable levels of service. Specifically, this strategy would maintain the commitment to needed improvements identified through the 2030 Regional Transportation Plan: Pathways to the Future for San Diego County and the Imperial County 2007 Transportation Plan Highway Element.

Key Responsible Parties: Caltrans, IVAG, and SANDAG

Time Frame: Long-Term Strategy

Strategy 2b: Explore opportunities to expand ridesharing. This strategy recognizes the high percentages of both Imperial County residents and existing I-8 travelers indicating interest in ridesharing, whether by carpool, vanpool or public transit. The inclusion of increased ridesharing as a strategy to help maintain and improve mobility along the I-8 is intended to improve mobility and to improve travelers quality of life and reap the secondary benefits of reducing overall vehicle miles traveled, including reductions in air pollution and transportation-generated greenhouse gases. SANDAG currently operates a regional ridesharing program, suggesting this strategy could also service as an early action. For example, SANDAG’s RideLink could be expanded into Imperial County to provide an inter-regional transportation assistance program including, an inter-regional vanpool program, ridematching services, a guaranteed ride home program, SchoolPool and other services. Additionally, the “511” service, a free phone and web service that consolidates the San Diego region’s transportation information into a one-stop resource, could be expanded beyond San Diego County to Imperial County. The 511 service would provide up-to-the minute information on traffic conditions, incidents and driving times, schedule, route and fare information for San Diego and Imperial counties public transportation services, carpool and vanpool referrals, bicycling information and more on a 24 hours a day, seven days a week basis.

Key Responsible Parties: IVAG and SANDAG

Time Frame: Early Action

Strategy 2c: Explore the feasibility of promoting telecommuting programs at government agencies and other large employers. This strategy recognizes the overwhelming majority of Imperial County residents reporting a willingness to work from home if the opportunity existed. The effectiveness of this strategy to benefit the transportation system would initially rely on the concentration of jobs at government agencies and other large employers for which telecommuting is a viable option.

Key Responsible Party: IVAG

Time Frame: Mid-Term Strategy
Goal 3: Enhance the quality of life in the Imperial Valley and San Diego County

**Strategy 3a: Support pro-active, comprehensive planning.** This strategy recognizes a consensus among participants in this study that an opportunity exists along the I-8 corridor to address the causes of traffic gridlock before it occurs. This strategy would support efforts to match job creation and infrastructure investments with housing growth and to implement the types of balanced development recommended through regional comprehensive plans in both counties. Additionally, passage of Senate Bill 375 (Steinberg, 2008), reiterates the importance of linking transportation and land use planning for achieving quality of life objectives.

Key Responsible Parties: Imperial County and local jurisdictions within Imperial County, the County of San Diego and the City of El Cajon

Time Frame: Mid-Term Strategy

**Strategy 3b: Explore means of preserving what people like about the Imperial Valley.** This strategy recognizes the overall high level of satisfaction with the quality of life within the Imperial County. Key attributes reported through surveys include the small town character, acceptable traffic levels, good public schools, and safe environment. This strategy aims to reinforce the notion that part of any solution set for addressing the long-term needs of the Imperial County should include maintaining what is most valued today. Further study is needed to identify specific actions that would preserve the attributes of Imperial County that residents rate highly.

Key Responsible Party: IVAG

Time Frame: Mid-Term Strategy

**Strategy 3c: Explore local access to medical and dental care, including specialized care and hospitalization.** This strategy recognizes the large number of Imperial County residents concerned with local access to medical and dental services within the Imperial County. Further study is needed to address the underlying causes and potential solutions for addressing the noted concern regarding local access to medical and dental care.

Key Responsible Party: IVAG

Time Frame: Mid-Term Strategy

Goal 4: Improve the economic vitality of Imperial Valley and San Diego County

**Strategy 4: Support economic development focusing on job creation, particularly on higher paying jobs.** This strategy recognizes the large percentage of Imperial County residents indicating concern about local job opportunities and historically high unemployment rate within the Imperial Valley. While the Imperial Valley’s employment diversification over the last decade away from primarily agriculturally-based jobs, has resulted in lower unemployment levels, Imperial County continues to have higher jobless rates than neighboring California counties. Specific actions identified by the Joint Technical Advisory Group, the SANDAG Borders Committee, and Joint Policy Advisory Group to support higher paying job creation, include training for jobs in the alternative energy and bio-tech production sectors, identifying and supporting economic clusters that are regionally competitive (such as alternative energy production and bio-tech production), and identification of critical infrastructure to sustain the job growth. Specific future actions regarding economic development are anticipated to result
from completion of the Mega-Region Initiative and the Comprehensive Economic Development Strategy.

Key Responsible Parties: Imperial Valley Economic Development Council and the East County Economic Development Council, IVAG and SANDAG

Time Frame: Mid-Term Strategy

**Goal 5: Minimize negative impacts of growth and transportation improvements on the environment**

**Strategy 5a: Preserve I-8 transportation corridor right of way.** This strategy recognizes that, with the exception of the widening from four to six lanes between El Cajon to Alpine (2nd Street to Los Coches Road) and widening within Imperial Valley between SR-111 and Forrester Road, there are no committed projects necessitating substantial transportation corridor right of way. However, a number of previous studies have considered utilization of this corridor, including high-speed rail. This strategy also recognizes that preservation of the corridor is an effective means for not only minimizing potential future costs if new transportation improvements are needed, but that preservation of the corridor helps to maintain the natural environment and aesthetic value of the corridor.

Key Responsible Parties: Caltrans, IVAG, and SANDAG, Imperial County and local jurisdictions within Imperial County, San Diego County and the City of El Cajon

Time Frame: Long-Term Strategy

**Strategy 5b: Monitor related interregional issues and identify impacts to the corridor, if any.** This strategy recognizes that there are a myriad of related issues that could potentially result in substantial impacts to both the I-8 corridor and the overall conditions within the two counties. The SDG&E’s Sunrise Powerlink project is an example of related issues that will use portions of the I-8 corridor and is also linked to the economic development considerations regarding promotion of alternative energy production. This and other related issues should be monitored on a continuing basis to ensure potential impacts to the corridor are addressed.

Key Responsible Parties: Caltrans, IVAG, and SANDAG

Time Frame: Early Action

**C. Future Study Needs**

As is indicated in a number of early actions and interregional strategies, additional study is needed subsequent to this Strategic Plan to identify a specific future course of actions. Additional study needs include:

- Expanded surveys of I-8 travelers, including non-peak hour users, weekend and holiday users, and non-recurrent travelers. In particular, additional information is needed on the travel behavior of recreational-based trips and tourist travel along the I-8 corridor, which seasonally contribute to diminished operating conditions along the I-8 corridor.

- A targeted study of San Diego County residents to better understand their use of the I-8 corridor for inter-county travel and to identify strategies that might mitigate this type of traffic in the future. Given the perspective gained from I-8 travelers surveyed at the I-8
V. Key Findings and Recommendations

Westbound Custom and Border Patrol Checkpoint located near Pine Valley, San Diego County residents make up more than two-thirds of weekday traffic along the I-8 corridor. Most of those residents are traveling for work, most frequently within San Diego County. The sample of San Diego residents obtained during this study is not sufficient to analyze specific travel patterns among this population (detailed origin and destination information, including zip code data) or to explore their reaction to specific transportation alternatives and/or scenarios.

- Surveys of employers along corridor, including Tribal casinos. Better understanding employers’ concerns and their ability to address the growth of congestion along the corridor, including their ability to expand and target ridesharing activities is important for helping to maintain the generally acceptable levels of service along the corridor today.

- Examination of underlying causes for and options to address Imperial Valley residents’ concern with local access to medical and dental care, especially specialized services. This examination should determine the degree to which general knowledge of available resources, actual lack of viable resources, or limits based on insurance coverage or other issues are the primary factors for the reported lack of local resources.
VI. REFERENCES


Haas, Dr. Glenn E. and Dr. Kimberly Collins. A Profile of the 2006 Visitor to the Imperial Sand Dunes Recreation Area. May 2008.


Imperial County, Imperial County Planning & Development Services Department. Circulation and Scenic Highways Element. August 2006 Revision.


Imperial County Planning Department. Imperial County Land Use Data. November 9, 1993.


VII. APPENDICES

A. APPENDIX A: RESIDENTIAL SURVEY INSTRUMENT WITH FREQUENCIES

San Diego Imperial County I-8 Corridor Strategic Plan
Residential Telephone Survey n=401
Final with Frequencies

Introduction

Hello, my name is __________. I am calling on behalf of the Imperial Valley Association of Governments. I am conducting a survey with Imperial County residents and would like to get your opinions on the quality of life in your community.

01 willing to continue
02 refusal
03 call back <at specific time>
04 call back <no specific time>
05 no answer
06 busy
07 answering machine
08 disconnected number
09 language barrier (not Spanish)
10 language barrier (Spanish, call back)
11 business number
12 fax machine

Screener Questions

1. Are you 18 or older? (n=401)
   1   Yes (Go to 1b) 100%
   2   No

1a. Is there someone who is over the age of 18 living in your home and who is available to talk now?
   1   Yes (Go back to introduction with new respondent)
   2   No (If an adult who lives here is not currently present, enter yes to go back to introduction and arrange a call-back)
1b. What is the name of the city or community you live in? (Do not read) \( (n=400) \)

1. Bombay Beach 1%
2. Brawley 18%
3. Coyote Wells 0%
4. Calexico (city of) 25%
5. Calipatria 2%
6. Desert Shores 1%
7. El Centro 29%
8. Heber 2%
9. Holtville 4%
10. Imperial (city of) 11%
11. Niland 2%
12. Ocotillo <1%
13. Palo Verde <%
14. Plaster City <1%
15. Salton City 2%
16. Salton Sea Beach <1%
17. Seeley 2%
18. Westmorland 2%
19. Winterhaven 1%
20. Other (specify) 0%
99. Don’t know/refused (1 case, removed from percentage base)

1c. [Ask only if answer to Q1b = 20 or 99] Do you live within Imperial County? \( (n=1) \)

1. Yes 100%
2. No (Terminate)
9. Refused (Terminate)
Quality of Life: Satisfaction and Importance Ratings

Ask Everyone

3. How would you rate the overall quality of life in your city or community? (n=399)

1. Excellent 12%
2. Good 49%
3. Fair 31%
4. Poor 9%
5. Don’t know/refused (don’t read) (2 cases, removed from percentage base)

5. Thinking about your city or community, how would you rate ________? Would you say it’s Excellent, Good, Fair, or Poor? (99=“don’t know/refused”)

01. The quality of education provided by the public schools? (n=360) 15%, 51%, 23%, 10%
02. Access to medical care, including specialized care and hospitalization? (n=392) 10%, 35%, 27%, 28%
03. The ability to drive without traffic congestion? (n=395) 29%, 47%, 17%, 7%
04. The ability to walk to neighborhood elementary schools (n=367) 20%, 47%, 22%, 11%
14. The ability to walk to shopping and recreation (n=379) 8%, 27%, 28%, 37%
05. Public transportation? (n=359) 8%, 34%, 33%, 25%
06. Nearby shopping opportunities? (n=398) 15%, 41%, 27%, 17%
07. Nearby job opportunities? (n=379) 3%, 12%, 27%, 58%
09. Nearby recreational activities? (n=394) 7%, 27%, 32%, 34%
10. The ability to find affordable housing? (n=380) 13%, 35%, 33%, 19%
11. The weather conditions or climate? (n=397) 4%, 23%, 29%, 45%
12. Personal safety? (n=399) 16%, 51%, 24%, 9%
13. Commute time to and from work (n=343) 22%, 47%, 21%, 10%

6. Please tell me if you think each of the following is a Major problem, Minor problem, or are Not at All a Problem where you live. (Rotate stems. Don’t know/refused = 99)

1. Air pollution 29% Major Problem; 45% Minor Problem; 26% Not a Problem (n=181)
2 Traffic congestion 6% Major Problem; 45% Minor Problem; 49% Not a Problem
3 Crime 27% Major Problem; 51% Minor Problem; 23% Not a Problem

7. What is the main reason you decided to move to Imperial County? (Do not read) (If respondent answers “for job” ask: “Was that a job within Imperial County or outside of the County?”) (n=398)

<table>
<thead>
<tr>
<th>Reason</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Housing was affordable</td>
<td>5%</td>
</tr>
<tr>
<td>Job in Imperial County</td>
<td>15%</td>
</tr>
<tr>
<td>Job near Imperial County</td>
<td>6%</td>
</tr>
<tr>
<td>Family/friends in area</td>
<td>20%</td>
</tr>
<tr>
<td>Quality of life/lifestyle</td>
<td>10%</td>
</tr>
<tr>
<td>I didn’t move here, always lived here</td>
<td>37%</td>
</tr>
<tr>
<td>Other (specify)</td>
<td>7% (better schools, closer to Mexico, small city, family issues)</td>
</tr>
<tr>
<td>Don’t know/refused</td>
<td>37%</td>
</tr>
</tbody>
</table>

8. Have you ever considered moving out of the County? (If respondent answers “yes,” ask was that within the last two years or more than two years ago?) (n=399)

<table>
<thead>
<tr>
<th>Reason</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, within the last two years</td>
<td>28%</td>
</tr>
<tr>
<td>Yes, more than two years ago</td>
<td>16%</td>
</tr>
<tr>
<td>No (skip to Q10)</td>
<td>56%</td>
</tr>
<tr>
<td>Don’t know/Refused (skip to Q10)</td>
<td>0%</td>
</tr>
</tbody>
</table>

9. What was the main reason you considered moving? (Do not read) (n=171)

<table>
<thead>
<tr>
<th>Reason</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commute time</td>
<td>1%</td>
</tr>
<tr>
<td>Gas prices</td>
<td>0%</td>
</tr>
<tr>
<td>Neighborhood going downhill/undesirable</td>
<td>2%</td>
</tr>
<tr>
<td>Crime</td>
<td>1%</td>
</tr>
<tr>
<td>Better quality of life elsewhere</td>
<td>16%</td>
</tr>
<tr>
<td>My job/partner’s job</td>
<td>33%</td>
</tr>
<tr>
<td>Cost of living</td>
<td>2%</td>
</tr>
<tr>
<td>Air pollution</td>
<td>2%</td>
</tr>
</tbody>
</table>
10 Traffic congestion 1%
11 Lack of entertainment/cultural opportunities 1%
12 Quality of schools 2%
13 Weather/Climate 2%
14 Lack of Medical Care/Facilities 19%
15 Lack of Shopping Opportunities 5%
16 Family/Friends 7%
17 Retirement 4%
18 Other (specify) 2%
99 Don’t know/refused (3 cases, excluded from percentage base)

10. We want to know what is most important to people in deciding where to live. Please tell me whether each of the following is Extremely Important, Very Important, Somewhat Important, Not too Important, or Not at all Important to you. (Don’t know/refused=99. **ROTA**

<table>
<thead>
<tr>
<th>Question</th>
<th>Extremely Important</th>
<th>Very Important</th>
<th>Somewhat Important</th>
<th>Not too Important</th>
<th>Not at all Important</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality of education provided by the public schools? (n=391)</td>
<td>31%</td>
<td>55%</td>
<td>8%</td>
<td>3%</td>
<td>4%</td>
</tr>
<tr>
<td>Access to medical care, including specialized care and hospitalization?</td>
<td>(n=398)</td>
<td>34%</td>
<td>53%</td>
<td>10%</td>
<td>2%</td>
</tr>
<tr>
<td>Ability to drive without traffic congestion? (n=394)</td>
<td>14%</td>
<td>55%</td>
<td>22%</td>
<td>6%</td>
<td>3%</td>
</tr>
<tr>
<td>Ability to walk to neighborhood elementary schools? (n=377)</td>
<td>14%</td>
<td>46%</td>
<td>20%</td>
<td>8%</td>
<td>11%</td>
</tr>
<tr>
<td>Ability to walk to shopping and recreation? (n=383)</td>
<td>9%</td>
<td>37%</td>
<td>29%</td>
<td>19%</td>
<td>7%</td>
</tr>
<tr>
<td>Public transportation? (n=396)</td>
<td>12%</td>
<td>44%</td>
<td>24%</td>
<td>14%</td>
<td>7%</td>
</tr>
<tr>
<td>Nearby shopping opportunities? (n=396)</td>
<td>9%</td>
<td>44%</td>
<td>32%</td>
<td>11%</td>
<td>4%</td>
</tr>
<tr>
<td>Nearby job opportunities? (n=391)</td>
<td>26%</td>
<td>52%</td>
<td>10%</td>
<td>4%</td>
<td>8%</td>
</tr>
<tr>
<td>Nearby recreational activities? (n=393)</td>
<td>12%</td>
<td>45%</td>
<td>27%</td>
<td>10%</td>
<td>6%</td>
</tr>
<tr>
<td>Ability to find affordable housing? (n=397)</td>
<td>24%</td>
<td>58%</td>
<td>12%</td>
<td>4%</td>
<td>3%</td>
</tr>
<tr>
<td>Weather conditions or climate? (n=393)</td>
<td>16%</td>
<td>44%</td>
<td>25%</td>
<td>9%</td>
<td>6%</td>
</tr>
<tr>
<td>Commute time to and from work? (n=377)</td>
<td>16%</td>
<td>51%</td>
<td>17%</td>
<td>8%</td>
<td>9%</td>
</tr>
<tr>
<td>Personal safety? (n=377)</td>
<td>37%</td>
<td>53%</td>
<td>6%</td>
<td>2%</td>
<td>1%</td>
</tr>
</tbody>
</table>
Current and Future Commute Patterns

**Ask of Everyone**

I’d like to ask you some questions related to traffic congestion.

12. Are you currently employed? (n=400)

1  Yes 45%
2  No (Go to Q34) 55%
9  Don’t know/Refused (Go to Q34) (1 case, excluded from percentage base)

**Ask of Workers**

13. What industry do you work in? (Don’t read. If necessary: “What kind of job do you have?”) (n=176)

01  Government Agency (non-military/non-education) 17%
02  Education 17%
03  Construction 7%
04  Agriculture/Farming 7%
05  Healthcare 15%
06  Casino 1%
07  Corrections/Prison 1%
08  Military 1%
09  Retail 10%
10  Restaurant/food industry 3%
11  Utilities 4%
12  Transportation 3%
13  Telecommunications 3%
14  Restaurant/Food industry 3%
15  Banking 2%
16  Engineering 1%
17  Housing 1%
11. What is the maximum amount of time you would be willing to spend traveling one-way to get to work? (Record in minutes. Range 0-500. Check box for each of the following: don’t know/refused; work from home) If respondent answers “I work from home,” skip to Q25, backfill for Q19 as if answered punch 5, backfill Q22 as if answered punch 2, backfill Q23 with answer to 1b. (n=172, excludes 5 cases for “don’t know” and 3 cases reporting “zero.”)

29 minutes mean, 30 minutes median

14. How many minutes does it currently take you to get from your home to work? (Record in minutes. 999=don’t know refused. Punch for “telecommute/work from home”) If respondent answers “work from home,” skip to Q25, backfill for Q19 as if answered punch 5, backfill Q22 as if answered punch 2, and backfill Q23 with answer to 1b.

(n=178, excludes 2 cases for “don’t know” and 5 cases reporting “zero.”)

20 minutes mean, 15 minutes median (33% commute 10 minutes or less)

15. How often do you make that trip? (n=173)

1  Once a month or less 1%
2  Several times a month 3%
3  Once a week 1%
4  Several times a week 14%
5  Five days a week or more 81%
9  Don’t know/refused (7 cases, excluded from percentage base)

16. How do you usually get there? (Read. If needs clarification: “What is your primary means of transportation for that trip?”) Do you... (n=174)

1  Drive alone 83%
2  Carpool (skip Q17-backfill answer as punch 5) 10%
3  Van pool (skip Q17a-backfill answer as punch 5) 1%
4  Take public transportation (skip Q18-backfill answer as punch 5) 2%
5  Bike 1%
6  Walk 3%
7  Or use some other means (specify) _____ 0%
9 Don’t know refused (don’t read) (6 cases, excluded from percentage base)

17. How likely would you be to carpool with a co-worker who lived nearby? (n=171)

1 Very likely 23%
2 Somewhat likely 15%  38%
3 Not too likely 16%
4 Not at all likely 35%
5 I already carpool (don’t read) 11%
9 Don’t know/refused (don’t read) (9 cases, excluded from percentage base)

17a. How likely would you be to join a vanpool that picked you up from a centralized location and drove you to work for less than you are paying now in travel costs? (n=169)

1 Very likely 26%
2 Somewhat likely 15%  41%
3 Not too likely 14%
4 Not at all likely 44%
5 I already vanpool (don’t read) 1%
9 Don’t know/refused (don’t read) (11 cases, excluded from percentage base)

18. How likely would you be to take public transportation to work if you could catch a single bus near your home that took you to within a short walk of your work? (n=169)

1 Very likely 24%
2 Somewhat likely 15%  38%
3 Not too likely 17%
4 Not at all likely 43%
5 I already take public transportation (don’t read) 2%
9 Don’t know/refused (don’t read) (11 cases, excluded from percentage base)

19. How likely would you be to work from home if your employer gave you that option? (question removed from study after one week of dialing due to survey length) (n=74)

1 Very likely 53%
2 Somewhat likely 19%  72%
21. Do you travel along the Interstate 8 as part of your commute to work? (n=174)

<p>| | |</p>
<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Yes 30%</td>
</tr>
<tr>
<td>2</td>
<td>No 70%</td>
</tr>
<tr>
<td>3</td>
<td>(Don’t Read) other, unprompted (specify) 0%</td>
</tr>
<tr>
<td>9</td>
<td>Don’t know/Refused (6 cases, excluded from percentage base)</td>
</tr>
</tbody>
</table>

22. Is your work site located outside Imperial County? (n=179)

<p>| | |</p>
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<thead>
<tr>
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<tbody>
<tr>
<td>1</td>
<td>Yes 9% (defined as “super commuter” skip to Q26)</td>
</tr>
<tr>
<td>2</td>
<td>No 91%</td>
</tr>
<tr>
<td>9</td>
<td>Don’t know/Refused (1 case, excluded from percentage base)</td>
</tr>
</tbody>
</table>

23. What is the name of the city or community you work in? (Do not read) (n=161)

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<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Bombay Beach 0%</td>
</tr>
<tr>
<td>2</td>
<td>Brawley 11%</td>
</tr>
<tr>
<td>3</td>
<td>Coyote Wells 0%</td>
</tr>
<tr>
<td>4</td>
<td>Calexico (city of) 16%</td>
</tr>
<tr>
<td>5</td>
<td>Calipatria 6%</td>
</tr>
<tr>
<td>6</td>
<td>Desert Shores 0%</td>
</tr>
<tr>
<td>7</td>
<td>El Centro 45%</td>
</tr>
<tr>
<td>8</td>
<td>Heber 1%</td>
</tr>
<tr>
<td>9</td>
<td>Holtville 2%</td>
</tr>
<tr>
<td>10</td>
<td>Imperial (city of) 11%</td>
</tr>
<tr>
<td>11</td>
<td>Niland 1%</td>
</tr>
<tr>
<td>12</td>
<td>Ocotillo 1%</td>
</tr>
</tbody>
</table>
25. During the time you have lived in Imperial County, have you ever had to commute to a work location outside of the County on a regular basis? (n=162)

1  Yes 17% (defined as “former super commuter” skip to Q33)
2  No 83% (Go to Q34)
9  Don’t know/Refused (2 cases, excluded from percentage base) (Go to Q34)

Ask only of Super Commuters

26. What county do you work in? (Do not read) (n=16)

01  San Diego County 3 cases
02  Los Angeles County 1 case
03  Riverside County 4 cases
04  San Bernardino County --
05  Orange County --
06  La Paz County, Arizona --
07  Yuma County, Arizona 1 case
08  Maricopa County, Arizona --
09  Pima County, Arizona --
10  Mexicali 3 cases
11  Other place in Mexico 2 cases
VII. APPENDICES

12 Other (specify) (don’t read) --
99 Don’t know/refused --

26a. What city do you work in? (Record verbatim. Punch for don’t know/refused) (n=16)

   Coachella 1 case
   Calexico 3 cases
   Mexicali 2 cases
   Moreno Valley 2 cases
   Oceanside 1 case
   Palm Desert 1 case
   Raleigh 1 case

   Other (named county instead of city/or other non-response) 5 cases (1 Imperial County, 1 San Diego County, 1 Yuma County, 1 “different locations,” 1 “Ocopollo”)

30. Why haven’t you moved closer to your work? (Do not read. Check all that apply. Don’t know/refused=9) (n=15)

   1 Because I like quality of life in Imperial Valley 2 cases
   2 Family/friends in Imperial Valley --
   3 Own a home in Imperial Valley 5 cases
   4 Housing is more affordable in Imperial Valley 2 cases
   2 I am planning on moving 1 case
   3 Commute is not so bad, don’t mind 1 case
   4 Other (specify) (4 cases, not included in percentage base)

31. How likely would you be to move closer to your work if you could find quality housing for 25% more than you pay now? (n=15)

   1 Very likely 6 cases
   2 Somewhat likely 4 cases
   3 Not too likely 2 cases
   4 Not at all likely 3 cases
   9 Don’t know/refused (don’t read) (1 case, not included in percentage base)
31a. How likely would you be to move closer to your work if gas prices went over $6 a gallon? (n=15)

1. Very likely 5 cases
2. Somewhat likely 4 cases
3. Not too likely 2 cases
4. Not at all likely 4 cases
9. Don’t know/refused (don’t read) (1 case, not included in percentage base)

32. Why haven’t you taken a job closer to your home? (Do not read. Check all that apply. Don’t know/refused = 9) (n=14)

1. Because I like my job 2 cases
2. Can’t find a job in my industry/field locally 4 cases
3. Can’t find a job for same pay/benefits locally 4 cases
4. I am looking for a job closer to home --
6. Commute is not so bad, little traffic 1 case
7. Other (specify) (3 cases, not included in percentage base)

32a. How likely would you be to take a job that is located closer to your home for 10% less pay? (n=16) (All go to Q34 after answering)

1. Very likely 5 cases
2. Somewhat likely 5 cases
3. Not too likely 3 cases
4. Not at all likely 3 cases
9. Don’t know/refused (don’t read)

Ask only of Former Super Commuters

33. Why did you stop making that commute? (Check all that apply) (n=28)

1. Too long in the car 5 cases
2. Too expensive 6 cases
3. Changed jobs 9 cases
4. Changed industries --
5  Stopped working/retired 4 cases
6  Started working from home 1 case
7  Moved to different location 3 cases
7  Other (specify) (includes hurt on the job, was in training, temporary position) 6 cases
9  Don’t know/refused 0%

Non-Work Related Travel

Ask of Everyone

34. What is the most common reason you travel outside of Imperial County, not including travel for work? (Do not read) (n=382)

1  Shopping 17%
2  Vacation 11%
3  Recreation 16%
4  Medical/ Dental 15%
4  Visit family/friends 36%
5  School 1%
6  Don’t travel/don’t go out 3%
6  Other (specify) 1%

35. [Ask only if answer to Q34 = 2 or 3. All others skip to Q36] Do you make that type of trip...
   (n=97)

1  Year round, regardless of the season 65%
2  In the summer 30%
3  In the spring 1%
4  In the fall 2%
5  In the winter 2%
9  Don’t know/refused (don’t read) (6 cases, excluded from base)

36. How often do you make that type of trip? (Read options) (If seasonal travel: “During that season, how often do you make that type of trip?”) (n=372)
1. Once a year or less 14%
2. Several times a year 31%
3. Once a month 21%
4. Several times a month 17%
5. Once a week 10%
6. Several times a week 6%
7. Five days a week or more 1%
8. Don’t know/refused (don’t read) (22 cases, excluded from percentage base)

37. What is your primary means of transportation for that trip? (Read options) (n=381)
1. Drive alone 32%
2. Drive with other people 60%
3. Public transportation 5%
4. Bike --
5. Walk 1%
6. Other (specify) 2%
7. Don’t know/refused (don’t read) (13 cases, excluded from percentage base)

38. Do you use the Interstate 8 as part of that trip? (n=375)
1. Yes 80%
2. No 20%
3. (Don’t read) other routes, specify 0%
4. Don’t know/refused (19 cases, excluded from percentage base)

Demographics

Ask of Everyone

I’d like to ask you a few final questions for statistical purposes. Your answers are confidential.

41. What year were you born? (n=378) Mean/median = 51 years
18-29 17%
30-49  32%
50-64  25%
65+  26%

42. What is the highest level of school you have completed? (DON’T READ) (n=394)

1  Grades 1-8 15%
2  Grades 9-11 10%
3  High School Graduate/ GED 23% 78% not college graduate
4  Some College/Vocational Training 30%
5  College Graduate 15%
6  Post Graduate/Professional School 7% 22% college graduate
9  Refused (7 cases, excluded from percentage base)

43. Would you please tell me what ethnic group you identify with? Are you Hispanic/Latino, Black/African American, Asian, Caucasian, or of some other ethnic or racial background? (n=401)

1  Hispanic/Latino 71%
2  Black/African American 2%
3  Asian <1%
4  Caucasian 24%
5  Other (Specify) 1%
9  Refused (DON'T READ) 1%

44. I am going to read some categories of household income. Please stop me when I reach the category of your total 2007 annual household income, before taxes: (n=342)

1  Less than $20,000 34% 55% below median income for Imperial
2  More than $20,000 but less than $35,000 21% ($34K)
3. More than $35,000 but less than $50,000 12%
4. More than $50,000 but less than $75,000 13%
5. More than $75,000 but less than $100,000 8% \(\text{45% above median income}\)
6. More than $100,000 but less than $150,000 7%
7. More than $150,000 but less than $200,000 3%
8. Over $200,000 2%
9. Refused (DON'T READ) \(\text{59 cases excluded from percentage base}\)

45. (GENDER BY OBSERVATION-- DON'T READ) \(n=401\)
1. Male 50%
2. Female 50%

46. Note Language \(n=401\)

- English 66%
- Spanish 34%

That concludes our survey. Thank you very much for your time.
## APPENDIX B: I-8 TRAVELER SURVEY INSTRUMENT WITH FREQUENCIES

### San Diego Imperial County I-8 Corridor Strategic Plan

**1-8 Travelers Survey n=531**

**Final with Frequencies**

**All Respondents, including Truck Drivers**

#### Screeners: Everyone

| SC 1 | Ask everyone | Hello and thank you for participating in the I-8 traveler survey, sponsored by the California Department of Transportation and the Imperial Valley Association of Governments. Once you have completed the questionnaire you will be entered to win a $500 gas card. All your answers will remain completely confidential. (n=486) If you would like to continue in English, press 1. 94% Si usted desea continuar en español, presione 2. 6% |
| SC 2 | Ask everyone | Are you 18 years or older? (n=486) 100% Press (7) for yes, (8) for no, or (9) if you do not want to provide that information. |
| SC 3 | Read only if answer to SC 2=8 or 9 | Thank you, but this study is restricted to drivers 18 years and older. |
| SC 4 | Ask everyone | Please enter the 3-digit password on the front of the postcard inviting you to participate in this survey. Tu a.m. 27%; Tu p.m. 16%; Wed a.m. 14%; Wed p.m. 19%; Th a.m. 11%; Th p.m. 13% |

#### Origin, Destination, and Trip Purpose: Everyone

| Read to everyone | We would like to know more about your trip on the I-8 the day you received the invitation to take this survey. This will help us to continue to improve services. |

---

*Imperial Valley Association of Governments*  
*San Diego-Imperial County I-8 Corridor*  
*February 2009*  

---
### 1. Ask everyone about traffic

<table>
<thead>
<tr>
<th>Question</th>
<th>Response Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>How would you rate the traffic the day you received the invitation?</td>
<td>(n=486)</td>
</tr>
<tr>
<td>If you thought the traffic was heavy, press 1. 2%</td>
<td></td>
</tr>
<tr>
<td>If thought the traffic was moderate, press 2. 32%</td>
<td></td>
</tr>
<tr>
<td>If you thought the traffic was light, press 3. 66%</td>
<td></td>
</tr>
<tr>
<td>If you don’t know or this does not apply to you, press 9. 0%</td>
<td></td>
</tr>
</tbody>
</table>

### 2a. Ask everyone about professional truck drivers

<table>
<thead>
<tr>
<th>Question</th>
<th>Response Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are you a professional truck driver? (n=486)</td>
<td></td>
</tr>
<tr>
<td>Press (7) for yes 12%, (8) for no 88%</td>
<td></td>
</tr>
<tr>
<td>If you don’t want to provide that information, press 9 (10 cases, excluded from base)</td>
<td></td>
</tr>
</tbody>
</table>

### 2b. Ask everyone about trip purposes

<table>
<thead>
<tr>
<th>Question</th>
<th>Response Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>What was the main purpose of your trip along the I-8 that day? (n=485)</td>
<td></td>
</tr>
<tr>
<td>If you were traveling for work or business, including military, press 1. 67%</td>
<td></td>
</tr>
<tr>
<td>Traveling for Shopping, press 2. 3%</td>
<td></td>
</tr>
<tr>
<td>Traveling for Recreation, press 3. 7%</td>
<td></td>
</tr>
<tr>
<td>Traveling on Vacation, press 4. 5%</td>
<td></td>
</tr>
<tr>
<td>Traveling for Medical or Dental Services, press 5. 7%</td>
<td></td>
</tr>
<tr>
<td>Traveling to attend school, press 6. 2%</td>
<td></td>
</tr>
<tr>
<td>Traveling to visit friends or relatives, press 7. 6%</td>
<td></td>
</tr>
<tr>
<td>If you were traveling for some other reason, press 8. 4%</td>
<td></td>
</tr>
<tr>
<td>If you don’t know or this does not apply to you, press 9. (1 case, excluded from base)</td>
<td></td>
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</tbody>
</table>

### 3. Ask everyone about origin

<table>
<thead>
<tr>
<th>Question</th>
<th>Response Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Where were you coming from when you received the invitation? (n=484)</td>
<td></td>
</tr>
<tr>
<td>If you were coming from your home, press 1. 52%</td>
<td></td>
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<tr>
<td>If you were coming from another private residence, press 2. 6%</td>
<td></td>
</tr>
<tr>
<td>A hotel or motel, press 3. 4%</td>
<td></td>
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<tr>
<td>Your place of work, press 4. 17%</td>
<td></td>
</tr>
</tbody>
</table>
### 4b. Ask everyone

**What county were you coming from? (n=485)**

- If you were coming from Imperial County, press 1. 43%
- If you were coming from San Diego County, press 2. 35%
- If you were coming from Arizona, press 3. 17%
- If you were coming from Mexico, press 4. 1%
- Some other place, press 5. 4%

Press (9) if you do not want to provide that information. (1 case, excluded)

### 5. Ask everyone

**What city were you coming from? (open-end)**

Begin speaking after the tone. When you’re done speaking or if this does not apply to you, press any key to continue.

### 6. Ask of everyone

**Where were you going when you received the invitation? (n=483)**

- If you were going home, press 1. 33%
- If you were going to another private residence, press 2. 6%
- A hotel or motel, press 3. 6%
- Your place of work, press 4. 32%
- Another place of business, press 5. 12%
- A shopping location, press 6. 2%
- A local attraction, press 7. 1%
### VII. APPENDICES

<table>
<thead>
<tr>
<th>7b</th>
<th>Ask everyone</th>
<th>What county were you going to? (n=484)</th>
</tr>
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<tbody>
<tr>
<td></td>
<td></td>
<td>If you were traveling to a place in San Diego County, press 1. 93%</td>
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<td>For Los Angeles County, press 2. 1%</td>
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<td></td>
<td></td>
<td>Riverside County, press 3. 1%</td>
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<td></td>
<td></td>
<td>San Bernardino County, press 4. 0%</td>
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<td></td>
<td></td>
<td>Orange County, press 5. 2%</td>
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<td></td>
<td></td>
<td>If you were traveling to Mexico, press 6. &lt;1%</td>
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<td></td>
<td></td>
<td>Some other place, press 7. 2%</td>
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<td></td>
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<td>If you don’t know or this does not apply to you, press 9. (3 cases, excluded from base)</td>
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<table>
<thead>
<tr>
<th>8</th>
<th>Ask everyone</th>
<th>What city were you going to? (open-end)</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Begin speaking after the tone. When you’re done speaking or if this does not apply to you, press any key to continue.</td>
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</table>

**Trip frequency and trip length: Everyone, except truck drivers**

<table>
<thead>
<tr>
<th>9</th>
<th>Ask everyone, except Truck drivers (Q2a=7)</th>
<th>How often do you make this trip? (n=423)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>If you make this trip once a year or less, press 1. 9%</td>
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<td>If you make this trip several times a year, press 2. 24% (primarily vacationers/recreation)</td>
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<td>If you make this trip several times a month, but less than once a week,</td>
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<tr>
<td></td>
<td>press 3.  14%</td>
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<tr>
<td></td>
<td>If you make this trip once a week, press 4.  10%</td>
<td></td>
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<td></td>
<td>If you make this trip several times a week, press 5.  13%</td>
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<tr>
<td></td>
<td>If you make this trip five days a week or more, press 6.  29%</td>
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<td></td>
<td>If you don’t know or this does not apply to you, press 9. (7 cases, excluded from base)</td>
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<tr>
<td>10</td>
<td><strong>Ask everyone, except Truck drivers (Q2a=7)</strong></td>
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<tr>
<td></td>
<td>Is there a particular time of year you make this trip? (n=379)</td>
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<td></td>
<td>If you make this type of trip year round, regardless of the season, press 1. 90%</td>
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<td></td>
<td>If you tend to make this type of trip in the Summer, press 2. 3%</td>
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<td></td>
<td>In the Fall, press 3. 5%</td>
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<td></td>
<td>In the Winter, press 4. 1%</td>
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<tr>
<td></td>
<td>In the Spring, press 5. 1%</td>
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<tr>
<td></td>
<td>If you don’t know or this does not apply to you, press 9. (51 cases, excluded)</td>
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</tr>
<tr>
<td>11</td>
<td><strong>Ask everyone, except Truck drivers (Q2a=7)</strong></td>
<td></td>
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<tr>
<td></td>
<td>How many minutes did it take you to make this one-way trip using the I-8? (n=425)</td>
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<tr>
<td></td>
<td>If it took you less than 30 minutes, press 1. 5%</td>
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<td>If it took you between 30 minutes and an hour, press 2. 28%</td>
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<td></td>
<td>If it took you more than an hour but less than two hours, press 3. 38%</td>
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<tr>
<td></td>
<td>If it took you two hours or more, press 4. 30%</td>
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<td></td>
<td>If you don’t know or this does not apply to you, press 9. (5 cases, excluded from base)</td>
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</tbody>
</table>
**Detailed Questions for All Work Commuters:** (Defined as respondents traveling for work and conduct trip at least once a week: All others skip to Demographics Q24) Do not ask of truck drivers defined as Q2a=7.

<table>
<thead>
<tr>
<th>Question</th>
<th>Description</th>
<th>Response Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>12</strong></td>
<td><strong>Ask if Q2b = 1; and Q9=4, 5, or 6. Don't ask if Q2a=7 truck driver</strong></td>
<td>I’d like to ask you a few more questions about your commute to and from work and how we might be able to serve you better. How satisfied are you with your current commute to work? (n=185) If you are very satisfied, press 1. 42% If you are somewhat satisfied, press 2. 48% If you are not at all satisfied, press 3. 10% If you don’t know or this doesn’t apply to you, press 9. (4 cases)</td>
</tr>
<tr>
<td><strong>13</strong></td>
<td><strong>Ask if Q2b = 1; and Q9=4, 5, or 6. Don't ask if Q2a=7 truck driver</strong></td>
<td>Do other people ride with you to work? (n=186) If other people ride with you most of the time, press 1. 22% Some of the time, press 2. 20% Rarely or never, press 3. 58% If you don’t know or this doesn’t apply to you, press 9. (3 cases, excluded from base)</td>
</tr>
<tr>
<td><strong>14</strong></td>
<td><strong>Ask if Q2b = 1; and Q9=4, 5, or 6. Don't ask if Q2a=7 truck driver</strong></td>
<td>How long have you been making that commute? (n=189) If you have been making that commute for less than a year, press 1. 20% If you have been making that commute for more than a year, but less than two years, press 2. 9% If you have been making that commute two to five years, press 3. 36% If you have been making that commute more than five years, press 4. 35% If you don’t know or this doesn’t apply to you, press 9. 0%</td>
</tr>
<tr>
<td>Question Numbers</td>
<td>Question Description</td>
<td>Response Options</td>
</tr>
<tr>
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</tr>
<tr>
<td>15</td>
<td>Ask if $Q_{2b} = 1$; and $Q_9 = 4, 5, 6$ Don't ask if $Q_{2a} = 7$ truck driver)</td>
<td>How likely would you be to carpool to work with a co-worker who lived nearby? $(n=184)$</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Very likely to carpool, press 1. 31%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Somewhat likely to carpool, press 2. 18% 49%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not too likely to carpool, press 3. 21%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not at all likely to carpool, press 4. 30%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>If you don’t know or this doesn’t apply to you, press 9. (5 cases, excluded from base)</td>
</tr>
<tr>
<td>16</td>
<td>Ask if $Q_{2b} = 1$; and $Q_9 = 4, 5, 6$ Don't ask if $Q_{2a} = 7$ truck driver)</td>
<td>How likely would you be to join a vanpool that picked you up a centralized location and drove you to work for less than you are paying now in travel costs? $(n=181)$</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Very likely to vanpool, press 1. 26%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Somewhat likely to vanpool, press 2. 17% 43%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not too likely to vanpool, press 3. 19%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not at all likely to vanpool, press 4. 39%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>If you don’t know or this doesn’t apply to you, press 9. (8 cases, excluded from base)</td>
</tr>
</tbody>
</table>
### 17 - How likely would you be to take public transportation to work if you could catch a single bus near your home that took you within a short walk of your work? (n=183)

- Very likely to take public transportation, press 1. **30%**
- Somewhat likely to take public transportation, press 2. **17%**
- Not too likely to take public transportation, press 3. **17%**
- Not at all likely to take public transportation, press 4. **36%**

If you don’t know or this doesn’t apply to you, press 9. *(6 cases, excluded from base)*

---

**Extra Questions for Super Commuters:** Don’t ask Q18-23 if a truck driver (defined as Q2a=7) or if traveling from one place in San Diego County to another place within San Diego County (Q4b=2 and Q7b=1).

### 20 - Why haven’t you moved closer to work? (open-end)

Begin speaking after the tone. When you’re done speaking or if this does not apply to you, press any key to continue.
<table>
<thead>
<tr>
<th>21</th>
<th>Ask if Q2b = 1; and Q9=4, 5, or 6; and answer for Q4b &amp; Q7b are not both San Diego</th>
<th>How likely would you be to move closer to your work if you could find quality housing for 25% more than you pay now? (n=77)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Very likely to move, press 1. 12%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Somewhat likely to move, press 2. 9%</td>
<td>21%</td>
</tr>
<tr>
<td></td>
<td>Not too likely to move, press 3. 25%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Not at all likely to move, press 4. 55%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>If you don’t know or this doesn’t apply to you, press 9. (8 cases, excluded from base)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>22</th>
<th>Ask if Q2b = 1; and Q9=4, 5, or 6; and answer for Q4b &amp; Q7b are not both San Diego</th>
<th>How likely would you be to move closer to your work if gas prices went over $6 a gallon? (n=76)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Very likely to move, press 1. 21%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Somewhat likely to move, press 2. 13%</td>
<td>34%</td>
</tr>
<tr>
<td></td>
<td>Not too likely to move, press 3. 14%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Not at all likely to move, press 4. 51%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>If you don’t know or this does not apply to you, press 9. (9 cases, excluded from base)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>22a</th>
<th>Ask if Q2b = 1; and Q9=4, 5, or 6; and answer for Q4b &amp; Q7b are not both San Diego</th>
<th>Why haven’t you taken a job closer to your home? (open-end)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Begin speaking after the tone. When you’re done speaking or if this does not apply to you, press any key to continue.</td>
<td></td>
</tr>
</tbody>
</table>
### Demographics

<table>
<thead>
<tr>
<th>23</th>
<th><strong>Ask if Q2b = 1; and Q9=4, 5, or 6; and answer for Q4b &amp; Q7b are not both San Diego</strong></th>
<th>How likely would you be to take a job that is located closer to your home for 10% less pay? <em>(n=79)</em></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Very likely to change jobs, press 1.  <strong>16%</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Somewhat likely to change jobs, press 2. <strong>6%</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not too likely to change jobs, press 3. <strong>28%</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not at all likely to change jobs, press 4. <strong>49%</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>If you don’t know or this doesn’t apply to you, press 9. <em>(6 cases, excluded from base)</em></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>25</th>
<th><strong>Ask of everyone</strong></th>
<th>Where do you live? <em>(n=419)</em></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>If you live in Imperial County, press 1. <strong>23%</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>San Diego County, press 2. <strong>70%</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Los Angeles County, press 3. <strong>2%</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Riverside County, press 4. <strong>2%</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>San Bernardino County, press 5. <strong>&lt;1%</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Orange County, press 6. <strong>2%</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mexicali, press 7. <strong>&lt;1%</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tijuana/Rosarito/Tecate, press 8. <strong>&lt;1%</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>If you don’t know or this does not apply to you, press 9. <em>(67 cases, excluded from base)</em></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>28</th>
<th><strong>Ask of everyone</strong></th>
<th>Are you currently employed? <em>(n=472)</em></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Press (7) for yes 87% (8) for no 13% (9) if you prefer not to state your employment status. <em>(14 cases, excluded from base)</em></td>
</tr>
</tbody>
</table>
### VII. APPENDICES

| 29  | **Ask if Q28=7** | What industry do you work in?  \(n=404\)  
If you work for a government agency, press 1. 20%  
If you work in the military, press 2. 1%  
If you work in construction, press 3. 13%  
If you work in agriculture or farming, press 4. 2%  
If you work in Healthcare, press 5. 12%  
If you work for a Casino, press 6. 1%  
If you work for Corrections or the prison, press 7. 1%  
If you work in another field, press 8. 48%  
Press 9 if you prefer not to state your type of work. (5 cases, excluded from base) |
| 30  | **Ask of everyone** | What is your gender?  
Press (7) for male 65% (8) for female 35% or (9) if you prefer not to state gender. |
| 31  | **Ask of everyone** | Please tell us the year you were born. Please enter the 4-digit year now.  
If you prefer not to provide this information, press 9. \(n=465\)  
18-29: 12%  
30-49: 42%  
50-64: 35%  
65+: 11%  
Mean age: 48 years; Median: 49 years  
Don’t know/Refused: (21 cases, excluded from base) |
### VII. APPENDICES

| 33  | **Ask of everyone** | What is your total annual household income before taxes from all sources? (n=436)  
If less than $20,000, press 1. 9%  
If $20,000 to less than $35,000, press 2. 13%  
Below median income for CA: 38%  
If $35,000 to less than $50,000, press 3. 16%  
Above median income for CA: 62%  
If $50,000 to less than $75,000, press 4. 19%  
If $75,000 to less than $100,000, press 5. 16%  
If $100,000 but less than $150,000, press 6. 15%  
If more than $150,000 but less than $200,000, press 7. 7%  
If over $200,000, press 8. 5%  
If you prefer not to state income, press 9. (50 cases, excluded from base) |
| 34  | **Ask of everyone** | After the tone, please state your name, address, and phone number so that if you win the sweepstakes we know who to contact. When you are done, press any key to continue. |
| 35  | **Read to everyone** | This concludes our survey. Thank you for your participation. You have now been entered into the sweepstakes. For detailed rules please visit www.xxxxx.xxx |
San Diego Imperial County I-8 Corridor Strategic Plan

I-8 Travelers Survey n=531

Final with Frequencies

General Public, Excluding Truck Drivers

Screeners: Everyone

**SC1** Ask everyone

Hello and thank you for participating in the I-8 traveler survey, sponsored by the California Department of Transportation and the Imperial Valley Association of Governments. Once you have completed the questionnaire you will be entered to win a $500 gas card. All your answers will remain completely confidential.

(n=430)

If you would like to continue in English, press 1. 96%

Si usted desea continuar en español, presione 2. 4%

**SC2** Ask everyone

Are you 18 years or older? (n=430) 100%

Press (7) for yes, (8) for no, or (9) if you do not want to provide that information.

**SC3** Read only if answer to SC2=8 or 9

Thank you, but this study is restricted to drivers 18 years and older.

**SC4** Ask everyone

Please enter the 3-digit password on the front of the postcard inviting you to participate in this survey.

Tu a.m. 27%; Tu p.m. 15%; Wed a.m. 15%; Wed p.m. 20%; Th a.m. 11%; Th p.m. 13%

**Origin, Destination, and Trip Purpose: Everyone**

**Read to everyone**

We would like to know more about your trip on the I-8 the day you received the invitation to take this survey. This will help us to continue to improve services.
|   | Ask everyone | How would you rate the traffic the day you received the invitation? (n=430)  
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>If you thought the traffic was heavy, press 1. 2%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>If thought the traffic was moderate, press 2. 30%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>If you thought the traffic was light, press 3. 68%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>If you don’t know or this does not apply to you, press 9. 0%</td>
</tr>
</tbody>
</table>
| 2a| Ask everyone | Are you a professional truck driver? (n=420)  
|   |              | Press (7) for yes 0%, (8) for no 100%                                   |
|   |              | If you don’t want to provide that information, press 9 (10 cases, excluded from base) |
| 2b| Ask everyone | What was the main purpose of your trip along the I-8 that day? (n=429)  
<p>|   |              | If you were traveling for work or business, including military, press 1. 64% |
|   |              | Traveling for Shopping, press 2. 3%                                      |
|   |              | Traveling for Recreation, press 3. 8%                                    |
|   |              | Traveling on Vacation, press 4. 5%                                       |
|   |              | Traveling for Medical or Dental Services, press 5. 8%                    |
|   |              | Traveling to attend school, press 6. 2%                                  |
|   |              | Traveling to visit friends or relatives, press 7. 7%                    |
|   |              | If you were traveling for some other reason, press 8. 3%                |
|   |              | If you don’t know or this does not apply to you, press 9. (1 case, excluded from base) |</p>
<table>
<thead>
<tr>
<th></th>
<th><strong>Ask everyone</strong></th>
<th><strong>Where were you coming from when you received the invitation? (n=428)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td></td>
<td>If you were coming from your home, press 1. 55%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>If you were coming from another private residence, press 2. 7%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A hotel or motel, press 3. 5%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Your place of work, press 4. 15%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Another place of business, press 5. 124%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A local attraction, press 6. 2%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>If you were coming from some other place, press 7. 5%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>If you don’t know or this does not apply to you, press 9. (2 cases excluded from base)</td>
</tr>
<tr>
<td>4b</td>
<td><strong>Ask everyone</strong></td>
<td><strong>What county were you coming from? (n=430)</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>If you were coming from Imperial County, press 1. 44%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>If you were coming from San Diego County, press 2. 36%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>If you were coming from Arizona, press 3. 16%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>If you were coming from Mexico, press 4. 1%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Some other place, press 5. 3%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Press (9) if you do not want to provide that information. 0%</td>
</tr>
<tr>
<td>5</td>
<td><strong>Ask everyone</strong></td>
<td><strong>What city were you coming from? (open-end)</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Begin speaking after the tone. When you’re done speaking or if this does not apply to you, press any key to continue.</td>
</tr>
</tbody>
</table>
### VII. APPENDICES

<table>
<thead>
<tr>
<th></th>
<th>Ask everyone</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td></td>
<td>Where were you going when you received the invitation? (n=428)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>If you were going home, press 1. 35%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>If you were going to another private residence, press 2. 7%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A hotel or motel, press 3. 6%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Your place of work, press 4. 31%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Another place of business, press 5. 10%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A shopping location, press 6. 2%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A local attraction, press 7. 2%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>If you were going to some other place, press 8. 8%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>If you don’t know or this does not apply to you, press 9. (2 cases, excluded from base)</td>
</tr>
<tr>
<td>7b</td>
<td>Ask everyone</td>
<td>What county were you going to? (n=430)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>If you were traveling to a place in San Diego County, press 1.93%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>For Los Angeles County, press 2. 1%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Riverside County, press 3. 1%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>San Bernardino County, press 4. 0%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Orange County, press 5. 2%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>If you were traveling to Mexico, press 6. &lt;1%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Some other place, press 7. 2%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>If you don’t know or this does not apply to you, press 9. 0%</td>
</tr>
<tr>
<td>8</td>
<td>Ask everyone</td>
<td>What city were you going to? (open-end)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Begin speaking after the tone. When you’re done speaking or if this does not apply to you, press any key to continue.</td>
</tr>
</tbody>
</table>
## Trip frequency and trip length: Everyone, except truck drivers

<table>
<thead>
<tr>
<th>9</th>
<th>Ask everyone, except truck drivers (Q2a=7)</th>
<th>How often do you make this trip? (n=423)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>If you make this trip once a year or less, press 1. 9%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>If you make this trip several times a year, press 2. 24% (primarily vacationers/recreation)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>If you make this trip several times a month, but less than once a week, press 3. 14%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>If you make this trip once a week, press 4. 10%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>If you make this trip several times a week, press 5. 13%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>If you make this trip five days a week or more, press 6. 29%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>If you don’t know or this does not apply to you, press 9. (7 cases, excluded from base)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>10</th>
<th>Ask everyone, except truck drivers (Q2a=7)</th>
<th>Is there a particular time of year you make this trip? (n=379)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>If you make this type of trip year round, regardless of the season, press 1. 90%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>If you tend to make this type of trip in the Summer, press 2. 3%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>In the Fall, press 3. 5%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>In the Winter, press 4. 1%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>In the Spring, press 5. 1%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>If you don’t know or this does not apply to you, press 9. (51 cases, excluded)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>11</th>
<th>Ask everyone, except truck drivers (Q2a=7)</th>
<th>How many minutes did it take you to make this one-way trip using the I-8? (n=425)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>If it took you less than 30 minutes, press 1. 5%</td>
</tr>
</tbody>
</table>
If it took you between 30 minutes and an hour, press 2. 28%
If it took you more than an hour but less than two hours, press 3. 38%
If it took you two hours or more, press 4. 30%
If you don’t know or this does not apply to you, press 9. (5 cases, excluded from base)

**Detailed Questions for All Work Commuters:** (Defined as respondents traveling for work and conduct trip at least once a week: All others skip to Demographics Q24) **Do not ask of truck drivers defined as Q2a=7.**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>I’d like to ask you a few more questions about your commute to and from work and how we might be able to serve you better.</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Ask if Q2b = 1; and Q9=4, 5, or 6. Don’t ask if Q2a=7 truck driver)</td>
</tr>
<tr>
<td></td>
<td>How satisfied are you with your current commute to work? (n=185)</td>
</tr>
<tr>
<td></td>
<td>If you are very satisfied, press 1. 42%</td>
</tr>
<tr>
<td></td>
<td>If you are somewhat satisfied, press 2. 48%</td>
</tr>
<tr>
<td></td>
<td>If you are not at all satisfied, press 3. 10%</td>
</tr>
<tr>
<td></td>
<td>If you don’t know or this doesn’t apply to you, press 9. (4 cases)</td>
</tr>
</tbody>
</table>

| 13 | Ask if Q2b = 1; and Q9=4, 5, or 6. Don’t ask if Q2a=7 truck driver) |
| Do other people ride with you to work? (n=186) |
| If other people ride with you most of the time, press 1. 22% |
| Some of the time, press 2. 20% |
| Rarely or never, press 3. 58% |
| If you don’t know or this doesn’t apply to you, press 9. (3 cases, excluded from base) |
| 14 | **Ask if Q2b = 1; and Q9=4, 5, or 6**  
**Don't ask if Q2a=7 (truck driver)** | **How long have you been making that commute? (n=189)**  
If you have been making that commute for less than a year, press 1. **20%**  
If you have been making that commute for more than a year, but less than two years, press 2. **9%**  
If you have been making that commute two to five years, press 3. **36%**  
If you have been making that commute more than five years, press 4. **35%**  
If you don’t know or this doesn’t apply to you, press 9. **0%** |
|---|---|---|
| 15 | **Ask if Q2b = 1; and Q9=4, 5, or 6**  
**Don’t ask if Q2a=7 (truck driver)** | **How likely would you be to carpool to work with a co-worker who lived nearby? (n=184)**  
Very likely to carpool, press 1. **31%**  
Somewhat likely to carpool, press 2. **18%** **49%**  
Not too likely to carpool, press 3. **21%**  
Not at all likely to carpool, press 4. **30%**  
If you don’t know or this doesn’t apply to you, press 9. **(5 cases, excluded from base)** |
| 16 | **Ask if Q2b = 1; and Q9=4, 5, or 6**  
**Don’t ask if Q2a=7 (truck driver)** | **How likely would you be to join a vanpool that picked you up at a centralized location and drove you to work for less than you are paying now in travel costs? (n=181)**  
Very likely to vanpool, press 1. **26%**  
Somewhat likely to vanpool, press 2. **17%** **43%**  
Not too likely to vanpool, press 3. **19%**  
Not at all likely to vanpool, press 4. **39%**  
If you don’t know or this doesn’t apply to you, press 9. **(8 cases, excluded from base)** |
<table>
<thead>
<tr>
<th>17</th>
<th>Ask if Q2b = 1; and Q9=4, 5, or 6. Don't ask if Q2a=7 (truck driver)</th>
<th>How likely would you be to take public transportation to work if you could catch a single bus near your home that took you within a short walk of your work? (n=183)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Very likely to take public transportation, press 1. 30%</td>
<td>46%</td>
</tr>
<tr>
<td></td>
<td>Somewhat likely to take public transportation, press 2. 17%</td>
<td>46%</td>
</tr>
<tr>
<td></td>
<td>Not too likely to take public transportation, press 3. 17%</td>
<td>46%</td>
</tr>
<tr>
<td></td>
<td>Not at all likely to take public transportation, press 4. 36%</td>
<td>46%</td>
</tr>
<tr>
<td></td>
<td>If you don’t know or this doesn’t apply to you, press 9. (6 cases, excluded from base)</td>
<td></td>
</tr>
</tbody>
</table>

**Extra Questions for Super Commuters**: Don’t ask Q18-23 if a truck driver (defined as Q2a=7) or if traveling from one place in San Diego County to another place within San Diego County (Q4b=2 and Q7b=1).

<table>
<thead>
<tr>
<th>20</th>
<th>Ask if Q2b = 1; and Q9=4, 5, or 6; and answer for Q4b &amp; Q7b are not both San Diego</th>
<th>Why haven’t you moved closer to work? (open-end)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Begin speaking after the tone. When you’re done speaking or if this does not apply to you, press any key to continue.</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Ask if Q2b = 1; and Q9=4, 5, or 6; and answer for Q4b &amp; Q7b are not both San Diego</td>
<td>How likely would you be to move closer to your work if you could find quality housing for 25% more than you pay now? (n=77)</td>
</tr>
<tr>
<td>----</td>
<td>--------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>Very likely to move, press 1. 12%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Somewhat likely to move, press 2. 9%</td>
<td>21%</td>
</tr>
<tr>
<td></td>
<td>Not too likely to move, press 3. 25%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Not at all likely to move, press 4. 55%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>If you don’t know or this doesn’t apply to you, press 9. (8 cases, excluded from base)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>22</th>
<th>Ask if Q2b = 1; and Q9=4, 5, or 6; and answer for Q4b &amp; Q7b are not both San Diego</th>
<th>How likely would you be to move closer to your work if gas prices went over $6 a gallon? (n=76)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Very likely to move, press 1. 21%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Somewhat likely to move, press 2. 13%</td>
<td>34%</td>
</tr>
<tr>
<td></td>
<td>Not too likely to move, press 3. 14%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Not at all likely to move, press 4. 51%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>If you don’t know or this does not apply to you, press 9. (9 cases, excluded from base)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>22a</th>
<th>Ask if Q2b = 1; and Q9=4, 5, or 6; and answer for Q4b &amp; Q7b are not both San Diego</th>
<th>Why haven’t you taken a job closer to your home? (open-end)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Begin speaking after the tone. When you’re done speaking or if this does not apply to you, press any key to continue.</td>
<td></td>
</tr>
</tbody>
</table>
### Demographics

<table>
<thead>
<tr>
<th>23</th>
<th><strong>Ask if Q2b = 1; and Q9=4, 5, or 6; and answer for Q4b &amp; Q7b are not both San Diego</strong></th>
<th>How likely would you be to take a job that is located closer to your home for 10% less pay? (n=79)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Very likely to change jobs, press 1. 16%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Somewhat likely to change jobs, press 2. 6%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not too likely to change jobs, press 3. 28%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not at all likely to change jobs, press 4. 49%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>If you don’t know or this doesn’t apply to you, press 9. (6 cases, excluded from base)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>25</th>
<th><strong>Ask of everyone</strong></th>
<th>Where do you live? (n=375)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>If you live in Imperial County, press 1. 24%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>San Diego County, press 2. 71%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Los Angeles County, press 3. 1%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Riverside County, press 4. 2%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>San Bernardino County, press 5. 0%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Orange County, press 6. 2%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mexicali, press 7. &lt;1%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tijuana/Rosarito/or Tecate, press 8. &lt;1%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>If you don’t know or this does not apply to you, press 9. (65 cases, excluded from base)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>28</th>
<th><strong>Ask of everyone</strong></th>
<th>Are you currently employed? (n=417)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Press (7) for yes 85% (8) for no 15% (9) if you prefer not to state your employment status. (3 cases, excluded from base)</td>
</tr>
</tbody>
</table>
29  Ask if Q28=7  What industry do you work in?  (n=353)

If you work for a government agency, press 1.  22%
If you work in the military, press 2.  1%
If you work in construction, press 3.  11%
If you work in agriculture or farming, press 4.  2%
If you work in Healthcare, press 5.  14%
If you work for a Casino, press 6.  2%
If you work for Corrections or the prison, press 7.  1%
If you work in another field, press 8.  47%
Press 9 if you prefer not to state your type of work. (3 cases, excluded from base)

30  Ask of everyone  What is your gender?
Press (7) for male 62% (8) for female 38% or (9) if you prefer not to state gender.

31  Ask of everyone  Please tell us the year you were born. Please enter the 4-digit year now.

If you prefer not to provide this information, press 9. (n=413)

18-29: 13%
30-49: 40%
50-64: 36%
65+: 11%
Mean age: 48 years; Median: 49 years
Don’t know/Refused: (17 cases, excluded from base)
<table>
<thead>
<tr>
<th>33</th>
<th><strong>Ask of everyone</strong></th>
<th>What is your total annual household income before taxes from all sources? (n=383)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>If less than $20,000, press 1. 9%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>If $20,000 to less than $35,000, press 2. 13% Below median income for CA: 37%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>If $35,000 to less than $50,000, press 3. 14% Above median income for CA: 63%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>If $50,000 to less than $75,000, press 4. 19%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>If $75,000 to less than $100,000, press 5. 16%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>If $100,000 but less than $150,000, press 6. 16%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>If more than $150,000 but less than $200,000, press 7. 7%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>If over $200,000, press 8. 5%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>If you prefer not to state income, press 9. (47 cases, excluded from base)</td>
<td></td>
</tr>
</tbody>
</table>

| 34 | **Ask of everyone** | After the tone, please state your name, address, and phone number so that if you win the sweepstakes we know who to contact. When you are done, press any key to continue. |

| 35 | **Read to everyone** | This concludes our survey. Thank you for your participation. You have now been entered into the sweepstakes. For detailed rules please visit www.xxxxx.xxx |
C. **APPENDIX C: JOINT TECHNICAL ADVISORY GROUP AGENDA PACKET RECIPIENTS**

Eusebio Arballo, Imperial Valley Economic Development Corporation  
Trev Holman, City of El Cajon

William Brunet, Imperial County  
Monique La Chappa, Campo Kumeyaay Nation

Abraham Campos, El Centro,  
Willie Micklin, Ewiaapaayp Band of Kumeyaay Indians

Kimberly Collins, San Diego State University - Imperial Valley Campus  
Don Parent, Sempra Energy

Jo Marie Diamond, San Diego East County Economic Development Council  
Gerald Peacher, Holtville

Tina M. Estrada, Viejas Band of Kumeyaay Indians  
Marcela Piedra, El Centro

Michael Garcia, Ewiaapaayp Band of Kumeyaay Indians  
Andy Phemister, San Diego East County Chamber of Commerce

Eric Gibson, San Diego County  
Wendy Roach, Viejas Band of Kumeyaay Indians Tribal Government

Lisa Gover, Campo Kumeyaay Nation  
Jenny Rothrauff, Viejas Band of Kumeyaay Indians Tribal Government

Bob Ham, Imperial County and Imperial Valley Association of Governments  
Sherry Ryan, Ph.D., San Diego State University

Everett Hauser, San Diego County  
John Snyder, San Diego County

Lisa C. Haws, Viejas Band of Kumeyaay Indians Tribal Government  
Allen Tyler, Imperial Valley Joint Chambers of Commerce

Jurg Heuberger, Imperial County  
Deanna Weeks, San Diego East County Economic Development Council
D. APPENDIX D: COMMENTS RECEIVED AND RESPONSES ON DRAFT STRATEGY PLAN

The following pages include summaries of Joint Technical Advisory Group, Joint Policy Advisory Group and the Public Meeting summaries.

<table>
<thead>
<tr>
<th>Comment</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Update included data to reflect the latest available data.</td>
<td>The existing conditions section of the Strategy Plan has been extensively updated to reflect the latest available data.</td>
</tr>
<tr>
<td>Expand discussion of related studies including the Mega-Region Initiative and the Comprehensive Economic Development Strategy.</td>
<td>This section has been updated to provide additional discussion of these two related economic development efforts.</td>
</tr>
<tr>
<td>Provide updated information about the Sunrise Powerlink project.</td>
<td>Updated information on the Sunrise Powerlink has been added to the related studies section, including a map of the approved alignment.</td>
</tr>
<tr>
<td>Expand discussion of early actions and interregional strategies.</td>
<td>The discussion of early actions and interregional strategies has been expanded to define early actions, mid-term strategies, and long-term strategies. Examples and additional discussion has been added to strategies as appropriate.</td>
</tr>
<tr>
<td>Add in a section addressing areas requiring future study.</td>
<td>A new section identifying areas requiring further study has been added to the recommendations section.</td>
</tr>
<tr>
<td>Provide a summary of meetings held throughout the Strategic Plan development.</td>
<td>Summaries of Joint Technical Advisory Group meeting, Joint Policy Advisory Group meeting and the Public Meeting has been added to the appendices.</td>
</tr>
</tbody>
</table>

E. APPENDIX E: JOINT TECHNICAL ADVISORY GROUP, JOINT POLICY ADVISORY GROUP, AND PUBLIC MEETING SUMMARIES

The following pages include summaries of Joint Technical Advisory Group, Joint Policy Advisory Group and the Public Meeting summaries.
San Diego Imperial County I-8 Corridor Strategic Plan

JOINT TECHNICAL ADVISORY GROUP

JUNE 27, 2008 MEETING SUMMARY

El Centro
10 am – 12 noon

Attendees:  
Rosa C. López-Solís  IVAG  
Evan Howser  County of San Diego  
Ron Sáenz  SANDAG  
Bob Ham  IVAG  
Maurice Eaton  Caltrans District 11  
Dennis Thompson  Caltrans District 11  
Abraham Campos  City of El Centro  
Darrell Gardner  Imperial County  
Jim Minnick  Imperial County  
Allen Tyler  El Centro Chamber of Commerce  
Eusebio Arballo  Imperial Valley EDC  
Sophia Gomez  Gomez Research  
Douglas Kim  PMC  
Warren Whiteaker  PMC

1. Welcome and Introductions

2. Strategic Plan Overview/Role of JTAG

On behalf of IVAG, Ms. López-Solís welcomed the JTAG and provided an overview of the process.

IVAG, in cooperation with Caltrans District 11 and SANDAG, has initiated the San Diego-Imperial County I-8 Corridor Strategic Plan, a first phase of analysis that will look at interregional transportation and transportation-related issues facing Imperial Valley and San Diego County and develop broad early actions and longer-term strategies related to transportation, economic development, jobs/housing balance, the natural environment, and other resource areas.

The JTAG will be asked to identify transportation, land use, economic, environmental, and other priorities for analysis in this integrated Strategic Plan. The JTAG will provide a reality check and local expertise on issues and guide the development of the study. Information and recommendations will then be passed onto two bodies of elected officials, the SANDAG Borders Committee and an I-8 Joint Policy Advisory Committee.

Members of the JTAG identified several issues for discussion:

- Given the price of gasoline issue, the Plan should identify alternatives to the conventional capacity enhancements (e.g., widening the I-8 freeway).
• The study should consider travel to/from areas east of the Imperial Valley (e.g., Phoenix) to San Diego.
• High speed rail or MAGLEV transportation should be considered a long-term option to reducing traffic volumes.
• The horizon year for the study should be long-term, potentially 50-years like the Imperial County General Plan.
• Will the study focus on point-to-point use of the corridor from the Imperial Valley to San Diego?
• Recreational users of the corridor should be addressed in the study. This includes users of the Imperial Sand Dunes, such as the Glamis and Buttercup, where the population can increase to 35,000 on weekends during the Fall. What are the problems and challenges for RV users? Encouraging the zoning for RV storage facilities in areas like Ocotillo and further east can help reduce the congestion from larger vehicles on the I-8.
• Cross-border congestion and issues should be considered.
• Imperial Valley Airport will move within 10 years. Imperial County did a study on a large cargo airport with small commuter aviation facility.
• Imperial County is not a bedroom community. The commute to San Diego is prohibitively long. The most likely recurrent users are for specialty jobs (e.g., government, military, medical facilities).
• Imperial Valley locals don’t trust medical facilities in Imperial Valley. Improving local facilities could reduce the need for interregional travel.

3. Working Draft Goals and Objectives

The JTAG commented on the Draft Goals and Objectives for this study.

• The Goals should be geared toward a 50-year planning horizon, like the Imperial County Transportation Element. Growing communities require that type of lead time in planning for transportation needs because of right-of-way acquisition and the need to plan for intersection that have adequate spacing (e.g., one mile). This longer-term perspective is akin to a build-out scenario.
• The Plan should focus on developing expressways as parallel alternatives to the I-8 freeway.
• Heed the lessons learned from how Temecula and Murrieta grew. The Study should look at ways to avoid the single-road option by creating redundancy in the transportation system.
• Dogwood Road is a major non-Caltrans corridor alternative to Route 86 (4th Street) in El Centro. This will have two lanes of transit (could be rail or bus) linking Brawley and northern cities to El Centro, Calexico, and the southern communities.

4. Interregional Public Survey
The Strategic Plan will recognize the current needs and issues of those who use the I-8 corridor, as well as the growing communities in the Imperial Valley and San Diego County that are likely to generate additional traffic on this important corridor in the future. To that end, public surveys are needed to accurately understand why people use or may use this freeway in the future. Ms. Gomez led a discussion about options and issues for the survey. The recommendation is to have the public survey conducted in two parts: a travelers’ survey of those using the I-8, and a general population survey of those who could use the I-8 freeway in the future.

- **I-8 Travelers Survey.** The recommended option focuses on handing out postcards to motorists on the I-8 freeway at the westbound checkpoint in Pine Valley. The survey would capture Imperial Valley-based commuters and other travelers in the morning and San Diego-based commuters and other travelers in the afternoon. The postcard would invite travelers to participate in an on-line survey and be eligible for a gasoline card. While it’s unclear what the response rate will be for an online survey, Ms. Gomez indicated that internet response rates for commuters and truckers are expected to be fair because they tend to be wealthier, more internet-savvy, or have better access to the Internet.

Comments from the JTAG

- Since some travelers may not have access to an online survey, would it be better to have travelers fill out the survey and send it back using a pre-paid mailer? Ms. Gomez felt that the lag time for processing postcard surveys is a concern, given that need to clean data, address keypunch issues, etc. Given the need to have results ready by September, this is not a preferred option.
- Call-in number should be looked at for those who don’t have online access.
- In order to get enough responses to do real analysis, thousands of cards would need to be handed out. Mr. Eaton noted that the Department of Homeland Security has been very cooperative in exploring this survey option and has even offered to have a staffer assist with coordination.
- Because of resource constraints, the survey won’t address recreational issues in any depth.
- The travelers’ survey may identify that “super-commuters” differ from the general population in their willingness to drive or to accept other compromises from the 100 mile plus one-way drive.
- Several questions/comment for possible inclusion/consideration in the survey were identified:
  - Determine commuters’ profession, age, and demographics.
  - What is the purpose of the trip, frequency?
  - Has travel to see family been identified as a separate trip purpose?
  - Why have they chosen to do the super-commute?
  - How long have you been commuting on the I-8?
o Grant writing for development of a mega-region incorporating Imperial, San Diego counties and Baja California is underway. They are conducting their survey soon and we should coordinate with them.

o Socioeconomic, salary, home ownership or rental (more open to changes in lifestyle) should be considered.

o 17% purchase rate from San Diego back during housing boom.

o The survey should ask about how fuel costs have affected their behavior. This is an emotional question that could increase response rates.

o For non-commuters, the study could identify the needs of periodic commercial travelers such as doctors, sales people, or other socially-beneficial professions that are underrepresented in the Imperial Valley.

o Dunes users should be surveyed. Mr. Tyler will coordinate with United Desert Gateway, Sand Association, and others on existing data or surveys that may be available.

o While the budget for the Strategic Plan may not accommodate a special survey of dunes users, it could be a recommendation for the next phase of planning work on the I-8 corridor.

• General Population Survey. The recommended option focuses on a random telephone survey of Imperial Valley residents, with a goal of securing at least 400 completed surveys. If the travelers’ survey on the I-8 is not feasible, Sophia recommends increasing the sample size of the telephone survey to 800 or by surveying 400 San Diego County residents. The survey would capture some I-8 commuters, who could be asked questions similar to the I-8 travelers’ survey. However, the number of I-8 users is expected to be very small and a phone survey alone is too crude an instrument to gauge the perspective of I-8 users. The main goal of the survey is to identify what types of issues need to be addressed to manage the future demand for driving on the I-8 freeway.

JTAG comments and discussion included:

• Vanpools are designed to subsidize super-commuters.
• The survey will probe into quality of life questions and identify what factors would have to change to force them into becoming a “super-commuter.”

The following are overall comments on the survey approach:

• The JTAG understands that the limited budget precludes doing three surveys (i.e., intercept, phone survey, and employer).
• Survey for employers could be given for analysis purposes, but will have to wait for a future Phase 2 study.
• Tribes will be involved shortly, they may want employee survey. The consultant team will look into how to fold any information from the tribes and casinos into the Plan.
• Ms. Gomez will draft a survey instrument for project managers review, which will then be distributed to TAWG members for comment on the draft survey.

5. **Working Draft Existing Conditions**

Due to a lack of time, this item is deferred to the next JTAG meeting.

6. **Upcoming Meetings and Next Steps**

The next meeting of the Joint Technical Advisory Group is scheduled for Monday, July 21 at 10 am in San Diego.
1. Welcome and Introductions

2. June 27, 2008 Meeting Summary

A number of corrections were noted to be made regarding the meeting summary and clarifications as to the purpose of the meeting summaries.

3. Updated Goals and Objectives

An update on the project goals and objectives was provided. There were no JTAG comments.

4. Interregional Public Survey

An update on the status on the interregional public survey was provided. The JTAG provided the following comments:

- Try to get origin and destination data,
- Try to condense the time it takes to conduct the survey,
- Test the survey to make sure people don’t drop out during call, and
- Consider adding eastern San Diego County if feasible to capture people entering the county who may not be going through a checkpoint.

5. Draft Existing Conditions

An overview of the draft existing conditions document was provided. The JTAG had the following comments:
• Verify the number of vehicles at the dunes and ensure it is not confused with population estimates;
• Note that Imperial County is currently a bedroom community for existing conditions, but maybe will be in the future;
• Provide more sensitivity to cross-border congestion – many commuters head north from Mexico, about 20 percent of working population in the Imperial Valley.
• Note that 60 minute commute could also be workers from north county heading south to jobs;
• Verify the number of tribal casinos;
• Note that the checkpoints on I-8 are bottlenecks and cause back-ups;
• Note that high wind days/extreme weather conditions sometimes lead to road closure for trucks;
• Question if Caltrans has data on truck accident effect on traffic;
• Revise population charts to make Imperial County population changes more clear;
• Consider comparing housing growth to places that are already commuter areas like Riverside;
• Noted that increase Imperial County jobs in 2000 was because of housing boom and recent labor reductions because of more mechanization of agriculture but that retail is boosting jobs;
• Question of how does commuters/housing in Mexico change this;
• Question on intermittent commuters;
• Note that some frequent I-8 users are on the road for education opportunities – more education options in San Diego;
• Consider addressing the border commute:
  o Could be 2 hours to move 15 miles,
  o SANDAG/IVAG should jointly lobby for more POE staffing,
  o Origin and destination – high percentage from Mexicali to El Centro,
  o If border crossing is quicker, may impact congestion on I-8, significant impact on 111, and
  o Will make easier/quicker to get through may lead to more people wanting to cross (less hassle).

6. Upcoming Meetings and Next Steps

It was noted that the next JTAG meeting was scheduled for Thursday, August 21 at 10 am in El Centro.
1. Welcome and Introductions

Mr. Carrillo welcomed the attendees and led the self-introductions.

2. Strategic Plan Overview / Role of the Joint Policy Advisory Group

Ms. López-Solís introduced Mr. Whiteaker, who noted that IVAG, in cooperation with Caltrans District 11 and SANDAG, initiated the San Diego-Imperial County I-8 Corridor Strategic Plan, as a first phase of analysis that will look at interregional transportation and transportation-related issues facing Imperial Valley and San Diego County. He outlined the process, recommended schedule, and approach to
developing early actions and strategies related to transportation, economic
development, jobs/housing balance, the natural environment, and other resource
areas. The Joint Policy Advisory Committee will be asked to identify transportation,
land use, economic, environmental, and other priorities for analysis in this
integrated Strategic Plan.

3-6. Draft Goals and Objectives, Interregional Public Survey, Draft Existing
Conditions, and Upcoming Meetings and Next Steps.

Mr. Whiteaker led an interactive discussion on the Draft Goals and Objectives,
provided an update on the Interregional Public Survey, highlighted preliminary
findings as part of the Draft Existing Conditions and noted that the next Joint Policy
Advisory Group is scheduled for October 31, 2008 in El Centro.

The following summary highlights key discussion points and items identified for
follow up:

a. Mr. Whiteaker noted that the draft goals and objectives address interregional
   collaboration, mobility, quality of life, economic vitality, and minimizing
   negative impacts on the environment.

b. Mr. Carrillo reinforced that the Strategic Plan should incorporate economic
development considerations, acknowledging that the two regions will grow
together. He noted that Imperial County has available land, water and
infrastructure for future development, including expansion of the biotech
industry.

c. Mr. Carrillo explained that while IVAG is within the Southern California
   Association of Governments (SCAG) metropolitan planning area and
   SANDAG is the lead agency for the San Diego metropolitan planning area,
   SANDAG and IVAG share a Caltrans District.

d. Mr. Carrillo indicated that among the travelers currently using the I-8
   corridor; approximately 150,000 people come to the sand dunes in Imperial
   County during Thanksgiving weekend and many drivers use I-8 for travel
   between Mexicali and Tijuana to avoid less safe routes in Mexico.

e. Mr. Whiteaker noted that the Interregional Public Survey will use two
different approaches: an automated telephone survey of existing travelers in
which participants will be asked about their drive on the I-8 and a telephone
survey of Imperial Valley residents.

f. Mr. Whiteaker noted that based on existing data available, interregional
   commuters traveling from Imperial County to San Diego County and from
   San Diego County to Imperial County represent a small portion of all traffic
the I-8, which makes solutions to congestion problems challenging as the traditional solutions targeted to commuters will not address the majority of traffic on the corridor.

g. Ms. McCoy suggested that the Sunrise Powerlink be mentioned in the plan and the possibility that it can run down the freeway. She also mentioned that tribal issues need to be addressed in the plan as well as the project will disturb the natural environment.

h. Mr. Allen suggested that closures due to fire and consideration of fire evacuation routes be addressed in the plan.

i. Mr. Whiteaker highlighted the following as key preliminary findings in terms of existing conditions:

   ii. Existing congestion along the corridor is limited.

   iii. Commuters and truckers account for less than a third of the traffic at the county boundary, suggesting the need to non-traditional solutions to future traffic problems.

   iv. Imperial County is not a bedroom community to San Diego County today.

   v. The two economies are linked, but independent.

j. Mr. Whiteaker noted that the next steps include finalizing the existing conditions, conducting the Interregional Public Survey and developing early actions and interregional strategies.

k. Ms. Sanders suggested that the region be broadened into a “mega-region” and that with tourism, movement of goods and services, and others, we need to think on a more broad scale. With a plan like this, San Diego and Imperial Counties are intertwined with the Counties of Los Angeles, Riverside, San Bernardino, and others.

l. Mr. Sáenz added that the Mega Region was planning to include this study in their report which would be released after this study is complete. In addition, the president of the Mega Region initiative has been invited to participate in the Joint Technical Advisory Group.

m. Mr. Allen suggested that a first time home buyer program linked to foreclosed housing should be considered.

n. Mr. Carrillo mentioned that this is a positive plan because more stakeholders and the general public are being included in decisions.
The next meeting will be on October 31st with a tour of the area included. Mr. Figge will look into reserving a van for the day.
1. Welcome and Introductions

2. Interregional Public Survey

A presentation of the preliminary interregional public survey results was provided. The JTAG had the following comments:

- It is important to remember that many of the agricultural workers do not reside in the Imperial Valley and would therefore not be included in the resident survey.
- The I-8 traveler survey did not ask questions about the Customs and Border Patrol checkpoint itself.
- There was some surprise noted at the relatively few travelers’ surveys indicating school-based trips on I-8. It was noted that maybe a number of respondents could be trip chaining or they may simply have not participated in the survey.
- It was clarified that the postcards were distributed between approximately 6 am and 9 am in the morning and 4 pm and 6 pm in the afternoon.

3. Early Actions and Interregional Strategies

Initial areas for possible strategies was provided. The JTAG has the following comments:

- Early Actions should entail those strategies that can either be implemented or initiated within six months.
- The primary responsible party for each strategy should be identified. This would indicate who should lead any efforts to address the strategy.
- It is important to identify existing activities rather than duplicate them.
- Try to tie strategies specifically to survey results, especially where the survey results indicate promise of the strategy’s success.
• Strategies related to goods movements, including cross border concerns should be identified.
• Identify strategies to create high paying jobs within Imperial County, which would tend to minimize demand on I-8.
• It is important to recognize that “super-commuters” are traveling long distances for a number of reasons, including the noted high quality of life within the Imperial Valley.
• Strategies on regional collaboration should include bringing all stakeholders together for next phase of the project.
• Job creation and economic development strategies should consider the alternative energy industries locating in the Imperial Valley. The Silicon Border development and other manufacturing should also be addressed.
• Strategies to reducing wait times at the borders will have economic benefits but may have traffic impacts. Strategies should consider the Border Master Plan.
• Strategies to improve community outreach should consider lessons-learned from previous studies such as use of media (e.g., TV, newspapers) to encourage public participation and to educate the public on how to participate in process.
• Economic development strategies should consider the cluster analysis being performed to the mega region study.
• Strategies addressing housing and job-housing balance should consider the factors that make the Imperial Valley attractive.
• Make sure that transportation strategies include improvements identified in SANDAG’s and IVAG’s long-range plans.
• Strategies for ridesharing might consider opportunities to promote use of cleaner vehicles, such as natural gas vehicles.
• It is important to track how climate actions plans and addressing greenhouse gas emissions fit into the future of this corridor.

4. Upcoming Meetings and Next Steps

It was noted that the next JTAG meeting was scheduled for Thursday, November 20 at 10 am. Rescheduling January 30, 2009 JPAG meeting to February 6, 2009 was discussed but not resolved.
Joint Policy Advisory Group Members Present:

Dave Allen       SANDAG Borders Committee Member / City of La Mesa Councilmember
Victor Carrillo  IVAG Regional Councilmember / Imperial County Supervisor
James Hill       La Posta Band of Mission Indians
Patricia McCoy   SANDAG Borders Committee Chair / City of Imperial Beach Councilmember
John W. Minto    SANDAG Borders Committee Member/City of Santee Councilmember

Staff and Guests:

Eusebio Aballo   Imperial Valley EDC
Elisa Arias      SANDAG
Ralph Cordova, Jr. Imperial County
Maurice Eaton    Caltrans District 11
Bob Ham          IVAG
Andy Horne       Imperial County
Rosa C. López-Solís IVAG
Ron Sáenz        SANDAG
Hector Vanegas   SANDAG
Jared Jerome     PMC (consultant)
Warren Whiteaker PMC (consultant)

1. Welcome and Introductions

Mr. Carrillo welcomed the attendees and led the self-introductions. He then briefly described the stops on the van tour, which immediately preceded the meeting.
2. Approval of the August 1, 2008, Meeting Minutes

Ms. McCoy initiated the approval of August 1, 2008 Meeting Minutes.

3. Interregional Public Survey

Ms. McCoy introduced Mr. Whiteaker who then briefly summarized the key findings of the project to date, including summarizing the Existing Conditions. He then began discussing the Interregional Public Survey. He noted that the I-8 Traveler Survey was conducted at the I-8 westbound checkpoint on Tuesday, Wednesday and Thursday during AM and PM peak hours to focus on interregional commuters commuting between Imperial Valley and San Diego.

Mr. Whiteaker noted that in the Residential Survey findings, there were high numbers of satisfaction of quality of life from respondents. Low marks were noted for shopping, nearby jobs and recreation, and climate. The majority of respondents do not plan to move out of the community in the next two years. Family and friends account for 20 percent of the reason people choose to stay in Imperial County. Ninety-one percent of respondents work within Imperial County, demonstrating that the County is not a bedroom community.

Mr. Whiteaker noted that economic policies are a priority over traffic. There is more concern over job opportunities. Higher paying jobs and job growth is something to focus on.

Mr. Whiteaker noted that on the I-8 Travelers Survey, the majority of respondents reported good congestion conditions. Most travelers, approximately two-thirds, were traveling for work or business. He also noted that due to the survey being handed out at a border checkpoint, the survey avoided questions related issues such as immigration.

Mr. Whiteaker noted that 70 percent of respondents have been making their current commute for more than two years, which reinforces that the commute is acceptable for them.

Mr. Whiteaker noted the following amongst super commuters:

- 91 percent drive an hour each way, and 26 percent drive at least two hours each way.
- 91 percent are somewhat satisfied, or very satisfied with their commute.
- Typical super commuters are older, higher income males.

Mr. Hill noted that a high percentage of workers in the casinos along I-8 regularly participate in vanpooling.
Mr. Whiteaker noted that casinos in the study area have received recognition through the RideLink Diamond Awards for their vanpooling programs.

Mr. Whiteaker continued the super commuter discussion, noting:

• Approximately three-fourths would not likely move closer to work for a 25 percent pay increase.

• 77 percent would not take a closer job that pays 10 percent less than their current job.

• 65 percent are not willing to take a closer job even if gas rose to $6 per gallon.

Mr. Allen stated that high traffic in some areas can be attributed to recreational areas.

Mr. Carrillo noted people going to the Mission Beach area in Arizona.

Mr. Whiteaker verified that the Existing Conditions report addresses traffic related to recreational activities, particularly Friday evenings and Sunday afternoons.

Mr. Allen explained that the I-8 at El Cajon can be bottlenecked badly on weekends.

Ms. Lopez-Solis agreed, but reiterated that this study is addressing multiple smaller issues.

Mr. Eaton reinforced that the study addresses inter-county issues related to the interaction between communities on the I-8, not solely transportation. The study identifies what needs more focus, whether is be transportation, economic development, or other issues.

Mr. Allen noted that recreational vehicles can also damage roadways.

Mr. Carrillo noted that also trucks and farm equipment, along with recreational vehicles, can damage roads.

Mr. Ham noted that users of the corridor include cross-border trips.

Mr. Whiteaker noted that ridesharing would reduce vehicle miles traveled (VMT), improve air quality, and reduce greenhouse gases.

Ms. McCoy noted that with rising gas prices, people have to change driving habits, but people adapt only if they have to, rather than by choice. Ms. McCoy noted that the wide use of private vehicles is definitely cultural, and in Europe, private transportation is less of a focus. In the U.S., driving is viewed as a given right. In the past three to four months, this has been changing; people’s habits are changing.
Incentives [to participate in carpooling, etc] are good, but the pocketbook has a much bigger effect.

Mr. Whiteaker suggested that to address the job/housing balance, to look at incentives. Are there high paying jobs, and a good jobs/housing mix in the county?

Mr. Minto noted that there are cultural conflicts with a distant commute, such as driving long distances for entertainment.

Mr. Whiteaker discussed lessons learned from the SANDAG I-15 study. For instance, many people close to retirement age may want to put in a few more years to get full retirement.

Mr. Minto asked that if trucking continues to grow, is there a discussion to get off the road and on to rails?

Ms. Arias noted that SANDAG is going to start a regional freight study beginning within the next couple of months.

Mr. Whiteaker noted that depending on the type of freight, shifting to rail works, but it is less attractive if you want to move freight quickly, because the freight lines are not straight enough. Although rail may reduce trucks, there is still a demand for trucks.

Mr. Ham noted that the Maglev study had a goods movement component. Maglev slows less over inclines, which is better for quick goods movement.

Mr. Whiteaker noted that California High-speed Rail has an aspect of light goods movement, mixed with passenger movement.

Mr. Carrillo noted that the Maglev was partly derailed because an alternative airport site was part of the Maglev initiative. The high cost of the Maglev rail was also a factor, $22 billion, which is partly because the right of way needs to be flat to increase speed.

Mr. Ham noted that Measure 1A is on the ballot and would be a first step to get high-speed rail to the corridor.

4. Early Actions and Interregional Strategies

Mr. Whiteaker noted the following strategies:

- There is not too much congestion on the I-8 corridor, but this presents an opportunity to get ahead of any congestion issues. He noted that there is a willingness to look at ridesharing opportunities, using fuel prices as an incentive.
• Reiterated the importance of jobs; the public responses to jobs being important attributes.

• Mr. Whiteaker noted that there is an opportunity to be proactive in the jobs/housing balance. This includes trying to match the amount of jobs with the available housing.

• There is still a need for capital improvements to address issues such as bottlenecks.

• Rail freight movement could reduce air pollution.

• Focus more on economic development opportunities, diversify into high paying jobs, and capitalize on interregional opportunities such as education, biotech, as well as the alternative energy market.

Mr. Carrillo noted there is a lot of potential in Imperial County for power generation but the ability to transmit the energy from the rural area to the consumer is difficult. He noted to also look at energy traffic; Powerlink was going to use the I-8 as a corridor for energy travel. Also, Maglev was planning on using the I-8 corridor. Mr. Carrillo noted that we must broaden our scope to collaborate with other resources that may enhance or take away from what we’re doing. Ultimately, we need to make sure we are in sync with other regions.

Mr. Allen agreed about looking at Powerlink.

Mr. Whiteaker noted that this is beyond the scope, but must look at everything being in sync, the players must work in unison. He reiterated the importance of interregional collaboration.

Mr. Allen noted that after visiting the geothermal plant and looking at solar power generation, he is convinced that power transmission is the critical issue.

Ms. McCoy noted that there are industries interested in the I-8 for power transit. She mentioned that Mr. Carrillo has been discussing geothermal technology for a while.

Mr. Venegas noted that the South San Diego EDC is working with the Imperial Valley EDC working on a comprehensive study on economic development. The objective is to create an economic area south of the I-8. This I-8 Corridor study can help avoid duplication.

Mr. Minto stated that he had not heard of this study.

Mr. Arballo noted that the study is very recent, and in the initial stages.
Mr. Arballo noted that the funds are from a grant from the EDA. Rather than Imperial Valley EDC and South County EDC working separately, they should work together.

Mr. Minto stated that it is confusing because, how much of South County is included in the I-8 corridor?

Mr. Arballo explained that it is mapped by census tract. Unemployment and per capita income are variables in the study. Most of the study area is south of the I-8, in both counties.

Ms. McCoy asked if the study is looking at border stations.

Mr. Arballo stated the emphasis of the study is on infrastructure, such as a regional mall, and growth projects, and possibly a regional airport.

Mr. Allen noted that it is good that the study is happening, but if you’re going to have an economic group, we must be talking with each other.

Mr. Arballo stated that the main push is in South County EDC. He also reiterated that the study is very recent, and it is possibly between council meetings.

Mr. Allen reiterated that everyone should be working together, and we just don’t want anyone splitting off.

Mr. Minto thanked Mr. Arballo for letting them know.

5. Upcoming Meeting and Next Steps

Mr. Whiteaker noted that November 20th is the next Joint Technical Advisory Group meeting. The next Joint Policy Advisory Group meeting tentatively scheduled for January 23, 2009.
1. Welcome and Introductions

2. Interregional Public Survey

A presentation of the survey findings was presented by Gomez Research. The following items were noted:

- Most respondents rated quality of life either good or excellent.
- The top priorities when rating the area were personal safety, access to medical care, affordable housing, and job access.
- Respondents rated personal safety as good or excellent, but lower ratings for nearby jobs.
- Over half of respondents were not interested in leaving Imperial County.
- The reasons for moving to Imperial County for respondents were primarily that they were born and raised in the county, or for family and friends.
- Of workers commuting at least once per week, the majority drive alone.
- It was noted that there was a drop in people carpooling, yet transit use remained stable.
- Of non-work travelers, the following was noted:
  - 36 percent traveling to visit family and/or friends,
  - 17 percent traveling for shopping,
  - 16 percent for recreation,
  - 15 percent for medical facilities/care, and
  - 11 percent for vacation.
- The following was noted for future travel patterns:
  - 77 percent would likely work from home if employer provided the option and
Less than 50 percent would carpool, vanpool, or use transit.

- It was noted that Imperial County is a relatively untapped market for vanpooling.
- It was noted that working from home could be a viable option for many workers:
  - For example, although medical care could not be performed at home, medical billing could.
  - Also, certain government agencies could work from home.
  - Cheaper, not capital intensive.

The following was noted about the I-8 travelers survey:

- 66 percent of respondents reported that traffic was light.
- Only 2 percent of respondents noted traffic was heavy.
- Two-thirds of travel on the I-8 was for work purposes.
- 7 percent of traffic was for medical/dental care.
- 93 percent of respondents were traveling to San Diego County.
- Typical travelers is just under 50 years old, with an above median income.
- The following was noted about travel patterns:
  - 54 percent of travelers drive 1 hour or more.
  - 71 percent have done the same commute for 2 years or more.
  - 22 percent carpool.
  - 90 percent of respondents note that they are satisfied with their commute.
- The following was noted about Super Commuters:
  - Longer one-way trips – 91 percent drive at least an hour one way.
  - Approximately a quarter of respondents drive 2 hours one way.
  - Typical commuter is higher income, older, and male.
- It was noted that, in regards to the I-15, a number of drivers doing super commute trips were post-retirement, possibly looking to maximize their retirement plan.
- The following was noted about future travel patterns for Super Commuters:
  - Less than half reported that they were likely to carpool, vanpool, or take transit.
  - Over three-quarters of respondents were not likely to move closer to work, even if they could get cheaper housing.
  - Two-thirds were not likely to move closer to work, even if gas prices were to rise to $6 per gallon.
  - These respondents are not interested in changing jobs or housing.

3. Early Actions and Interregional Strategies

PMC lead a discussion on the draft early actions and interregional strategies. The following items were noted:

- Focus on job development within the County of Imperial.
- Promote telecommuting.
• It was noted that because traffic and congestion is acceptable, there is an opportunity to be proactive.
  o There is a willingness to rideshare and work from home.
  o With the downturn in the housing market, there is an opportunity to increase jobs to keep up with future housing demand.
  o Economy could shift away from agricultural jobs, and more towards alternative energy employment.
• It was noted that high tech companies have researchers based around the University of California at San Diego, and that the production side of these companies could be based in Imperial County.
• It was noted that there will be increased housing in the near future, and that maintaining the jobs/housing balance, recreational facilities, should be focused on, maintaining the standard of living with future growth.
• In regards to SB 375, rideshare activities could be included in regional plans to help lower greenhouse gases.
• It was noted that cross-border co-operation could assist in goods movement and import being routed through Imperial County.
• It was also noted that cross-border co-operation should also look at the border crossing delay problem.
• It was noted that anytime there can be a decrease in the number of single-occupant vehicles, vehicle miles traveled (VMT) will lower, air quality will be better, and it will be better for addressing SB 375. There are large secondary benefits of ridesharing.
• It is important to integrate Tribal Nations in any interregional collaboration.
• Casinos account for both a large percentage of travel, and also a large percentage of ridesharing activity.
• There should be a focus on economic development, and higher paying jobs such as alternative energy and biotech employment.
• It was noted that with more jobs and manufacturing in Imperial County, there will be a greater demand for energy. Energy should be a large focus for both Imperial County, and San Diego, in regards to Imperial County supplying alternative energy to both counties.
• The I-8 right of way could be used for energy transmission.
• The I-8 right of way could also be used for Maglev.
• It was noted that the goals for this study are broad enough, and not too focused. The goals for this study can be used to create more detailed goals for future studies.
• It was noted that when setting a footprint for future I-8 uses, that the corridor should be preserved.
• It was noted that the survey cards were distributed between approximately 6:20AM and 9AM.
• It was noted that in terms of quality of life, some aspects that are not working should be improved, but also what is working should be improved.
4. Upcoming Meetings and Next Steps

It was noted that the next JTAG meeting was scheduled for Thursday, December 18 at 10 am in San Diego (SANDAG offices).
1. Welcome and Introductions

2. November 20, 2008 Meeting Summary

The JTAG had no comments on the November Meeting Summary.

3. Draft Report

A presentation of the Draft Report was provided, including the following topics:

- Strategic Plan Elements
- Key Findings
- Recommendations

The JTAG had the following comments:

- Final document should include recommendations for future studies
- Final document should include a summary of previous meetings, including JTAG meetings and the public meeting
- Provide additional information about the Mega-Region Initiative and the Comprehensive Economic Development Strategy

4. Upcoming Meetings and Next Steps

The next meeting of the JTAG is scheduled for Thursday, February 19, 2009, at 10 a.m.
1. Welcome and Introductions

2. PMC lead a presentation and discussion on an overview of the San Diego-Imperial County I-8 Corridor Strategic Plan. The following items were discussed:

- Overview of Strategic Plan Elements
- Strategic Plan Goals
- Review of Existing Conditions
- Overview of Interregional Public Survey
- Key findings of the Strategic Plan
- Strategic Plan Recommendations
3. **Comments made during Strategic Plan Presentation**

- Ed Snively commented that there is too much truck traffic coming to and from Los Angeles on SR-86 to the I-8 corridor. He wanted to hear more strategies to get trucks off the SR-86 and suggested the need to complete the Brawley by-pass. He also indicated the need for better signage along SR-86 to warn truck drivers of the need to merge left as SR-86 moves from Imperial Avenue to Adams Avenue. He was also concerned that SR-86 in the city of Imperial and El Centro is being ripped apart by the truck traffic and repairs are needed.

- Ed Snively made another comment regarding traffic deaths along the I-8 corridor. He suggested that new signage was needed to alert people to the dangers of falling asleep while driving through the flatter terrain along the corridor.

- San Sandoval indicated that the county roads approaching the El Centro Naval Air Facility are in poor condition and need additional maintenance and rehabilitation.

4. **PMC thanked all attendees for their participation and concluded the meeting.**
Joint Policy Advisory Group Members Present:

 Victor Carrillo  
 IVAG Regional Councilmember / Imperial County 
 Supervisor

 Patricia McCoy  
 SANDAG Borders Committee Chair / City of Imperial 
 Beach Councilmember

 John W. Minto  
 SANDAG Borders Committee Member/City of Santee 
 Councilmember

 Staff and Guests:

 Elisa Arias  
 SANDAG

 Maurice Eaton  
 Caltrans District 11

 Bill Figge  
 Caltrans District 11

 Rosa C. López-Solís  
 IVAG

 Dennis Thompson  
 Caltrans District 11

 Ron Sáenz  
 SANDAG

 Hector Vanegas  
 SANDAG

 Jared Jerome  
 PMC (consultant)

 Warren Whiteaker  
 PMC (consultant)

1. Welcome and Introductions

Mr. Whiteaker welcomed the attendees and led the self-introductions.

2. Approval of the October 31, 2008, Meeting Minutes

Mr. Whiteaker noted that, due to a lack of a quorum, the October 31, 2008 Meeting Minutes could not be approved.
3. Draft Strategic Plan

Mr. Whiteaker briefly summarized the findings of the Specific Plan. He noted that Imperial County is not a bedroom community for San Diego County, and that for those that do commute between the two counties, most commuters are satisfied with their trips. There is also an untapped ridesharing opportunity with up to 50 percent of commuters willing to carpool. He also noted that residents of Imperial County are generally satisfied with their quality of life.

Mr. Whiteaker noted that the first goal of the Plan is to improve interregional collaboration between Imperial and San Diego Counties. This includes information sharing, continued integration of Tribal Nations in planning, and collaboration on cross-border people and goods movement.

Mr. Carrillo noted that both San Diego and Imperial Counties share Caltrans District 11. He also noted that most highway projects being included in the upcoming stimulus package will be North-South corridors rather than East-West corridors, such as the I-8.

Mr. Whiteaker continued with the second goal of the Plan being to maintain and improve mobility for people and goods. The first strategy associated with this goal is to maintain commitment to key capital investments, such as widening the I-8 from 4 to 6 lanes between El Cajon and Alpine.

Mr. Eaton noted that in late summer, there will be a bid to widen the corridor from 2nd Street to Greenfield, in the eastbound direction as part of the economic stimulus package.

Mr. Carrillo asked whether that was resulting from trips related to the Viejas area, or to accommodate the workforce commuting between the two counties.

Mr. Figge noted that right now it is for accommodating the workforce, although Viejas is also interested in the improvements.

Mr. Minto noted that for Viejas, most traffic is not exiting in the area under question.

Mr. Whiteaker continued on to Goal 3, which is to enhance the quality of life in the Imperial Valley and San Diego County. Related strategies include exploring means of preserving current quality of life, and addressing access to medical and dental care.

Mr. Carrillo noted that some insurance packages offered to employees will cover 100 percent of the cost if the employee chooses to go to Mexico for medical care. He noted that the proficiency and commonality of Spanish makes it easier for an employee to see a doctor who speaks Spanish rather than to come to San Diego to seek specialized care but have to use a translator. He also noted that much of the
Asian population in Imperial County will also seek care in Mexicali because of the lower cost and ability for many Imperial County residents to speak Spanish.

Mr. Minto asked if moving healthcare south, does this have benefits to the economy of Imperial County.

Mr. Carrillo said that the residents of Imperial County would have more disposable income due to their insurance covering the entire cost of health care.

Mr. Minto asked if disposable income is also being spent on retail in Mexico as well.

Mr. Carrillo said that residents primarily just seek medical care and prescriptions in Mexicali, and that Mexicali residents will come north to shop at retail stores in Imperial.

Ms. McCoy noted that the primary care sought in Mexico is dentistry.

Mr. Sáenz noted that there is an opportunity to decrease border delay and increase ridesharing across the border, but is not sure if the medical community in Imperial would support these actions.

Mr. Carrillo noted that from a socio-economic standpoint, residents are less likely to get over the counter care than to get care from a pharmacy adjacent to medical offices. He also noted that the uninsured are likely to go directly to the emergency room for care.

Mr. Whiteaker continued on to Goal 4, which is to improve the economic vitality of Imperial Valley and San Diego County. Associated strategies for Goal 4 include supporting economic development focusing on job creation, particularly on higher paying jobs. Goal 5 is to minimize the negative impacts of growth and transportation improvements on the environment. Strategies associated with Goal 5 include preserving the I-8 corridor right of way, and monitoring related interregional issues such as SDG&E’s Powerlink.

Mr. Whiteaker noted that the draft Plan will be updated with the latest data available for existing conditions. He also noted that the discussion of related studies, including the Mega-Region project will be expanded. Mr. Whiteaker noted that we will identify other areas needing additional study.

Mr. Whiteaker noted that there were public comments on truck traffic on SR 86, single vehicle crashes on the I-8, and the need for improved road maintenance approaching the El Centro Naval Air Facility.

Mr. Eaton noted that a keystone for the I-15 study was the identification of industry clustering in southwest Riverside and north San Diego Counties. This clustering
study looked for synergies in industries between the counties. The study demonstrated where economic development could benefit both communities.

Ms. Arias stated that there have been synergy clusters identified, and it will be discussed at the next Borders Committee presentation by the EDC.

Mr. Sáenz asked if Mr. Eaton was considering that the Policy Advisory Group look at the clustering.

Mr. Eaton stated that he was.

Mr. Minto noted that we need to make sure that we are not duplicating the EDC effort, but agreed with Mr. Eaton that we should look at clustering. Mr. Minto asked if we have looked at local General and Master Plan’s along the I-8 corridor. He stated that if they’ve already been looked at, we shouldn’t be looking at putting anything on top of their already established plans which may suppress or hinder their plans.

Mr. Whiteaker stated that the character of Smart Growth may be very different in San Diego versus the Imperial Valley. He noted that success for Imperial Valley would be that most jobs are within the Valley. He also noted that in regards to Senate Bill 375, there needs to be a land use solution to help meet greenhouse gas emission reduction goals and reductions of vehicle miles travelled, and to encourage transit, accommodating land use issues need to be identified.

Mr. Minto stated that we should note the experience level of councils and board of supervisors, and even staff, and that Santee has been dealing with a large amount of development in the last six years and has a lot of experience, whereas areas like Imperial Beach may not have the same amount of development experience. He noted that we should look at how to help or train the staff and elected officials of these areas on development.

Ms. McCoy agreed, and noted that they have to find new ways of doing business. She noted that there should be a concern about climate change, and that we need to look further out than every four years.

Mr. Minto noted that some elected officials look closer at current issues, rather than future issues.

Ms. McCoy stated that there is a need to look further down the road, and that to have a vision for the future is incredibly important.

Mr. Figge noted that it is easy to lose sight of the bigger picture by focusing too much on immediate local development.

Mr. Minto noted that we can’t just focus on current planning.
Mr. Whiteaker stated the possibility of an annual summit for elected officials or staff to get together and share development processes or techniques. He asked if that is something that makes sense.

Ms. McCoy mentioned that as Mr. Minto noted, we can avoid duplication of work, and have staff and elected officials get outside of their comfort zones.

Ms. Arias noted that the Borders Committee work program has an existing mechanism to maintain dialogue.

Mr. Minto stated that he would prefer more frequent meetings because of the high turnover of elected officials. He stated a preference for bi-annual or quarterly meetings, and that many San Diego public officials may not know about issues in Imperial County.

Mr. Carrillo noted that in California, we identify ourselves by our local area, rather than by our state. He noted that many school-age children have not been to Sacramento, or Washington D.C.

Mr. Whiteaker noted a Mobility-21 style annual summit for information sharing, which mixes staff, the private sector, and elected officials might be a good approach.

Mr. Minto reiterated the importance of cooperation and the building of capacity. He stated that if a company comes to you, and you don’t know the answer, you reach out to someone who you know knows better. Because of collaboration there is a benefit of information sharing between regions, and also regional economic development. This information sharing encourages cooperation, and discourages hoarding of information.

Mr. Whiteaker noted to consider this discussion while going over the next Overall Work Program.

Mr. Carrillo noted that we are three to four years behind on roadway projects. He noted that people are trying to get back into urban areas to utilize transit and walk. He asked what our goals are for the I-8 in regards to what we want to build, development, etc.

Mr. Whiteaker noted the idea of a real grand plan would be a big turnaround for Congress.

Mr. Carrillo asked if there are projects on the drawing board for east to west projects to be funded.

Mr. Minto stated that maybe we should think about having their transportation committee make recommendations to the Congress or Senate to start looking at
introducing something for a nationwide transportation fund. He noted that we have fallen behind on east to west freeway development.

Mr. Carrillo noted that Maglev was initially a pipedream to connect the Imperial County with San Diego, yet to make Maglev palatable is to make it accessible to Arizona. He stated that yet, the $22 billion cost of Maglev sounds like less money as we spend more money on the Iraq war, and now $22 billion does not sound like as much money as it did before.

Mr. Whiteaker noted that with the stimulus package, there is scrambling to come up with what is the right list of projects to be funded. He stated that it is valuable to highlight what the needs are to identify a comprehensive list of projects of regional importance.

Ms. McCoy noted the rising and unstable fuel costs.

Ms. Arias noted that the SANDAG RCP developed a list of long range projects.

Ms. Lopez noted that we have to move on to a second phase of the Plan, although the state does not have the funding.

Mr. Eaton noted that funding will be used for its intended purpose rather than be rerouted, and the next round of funding is early April. He noted that hopefully an opportunity to supply and complete a second phase with upcoming funds will be possible. He also noted that Sacramento views joint applications for funding more favorably.

Ms. Arias asked that since we couldn’t take action on the Plan, committee members can still express their support.

Mr. Sáenz asked for a review of new strategies identified in the current meeting.

Mr. Whiteaker review the strategies identified. This included economic development and cluster analysis. Overall recommendations included interest in the idea of this regional discussion continuing into the future.

Ms. McCoy noted that the Powerlink will need to fit in with other planning issues, and there is a need to make sure it fits into the strategies.

Mr. Whiteaker noted that shared experience training could be something like a planning directors’ forum, or a forum for traffic engineers at COGs. IVAG, SCAG, and Caltrans could discuss how to use planning dollars for the Overall Work Program.
Mr. Carrillo noted that with so much synergy coming out of the region, individual trips to Washington D.C. could result in the right hand not knowing what the left hand is doing.

Mr. Minto stated that maybe staff could identify what regions are doing similar meetings or processes, bring those people to collaborate, and go with one voice to obtain grants, etc.

Mr. Carrillo noted that SCAG does not move as cohesively as SANDAG, and is less effective and larger. He noted that when we become more global, people expect the public agencies to deliver, and the public needs work to be shown for.

Mr. Minto noted that people may not realize the length between planning, and breaking dirt.
1. Welcome and Introductions

2. January 15, 2009 Meeting Summary

The JTAG had no comments on the January Meeting Summary.

3. Strategic Plan

Mr. Whiteaker briefly summarized the four key parts of the Strategic Plan: Goals and Objectives, Existing Conditions, Interregional Public Survey, and Early Actions and Interregional Strategies.

Mr. Whiteaker highlighted the key updates to the Strategic Plan:
- Latest available data
- Expanded discussion of related studies
- Additional information on Sunrise Powerlink
- Expanded discussion on Early Actions and Interregional Strategies
- Identify areas requiring further study
- Summary of meetings

Mr. Sáenz noted a public comment regarding ridesharing.

Mr. Whiteaker clarified that the comment clarifies ridesharing programs in Imperial County.

Mr. Sáenz stated that during discussions with staff involved with ridesharing programs at SANDAG, it was suggested that it is possible for SANDAG to work with Imperial County to help to develop a similar ridesharing program. SANDAG staff gave Mr. Saenz 511 information on technical needs to implement a similar program. He also noted that Caltrans is interested in further developing a ridesharing program.
Mr. Whiteaker noted that some of the information on ridesharing is included in the Plan, and that the 511 service is a very useful program, which he has used previously during commute.

Mr. Sáenz noted that the 511 program could be used to assess border wait time.

Mr. Whiteaker noted that media outlets could utilize the information from 511.

Mr. Tyler noted that media outlets report on border waits.

Mr. Whiteaker said that he will update the ridesharing language in the Strategic Plan.

Mr. Sáenz stated that last meeting the group discussed seeing an appendix with stakeholder comments in the Strategic Plan.

Ms. López-Solís noted that we should have public comments attached before the draft gets turned in to Caltrans.

Mr. Sáenz commented that the group is more interested in comments addressing policy, rather than wordsmithing comments.

Mr. Tyler noted that the comments are those specifically about the final Strategic Plan.

Mr. Whiteaker noted that he will come up with an expanded table of Agenda Item 3, and fold that information into an appendix.

Mr. Sáenz stated that SANDAG, IVAG, and Caltrans need to meet to lay out another year long schedule to continue pushing forward with the plan.

Mr. Whiteaker noted that the main issue is getting representatives from both Imperial and San Diego to attend the meetings.

Mr. Tyler noted that it will help being able to coordinate both Imperial and San Diego projects.

Ms. López-Solís asked about whether it is possible to get enough copies of the plan, approximately 7-8 copies, by next Wednesday for the IVAG meeting.

Mr. Sáenz noted that he would also like copies for SANDAG stakeholders.

Mr. Thompson stated that all paperworks needs to be in from IVAG by the middle of April, by about the 17th.

Mr. Whiteaker stated that PMC could provide extra copies and billing reports.
Mr. Sáenz discussed going for a second round of grants with IVAG.

Ms. López-Solís noted that she needs final approval from her advisor, but is putting together a second round of grants. One option is to go through SCAG, or a second option is to have SANDAG be the lead. She noted that IVAG intends to go to a Phase Two of the Strategic Plan, and will discuss this further with SANDAG.

Mr. Whiteaker summarized the scheduled meetings, and project close-out from PMC. He noted that it may make sense to deliver the final package in March, to make sure the most up to date information is included in the Plan.

Mr. Thompson noted that Caltrans needs to have everything by February 28th.

Mr. Sáenz asked for a copy of Mr. Whiteaker’s presentation for next week.

Ms. López-Solís noted that the presentation may have to be condensed.

Mr. Sáenz asked if Mr. Whiteaker will be able to get through the recommendations during the Wednesday meeting.

Mr. Whiteaker noted that he can get through the recommendations, and noted that he can put the various presentations on the PMC FTP server for Mr. Sáenz.

Mr. Sáenz and Ms. López-Solís thanked Mr. Whiteaker for an exceptional job.

Mr. Tyler noted that he appreciated Mr. Whiteaker’s flexibility on refocusing on different issues raised during the report.

Ms. López-Solís noted that since they publicly announced the $500 gas card giveaway, they may need to provide the awardee information to the State for purposes of confirming that the group did not go out soliciting for surveys and falsely saying that there will be a $500 gas card. She asked whether the State needs confirmation that it was indeed awarded.

Ms. López-Solís noted that another staff person from Imperial County wanted to know if they have to announce the winner for another similar giveaway.

Mr. Whiteaker stated that he will check with Ms. Gomez from Gomez Research for documentation.

Ms. López-Solís asked Mr. Thompson to check with Caltrans on whether the group needs to provide documentation in the case of an audit on the project.
Mr. Tyler noted that Kathi Williams heads up the IVAG transit team.

Mr. Sáenz noted that he will get in contact with her regarding ridesharing.