



Short Range Transit Plan

Imperial County Transportation Commission (ICTC)
Imperial County, California

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ICTC

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Prepared for:

Imperial County Transportation Commission



Prepared by:

AECOM
401 West A Street
Suite 120
San Diego, CA 92101
aecom.com

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Executive Summary

This report presents a *Short Range Transit Plan* (SRTP) for the various public transportation services sponsored and supported by the Imperial County Transportation Commission (ICTC). Several sequential steps were followed during the development process for the SRTP, and they are described in this Executive Summary.

Public Outreach Process

This section summarizes community input received during public outreach efforts for the Imperial County Transportation Commission (ICTC) Short Range Transit Plan (SRTP). More than 236 people participated in the public outreach activities, which included the following activities throughout 2018:

- Stakeholder Interviews;
- Bilingual “bus stop workshops”;
- Bilingual public workshops; and
- A Public Review Session presenting the Draft SRTP.

The public outreach effort offered multiple participation options to make it as easy as possible for interested organization representatives and individuals to give input. The chart on the next page summarizes these input options, focus, and participants.

ICTC Short Range Transit Plan: Overview of Community Participation Activities

Participation Opportunity	Focus	Number of Participants
Stakeholder Interviews Wednesday, February 14, 2018 1503 North Imperial Avenue, Suite 104 El Centro	Focus-group format meetings scheduled conveniently throughout the day for 20 identified stakeholder groups. Several sessions held from 8:30 a.m. until 5 p.m.	26
Bus Stop Workshops Tuesday, February 13, 2018	The project team stopped by several bus stops within Imperial County to hear perspectives on public transportation directly from riders	
	Calexico: 3 rd and Paulin 6:30AM to 8:30AM	73
	Calipatria: State Route 111 and Main 9:40AM to 10:10AM	1
	Brawley: South Plaza/5th & G Transfer Center 10:30AM to 12:00PM	14
	Imperial Valley College: IVC bus stop 12:15PM to 1:45PM	48
	IV Mall: IVT stop at Mall 2:00PM to 3:30PM	6
	El Centro : 7th & State Transfer Center 3:45PM to 5:15PM	17
Bilingual Public Workshops Monday, April 23, 2018 and Tuesday, April 24, 2018	The project team conducted four bilingual, open house-style Public Workshops within Imperial County to hear perspectives on public transportation directly from riders	
	Calexico: Camarena Memorial Library Monday, April 23, 4:30PM to 6:30PM	8
	Niland: Niland Community Center Tuesday, April 24, 10:00AM to 11:30AM	15
	Brawley: Brawley Chamber of Commerce Tuesday, April 24, 12:30PM to 2:30PM	10
	El Centro: Imperial County Department of Social Services Tuesday, April 24, 4:00PM to 6:00PM	9
Public Review Session Wednesday, November 28, 2018 ICTC Office 1503 North Imperial Avenue, Suite 104, El Centro	Present the Draft SRTP and Provide Opportunities for Attendees to Submit Comments	11
TOTAL PARTICIPANTS		236

During both the public outreach activities, the planning team developed guiding questions as prompts to address certain key topics with the public and ensure consistent, comprehensive discussion of issue areas. These topics ranged from available services to vehicle quality, to operator courtesy, and feedback on the Draft SRTP. Even with a wide range of topics, the following major discussion themes emerged during outreach activities. These major discussion themes are not listed in any order of priority or importance:

- Overall satisfaction with service
- Improved service for transit-dependent riders
- Expanded options – improved frequencies/spans of service and new routes Improved service for students
- Additional communication and education
- Increased passenger comfort at bus stops

Existing Conditions/Service Evaluation

This section of the SRTP served as an outline of the existing conditions for the Imperial County Transportation Commission's (ICTC) transit system, combining general service guidelines, a profile of the service area, a profile of the transit system, and an evaluation of its service. The purpose of this section was to support the 2018 update to ICTC's Short Range Transportation Plan (SRTP).

Overall, the goals of the transit system, based on those previously adopted in the 2004 SRTP, are outlined below. The existing goals are as follows:

1. Provide mobility to all residents of Imperial County. Service levels are determined by demand, with all areas receiving service but those with more demand for transit receiving more service.
2. Connect residents of Imperial County with medical, social services, and educational facilities throughout the county.
Resources should be deployed with the following priorities (ranked 1-6):
 - 1) Access to major medical
 - 2) Social services facilities
 - 3) Access to educational facilities
 - 4) Access to employment.
 - 5) Support economic development such as commercial centers, retail and entertainment destinations.
 - 6) Provision of transit as a transportation alternative for the general public.

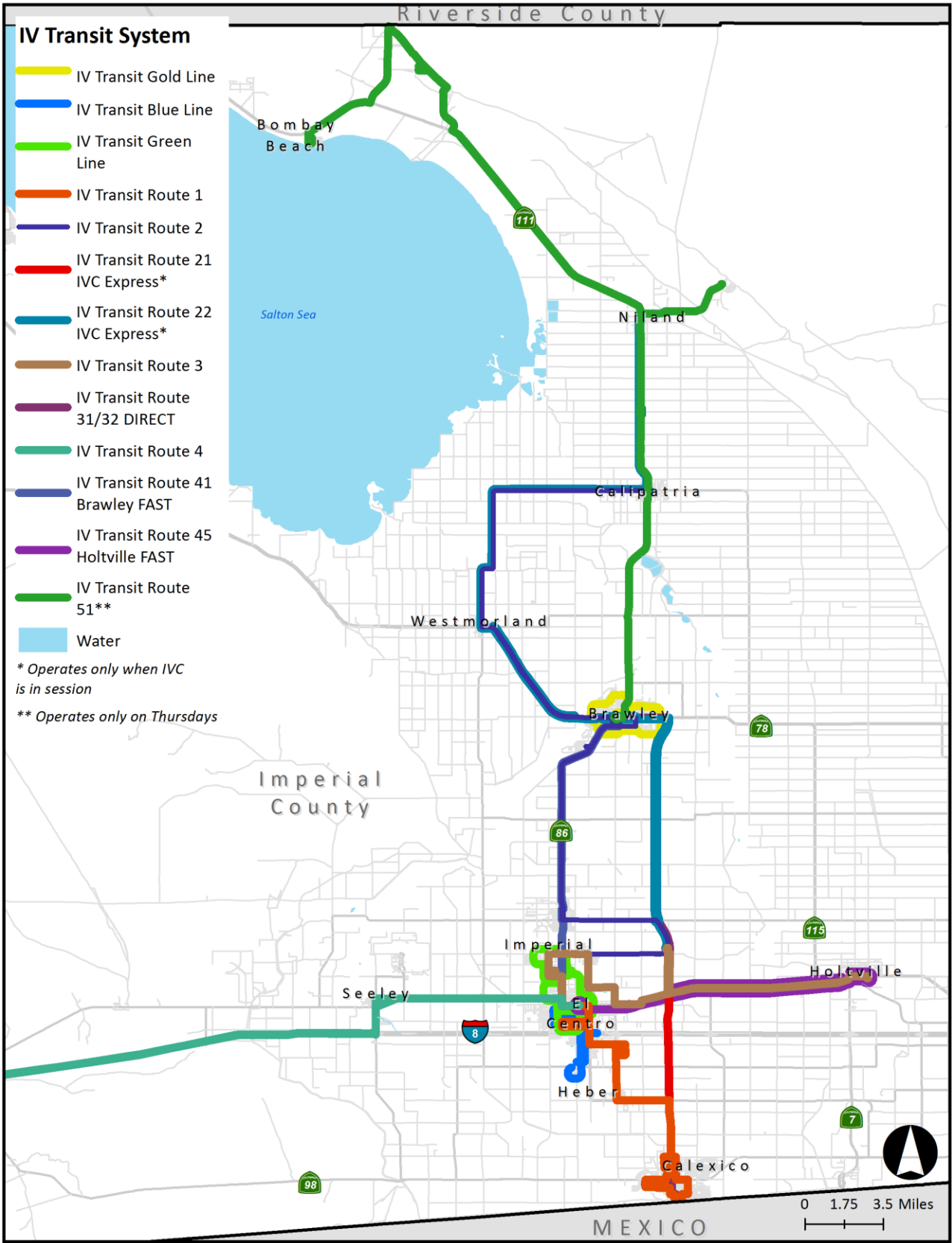
In order to move toward these goals for ICTC's transit system, this study should work to:

1. Maximize the efficiency of the system by deploying appropriate resources to areas where they are needed most.
 - i. Reduce crowding and increase frequency in denser areas where appropriate
 - ii. Provide an appropriate amount of service for rural areas
 - iii. Encourage coordination between all services, including cross-training between agencies (including those that are competitors) and the ability to cover service for other providers
 - iv. Eliminate duplicate services
2. Maximize usage of the system by serving all major trip generators and ensuring passengers can make the necessary connections to reach those destinations.

Transit service in Imperial County is broken down into three general fare types (Local, Regional, DIRECT/FAST), with a different level of service provided by each type. The primary service corridor includes Calexico, Heber, El Centro, Imperial and Brawley; the secondary service corridor includes Holtville, Seeley, Niland, Calipatria and Westmorland; and the remote zone includes the remainder of the county.

Both fixed route and demand response services are provided throughout much of the county, providing transportation for the general public, as well as senior and disabled people. Local, circulator, express and deviated fixed route service is operated between points throughout the Imperial Valley under contract for the county by First Transit, Inc., branded as Imperial Valley Transit. Demand response service (IVT ACCESS, IVT RIDE, and IVT MedTrans) is subsidized and administered by ICTC. IVT ACCESS is also available to the general public for an added fee when space allows. The figure on the next page shows the fixed route IV Transit services provided by ICTC throughout Imperial County.

Imperial County Transportation Commission Fixed Routes

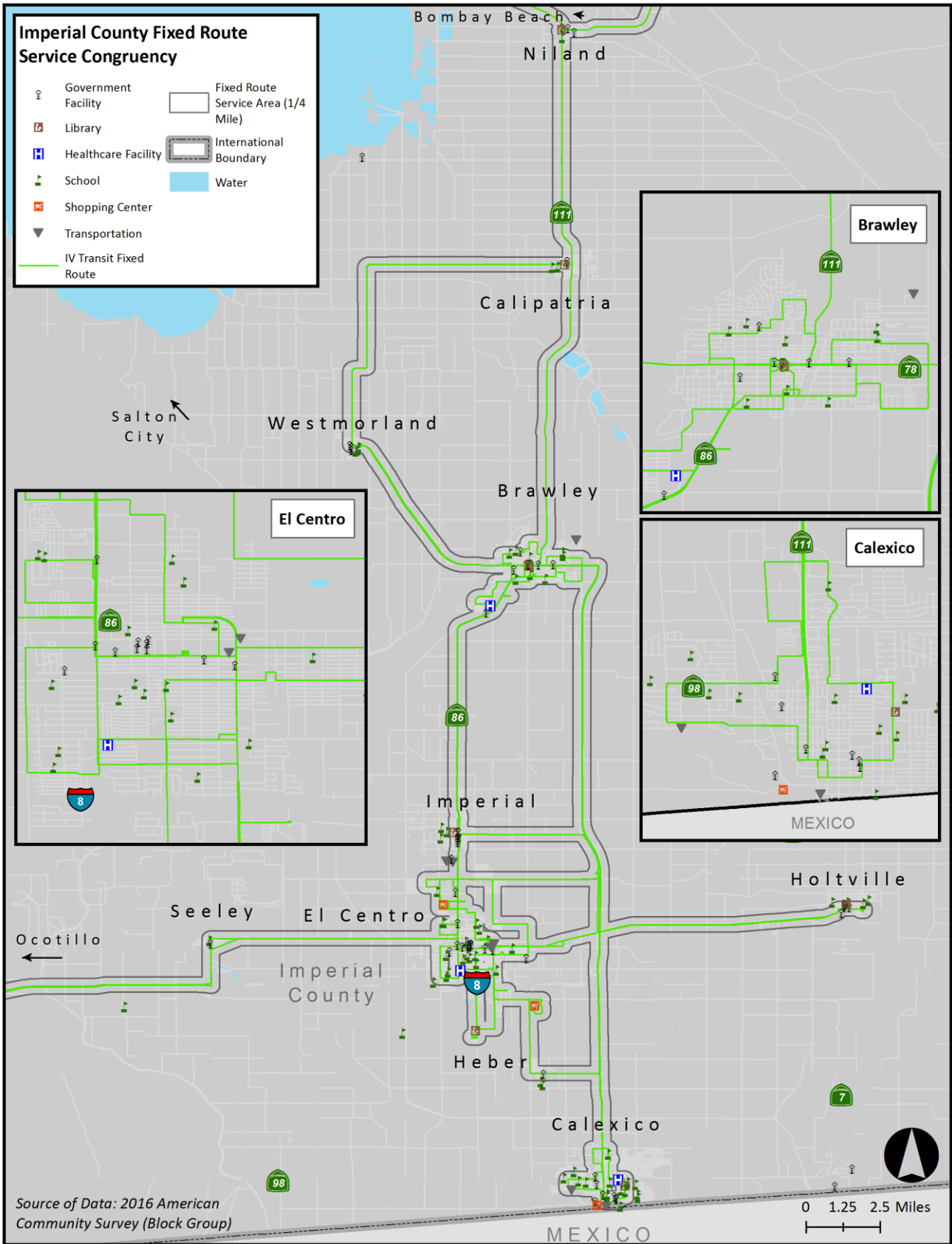


A “congruency analysis” shows what areas are currently served by transit, and what generators or areas determined to have a high transit need score are not currently served by transit.

The map on the following page overlays the current fixed routes, including a ¼ mile buffer around each route (the area considered by ICTC to be the “service area”, which is also served by IVT ACCESS), and IVT RIDE service areas, as well as the major trip generators in Imperial County.

Trip generators include employers, schools/colleges/ universities, business parks, government and social service locations, hospitals and medical centers, parks and tourist attractions, major retail locations and multimodal links. Border crossings are also taken into account as generators, as many people cross into Imperial County from Mexico to access jobs and/or shopping. Most major generators are served, with the exception of some employers, such as the Calipatria and Centinela State Prisons, CalEnergy, and Ormat Technologies (in Heber).

Imperial County Fixed Route Service Congruency



A brief summary of key points from the Service Evaluation portion of the Existing Conditions report follows. These points provide the basis for the recommendations that follow. The recommendations in this SRTTP seek to address the following needs and opportunities for the fixed route IV Transit system:

- Routes 1 and 2 represent the core of the IV Transit system, serving the primary north-south corridor between Brawley and Calexico. These services carry over 75 percent of passengers using the IV Transit fixed route system.
- Route 21 IVC Express is the most productive (i.e., in terms of boardings per hour) of the IV Transit routes.
- Routes with lower ridership or productivity represent policy decisions to provide and promote access and mobility for other residents of the region.
- Circulator routes provide improved circulation within urban areas, allowing for the streamlining of other routes, and thus providing decreased headways and promoting an increased number of trips on the primary corridor routes through timed connections. These routes also reduce the demand for IVT RIDE service in certain urban areas.
- The Direct and IVC Express services perform extremely well in terms of productivity and cost effectiveness, particularly Routes 21 IVC Express (as was previously mentioned) and Route 31/32 Direct.
- Some neighborhoods that are not currently served by IV Transit fixed route service in Calexico have access to service by a private operator (i.e., Calexico Transit System).
- Previously, ICTC did not own the IVT Transit fleet but has since purchased the majority of its fixed route fleet, although operator First Transit still owns several vehicles and directly leases its operations and maintenance facility to Imperial County. ICTC is currently considering constructing its own garage, maintenance, and administrative facility at a new location, which has yet to be determined.

Similar to the fixed routes, a brief summary of key points for the demand response services follows, and these points provide the basis for the recommendations that follow. It is important to note that demand response services in Imperial County are provided in a significantly different manner than the fixed route services, with both an Americans with Disabilities Act-mandated complementary demand response service (i.e., IVT ACCESS), as well as IVT RIDE, which provides demand responsive service in various communities.

- Several previously separate municipal Dial-a-Ride services (i.e., West Shores Dial-a-Ride, Imperial/EI Centro Dial-a-Ride, Brawley Dial-a-Ride) have been combined and integrated into IVT RIDE, a demand response service for Seniors 55 years of age or over and passengers who are certified to ride IVT Access. In West Shores, the service is open to general public since it acts as a community lifeline service and there are no other public or private operators.
- Historically – and particularly prior to the recent efforts to pursue a more coordinated service delivery model – costs have continued to increase with regards to the provision of demand responsive services under the countywide Americans with Disabilities Act (ADA) complementary paratransit program (i.e., formerly known as AIM Transit and now known as IVT ACCESS). Recently, ICTC has implemented demand management and growth management strategies, so as to contain the increase in costs as much as practically possible. The strategies recently implemented by ICTC include functional certification (where the need for ADA eligibility is tested and verified by the paratransit operator, without sole reliance on the client's physician for the certification), as well as an interview process, which was implemented in January of 2017 and where each applicant is interviewed by ICTC staff.

Peer Review

Ten peer community transit systems were selected for comparison. No two communities are the same, so a variety of communities were selected with characteristics that have similarities to ICTC in terms of community size, transit system size, and transit operations. The selected peer communities include:

1. Hanford, CA – Kings County Area Public Transit Agency (KART)
2. Redding, CA – Redding Area Bus Authority (RABA)
3. Santa Maria, CA – Santa Maria Area Transit (SMAT)
4. Pueblo, CO – Pueblo Transit System (PT)
5. Sioux City, IA – Sioux City Transit System (SCTS)
6. Pittsfield, MA – Berkshire Regional Transit Authority (BRTA)
7. Port Tobacco, MD – County Commissioners of Charles County, MD (VanGO)
8. Jackson, MI – City of Jackson Transportation Authority (JTA)
9. Lebanon, PA – County of Lebanon Transit Authority (LT)
10. Brownsville, TX – City of Brownsville-Brownsville Metro (BMetro)

Although efforts were made to find the closest matching peers, no two systems are exactly alike. Factors such as the type of service (fixed route, commuter, and demand response), the presence or absence of unions, local fare policies, quality of pedestrian facilities, community topography, and the quality of capital equipment can substantially impact the performance of individual systems. The peer review, therefore, should be viewed as a gauge of ICTC's operation compared to a representative sample of similar systems/communities, rather than an exact "report card."

Overall, IV Transit provides comparable service to its peers both in terms of fixed route service and demand responsive services. In particular, the cost of providing fixed route transit service in Imperial County (e.g., IV Transit) is similar to those in its peer systems.

Recommendations

Following are the recommendations emanating from the SRTP process for IV Transit's fixed route and demand responsive systems. Recommendations proposed for the five year financially constrained planning horizon (i.e., up to FY 2023/2024) are included in the following capital, financial and implementation plans, while the financially unconstrained proposals are included for the subsequent five years, illustrating the unfunded recommendations that necessarily fall into these latter phases.

The various proposals for both the IV Transit fixed route system, as well as the proposed changes to the IVT RIDE system, are shown jointly in the figure on the following page. All of the various service proposals – along with the existing IV Transit system – are illustrated in the subsequent figure as well on the following pages. All cost estimates are based on the cost per hour in provided during the unmet transit needs process, differentiated by fixed route values and demand response values, and scaled by implementation year.

The following recommendations are provided with their proposed implementation year.

Fixed Route Concepts:

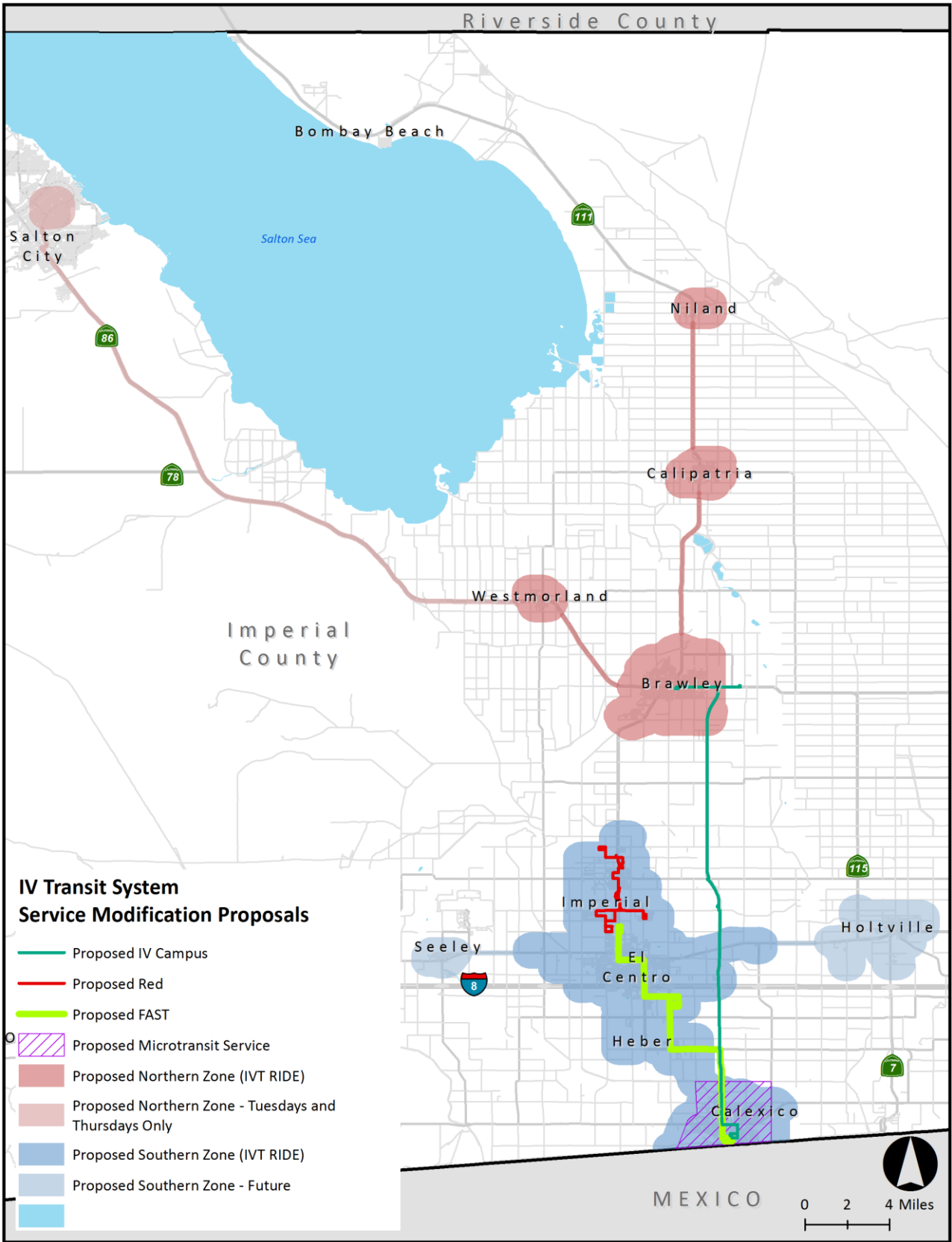
- Route 1: Expansion of Sunday service (Year 2), operate on Federal Holidays (Year 8)
- Route 2: Expansion of Sunday service (Year 2), increased frequency (Year 2), and operation on Federal Holidays (Year 8)

- Route 21 IVC Express: Restructuring of service in the afternoon (due to the adjustment of the “college hour” at Imperial Valley College) as well as an additional trip during the early evening (Year 1)
- Route 31/32 DIRECT: Increase weekday service with 4 additional weekday round trips (Year 8)
- Route 41 FAST: Increase weekday service (Year 2)
- Route 51: Service on an additional weekday (Year 1)
- El Centro-Calexico FAST: New FAST service between Calexico and El Centro (Year 7)
- IV Campus Shuttle: New shuttle between SDSU’s two campuses (in Calexico and Brawley) and IVC (Year 9)
- IVT Red Line: New circulator service for Imperial (Year 10)
- IVT Gold Line: Add weekend service (Year 10)

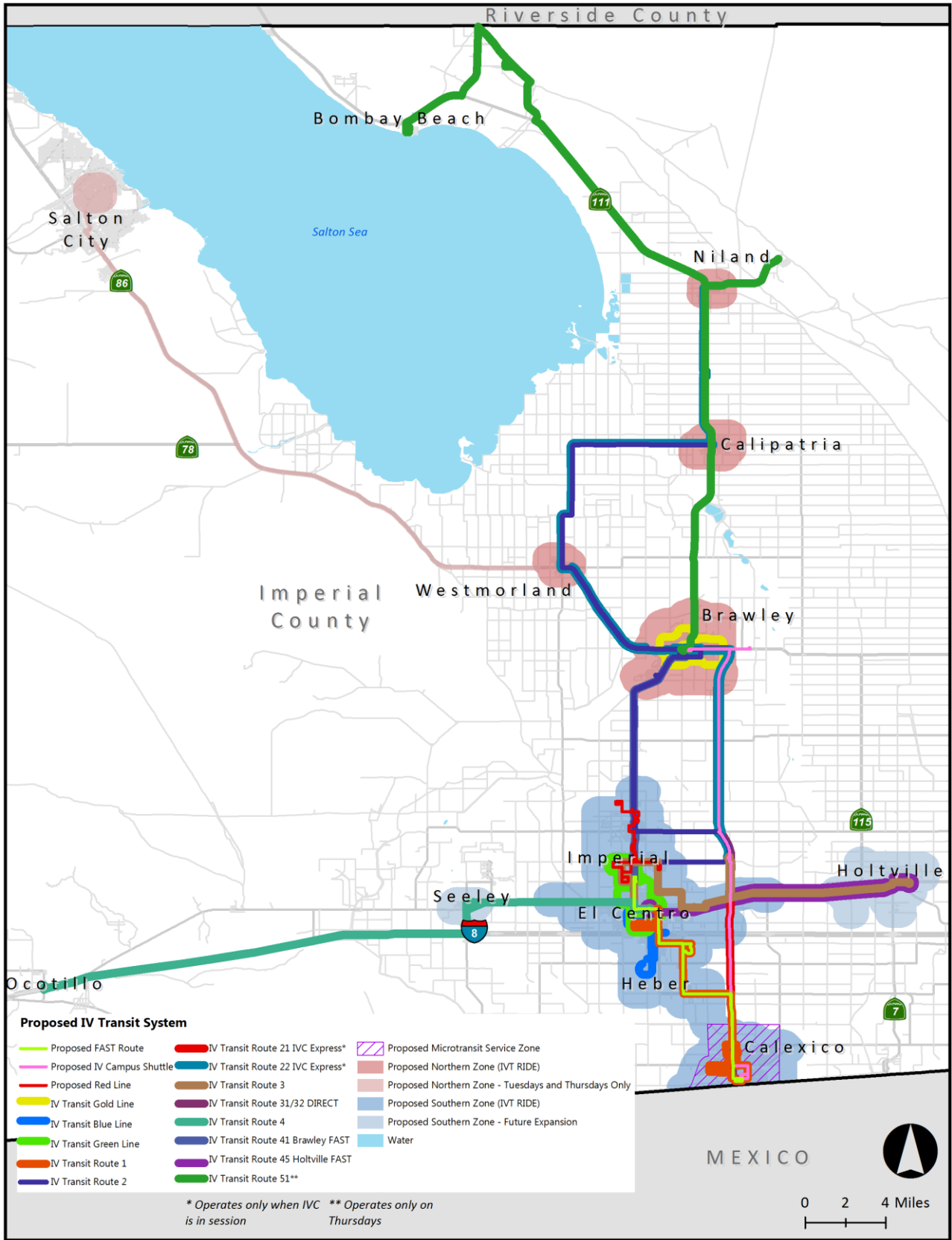
Demand Response Concepts:

- IVT RIDE: Implement service in Heber (Year 1)
- IVT RIDE: Implement two-zone fare system in the “North” and “South” service zones (Year 6) and on weekends in a latter phase (Year 10)
- Calexico “Microtransit” service (Year 7) – including East Port-of-Entry in a latter phase (Year 9)

Service Modification Proposals



Proposed IV Transit System with Proposals



The estimated fixed route and demand response financial operating plans were also prepared as part of the SRTP; these include operating expenses reflecting the previously described service plans. The financial plan assumes the operations and capital included in the recommendations section of this report. The financial plan has two components, operations and capital, and a summary table is presented below:

Total Projected Funding Picture										
Line Item	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29
Operating Budget Projections										
Total Operations Cost	\$11,773,803	\$12,973,627	\$13,362,836	\$13,763,721	\$14,176,632	\$16,283,289	\$19,388,229	\$20,129,452	\$21,820,138	\$24,210,065
Total Operating Funding	\$11,773,803	\$12,973,627	\$13,362,836	\$13,763,721	\$14,176,632	\$16,220,551	\$17,007,941	\$17,524,129	\$18,167,069	\$18,907,120
Operating Surplus or Deficit	\$0	\$0	\$0	\$0	\$0	(\$62,738)	(\$2,380,288)	(\$2,605,323)	(\$3,653,069)	(\$5,302,946)
Capital Budget Projections										
Total Capital Cost	\$2,033,377	\$5,019,218	\$5,503,705	\$7,551,306	\$2,579,360	\$2,919,408	\$10,424,343	\$6,697,230	\$5,476,512	\$3,870,122
Total Capital Funding	\$3,230,055	\$4,115,109	\$4,816,068	\$7,831,268	\$2,734,580	\$1,379,019	\$6,524,965	\$5,162,415	\$1,631,389	\$1,520,546
Capital Surplus or Deficit	\$1,196,678	(\$904,109)	(\$687,637)	\$279,962	\$155,221	(\$1,540,389)	(\$3,899,378)	(\$1,534,815)	(\$3,845,124)	(\$2,349,576)
Total Budget Projections										
Total Cost	\$13,807,180	\$17,992,845	\$18,866,540	\$21,315,027	\$16,755,992	\$19,202,697	\$29,812,572	\$26,826,683	\$27,296,650	\$28,080,187
Total Funding Available	\$15,003,858	\$17,088,736	\$18,178,903	\$21,594,990	\$16,911,213	\$17,599,570	\$23,532,906	\$22,686,544	\$19,798,458	\$20,427,665
Total Surplus or Deficit	\$1,196,678	(\$904,108)	(\$687,637)	\$279,963	\$155,220	(\$1,603,127)	(\$6,279,666)	(\$4,140,138)	(\$7,498,193)	(\$7,652,521)

Conclusion

This Short Range Transit Plan has provided the Imperial County Transportation Commission (ICTC) a ten-year implementation process for a range of new service initiatives and proposals for IV Transit services (including the circulator services), IVT ACCESS and IVT RIDE, including the implementation of a new "Microtransit" service in Calexico.

The SRTP's proposals are divided into two main groups: the first five years of the service plan present a financially constrained set of recommendations that account for the existing funding streams and reasonable assumptions associated with those streams, and the last ten years of the service plan present the remaining proposals as part of a financially unconstrained set of proposals.

Introduction

This report presents a *Short Range Transit Plan* (SRTP) for the various public transportation services sponsored and supported by the Imperial County Transportation Commission (ICTC).

An overview of the public outreach process undertaken as part of the SRTP is first presented, followed by a thorough evaluation of the existing condition of the ICTC-supported services, along with a review of peer transit providers. Finally, a series of recommendations are made for all of the ICTC-supported services.

The recommendations are split into two groups that cover a ten-year implementation period: those in the first five years of the plan are financially constrained, and those in the second half of the plan are financially unconstrained.

The recommendations propose changes for the IV Transit system (including the community circulator services), the IVT RIDE system and the IVT ACCESS system. These include modifications to the frequency of service of several bus routes, the days of the week on which they operate (including an additional service day to Bombay Beach), and entirely new bus routes (including a new FAST route between El Centro and Calexico, as well as an IV Campus Shuttle service).

There are no significant changes proposed for the IVT MedTrans service.

The recommendations also include a proposal for a new “Microtransit” demand responsive service in Calexico.

1. Public Outreach Summary

1.1 Introduction

Section Focus

This section summarizes community input received during public outreach efforts for the Imperial County Transportation Commission (ICTC) Short Range Transit Plan (SRTP). More than 236 people participated in the public outreach activities, which included the following activities throughout 2018:

- Stakeholder Interviews;
- Bilingual “bus stop workshops”;
- Bilingual public workshops; and
- A Public Review Session presenting the Draft SRTP.

About ICTC

As the state-designated Regional Transportation Planning Agency for Imperial County, ICTC is responsible for developing and updating a variety of transportation plans and allocating federal and state funds to implement programs. ICTC sponsors 13 fixed bus routes as part of Imperial Valley Transit, as well as two curb-to-curb demand responsive services: IVT ACCESS, for American with Disabilities Act (ADA) certified mobility disadvantaged persons who cannot use Imperial Valley Transit fixed route service in areas within $\frac{3}{4}$ of a mile of Imperial Valley Transit (IV Transit) fixed route service, and IVT RIDE, for ADA certified mobility disadvantaged persons who cannot use Imperial Valley Transit fixed route service and for senior citizens 55 years and older within the communities of Brawley, Calexico, El Centro, and Imperial. IVT Ride also provides service twice per week in the West Shores area for the General Public. In addition, ICTC also sponsors IVT MedTrans, which provides non-emergency transportation service between the Imperial Valley and San Diego County medical facilities, clinics and doctor offices.

Overview of the Short Range Transit Plan

An SRTP is a “master plan” for the programming of transit service and operations. The purpose of the plan is to enhance public transportation service for existing and potential users of public transit within ICTC service area. The SRTP for ICTC will provide planning guidance for the next several years. It will outline future transit system development and identify supporting projects.

1.2 Public Outreach Activities

The graphic below identifies the steps for completing the ICTC SRTP and the public input opportunities associated with each phase of the process. The public input activities summarized in this document include stakeholder interviews, bilingual bus stop workshops, and bilingual public workshops, and a public review session.

Public outreach efforts in early 2018 focused on identifying transit service issues and highlighting ideas for improving ICTC’s service, as well as soliciting initial feedback on potential transit modifications. More than 225 people participated in these public outreach activities. Ideas and issues raised by participants during this outreach phase helped guide the development of the draft transit service implementation plan.

In addition to the initial outreach activities, ICTC also provided opportunities for public input on the Draft SRTP in late 2018. A Public Review Session was held on November 28, 2018 to provide an opportunity for the public to learn about the Draft SRTP and provide their feedback. The Draft SRTP was also made available for public comment from November 16, 2018 to November 30, 2018.

Specifically, the Draft SRTP was available on the ICTC website and at the ICTC office (electronic and hard copies).

PROJECT STEPS	PROJECT KICK OFF	SERVICE EVALUATION AND PEER REVIEW	DEVELOPMENT OF ALTERNATIVE OPERATING PLANS	TRANSIT SERVICE IMPLEMENTATION PLAN	PREPARE AND PRESENT DELIVERABLES
KEY TECHNICAL WORK	Project Implementation Plan Kick Off Meeting	Review Policies, Goals, Objectives, and Standards Conduct Service Evaluation Conduct Peer Review	Create Operations Plans Review Specific Planning Emphasis Areas Create Service Reduction Policy/Strategies Alternative Selection	Review Capital Improvement/Vehicle Replacement Program Create Financial Program	Draft SRTP Present Final Draft SRTP Final SRTP
PUBLIC PARTICIPATION AND STAKEHOLDER OUTREACH	Public Outreach Plan TAC #1	Stakeholder and Operator Interviews Interview Commission Elected Officials TAC #2 Bilingual Public Workshops Bus Stop Workshops	TAC #3	TAC #4	Public Review Session TAC #5

The public outreach effort offered multiple participation options to make it as easy as possible for interested organization representatives and individuals to give input. The chart on the next page summarizes these input options, focus, and participants.

Table 1-1. ICTC Short Range Transit Plan: Overview of Community Participation Activities

Participation Opportunity	Focus	Number of Participants
Stakeholder Interviews Wednesday, February 14, 2018 1503 North Imperial Avenue, Suite 104 El Centro	Focus-group format meetings scheduled conveniently throughout the day for 20 identified stakeholder groups. Several sessions held from 8:30 a.m. until 5 p.m.	26
Bus Stop Workshops Tuesday, February 13, 2018	The project team stopped by several bus stops within Imperial County to hear perspectives on public transportation directly from riders	
	Calexico: <i>3rd and Paulin</i> 6:30AM to 8:30AM	73
	Calipatria: <i>State Route 111 and Main</i> 9:40AM to 10:10AM	1
	Brawley: <i>South Plaza/5th & G Transfer Center</i> 10:30AM to 12:00PM	14
	Imperial Valley College: <i>IVC bus stop</i> 12:15PM to 1:45PM	48
	IV Mall: <i>IVT stop at Mall</i> 2:00PM to 3:30PM	6
	El Centro : <i>7th & State Transfer Center</i> 3:45PM to 5:15PM	17
Bilingual Public Workshops Monday, April 23, 2018 and Tuesday, April 24, 2018	The project team conducted four bilingual, open house-style Public Workshops within Imperial County to hear perspectives on public transportation directly from riders	
	Calexico: <i>Camarena Memorial Library</i> Monday, April 23, 4:30PM to 6:30PM	8
	Niland: <i>Niland Community Center</i> Tuesday, April 24, 10:00AM to 11:30AM	15
	Brawley: <i>Brawley Chamber of Commerce</i> Tuesday, April 24, 12:30PM to 2:30PM	10
	El Centro: <i>Imperial County Department of Social Services</i> Tuesday, April 24, 4:00PM to 6:00PM	9
Public Review Session Wednesday, November 28, 2018 ICTC Office 1503 North Imperial Avenue, Suite 104, El Centro	Present the Draft SRTP and Provide Opportunities for Attendees to Submit Comments	11
TOTAL PARTICIPANTS		236

1.2.1 Stakeholder Interviews

The purpose of the stakeholder interviews was to gather input from agencies and organizations on the strengths and weaknesses of transit in Imperial County, the general role of public transportation in Imperial County, and specific transit service issues and opportunities. The planning team conducted in-person interviews on February 14, 2018, and multiple additional interviews via telephone in February and March. A total of 26 stakeholders participated in the process with representatives from the following organizations:

- Southern California Association of Governments
- Area Agency on Aging
- STACC/Seniors
- Catholic Charities
- ICOE Orientation and Mobility
- Imperial County Behavioral Health Services
- Work Training Center
- San Diego Regional Center
- ARC Imperial Valley
- Children's Services
- Imperial Valley College
- Veterans Affairs
- 2-1-1 Imperial
- Clinicas de Salud del Pueblo
- El Centro Regional Medical Center
- Pioneers Memorial Hospital Public Health
- California Health and Wellness
- Imperial County In-Home Supportive Services
- Molina Healthcare
- Yuma County Intergovernmental Public Transportation Authority (YCAT)
- Quechan Tribe of the Fort Yuma Indian Reservation

Discussion questions and key points raised during the stakeholder interviews are provided in Appendix A.1

1.2.2 Bilingual Bus Stop Workshops

The purpose of the bus stop workshops was to hold informal, one-on-one conversations with passengers. Outreach staff held discussions in English and Spanish in a convenient, comfortable environment at various bus stops within ICTC service area. Direct interaction with riders offers additional opportunities to hear from people who use ICTC services but may not be inclined to attend formal outreach events. The planning team engaged 159 individuals as part of this activity.

Appendix A.2 includes discussion questions and identifies key comments.

1.2.3 Bilingual Public Workshops

The purpose of the bilingual public workshops was to collect feedback on potential transit service modifications. Four open house workshops were held throughout ICTC's service area. Facilitators provided an overview of potential transit service modifications in English and Spanish and participants were given 12 dots and asked to place the dots next to the modifications they felt were most important.

Appendix A.3 includes the following:

- Workshop exhibit boards with participant prioritization (dots) of potential transit service modifications; and
- Comment cards.

It is important to note that the dot prioritization activity was not intended as a “voting” activity and the feedback provided through this activity should be considered a snapshot of initial preferences by those individuals that participated. These preferences should not be generalized, nor portrayed as broadly indicative of ICTC passengers or the general public.

1.2.4 Public Review Session

The purpose of the Public Review Session was to present the Draft SRTP and provide an opportunity for attendees to ask questions and submit comments. The project team held discussions in English and Spanish at the Public Review Session on November 28, 2018. Bilingual exhibits, summarizing proposed modifications to transit service, were posted around the room. Facilitators were available to walk participants through the exhibits and collect their feedback.

1.3 Major Discussion Themes

During both the public outreach activities, the planning team developed guiding questions (see Appendix A) as prompts to address certain key topics with the public and ensure consistent, comprehensive discussion of issue areas. These topics ranged from available services to vehicle quality, to operator courtesy, and feedback on the Draft SRTP. Even with a wide range of topics, the following major discussion themes emerged during outreach activities. These major discussion themes are not listed in any order of priority or importance:

- Overall satisfaction with service
- Improved service for transit-dependent riders
- Expanded options – improved frequencies/spans of service and new routes Improved service for students
- Additional communication and education
- Increased passenger comfort at bus stops

The following sections summarize key points raised in association with each of these major themes. For a comprehensive understanding of the depth and richness of input, this summary should be reviewed in concert with detailed input from public outreach activities presented in Appendix A.

1.3.1 Overall Satisfaction with Service

The majority of riders indicated overall satisfaction with ICTC service and operations. Passengers noted courteous drivers and clean and comfortable vehicles with appealing features, such as Wi-Fi access, new seating, and working air conditioning. Although some riders expressed interest in increased weekend hours or additional coverage during peak hours as described below, most interviewees view the current service as reliable, timely, affordable, and effective at meeting their overall travel needs.

Stakeholder representatives also specifically acknowledged prior service and infrastructure improvements, including enhanced fixed routes, more flexible community transportation services, better vehicle design and universal design strategies (i.e., branding) at facilities, on vehicles and at many stops.

1.3.2 Improved Service for Transit-Dependent Riders

Stakeholder organizations encouraged the prioritization of service for transit dependent riders, especially due to the centralization of shopping and medical services in El Centro and rising numbers of older and transit-dependent residents. Seniors and other riders with mobility issues often have challenges with multiple transfers, inconvenient times, and the 30 minute window for reserved riders. Input highlighted the need for better coordinated reservations process when utilizing multiple services (e.g., IVT RIDE and IVT MedTrans) to reduce service fragmentation and make the pickup system more efficient.

Other suggested improvements to enhance service for seniors or other riders with specialized needs included:

- Expanded IVT RIDE availability and increased point to point services within the current service area (i.e, additional intercity curb to curb service)
- Free rides to and from the ICTC office for the access certification process. (Note that ICTC currently offers free rides to and from the ICTC office for the access certification process.)
- Provide more IVT MedTrans service to and from San Diego. Also, consider weekend options for IVT MedTrans users traveling to San Diego, although currently medical appointments are almost entirely on weekdays. However, some stakeholders, such as Children's Services, did mention that occasionally they receive requests for weekend transportation services due to an early surgery time on a Monday morning, for example.
- Priority boarding for seniors and people with disabilities on IV Transit
- Additional signage indicating that handicap spaces are reserved for people with disabilities and the elderly would help keep spots open for those who need them most
- Dispatcher scheduling log should notify the driver if a passenger they are picking up is visually impaired and waiting inside

1.3.3 Expanded Options

While overall satisfaction with current service appears high, input indicated a desire for expanded coverage both geographically and in frequency or span of service. Several stakeholders and riders noted a need for expanded service options in Heber and outlying areas of Imperial County, including Ocotillo, Bombay Beach and Salton City. Potential future service to the north beyond Imperial County, to communities in the Coachella Valley, was also mentioned. Other input suggested additional circulation on the east side of Calexico, specifically around the Victoria homes, and modified schedules to connect riders to farmers markets and community events on weekends (which may be addressed with some of the options being considered as part of this Short Range Transit Plan).

Passengers also expressed a desire for more frequent service during peak hours and shorter wait times, citing routes between Heber and Calexico and particularly between Calexico and IVC. Some riders also said they would like to see greater frequency and more direct connections available on weekends, especially on Route 1.

In addition, it was suggested that ICTC look into potentially modifying schedules to provide service to farmers markets and community events on weekends, especially in the cooler months, as a way to encourage choice riders to use transit.

The majority of riders found the current fare to be reasonable and some indicated a willingness to pay a higher fare for enhanced services. Several riders specifically suggested a "day pass" system as a more convenient method of payment.

Participants also noted that they would like it to be easier to purchase tickets. Specifically, tickets should be available in locations with concentrations of transit-dependent populations, such as the County Services Building.

1.3.4 Improved Service for Students

Many IVC students take the bus to and from campus. Most IVC students indicated they only use the bus on weekdays. For the most part, students are happy with the service but identified periodic capacity and route scheduling limitations. Crowded bus conditions for the IVC Express (particularly on Route 21) at midday and evening can produce leave-behinds requiring students to wait another 1.5-2 hours for the next bus. Riders recommended additional buses (or a higher capacity bus) to improve service along Route 2, Route 21 IVC Express and Route 22 IVC Express during midday and evening hours.

Input also highlighted the need to better coordinate bus and class schedules. Multiple students commented that the 7:40AM departure from Calexico to IVC is too late to get to classes on time, thus forcing riders take a much earlier trip. Students also cited a need for more night services departing from IVC to accommodate the nighttime class schedule.

1.3.5 Communication and Education

While many riders appeared very familiar with the system, input suggested opportunities to strengthen awareness of available transportation options and improve the overall transit experience. Some organizations representing transit-dependent populations, including health care providers such as Clinicas de salud del pueblo and El Centro Regional Medical Center, cited the need for more fliers and increased marketing of IVT MedTrans services to clientele. These organizations also mentioned that ICTC staff is very responsive when a need arises. Stakeholders also encouraged a clarification of the hours of operation IVT RIDE.

Schedules and maps could also be more user-friendly and legible for older riders; this aspect of public information will be addressed as part of this Short Range Transit Plan. Input suggested a trip planner to make access to information easier, and that a system map be included in the schedule book and other similar public materials. Several riders also encouraged outreach on etiquette to create more welcoming and pleasant on-bus conditions and address crowding issues.

1.3.6 Increased Passenger Comfort at Bus Stops

Passengers cited several possible improvements to make bus stops more comfortable and safer, including establishing more shade, installing vending machines, ensuring adequate lighting and cleaning and maintaining the bus stops. Stakeholders also suggested the posting of service information, such as easy to read schedules and signs at bus stops.

2. Existing Conditions

2.1 Background and Introduction

2.1.1 Introduction

This section of the SRTP serves as an outline of the existing conditions for the Imperial County Transportation Commission's (ICTC) transit system, combining general service guidelines, a profile of the service area, a profile of the transit system, and an evaluation of its service. The purpose of this section is to support the 2018 update to ICTC's Short Range Transportation Plan (SRTP). Each section of the report is divided between an analysis of fixed route services (IV Transit) and demand response services (IVT Access, IVT Ride, IVT MedTrans). For the purpose of this report, standards represent those requirements stipulated in the operating contracts for each service while guidelines represent appropriate goals considering the level and type of service provided.

2.1.2 Goals and Objectives

This section identifies goals and objectives for ICTC transit services moving forward. Based on the 2004 Short Range Transit Plan (SRTP), "the mission of Imperial County's public transit system is to improve the quality of life for the residents of Imperial County through a coordinated, accessible, affordable, and efficient countywide transportation system." Similarly, the vision statement is that "the transit network provides safe, affordable and reliable transportation service that first meets the needs of the transit dependent in communities within Imperial County by providing access to healthcare, education, employment, public services, shopping, recreational facilities, and eventually allows anyone to go anywhere in the region easily and effectively."

Overall, the goals of the transit system, based on those adopted in the 2004 SRTP, are outlined below. These goals may be adjusted through this SRTP process. One potential new goal would be to attract choice riders and not only the transit dependent; however, if choice riders are to be pursued, implications such as some shifting of planning and resources away from the transit dependent to those with other mobility options must be acknowledged. The existing goals are as follows:

1. Provide mobility to all residents of Imperial County. Service levels are determined by demand, with all areas receiving service but those with more demand for transit receiving more service.
2. Connect residents of Imperial County with medical, social services, and educational facilities throughout the county.

Resources should be deployed with the following priorities (ranked 1-6):

- 1) Access to major medical
- 2) Social services facilities
- 3) Access to educational facilities
- 4) Access to employment.
- 5) Support economic development such as commercial centers, retail and entertainment destinations.
- 6) Provision of transit as a transportation alternative for the general public.

In order to move toward these goals for ICTC's transit system, this study should work to:

1. Maximize the efficiency of the system by deploying appropriate resources to areas where they are needed most.
 - i. Reduce crowding and increase frequency in denser areas where appropriate

- ii. Provide an appropriate amount of service for rural areas
 - iii. Encourage coordination between all services, including cross-training between agencies (including those that are competitors) and the ability to cover service for other providers
 - iv. Eliminate duplicate services
2. Maximize usage of the system by serving all major trip generators and ensuring passengers can make the necessary connections to reach those destinations.

2.1.3 System Background

Bus service in Imperial County began in 1989 with 5-routes and 3 buses serving about 3,000 passengers per month on five weekday-only routes. The fixed route portion of the service is now operated under the name Imperial Valley Transit (IV Transit or IVT), while the demand response portions are operated as IVT Access, IVT Ride, and IVT MedTrans. Today, IVT operates 13-routes using 26 buses (18 fixed-route, 8 demand response, 36 vehicles available at maximum service), serving more than 70,000 passengers per month. This equates to about 875,127 annual unlinked passenger trips, an increase of 27.7% from 2013.

Public transit in Imperial County is administered by the Imperial County Transportation Commission (ICTC), which includes all public transit service provided in the county. ICTC allocates its funding through the Overall Work Program Budget and Finance Plan, deriving funds from the FTA programs 5307 and 5311, the California State Transportation Development Act (TDA), Local Transportation Fund (LTF), State Transit Assistance (STA), and through the collection of fares. In 2016, fare revenues accounted for 12.2% of operating funds expended, out of a total operating budget of \$6,412,320 for fixed routes (NTD, 2016).

This document outlines the existing public transit service in Imperial County in greater detail. It includes a demographic overview of the service area including past, present and projected population socioeconomic profile, and key trip generators. Following the demographic overview is an overview of general operating and financial data for both the fixed route and demand response services. Following a review of existing conditions is an overview of Service Guidelines followed by a Service Evaluation which will underpin the planning process for the STRP going forward.

2.2 Service Area Profile

This section uses data from the 2010 U.S. Census, as well as the 2012-16 American Community Survey (ACS), in some cases vis-à-vis the Southern California Council of Governments (SCAG). Data sources are noted in the individual tables below.

2.2.1 Community Characteristics

This section describes the area served by Imperial County's public fixed route and demand response transit services. It includes a socioeconomic and demographic overview, as well as an overview of key employers and trip generators throughout the county. Imperial County encompasses nearly 4,500 square miles in the southeastern corner of the State of California, bordered by Baja California, Mexico to the south; La Paz and Yuma Counties, Arizona to the east and southeast, Riverside County, California to the north, and San Diego County, California to the west. The county is generally characterized by sand dunes and desert in the east and mountains in the west, with a valley (the Imperial Valley) in between. A majority of the population resides in the southern portion of the valley, while inland, saltwater lake, the Salton Sea, occupies a majority of the northern portion of the valley. The agricultural portion of the Imperial Valley is referred to as the "irrigated district".

2.2.2 Population

As of the 2010 Census, the population of Imperial County was 174,528. The largest city was El Centro with a population of 42,598, a 12.6% increase from the 2000 census. This is a somewhat slower rate of growth than the county as a whole at 22.6% reflecting a wide variation in growth among incorporated and unincorporated places in Imperial County. By far the fastest growing location was the city of Imperial which grew 95.2% to a population of 14,758. From the annual population estimates of the American Community Survey, the population of Imperial County has likely grown to just under 183,000 residents

Table 2-1. Imperial County and Municipal Growth, 2000-2010

City	2000 Census	Percent Change	2010 Census
Brawley	22,052	13.2%	24,953
Calexico	27,109	42.3%	38,572
Calipatria	7,289	5.7%	7,705
El Centro	37,835	12.6%	42,598
Holtville	5,612	5.8%	5,939
Imperial	7,560	95.2%	14,758
Westmorland	2,131	4.4%	2,225
Unincorporated Areas	32,773	15.3%	37,778
Imperial County (Total)	142,361	22.6%	174,528

2000-2010 SCAG

By 2020 the total population of unincorporated areas is expected to exceed that of any individual city while the population of Calexico is expected to exceed that of El Centro by 2030 with a population of 60,600. By 2040, the population of Imperial County is expected to grow by 57.1% over the estimate for 2012 to about 282,100 people.

Table 2-2. Population Projections through 2040

Group	2012 Projection	% Growth 2012-2020	2020 Projection	% Growth 2020-2030	2030 Projection	% Growth 2030-2040	2040 Projection	% Growth 2012-2040
Brawley	25,800	34.1%	34,600	17.3%	40,600	5.7%	42,900	66.3%
Calexico	40,200	23.6%	49,700	21.9%	60,600	2.6%	62,200	54.7%
Calipatria	7,600	11.8%	8,500	10.6%	9,400	2.1%	9,600	26.3%
El Centro	44,100	20.6%	53,200	10.7%	58,900	3.6%	61,000	38.3%
Holtville	6,100	13.1%	6,900	13.0%	7,800	2.6%	8,000	31.1%
Imperial	15,800	24.1%	19,600	21.9%	23,900	6.3%	25,400	60.8%
Westmorland	2,300	4.3%	2,400	8.3%	2,600	3.8%	2,700	17.4%
Unincorporated Areas	37,700	58.4%	59,700	14.9%	68,600	2.5%	70,300	86.5%
Imperial County (Total)	179,600	30.6%	234,600	16.1%	272,400	3.6%	282,100	57.1%

SCAG: All figures rounded to 100

Figure 2-1. 2016 Population Density by Census Tract

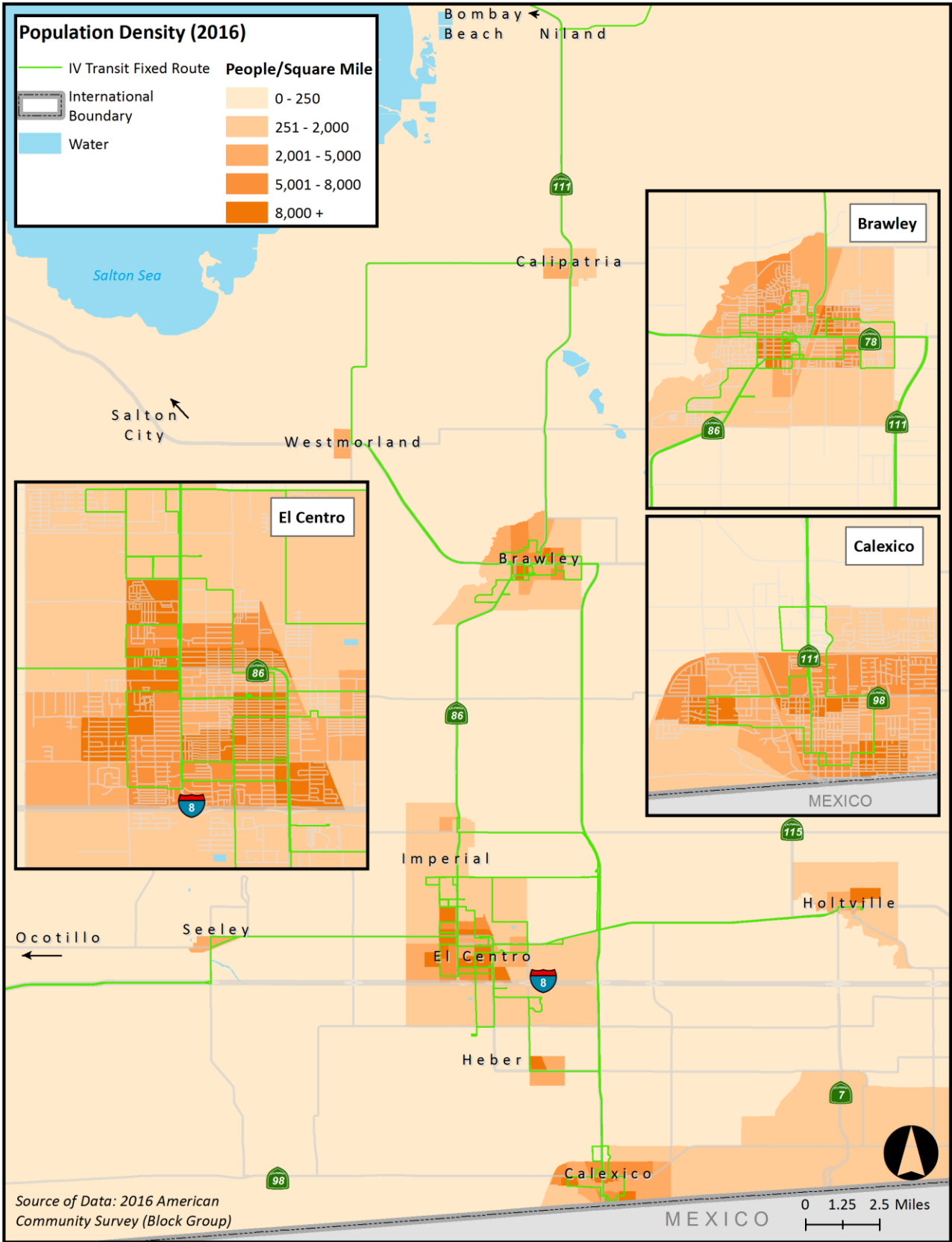
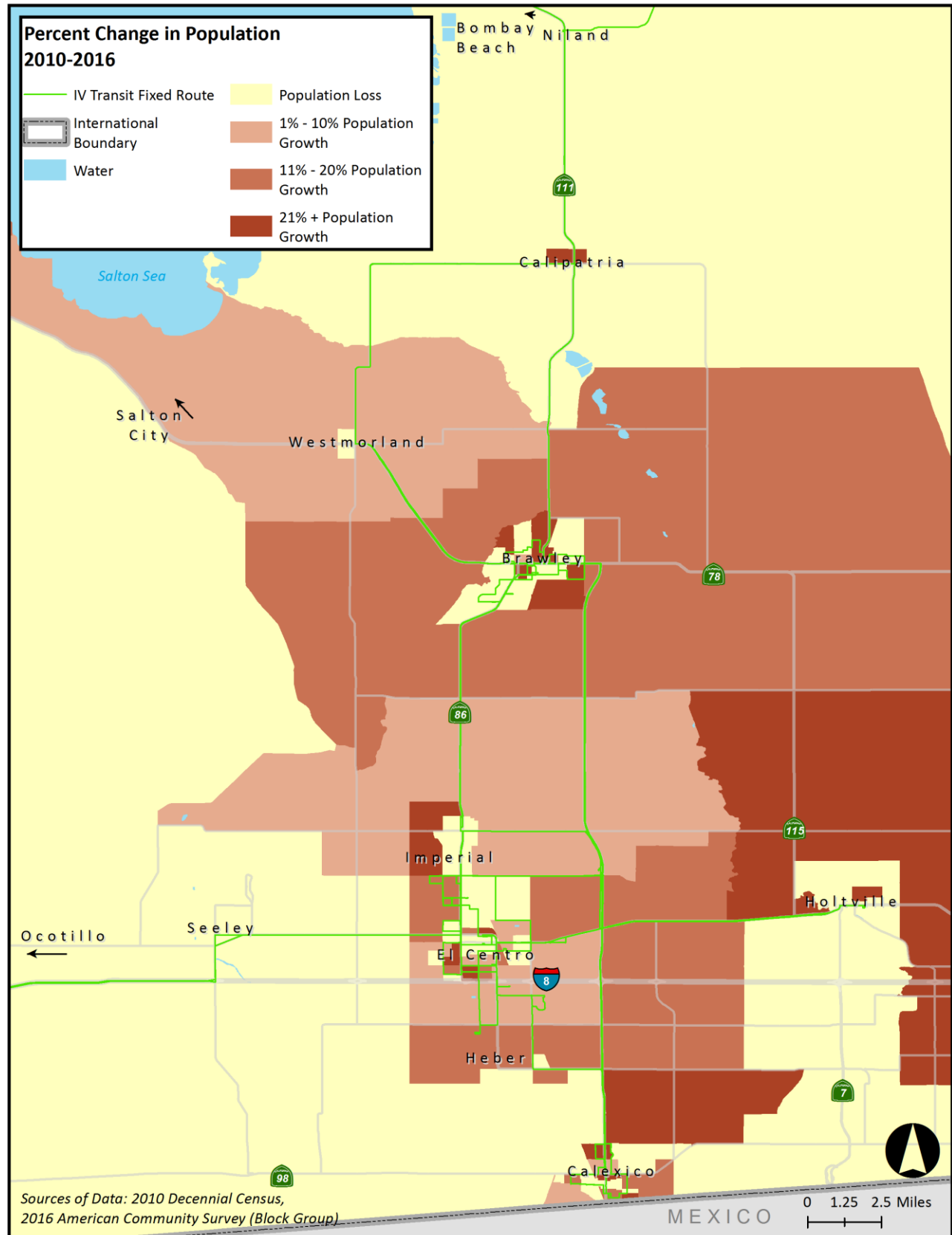


Figure 2-2. 2010-2016 Population Change by Census Tract



2.2.3 Employment

Employment in Imperial County is dominated by government, agriculture and food processing, and the service sector (primarily retail). The largest employers include the County of Imperial (~1,800 employees), National Beef, Brawley (~1,300 employees), and the Calipatria and Centinela State Prisons (~1,200 employees each). Major employers in each sector include the following:

- Government employers including the County of Imperial and local cities and towns, the Imperial Irrigation District, the Imperial County Office of Education and school districts (Brawley, Calexico, Calipatria, El Centro, Heber, Holtville, Imperial, Seeley, Westmorland, Winterhaven and Community Schools), the State Prison System (including the Calipatria and Centinela State Prisons) the El Centro Naval Air Facility, the U.S. Department of Homeland Security, and Imperial County Behavioral Health.
- Colleges and Universities including Imperial Valley College (Imperial), San Diego State University – Imperial Valley (Calexico), and the American Beauty Academy (Brawley).
- Agriculture and Food Processing employers including National Beef in Brawley, E-Z Labor Harvesting Inc. in Brawley, Bullfrog Dairy near Imperial, River Ranch in El Centro, and Spreckles Sugar Co. and Sahara Packing Co. in Brawley, as well as other agricultural businesses such as farms throughout the valley.
- Retail and Service employers including Target (El Centro), Walmart (Brawley, Calexico and El Centro), Costco (El Centro), Dillard's (El Centro), Home Depot (El Centro), Lowe's (El Centro), Food 4 Less (Calexico and El Centro), the Imperial Valley Mall (El Centro), Kennedy's Market (Heber), Mission Retail Center (El Centro), Valley Plaza Shopping Center (El Centro), Vons (Brawley and El Centro) and the Quechan and Paradise casinos in Winterhaven.
- Medical employers including the El Centro Regional Medical Center, Pioneers Health Center in Brawley, Clinicas de Salud del Pueblo (headquartered in Brawley),
- Senior centers including Alegria in Calexico, the Brawley Senior Center, Day Out in El Centro and Brawley, the El Centro Community Center, Imperial Heights in Brawley, the Westmorland Senior Center, and the Quechan Senior Center in Winterhaven.
- Industrial employers such as U.S. Gypsum Company in Plaster City, CalEnergy Operating Company in Calipatria, Guy Evans, Inc. in Imperial and Ormat in Heber.

Imperial County is home to a number of large industrial parks. Some of these, like the Mesquite Lake Specific Plan Area and the Gateway to the Americas Center are well over 1,000 acres in size (the former being over 5,000 acres). Due to its close proximity to the Mexican border, the Imperial Valley also has 7 foreign trade zones.

By sector, the total employment and characteristics for the county are outlined in Table 2-3, below.

Table 2-3. Employment by Area, 2015

2012 NAICS code	Meaning of 2012 NAICS code	Number of firms	Paid employees for pay period including March 12	First-quarter payroll (\$1,000)	Annual payroll (\$1,000)
11	Agriculture, forestry, fishing and hunting	35	660	5,392	23,814
21	Mining, quarrying, and oil and gas extraction	3	300*	5,500*	23,500*
22	Utilities	15	428	9,593	34,752
23	Construction	140	1,298	14,016	60,026
31-33	Manufacturing	48	3,612	24,411	106,830
42	Wholesale trade	228	1,893	22,588	93,619
44-45	Retail trade	487	8,719	48,315	196,209
48-49	Transportation and warehousing	180	1,527	12,628	54,371
51	Information	30	326	3,830	14,762
52	Finance and insurance	126	838	9,717	39,388
53	Real estate and rental and leasing	149	657	4,702	19,540
54	Professional, scientific, and technical services	169	796	7,287	31,620
55	Management of companies and enterprises	8	73	607	2,748
56	Administrative and support and waste management and remediation services	87	1,427	11,448	43,412
61	Educational services	16	394	2,837	11,200
62	Health care and social assistance	291	5,025	49,508	213,392
71	Arts, entertainment, and recreation	25	216	672	2,607
72	Accommodation and food services	265	4,073	16,456	69,418
81	Other services (except public administration)	183	881	5,296	22,772
99	Industries not classified	9	5	17	126
	Total for all sectors	2,494	33,153	255,044	1,064,301

* Figures estimated, suppressed
2015 County Business Patterns (CBP), U.S. Census

The largest employment sector for the county is retail trade, employing 8,719 people in 2015, followed by health care and social services at just over 5,000 and accommodation and food services at just over 4,000. These three sectors combined account for more than half of the employment in the county. For the purposes of this report however, it is important to consider the implications of payroll and likely transit use, and while healthcare is a major employment sector, it has a higher overall payroll than say, transportation, and warehousing. These sectors may employ fewer residents overall and may have a higher share requiring public transit provision. Therefore the totality of employment and location of all employers, in addition to social service needs and non-work trips must be taken into account when service planning.

Table 2-4. Employment Projections through 2040

Group	2012 Projection	% Growth 2012-2020	2020 Projection	% Growth 2020-2030	2030 Projection	% Growth 2030-2040	2040 Projection	% Growth 2012-2040
Brawley	8,000	71.3%	13,700	19.0%	16,300	3.1%	16,800	110.0%
Calexico	8,300	66.3%	13,800	23.2%	17,000	2.9%	17,500	110.8%
Calipatria	1,300	30.8%	1,700	29.4%	2,200	0.0%	2,200	69.2%
El Centro	20,300	73.9%	35,300	19.3%	42,100	4.0%	43,800	115.8%
Holtville	1,000	70.0%	1,700	17.6%	2,000	0.0%	2,000	100.0%
Imperial	3,400	105.9%	7,000	30.0%	9,100	4.4%	9,500	179.4%
Westmorland	300	33.3%	400	0.0%	400	25.0%	500	66.7%
Unincorporated Areas	16,400	71.3%	28,100	12.1%	31,500	2.5%	32,300	97.0%
Imperial County (Total)	59,000	72.4%	101,700	18.6%	120,600	3.3%	124,600	111.2%

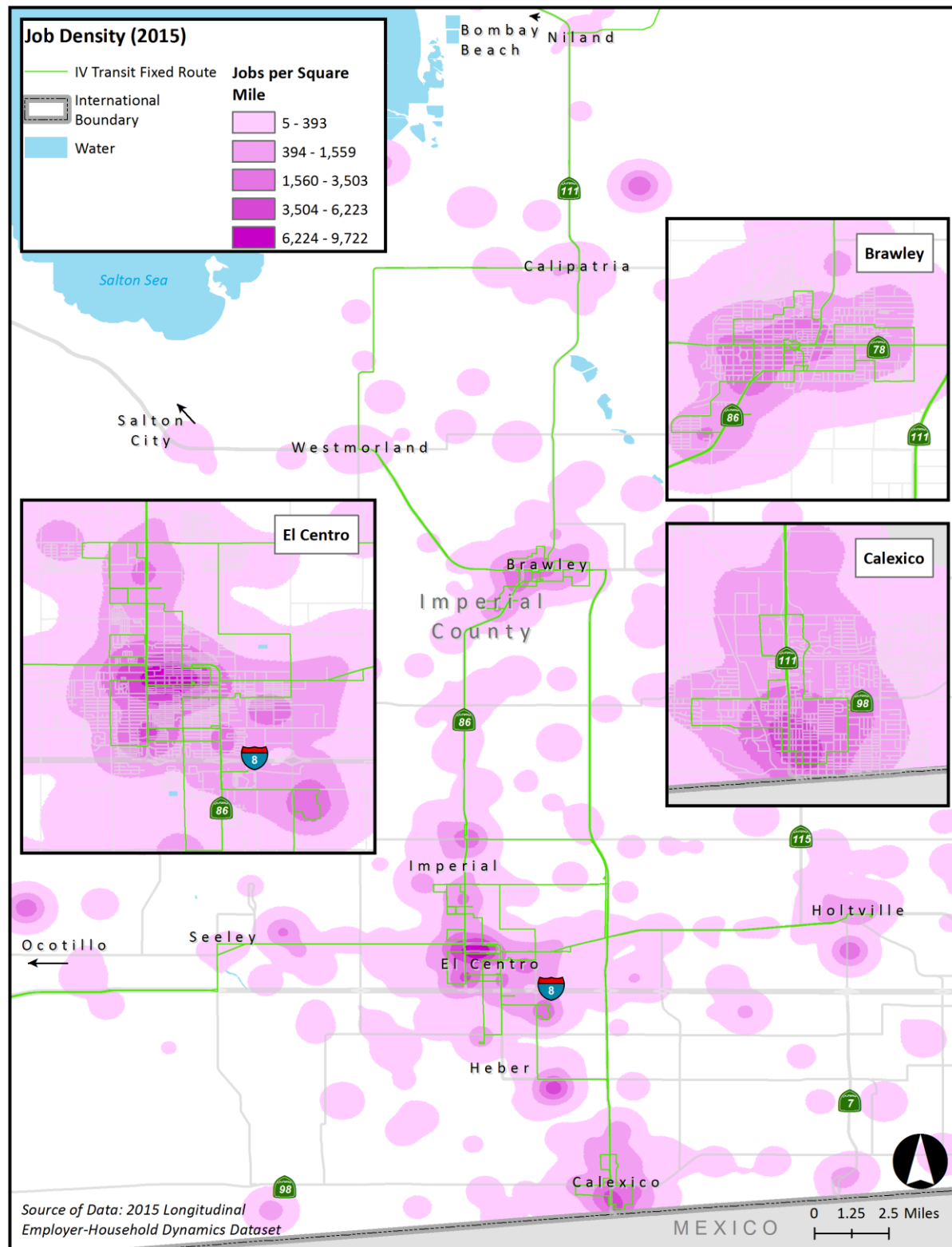
SCAG: All figures rounded to 100

In the aggregate, future development patterns are likely to continue to follow the existing patterns in Imperial County, with most jobs and employment opportunities being concentrated in the cities of El Centro, Calexico and Brawley, despite the presence of some significant employers being located in areas outside of these cities.

Anecdotally, there are a couple factors regarding employers which are important to consider when planning or evaluating transit service. First, two of the largest employers in Imperial County are the Calipatria and Centinela State Prisons – prison guards at both facilities are required to have their own automobiles for transportation to work, particularly in case of an emergency at either prison. Second, many workers commute from homes in Mexicali, cross the border into Calexico and access jobs in Imperial County from there. This increases the demand for transportation from Calexico to other parts of the county.

Generally, jobs are concentrated in the cities of El Centro, Calexico and Brawley; however, many major employers are located outside these urban centers, including the El Centro Naval Air Station, the Calipatria and Centinela State Prisons, the Imperial Irrigation District, the Imperial Valley College and CalEnergy.

Figure 2-3. Employment Concentration/Job Density



Another factor to consider regarding employment is commuting patterns. Data is available from the 2000 U.S. Census which shows worker flows between counties within the U.S. This data does not show worker flow across the U.S.-Mexican border, so it should be viewed with caution regarding

Imperial County, where many people are known to commute from the Mexican city of Mexicali to jobs in Imperial County each day. A majority of workers in Imperial County live in Imperial County and a majority of residents of Imperial County work in Imperial County. Large numbers of workers also commute between Imperial County and Yuma County, AZ followed by San Diego County, CA and Riverside County, CA. Table 2-5 outlines the top 10 counties where Imperial County residents work and the top 10 counties from which workers in Imperial County come.

Table 2-5. Imperial County Commuting Patterns, 2015

People Commuting FROM Imperial County TO:			People Commuting TO Imperial County FROM:		
Imperial County, CA	40,681	67.5%	Imperial County, CA	40,681	77.7%
San Diego County, CA	5,256	8.7%	Riverside County, CA	3,647	7.0%
Los Angeles County, CA	3,860	6.4%	San Diego County, CA	2,094	4.0%
Riverside County, CA	3,061	5.1%	Yuma County, AZ	1,189	2.3%
Yuma County, AZ	1,610	2.7%	Los Angeles County, CA	1,174	2.2%
Orange County, CA	1,532	2.5%	San Bernardino County, CA	779	1.5%
San Bernardino County, CA	1,083	1.8%	Orange County, CA	417	0.8%
Kern County, CA	340	0.6%	Maricopa County, AZ	278	0.5%
Ventura County, CA	308	0.5%	Mohave County, AZ	104	0.2%
Monterey County, CA	286	0.5%	Monterey County, CA	103	0.2%
All Other Locations	2,266	3.8%	All Other Destinations	1,859	3.6%
Total Primary Jobs (2015)	60,283	100%	Total Primary Jobs (2015)	52,325	100%

U.S. Census Bureau, OnTheMap Application and LEHD Origin-Destination Employment Statistics (Beginning of Quarter Employment, 2nd Quarter of 2002-2015)

2.2.4 Transit Market

Table 2-7 outlines those characteristics which are generally considered to have the greatest impact on transit demand, including youth and senior populations, zero-car households, median income and population below the poverty level, and unemployment. The largest cities are El Centro and Calexico with about 40,000 residents each, followed by Brawley and Imperial. In each of the three largest cities, El Centro, Calexico and Brawley, approximately one in three residents was under the age of 18, and one in ten was over the age of 65. Across the county, about 8% of the population lived in zero-car households, which is significant, though this varies from year-to-year as families and individuals gain and lose access to vehicles. The share of zero-car households exceeded 10% in Brawley, Holtville, and Westmorland. In 2016, the share of the labor force that was unemployed was 20.6% in Brawley, 18.9% in Calexico, and 17.4% in Calipatria, and was 17% across the entire county.

Median income for the county was \$37,595 and was lowest in Westmorland at \$28,397 and Calexico at \$33,717. Low median incomes were not entirely coterminous with poverty, with the highest rates being in Westmorland (39.6%), Calipatria (33.5%), and Holtville (32.5%). These figures combined, median income and poverty did seem to parallel (somewhat) the percentage of the public using transit to get to work, accounting for 3.3% of commutes in Westmorland (by far the highest share), 1.6% in Calexico, 1.2% in Calipatria, and 1.1% in El Centro (Table 6).

Overall, Westmorland had the largest proportion of youth under age 18, comprising 35 percent of the population, as well as the lowest median income, from previous data, this had been Imperial, which has the highest median income. Westmorland had had the largest proportion of seniors (but the smallest population), but this has since changed such that Holtville now has the largest share at

14.2% while also showing the second largest share of zero-car households and the third highest poverty rate. Despite being at the extremes of many metrics, Westmorland and Holtville also had the smallest total populations of organized jurisdictions in Imperial County.

Table 2-6. Commuting by Public Transit, ACS 2016

City	Civilian Labor Force (16+)	% Using Public Transit for Work (Excluding Taxis)**
Brawley	8,140	0.7%
Calexico	12,768	1.6%
Calipatria	947	1.2%
El Centro	15,288	1.1%
Holtville	1,869	0.9%
Imperial	6,692	0.0%
Westmorland	602	3.3%
<i>Unincorporated Areas*</i>	10,884	0.3%
Imperial County (Total)	57,190	0.9%

2012-2016 American Community Survey 5-Year Estimates

* Estimated by count and/or calculation

** Civilian Labor Force, 16 years and Over

Table 2-7. Transit Market Characteristics. ACS 2016

City	Total Pop.	Youth Pop. Under 18	% Youth	Senior Pop. 65+	% Seniors	% Zero-Car Households	Median Income	% of Pop. Below Poverty	Percent of Labor Force Unemployed
Brawley	25,776	8,159	31.7%	3,001	11.6%	10.5%	\$40,745	28.5%	20.6%
Calexico	39,750	11,665	29.3%	5,315	13.4%	9.0%	\$34,734	26.3%	18.9%
Calipatria	7,511	1,396	18.6%	403	5.4%	8.5%	\$34,800	33.5%	17.4%
El Centro	43,699	12,557	28.7%	5,417	12.4%	9.9%	\$41,849	24.8%	15.2%
Holtville	6,230	2,043	32.8%	886	14.2%	10.3%	\$28,115	32.5%	13.6%
Imperial	16,583	5,594	33.7%	1,295	7.8%	1.7%	\$58,503	5.3%	14.1%
Westmorland	2,014	697	34.6%	253	12.6%	10.1%	\$27,083	39.6%	14.5%
<i>Unincorporated Areas*</i>	<i>37,244*</i>	<i>9,230*</i>	<i>24.8%*</i>	<i>4,741*</i>	<i>12.7%*</i>	<i>5.0%</i>	<i>\$42,500*</i>	<i>22.1%*</i>	<i>16.6%*</i>
Imperial County (Total)	178,807	51,341	28.7%	21,311	11.9%	8.0%	\$42,560	24.1%	17.0%

2012-2016 American Community Survey 5-Year Estimates

* Estimated by count and/or calculation

Table 2-8 gives an overview of the characteristics of the disabled population of Imperial County. Again, Westmorland registers as one of the extreme values from the data, and along with Holtville, El Centro, Calexico, and Brawley, showed rates of disability higher than that of the county as a whole. Overall, more than half of these people likely have some kind of difficulty with ambulatory care, indicating a likely dependence on public or private transit services.

Table 2-8. Characteristics of Disability by City, ACS 2016

City	Total Population	With a Disability	%	% With Ambulatory Difficulty		% With Self-Care Difficulty		% With Independent Living Difficulty	
				% Total	% Disabled	% Total	% Disabled	% Total	% Disabled
Brawley	25,677	4,131	16.1%	8.7%	54.2%	4.7%	29.3%	6.7%	41.6%
Calexico	39,733	6,018	15.1%	8.8%	58.0%	5.0%	32.8%	8.2%	53.8%
Calipatria	3,444	376	10.9%	6.1%	55.9%	2.7%	24.7%	4.5%	41.5%
El Centro	43,069	6,450	15.0%	9.0%	60.3%	3.8%	25.6%	4.7%	31.4%
Holtville	6,230	916	14.7%	10.3%	70.3%	2.7%	18.3%	6.1%	41.8%
Imperial	16,551	1,102	6.7%	3.6%	54.0%	1.4%	21.0%	1.8%	27.1%
Westmorland	2,014	368	18.3%	10.0%	54.6%	4.1%	22.6%	6.2%	34.0%
Unincorporated Areas	31,976	4,713	14.7%	7.3%	49.2%	3.1%	20.8%	5.5%	37.6%
Imperial County (Total)	168,694	24,074	14.3%	8.1%	56.4%	3.8%	26.5%	5.8%	40.4%

2012-2016 American Community Survey 5-Year Estimates
Non-Institutionalized, Civilian Population

Across a number of metrics, Imperial County registers above the California and/or U.S. average for transit dependent populations. Table 2-9 compares each of the key attributes determining transit need in Imperial County with California state and U.S. national averages. Overall, the youth population in Imperial County is larger (in proportion to total population) than it is in California or nationally, on average, and the senior population is smaller. Additionally, Imperial County has a larger proportion of zero-car households than the California average but not the U.S. average, a lower median income than both, a higher proportion of people living below the poverty level, and an unemployment rate that is more than 1.9 times the national average.

Table 2-9. Imperial county vs California and U.S. Averages

Group	Imperial County	California Average	U.S. Average
Disabled Population	14.3%	10.6%	12.5%
Youth Population (under 18)	28.7%	23.6%	23.1%
Senior Population (65+)	11.9%	12.9%	14.5%
Percent Zero-Car Households	8.0%	7.6%	9.0%
Median Household Income (2009)	\$42,560	\$63,783	\$55,322
Percent below Poverty Level	24.1%	15.8%	15.1%
Percent Unemployed	9.0%	5.5%	4.7%

2012-2016 American Community Survey 5-Year Estimates

Table 2-10. Household Income Characteristics, ACS 2016

City	Total Households	With Social Security	%	With Supp. Security Income	%	With Cash Public Assist.	%	With Food Stamps/ SNAP	%	Per Capita Income
Brawley	7,080	2,200	31.1%	753	10.6%	800	11.3%	2,022	28.6%	\$16,838
Calexico	9,261	3,614	39.0%	1,193	12.9%	564	6.1%	2,017	21.8%	\$13,365
Calipatria	918	302	32.9%	44	4.8%	110	12.0%	242	26.4%	\$6,556
El Centro	12,352	4,103	33.2%	1,214	9.8%	963	7.8%	2,840	23.0%	\$18,172
Holtville	1,742	713	40.9%	230	13.2%	170	9.8%	534	30.7%	\$13,867
Imperial	4,360	929	21.3%	128	2.9%	11	0.3%	279	6.4%	\$24,433
Westmorland	566	229	40.5%	38	6.7%	24	4.2%	150	26.5%	\$11,331
Unincorporated Areas	9,521	3,823	40.2%	909	9.5%	508	5.3%	1,484	15.6%	\$14,335*
Imperial County (Total)	45,800	15,913	34.7%	4,509	9.8%	3,150	6.9%	9,568	20.9%	\$16,311

2012-2016 American Community Survey 5-Year Estimates

* Estimated by calculation

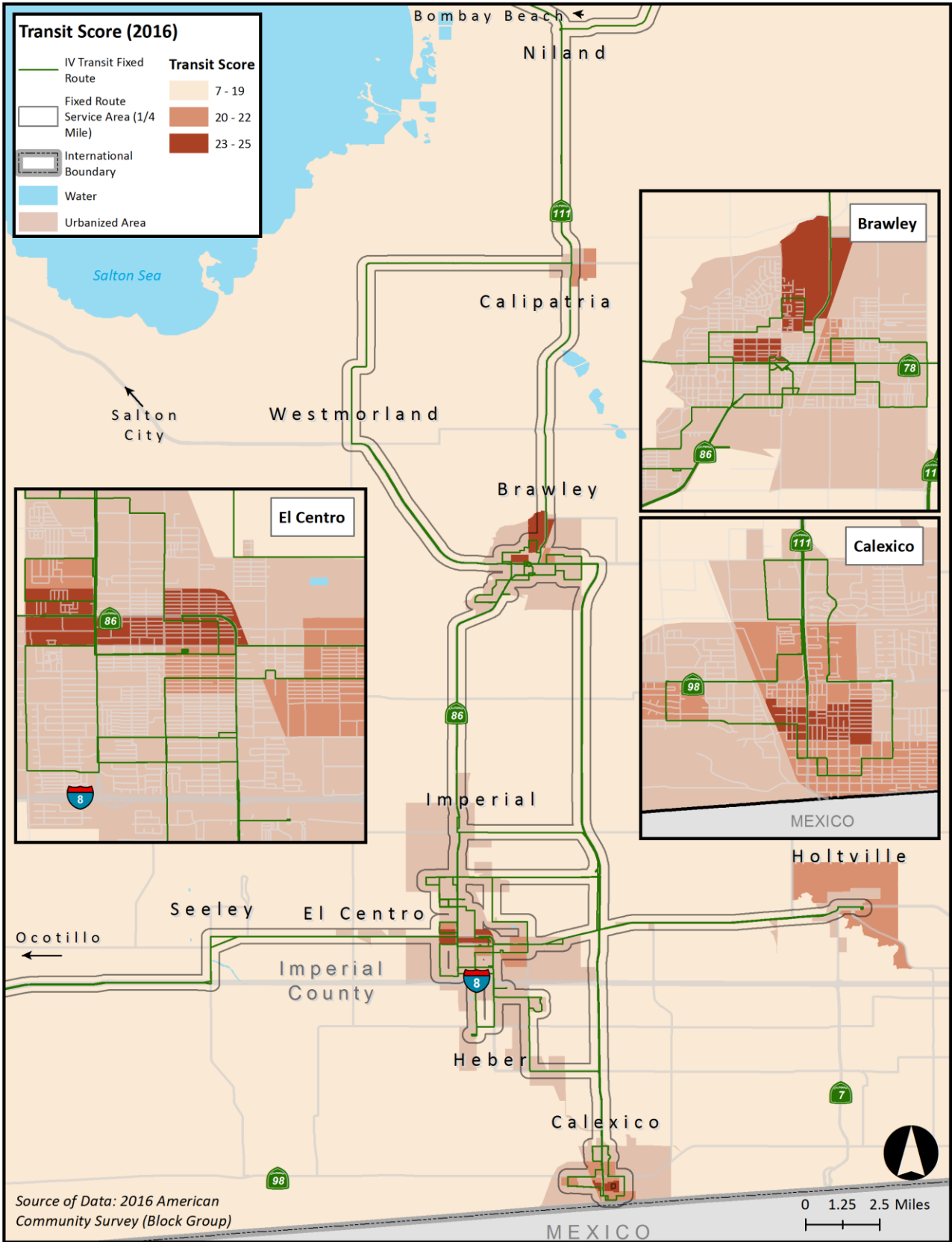
When considered together, this data can be used to calculate a transit score map. The “transit score” map is created in order to spatially analyze several transit-oriented demographic and socioeconomic characteristics at the same time. The transit score is a relative measure of how successful a fixed route transit system is expected to be in a particular region. Used in conjunction with a congruency analysis of major transit generators, the transit score can be used to evaluate existing service as well as to identify areas of potential demand.

Transit Score and Congruency Analysis

Transit Score (success)

- Population Density, Density of the population under the age of 18, density of the population over the age of 65, median household income, percentage of the population living below the poverty level (considered by the 2009 ACS to be \$10,956 for an individual), percentage of zero-car households
- For a given region, the values for each of these variables are organized by census tract. For each variable, the values are arranged into categories of values using the quantile classification method of GIS analysis. For this analysis, all variables are divided into five classes. All of the values in each category (class) are then given a “score” between 1 and 4, where 1 is low expectation of success and 4 is high expectation of success. All of the scores are then totaled for each variable inside a census tract to give a total transit score. Six variables are evaluated, so a score close to 24 means that a census tract has a high expectation for transit success; a score close to 6 means that there is low expectation for transit success. Transit scores are then mapped by geographic unit and quantile classification to show where demographic and socioeconomic variables lend themselves to potential transit success.

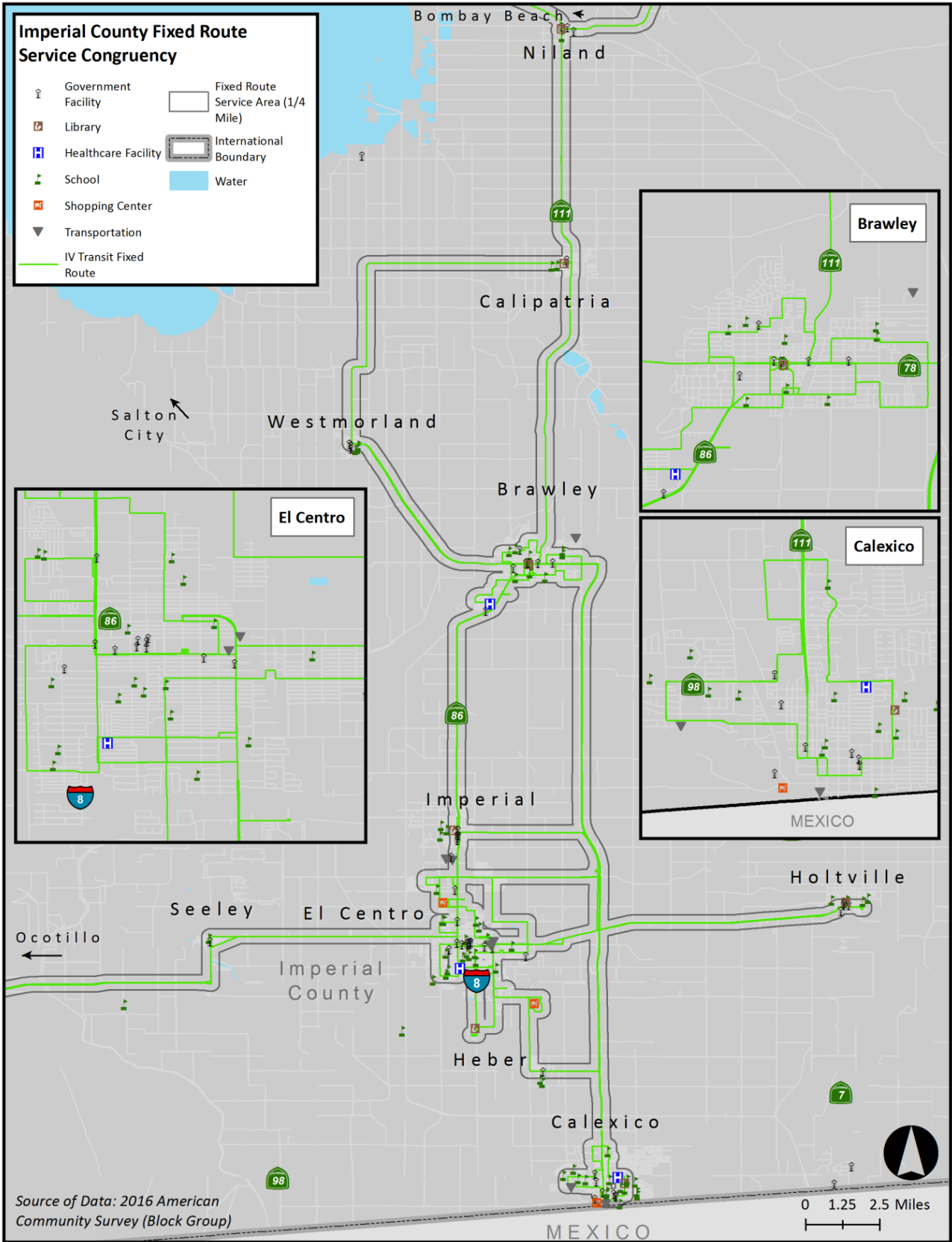
Figure 2-4. Imperial County Transit Success Score Map



Service Congruency

- In addition to transit score, a congruency analysis shows what areas are currently served by transit, and what generators or areas determined to have a high transit need score are not currently served by transit. The following map, shown in Figure 5, overlays the current fixed routes, including a ¼ mile buffer around each route (the area considered by ICTC to be the “service area”, which is also served by IVT ACCESS), and IVT RIDE service areas, as well as the major trip generators in Imperial County. Trip generators include employers, schools/colleges/ universities, business parks, government and social service locations, hospitals and medical centers, parks and tourist attractions, major retail locations and multimodal links. Border crossings are also taken into account as generators, as many people cross into Imperial County from Mexico to access jobs and/or shopping. Most major generators are served, with the exception of some employers, such as the Calipatria and Centinela State Prisons, CalEnergy, and Ormat Technologies (in Heber).

Figure 2-5. Imperial County Fixed Route Service Congruency



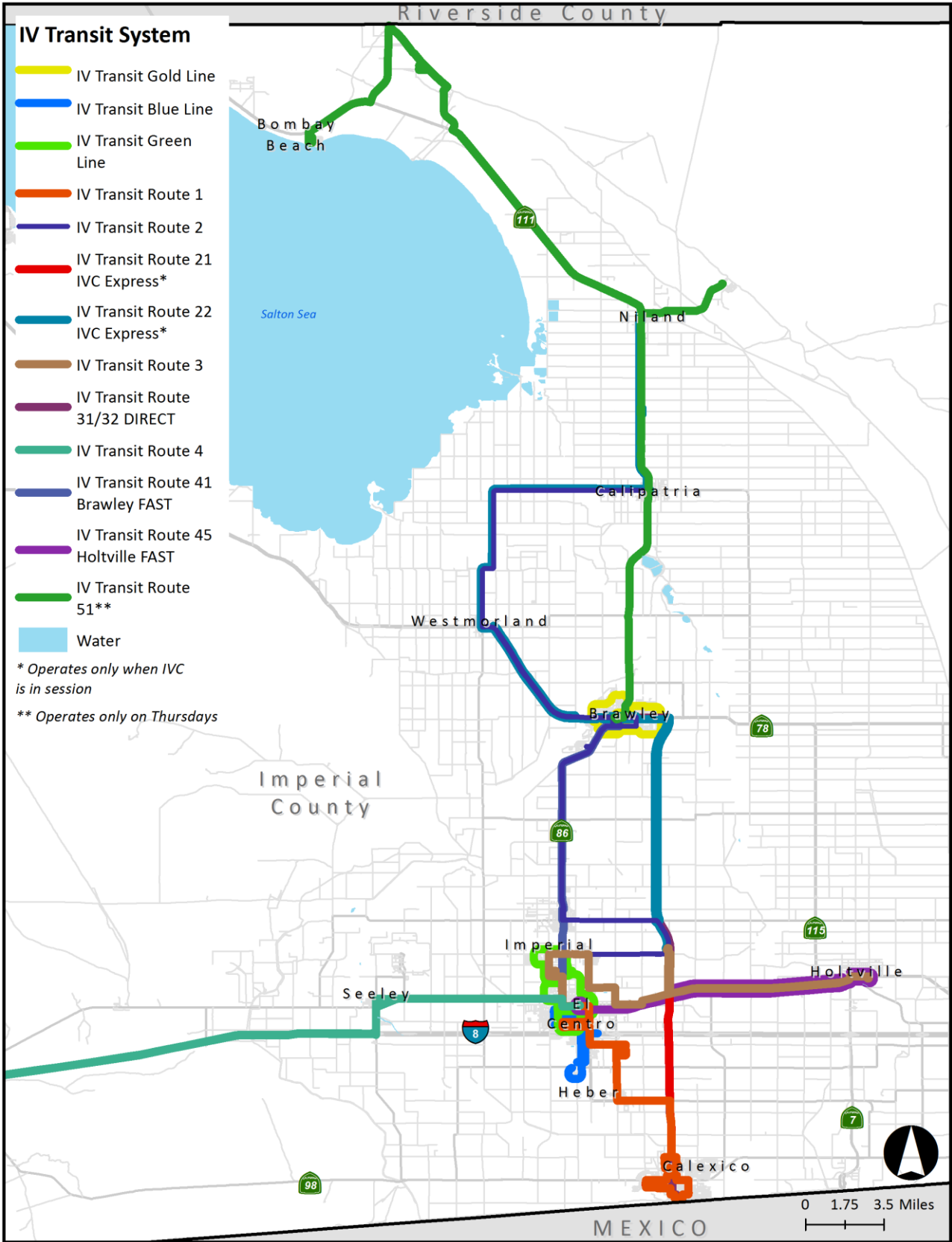
2.3 Transit System Profile

This section expands upon the transit services provided throughout Imperial County including operations, ridership, route performance, fare policies, equipment and facilities, organization, financial and capital planning, marketing and other transit operators. Transit service in Imperial County is broken down into three general fare types (Local, Regional, DIRECT/FAST), with a different level of service provided by each type. The primary service corridor includes Calexico, Heber, El Centro, Imperial and Brawley; the secondary service corridor includes Holtville, Seeley, Niland, Calipatria and Westmorland; and the remote zone includes the remainder of the county.

Both fixed route and demand response services are provided throughout much of the county, providing transportation for the general public, as well as senior and disabled people. Local, circulator, express and deviated fixed route service is operated between points throughout the Imperial Valley under contract for the county by First Transit, Inc., branded as Imperial Valley Transit. Demand response service (IVT ACCESS, IVT RIDE, and IVT MedTrans) is subsidized and administered by ICTC. IVT ACCESS is also available to the general public for an added fee when space allows.

Figure 2-6 shows the fixed route IV Transit services provided by ICTC throughout Imperial County.

Figure 2-6. Imperial County Transportation Commission Fixed Routes



2.3.1 Fixed Routes

Fixed route service in Imperial County is subsidized and administered by ICTC and provided as Imperial Valley Transit (IVT) under contract with First Transit, Inc. Service is provided on 13 routes, including 3 circulators. This section provides a detailed inventory of routes as well as available data regarding route operation, ridership, revenues, and costs. Data regarding each demand response service follows in the next section.

Table 2-11. Fixed Route Services

Route	Service Zone	Function	Towns Served	Days of Service	Hours of Service (M-F only shown)	Headway	Notes
1 (N&S) El Centro – Calexico	Zones 4, 5	Main Service	Calexico, El Centro, Herber, Imperial Valley Mall	7-Days, Limited Sat. and Sun.	5:45 AM – 9:00 PM, service to 11:23 PM when IVC in session	41 mins, all day 35 mins, midday (M-F avg. all stops)	Additional late night bus when IVC in session
2 (N&S) El Centro – Niland	Zones 2, 3, 4	Main Service	El Centro, IVC*, Imperial Brawley, Westmorland, Calipatria, Niland	7-Days, Limited Sun.	5:45 AM – 8:25 PM, service to 10:45 PM when IVC in session	82 mins, South 93 mins, North (M-F avg. all stops)	No Sun svc. to Niland, Calipatria, or W. Moreland
3 (E&W) El Centro – Holtville	Zones 4, 6	Main Service	El Centro, IVC*, Holtville	Weekdays, Limited Sat.	7:11 AM – 11:42 AM 1:00 PM – 7:40 PM	2 trips AM, 3 trips PM, each way, M-F Limited Saturday	
4 (E&W) El Centro – Seeley	Zone 4 (Local)	Main Service	Seeley, El Centro, Ocotillo**	Weekdays, Limited Sat.	7:00 AM – 9:00 AM 1:00 PM – 5:50 PM	80 minutes (M-F)	**Demand-Response to Ocotillo, Tuesdays
21 IVC Express Calexico – IVC*	Zones 4, 5 (Express)	IVC Express	Calexico, IVC*	Weekdays (Schooldays)	6:15 AM – 9:45 AM 12:30 PM – 6:30 PM	36 minutes AM** 75 minutes PM** (avg., all stops)	**Half of buses do not run on Fridays
22 IVC Express Niland – IVC*	Zones 2, 3, 4 (Express)	IVC Express	IVC*, Brawley, Westmorland, Calipatria, Niland	Weekdays (Schooldays)	6:20 AM – 9:50 AM 2:00 PM – 5:11 PM	2 Inbound AM, 2 Outbound PM trips (School Days Only)	IVC school days only for 21 and 22
31/32 DIRECT Brawley – Calexico	Zones 3, 5 (DIRECT)	DIRECT	Brawley to Calexico	Weekdays, Saturdays	6:30 AM – 10:00 AM 3:00 PM – 6:10 PM	2 trips AM, 2 trips PM, each way	
41 Brawley FAST El Centro – Brawley	Zones 3, 4 (FAST)	FAST/Express	El Centro, Imperial, Brawley	Weekdays	6:42 AM – 7:10 AM 5:40 PM – 6:40 PM	1 Outbound AM, 2 Inbound PM trips	
45 Holtville FAST El Centro – Holtville	Zones 4, 6 (FAST)	FAST/Express	El Centro, Holtville	Weekdays	6:40 AM – 7:00 AM 5:40 PM – 6:30 PM	1 Outbound AM, 2 Inbound PM trips	
51 Bombay Beach – Brawley	Zones 1, 2, 3	"Lifeline" Service	Brawley, Calipatria, Niland, Bombay Beach, Slab City	Thursdays (1 trip each)	8:35 AM – 10:30 PM 4:28 PM – 6:35 PM	1 Outbound AM, 1 Inbound PM trip	1 weekly trip in each direction
YCAT El Centro - Yuma	\$2.00 Fare	Long-Distance Connector	El Centro, Yuma, Ft Yuma, Winterhaven	M, W, F***	8:30 AM – 11:32 AM 2:30 PM – 5:32 PM **	1 trip each way, AM/PM (M, W, F***)	Trips cross time zones MST**/PST (PDT)
IVT Circulators							
BLUE: El Centro	Local	Circulator	El Centro	Weekdays	6:00 AM – 6:38 PM	70 minutes	
GOLD: Brawley	Local	Circulator	Brawley	Weekdays	6:00 AM – 6:38 PM	70 minutes	
GREEN: El Centro	Local	Circulator	El Centro	Weekdays	6:00 AM – 7:05 PM	70 minutes (avg.)	

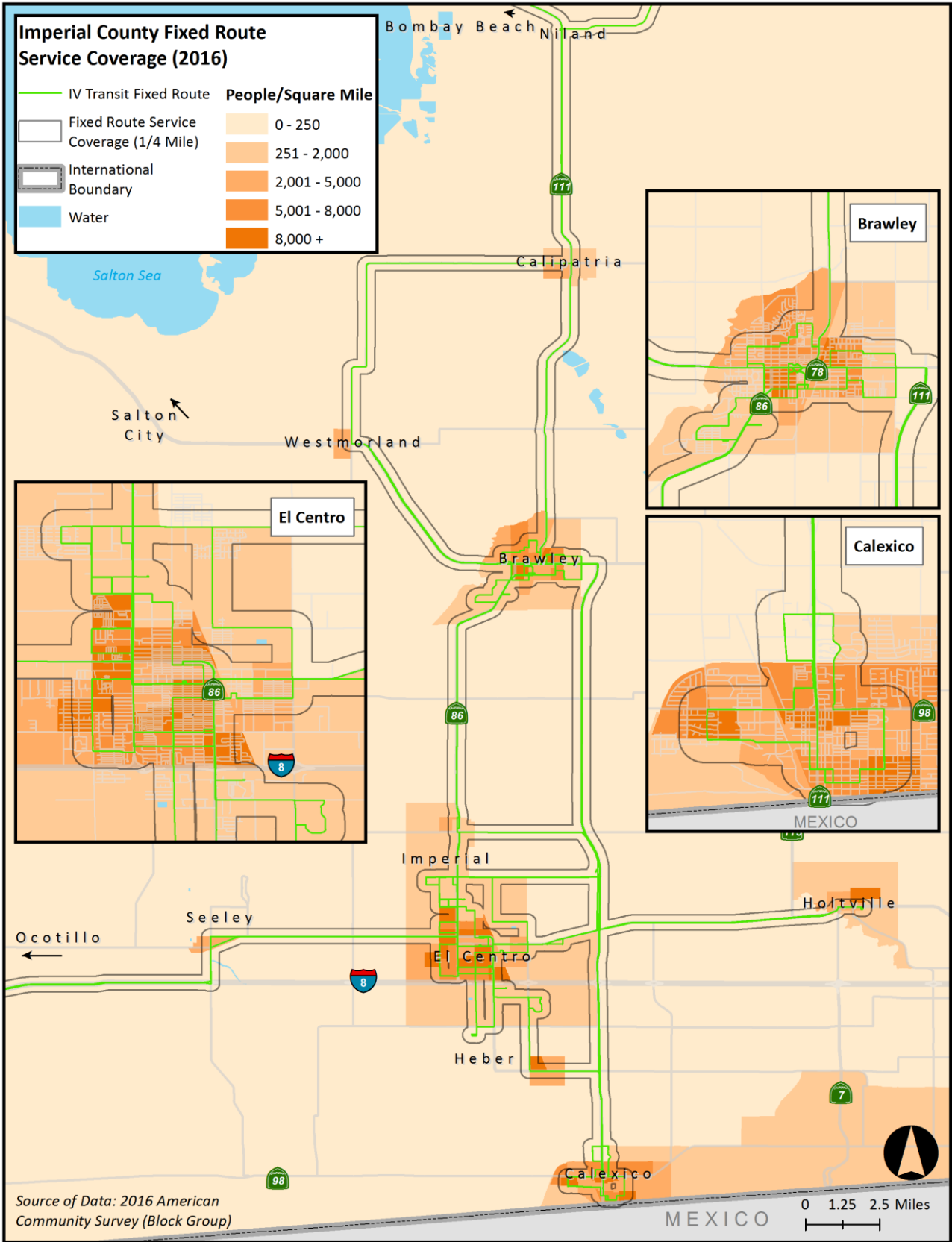
*IVC: Imperial Valley College

**Yuma, Arizona, does not observe daylight savings, so span-of-service changes throughout the year

***Friday service to Yuma (Turquoise Route 10 - Interstate 8) introduced July, 2018

All information for the tables in the following section is populated or calculated using data from 2017-2018, drawn from an overall dataset covering 5-years of operation, by ICTC.

Figure 2-7. IV Transit Fixed Route Service Coverage



Routes, Services, Operations

The 13 fixed routes form roughly a north-south axis along the California State Route 86 and California State Route 111 corridors from Calexico to Brawley, continuing along the California State Route 111 corridor to Niland (Bombay Beach on Thursdays), and an east-west axis along the Interstate 8 and Imperial County S80/Evan Hewes Highway corridors from Seeley to Holtville, extending to Ocotillo on Tuesdays, upon demand.

Figure 2-7 shows fixed route service coverage for IV Transit. The individual routes are described in further detail below. The coverage map shows a ¼ mile catchment area (buffer) for regular fixed routes, representing the distance passengers can be reasonably assumed to walk to a bus route.

Route 1: Calexico, Heber, El Centro

Route 1 connects El Centro and Calexico via Heber. Southbound trips are generally faster, with fewer scheduled stops while northbound trips tend to elicit higher ridership throughout the year, although headways in both directions are about the same. Routes 1 and 2 combined account for about 56% of the total ridership for the system. These are also the only two lines in the system that run on Sundays. During the week, headways average 41 minutes all day and 35 minutes midday. Some additional buses run late night when Imperial Valley College (IVC) is in session.

Table 2-12. Route 1 Stops

Route 1N Stops			Route 1S Stops		
Stop No.	Stop Name	Municipality	Stop No.	Stop Name	Municipality
10001	Birch St. & Kloke Rd.	Calexico	10006	Hacienda Dr. & Ollie Ave.	Calexico
10002	Rockwood Ave. & Cole Rd.	Calexico	11032	State St. & 7th St.	El Centro
10003	Kloke Rd. & Grant St.	Calexico	11034	El Centro Regional Medical Ctr.	El Centro
10004	Grant and Eady	Calexico	11036	State St. & 5th St.	El Centro
10005	Rockwood Ave. & R. Kennedy St.	Calexico	11038	Ross Ave. & 10th St.	El Centro
10006	Hacienda Dr. & Ollie Ave.	Calexico	11040	4th St. & Brighton Ave.	El Centro
10007	Ollie Ave. & Birch St.	Calexico	11044	4th St. & Wensley Ave.	El Centro
10008	Rockwood Ave. & Vega St.	Calexico	11047	Aurora Dr. & 4th St.	El Centro
10009	Grant St. and Cesar Chavez	Calexico	11052	4th St. & Wake St.	El Centro
10010	Paulin Ave. & 3rd St.	Calexico	11056	Imperial Valley Mall	El Centro
10011	Encinas Ave. & Belcher St.	Calexico	99011	Dogwood Rd. & Correll Rd.	Heber
10012	Mary Ave. & 4th St.	Calexico	99013	Heber Rd. & Parkyns Ave.	Heber
10013	Encinas Ave. & 7th St.	Calexico	99015	Clifford Rd. & Heber Rd.	Heber
11031	State St. & 7th St.	El Centro			
11033	El Centro Regional Medical Ctr.	El Centro			
11035	State St. & 5th St.	El Centro			
11038	Ross Ave. & 10th St.	El Centro			
11041	4th St. & Brighton Ave.	El Centro			
11042	Aurora Dr. & Cypress Dr.	El Centro			
11045	4th St. & Wensley Ave.	El Centro			
11046	Aurora Dr. & 4th St.	El Centro			
11053	Danenberg Dr. & 4th St.	El Centro			
11056	Imperial Valley Mall	El Centro			
99011	Dogwood Rd. & Correll Rd.	Heber			
99012	Heber Rd. & Parkyns Ave.	Heber			
99014	Heber Rd. & Nina Rd.	Heber			

Table 2-13. Route 1 Operating Statistics

	Northbound	Southbound
Route Length (Miles)	19.5 mi	14.5 mi
Scheduled Running Time	75 min	45 min
Weekday Headway	41 min*	41 min*
Annual Ridership	242,003	134,795
Annual Mileage	122,253	84,972

* 35 min midday

Service spans 5:45 am to 9:00 pm generally, but extends to 11:23 pm when IVC is in session.

Figure 2-8. Route 1 Ridership by Trip

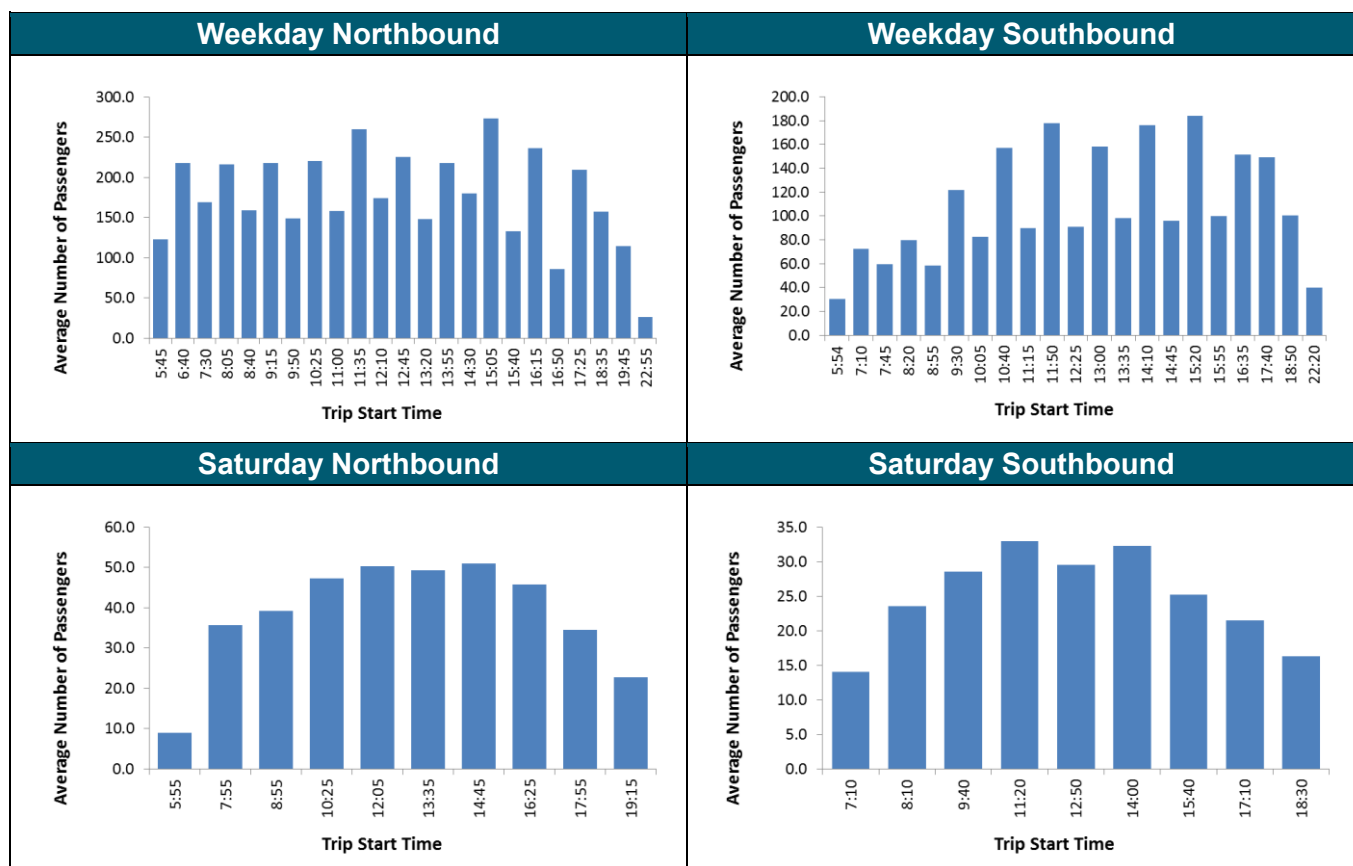
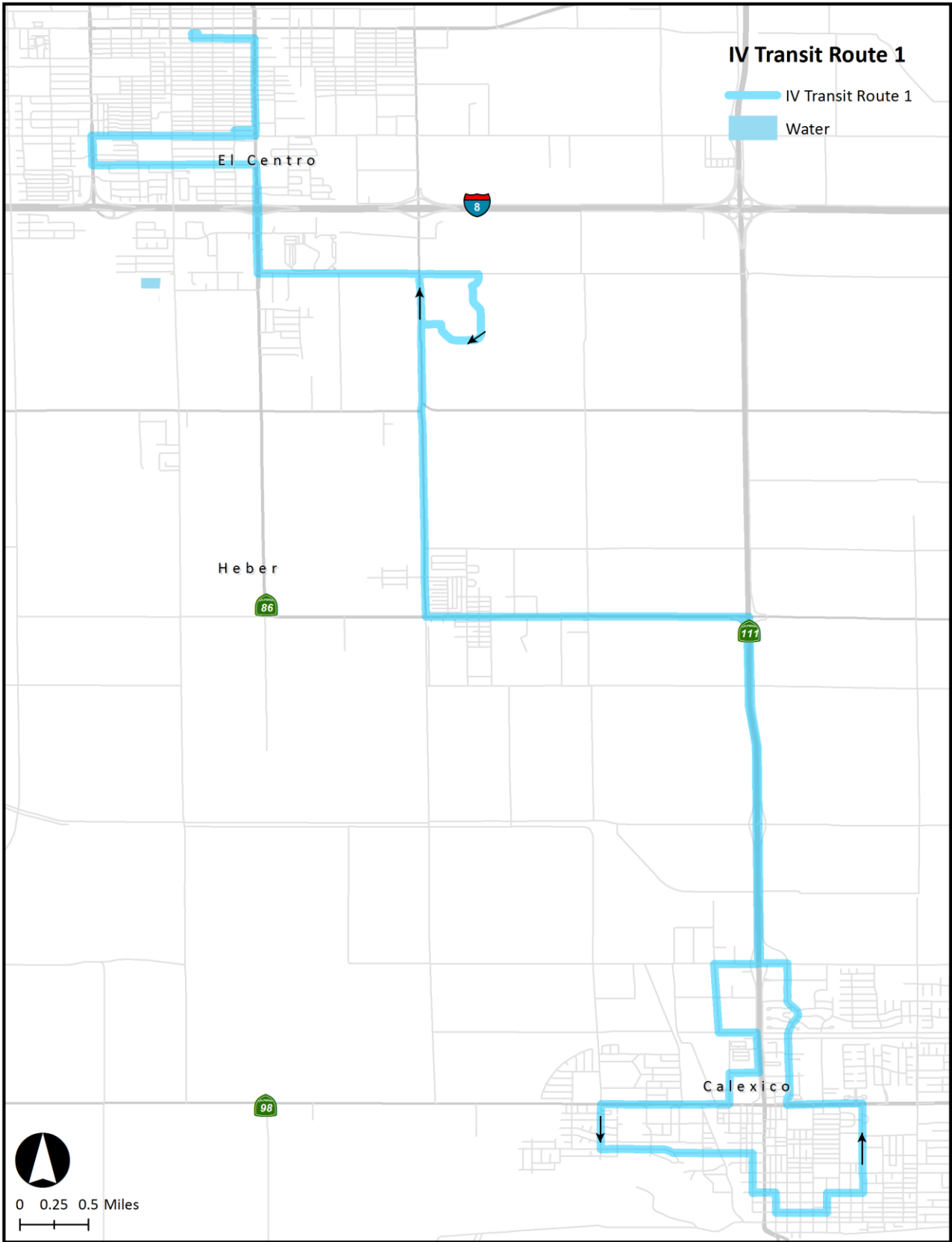


Figure 2-9. Route 1



Route 2: El Centro, Imperial Valley College, Imperial Brawley, Westmorland, Calipatria, Niland

Route 2 – along with Route 1 – serves as the “backbone” for the entire system; together with Route 1, Route 2 serves the highest number of daily riders along the primary north/south corridor of the Imperial Valley. Ridership tends to peak in the mornings in both directions, but this occurs slightly earlier for the southbound direction, and this trend holds true both during the week and on Saturdays. Route 2 serves most of the major municipalities in the Imperial Valley with most stops clustered in Brawley and El Centro, and with additional stops in Westmorland, Calipatria, Niland, Imperial, and at Imperial Valley College. Routes 1 and 2 combined account for about 56% of the total ridership for the system. These are also the only two lines in the system that run on Sundays, although Route 2 does not serve Niland, Calipatria or Westmorland on Sundays. Ridership is high despite having lengthier headways than Route 1. This is indicative of the service coverage, providing access to key employment and municipal centers in the county.

Table 2-14. Route 2 Stops

Route 2N Stops			Route 2S Stops		
Stop No.	Stop Name	Municipality	Stop No.	Stop Name	Municipality
11003	Bradshaw Rd. & La Brucherie Rd.	El Centro	11001	La Brucherie Rd. & Cruikshank Dr.	El Centro
11007	Imperial Ave. & Bradshaw Rd.	El Centro	11006	Bradshaw Rd. & Imperial Ave.	El Centro
11016	Imperial Ave. & Euclid Ave.	El Centro	11012	Frontage Rd. & Scott Ave.	El Centro
11020	Imperial Ave. & Commercial Ave.	El Centro	11015	Imperial Ave. & Euclid Ave.	El Centro
11022	State St. & 14th St.	El Centro	11019	Imperial Ave. & Commercial Ave.	El Centro
11028	State St. & 8th St.	El Centro	11023	State St. & 14th St.	El Centro
11031	State St. & 7th St.	El Centro	11029	State St. & 8th St.	El Centro
13001	Imperial Ave. & 9th St.	Imperial	11032	State St. & 7th St.	El Centro
13003	Barioni Boulevard & K St.	Imperial	13002	Imperial Ave. & Worthington Rd.	Imperial
13007	La Brucherie Rd. & Aten Rd.	Imperial	13004	Barioni Boulevard & K St.	Imperial
14002	E St. & Rio Vista Ave.	Brawley	13006	Aten Rd. & La Brucherie Rd.	Imperial
14012	Main St. & 3rd St.	Brawley	14002	E St. & Rio Vista Ave.	Brawley
14014	Pioneer Memorial Hospital	Brawley	14010	Main St. & 2nd St.	Brawley
14016	K St. & 2nd St.	Brawley	14014	Pioneer Memorial Hospital	Brawley
14017	5th St. & G St.	Brawley	14017	5th St. & G St.	Brawley
14025	Main St. & Cesar Chavez	Brawley	14018	K St. & 3rd St.	Brawley
14027	K St. & 9th St.	Brawley	14022	Main St. & 9th St.	Brawley
14028	Palm Ave. & Main St.	Brawley	14023	J St. & 8th St.	Brawley
14033	Palm Ave. & J St.	Brawley	14029	Main St. & Palm Ave.	Brawley
14035	K St. & Palm Ave.	Brawley	14032	Palm Ave. & J St.	Brawley
15001	Main St. & Ctr. St.	Westmorland	14034	Palm Ave. & K St.	Brawley
16002	Main St. & Park Ave.	Calipatria	15002	Ctr. St. & Main St.	Westmorland
16004	Main St. & Highway 111	Calipatria	16001	Main St. & Lake Ave.	Calipatria
99005	Highway 111 & Main St.	Niland	16003	Highway 111 & Main St.	Calipatria
99008	Imperial Valley College	County	99005	Highway 111 & Main St.	Niland
			99008	Imperial Valley College	County

Table 2-15. Route 2 Operating Statistics

	Northbound	Southbound
Route Length (Miles)	79.8 mi	79.2 mi
Scheduled Running Time	95 min	112 min
Weekday Headway	93 min	82 min
Annual Ridership	110,451	110,505
Annual Mileage	153,345	146,192

Service spans 5:45 am to 8:25 pm generally, but extends to 10:45 pm when IVC is in session.

Figure 2-10. Route 2 Ridership by Trip

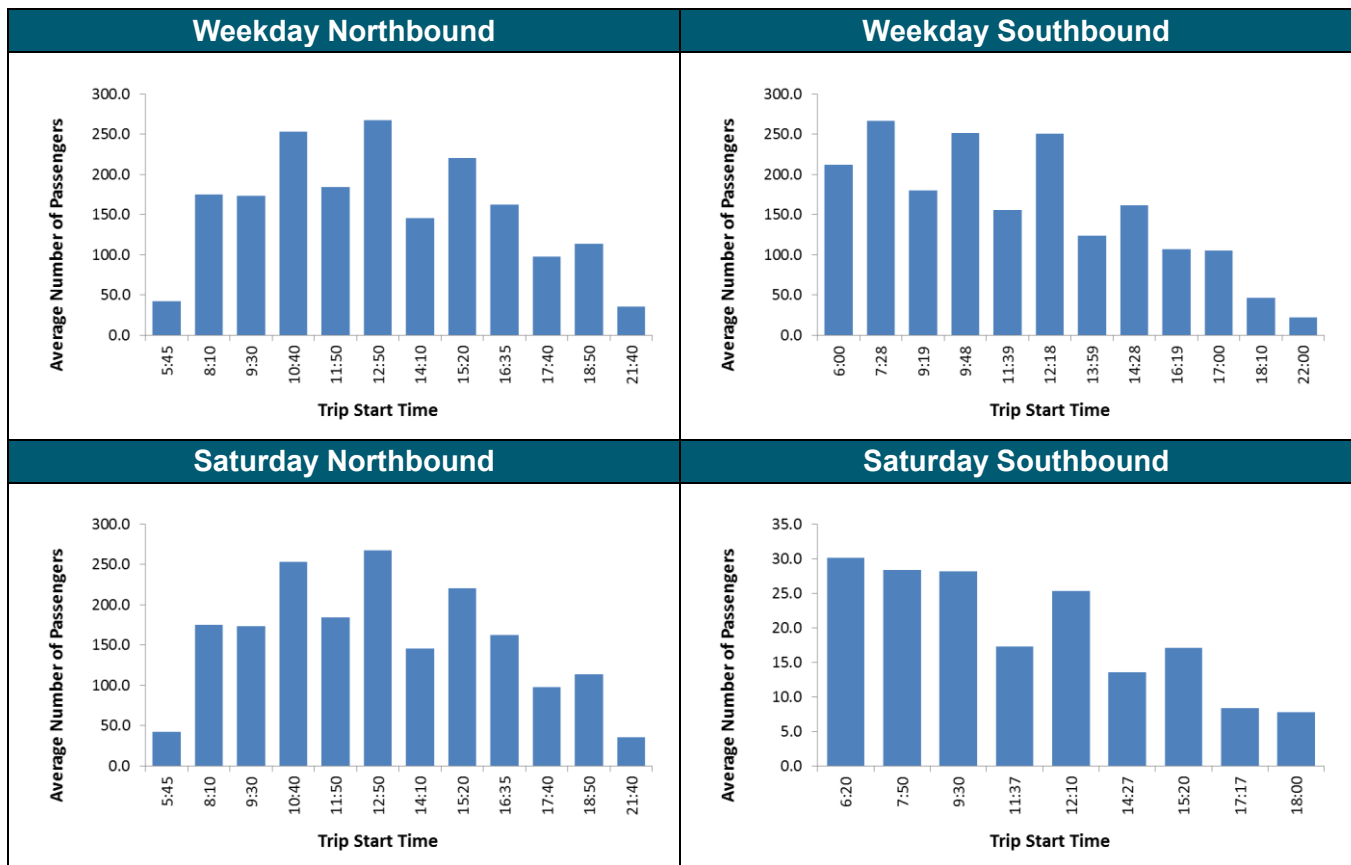
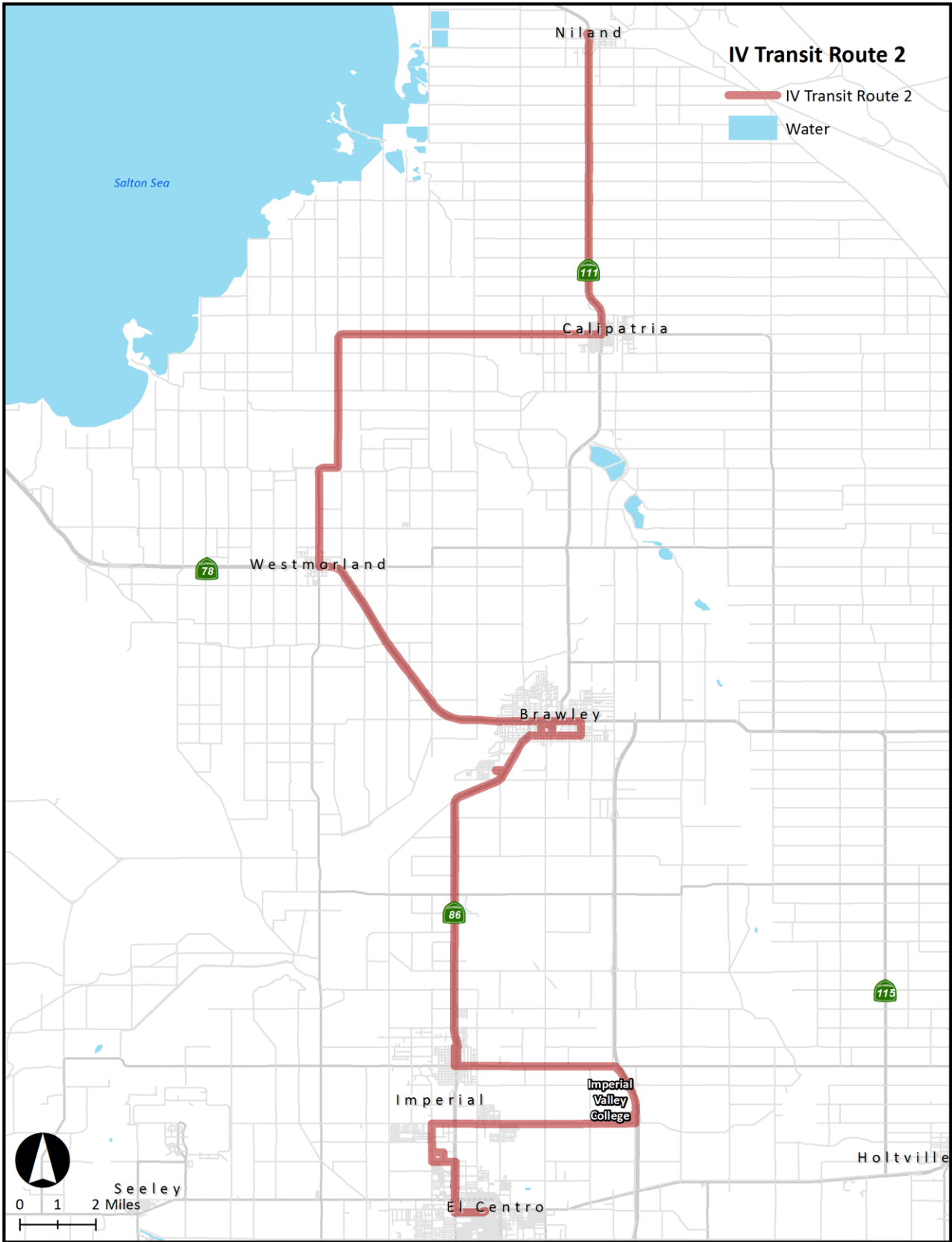


Figure 2-11. Route 2



Route 3: El Centro, Imperial Valley College, Holtville

Route 3 serves El Centro and Holtville with stops at Imperial Valley College. During the week, service is essentially 2 trips in the mornings and 3 in the evenings in both directions. Eastbound service peaks just before noon, while westbound service is peaked in the mornings with the largest share of riders catching the earliest available bus. This likely represents employment-based commuting patterns toward El Centro, from Holtville.

Table 2-16. Route 3 Stops

Route 3E Stops			Route 3W Stops		
Stop No.	Stop Name	Municipality	Stop No.	Stop Name	Municipality
11003	Bradshaw Rd. & La Brucherie Rd.	El Centro	11001	La Brucherie Rd. & Cruikshank Dr.	El Centro
11007	Imperial Ave. & Bradshaw Rd.	El Centro	11002	Cruikshank Dr. & Western Ave.	El Centro
11016	Imperial Ave. & Euclid Ave.	El Centro	11006	Bradshaw Rd. & Imperial Ave.	El Centro
11020	Imperial Ave. & Commercial Ave.	El Centro	11015	Imperial Ave. & Euclid Ave.	El Centro
11022	State St. & 14th St.	El Centro	11019	Imperial Ave. & Commercial Ave.	El Centro
11027	Villa Rd. & Oak Rd.	El Centro	11023	State St. & 14th St.	El Centro
11029	State St. & 8th St.	El Centro	11027	Villa Rd. & Oak Rd.	El Centro
11031	State St. & 7th St.	El Centro	11029	State St. & 8th St.	El Centro
11049	Evan Hewes & Dogwood Rd.	El Centro	11032	State St. & 7th St.	El Centro
12001	5th St. & Pine Ave.	Holtville	11049	Evan Hewes & Dogwood Rd.	El Centro
12003	5th St. & Figueroa Ave.	Holtville	12002	5th St. & Holt Rd.	Holtville
12004	5th St. & Figueroa/Grape	Holtville	12003	5th St. & Figueroa Ave.	Holtville
13007	La Brucherie Rd. & Aten Rd.	Imperial	12004	5th St. & Figueroa/Grape	Holtville
99008	Imperial Valley College	County	13006	Aten Rd. & La Brucherie Rd.	Imperial
99010	Gillett and Cannon	County	13010	Aten Rd. & Clark Rd.	Imperial
			99008	Imperial Valley College	County
			99010	Gillett and Cannon	County

Table 2-17. Route 3 Operating Statistics

	Eastbound	Westbound
Route Length (Miles)	21.6 mi	21.6 mi
Scheduled Running Time	62 min	59 min
Weekday Headway	5-trips	5-trips
Annual Ridership	5,578	7,020
Annual Mileage	30,615	31,919

Service spans 7:11 am to 11:42 am and 1:00 pm to 7:40 pm, with limited Saturday service and no Sunday service.

Figure 2-12. Route 3 Ridership by Trip

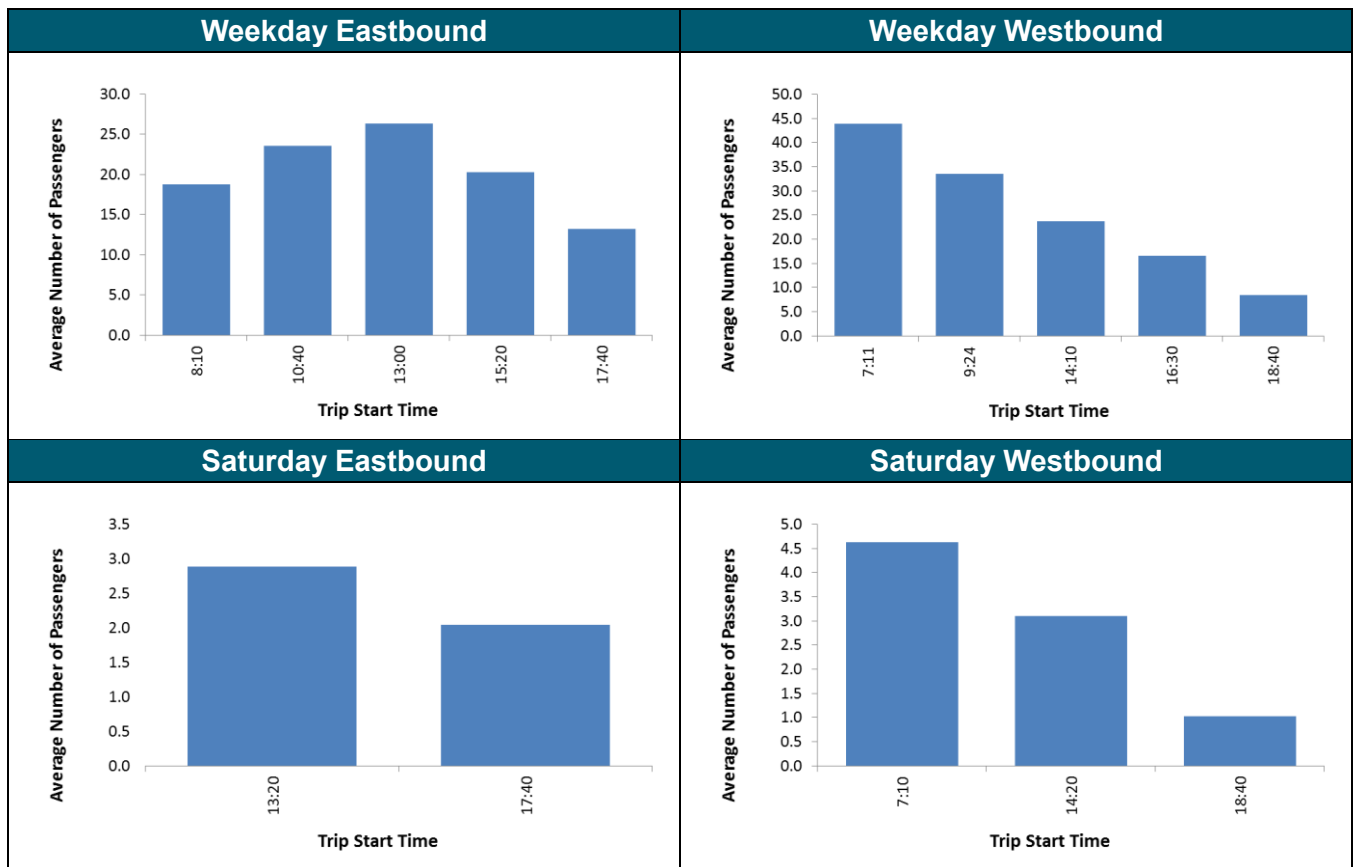
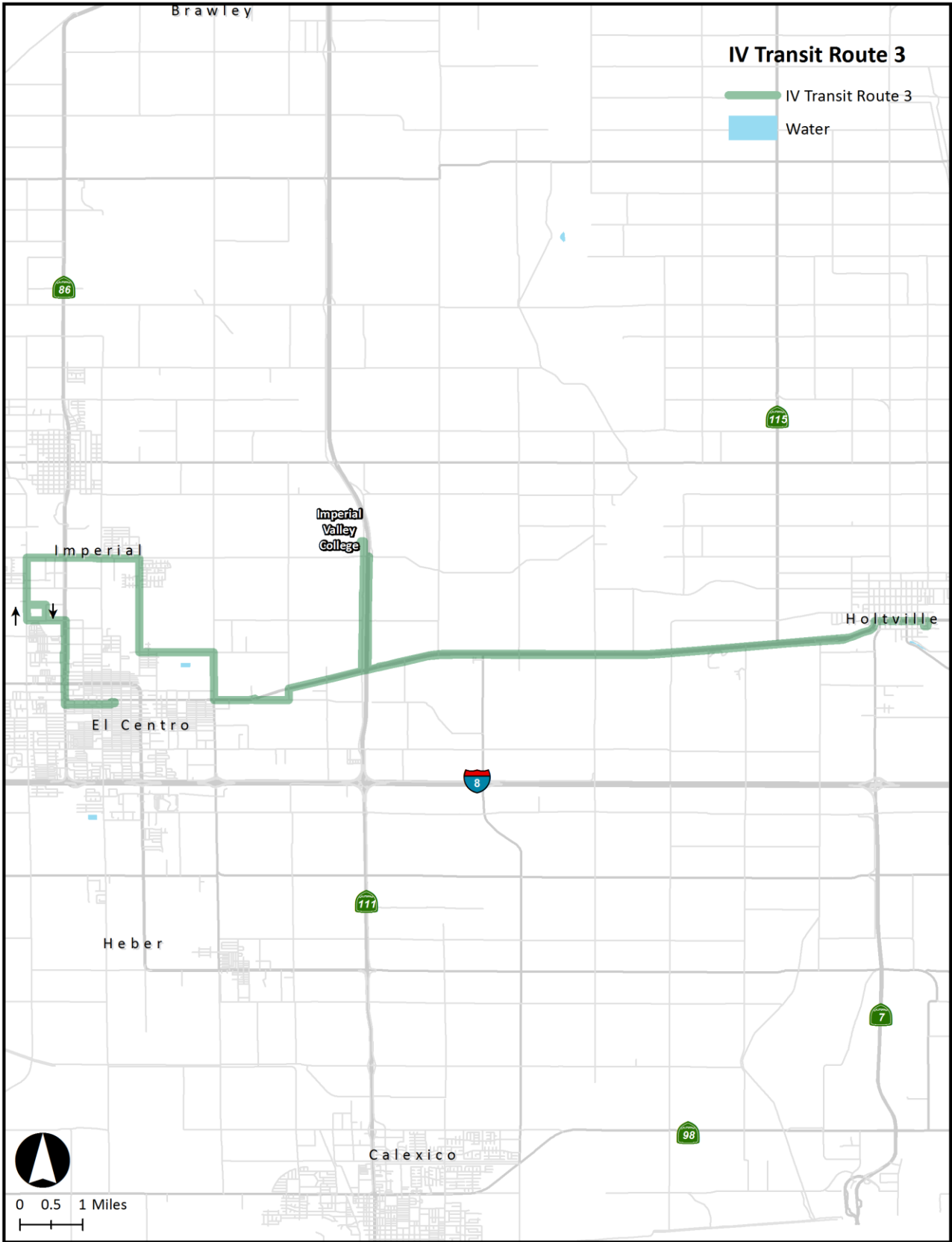


Figure 2-13. Route 3



Route 4: Seeley, El Centro

Route 4 connects El Centro and Seeley (to the west). During the week, headways average 80 minutes in both directions and there is additional service on Tuesdays to Ocotillo provided on demand. Ridership peaks in the mornings eastbound toward El Centro from Seeley with the largest share of riders catching the earliest bus, while, like Route 3, westbound service tends to peak toward the middle of the day. The first eastbound weekday trip also makes an additional stop at Imperial Valley College.

Table 2-18. Route 4 Stops

Route 4E Stops			Route 4W Stops		
Stop No.	Stop Name	Municipality	Stop No.	Stop Name	Municipality
11010	Adams Ave. & La Brucherie Rd.	El Centro	11009	Adams Ave. & La Brucherie Rd.	El Centro
11023	State St. & 14th St.	El Centro	11022	State St. & 14th St.	El Centro
11029	State St. & 8th St.	El Centro	11029	State St. & 8th St.	El Centro
11032	State St. & 7th St.	El Centro	11031	State St. & 7th St.	El Centro
99007	Evan Hewes Highway & Drew Rd.	Seeley	99007	Evan Hewes Highway & Drew Rd.	Seeley
99008	Imperial Valley College	County			

Table 2-19. Route 4 Operating Statistics

	Eastbound	Westbound
Route Length (Miles)	8.3 mi	8.3 mi
Scheduled Running Time	20 min*	20 min*
Weekday Headway	80 min	80 min
Annual Ridership	3,621	3,586
Annual Mileage	12,095	13,806

* to Seeley, +20 mins to Ocotillo

Service spans 7:00 am to 9:00 am and 1:00 pm to 5:50 pm, with limited Saturday service and no Sunday service.

Figure 2-14. Route 4 Ridership by Trip

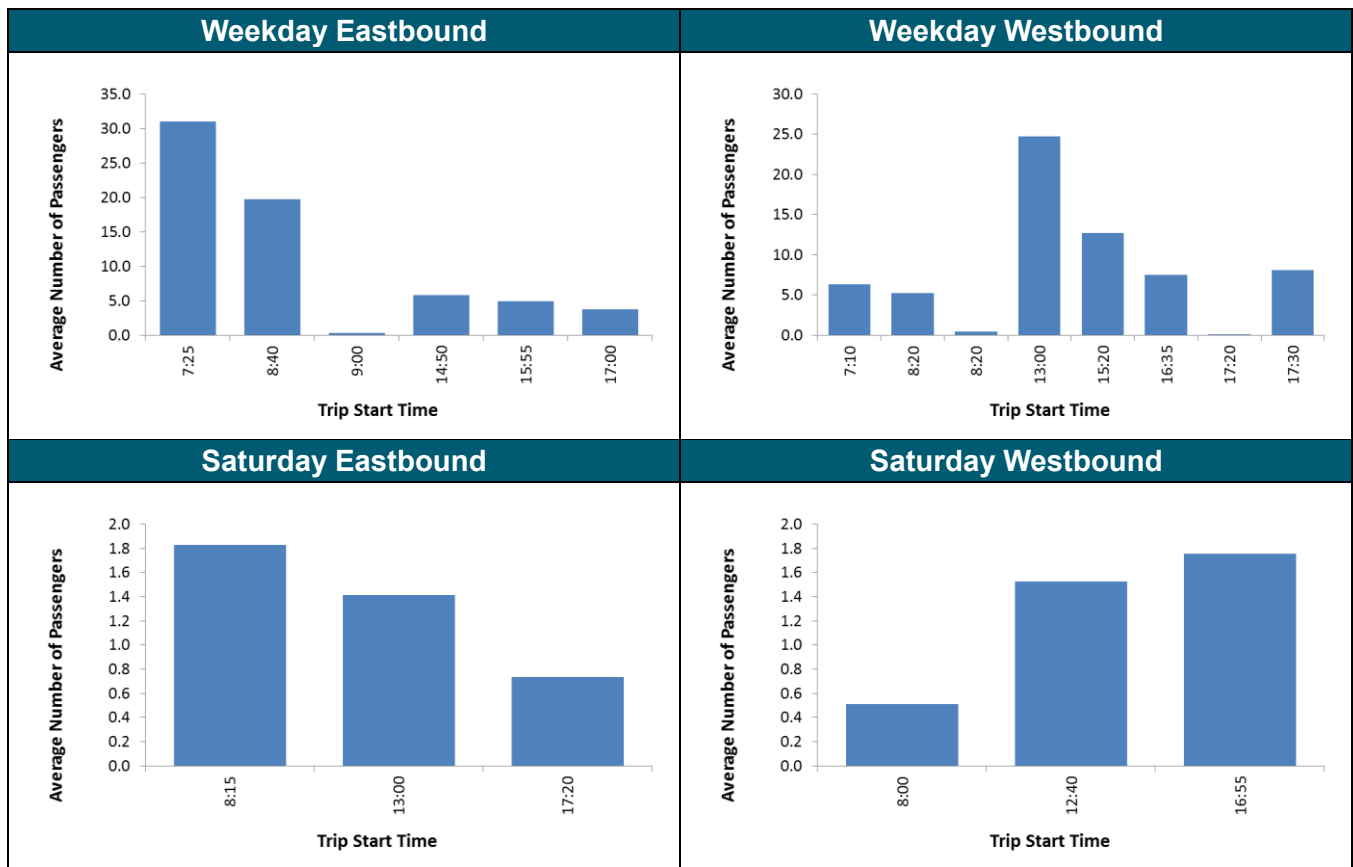
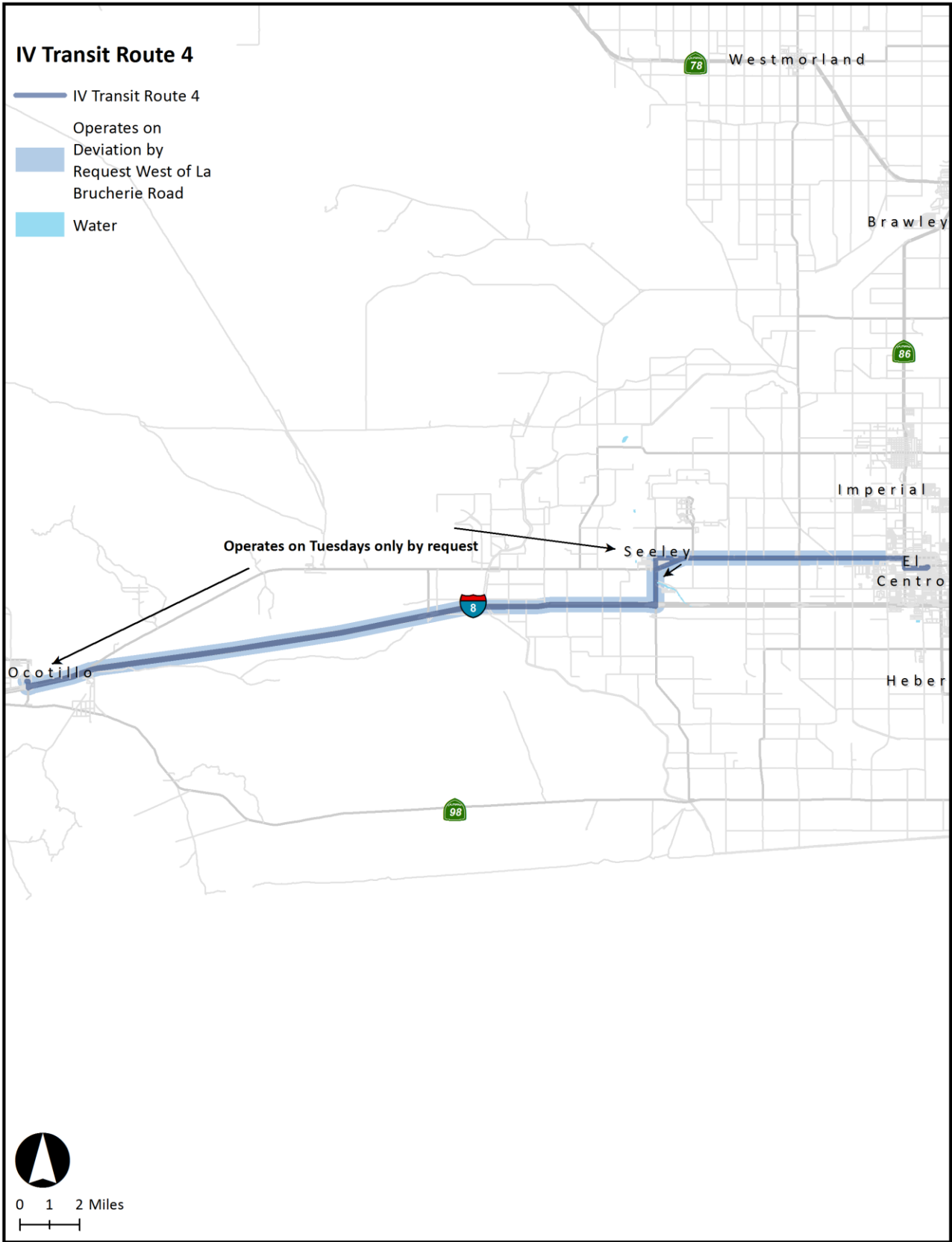


Figure 2-15. Route 4



Route 21 IVC Express: Calexico, Imperial Valley College

Route 21 IVC Express primarily serves Calexico with express service to Imperial Valley College. Between Calexico and IVC, the route uses State Route 111 and makes no intermediate stops. Ridership peaks shortly after noon with additional ridership spikes in the early morning and early evening. Service runs only during the week with AM headways of 36 minutes and PM headways of 75 minutes; however, on Fridays the total number of trips is reduced by half.

Table 2-20. Route 21 IVC Express Stops

Route 21N Stops			Route 21S Stops		
Stop No.	Stop Name	Municipality	Stop No.	Stop Name	Municipality
10001	Birch St. & Kloke Rd.	Calexico	10001	Birch St. & Kloke Rd.	Calexico
10002	Rockwood Ave. & Cole Rd.	Calexico	10002	Rockwood Ave. & Cole Rd.	Calexico
10003	Kloke Rd. & Grant St.	Calexico	10003	Kloke Rd. & Grant St.	Calexico
10004	Grant and Eady	Calexico	10004	Grant and Eady	Calexico
10005	Rockwood Ave. & R. Kennedy St.	Calexico	10005	Rockwood Ave. & R. Kennedy St.	Calexico
10006	Hacienda Dr. & Ollie Ave.	Calexico	10006	Hacienda Dr. & Ollie Ave.	Calexico
10007	Ollie Ave. & Birch St.	Calexico	10007	Ollie Ave. & Birch St.	Calexico
10008	Rockwood Ave. & Vega St.	Calexico	10008	Rockwood Ave. & Vega St.	Calexico
10009	Grant St. and Cesar Chavez	Calexico	10009	Grant St. and Cesar Chavez	Calexico
10010	Paulin Ave. & 3rd St.	Calexico	10010	Paulin Ave. & 3rd St.	Calexico
10011	Encinas Ave. & Belcher St.	Calexico	10011	Encinas Ave. & Belcher St.	Calexico
10012	Mary Ave. & 4th St.	Calexico	10012	Mary Ave. & 4th St.	Calexico
10013	Encinas Ave. & 7th St.	Calexico	10013	Encinas Ave. & 7th St.	Calexico
99008	Imperial Valley College	County	99008	Imperial Valley College	County

Table 2-21. Route 21 IVC Express Operating Statistics

	All
Route Length (Miles)	15.5 mi – North 11.0 mi – South
Scheduled Running Time	45 min (AM) 60 min (PM)
Weekday Headway	36 min (AM) 75 min (PM)
Annual Ridership	74,281
Annual Mileage	32,666

Service spans 6:15 am to 9:45 am and 12:30 pm to 6:30 pm.

Figure 2-16. Route 21 IVC Express Ridership by Trip

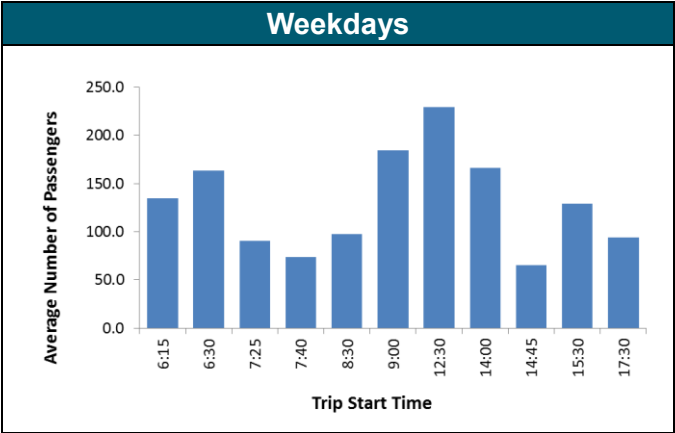
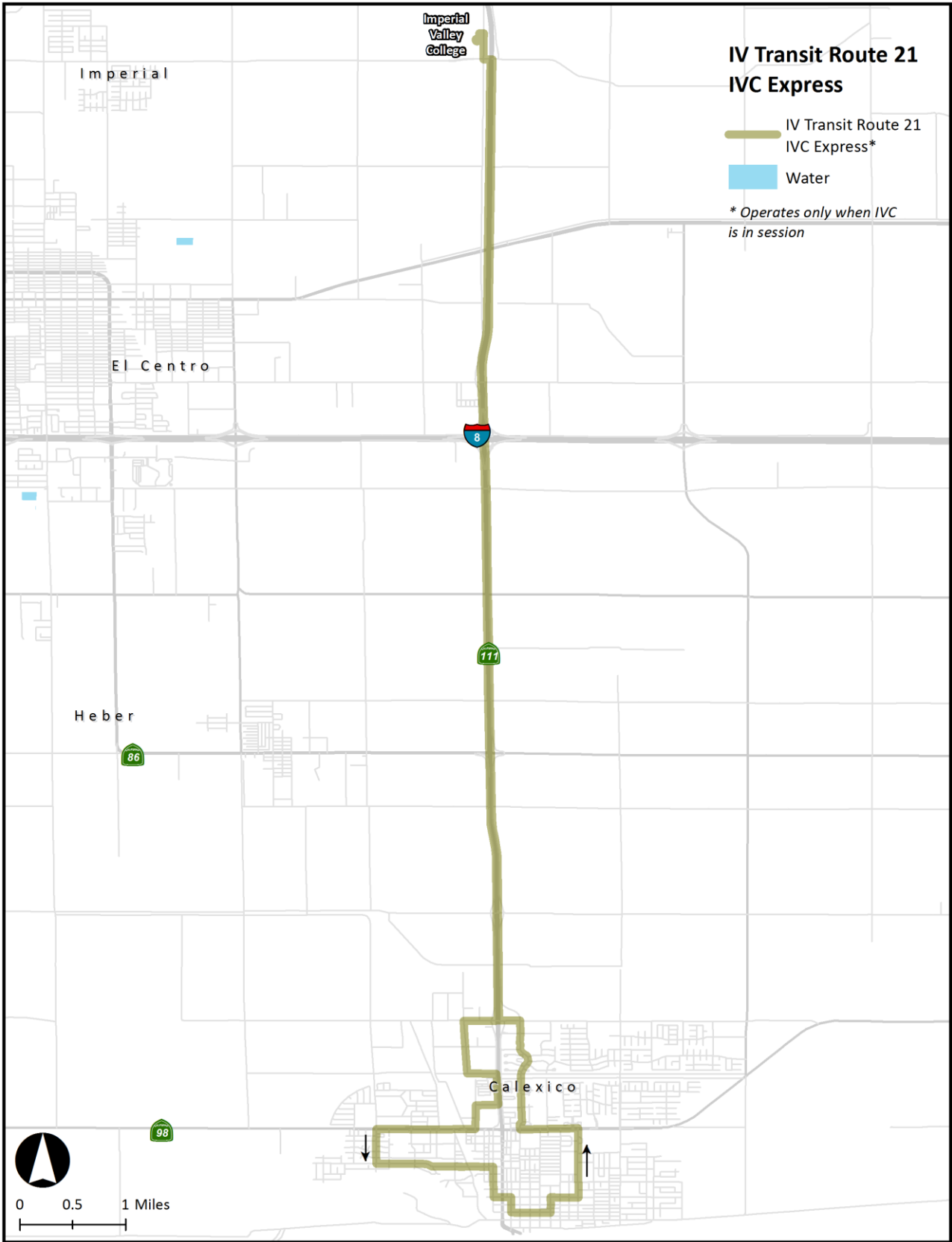


Figure 2-17. Route 21 IVC Express



Route 22 IVC Express: Imperial Valley College, Brawley, Westmorland, Calipatria, Niland

Route 22 IVC Express connects Niland and Imperial Valley College by way of Calipatria, Westmorland, and Brawley, using State Route 111 for about half of the route. Service includes 2 trips southbound in the morning and 2 trips northbound in the evening on weekdays only while IVC is in session. Total stops are limited in Niland, Calipatria, and Westmorland, with a handful more along Main Street in Brawley; otherwise, Route 22 runs express with no stops between municipalities. Overall ridership peaks in the mornings (southbound) toward IVC, scheduled to run 70 minutes end-to-end.

Table 2-22. Route 22 IVC Express Stops

Route 22N Stops			Route 22S Stops		
Stop No.	Stop Name	Municipality	Stop No.	Stop Name	Municipality
14002	E St. & Rio Vista Ave.	Brawley	14002	E St. & Rio Vista Ave.	Brawley
14012	Main St. & 3rd St.	Brawley	14010	Main St. & 2nd St.	Brawley
14025	Main St. & Cesar Chavez	Brawley	14022	Main St. & 9th St.	Brawley
14028	Palm Ave. & Main St.	Brawley	14029	Main St. & Palm Ave.	Brawley
15001	Main St. & Ctr. St.	Westmorland	15002	Ctr. St. & Main St.	Westmorland
16002	Main St. & Park Ave.	Calipatria	16003	Highway 111 & Main St.	Calipatria
16004	Main St. & Highway 111	Calipatria	99005	Highway 111 & Main St.	Niland
99005	Highway 111 & Main St.	Niland	99008	Imperial Valley College	County
99008	Imperial Valley College	County			

Table 2-23. Route 22 IVC Express Operating Statistics

	All
Route Length (Miles)	40.6 mi N/S
Scheduled Running Time	70 min
Weekday Headway	4-trips
Annual Ridership	8,176
Annual Mileage	32,585

Service spans 4 trips daily during the week, 6:20 am to 9:50 am and 2:00 pm to 5:11 pm.

Figure 2-18. Route 22 IVC Express Ridership by Trip

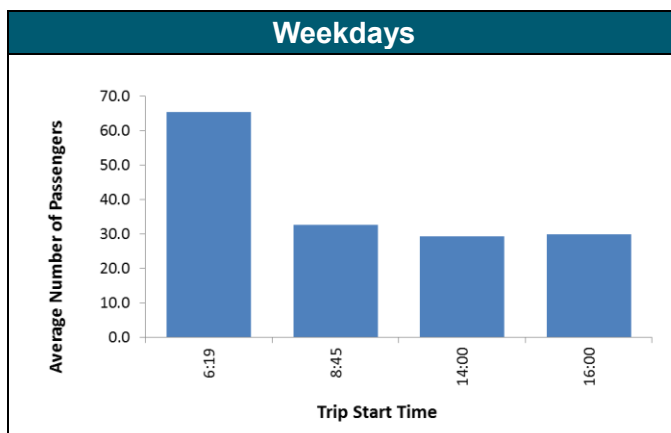
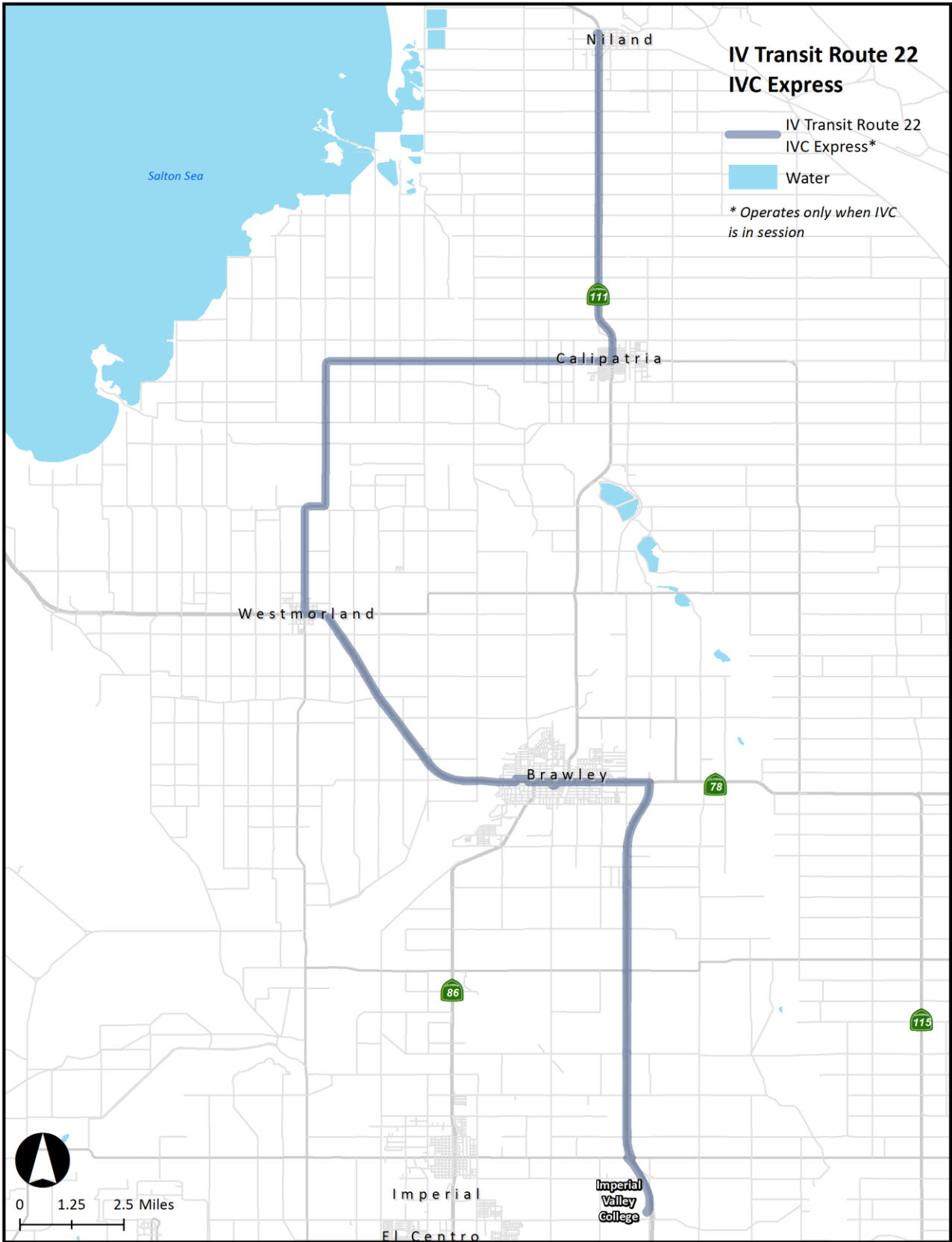


Figure 2-19. Route 22 IVC Express



Route 31/32 DIRECT: Brawley – Calexico

Route 31/32 DIRECT provides direct service between with 4 trips in each direction between 3 stops on Main Street in Brawley and 1 stop in Calexico along State Route 111. Route “31” runs southbound toward Calexico and Route “32” runs northbound toward Brawley; they are nonetheless the same bus route. Northbound (toward Brawley), peak ridership occurs in the early morning, while southbound (toward Calexico) peak ridership occurs in the early afternoon.

Table 2-24. Route 31/32 DIRECT Stops

Route 31D (Southbound) Stops			Route 32D (Northbound) Stops		
Stop No.	Stop Name	Municipality	Stop No.	Stop Name	Municipality
10010	Paulin Ave. & 3rd St.	Calexico	10010	Paulin Ave. & 3rd St.	Calexico
14017	5th St. & G St.	Brawley	14017	5th St. & G St.	Brawley
14022	Main St. & 9th St.	Brawley	14025	Main St. & Cesar Chavez	Brawley
14029	Main St. & Palm Ave.	Brawley	14028	Palm Ave. & Main St.	Brawley

Table 2-25. Route 31/32 DIRECT Operating Statistics

	31D Southbound	32D Northbound
Route Length (Miles)	23.7 mi	23.7 mi
Scheduled Running Time	40 min	40 min
Weekday Headway	4-trips	4-trips
Annual Ridership	17,099	14,980
Annual Mileage	29,289	29,506

Service spans 4 trips daily during the week and on Saturdays, 6:30 am to 10:00 am and 3:00 pm to 6:10 pm (2-trips each AM and PM in each direction).

Figure 2-20. Route 31/32 DIRECT Ridership by Trip

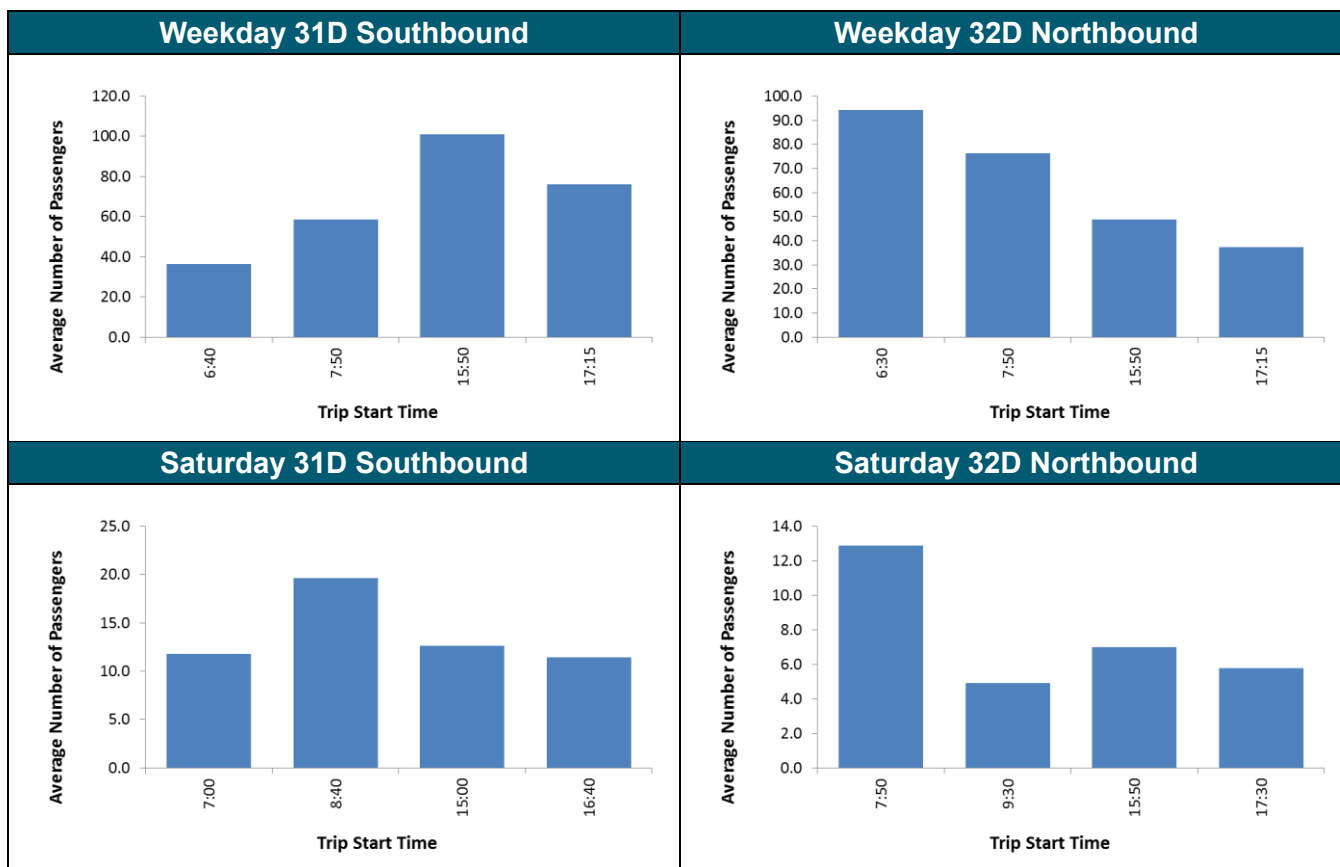
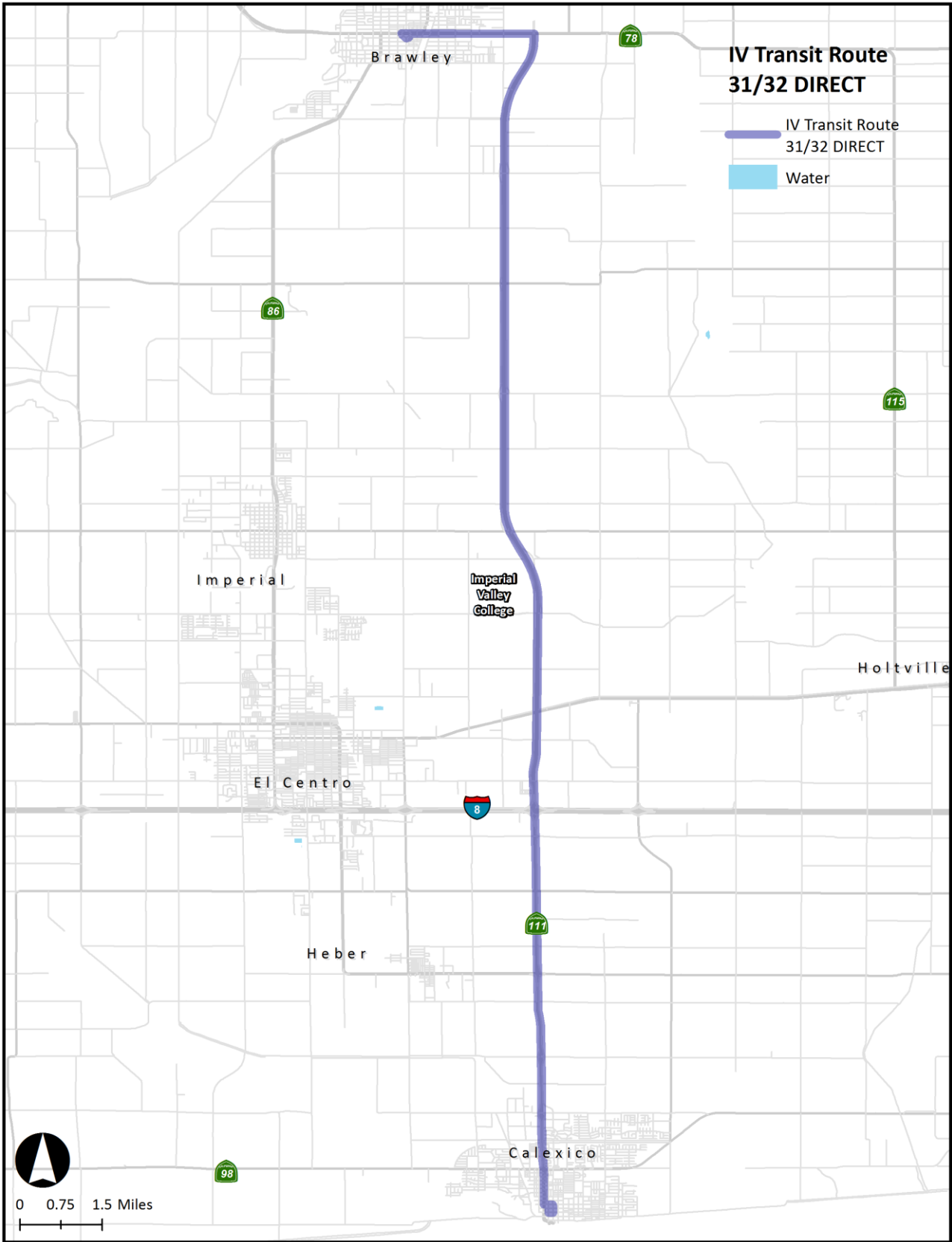


Figure 2-21. Route 31/32 DIRECT



Route 41 Brawley FAST: El Centro, Imperial, Brawley

Route 41 Brawley FAST provides express service between 3 stops in El Centro along State Street and 1 stop each in Imperial and Brawley along State Route 86. Service is 1 trip northbound and 2 trips southbound each day during the week only.

Table 2-26. Route 41 Brawley FAST Stops

Route 41N Stops			Route 41S Stops		
Stop No.	Stop Name	Municipality	Stop No.	Stop Name	Municipality
11023	State St. & 14th St.	El Centro	11023	State St. & 14th St.	El Centro
11029	State St. & 8th St.	El Centro	11029	State St. & 8th St.	El Centro
11031	State St. & 7th St.	El Centro	11032	State St. & 7th St.	El Centro
13002	Imperial Ave. & Worthington Rd.	Imperial	13002	Imperial Ave. & Worthington Rd.	Imperial
14017	5th St. & G St.	Brawley	14017	5th St. & G St.	Brawley

Table 2-27. Route 41 Brawley FAST Operating Statistics

	Northbound	Southbound
Route Length (Miles)	14.8 mi	14.8 mi
Scheduled Running Time	26 min	25 min
Weekday Headway	1-trip	2-trips
Annual Ridership	114	1,804
Annual Mileage	3,708	7,541

Service spans 3 trips daily during the week (1 northbound, 2 southbound), between 6:42 am and 7:10 am and 5:40 pm and 6:40 pm. Two trips occur in the mornings (1 each way) and one trip in the evening (southbound).

Figure 2-22. Route 41 Brawley FAST Ridership by Trip

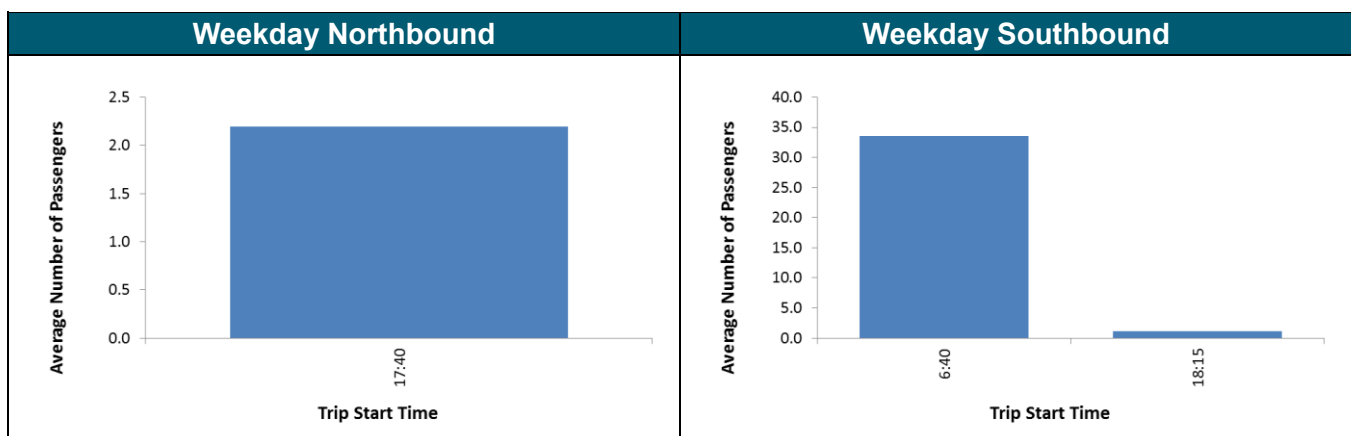
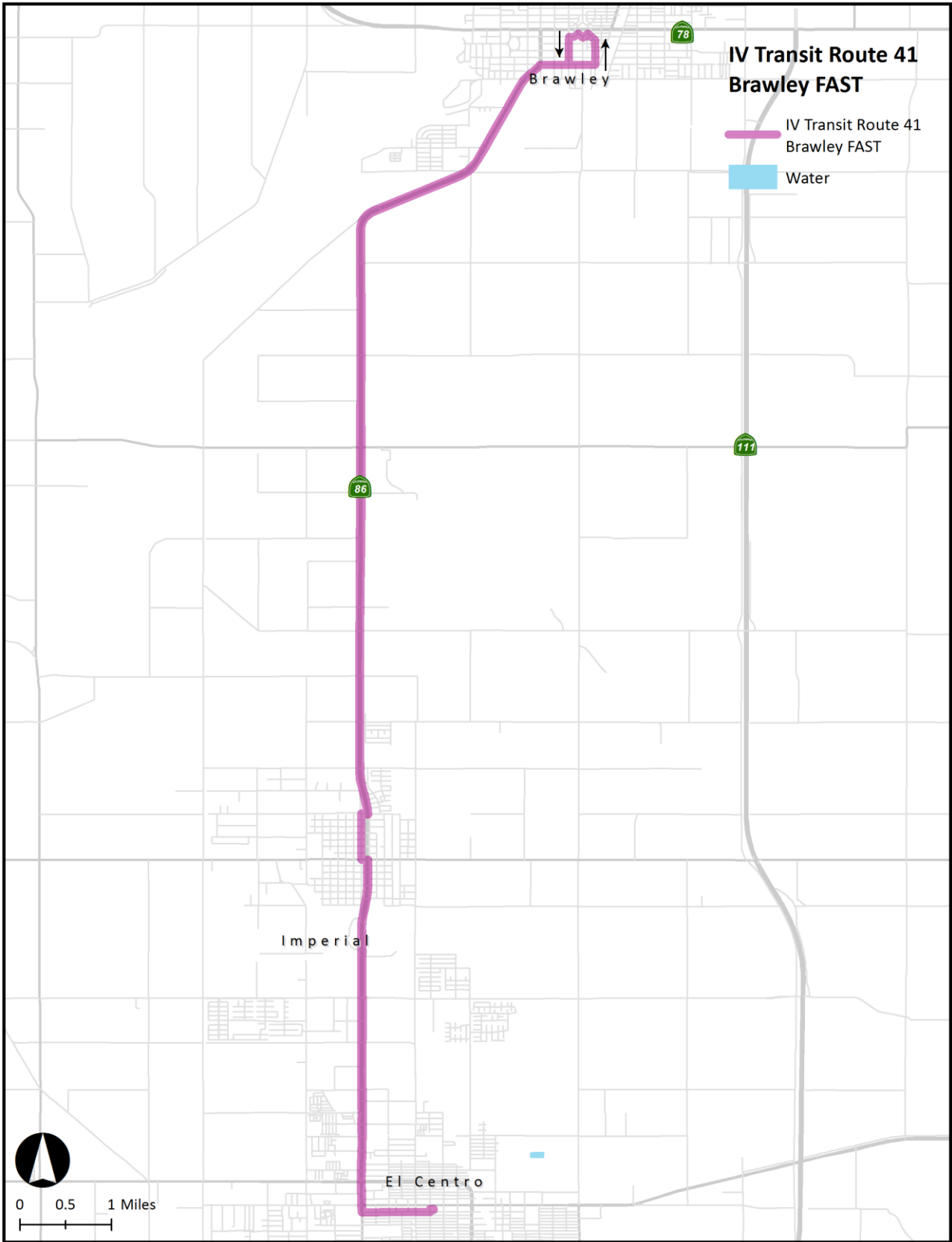


Figure 2-23. Route 41 Brawley FAST



Route 45 Holtville FAST: El Centro, Holtville

Route 45 Holtville FAST provides express service between 1 stop each in El Centro and Holtville. Service is 1 trip eastbound (toward Holtville) and 2 trips westbound (toward El Centro) on weekdays only.

Table 2-28. Route 45 Holtville FAST Stops

Route 45E Stops			Route 45W Stops		
Stop No.	Stop Name	Municipality	Stop No.	Stop Name	Municipality
11032	State St. & 7th St.	El Centro	11031	State St. & 7th St.	El Centro
12002	5th St. & Holt Rd.	Holtville	12002	5th St. & Holt Rd.	Holtville

Table 2-29. Route 45 Holtville FAST Operating Statistics

	Eastbound	Westbound
Route Length (Miles)	11.1 mi	11.1 mi
Scheduled Running Time	25 min	22 min
Weekday Headway	1-trip	2-trips
Annual Ridership	77	397
Annual Mileage	2,818	5,410

Service spans 3 trips daily during the week (1 eastbound, 2 westbound), between 6:40 am and 7:00 am and 5:40 pm and 6:30 pm. Two trips occur in the mornings (1 each way) and one trip in the evening (westbound toward El Centro).

Figure 2-24. Route 45 Holtville FAST Ridership by Trip

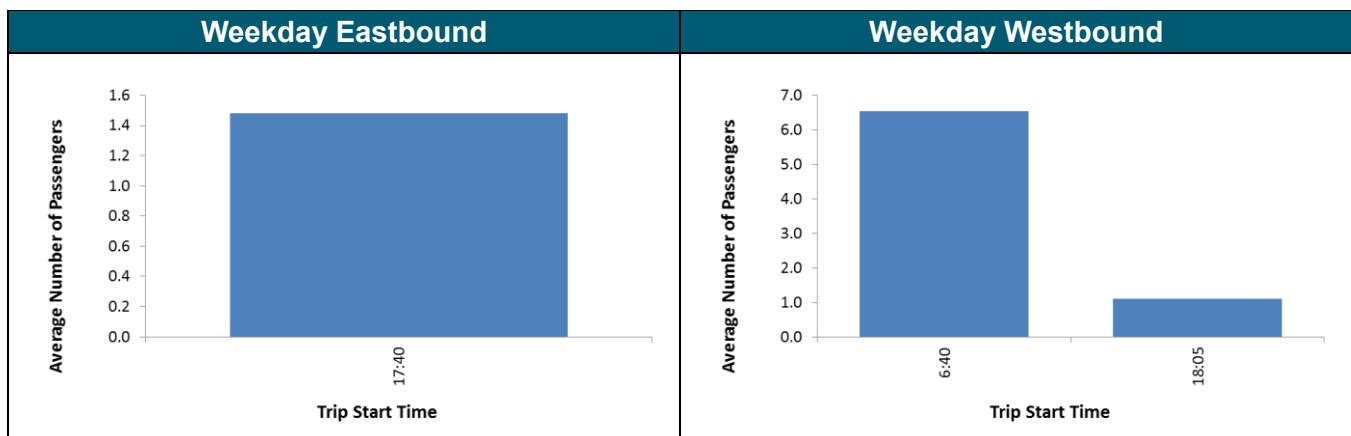
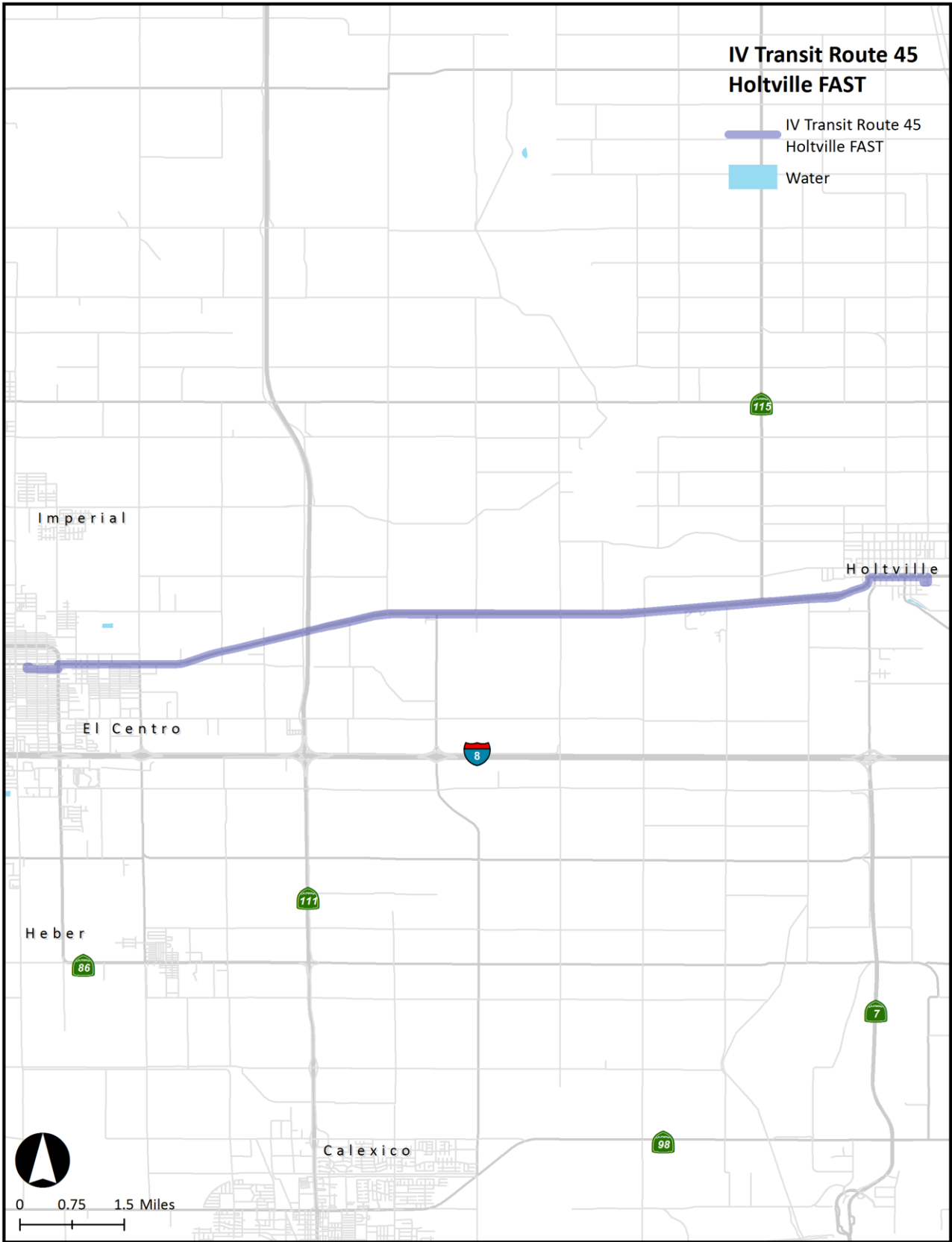


Figure 2-25. Route 45 Holtville FAST



Route 51: Brawley, Calipatria, Niland, Bombay Beach

Route 51 provides remote service to outlying communities from the transit center in Brawley and one stop in Calipatria to Niland, Bombay Beach, and stops along the Chocolate Mountains to the north such as to Slab City. The route primarily uses State Route 111 between Niland and Brawley. Service includes only 1 trip in each direction on Thursdays only; one trip southbound in the morning toward Brawley, and one trip northbound in the evening toward Bombay Beach. This is essentially a “lifeline” service to these communities.

Table 2-30. Route 51 Stops

Route 51S Stops			Route 51N Stops		
Stop No.	Stop Name	Municipality	Stop No.	Stop Name	Municipality
14017	5th St. & G St.	Brawley	14017	5th St. & G St.	Brawley
16003	Highway 111 & Main St.	Calipatria	16004	Main St. & Highway 111	Calipatria
99001	Bashford's Hot Mineral Spa	County	99001	Bashford's Hot Mineral Spa	County
99002	Ave. C & 3rd St.	Bombay Beach	99002	Ave. C & 3rd St.	Bombay Beach
99003	Fountain of Youth Spa	County	99003	Fountain of Youth Spa	County
99004	Lark Spa	County	99004	Lark Spa	County
99005	Highway 111 & Main St.	Niland	99005	Highway 111 & Main St.	Niland
99006	Beal Rd. & Low Rd.	County	99006	Beal Rd. & Low Rd.	County

Table 2-31. Route 51 Operating Statistics

	Southbound	Northbound
Route Length (Miles)	63.9 mi	63.9 mi
Scheduled Running Time	115 min	127 min
Weekday Headway	1-trip/week	1-trip/week
Annual Ridership	400	293
Annual Mileage	2,999	3,246

Service span includes 1 trip Thursdays, southbound at 8:35 am and 1 trip Thursday, northbound at 4:28 pm.

Figure 2-26. Route 51 Ridership by Trip

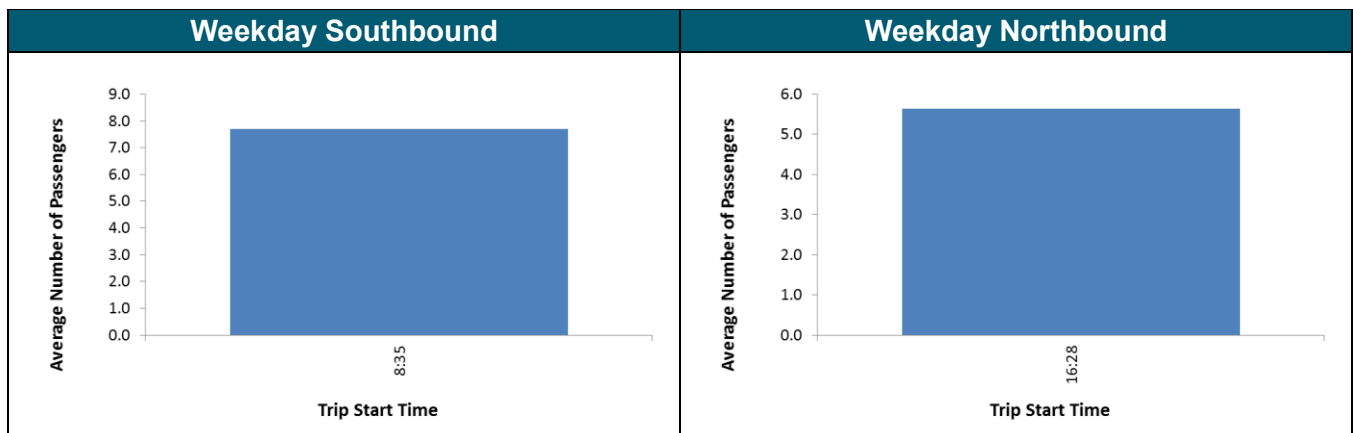
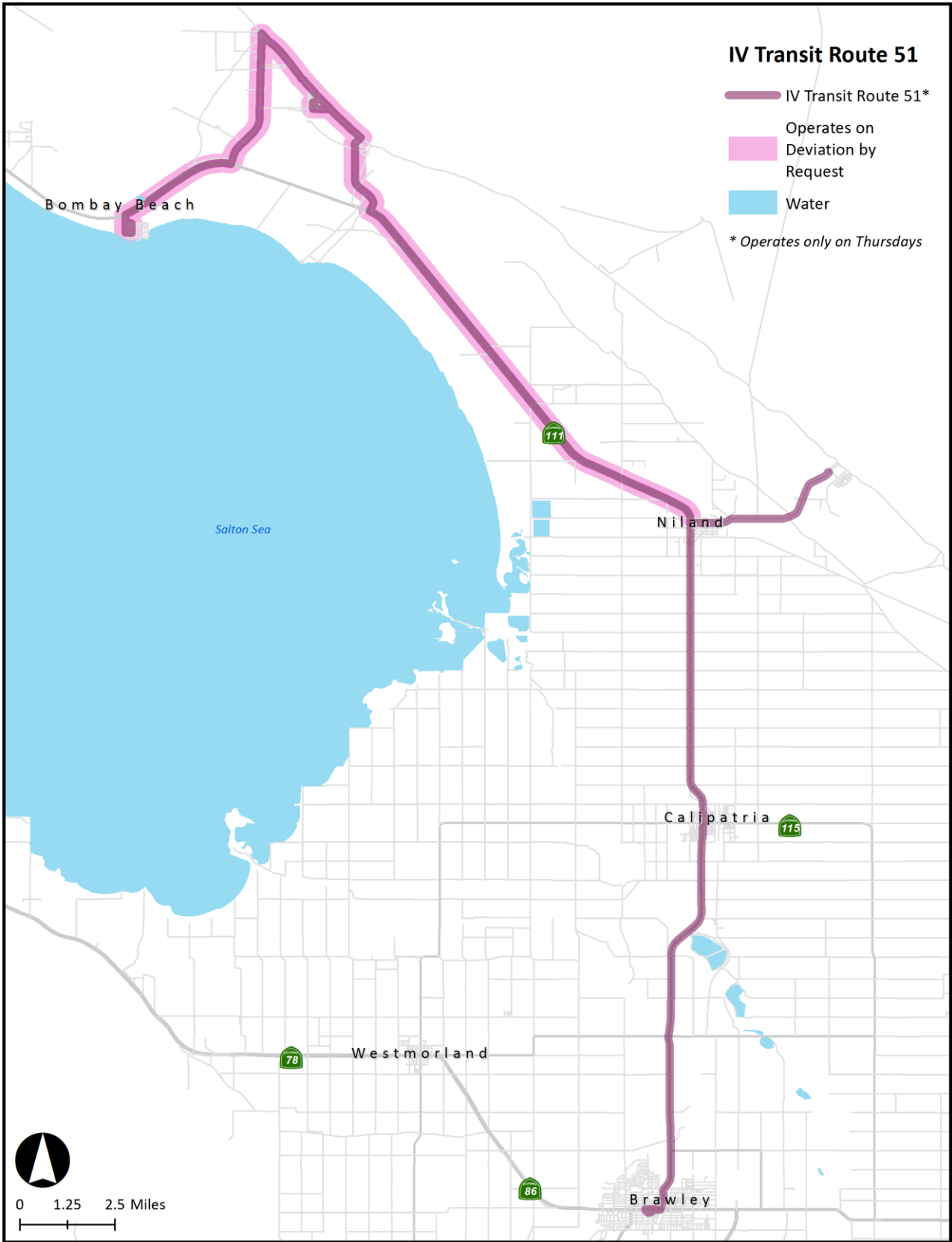


Figure 2-27. Route 51



Blue Line: El Centro

The Blue Line, serving El Centro, is one of three circulators in the Imperial Valley. The Blue Line makes 17 stops within El Centro and 1 stop just to the south at Imperial Valley Mall (El Centro). Ridership among circulators tends to peak around midday. The Blue Line primarily serves the urban core of El Centro but does pass to the south of town serving the civic and county services complex. The Blue Line Circulator operates every 70 minutes during the week, 6:00am to about 6:30pm.

Table 2-32. Blue Line Stops

Route BLUE Stops		
Stop No.	Stop Name	Municipality
11014	Waterman Ave. & Main St.	El Centro
11017	La Brucherie Rd. & Orange Ave.	El Centro
11022	State St. & 14th St.	El Centro
11025	La Brucherie Rd. & Ocotillo Dr.	El Centro
11029	State St. & 8th St.	El Centro
11030	Park Ave. & 5th St.	El Centro
11031	State St. & 7th St.	El Centro
11033	El Centro Regional Medical Ctr.	El Centro
11035	State St. & 5th St.	El Centro
11039	Ross Ave. & 10th St.	El Centro
11043	3rd St. & Orange Ave.	El Centro
11045	4th St. & Wensley Ave.	El Centro
11048	Dogwood Rd. & Main St.	El Centro
11050	Evan Hewes & Dogwood Rd.	El Centro
11051	Dogwood Rd. & Orange Ave.	El Centro
11054	Social Services	El Centro
11055	Wake Ave.	El Centro
Flag Stop	8 th and Wake	County
99009	Clark Rd. & South Loop Rd.	County

Table 2-33. Blue Line Operating Statistics

	ALL
Route Length (Miles)	13.5 mi
Scheduled Running Time	58 min
Weekday Headway	70 min
Annual Ridership	13,856
Annual Mileage	38,044

Figure 2-28. Blue Line Ridership by Trip

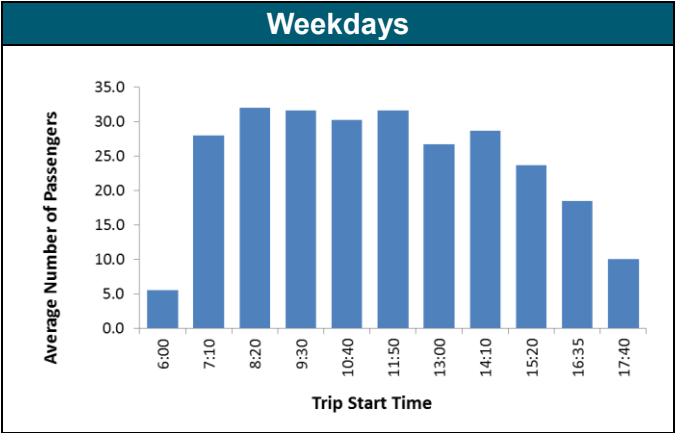
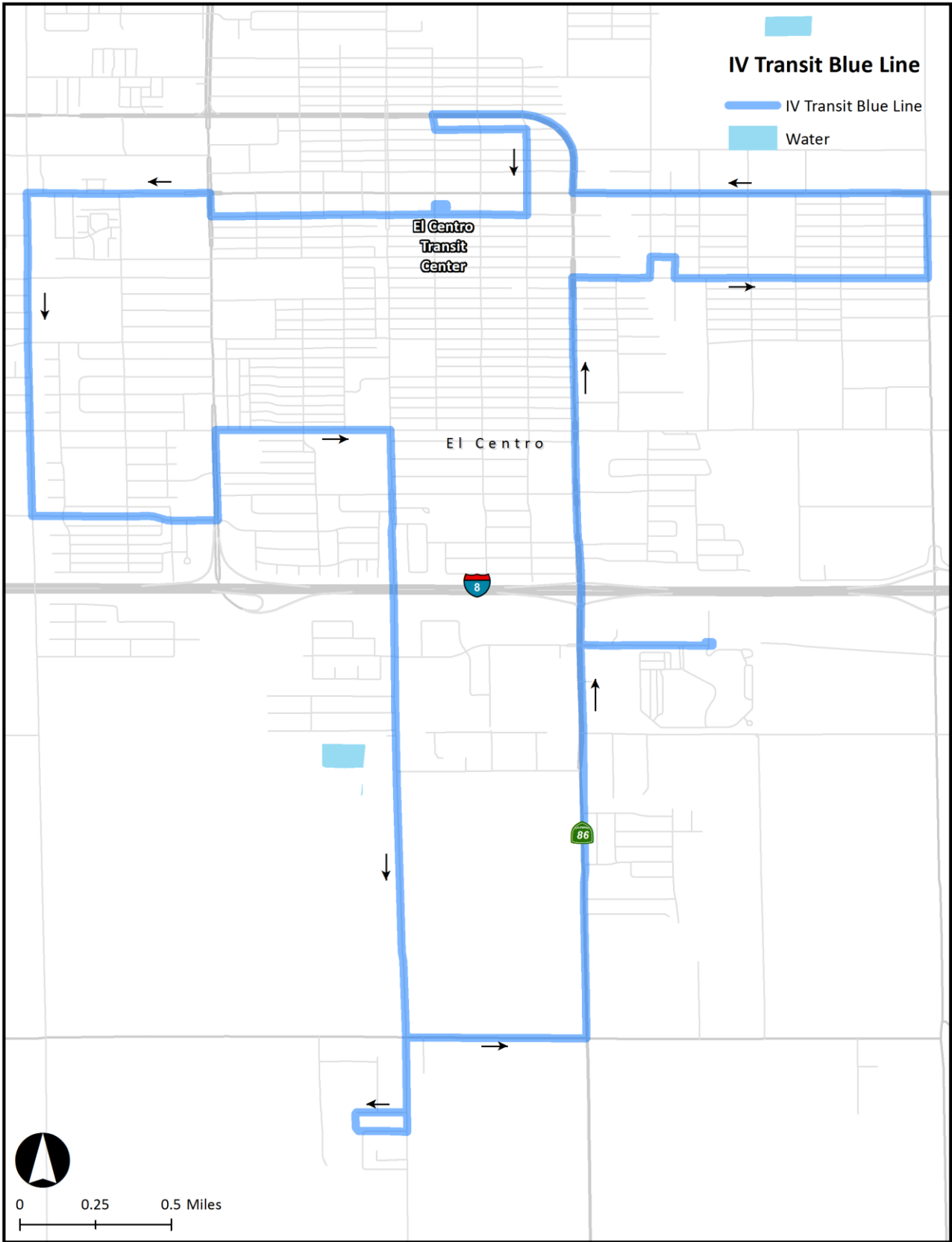


Figure 2-29. Blue Line



Gold Line: Brawley

The Gold Line, serving Brawley, is one of three circulators in the Imperial Valley. The Gold Line makes 28 stops within Brawley and provides coverage to most of the municipality. Ridership among all circulators tends to peak around midday. The Gold Line also serves the Pioneers Medical Center and a retail hub in the southwest of town. The Gold Line Circulator operates every 70 minutes during the week (no weekend service), 6:00am to about 7:00pm.

Table 2-34. Gold Line Stops

Route GOLD Stops		
Stop No.	Stop Name	Municipality
14001	A St. & Western Ave.	Brawley
14002	E St. & Rio Vista Ave.	Brawley
14003	Magnolia St. & 3rd St.	Brawley
14004	Flammang Ave. & Gutierrez Ct.	Brawley
14005	Cattle Call Dr. & Willard Ave.	Brawley
14006	River Dr. & Imperial Ave.	Brawley
14007	Western Ave. & G St.	Brawley
14008	Legion Rd. & Kelley Ave.	Brawley
14009	Panno Rd. & Evelyn Ave.	Brawley
14011	Cattle Call Dr. & De Anza Pl.	Brawley
14013	North Plaza St. & E St.	Brawley
14014	Pioneers Memorial Hospital	Brawley
14015	Malan St. & 1st St.	Brawley
14017	5th St. & G St.	Brawley
14019	Highway 86 & Wildcat Dr.	Brawley
14020	8th St. & E St.	Brawley
14021	Cesar Chavez St. & B St.	Brawley
14022	Main St. & 9th St.	Brawley
14023	J St. & 8th St.	Brawley
14024	Malan St. & Imperial Ave.	Brawley
14026	B St. & Ulloa Ave.	Brawley
14030	K St. & Cesar Chavez St.	Brawley
14031	C St. & Jacaranda St.	Brawley
14032	Palm Ave. & J St.	Brawley
14034	Palm Ave. & K St.	Brawley
14036	C St. & Best Rd.	Brawley
14037	I St. & Eastern Ave.	Brawley

Table 2-35. Gold Line Operating Statistics

	ALL
Route Length (Miles)	13.0 mi
Scheduled Running Time	58 min
Weekday Headway	70 min
Annual Ridership	14,990
Annual Mileage	36,454

Figure 2-30. Gold Line Ridership by Trip

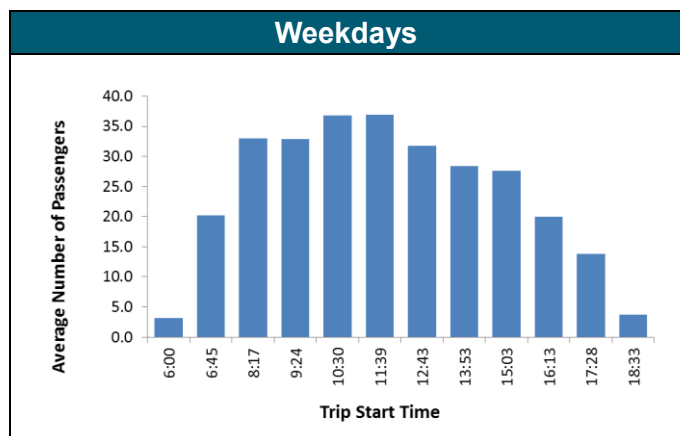
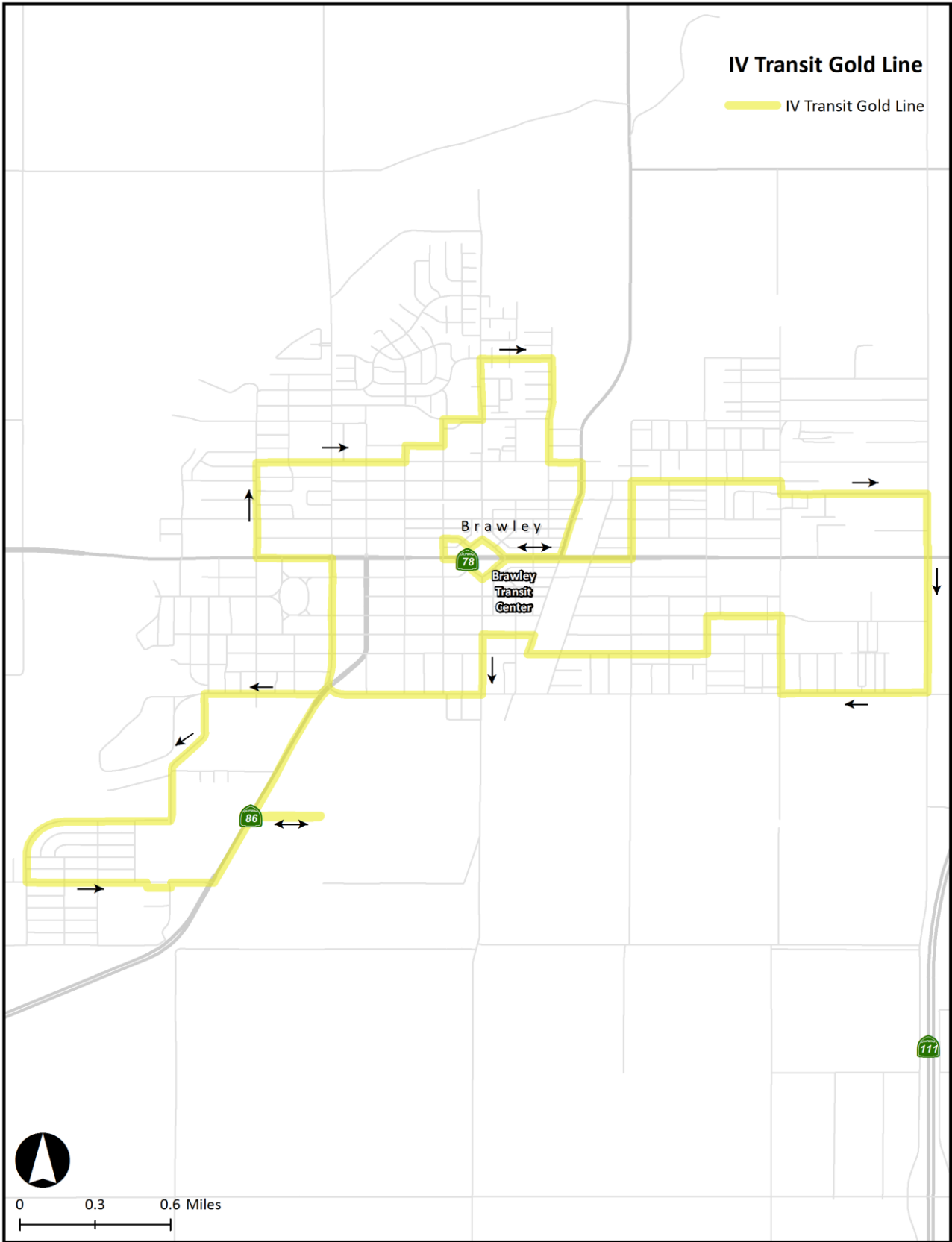


Figure 2-31. Gold Line



Green Line: El Centro

The Green Line, serving El Centro, is one of three circulators in the Imperial Valley and the second in El Centro. The Green Line makes 20 stops within El Centro and 4 stops on the southern outskirts of Imperial. Ridership among all circulators tends to peak around midday. The service focus of the Green Line is towards the northern portions of El Centro, compared to the more southerly focus of the Blue Line. The Green Line Circulator operates every 70 minutes during the week (no weekend service), 6:00am to about 6:30pm.

Table 2-36. Green Line Stops

Route GREEN Stops		
Stop No.	Stop Name	Municipality
11003	Bradshaw Rd. & La Brucherie Rd.	El Centro
11004	Food 4 Less	El Centro
11005	Social Security Office	El Centro
11007	Imperial Ave. & Bradshaw Rd.	El Centro
11008	18th St. & Villa Ave.	El Centro
11011	12th & El Dorado	El Centro
11012	Frontage Rd. & Scott Ave.	El Centro
11013	Vons	El Centro
11018	8th & Pico	El Centro
11020	Imperial Ave. & Commercial Ave.	El Centro
11021	8th and Woodward	El Centro
11022	State St. & 14th St.	El Centro
11024	Central High School	El Centro
11026	7th & Park	El Centro
11029	State St. & 8th St.	El Centro
11031	State St. & 7th St.	El Centro
11033	El Centro Regional Medical Ctr.	El Centro
11037	8th & Hamilton	El Centro
11040	4th St. & Brighton Ave.	El Centro
11042	Aurora Dr. & Cypress Dr.	El Centro
13005	Joshua Tree & Bougainvillea St.	Imperial
13007	La Brucherie Rd. & Aten Rd.	Imperial
13008	Myrtle	Imperial
13009	Theater	Imperial

Table 2-37. Green Line Operating Statistics

	ALL
Route Length (Miles)	13.6 mi
Scheduled Running Time	59 min
Weekday Headway	70 min
Annual Ridership	10,721
Annual Mileage	38,522

Figure 2-32. Green Line Ridership by Trip

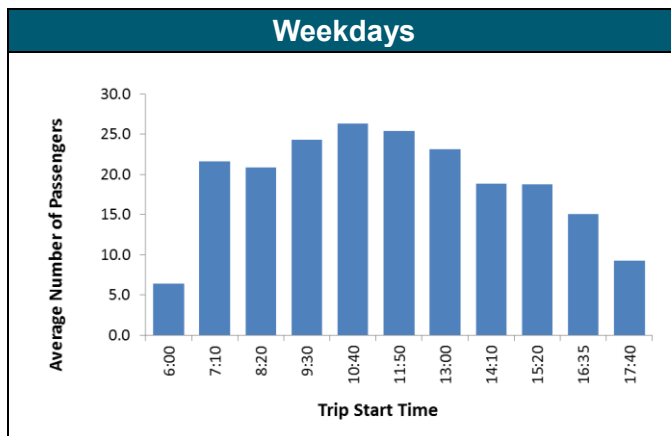
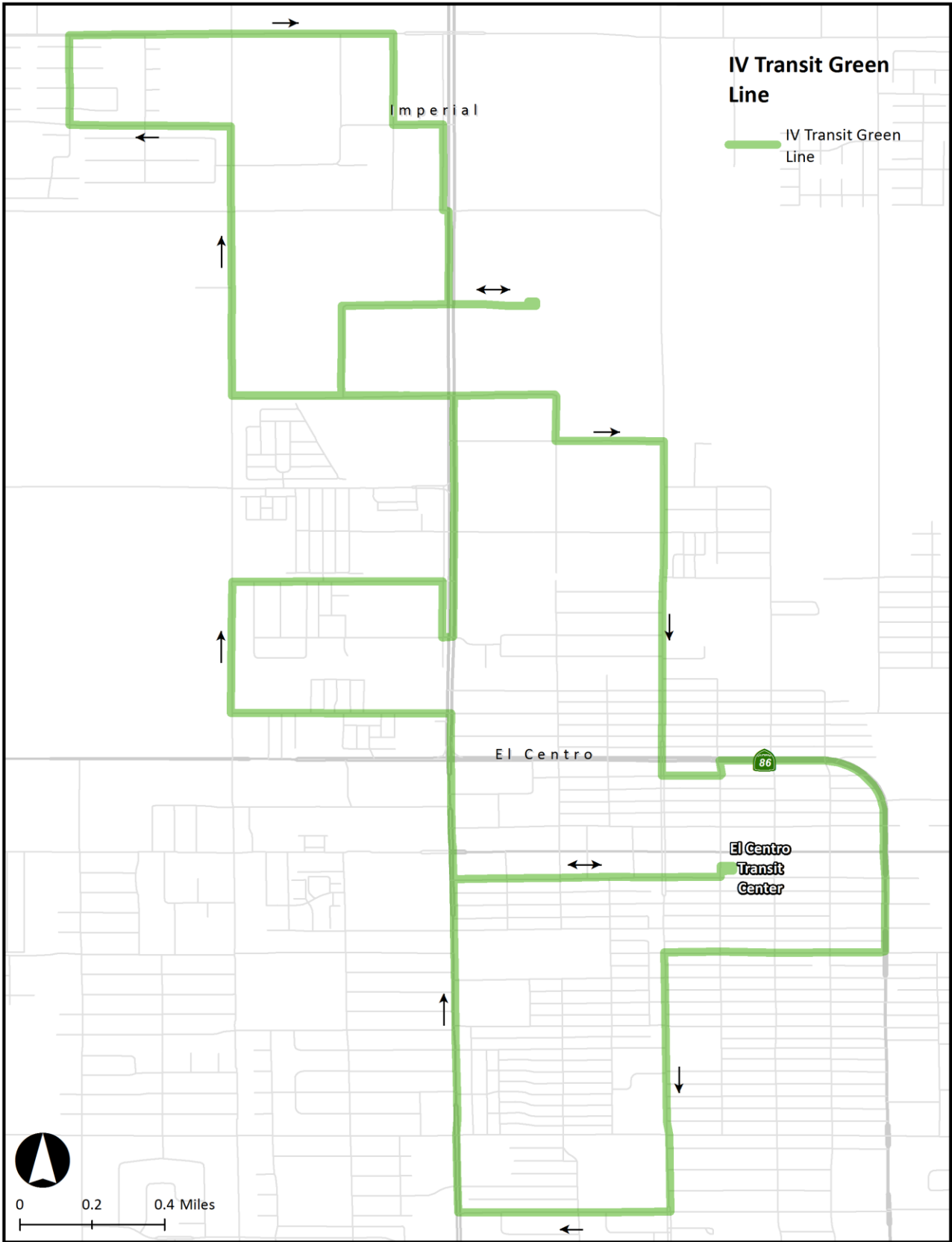


Figure 2-33. Green Line



2.3.1.1 Ridership and Service Evaluation

Table 2-38 summarizes the revenue miles, revenue hours and ridership on an annual basis for the entire IV Transit fixed route bus system. It also presents the productivity for each IV Transit route, in terms of passenger boardings per revenue hour, with Route 21 IVC Express being the most productive, followed by Route 1 and Route 2.

Table 2-38. Annual Revenue Hours, Revenue Miles, and Ridership by Route

Route	Hours	Revenue Miles	Ridership	Productivity (Boardings/Hour)	Productivity Rank
1 (N&S): El Centro – Calexico	13,588.8	207,225	376,798	27.7	2
2 (N&S): Niland – El Centro	10,923.4	299,537	220,956	20.2	3
3 (E&W): El Centro – Holtville	3,009.8	62,534	12,598	4.2	11
4 (E&W): El Centro – Seeley	1,343.4	25,901	7,207	5.4	7
21 IVC Express: Calexico – IVC*	1,768.6	32,666	74,281	42.0	1
22 IVC Express: Niland – IVC*	925.5	32,585	8,176	8.8	6
31/32 DIRECT: Brawley – Calexico	965.1	29,289	17,099	17.7	5
41 Brawley FAST: Brawley – El Centro	818.6	29,506	14,980	18.3	4
45 Holtville FAST: El Centro – Holtville	375.4	11,249	1,918	5.1	8
51: Bombay Beach – Brawley	332.5	8,228	474	1.4	14
Blue Line: El Centro	3,183.4	38,044	13,856	4.4	10
Gold Line: Brawley	3,184.3	38,522	10,721	3.4	13
Green Line: El Centro	3,296.0	36,454	14,990	4.5	9
Total	43,919.3	857,985	774,747	17.6	

FY July 2017 – June 2018

Ridership on each of the IV Transit fixed route services is summarized in Table 2-39; as can be seen, Routes 1 and 2 are – as mentioned previously – the most utilized routes by a significant margin and form the “backbone” of the IV Transit system, while Route 21 IVC Express is the most productive of the IV Transit routes.

Table 2-39. Weekday and Saturday Ridership by Route

Route	Weekdays (Annual Total)	Weekday Rank	Avg. Weekday (T,W,Th)	Saturdays (Annual Total)	Saturday Rank	Sundays (Annual Total)
1 (N&S): El Centro – Calexico	330,095	1	1,285	32,274	1	14,429
2 (N&S): Niland – El Centro	195,250	2	801	18,020	2	7,686
3 (E&W): El Centro – Holtville	11,874	8	48	724	5	--
4 (E&W): El Centro – Seeley	6,795	11	27	412	6	--
21 IVC Express: Calexico – IVC*	74,281	3	337	-		--
22 IVC Express: Niland – IVC*	8,176	10	37	-		--
31/32 DIRECT: Brawley – Calexico	14,159	6	49	2,940	3	--
41 Brawley FAST: Brawley – El Centro	13,360	7	49	1,620	4	--
45 Holtville FAST: El Centro – Holtville	1,918	12	7	-	--	--
51: Bombay Beach – Brawley	474	14	2	-	--	--

Route	Weekdays (Annual Total)	Weekday Rank	Avg. Weekday (T,W,Th)	Saturdays (Annual Total)	Saturday Rank	Sundays (Annual Total)
Blue Line: El Centro	13,856	5	57	--	--	--
Gold Line: Brawley	10,721	9	44	--	--	--
Green Line: El Centro	14,990	4	58	--	--	--
Total	696,642	--	2,805	55,990	--	22,115

FY July 2017 – June 2018

2.3.1.2 Fare Policies

Table 2-40 summarizes the fare policies utilized on IV Transit.

Table 2-40. IV Transit Fare Policies

Fare Type	Regular	Senior/ Disabled/ Medicare Cardholder	Student
IVT Fares, One-Way per Zone (FY 2013-2014)			
Local Zone Fare	\$1.00	\$0.50	
Regional Zone Fare	\$1.25	\$0.60	
DIRECT (Route 31/32)	\$2.50		
IVC Express (Routes 21/22)	\$1.75		\$1.25
FAST Trip (Routes 41/45)	\$2.50		
20 Ride Local (20% Discount)	\$16.00	\$10.00	
20 Ride Regional (20% Discount)	\$20.00	\$12.00	
20 Ride Student (IVC Express Only)			\$25.00
IVT ACCESS ADA Paratransit Fare, One-Way per Zone (FY 2013-2014)			
Local Zone Fare	\$2.00		
Regional Zone Fare	\$2.50		

2.3.1.3 Equipment/Facilities

The various services provided by ICTC are all operated by First Transit, as was previously mentioned. First Transit has an Operations and Maintenance Facility (including vehicle storage) in Imperial County which it directly leases. However, ICTC is considering constructing its own garage, maintenance, and administrative facility at a new location, which has yet to be determined.

The ICTC's IV Transit service utilizes several transfer and terminal facilities throughout Imperial County. New off-street facilities have been constructed in El Centro (at 7th and State Streets) and in Brawley (at South Plaza). The Imperial Valley College has a modern, off-street facility utilized by the IV Transit service, and the primary bus stops in Imperial (i.e., on Imperial Avenue at the Post Office/Worthington Road) have attractive and decorative shelters. The transit center in Calexico at 3rd Street and Paulin Avenue will be replaced by a new Calexico Transit Center to the east. Finally, as part of the capital plan, Imperial is constructing a transfer center at the northeast corner of M Street and Barioni Boulevard that will be known as the Imperial Transit Park, to include seating, walkways, landscaping, and several bus bays.

Table 2-41 provides an inventory of the various bus stops and shelters – along with their amenities – throughout Imperial County.

Table 2-41. Bus Stop Inventory

City	Stops	Shelters	Trash Cans	Signs
Brawley	38	30+	3	25
Calexico	13	12	2	11
Calipatria	4	3	2	1
El Centro	56	26	19	46
Holtville	4	1	2	2
Imperial	10	6	6	5
Westmorland	2	1	0	0
County/Other	15	6	6	10
Total	142	70	40	100

Table 2-42 provides the current status of the fleet for the fixed route IV Transit service provided by the ICTC; this includes the vehicles used in the IV Transit system, including those used on the various circulator services and vehicles utilized to provide mobility-impaired passengers service should all the wheelchair tiedowns be utilized on a fixed route bus.

Table 2-42. IV Transit Fleet, 2016/2017

No.	Vehicle Year	Engine Model Year	Make	Model/Use	Seating Capacity	Fuel	Owner
IV Transit Vehicles							
10	2012	2012	GILLIG	LOW FLOOR/IV Transit	40	Diesel	ICTC
6	2015	2015	GILLIG	LOW FLOOR /IV Transit	40	Diesel	ICTC
6	2016	2016	FORD	E-450 SUPER DUTY STARCRAFT/IV Transit	20	Gasoline	ICTC
5	2017	2017	FORD	E-450 STARCRAFT ALL STAR/IV Transit	20	Gasoline	ICTC
1	2012	2015	MV1	MV1/IV Transit	4	Gasoline	First Transit
1	2017	2015	MV1	MV1/IV Transit	4	Gasoline	ICTC
29	Total IV Transit Fleet						

May include some vehicles that entered service in 2017 after the end of the fiscal year

Organization

Transit service throughout Imperial County is overseen by the Imperial County Transit Commission (ICTC), which consists of nine employees. ICTC oversees each of the service contracts encompassing fixed-route transit service, general public demand response service, and paratransit. Currently, First Transit holds contracts for IV Transit, and IV Transit Blue, Green, and Gold Circulator Lines, as well as for the various demand response services.

2.3.1.4 Financial Information/Data and Evaluation

Table 2-43 provides the details of funding sources and expenditures for the various services provided and administered by the ICTC. As can be seen in the table, the current sources of revenue range from various local, state and federal funding programs.

In addition, Table 2-44 focuses on the recent historical trends for the IV Transit fixed route service in terms of some key performance indicators. As can be seen in the table, recent trends point to declines in ridership and fare revenue, while the operating costs of the service are still increasing, thus leading to a slight decrease in farebox recovery.

Table 2-43. Funding Sources and Expenditure Details for FY 2017-18

	Budget FY 2016-17	Estimated Actual FY 2016-17	Budget FY 2017-18	% FY 17/18 Change	% FY 17/18 Total
REVENUES					
FEDERAL					
FTA SEC 5307 (Urban)	\$2,276,290	\$2,276,290	\$1,935,901	-15.00%	11.97%
FTA SEC 5309 - Imperial Transfer Terminal	\$747,000	\$0	\$747,000	0.00%	4.62%
FTA SEC 5310 Regional Mobility Management	\$129,210	\$60,233	\$104,977	-18.80%	0.65%
FTA SEC 5311 (Rural) - Rural Transit Services	\$1,218,578	\$261,436	\$1,259,053	3.30%	7.78%
CMAQ	\$0	\$0	\$495,000	0.00%	3.06%
SUBTOTAL	\$4,371,078	\$2,597,959	\$4,541,931	3.90%	28.08%
STATE					
TOA-LOCAL TRANSPORTATION FUND (LTF)	\$7,027,401	\$6,513,267	\$6,449,505	-8.20%	39.87%
TOA-STATE TRANSIT ASSISTANCE (STA)	\$1,169,031	\$1,169,031	\$1,102,000	-5.70%	6.81%
STIP- PLANNING, PROGRAMMING & MONITORING (PPM)	\$300,000	\$300,000	\$300,000	0.00%	1.85%
PROP 1B - PTMISEA	\$186,250	\$0	\$186,250	0.00%	1.15%
PROP 1B - CTSGP	\$133,338	\$133,338	\$400,014	200.00%	2.47%
SUBTOTAL	\$8,816,020	\$8,115,636	\$8,437,769	-4.30%	52.16%
LOCAL					
FARE REVENUE	\$1,033,157	\$846,581	\$1,113,941	7.80%	6.89%
ON HAND/INTEREST	\$157,900	\$193,500	\$613,332	288.40%	3.79%
LOCAL TRANSPORTATION AUTHORITY (LTA) 2% transit set a side	\$350,000	\$350,000	\$440,000	25.70%	2.72%
LOCAL TRANSPORTATION AUTHORITY (LTA) 5% set a side	\$803,240	\$708,240	\$862,500	7.40%	5.33%
SCAG/IVEDC/MEMBER AGENCY CONTRIBUTIONS	\$132,500	\$137,500	\$168,332	27.00%	1.04%
SUBTOTAL	\$2,476,797	\$2,235,821	\$3,198,105	29.10%	19.77%
TOTAL	\$15,663,895	\$12,949,416	\$16,177,806	3.30%	
EXPENDITURES					
REGIONAL TRANSIT	\$6,794,880	\$6,362,015	\$7,263,968	6.90%	44.90%
LOCAL TRANSIT	\$1,820,131	\$1,809,770	\$1,840,412	1.10%	11.38%
TRANSIT CAPITAL (Vehicle Prcmt & Transit Facilities)	\$3,425,066	\$1,322,000	\$2,662,066	-22.30%	16.46%
TRANSIT CAPITAL Miscellaneous	\$168,338	\$133,000	\$435,014	158.40%	2.69%
TRANSIT OPS maintenance	\$220,000	\$220,000	\$220,000	0.00%	1.36%
MISC Projects and Improvements	\$0	\$0	\$857,500	0.00%	5.30%
ADMINISTRATION AND PLANNING	\$2,111,480	\$1,413,631	\$2,236,574	5.90%	13.82%
TRANSIT CAPITAL FLEET RESERVE	\$900,000	\$900,000	\$0	-100.00%	0.00%
REVENUE STABILIZATION/ OPERATING RESERVES	\$35,000	\$600,000	\$479,272	1269.30%	2.96%
BIKES AND PEDS Art 3	\$189,000	\$189,000	\$183,000	-3.20%	1.13%
TOTAL	\$15,663,895	\$12,949,416	\$16,177,806	3.30%	

Data from ICTC OWP and Budget FY 2017-18

Table 2-44. IV Transit Historical Trends

Contract	Revenue Miles	Revenue Hours	Ridership	Total Cost of Service	Fare Revenue	Farebox Recovery
FY 2014-2015						
IV Transit	765,728	34,316.31	825,171	\$3,105,647.08	\$711,301.89	22.9%
Blue Line	37,814	3,183.03	15,750	\$308,149.77	\$16,213.54	5.3%
Gold Line	36,533	3,298.74	12,681	\$252,734.18	\$10,427.42	4.1%
Green Line	38,509	3,186.51	13,590	\$308,384.00	\$10,098.86	3.3%
Total	878,584	43,984.59	867,192	\$3,974,915.03	\$748,041.71	18.8%
FY 2015-2016						
IV Transit	773,407	34,699.78	801,466	\$3,270,680.61	\$684,695.56	20.9%
Blue Line	38,383	3,207.71	14,181	\$321,642.77	\$13,125.31	4.1%
Gold Line	36,746	3,325.67	13,985	\$254,993.83	\$11,297.53	4.4%
Green Line	38,571	3,208.14	13,204	\$321,673.55	\$8,990.16	2.8%
Total	887,107	44,441.30	842,836	\$4,168,990.76	\$718,108.56	17.2%
FY 2016-2017						
IV Transit	770,087	34,439.68	741,974	\$3,447,782.53	\$614,384.46	17.8%
Blue Line	38,140	3,182.97	15,333	\$316,455.48	\$13,543.76	4.3%
Gold Line	36,499	3,297.97	14,388	\$262,017.92	\$11,229.97	4.3%
Green Line	38,523	3,182.88	11,141	\$313,449.00	\$7,650.69	2.4%
Total	883,249	44,103.50	782,836	\$4,339,704.93	\$646,808.88	14.9%
FY 2017-2018						
IV Transit	744,965	34,255.59	735,180	\$3,396,664.77	\$603,951.05	17.8%
Blue Line	38,672	3,184.33	10,921	\$318,917.58	\$7,454.59	2.3%
Gold Line	38,044	3,183.35	13,856	\$318,844.97	\$12,813.00	4.0%
Green Line	36,594	3,296.04	14,990	\$244,203.61	\$10,336.81	4.2%
Total FR	858,275	43,919.31	774,947	\$4,278,630.93	\$634,555.45	14.8%

2.3.1.5 Capital Plan

For the 2017-2018 fiscal year, capital expenditures for the ICTC varied widely depending on the program, as shown in Table 45. In terms of those capital programs which would most directly impact the IV Transit system, the most significant are the ongoing efforts towards constructing a new bus operations facility and a new Calexico Intermodal Transportation Center. As mentioned previously, the city of Imperial is constructing a transfer center at the northeast corner of M Street and Barioni Boulevard that will be known as the Imperial Transit Park, to include seating, walkways, landscaping, and several bus bays.

Table 2-45. Capital Program Costs and Funding Sources, FY 2017-18

Expense Item	Cost
Capital Projects	
I-8/Dogwood Bridge Interchange – Landscape Construction	\$3,694,000*
I-8/Imperial Avenue Interchange	\$37,840,000*
State Route 98 and Cesar Chavez Blvd. Improvements – Calexico West Port of Entry	\$21,253,000*
Calexico East Port of Entry Bridge Widening, Auto and Truck Lane Expansion	\$65,000,000
Phase 1 Construction & Expansion – Calexico West Port of Entry	\$98,000,000
Phase 2 Construction & Expansion – Calexico West Port of Entry	\$248,000,000
Total	\$473,787,000
Planning & Transportation Improvement Program Projects	
Regional Surface Transportation Program (RSTP)	\$2,465,000*
Congestion Mitigation & Air Quality (CMAQ)	\$1,559,000*
SHOPP Roadway Preservation Program	\$455,687,000*
National Highway System – STP – Highway Maintenance	\$3,681,000*
Highway Bridge Program (HBP)	\$780,000*
Regional Climate Action Plan	\$200,000
Total	\$460,348,000
Transit Planning and Program Management Projects	
Update to the Short Range Transit Plan (SRTTP)	\$150,000
IVT Maintenance Audit	\$14,242
IVT Bus Stop Inventory (Phase III)	\$150,000
IVT Adams Bus Operations Facility Evaluation	\$231,831
Calexico Intermodal Transportation Center (ITC) - Design	\$559,000
Total	\$1,105,073

*Funding Source: Federal Transportation Improvement Program (FTIP)
Data from ICTC OWP and Budget FY 2017-18

2.3.1.6 Marketing

The ICTC has a website which links to web pages describing all of the various services provided by the ICTC, as well as detailed descriptions of each route and schedule. Descriptions are also provided for each bus stop, including nearby points of interest.

Printed materials include a Rider's Guide, as well as brochures for each of the demand response services.

2.3.1.7 Other/Private Operators

There are other transit providers in Imperial County, although none provide a service as comprehensive as IV Transit and the ICTC's three demand response services. A brief description of these other operators is as follows:

- **Calexico Transit System** – The Calexico Transit System (CTS) is a private transit operator that operates fixed route service within the City of Calexico. CTS uses a terminal at East 1st Street and Heffernan Avenue, which is easy walking distance from IV Transit's terminal at 3rd Street and Paulin Avenue.

- **L& A Shuttle** – This service – formerly “Numero Uno Shuttle” – operates relatively frequent “jitney” type service between the Calexico Port of Entry and various points in the El Centro area.
- **Intercity Bus Operators** – Intercity operators, including Greyhound and operators from Mexico, serve Imperial County, particularly with services linking Calexico with Los Angeles and San Diego.
- **Taxi Services** – There are several taxicab service operators in Imperial County; generally, taxicab fares are significantly more expensive than transit fares.

2.3.2 Demand Response

2.3.2.1 Existing Programs

The ICTC provides and administers three demand response programs, which are described as follows and summarized in Table 2-46:

- **IVT ACCESS** – Curb-to-curb demand response service for certified mobility disadvantaged persons who cannot use Imperial Valley Transit fixed route service in areas within $\frac{3}{4}$ of a mile of Imperial Valley Transit fixed route service.
- **IVT RIDE** – Curb-to-curb demand response service for certified mobility disadvantaged persons who cannot use Imperial Valley Transit fixed route service and for senior citizens over 55 years old within the communities of Brawley, Calexico, El Centro, Imperial and West Shores. It is important to note that, while the other communities served by IVT Ride also have IVTransit service, this is not the case for West Shores, for which IVT Ride is the only transit service, effectively acting as a transit lifeline for the community.
- **IVT MedTrans** – Non-emergency transportation service between the Imperial Valley and San Diego County medical facilities, clinics and doctor offices.

Table 2-46. Imperial County's Public Demand Response Program Characteristics

Service	Service Area	Function	Rider Eligibility	Days of Service	Hours of Service	Fare
IVT ACCESS 760-482-2908 www.ivtaccess.com	Same corridors as fixed-route service	Services ADA-Certified Passengers with disabilities not able to utilize the fixed route system	Certified mobility disadvantaged persons within $\frac{3}{4}$ of a mile of IV Transit fixed route service	Operates same days/corridors as fixed route system	Operates same hours/ corridors as fixed-route system	Local \$2.00 Regional \$2.50
IVT RIDE 760-337-1760 www.ivtride.com	Brawley, Calexico, El Centro, Imperial and West Shores	Intra-city dial-a-ride system	Seniors 55 years of age or over, passengers who are certified to ride ACCESS, West Shores is open to general public since the service is a community lifeline service.	M-F	Brawley1: 7:00am-6:00pm Calexico: 7:00 am-3:00pm El Centro: 7:00am-6:00pm Imperial: 6:45am-5:15pm West Shores: 6:00am-5:00pm	Brawley - \$1.50 Calexico - \$1.00 El Centro - \$1.25 Imperial - \$.75, \$1.75 to/from EC West Shores - \$2.00, \$2.50 to Brawley
				Sat., Sun.	Brawley: 8:00am-2:00pm (Sat) El Centro: 7:00am-5:00pm (Sat) Calexico: 7:00am-5:00pm Imperial: 6:50am-5:15pm Every other Sat.	
IVT MedTrans 760-337-1766 www.ivtmedtrans.com	Imperial Valley and San Diego County Medical facilities, clinics, and doctors' offices	Non-emergency transportation to medical facilities in San Diego County	Cat. A: ADA certified, low-income persons, veterans Cat. B: All other, space available	By Reservation, fare paid 48 hours in advance 7am-6pm M-F	By Reservation, fare paid 48 hours in advance 7am-6pm M-F	Category A. \$7.50 one-way Attendant \$3.50 one-way Category B. \$15.00 one-way

2.3.2.2 Fleet

Table 2-47 summarizes the current status of the fleet utilized in the demand response services provided by ICTC.

Table 2-47. Demand Response Vehicles by Program

No.	Vehicle Year	Engine Model Year	Make	Model/Use	Seating Capacity	Fuel	Owner
Demand Response Vehicles							
15	2016	2016	FORD	E-450 STARCRAFT/IVT ACCESS	16	Gasoline	ICTC
9	2015	2015	FORD	E-450 LF Transport Champion/IVT RIDE	19	Gasoline	ICTC
5	2016	2015	FORD	E-450 LF Transport Champion/IVT RIDE	19	Gasoline	ICTC
2	2012	2015	MV1	MV1/IVT ACCESS	4	Gasoline	First Transit
2	2017	2015	MV1	MV1/IVT ACCESS	4	Gasoline	ICTC
1	2015	2015	MV1	MV1/IVT RIDE	4	Gasoline	ICTC
4	2016	2016	MV1	MV1/IVT MedTrans	3	Gasoline	ICTC
33	Total Demand Response Fleet						

*May include some vehicles that entered service in 2017 after the end of the fiscal year

2.3.2.3 Demand Response Service Evaluation/Summary

The following subsections provide operating statistics and some key performance indicators for the IVT ACCESS and IVT RIDE demand response services provided by ICTC. It should be noted that the data for IVT RIDE is disaggregated into each of its geographical service zones.

IVT ACCESS

Overall, IVT ACCESS service has remained relatively stable, with only a slight reduction in passengers per hour over the past three years.

Table 2-48. Operating Statistics

	Ridership	Operating Cost	Subsidy	Fare Revenue	Vehicle Service Hours*	Vehicle Service Miles
FY 2015-16	32,291	\$1,433,453.12	\$1,416,467.02	\$66,554.88	18,087.5	318,142
FY 2016-17	32,882	\$1,457,672.20	\$1,444,681.60	\$68,683.98	20,839.1	338,860
FY 2017-18	32,124	\$1,415,399.50	\$1,410,579.36	\$63,137.50	20,429.6	328,922
% change over 3 years**	0.26%	-0.53%	-0.10%	-1.45%	6.57%	2.02%

* Revenue Hours + Deadhead Hours

**3-year Weighted average, July 2015 – June 2018

Table 2-49. Performance Indicators

	Farebox Recovery	Cost Per Trip (per rider in DR)	Passengers Per Revenue Hour	Passengers Per Revenue Mile
FY 2015-16	4.64%	\$44.39	2.38	0.11
FY 2016-17	4.71%	\$44.33	2.11	0.11
FY 2017-18*	4.46%	\$44.06	2.23	0.11
3 year	4.61%	\$44.26	2.23	0.11

Calculated values may differ slightly from data provided by IVT

IVT RIDE

IVT RIDE: Brawley

IVT RIDE in Brawley has seen its operating costs increase over the past three years, while farebox recovery and passengers per revenue hour have slightly declined.

Table 2-50. Operating Statistics

	Ridership	Operating Cost	Subsidy	Fare Revenue	Vehicle Service Hours*	Vehicle Service Miles
FY 2015-16	10,358	\$212,235.11	\$211,392.01	\$14,325.72	3,753.7	22,421
FY 2016-17	10,119	\$250,340.76	\$235,850.77	\$14,506.49	4,321.1	21,564
FY 2017-18	10,159	\$253,652.50	\$243,928.11	\$13,416.28	4,286.6	26,447
% change over 3 years**	-0.45%	9.43%	7.53%	-2.19%	7.31%	10.74%

*Revenue Hours + Deadhead Hours

**3-year Weighted average, July 2015 – June 2018

Table 2-51. Performance Indicators

	Farebox Recovery	Cost Per Trip (per rider in DR)	Passengers Per Revenue Hour	Passengers Per Revenue Mile
FY 2015-16	6.75%	\$20.49	2.76	0.46
FY 2016-17	5.79%	\$24.74	2.34	0.47
FY 2017-18	5.29%	\$24.97	2.37	0.38
3 year	5.90%	\$23.38	2.48	0.43

Calculated values may differ slightly from data provided by IVT

IVT RIDE: El Centro

IVT RIDE in El Centro appears to be experiencing an improvement in terms of passengers per revenue hour over the past two years, although the farebox recovery has decreased.

Table 2-52. Operating Statistics

	Ridership	Operating Cost	Subsidy	Fare Revenue	Vehicle Service Hours*	Vehicle Service Miles
FY 2015-16	--	--	--	--	--	--
FY 2016-17	25,898	\$555,975.45	\$536,438.63	\$28,231.85	10,103.1	67,276
FY 2017-18	22,216	\$572,208.24	\$550,719.58	\$15,461.14	10,325.9	65,361
% change over 2 years**	-13.96%	3.24%	2.70%	-41.84%	2.28%	-2.71%

* Revenue Hours + Deadhead Hours,

**2-year Weighted average, July 2016 – June 2018

Table 2-53. Performance Indicators

	Farebox Recovery	Cost Per Trip (per rider in DR)	Passengers Per Revenue Hour	Passengers Per Revenue Mile
FY 2015-16	--	--	--	--
FY 2016-17	5.08%	\$21.47	2.56	0.38
FY 2017-18	2.70%	\$25.79	2.15	0.34
2 year	3.87%	\$23.45	2.36	0.36

Calculated values may differ slightly from data provided by IVT

IVT RIDE: Calexico

IVT RIDE in Calexico has seen farebox recovery decline over the past three years, as well as passengers per revenue hour. It should be noted that the various fixed route options available in Calexico may impact IVT RIDE patronage in this community more than in others.

Table 2-54. Operating Statistics

	Ridership	Operating Cost	Subsidy	Fare Revenue	Vehicle Service Hours*	Vehicle Service Miles
FY 2015-16	26,633	\$347,166.63	\$344,478.43	\$25,310.45	6,686.7	28,024
FY 2016-17	19,648	\$382,258.47	\$378,342.54	\$18,343.38	7,183.5	46,198
FY 2017-18	17,202	\$414,602.26	\$402,518.56	\$15,979.97	7,337.5	48,093
% change over 3 years**	-19.98%	9.35%	8.18%	-20.83%	4.92%	21.12%

* Revenue Hours + Deadhead Hours

**3-year Weighted average, July 2015 – June 2018

Table 2-55. Performance Indicators

	Farebox Recovery	Cost Per Trip (per rider in DR)	Passengers Per Revenue Hour	Passengers Per Revenue Mile
FY 2015-16	7.29%	\$13.04	3.98	0.95
FY 2016-17	4.80%	\$19.46	2.74	0.43
FY 2017-18	3.85%	\$24.10	2.34	0.36
3 year	5.21%	\$17.47	2.99	0.52

Calculated values may differ slightly from data provided by IVT

IVT RIDE: Imperial

Although the operating cost and passengers per revenue hour of IVT RIDE in Imperial has remained relatively stable, farebox recovery appears to have slightly declined.

Table 2-56. Operating Statistics

	Ridership	Operating Cost	Subsidy	Fare Revenue	Vehicle Service Hours*	Vehicle Service Miles
FY 2015-16	5,037	\$164,065.42	\$161,891.34	\$8,336.14	2,619.0	23,722
FY 2016-17	4,688	\$165,347.28	\$162,520.52	\$6,951.11	2,433.6	19,464
FY 2017-18	3,719	\$170,502.14	\$165,917.37	\$5,016.27	2,326.9	19,772
% change over 3 years**	-12.59%	2.05%	1.31%	-20.74%	-5.23%	-7.51%

*Revenue Hours + Deadhead Hours

**3-year Weighted average, July 2015 – June 2018

Table 2-57. Performance Indicators

	Farebox Recovery	Cost Per Trip (per rider in DR)	Passengers Per Revenue Hour	Passengers Per Revenue Mile
FY 2015-16	5.08%	\$32.57	1.92	0.21
FY 2016-17	4.20%	\$35.27	1.93	0.24
FY 2017-18	2.94%	\$45.85	1.60	0.19
3 year	4.06%	\$37.18	1.82	0.21

Calculated values may differ slightly from data provided by IVT

IVT RIDE: West Shores

Overall, IVT RIDE in the West Shores area appears to be relatively stable. It is important to note that IVT Transit does not serve West Shores and so IVT Ride is the sole public transit provider for the area.

Table 2-58. Operating Statistics

	Ridership	Operating Cost	Subsidy	Fare Revenue	Vehicle Service Hours*	Vehicle Service Miles
FY 2015-16	717	\$57,956.51	\$55,256.07	\$1,442.05	615.4	14,141
FY 2016-17	645	\$51,697.83	\$51,612.83	\$1,166.14	461.7	10,106
FY 2017-18	781	\$64,123.53	\$63,239.63	\$1,162.38	648.3	9,891
% change over 3 years**	13.08%	7.65%	9.02%	-5.36%	13.72%	-14.01%

*Revenue Hours + Deadhead Hours

**3-year Weighted average, July 2015 – June 2018

Table 2-59. Performance Indicators

	Farebox Recovery	Cost Per Trip (per rider in DR)	Passengers Per Revenue Hour	Passengers Per Revenue Mile
FY 2015-16	2.49%	\$80.83	1.17	0.05
FY 2016-17	2.26%	\$80.15	1.40	0.06
FY 2017-18	1.81%	\$82.10	1.20	0.08
3 year	2.17%	\$81.09	1.24	0.06

Calculated values may differ slightly from data provided by IVT

IVT MedTrans

Formerly known as Med-Express, IVT MedTrans provides non-emergency transportation service between the Imperial Valley and San Diego County medical facilities, clinics and doctor offices, where many regional specialty services are provided. No modifications to service or operations are foreseen.

Table 2-60. Operating Statistics

	Ridership	Operating Cost	Subsidy	Fare Revenue	Vehicle Service Hours*	Vehicle Service Miles
FY 2015-16	--	--	--	--	--	--
FY 2016-17	6,069	\$498,288.56	\$432,313.56	\$38,444.00	4,565.79	126,553
FY 2017-18	5,460	\$466,484.67	\$425,850.00	441,001.42	4,821.54	117,962
% change over 2 years**	-8.29%	-5.31%	-1.34%	11.01%	-0.12%	-6.34%

*Revenue Hours + Deadhead Hours

**2-year Weighted average, July 2016 – June 2018

Table 2-61. Performance Indicators

	Farebox Recovery	Cost Per Trip (per rider in DR)	Passengers Per Revenue Hour	Passengers Per Revenue Mile
FY 2015-16	--	--	--	--
FY 2016-17	7.72%	\$82.10	1.74	\$0.05
FY 2017-18	8.79%	\$85.44	1.58	\$0.05
2 year	8.23%	\$83.68	1.66	\$0.05

Calculated values may differ slightly from data provided by IVT

2.4 Service Guidelines

This section presents existing performance standards and proposed service guidelines for the fixed routes and lists IV Transit's performance against each. It should be noted that viewing any system with regard to a set of goals or guidelines requires an understanding of local conditions as well as the trade-offs associated with providing service. For example, in some cases it will be acceptable to fall below the target; e.g., while it is desirable to provide service at 30-minute frequencies during peak periods, doing so in less dense areas might mean not meeting the guidelines for fiscal condition. This analysis discusses these issues and the competing requirements of providing extensive coverage and frequent service while maintaining cost effectiveness. It will identify where guidelines should be met, and where guidelines should be used as goals for ICTC to use in planning future service changes. Service guidelines have been created for both fixed route and demand response services and are thus presented separately.

2.4.1 Service Standards and Guidelines for Fixed Routes

Fixed route service in Imperial County is provided by Imperial Valley Transit (IVT) under contract with First Transit, Inc. All fixed routes are subsidized and administered by ICTC.

Contractual Service Standards

Each contract for First Transit, Inc. to operate fixed-route bus service in the Imperial Valley includes service standards based on performance metrics regarding productivity (passengers per hour, passengers per day), efficiency (cost per hour, cost per mile) and cost effectiveness (cost per passenger, subsidy per passenger, farebox recovery). The performance standards are negotiated at the beginning of the contract based on "stretch" goals or a five-year average and service is not expected to meet every standard each year. For 2016/2017 the operating subsidy for ICTC was \$5,627,658 of which about \$3 million was funding from the State of California, while about \$2.5 million came from Federal funds. In the table below, subsidies were assumed to be allocated based on cost; therefore subsidies per passenger were calculated by multiplying the total subsidy by the share of total costs for fixed routes and circulators and dividing by the total annual ridership for each.

Table 2-62. Fixed Route Contractual Service Standards

Performance Metric	Contractual Standard	Actual (2016-2017)	Minimum or Maximum?	Meets Standard?
IV Transit Fixed Routes				
Passengers/Hour	20	22	Minimum	Yes
Passengers/Day*	1,200	2,678	Minimum	Yes
Cost/Hour	\$101.00	\$100.35	Maximum	Yes
Cost/Mile	\$4.44	\$4.63	Maximum	No
Cost/Passenger	\$6.50	\$4.65	Maximum	Yes
Subsidy/Passenger	\$5.50	\$6.06	Maximum	No
Farebox Recovery	14.5%	17.8%	Minimum	Yes
IV Transit Circulators (Blu, GLD, GRN)				
Passengers/Hour	12	4	Minimum	No
Passengers/Day*	120	165	Minimum	Yes
Cost/Hour	\$95.00	\$89.95	Maximum	Yes
Cost/Mile	\$4.50	\$7.69	Maximum	No
Cost/Passenger	\$5.50	\$21.27	Maximum	No
Subsidy/Passenger	\$4.50	\$10.03	Maximum	No
Farebox Recovery	14.5%	4.2%	Minimum	No

*Average Weekday

Proposed Service Guidelines

Table 2-63 presents a summary of the proposed service guidelines for ICTC's fixed route system. A performance evaluation based on weekday operations follows. These guidelines are intended for general planning purposes and represent standards used across the industry. The individual guidelines are most applicable to the more urban communities within the county; it is not necessary for every route to meet every guideline.

Table 2-63. Fixed Route General Service Guidelines

Category	Guideline(s)
Service Coverage	
Availability	Residential areas <ul style="list-style-type: none"> • 90% of population within ¼ mile of a bus route • Route spacing guide presented in Table 64 Major activity centers <ul style="list-style-type: none"> • Employers or employment concentrations of 200 or more employees • Health centers • Middle and high schools • Colleges/universities • Shopping centers of over 25 stores or 100,000 square feet of leased retail space • Social service/government centers
Frequency	Arterial routes: 30-minute peak, 60-minute off-peak Crosstown/neighborhood/shuttle services: 60-minute service all day
Span	5:00 AM to 10:00 PM on weekdays 6:00 AM to 7:00 PM on Saturdays
Directness	Maximum of 25% transfer rate

Patron Convenience	
Speed	20-25 MPH maximum on regular routes 10-15 MPH maximum for downtown shuttle services Higher speeds acceptable for outlying services
Loading	25% standees for short periods acceptable
Bus Stop Spacing	5 to 7 stops per mile in the core (every other block) 4 to 5 stops per mile in the fringe areas, as needed based on land uses
Dependability	No missed trips 95% on-time service (0 to 10 minutes late) No trips leaving early
Road Call Ratio	4,000 to 6,000 miles per road call
Fiscal Condition	
Fare Structure	Qualitative criteria
Farebox Recovery	Lower performing routes should be considered for alteration to improve performance.
Productivity (Passengers/Hour)	Lower performing routes should be considered for alteration to improve performance.
Passenger Comfort	
Waiting Shelters	At all stops with 25 or more boardings per day
Bus Stop Signs	At all stops, denoting system, contact information, and route(s) serving that stop
Revenue Equipment	Clean and in good condition
Public Information	Timetable, maps and advertising

1. Service Coverage

This broad category covers guidelines for availability, frequency, span, and directness.

Availability

One of the key decisions in providing transit is determining where service should be provided and the spacing of bus routes. Service coverage and congruency analyses provide a baseline evaluation of service availability. Service coverage analysis looks at bus routes and their relationship to areas of high population density and poverty status, and service congruency analysis looks at bus routes and their relationship to the locations of major trip generators.

This guideline is divided into two separate components that reflect travel concentrations: trip purpose and the need for bus service. Availability guidelines are developed for the residential trip end that produces travel and the non-home end that attracts travel. A description of each is provided below:

- **Production End (Coverage)** – Determination of which residential neighborhoods should be candidates for service is a function of reasonable walking distance. Numerous studies have indicated that the maximum distance an average person can reside from a bus stop and still be considered to “have service” is one-quarter mile, which is approximately equal to a five-minute walk. However, income and mobility as well as population density, environmental conditions (such as extreme cold, heat, or wind) and fixed barriers (fences, walls, and roadways/sidewalk layout) must be considered when applying this rule of thumb. Route spacing and existing service coverage are discussed in the following sections.
- **Attraction End (Congruency)** – Activity centers warrant transit service if they are large enough to attract an adequate number of transit trips. To assist in this determination, “threshold levels” have been established for different categories of activity centers. These threshold levels should serve as guidelines in determining which activity centers in each category should be given consideration for service. It should be noted that other factors, such

as proximity of the center to existing bus routes, should be considered before providing new service to a major activity center.

- Health Centers – Institutions consisting of hospitals, clinics, rehabilitation centers, mental health centers, and nursing homes are significant destinations that should have access to transit service.
- Social Service/Government Centers – Public agencies, government centers, community facilities, and recreational complexes attract some volume of traffic. Since the nature and size of these facilities varies greatly, no numerical threshold will be set. Judgment, as well as trip purposes and characteristics of the users (e.g., elderly and low income citizens) should be considered in deciding whether or not to serve a facility.
- Educational Facilities – Colleges, universities, vocational schools, and secondary (middle and high) schools have been included in the availability guideline. Those institutions with an enrollment of at least 1,000 full-time students warrant consideration for service.
- Employers – Employers or concentrations of employers, such as businesses or industrial parks, with 200 or more employees are large enough to generate transit ridership.
- Shopping Centers – Shopping trips constitute a key reason for transit travel. Shopping centers (including malls and major plazas) with at least 25 stores or more than 100,000 square feet of leased retail space are large enough to warrant consideration for service, as well as the central business district(s) (CBD), neighborhood business districts, and any other significant commercial attractions.

Route Spacing

Table 2-64 lists the recommended route spacing guide given an area's population density and percentage of households without automobiles, which are the surrogates for income and transit dependency. Areas with low population density and low transit dependence given the number of cars available have lower requirements for transit service than do areas with high population density and greater transit dependence.

Table 2-64. Route Spacing Guide

% of Households without Automobiles	Population Density (Persons per Square Mile)			
	Over 6,400	4,500 to 6,400	2,500 to 4,449	Under 2,500
Over 15.0	¼ mile	¼ mile	⅜ mile	½ mile
10.0 to 15.0	¼ mile	⅜ mile	½ mile	1 mile or paratransit
5.0 to 9.9	⅜ mile	½ mile	1 mile or paratransit	-
Below 5.0	½ mile	1 mile or paratransit	-	-

The route coverage guide should be taken as a guide, rather than a set of stringent rules. In some areas, the street pattern is not uniform or the trip generators are further apart than the guide indicates. IV Transit bus service should not conform to the guide in all areas. For example, high instances of

zero-car households in the sparsely populated eastern and western census tracts result in the guide recommending 1-mile spacing between bus routes in these areas – due to extremely sparse population (and very large census tract areas), a large area of the map is influenced by a very small number of people (who could be served using a demand response service).

Service should, however, meet the intent of the guide – areas with more people and/or fewer cars need more transit service than sparsely populated or relatively affluent areas. Another consideration for warranting service is concentrations of elderly and disabled populations as well as multifamily housing developments. These socioeconomic characteristics are included in the transit score analysis, which is also the base map for the coverage analysis.

Coverage

Service coverage analysis looks at the IV Transit system in comparison to the distribution of the population and socioeconomic characteristics (transit needs score) in the region to see if any areas are currently un-served.

Service coverage and congruency analyses are used to evaluate the existing IV Transit fixed route system. These analyses provide the opportunity to identify un-served populations and un-served destinations within Imperial County that have a potential for transit success. Service coverage compares the IV Transit fixed route system to the underlying demographic and socioeconomic characteristics of the county's population; service congruency compares the IV Transit fixed route system to major transit generators in the county. Major employers in the county and their locations relative to the IV Transit fixed routes are also addressed in the congruency analysis.

Congruency

The congruency analysis looks at the IV Transit fixed route service area (the area within a quarter mile of the fixed routes) in comparison to the locations of major trip generators throughout the county. Major trip generators include: hospitals, shopping centers, major employers, government offices, schools, colleges and universities, and cultural and entertainment centers.

The congruency analysis was presented earlier (see Figure 2-5) for IV Transit services.

Frequency, Span, Directness

As presented in Table 61, the frequency, span and directness guidelines help determine the overall utility, usefulness, and convenience of the fixed route transit service.

2. Patron Convenience

This category includes guidelines for operating speed, loading, bus stop spacing, dependability, and road call ratio.

Speed

The set of guidelines for the operating speed of a bus route allow for the identification of routes that may be too long for the running time allotted or may be running slowly and unreliably due to congestion. These guidelines are indicators of safety and reliability: routes that are too long require drivers to speed to maintain the schedule, and very slow routes may create problems with on-time performance and transfers, particularly in a system comprised of radial routes which often require passengers to change buses in order to reach their destinations.

The guidelines, as shown in Table 2-65, are as follows:

- Regular routes should not exceed 20-25 MPH maximum
- Shuttle routes should not exceed 10-15 MPH maximum
- Higher speeds are acceptable for outlying services

Again, these guidelines are dependent on the density of population and trip generators and the frequency with which stops are made along a route. In rural areas or along express or non-stop routes speeds may exceed those included in the guidelines.

Table 65 lists average operating speed by route, found by dividing the annual revenue miles by the annual revenue hours for each route (FY 2016-2017). There is a high degree of variability between routes that meet the guidelines and those that do not (exceed recommended speeds). Among regular routes, line 2 North and South both exceed the recommended speeds. Lines 22-51 all exceed the guidelines, however this is because these routes tend to run either express or remote/rural and outlying service and direct service. The average for the entire system falls within an acceptable range with an average speed of about 25 mph.

Table 2-65. IV Transit Average Operating Speed by Route

Route	Annual Miles	Annual Hours	Average Speed (mph)
1 N&S: El Centro – Calexico	207,803	13,589.7	15
2 N&S: Niland – El Centro	299,174	10,997.3	27
3 E&W: El Centro – Holtville	62,413	3,011.8	21
4 E&W: El Centro – Seeley	25,811	1,349.0	19
21 IVC Express: Calexico – IVC*	32,554	1,757.2	19
22 IVC Express: Niland – IVC*	32,278	928.0	35
31/32 DIRECT: Brawley – Calexico	58,953	1,806.3	33
41 Brawley FAST: Brawley – El Centro	11,247	379.2	30
45 Holtville FAST: El Centro – Holtville	8,256	333.5	25
51: Bombay Beach – Brawley	6,256	205.1	31
Blue Line: El Centro	38,140	3,183.0	12
Gold Line: Brawley	38,523	3,182.9	13
Green Line: El Centro	36,361	3,298.0	12
Total	857,769	34,357.1	25

Loading

Passengers should be seated except for short periods of time associated with peak load periods, during which there should be no more than 25 percent standees for only a limited duration. No passengers should be standing for an intercity trip.

While there is no minimum guideline for loading (minimum number of passengers onboard), consistent, small loads may demonstrate an ability to use smaller vehicles in order to minimize operating expenses; however, on routes operating on headways exceeding an hour (sometimes exceeding two hours on these routes), it is important that any waiting passengers be accommodated so no-one is left stranded by a full vehicle. Routes with low ridership may be candidates for conversion to a demand response service or combination with another service.

Bus Stop Spacing

The spacing of stops should balance patron convenience and speed of operation. The general guideline for urban downtown areas calls for a stop every other block, while in fringe areas stops can be as far apart as 0.20 to 0.25 miles (4 to 5 stops per mile), based on need.

Dependability

Riders require dependable service, defined as service that arrives on time and gets them to their destinations on time, particularly if they are going to work, school or an appointment. The guideline is two-fold: 100 percent of all trips should be operated (i.e., no missed trips) and 95 percent of the trips should run on time (i.e., not more than five minutes late). A caveat to the on-time requirement is that no trip should run ahead of schedule at any point along a route.

Factors limiting on-time performance in the greater Imperial Valley may include vehicles delayed by sheep crossing the roadway, slow-moving farm equipment, roadway construction, and railroad switching operations blocking grade crossings.

Road Call Ratio

This is a measure of dependability and quality for the customer, as the fewer the road calls, the fewer times customers are inconvenienced. The guideline for road calls is between 4,000 and 6,000 miles per road call.

3. Fiscal Condition

These guidelines assess IV Transit's financial situation, the use of the IV Transit system, and the relationship of service used to the amount of service provided. While there are any number of possible criteria that can be used to define fiscal condition, three were selected for the purpose of defining general guidelines and overall condition: fare structure, farebox recovery and productivity.

Fare Structure

The fare structure should meet qualitative considerations set by local policy. It should be simple to understand, offer convenience to the user, and generate reasonable revenues for the system.

Farebox Recovery

Farebox recovery measures the percent of operating cost covered by fares. It is an indicator heavily influenced by the ridership productivity of a route against its total operating cost, as well as the fare policy of the system.

Productivity (Passengers/Hour)

Similar to farebox recovery, this route-by-route guideline relates individual route performance to the overall fixed-route system performance. For the service guideline section, productivity is measured in passengers per hour. IV Transit has two sets of routes: those which are very productive, and those which are not. As per ICTC policy, the higher performing routes allow for service to be continued to the lower performing routes (generally serving the more rural areas of the county) while maintaining a reasonable systemwide average productivity.

4. Passenger Comfort

Passenger comfort guidelines pertain to the passenger environment that is provided for IV Transit passengers. These guidelines examine the placement and condition of shelters and bus stop signs, the comfort and condition of the revenue equipment, and the quality of public information.

Waiting Shelters

The recommended guideline for waiting shelters for a system of this size is to place one at any stop location having 25 or more daily boardings, generally spread throughout the day (e.g., not 25 boardings for a single load and no boardings for the remaining part of the day). Stops with 15 or more daily boardings should be considered for future shelter/bench placement. Bus stop amenities are funded and maintained at the local (town/city) level, and the design of amenities varies by jurisdiction.

Bus Stop Signs

The guideline for bus stop signs is to have one at every stop denoting the name of the system and the route/routes served, as well as providing a telephone number for schedule information. Additionally, bus stop signs should be uniform throughout the system in order to provide consistent branding and minimize confusion for customers.

Revenue Equipment

Per the previous Short Range Transportation Plan in 2012, IV Transit was scheduled to finish replacing its vehicle fleet by 2015.

Public Information

- System Map
 - Website
 - Printed Materials
 - Posted Materials at Bus Stops
 - Other Comments
- *Previously, IV Transit had differentiated direction on its lines by using different numbers (Route 50/200 were actually the same line but traveling in opposite directions). IV Transit revised its naming scheme following the previous Short Range Transit Plan, which also revamped routes, and adopted single route numbers differentiating direction with a North/South/East/West suffix. This is an improvement, but is still confusing especially where routes make turns or take circuitous paths to their final destinations. IV Transit should use a naming system that shows direction by indicating a final destination. This is to be included in the recommendations section of the report.*

2.4.2 Service Standards and Guidelines for Demand Response

Imperial County's demand response services are oriented to residents of the county who need specialized transportation of various types and are administered by the Imperial County Transportation Commission (ICTC) and local jurisdictions (for dial-a-ride services), with the operation of service by various providers.

Demand response service standards vary in each community and for each system, depending on the type of service being provided and the clientele being provided service. Nonetheless, demand response services must meet the standards set forth by the Americans with Disabilities Act (ADA) and described below.

Americans with Disabilities Act (ADA) Complementary Paratransit Service Standards

Important background regarding service standards for Imperial County's public transportation program is found in the requirements of the Americans with Disabilities Act of 1990 (ADA). Those requirements relate to bus stop signage, bus stop design, vehicle accessibility and other accessibility and universal design issues. Of particular importance here are the specific requirements of the ADA as it pertains to the complementary paratransit service, which are available to persons unable to use fixed-route transportation due to a disabling condition.

The required primary service criteria are set forth in 49 CFR Part 37.131:

1. Type of Service and Service Area – demand response, origin-to-destination service is required for eligible riders within $\frac{3}{4}$ mile of the fixed-route service.
2. Days and Hours of Service – service shall be provided on all days and at all times at which the fixed-route service is operating for passenger transport.
3. Fares – passenger fares shall be no more than two times the base-fare rate for a fixed-route trip.
4. Response Time – scheduling of trips and provision of service to any ADA paratransit eligible person shall be made in response to a request for service made the previous day.
5. Trip Purposes – trips shall not be restricted based upon the trip's purpose.
6. Capacity Constraints – services shall not limit the availability of service to ADA paratransit eligible persons based upon restrictions on the number of trips an individual is provided, waiting lists for access to service or patterns or practices that significantly limit the availability of service to ADA paratransit eligible persons.

Of additional importance is the ADA complementary paratransit eligibility process. Section 49 CFR Part 37.125(b) states that all information related to eligibility and the eligibility determination process must be available in accessible formats, upon request. This involves making available the eligibility requirements, the application process and timeline or recertification processes to any individual who calls or writes to request an ADA application. The eligibility processes are explained in detail in Appendix D of CFR Part 37 and the appeals process is detailed in Appendix F of CFR Part 37.

In the ensuing years since the enactment of the ADA, FTA audits and industry best practices have served to clarify and further refine ADA complementary paratransit service expectations.

Among the key performance standards noteworthy here are:

- Trip Denial Policies – DOT ADA regulations allow transit agencies to negotiate pick-up times with a rider, provided the rider is not required to travel more than one hour before or one hour after the time requested. Otherwise, trip denials within the rider requested window are not allowable.

- Vehicle Wait Time and Rider No-Show Policy – Policies related to rider wait times and to no-shows are advised to be printed and publicly available.
- On-Time Performance Standards – It is advisable to have these printed and publicly available, defining what is on-time.
- Customer Comments and Complaints – It is advisable to have a formalized policy for receiving and processing customer comments, specifically complaints.

Demand Response Performance Guidelines for Rural Service

Finally, ICTC and its demand response providers need to provide for general performance standards and have developed individualized standards, as presented earlier in this memorandum. Such individualized standards help to reflect the unique operating environment and service parameters of each demand response program. The Transit Cooperative Research Program Report 136: Guidebook for Rural Demand Response Transportation: Measuring, Assessing and Improving Performance (2009) (to be referred to as TCRP Report 136) provides some larger benchmarks against which to assess Imperial County's demand response performance guidelines.

TCRP Report 136 developed a typology for comparing rural systems, to help ensure more apples-to-apples comparisons. Three categories of programs are identified: 1) municipalities, serving individual communities; 2) county, serving a countywide area; and 3) multi-county, serving areas beyond the home-county. Imperial County has programs that fall into each of these three categories. IVT Access is essentially a countywide program, although its service area within the county is defined in relation to ADA requirements. The IVT MedTrans program is multi-county, as the service travels between Imperial and San Diego Counties.

TCRP Report 136 identified 24 representative systems that met a variety of conditions and service parameters and which were willing to make their cost and reporting procedures available to the TCRP consultants for purposes of ensuring comparability. Table 2-66 is adopted from TCRP Report 136 and reflects the median range of values for four key indicators reported by these 24 representative systems, in relation to the municipal, county-wide, and multi-county types of rural demand response programs.

These standards will be used to assess the performance of the individuals systems, contrasting them with these nationally reported performance guidelines.

2.4.3 Summary and Conclusions

Overall, the various fixed route and demand response services provided by the ICTC meet the intent of the service guidelines developed for their use. As was previously mentioned, these guidelines were developed to help guide the development of the contract and the monitoring of service – they are not intended as a strict “pass/fail” system of route and service measurement.

Table 2-66. Summary Performance Data from Representative Rural DRT Systems & Influencing Factors

Representative Rural DRT System	Passenger Trips per Vehicle Hour (Effectiveness)	Operating Cost per Vehicle Hour (Cost-Efficiency)	Operating Cost per Vehicle Mile (Cost-Efficiency)	Operating Cost per Passenger Trip (Cost-Effectiveness)
Primarily Single-Municipality Systems (5 systems)	2.38 to 7.05	\$35.23 to \$74.04	\$2.57 to \$5.84	\$5.00 to \$31.17
Primarily Single-County Systems (10 systems)	2.06 to 6.23	\$32.47 to \$78.05	\$1.49 to \$5.75	\$7.63 to \$30.76
Multi-County Systems (7 systems)	1.57 to 4.34	\$26.08 to \$42.27	\$1.16 to \$2.67	\$7.99 to \$20.76
Factors Influencing Performance				
Controllable/Partially Controllable	<ul style="list-style-type: none"> Group trips for agency clients Ability to group trips for unaffiliated riders, particularly for longer-distance trips Use of AVL Use of immediate response vs. advance reservations Extent of long-distance, out-of-primary-service-area trips Characteristics of contracted service (Medicaid / MediCal) Measures to reduce deadhead; no-shows / late cancellations 	<ul style="list-style-type: none"> Administrative / overhead costs Costs for operator labor 	<ul style="list-style-type: none"> Administrative / overhead costs Costs for operator labor 	<ul style="list-style-type: none"> Administrative / overhead costs Costs for operator labor Group trips for human service agency clients and ability to group trips for unaffiliated riders Use of AVL Use of immediate response vs. advance reservation service Extent of long-distance, out-of-primary-service area trips Measure to reduce deadhead; no-shows, late cancellations
Uncontrollable	<ul style="list-style-type: none"> Size of service area Geographic constraints of service area Requirements for long-distance, out-of-service area trips Type of ridership, i.e. ADA versus non-ADA 	<ul style="list-style-type: none"> Type of organization, i.e. transit districts, city / county, private-non profit Location of higher / lower labor-wage region of the country Type of ridership, i.e. ADA versus non-ADA 	<ul style="list-style-type: none"> Type of organization, i.e. transit districts, city / county, private-non profit Size of service area and its influence on miles traveled Types of roadways, operating speeds; weather conditions 	<ul style="list-style-type: none"> Type of organization, i.e. transit districts, city / county, private-non profit Size of service area, geographic constraints Requirements for long-distance, out-of-area trips Ridership – ADA vs. non-ADA

Adapted from TCRP Report 136: Guidebook for Rural Demand-Response Transportation: Measuring, Assessing and Improving Performance. (Transportation Research Board, Washington D.C., 2009, page 56.)

3. Peer System Comparison

This section provides information about other peer community transit systems as a benchmark for comparison with Imperial County Transportation Commission (ICTC). The data were taken from the 2016 National Transit Database (NTD) to ensure the best consistency in reporting costs by different agencies.

3.1 Selection Criteria

A series of criteria were developed in order to determine the most comparable peer transit systems. The selection criteria included:

- Transit systems with annual systemwide operating expenses totaling between \$1 million and \$10 million. Systemwide operating expenses include fixed-route bus service, demand response service, and commuter bus service expenses.
- Transit systems with an agency fleet size between 15 and 30 vehicles. Agency fleet size includes transit vehicles for fixed-route bus service, demand response service, and commuter bus service.
- Transit systems in communities with an urbanized area population between 50,000 and 200,000.
- Transit systems with a service area population between 50,000 and 200,000.
- Transit systems that are NTD Full Reporters (as opposed to NTD Reduced or Rural Reporters) in order to have the necessary data to complete the peer system comparison.
- Transit systems that charge passenger fares.
- Transit systems in communities with no major colleges, defined as total university student enrollment under 10,000 students.
- Transit systems in communities that are not part of a larger urban area.
- No university bus systems.

In addition, several border communities similar to Imperial County were identified and evaluated, including:

- Yuma, AZ – Yuma County Intergovernmental Public Transportation Authority (YCAT)
- Laredo, TX – Laredo Transit Management, Inc. (El Metro)
- McAllen, TX – City of McAllen-McAllen Express Transit (Metro McAllen)
- Brownsville, TX – City of Brownsville-Brownsville Metro (BMetro)

The Yuma County Intergovernmental Public Transportation Authority (YCAT) in Yuma, AZ did not fit within the selection criteria as the transit system had annual operating expenses exceeding \$10 million (\$14,574,740) and significantly more than 30 agency vehicles (54).

El Metro in Laredo, TX did not fit within the selection criteria as the transit system had an urbanized area population greater than 200,000 (235,730), a service area population over 200,000 (236,091), and significantly more than 30 agency vehicles (54).

Metro McAllen in McAllen, TX did not fit within the selection criteria as the transit system is a NTD Reduced Reporter. Reduced Reporters provide less information to the NTD, thus having insufficient data to use in the peer system comparison.

According to the NTD, a transit agency qualifies as a Reduced Reporter if it:

1. Receives or benefits from 5307 funding
2. Operates 30 vehicles or less across all modes and types of service and does not operate fixed guideway and/or high intensity busway.

Of the border communities identified and evaluated, BMetro in Brownsville, TX was the closest to fitting within the selection criteria. While having an urbanized area population slightly over 200,000 (217,585) and slightly more than 30 agency vehicles (33), Brownsville, TX was selected as the most comparable border community and was included in the peer system comparison.

3.2 Selected and Overview of Peer Communities

Ten peer community transit systems were selected for comparison. No two communities are the same, so a variety of communities were selected with characteristics that have similarities to ICTC in terms of community size, transit system size, and transit operations.

As shown in Figure 3-1, the selected peer communities include:

1. Hanford, CA – Kings County Area Public Transit Agency (KART)
2. Redding, CA – Redding Area Bus Authority (RABA)
3. Santa Maria, CA – Santa Maria Area Transit (SMAT)
4. Pueblo, CO – Pueblo Transit System (PT)
5. Sioux City, IA – Sioux City Transit System (SCTS)
6. Pittsfield, MA – Berkshire Regional Transit Authority (BRTA)
7. Port Tobacco, MD – County Commissioners of Charles County, MD (VanGO)
8. Jackson, MI – City of Jackson Transportation Authority (JTA)
9. Lebanon, PA – County of Lebanon Transit Authority (LT)
10. Brownsville, TX – City of Brownsville-Brownsville Metro (BMetro)

Although efforts were made to find the closest matching peers, no two systems are exactly alike. Factors such as the type of service (fixed route, commuter, and demand response), the presence or absence of unions, local fare policies, quality of pedestrian facilities, community topography, and the quality of capital equipment can substantially impact the performance of individual systems. This comparison, therefore, should be viewed as a gauge of ICTC's operation compared to a representative sample of similar systems/communities, rather than an exact "report card." In addition, this type of comparison must always be used with caution as there are differences in how various agencies report costs. Transit systems which are a department of a larger entity such as a city or county may not report the full costs of many services provided by other departments. While the comparison is useful, cost comparisons in particular should only be used with the caveat that systems may not be reporting the same costs.

Figure 3-1. Selected Peer Communities



OVERVIEW OF PEER COMMUNITIES

A brief description of each of the ten peer communities is included in this section, including types of service provided, operating hours, and fare information.

1. Kings County Area Public Transit Agency

Kings Area Rural Transit (KART) is the public transportation provider in Kings County, CA. The NTD classifies KART's organization type as an Independent Public Agency or Authority of Transit Service. KART provides public transit service Monday through Friday and limited service on Saturdays to the cities of Armona, Avenal, Corcoran, Grangeville, Hardwick, Hanford, Kettleman City, Laton, Lemoore, and Stratford. In addition, KART provides regular transportation service to Fresno and Visalia Monday through Friday.

KART paratransit (origin-to-destination) is available to eligible certified passengers who are functionally unable to use the fixed-route KART service. KART paratransit is an origin-to-destination, advance reservation required shared-ride public transportation service for any trip purpose within the designated service area and during the same days and hours as the fixed-route bus service. It is designed to "mirror" the KART fixed-route service in terms of available times and areas. Curb-to-curb and "mirroring" provisions of the Americans with Disabilities Act (ADA) mean that no assistance is provided to individuals between the door of their starting point or destination and the paratransit

vehicle. Assistance is provided only to help board and exit vehicles (i.e., wheelchair lift). Paratransit is required to provide service only if both the starting point and the destination of a trip are located within $\frac{3}{4}$ mile of a KART fixed route during hours when that route is operating. KART's fixed

Table 3-1. KART Fares and Passes

Fixed Route Single-fares	
Local Routes*	\$1.25
Local Routes, discounted**	\$0.60
Out-of-Town Routes^	\$1.75
Out-of-Town Routes, discounted^`	\$0.85
Day Pass (local routes only)	\$4.00
Local Routes Trip Card (10 trips)*	\$10.00
Out-of-Town Routes Trip Card (10 trips)^	\$14.00
Children 6 and Under	Free
Paratransit Single-Fares	
Per Trip	\$2.50
Companions and Children	\$2.50
PCA (only free on Paratransit)	Free
Trip card (10 trips)	\$25.00
Premium Fare	\$5.00
30-Day Bus Passes	
Local Routes*	\$50.00
Local Routes, discounted**	\$40.00
Out-of-Town Routes^	\$60.00
Out-of-Town Routes, discounted^`	\$50.00
Paratransit	\$100.00

Notes:

* Local Routes include Hanford, Armona, Lemoore, and NAS.

^ Out of Town Routes include Avenal, Corcoran, Fresno, Laton, and Visalia.

` Must have KART-issued ID card to receive discount fare.

2. Redding Area Bus Authority

The Redding Area Bus Authority (RABA) was formed in 1976 by a joint powers agreement between the City of Redding and the County of Shasta to provide public transit services within the Greater Redding Area in California. RABA began services in November 1981 and the joint powers agreement between the City of Redding and the County of Shasta was amended in 1998 to include the City of Anderson and the City of Shasta Lake. The NTD classifies RABA's organization type as an Independent Public Agency or Authority of Transit Service.

RABA provides fixed-route public transportation as well as complementary paratransit service in compliance with the Americans with Disabilities Act (ADA) on weekdays and Saturdays. The service hours for paratransit and fixed-route services are the same, generally from 6:30 a.m. to 7:30 p.m. weekdays and from 9:30 a.m. to 7:30 p.m. Saturdays. The RABA service area centers on the City of Redding, the county seat of Shasta County, which is located at the northern end of the Sacramento Valley (approximately 160 miles north of Sacramento).

RABA's bus services include fixed-route service, commuter service, and express service. RABA operates 10 fixed routes, one commuter route and three express routes. Bus services are provided

along fixed routes and stops, on fixed schedules using 35-foot and 40-foot Gillig Phantom buses. Bus cash fares are based on the number of zones of travel for a one-way trip. The passenger fare for youth and adult bus service is \$1.50 for one zone and \$0.75 for each additional zone. The passenger fare for senior (62 and older) and disabled/Medicare bus service is \$0.75 for one zone and \$0.35 for each additional zone.

RABA's paratransit service is for people with disabilities who are functionally unable to use fixed-route service and is operated by 23-foot vans. Paratransit service is provided in accordance with the ADA and is an origin-to-destination, shared ride, advanced reservation public transit service. Consistent with the ADA, paratransit service is comparable to fixed-route service, including service area and service hours. The service area is defined as the area $\frac{3}{4}$ of a mile from RABA fixed-route service and all pick-ups and drop-offs must be within this service area. This service area is subject to change, consistent with changes to fixed-route service. Paratransit cash fares are based on the number of zones of travel for a one-way trip. The passenger fare for paratransit service is \$3.00 for one zone and \$1.50 for each additional zone.

3. Santa Maria Area Transit

Santa Maria Area Transit (SMAT) offers transit service within the City of Santa Maria, CA and in the unincorporated town of Orcutt, CA. The NTD classifies SMAT's organization type as a City, County or Local Government Unit or Department of Transportation. SMAT operates eight fixed routes and an ADA paratransit service. Service hours are Monday through Friday from 5:30 a.m. to 10:30 p.m. and Saturday and Sunday from 7:00 a.m. to 7:45 p.m.

SMAT fixed-route bus basic fare is \$1.50, fixed-route bus student fare (with a valid ID) is \$1.25, and fixed-route bus fare for seniors (60 and older, persons with disabilities, and Medicare card holders) is \$0.75. Children under 6 years with a fare paying adult on SMAT ride free. SMAT Passes are also available.

SMAT ADA Service offers curb-to-curb transportation for individuals who, because of their disability, are unable to use the fixed-route bus. The SMAT ADA service area includes Santa Maria, Tanglewood, and the Orcutt areas. Reservations are required and can be made up to 14 days in advance. SMAT ADA Service fare is \$1.25 for a one-way trip and eight ride punch passes are available.

4. Pueblo Transit System

Pueblo Transit (PT) is the public transit system in Pueblo, CO. Pueblo Transit is a non-profit corporation owned by the City of Pueblo. The NTD classifies PT's organization type as a City, County or Local Government Unit or Department of Transportation. PT operates fixed route and complementary ADA paratransit services.

PT currently operates 11 fixed routes; all routes begin and end at the Pueblo Transit Center at the top and/or bottom of the hour. Systemwide weekday service operates from 6 a.m. to 6:30 p.m. and systemwide Saturday service operates from 8 a.m. to 6:30 p.m. Single fares for PT's fixed-route service are \$1.25 for adults, \$0.60 for elderly (60 and older) and the disabled (Medicare or Disabled authorization form), and \$1.00 for students. Daily passes, 35-day passes, 22-ride passes, and unlimited passes are also available.

Citi-Lift is PT's complementary ADA paratransit service provided for individuals who, because of their disability, are unable to use the fixed-route bus service. This does not include disabilities that only make the use of accessible transit service difficult or inconvenient. Citi-Lift provides comparable service to the regular fixed route in terms of shared rides, origin-to-destination service, service area, and hours and days of service. All rides are \$2.50 per one-way trip. The service area includes the Pueblo City limits and corridors that are within a $\frac{3}{4}$ mile of the fixed bus route.

5. Sioux City Transit System

The Sioux City Transit System (SCTC) provides public transportation in the metropolitan area, including Sioux City, South Sioux City, and North Sioux City. The NTD classifies SCTC's organization type as a City, County or Local Government Unit or Department of Transportation. SCTC's hours of operation are Monday through Friday from 6:00 a.m. to 6:00 p.m. and Saturday from 7:00 a.m. to 6:00 p.m.

SCTC currently operates 10 fixed routes in addition several school tripper routes. SCTC's fixed route hours of operation are Monday through Friday from 6:00 a.m. to 6:00 p.m. and Saturday from 7:00 a.m. to 6:00 p.m. SCTC's school tripper routes operate from 6:15 a.m. to 8:15 a.m. and 2:15 p.m. to 4:15 p.m. Monday through Friday. SCTC's fixed-route bus fares are presented in Table 3-2.

Table 3-2. SCTC Fixed Route Fares and Passes

Cash Fare	
Adult Cash Fare	\$1.80
Youth Cash Fare	\$1.55
Senior Citizen/Medicare Cardholder/Disability Cash Fare	\$0.90
Children under 5, accompanied by an adult	Free
Tokens	
Single Token	\$1.80
Pack of 20 Tokens	\$31.00
10-Ride Tickets	
Ten-Ride Punch Ticket	\$18.00
Student Ten-Ride Punch Ticket	\$15.50
Senior Citizen/Medicare Cardholder/Disability 10-Ride Ticket	\$9.00
Monthly Passes	
Adult Monthly Pass	\$48.00
Senior Citizen/Medicare Cardholder/Disability Monthly Pass	\$42.00

SCTC provides accessible, origin-to-destination bus transportation for individuals with special transportation needs. Eligibility is based upon functional ability and whether a disability prevents a person from using SCTC fixed bus routes, rather than a medical diagnosis. All rides are origin to destination, meaning passengers will board at the street curb when the vehicle arrives and exit at the curb of the destination. SCTC drivers will offer assistance to paratransit passengers for walking support, maneuvering a wheelchair, and with a limited number of small packages when boarding and exiting the vehicle. Any additional assistance must be provided by a personal care attendant. Door-to-door service will be given when requested at the time of the ride reservation, with 24 hour advance notice. The paratransit service area coincides with SCTC's regular fixed-route service area including the corporate limits of Sioux City, South Sioux City, and North Sioux City. The one-way trip cost is \$3.60 and the hours of operation are Monday through Friday from 6:00 a.m. to 6:00 p.m. and Saturday from 7:00 a.m. to 6:00 p.m.

6. Berkshire Regional Transit Authority

The Berkshire Regional Transit Authority (BRTA) provides public transportation services to its 26 member communities within Berkshire County, the western most region of Massachusetts. The NTD classifies the BRTA's organization type as a Subsidiary Unit of a Transit Agency, Reporting Separately. The BRTA provides fixed-route service, as well as paratransit services to eligible persons for ambulatory, non-ambulatory, or complementary paratransit ADA service. The BRTA's hours of operation are Monday through Friday from 5:45 a.m. to 7:20 p.m. and Saturday from 7:15 a.m. to 7:00 p.m. There is no Sunday service or service on holidays.

The BRTA's fixed-route service is provided by 14 bus routes in 12 communities. Bus fares for the BRTA fixed-route services are presented in Table 3-3.

Table 3-3. BRTA Fixed Route Fares and Passes

	Full Fare	Reduced Fare*	Other
Local			
Cash	\$1.75	\$0.85	
Charlie Card	\$1.40	\$0.70	
Unlimited Rides 7-Day Pass	\$13.00	\$10.00	
Unlimited Rides 30-Day Pass	\$52.00	\$39.00	
College Students: 30-Day Pass			\$52.00
Systemwide			
Cash	\$4.50	\$2.25	
Charlie Card	\$3.60	\$1.80	
Unlimited Rides 1-Day Pass	\$10.00	\$10.00	
Unlimited Rides 7-Day Pass	\$35.00	\$26.00	
Unlimited Rides 30-Day Pass	\$140.00	\$105.00	
K-12 Students: Unlimited Rides 30-Day Pass			\$26.00
College Students: Semester Pass			\$250.00

*Reduced fare are available to the elderly (60+), persons with a valid Medicare card, and disabled persons with a valid Massachusetts Access Pass.

In addition to traditional fixed-route bus services, the BRTA supports paratransit public transportation using ambulatory or wheelchair accessible vehicles to parties who are unable to access or navigate the fixed-route service. In 1992, under the ADA, the BRTA began to provide origin to destination curb service required to complement the fixed-route bus service for persons who qualify under the Federal eligibility criteria. In addition, BRTA paratransit services not mandated by the ADA may be provided to individuals located in participating communities. The service corridor for the BRTA's paratransit service is within $\frac{3}{4}$ mile of BRTA fixed bus route alignment and both the origin and destination for each trip must be within the service corridor. The BRTA established curb-to-curb as the basic mode of paratransit service, identified as "curb service from origin to destination." However, this is not intended to result in passengers being restricted to curb service only. Consistent with origin to destination service, the BRTA regularly provides greater than curb service based on passenger need and/or trip-by trip scenario. In these instances door-to-door service is not considered enhanced but an accommodation and the BRTA does not charge additional for this accommodation as it is based on passenger need rather than request for convenience. Similarly, the BRTA routinely extends its basic curb-to-curb service when passengers' mobility is limited and prevents them from getting to the curb of either their origin or destination. The BRTA paratransit ADA fares are \$2.50 for local trips (in-town),

\$3.50 for local trips (in-town and adjoining town), \$7.50 for systemwide trips (in-town and two towns), and \$9.00 for systemwide/Max trips (in-town and three or more towns).

7. County Commissioners of Charles County, MD (VanGO)

VanGO is a countywide public transportation system in Charles County, MD. VanGO offers public routes that operate on fixed schedules and more specialized transportation services for those persons unable to utilize the public transportation system. The Charles County Department of Planning and Growth Management oversees VanGO, but operations are contracted to a private contractor. The NTD classifies VanGO's organization type as a City, County or Local Government Unit or Department of Transportation.

VanGO operates 16 fixed routes with most routes operating Monday through Saturday from 7:00 a.m. to 10:00 p.m. on hourly schedules. Fares for VanGO's fixed-route service are presented in Table 3-4.

Table 3-4. VanGO Fixed Route Fares and Passes

All-Day Pass	
General Public	\$2.00
Senior/Disabled	\$1.00
Medicare Card Holders	\$1.00
Children under 6, accompanied by an adult	Free
One-Way Trip	
General Public	\$1.00
Senior/Disabled	\$0.50
Medicare Card Holders	\$0.50
Children under 6, accompanied by an adult	Free
Stored Value Card	
\$10.00 worth of fares	\$8.00

*Available for purchase at the Charles County Government Treasurer's Office.

VanGO operates door-to-door specialized transportation services under a variety of programs for senior citizens and persons with disabilities who are unable to use the fixed-route system. VanGO's specialized services are a shared ride program.

VanGO's ADA Transportation Service provides general purpose transportation to disabled persons who are prevented from using VanGO's fixed-route public transportation system due to their disability. The service area for VanGO's ADA Transportation Service is up to 3/4 of a mile around existing fixed public routes. Departure locations and or destinations outside ADA areas may be considered for VanGO's Demand Response service. ADA services operate Monday through Saturday from 6:30 a.m. to 10:00 p.m., depending upon service area. VanGO's ADA Transportation Service costs \$1.00 per one-way trip or an all-day pass may be purchased for \$2.00.

VanGO's Demand Response service is a door-to-door service for seniors 60 and older, and disabled persons near a VanGO public transit route or unable to use fixed-route services due to mental or physical impairments. Service is only to destinations within Charles County and individuals are limited to 12 one-way trips per month. Demand Response service operates Monday through Friday from 8:00 a.m. to 5:00 p.m. and costs \$1.50 per one-way trip.

VanGO offers Subscription Services for persons needing transportation to dialysis centers and senior centers based on where a customer lives. The County is divided into service zones that determine when VanGO can provide transportation to and from the centers. VanGO has worked closely with the senior and dialysis centers to give VanGO customers priority when scheduling service and operating hours. VanGO Subscription Service is available Monday through Saturday from 5:30 a.m. to 5:30 p.m.

and costs \$1.00 per one-way trip or \$2.00 for an all-day pass. For senior citizens and persons with disabilities, the cost per one-way trip is \$0.50 or \$1.00 for an all-day pass.

8. City of Jackson Transportation Authority

The Jackson Area Transportation Authority (JATA) is a multi-service system providing county-wide transit services to all residents within Jackson County, MI. The NTD classifies JATA's organization type as an Independent Public Agency or Authority of Transit Service.

JATA operates nine fixed routes with service operating Monday through Friday from 6:00 a.m. to 6:15 p.m. and Saturday from 10:15 a.m. to 6:15 p.m. There is no Sunday service or service on holidays. Fares for JATA's fixed-route service are presented in Table 3-5.

Table 3-5. JATA Fixed Route Fares and Passes

Individual Tickets	
Adult	\$1.50
Student	\$1.00
Seniors (60 and older) / Children / Persons with Disabilities	\$0.75
31-Day Pass	
Adult	\$54.00
Student	\$34.00
Seniors (60 and older) / Children / Persons with Disabilities	\$27.00
Ticket Books (Book of 10 Tickets)	
Adult	\$15.00
Student	\$10.00
Seniors (60 and older) / Children / Persons with Disabilities	\$7.50

JATA's Reserve-A-Ride is a curb-to-curb service accommodating the general public, including wheelchair users, in Jackson County. Advanced reservations are required and rides are scheduled on a first come, first served basis. JATA's Reserve-A-Ride hours of operation within the City of Jackson are Monday through Friday from 6:00 a.m. to 10:00 p.m., Saturday 10:00 a.m. to 10:00 p.m., and Sunday 7:00 a.m. to 4:00 p.m. JATA's Reserve-A-Ride hours of operation within Jackson County are Monday, Wednesday, and Friday from 6:00 a.m. to 6:00 p.m. Operators are required to provide reasonable assistance to passengers (if requested) as they board and depart the vehicle, but are not allowed to enter a private residence, physically lift passengers, or negotiate stairs. JATA's Reserve-A-Ride vehicles range from mini-vans to 24-passenger small buses. Fares for JATA's Reserve-A-Ride service are presented in Table 3-6.

Table 3-6. JATA Reserve-A-Ride Fares

Fare Type	Zone 1 to Zone 1	Zone 1 to Zone 2	Zone 1 to Zone 3	Zone 2 to Zones 1, 2, and 3	Zone 3 to Zones 1, 2, and 3
Adult	\$4.00	\$5.00	\$7.50	\$7.50	\$10.50
Student	\$2.50	\$3.50	\$7.50	\$7.50	\$10.50
Seniors (60 and older) / Persons with Disabilities	\$2.00	\$2.50	\$3.00	\$3.00	\$3.00

9. County of Lebanon Transit Authority

The County of Lebanon Transit Authority (LT) provides fixed-route bus service, commuter bus service, and ADA Complementary Shared Ride service in Lebanon County, PA. The NTD classifies LT's organization type as an Independent Public Agency or Authority of Transit Service.

LT operates eight fixed-route bus routes, in addition to a special route to Park City Mall in Lancaster every Saturday. LT's fixed-route bus service operates Monday through Friday from 6:00 a.m. to 11:35 p.m. and on Saturday from 7:30 a.m. to 11:35 p.m. There is no Sunday service or service on holidays. Fares for LT's fixed-route service are presented in Table 3-7.

Table 3-7. LT Fixed Route Fares and Passes

Fares	Price	Transfer
City Fare	\$1.50	\$0.25
City Half Fare*	\$0.75	\$0.10
County Fare	\$2.00	\$0.25
County Half Fare*	\$1.00	\$0.10
Student Fare	\$1.00	\$0.25
Passes	Price	
All-Day Pass		\$6.00
10-Ride City Pass		\$15.00
10-Ride County Pass		\$20.00
31-Ride City Pass		\$57.00
31-Ride County Pass		\$76.00

*Persons with disabilities are eligible for a half fare transit card.

LT operates a commuter service, called the Commute King, providing express service from Lebanon to Harrisburg, Monday through Friday. The route structure is a loop operated by four vehicles, two eastbound and two westbound. Each vehicle provides one morning and one afternoon roundtrip. The one-way cost for Commute King Express Service is \$2.00.

LT provides an ADA Complementary Shared Ride service that maintains the same operating days and hours as LT's fixed-route bus service, Monday through Friday from 6:00 a.m. to 11:35 p.m. and Saturday from 7:30 a.m. to 11:35 p.m.

Reservations are required to schedule LT's ADA Complementary Shared Ride service. To be eligible for LT's ADA Complementary Shared Ride, a passenger's origin and destination must be within $\frac{3}{4}$ of a mile of the fixed-route bus service (excluding the commuter service). One-way fares for LT's ADA Complementary Shared Ride are \$3.00 for service in Lebanon City (plus \$0.50 for a transfer) and \$4.00 for service outside Lebanon City (plus \$0.50 for a transfer).

LT provides a Shared Ride Van Service for passengers who do not qualify for the Complementary ADA Shared Ride. The Shared Ride Van Service operates within the boundary of Lebanon County. Within the Lebanon City Limits, the Shared Ride Van Service operates Monday through Friday from 8:00 a.m. to 5:00 p.m. and on Saturday from 8:00 a.m. to 4:00 p.m. Outside the Lebanon City Limits, the Shared Ride Van Service operates Monday through Friday from 8:00 a.m. to 3:30 p.m. Fares for LT's Shared Ride Van Service are \$2.50 for Seniors 65 and older and then based on mileage (\$19.00 for 0 to 5 miles, \$22.00 for 5 to 10 miles, and \$26.00 for 10 or more miles) for everyone else.

10. City of Brownsville-Brownsville Metro

The City of Brownsville, Brownsville Metro (BMetro) provides fixed-route bus service and ADA Paratransit service in Brownsville, TX. The NTD classifies BMetro's organization type as a City, County or Local Government Unit or Department of Transportation. BMetro's operating hours are Monday through Saturday from 6:00 a.m. to 8:00 p.m.

BMetro operates 13 fixed-route bus routes throughout Brownsville. The general fare for BMetro's fixed-route service is \$1.00 and transfers are \$0.25. BMetro offers reduced fares for students (\$0.75), seniors (\$0.50), and individuals with disabilities (\$0.50), Medicare (\$0.50), and children under six years old (free). BMetro also offers day passes, weekly passes, and 20-Ride passes.

BMetro also operates an ADA Paratransit service for people with disabilities who are not able to ride the fixed-route bus routes and whose eligibility has been determined by a certification process. ADA Paratransit is a specialized, shared ride, origin-to-destination transportation service that operates during the same working hours as BMetro's fixed routes and in areas within $\frac{3}{4}$ of a mile from BMetro's fixed routes. One-way trip fare for BMetro's ADA Paratransit service is \$1.50.

3.3 Peer System Comparison

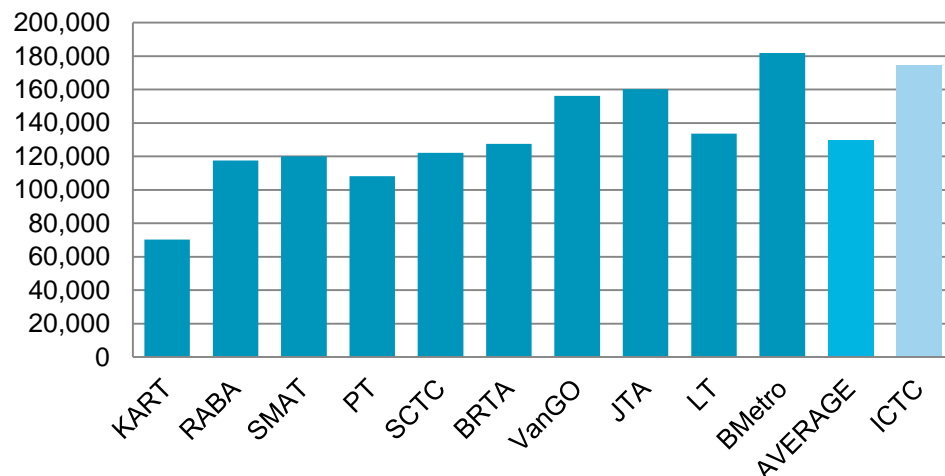
Table 72 presents the compilation of data on the selected peer communities and shows the averages of the peer systems for each category and a comparison with ICTC.

Service Area Population

As shown in Figure 3-2, the average service area population among peer communities is approximately 130,000. The Kings County Area Public Transit Agency (KART) service area population is the smallest at approximately 70,000 while the City of Brownsville (BMetro) service area population is the largest at approximately 182,000. ICTC has the second largest service area population after BMetro with approximately 175,000.

The peer comparison selection criteria included transit systems with a service area population between 50,000 and 200,000. The average service area population among peer communities is approximately 130,000. With a service area population of 175,000, ICTC has the second largest service area population after the City of Brownsville's BMetro. While ICTC was at the top end of the service area population spectrum (from 50,000 to 200,000), the majority of the selected peer transit systems were also towards the top end of the spectrum. Only one peer agency had a service area population under 100,000, and half of the peer agencies (five out of ten) had a service area population over 125,000.

Figure 3-2. Service Area Population



Agency Fleet Size

The peer communities averaged 26 Vehicles Operated in Annual Maximum Service (VOMS) during 2016. The NTD defines VOMS as “the number of revenue vehicles operated to meet the annual maximum service requirement.” As shown in Figure 3-3, JTA had the fewest VOMS (20), while BMetro had the most VOMS (33). ICTC had 26 VOMS during 2016, the same as the average of the peer communities. See Appendix B.

Figure 3-3. Agency VOMS

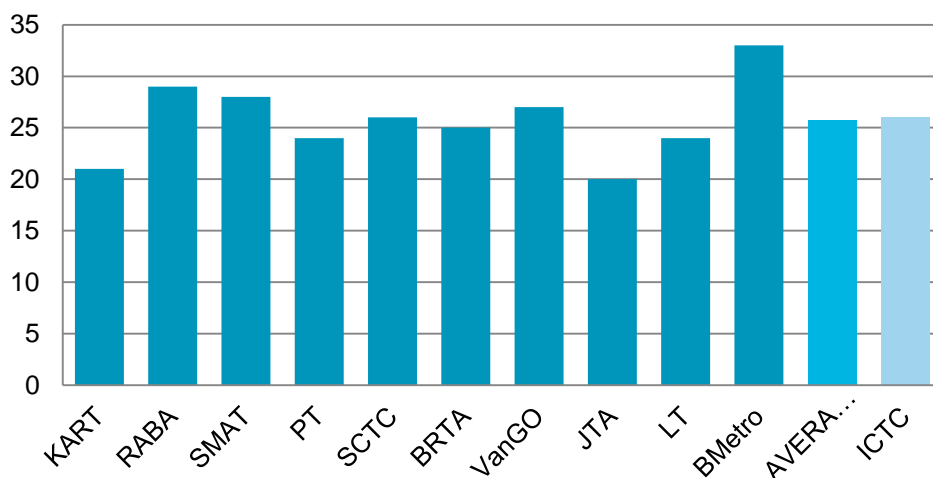
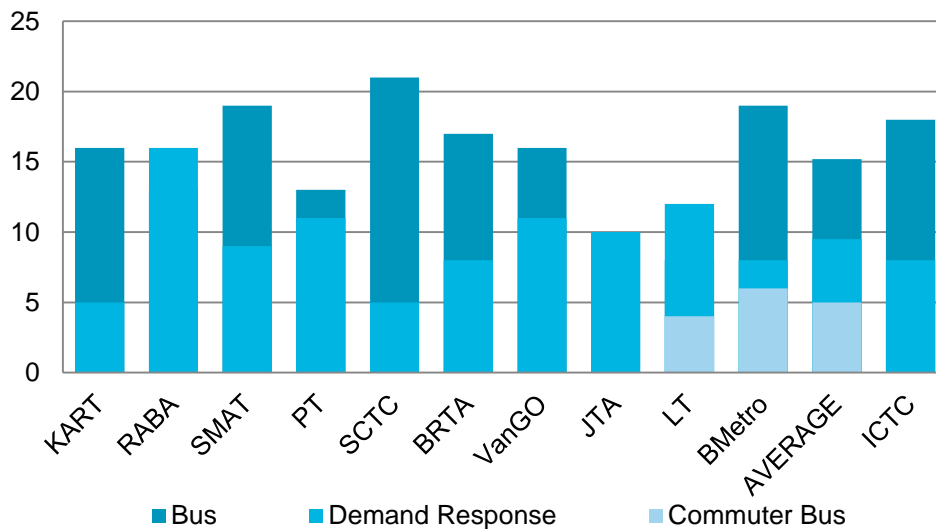


Figure 3-4 illustrates Agency VOMS by mode type during 2016. The peer communities averaged 15 bus VOMS, 10 demand response VOMS, and 5 commuter bus VOMS. LT had the fewest bus VOMS (8), while SCTC had the most bus VOMS (21). KART and SCTC had the fewest demand response VOMS (5), while RABA had the most demand response VOMS (16). Only two agencies operate commuter bus service, LT which had 4 VOMS and BMetro which had 6 VOMS. ICTC had more bus VOMS (18) and fewer demand response VOMS (8) than the average of the peer communities.

Figure 3-4. Agency VOMS by Mode



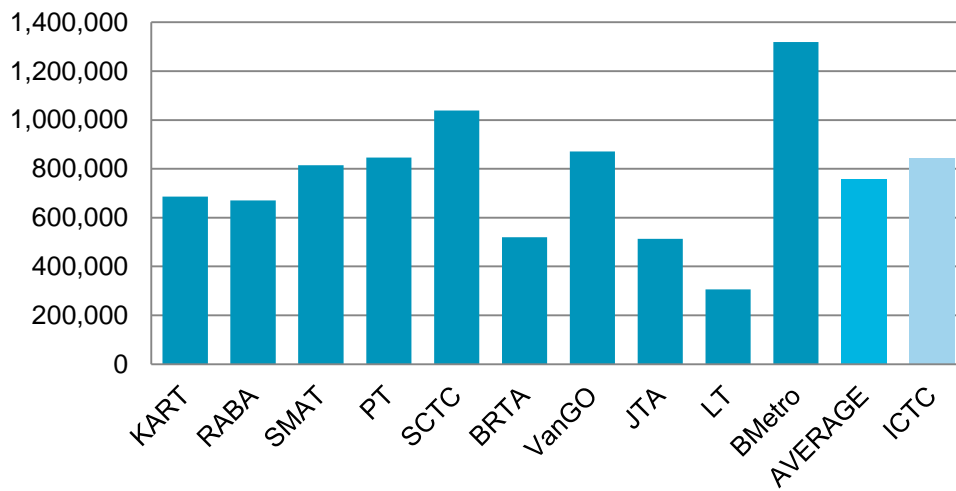
The peer comparison selection criteria included transit systems with an agency fleet size between 15 and 30 vehicles. The peer communities averaged 26 Vehicles Operated in Annual Maximum Service (VOMS) during 2016. ICTC had 26 VOMS during 2016, the same as the average of the peer communities.

The peer communities averaged 15 bus VOMS, 10 demand response VOMS, and 5 commuter bus VOMS. ICTC had more bus VOMS (18) and fewer demand response VOMS (8) than the average of the peer communities. Compared to the average of the peer communities, ICTC provides more annual fixed-route passenger trips and fewer annual demand-response trips, so it is fitting that that ICTC has more bus VOMS and fewer demand response VOMS than the average of the peer communities.

Annual Passenger Trips

Figure 3-5 illustrates that ICTC provided approximately 843,000 fixed route annual passenger trips during 2016, higher than the average among peer communities of approximately 759,000 fixed route annual passenger trips. BMetro was the agency with the largest number of fixed route annual passenger trips with approximately 1,320,000, while Lebanon Transit had the fewest fixed route annual passenger trips at just above 300,000.

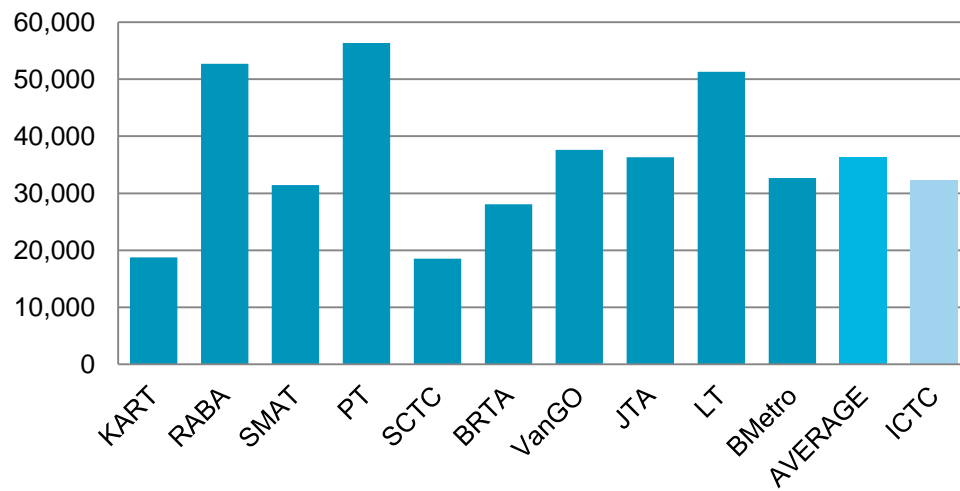
Figure 3-5. Fixed Route Annual Passenger Trips



Comparability of demand response service between peer communities can be problematic as this type of service is delivered in different manners. This difference, or nuance, is reflected in the present peer communities. For instance, some transit agencies provide complementary paratransit limited to passengers unable to use fixed-route service and serving an area within $\frac{3}{4}$ of a mile of a fixed route. Other agencies provide demand response service to senior citizens and the general public and serve areas beyond the $\frac{3}{4}$ mile corridor around a fixed route. This nuance in service delivery is not reflected in data collection as all demand response data is comingled (not stratified by type of service delivered) and reported as a single service. Descriptions of each peer community's demand response criteria were included in the previous section. ICTC's IVT Access demand response service provides transportation for individuals who have physical or cognitive disabilities and cannot use the fixed-route bus system (Imperial Valley Transit). IVT Access provides service within $\frac{3}{4}$ of a mile from the Imperial Valley Transit fixed-route system.

The peer communities averaged approximately 36,000 annual demand response passenger trips during 2016. As shown in Figure 3-6, SCTC provided the fewest annual demand response trips with approximately 18,500, while PT provided the most annual demand response trips with almost 57,000. ICTC provided fewer annual demand response trips than the average of the peer communities with approximately 32,000 trips.

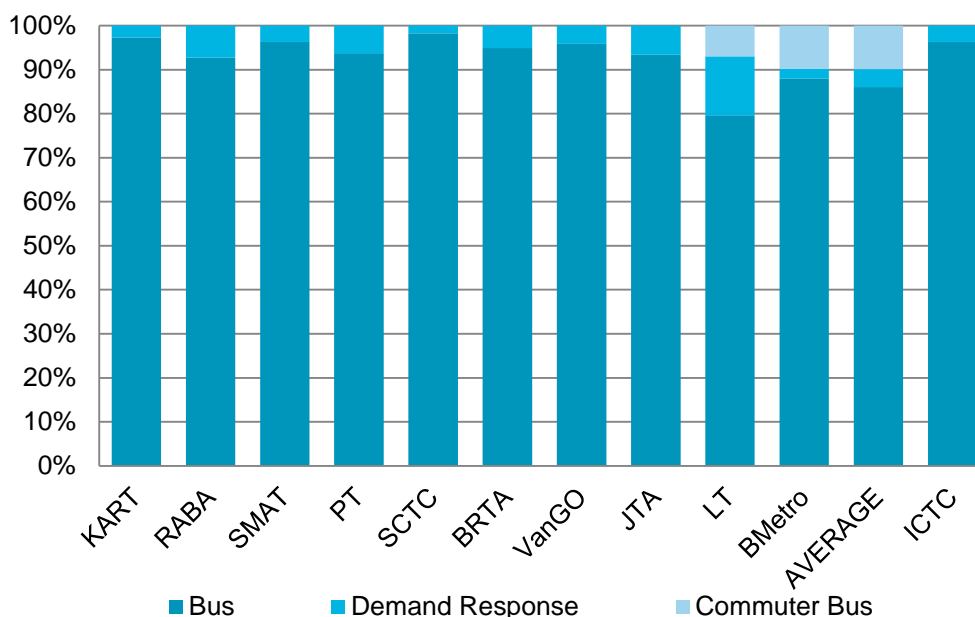
Figure 3-6. Demand Response Annual Passenger Trips



Modal Passenger Trips as a Percent of Total System Trips

This measure looks at passenger trips by mode as a proportion of all trips provided (fixed route, demand response, and commuter bus) per peer agency. As shown in Figure 3-7, the peer communities averaged 86 percent bus trips, 4 percent demand response trips, and 10 percent commuter bus trips. SCTC had the highest percentage of bus trips (98 percent) while LT had the lowest percentage of bus trips (80 percent). LT had the highest percentage of demand response trips (13 percent), while SCTC had the lowest percentage of demand response trips (2 percent). Only two agencies operate commuter bus service, LT and BMetro. ICTC had a higher percentage of bus trips (96 percent) than the average of the peer communities and a slightly lower percentage of demand response trips (3.7 percent) than the average of the peer communities. This likely reflects the nature of the community and the number of people using fixed-route service for access to employment.

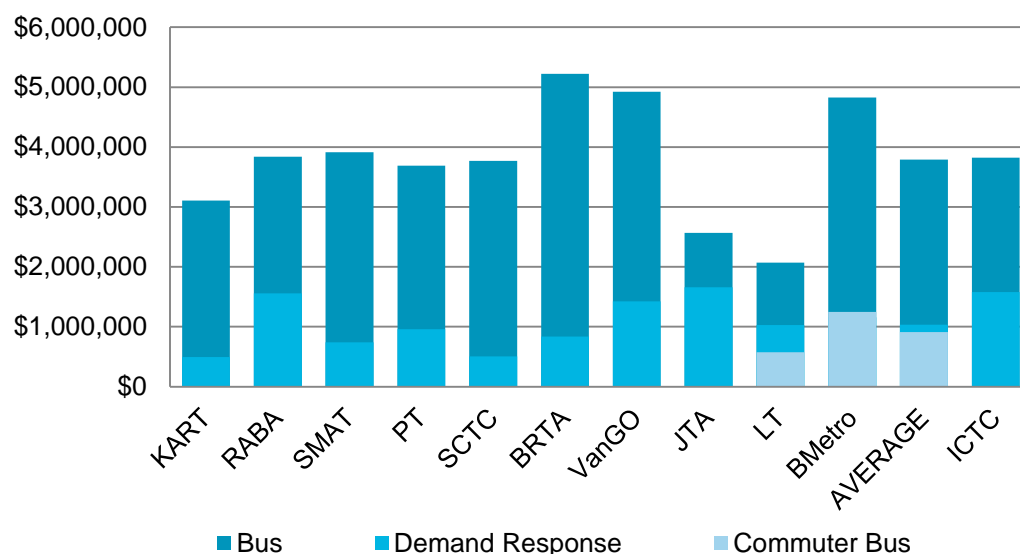
Figure 3-7. Modal Passenger Trips as Percentage of Total



Operating Cost

The peer communities averaged approximately \$3,800,000 in bus operating costs, \$1,000,000 in demand response operating costs, and \$910,000 in commuter bus operating costs during 2016, as shown in Figure 3-8. BRTA had the highest bus operating expenses with over \$5,200,000, while LT had the lowest bus operating expenses with approximately \$2,000,000. JTA had the highest demand response operating expenses with approximately \$1,700,000, while KART had the lowest demand response operating expenses with just under \$500,000. Only two agencies operate commuter bus service, LT with approximately \$600,000 in operating expenses and BMetro with over \$1,200,000 in operating expenses. ICTC had slightly higher bus operating expenses than the average of the peer communities with approximately \$3,825,000 and higher demand response operating expenses than the average of the peer communities with approximately \$1,600,000.

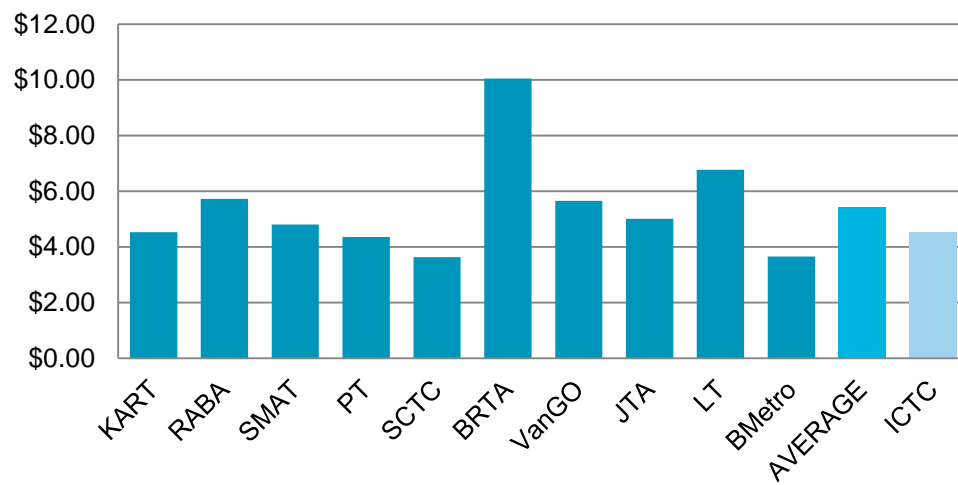
Figure 3-8. Operating Cost by Mode



Operating Cost per Passenger Trip

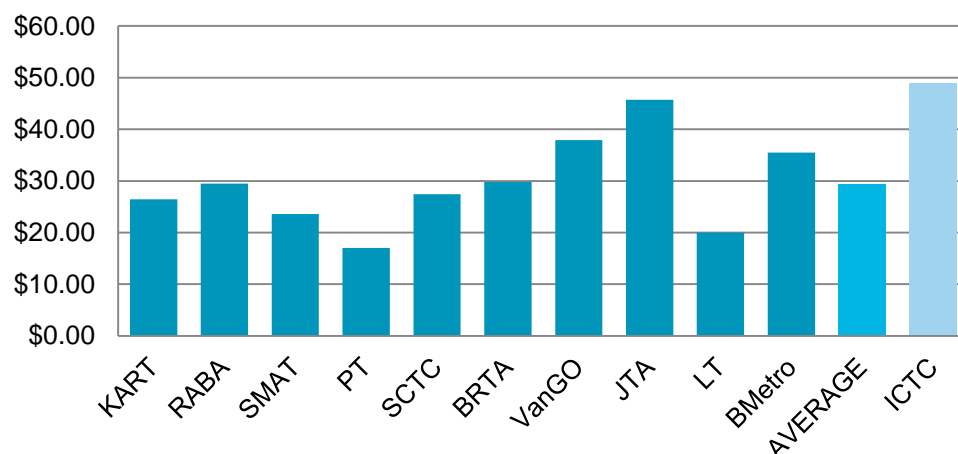
The average fixed route operating cost per passenger trip among peer communities was \$5.42, as shown in Figure 3-9. SCTC had the lowest fixed route operating cost per passenger trip with \$3.62, while BRTA had the highest fixed route operating cost per passenger trip with \$10.05. ICTC had a slightly lower fixed route operating cost per passenger trip than the average of the peer communities with \$4.54. ICTC provides a greater number of annual fixed-route passenger trips than the average of the peer communities, with only a slightly higher annual bus operating cost than the average of the peer communities, resulting in a slightly lower fixed route operating cost per passenger trip.

Figure 3-9. Fixed Route Operating Cost per Passenger Trip



The average demand response operating cost per passenger trip among peer communities was \$29.29, as shown in Figure 3-10. PT had the lowest demand response route operating cost per passenger trip with \$17.03, while JTA had the highest demand response route operating cost per passenger trip with \$45.70. ICTC had a higher demand response operating cost per passenger trip than the average of the peer communities with \$48.95 and was higher than any of the individual systems. ICTC provides fewer annual demand response passenger trips than the average of the peer communities, with a higher annual demand response operating cost than the average of the peer communities, resulting in a higher demand response operating cost per passenger trip.

Figure 3-10. Demand Response Operating Cost per Passenger Trip

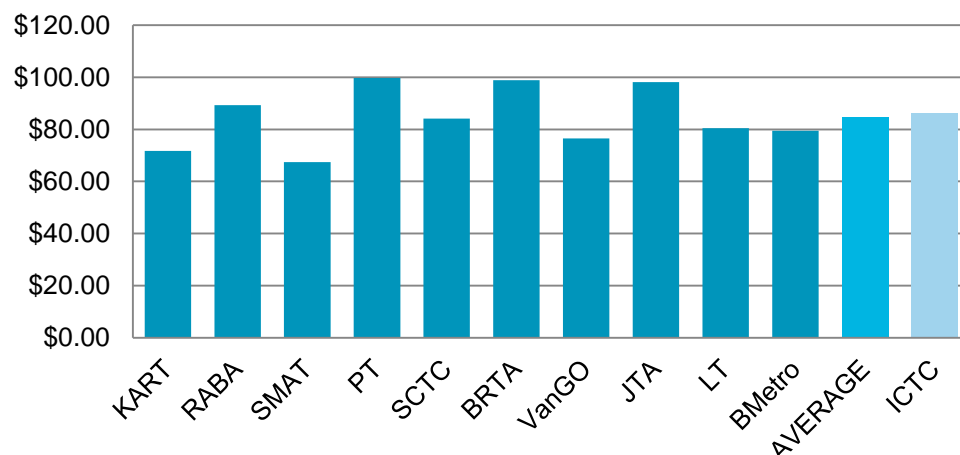


Operating Cost per Vehicle Revenue Hour

The average fixed route operating cost per vehicle revenue hour among peer communities was \$84.58, as shown in Figure 3-11. SMAT had the lowest fixed route operating cost per vehicle revenue hour with \$67.41, while PT had the highest fixed route operating cost per vehicle revenue hour with

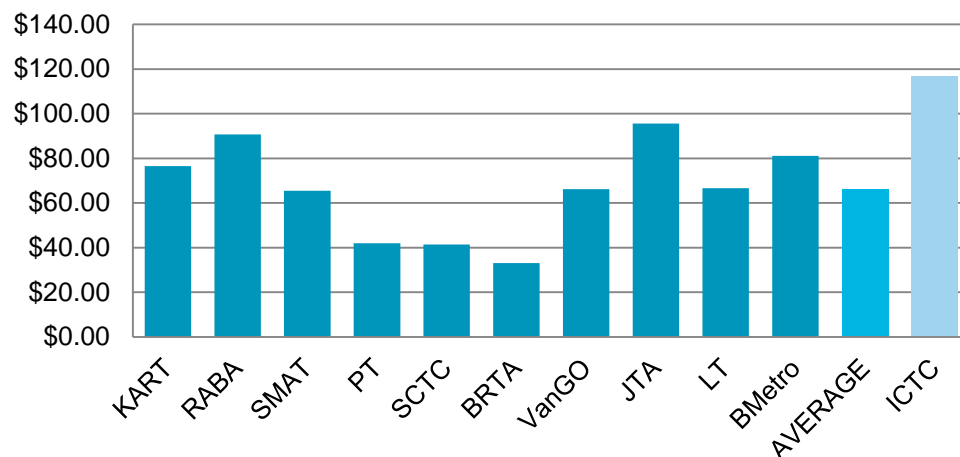
\$99.71. ICTC had a slightly higher fixed route operating cost per vehicle revenue hour than the average of the peer communities with \$86.06.

Figure 3-11. Fixed Route Operating Cost per Vehicle Revenue Hour



The average demand response operating cost per vehicle revenue hour among peer communities was \$65.82, as shown in Figure 3-12. BRTA had the lowest demand response route operating cost per vehicle revenue hour with \$33.00, while JTA had the highest demand response route operating cost per vehicle revenue hour with \$95.50. ICTC had a significantly higher demand response operating cost per vehicle revenue hour than the average of the peer communities with \$116.68. This is also higher than any of the individual peers and is the reason that the cost per passenger is the highest of the systems. ICTC appears to have a higher cost structure than the other peers; this is most likely related to the negotiated contract with the operator. Prior to negotiating a new contract, ICTC may want to contact other systems to have a better understanding of the costs to provide the demand-response service.

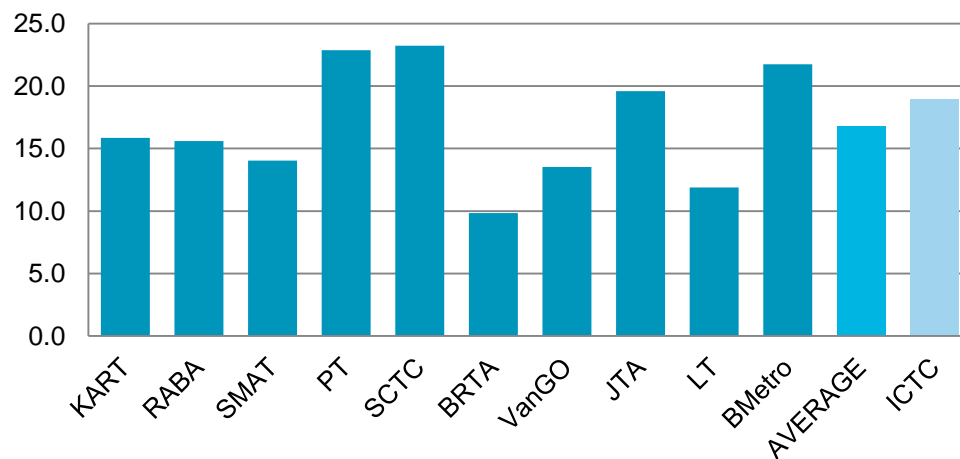
Figure 3-12. Demand Response Operating Cost per Vehicle Revenue Hour



Passenger Trips per Vehicle Revenue Hour

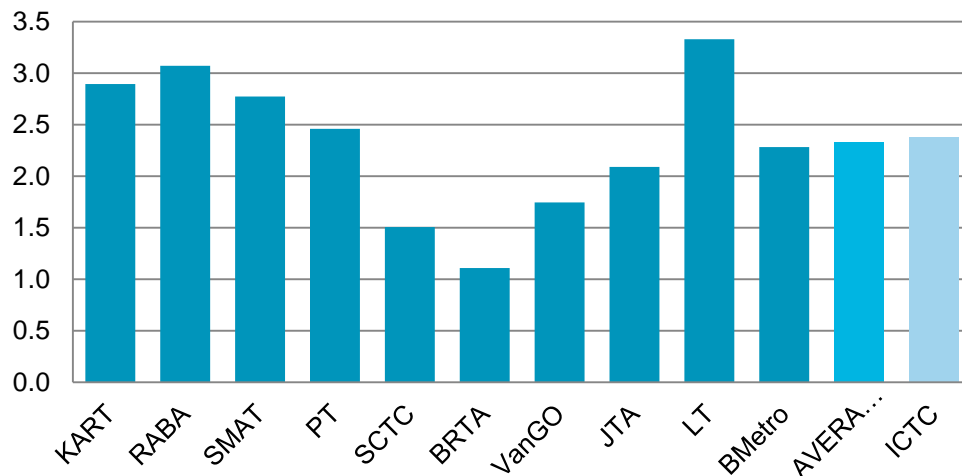
The average number of fixed route passenger trips per vehicle revenue hour among peer communities was 16.8, as shown in Figure 3-13. BRTA had the lowest number of fixed route passenger trips per vehicle revenue hour with 9.8, while SCTC had the highest number of fixed route passenger trips per vehicle revenue hour with 23.2. ICTC had a higher number of fixed route passenger trips per vehicle revenue hour than the average of the peer communities with 19.0. ICTC has a higher number of annual unlinked fixed route passenger trips than the average of the peer communities and a slightly lower number of fixed route vehicle revenue hours than the average of the peer communities, resulting in a slightly higher number of annual unlinked fixed route passenger trips per vehicle revenue hour than the average of the peer communities.

Figure 3-13. Fixed Route Passenger Trips per Vehicle Revenue Hour



The average number of demand response passenger trips per vehicle revenue hour among peer communities was 2.3, as shown in Figure 3-14. BRTA had the lowest number of demand response passenger trips per vehicle revenue hour with 1.1, while LT had the highest number of fixed route passenger trips per vehicle revenue hour with 3.3. ICTC had a slightly higher number of demand response passenger trips per vehicle revenue hour than the average of the peer communities with 2.4. The higher productivity on demand-response service may reflect the nature of the passengers served and efficiency of operations; ICTC demand responsive service includes general public riders in addition to ADA eligible passengers, while other systems have only ADA service. With general public demand-response service, passenger boarding times may be reduced and the overall productivity higher than those systems which serve only individuals with some type of disability.

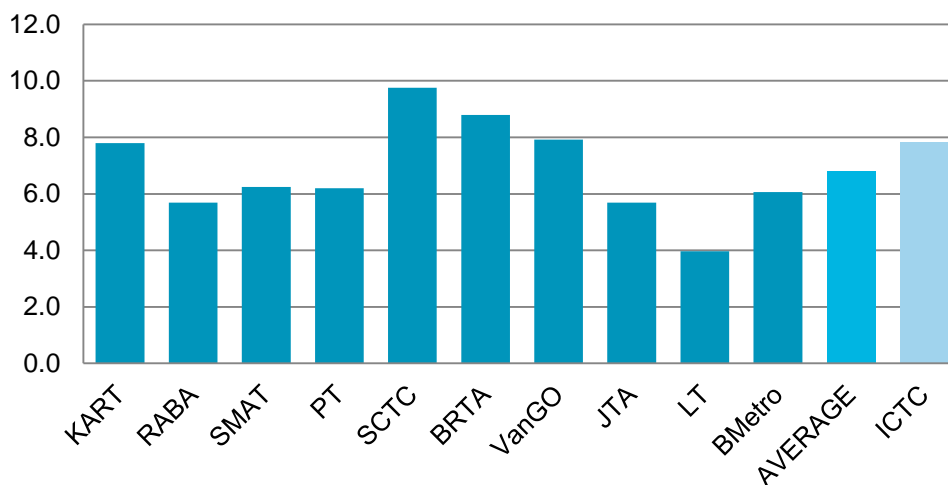
Figure 3-14. Demand Response Passenger Trips per Vehicle Revenue Hour



Passenger Trips per Capita

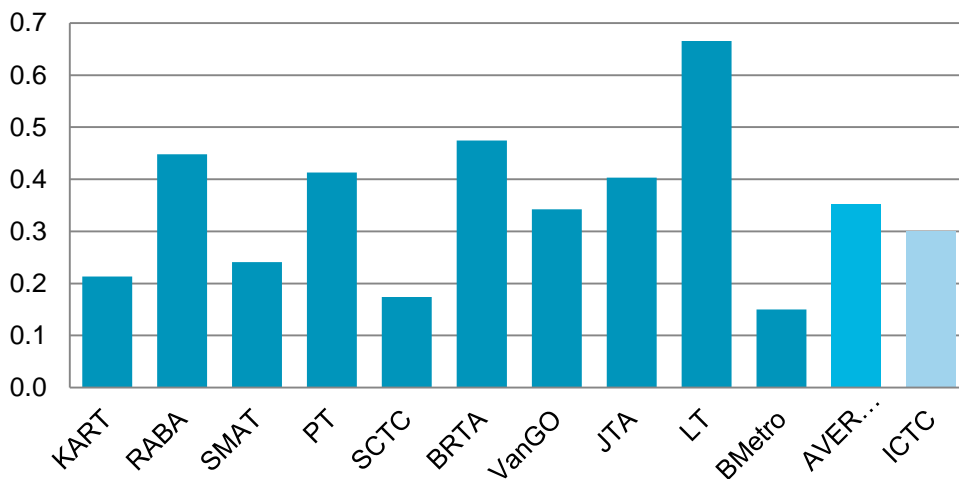
The average number of fixed route passenger trips per capita among peer communities was 6.8, as shown in Figure 3-15. LT had the lowest number of fixed route passenger trips per capita with 4.0, while SCTC had the highest number of fixed route passenger trips per capita with 9.8. ICTC had a slightly higher number of fixed route passenger trips per capita than the average of the peer communities with 7.8.

Figure 3-15. Fixed Route Passenger Trips per Capita



The average number of demand response passenger trips per capita among peer communities was 0.35, as shown in Figure 3-16. BMetro had the lowest number of demand response passenger trips per capita with 0.15, while LT had the highest number of demand response passenger trips per capita with 0.67. ICTC had a slightly lower number of demand response passenger trips per capita than the average of the peer communities with 0.3.

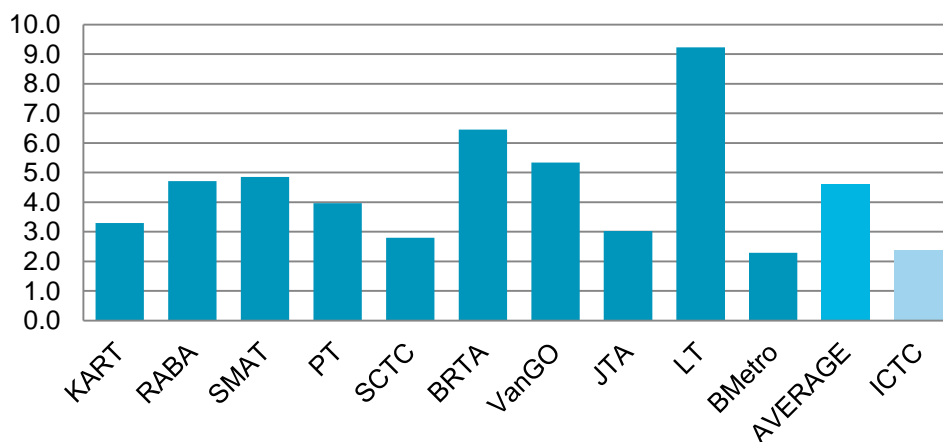
Figure 3-16. Demand Response Trips per Capita



Demand Response Trips per Ambulatory Difficulty Population

This measure looks at the number of demand response passenger trips per the Ambulatory Difficulty Population, which is defined by the U.S. Census as the population “having serious difficulty walking or climbing stairs.” The average number of demand response trips per ambulatory difficulty population among peer communities was 4.6, as shown in Figure 3-17. BMetro had the lowest number of demand response trips per ambulatory difficulty population with 2.3, while LT had the highest number of demand response trips per ambulatory difficulty population with 9.2. ICTC had a significantly lower number of demand response trips per ambulatory difficulty population than the average of the peer communities with 2.4 and was lower than all the systems except BMetro. The population segment with ambulatory difficulties in Imperial County use the demand-response service at a rate lower than that found in the peer communities; note that LT has a significantly higher rate than the other systems and increases the average. Without LT, ICTC would be close to the average of the peer systems. The lower rate in Imperial County may be due to higher use of fixed-route service, availability of transportation provided by friends and family members, or a lower overall rate of travel among this population.

Figure 3-17. Demand Response Trips per Ambulatory Difficulty Population



4. Recommendations

4.1 Introduction

This document describes the recommendations made for the ICTC-sponsored fixed route and demand response transit services based on the previous memoranda prepared for the Short Range Transit Plan, including an Existing Conditions and Service Evaluation memorandum, various Public Participation and Outreach events, as well as a significant Plan Development process which serves as the basis for the recommendations. The recommendations are divided into a “financially constrained” set of recommendations that are designed for implementation over the next five years, and a “financially unconstrained” set of recommendations, which would be implemented within the subsequent five years.

This memorandum provides an assessment of needs and opportunities, and initial concepts, followed by several recommendations for Imperial County’s transit system. Included are an in-depth description of the service recommendations with fixed route and demand response operating plans, followed by capital plan recommendations, a financial plan (focusing on operating cost and funding components), and an implementation plan covering the next five to ten years; this serves as the overarching structure for this memorandum.

4.2 Needs and Opportunities Statement

This section examines the results of the service evaluation, presented in the Service Evaluation, and determines some specific needs and opportunities for the ICTC-sponsored transit services in terms of how they may address the results of the service evaluation. These needs and opportunities are then used to help develop and shape the Short Range Transit Plan recommendations, which will have financially constrained recommendations to be implemented over a five-year period from fiscal year 2019-2020 to fiscal year 2023-2024, and financially unconstrained recommendations spanning from fiscal year 2024-2025 to fiscal year 2028-2029.

4.3 Summary of Key Points

Fixed Routes

This section provides a brief summary of key points from the Service Evaluation. These points provide the basis for the recommendations that follow. The recommendations in this memorandum will seek to address the following needs and opportunities:

- Routes 1 and 2 represent the core of the IV Transit system, serving the primary north-south corridor between Brawley and Calexico. These services carry over 75 percent of passengers using the IV Transit fixed route system.
- Route 21 IVC Express is the most productive (i.e., in terms of boardings per hour) of the IV Transit routes.
- Routes with lower ridership or productivity represent policy decisions to provide and promote access and mobility for other residents of the region.
- Circulator routes provide improved circulation within urban areas, allowing for the streamlining of other routes, and thus providing decreased headways and promoting an increased number of trips on the primary corridor routes through timed connections. These routes also reduce the demand for IVT RIDE service in certain urban areas.

- The Direct and IVC Express services perform extremely well in terms of productivity and cost effectiveness, particularly Routes 21 IVC Express (as was previously mentioned) and Route 31/32 Direct.
- Some neighborhoods that are not currently served by IV Transit fixed route service in Calexico have access to service by a private operator (i.e., Calexico Transit System).
- IV Transit provides comparable service to its peers both in terms of fixed route service and demand responsive services.
- The cost of providing fixed route transit service in Imperial County (e.g., IV Transit) is similar to those in its peer systems.
- Previously, ICTC did not own the IVT Transit fleet but has since purchased the majority of its fixed route fleet, although operator First Transit still owns several vehicles and directly leases its operations and maintenance facility to Imperial County. ICTC is currently considering constructing its own garage, maintenance, and administrative facility at a new location, which has yet to be determined.

Demand Response Services

Similar to the fixed routes, this section provides a brief summary of key points from the Service Evaluation for the demand response services, and these points provide the basis for the recommendations that follow. It is important to note that demand response services in Imperial County are provided in a significantly different manner than the fixed route services, with both an Americans with Disabilities Act-mandated complementary demand response service (i.e., IVT ACCESS), as well as IVT RIDE, which provides demand responsive service in various communities.

- Several previously separate municipal Dial-a-Ride services (i.e., West Shores Dial-a-Ride, Imperial/EI Centro Dial-a-Ride, Brawley Dial-a-Ride) have been combined and integrated into IVT RIDE, a demand response service for Seniors 55 years of age or over and passengers who are certified to ride IVT Access. In West Shores, the service is open to general public since it acts as a community lifeline service and there are no other public or private operators.
- Historically – and particularly prior to the recent efforts to pursue a more coordinated service delivery model – costs have continued to increase with regards to the provision of demand responsive services under the countywide Americans with Disabilities Act (ADA) complementary paratransit program (i.e., formerly known as AIM Transit and now known as IVT ACCESS). Recently, ICTC has implemented demand management and growth management strategies, so as to contain the increase in costs as much as practically possible. The strategies recently implemented by ICTC include functional certification (where the need for ADA eligibility is tested and verified by the paratransit operator, without sole reliance on the client's physician for the certification), as well as an interview process, which was implemented in January of 2017 and where each applicant is interviewed by ICTC staff.

4.4 Strengths and Opportunities

This section discusses opportunities for both the fixed route and demand response transit services in Imperial County, including improvements to the existing service frequencies, route and fare structures, including service frequency and span. It identifies unmet needs given the existing transit service and suggests opportunities for alternative service delivery methods. Possible service types are named, followed by some initial concept plans that will be further refined in the subsequent recommendations section.

Fixed Routes

IV Transit's route structure is generally strong, focusing on providing service to the primary corridor area (spanning Calexico, Heber, El Centro, Imperial, Imperial Valley College and Brawley), where a majority of trips are taken. Additional service is provided to outlying areas on a less frequent basis, supported by policy decisions regarding overall access and mobility within the county. Deviated "lifeline" service, operating one day per week, extends mobility to many rural communities throughout the county and seasonally strong service is provided to Imperial Valley College.

The fare structure is simple and logical with lower fares for local routes and higher fares for premium ("express" or "Direct") services, with seniors, disabled persons and students eligible for discounted fares (for students on IVC Express routes only). These discounts are available all day, and not solely during the peak periods (as required by the FTA for seniors/disabled people). One drawback to the current fare policy (and also highlighted in the previous SRTP), is the lack of free transfers between the circulators and main line routes, which may discourage some passengers from making trips that involve transferring between the different service types—this may ultimately be limiting ridership on the circulators, the main line routes, or both.

Some areas lacking fixed route service—namely West Shores—are instead served by a general public demand response service, or dial-a-ride known as IVT RIDE. In areas with fixed route service, IVT RIDE is only available to seniors 55 years of age or over and passengers who are certified to ride IVT ACCESS.

Since the previous SRTP, several transfer terminals have been constructed throughout Imperial County with new off-street facilities in El Centro, Brawley, and at IV College. Calexico is in the process of replacing its transit center with a newer facility further to the east, and Imperial is constructing its own transfer center as well.

With regard to frequency and span of service, IV Transit currently operates fixed route service seven days per week with a maximum frequency of every 80 minutes on some lines, and up to 35-40 minutes on certain trunk routes. Service on the weekends is less frequent than that operated on weekdays, and is more limited in span (i.e., the hours during which service is offered), although some services only operate during the week.

Generally, service in Imperial County covers the urban areas of the county as well as most major generators and employers. The continued improvement of circulator services in the cities will help in better serving the major generators in those locations. Information regarding the fixed routes is provided in bilingual format to the public via a website (www.ivtransit.com) and in booklet form (Rider's Guide). No system map is provided to the public and bus stop signage design varies somewhat depending on location.

Additionally, all of IV Transit's buses now have on-board cameras to help assure the safety and security of riders, and an automatic vehicle location (AVL) system is planned.

Demand Response Services

Imperial County's demand responsive services have evolved to meet varying rider needs and serve most of the county's populated areas. From the previous SRTP, a number of changes have been made, and demand response services have been gathered under 3 services coordinated at the county level: IVT ACCESS (serving ADA certified passengers along the same corridors as fixed routes services), IVT RIDE (acting as an intra-city dial-a-ride system for seniors and IVT ACCESS riders), and IVT MedTrans (acting as non-emergency transportation to medical facilities in San Diego County). The first and last of these had existed previously in slightly different forms, the most significant change overall being the consolidation of dial-a-ride services at the county level. Such consolidation was one of the recommendations of the previous SRTP.

4.5 Recommendations

This section outlines recommendations for ICTC-sponsored transit services in Imperial County, including the fixed routes (IV Transit) and demand response services (IVT ACCESS, IVT RIDE, and IVT MedTrans). Recommendations span a ten year period, with the first five years being considered “financially constrained” and the subsequent five years being considered “financially unconstrained”. Following the recommendations, a capital plan is outlined that would take into account the recommended operating changes and their impact on the number of vehicles required to provide service. A financial plan is also presented, summarizing operating and capital costs and revenues for the next decade. Finally, an implementation summary is presented showing each phase and its associated impacts.

The scope of the latest SRTP is significantly more modest than the previous version released in 2012, as ICTC and IV Transit continue to adjust to its new route nomenclature, changing demographics, economic growth, service consolidation, and changes in fleet structure. The scope of the proposals also reflects continued austerity in transit funding and the local, state, and national level, focusing on short-term, achievable interventions.

Generally, recommendations focus on increasing the span and frequency of service on existing routes, on weekends, weekdays, and holidays. The recommendations also suggest several new service concepts, including a new FAST route, Microtransit services, a new circulator, and a new fare zone and operating plan system for IVT RIDE.

4.5.1 Recommendations by Proposed Implementation Year

Following are the recommendations emanating from the SRTP process for IV Transit’s fixed route and demand responsive systems. Recommendations proposed for the five year financially constrained planning horizon (i.e., up to FY 2023/2024) are included in the following capital, financial and implementation plans, while the financially unconstrained proposals are included for the subsequent five years, illustrating the unfunded recommendations that necessarily fall into these latter phases. Some additional studies and general recommendations for future study are also presented in a more general sense, with further study recommended.

The various proposals for both the IV Transit fixed route system, as well as the proposed changes to the IVT RIDE system, are shown jointly in Figure 4-1. All of the various service proposals – along with the existing IV Transit system – are illustrated in Figure 4-2 on the following pages. Estimated order-of-magnitude ridership changes are included for service improvements for which a change in ridership is anticipated. All cost estimates are based on the cost per hour in provided during the unmet transit needs process, differentiated by fixed route values and demand response values, and scaled by implementation year.

The following recommendations will be broken-out by proposed implementation year in the following sections.

Fixed Route Concepts:

- Route 1: Expansion of Sunday service, operate on Federal Holidays
- Route 2: Expansion of Sunday service, increased frequency, and operation on Federal Holidays
- Route 21 IVC Express: Restructuring of service in the afternoon (due to the adjustment of the “college hour” at Imperial Valley College) as well as an additional trip during the early evening
- Route 31/32 DIRECT: Increase weekday service with 4 additional weekday round trips
- Route 41 FAST: Increase weekday service
- Route 51: Service on an additional weekday

- El Centro-Calexico FAST: New FAST service between Calexico and El Centro
- IV Campus Shuttle: New shuttle between SDSU's two campuses (in Calexico and Brawley) and IVC
- IVT Red Line: New circulator service for Imperial
- IVT Gold Line: Add weekend service

Demand Response Concepts:

- IVT RIDE: Implement service in Heber
- IVT RIDE: Implement two-zone fare system (North and South service zones)
- Calexico "Microtransit" service (including East Port-of-Entry)

Figure 4-1. Service Modification Proposals

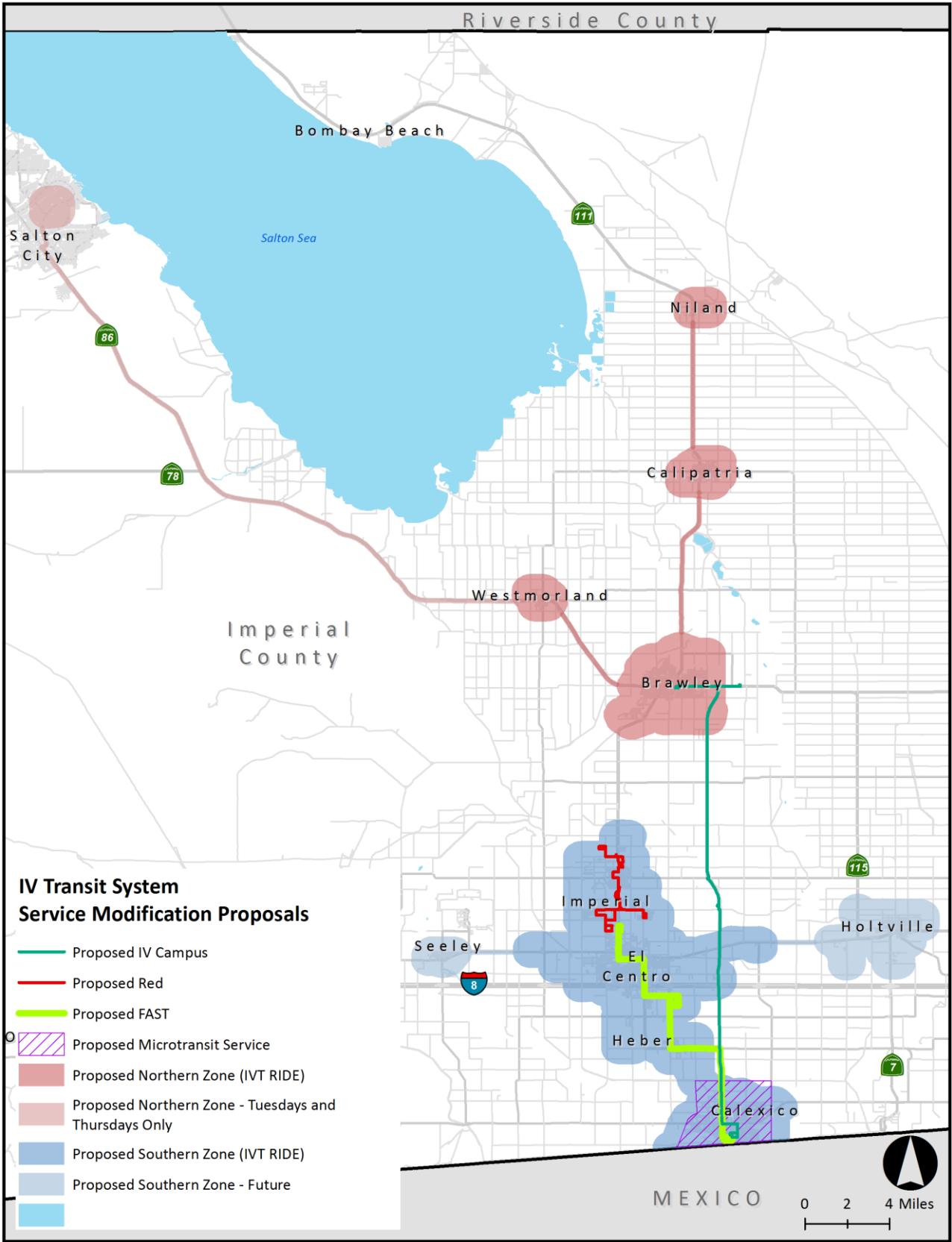
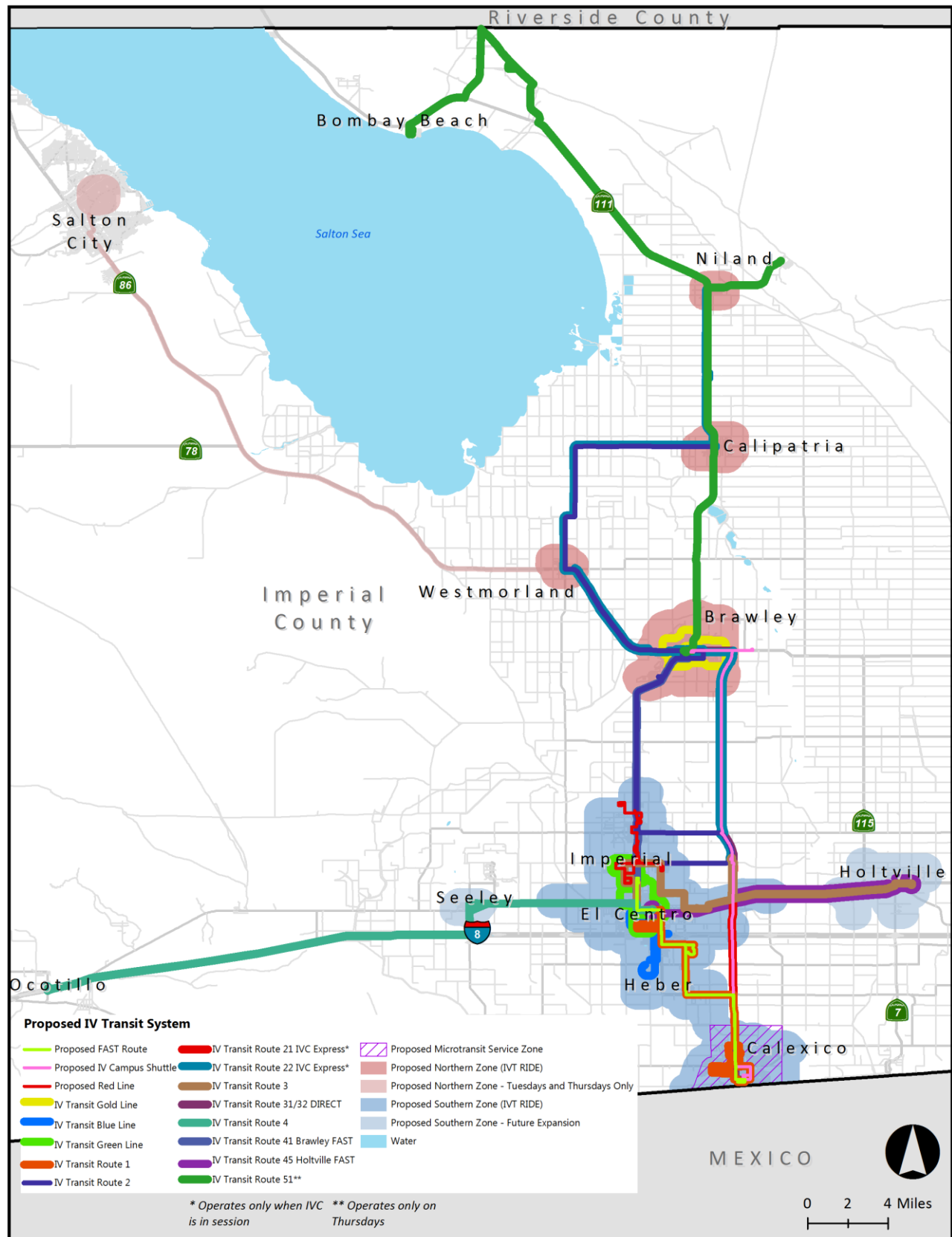


Figure 4-2. Proposed IV Transit System with Proposals



4.5.1.1 Year One – FY 2019/2020 (Financially Constrained)

- Estimated Cost of Improvements in Year One (annual): \$163,839
- Estimated Additional Revenue Hours in Year One (annual): 2,276

Service Expansions: Route 21 IVC Express and Route 51

- Fixed Route Service
- Estimated Cost of Improvement (annual): \$30,627
- Estimated Change in Revenue Hours (annual): 404

Route 21 IVC Express

For Route 21 IVC Express, the restructuring of service in the afternoon (due to the adjustment of the “college hour” at Imperial Valley College), as well as an additional round trip during the early evening (i.e., after 5:30PM) between the Imperial Valley College (IVC) and Calexico, is proposed. These adjustments will help alleviate some crowding on Route 21 IVC Express and were initially developed as part of the Unmet Transit Needs process.

Route 51

For Route 51, the provision of service on one additional weekday between Brawley and Calipatria, Niland and Bombay Beach is proposed. This service was initially discussed as part of the Unmet Transit Needs process.

New Service: IVT RIDE in Heber

- Demand Response Service
- Estimated Cost of Improvement (annual): \$133,212
- Estimated Change in Revenue Hours (annual): 1,872

IVT RIDE in Heber

It is proposed that the IVT RIDE service also be provided in Heber. Service would be operated on three weekdays.

Table 4-1 below shows the revenue hours and cost of the proposed services.

Table 4-1. Proposed Service Expansions – Year 1

Route	Weekday Hours	Saturday Hours	Sunday Hours	Weekly Hours	Year One Revenue Hours	Year One Cost
21 IVC Express*: additional trip	1	0	0	5	170	\$12,888
51: service on an additional weekday	4.5	0	0	5	234	\$17,740
IVT RIDE in Heber	12	0	0	36	1,872	\$133,212
Total	17.5	0	0	46	2,276	\$163,839

* Route 21 IVC Express assumes 34 weeks per year

4.5.1.2 Year Two – FY 2020/2021 (Financially Constrained)

- Estimated Cost of Improvements in Year Two (annual): \$846,610
- Estimated Additional Revenue Hours in Year Two (annual): 10,738

Service Expansions: Route 1, Route 2 and Route 41 Brawley FAST

- Fixed Route Service
- Estimated Cost of Improvements (annual): \$846,610
- Estimated Change in Revenue Hours (annual): 10,738

Route 1 El Centro-Calexico and Route 2 El Centro-Niland

It is proposed that both Routes 1 and 2 be modified so that on Sundays service is provided along the entire “primary service corridor” in Imperial County between Calexico, El Centro, Imperial, Brawley, Calipatria, Westmorland and Niland. Currently, Route 2 only operates as far north as Brawley on Sundays. In addition, the frequency of service would be enhanced so that the entire corridor between Niland and Calexico is provided with five round trips on Sundays. These adjustments were initially developed as part of the Unmet Transit Needs process.

Route 2 El Centro-Niland

It is proposed that the service frequency on Route 2 be increased to every 35 minutes on weekdays, but only between Brawley and El Centro. This will allow the most heavily utilized portion of Route 2 to have the same service frequency as Route 1 on weekdays, and will help provide additional service between Imperial Valley College (IVC) and Brawley throughout the year. This service was initially discussed as part of the Unmet Transit Needs process.

Route 41 Brawley FAST

In order to also help relieve some of the crowding on Route 2, and to afford passengers in Brawley the ability to travel directly to El Centro without needing to travel via Imperial Valley College, it is proposed that the Route 41 Brawley FAST be enhanced with the addition of two southbound Route 41 Brawley FAST trips on weekdays. These adjustments were initially developed as part of the Unmet Transit Needs process.

Table 4-2 below shows the revenue hours and cost of the proposed services.

Table 4-2. Proposed Service Expansions – Year 2

Route	Weekday Hours	Saturday Hours	Sunday Hours	Weekly Hours	Year Two Revenue Hours	Year Two Cost
1 and 2: Sunday service extension and frequency enhancement	0	0	12.3	12	640	\$50,428
2: weekday frequency enhancement between Brawley & El Centro	36	0	0	180	9,360	\$737,965
41 Brawley FAST: additional trips	2.84	0	0	14	738	\$58,217
Total	38.84	0	12.3	207	10,738	\$846,610

4.5.1.3 Year Six – FY 2024/2025 (Financially Unconstrained)

- Estimated Cost of Improvements in Year Six (annual): \$1,750,401
- Estimated Additional Revenue Hours in Year Six (annual): 24,925

New Two-Zone Intercity IVT RIDE System on Weekdays

- Demand Response Service
- Estimated Additional Cost of Improvement (annual): \$1,750,401
- Estimated Additional Revenue Hours (annual): 24,925

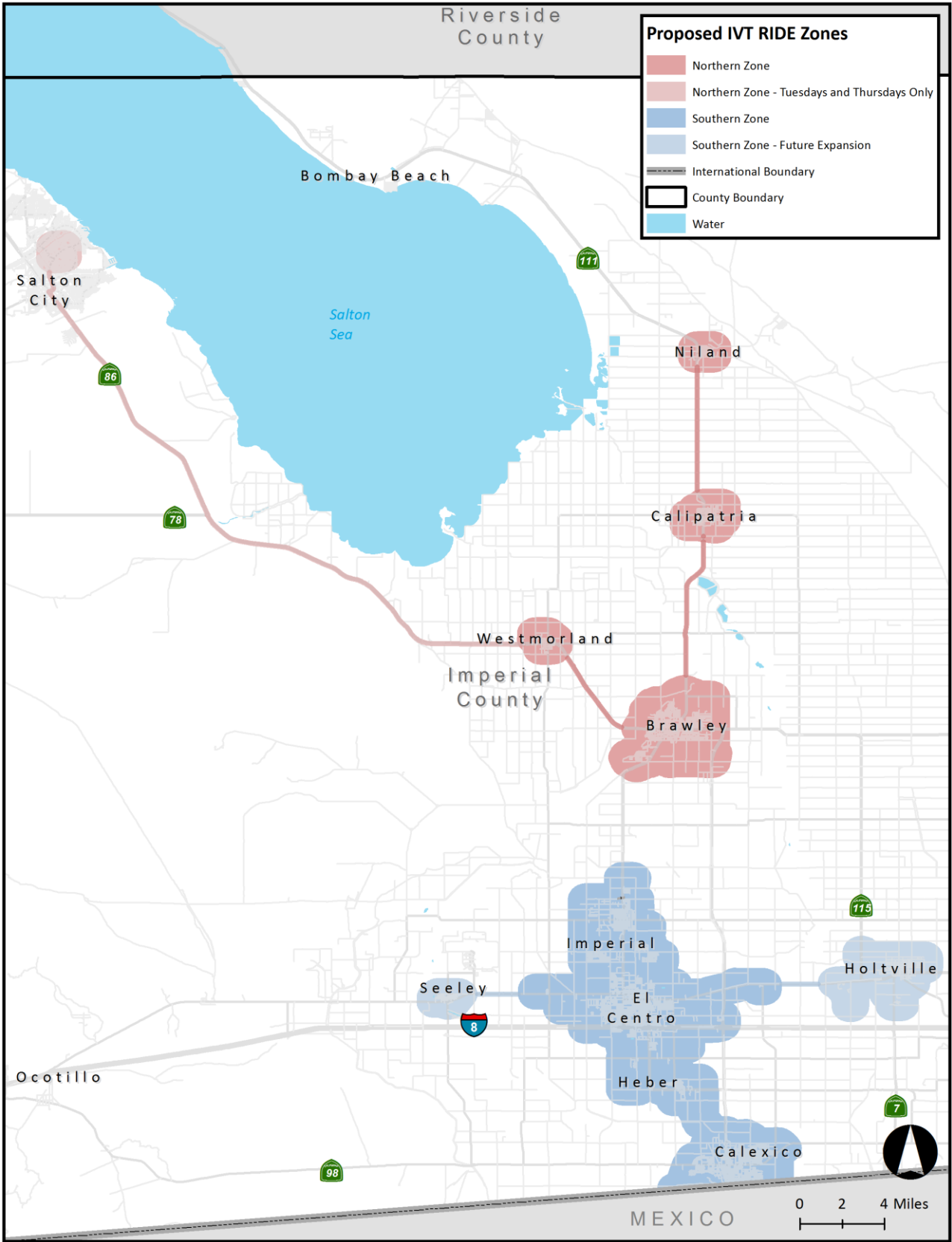
The IVT RIDE service would be restructured to provide intercity IVT RIDE service on weekdays using a two zone system. There would be a Northern Zone that serves Niland, Calipatria, Westmorland, West Shores & Brawley (with the west side of the Salton Sea only being served on Tuesdays and Thursdays) and a Southern Zone that serves Imperial, El Centro, Heber & Calexico, with Seeley and Holtville potentially being served in a future phase. This service was initially discussed as part of the Unmet Transit Needs process.

Table 4-3 below shows the revenue hours and cost of the proposed service, and the proposed IVT RIDE service zones are shown in Figure 4-3.

Table 4-3. Proposed Service Expansions – Year 6

Route	Weekday Hours	Saturday Hours	Sunday Hours	Weekly Hours	Year Six Revenue Hours (Additional)	Year Six Cost (Additional)
New IVT RIDE two Zone Intercity Service on weekdays	180	0	0	900	24,925	\$1,750,401
Total	180	0	0	900	24,925	\$1,750,401

Figure 4-3. Proposed IVT RIDE Intercity Zone System



4.5.1.4 Year Seven – FY 2025/2026 (Financially Unconstrained)

- Estimated Cost of Improvements in Year Seven (annual): \$2,616,441
- Estimated Additional Revenue Hours in Year Seven (annual): 28,080

New FAST Route Between El Centro and Calexico

- Fixed Route Service
- Estimated Additional Cost of Improvement (annual): \$1,436,555
- Estimated Additional Revenue Hours (annual): 14,976

A new El Centro-Calexico FAST route would provide limited stop/express service and therefore a faster overall trip. Figure 4-5.

Table 4-4 below shows the estimated revenue hours and cost of the proposed service. Service would operate every 30 minutes on weekdays and hourly on Saturdays and Sundays. The service would make limited stops and connect the Calexico Transit Center with Imperial Valley Mall, the El Centro Transit Center and the Social Security Office on Imperial Avenue; while this overlaps portions of other IV Transit services, it would allow for a one-seat ride between these locations on a limited stop/express service. As with the other FAST services, this service would charge a “Fast Trip” fare.

The proposed new FAST service between Calexico and El Centro is shown in Figure 4-4.

New Service: Calexico Microtransit Zone

- Demand Response Service
- Estimated Cost of Improvement (annual): \$1,179,885
- Estimated Revenue Hours (annual): 13,104

The new “microtransit” service would provide curb-to-curb service on a demand response basis to the community in Calexico. Microtransit service may require passengers to walk a few blocks in order to be picked up or after their drop-off. Figure 4-5.

Table 4-4 below shows the revenue hours and cost of the proposed service, and the service zone is shown in Figure 4-5.

Table 4-4. Proposed Service Expansions – Year 7

Route	Weekday Hours	Saturday Hours	Sunday Hours	Weekly Hours	Year Seven Revenue Hours	Year Seven Cost
New FAST Route between Calexico and El Centro	48	24	24	288	14,976	\$1,436,555
New Calexico Microtransit Service	36	36	36	252	13,104	\$1,179,885
Total	84	60	60	540	28,080	\$2,616,441

Figure 4-4. Proposed New El Centro-Calexico FAST Route

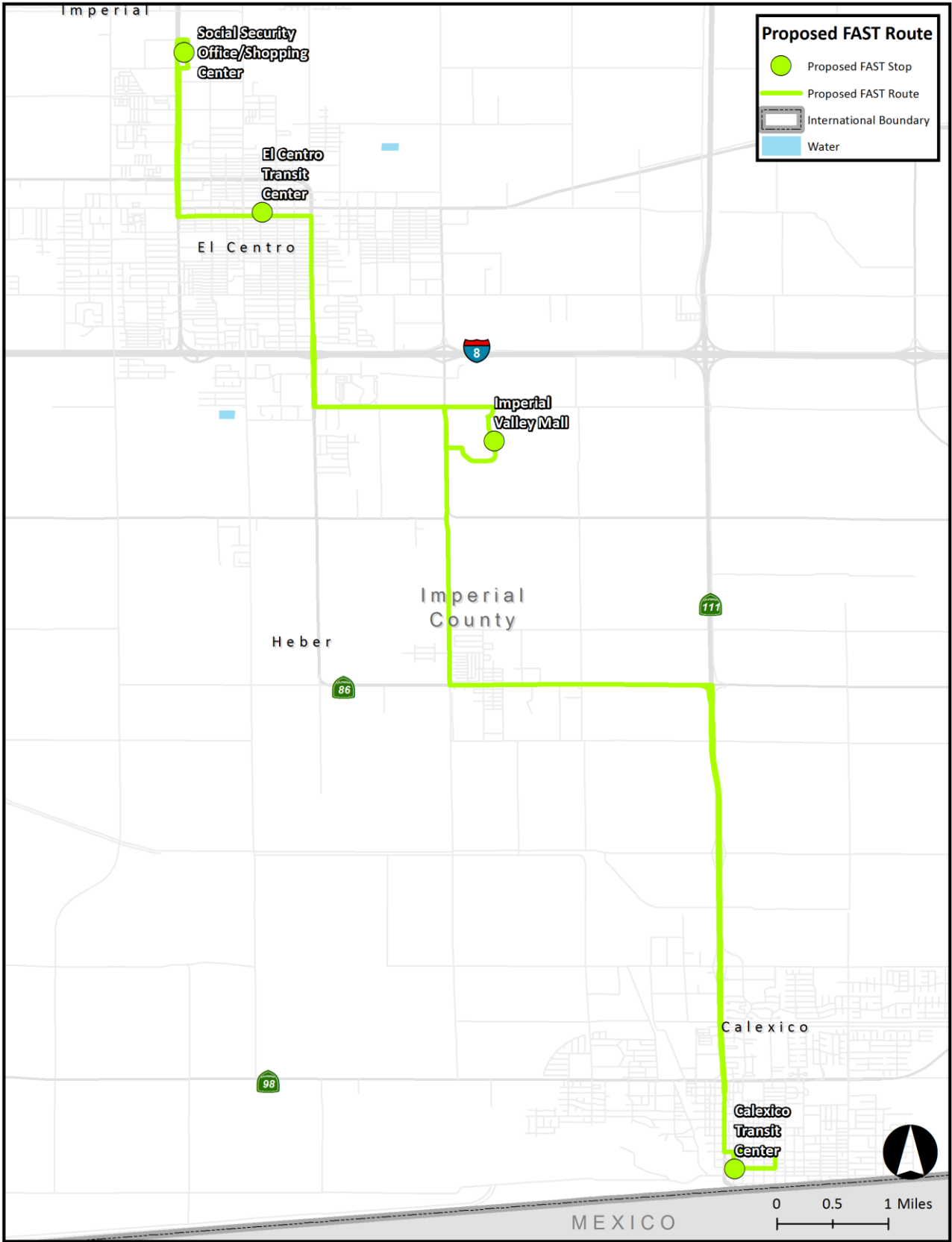
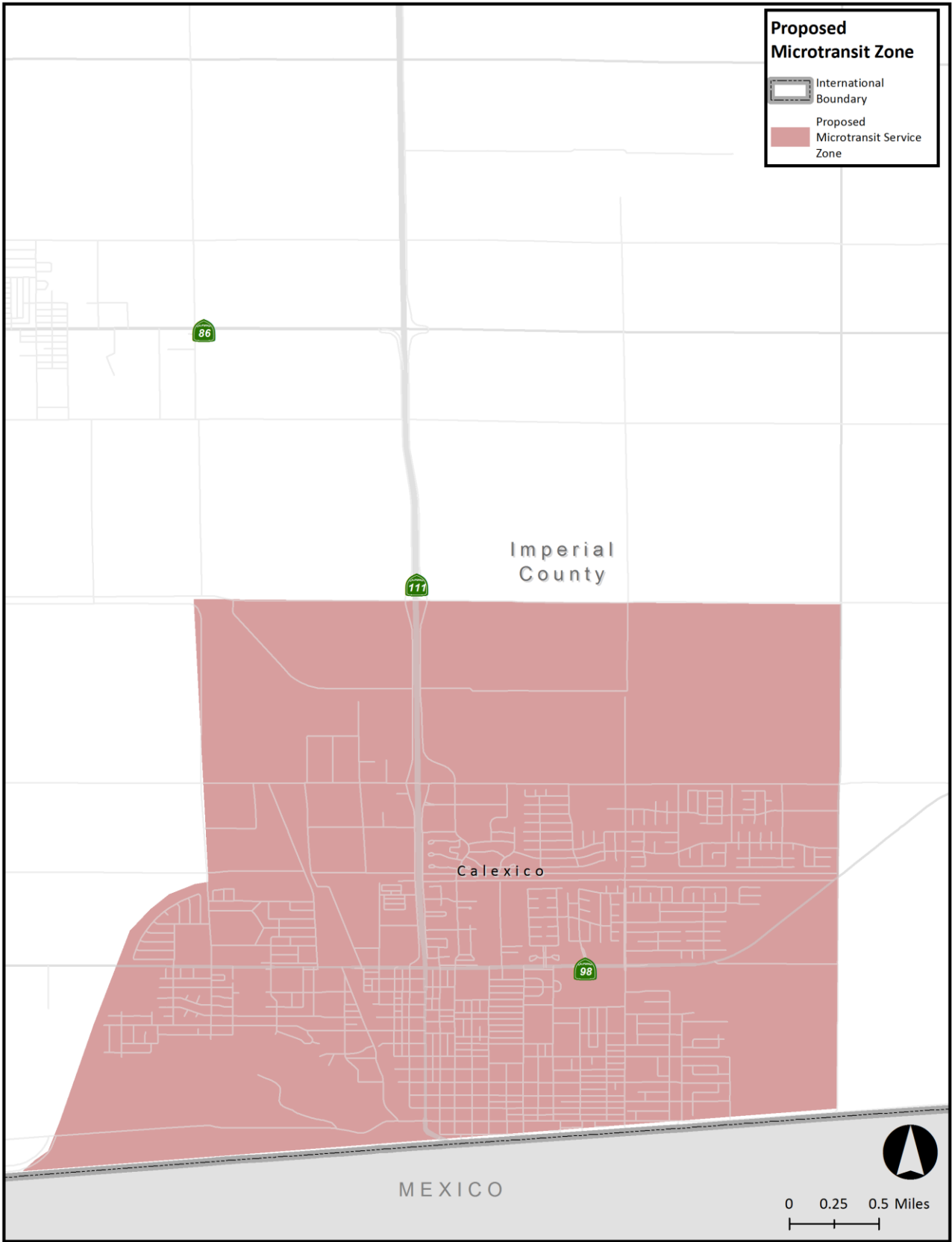


Figure 4-5. Proposed New Calexico Microtransit Service Zone



4.5.1.5 Year Eight – FY 2026/2027 (Financially Unconstrained)

- Estimated Cost of Improvements in Year Eight (annual): \$159,577
- Estimated Additional Revenue Hours in Year Eight (annual): 1,602

Service Expansions: Route 1, Route 2 and Route 31/32 DIRECT

- Fixed Route Service
- Estimated Cost of Improvements (annual): \$156,206
- Estimated Change in Revenue Hours (annual): 1,566

Route 1 El Centro-Calexico and Route 2 El Centro-Niland

It is proposed that both Routes 1 and 2 be operated on three Federal holidays (i.e., Martin Luther King Day, Presidents' Day and Veterans' Day) on a limited schedule; Route 2 would operate along its entire length between El Centro, Brawley, Calipatria, Westmorland and Niland. Table 4-5 below shows the revenue hours and cost of the proposed service.

Route 31/32 DIRECT

In order to afford passengers the ability to travel between the two endpoints of the "primary service corridor" – Brawley and Calexico – without transferring in El Centro and with a reduced travel time, it is proposed that the Route 31/32 DIRECT increase its level of service to offer an additional four round trips every weekday. Table 4-5 below shows the revenue hours and cost of the proposed service.

Additional IVT ACCESS Service

- Demand Response Service
- Estimated Additional Cost of Improvement (annual): \$3,371
- Estimated Additional Revenue Hours (annual): 36

In order to meet the mandates of the Americans with Disabilities Act (ADA), the IVT ACCESS complementary demand-responsive service will be operated on the same three Federal holidays that Routes 1 and 2 will operate on (i.e., Martin Luther King Day, Presidents' Day and Veterans' Day). IVT ACCESS service would operate in the service areas of Routes 1 and 2. Table 4-5 below shows the revenue hours and cost of the proposed service.

Table 4-5. Proposed Service Expansions – Year 8

Route	Weekday Hours	Saturday Hours	Sunday Hours	Weekly Hours	Year Eight Revenue Hours	Year Eight Cost
1: service on 3 holidays	0	0	24	24	72	\$7,183
2: service on 3 holidays	0	0	36	36	108	\$10,774
31/32 Direct: additional service	5.33	0	0	27	1,386	\$138,249
Additional IVT ACCESS service	0	0	12	12	36	\$3,371
Total	5.33	0	72	99	1,602	\$159,577

4.5.1.6 Year Nine – FY 2027/2028 (Financially Unconstrained)

- Estimated Cost of Improvements in Year Nine (annual): \$1,086,802
- Estimated Additional Revenue Hours in Year Nine (annual): 10,743

New IV Campus Shuttle Service

- Fixed Route Service
- Estimated Cost of Improvements (annual): \$661,414
- Estimated Change in Revenue Hours (annual): 6,375

Operate a new “IV Campus Shuttle” service between San Diego State University (SDSU) Calexico, Imperial Valley College (IVC) and SDSU Brawley, which might also be used demonstrate the use of electric vehicles. The new shuttle would also serve the Brawley Transit Center and operate approximately every 30 minutes on weekdays during the academic year. Table 4-6 below shows the revenue hours and cost of the proposed route; the alignment of the proposed service is shown in Figure 4-6.

Expansion of Calexico Microtransit Service to East Port of Entry

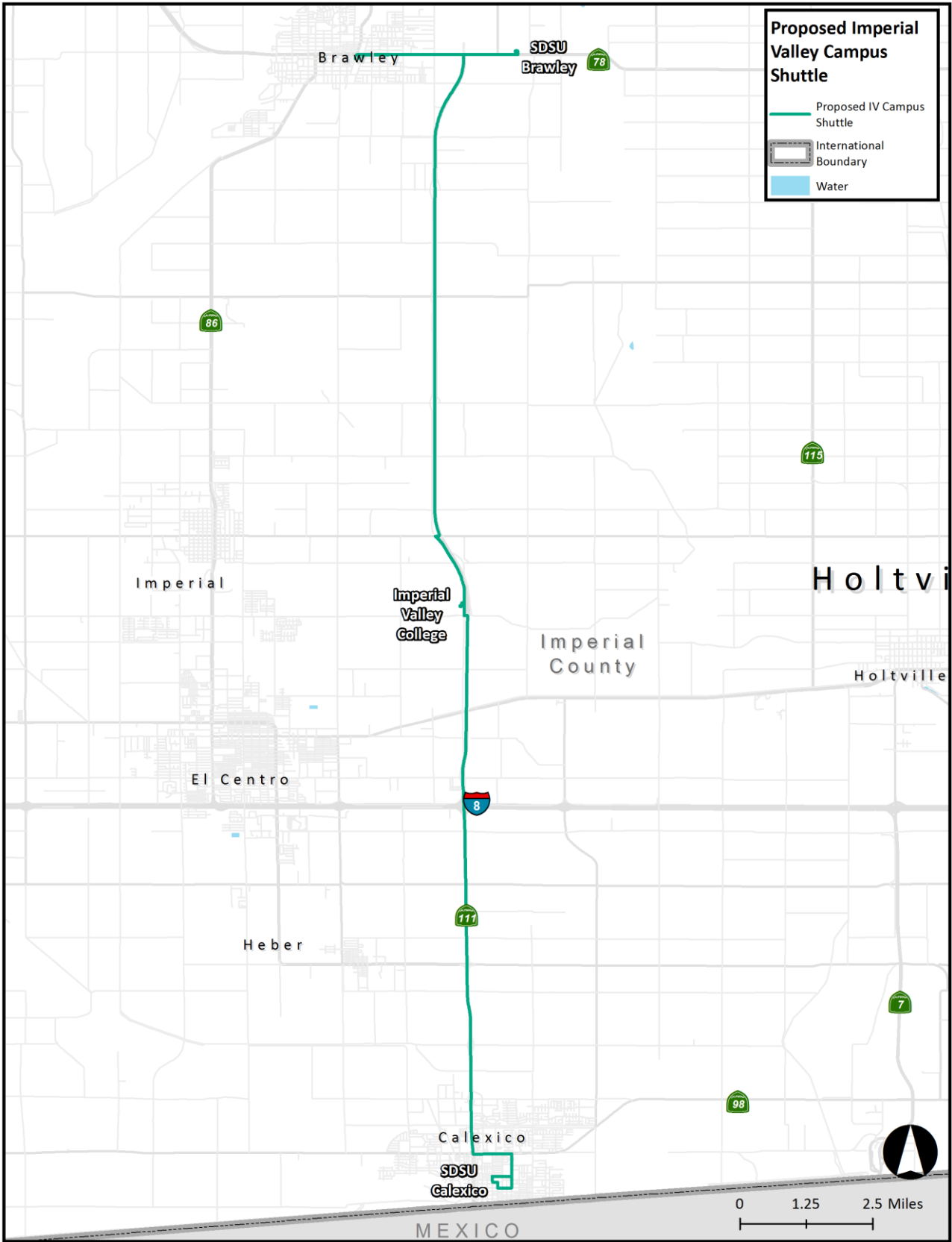
- Demand Response Service
- Estimated Additional Cost of Improvement (annual): \$425,388
- Estimated Additional Revenue Hours (annual): 4,368

Extend the “Microtransit” Service Zone in Calexico to include the East Port of Entry. Table 4-6 below shows the revenue hours and cost of the proposed service.

Table 4-6. Proposed Service Expansions – Year 9

Route	Weekday Hours	Saturday Hours	Sunday Hours	Weekly Hours	Year Nine Revenue Hours	Year Nine Cost
New IV Campus Shuttle service	37.5	0	0	188	6,375	\$661,414
Expansion of Calexico Microtransit Service to East Port of Entry	12	12	12	84	4,368	\$425,388
Total	49.5	12	12	272	10,743	\$1,086,802

Figure 4-6. Proposed New IV Campus Shuttle Service



4.5.1.7 Year Ten – FY 2028/2029 (Financially Unconstrained)

- Estimated Cost of Improvements in Year Ten (annual): \$1,735,323
- Estimated Additional Revenue Hours in Year Ten (annual): 16,848

Service Expansion: IVT Gold Line

- Fixed Route Service
- Estimated Cost of Improvements (annual): \$134,661
- Estimated Change in Revenue Hours (annual): 1,248

Add weekend service for the IVT Gold Line (Brawley Circulator Shuttle). Table 4-7 below shows the revenue hours and cost of the proposed service.

New IVT Red Line

- Fixed Route Service
- Estimated Cost of Improvements (annual): \$336,652
- Estimated Change in Revenue Hours (annual): 3,120

Implement the IVT Red Line (Imperial Circulator Shuttle) to provide local hourly service on weekdays within the community of Imperial. Table 4-7 below shows the revenue hours and cost of the proposed service; and the alignment of the proposed service is shown in Figure 4-7.

Expansion of Two-Zone Intercity IVT RIDE System on Weekends

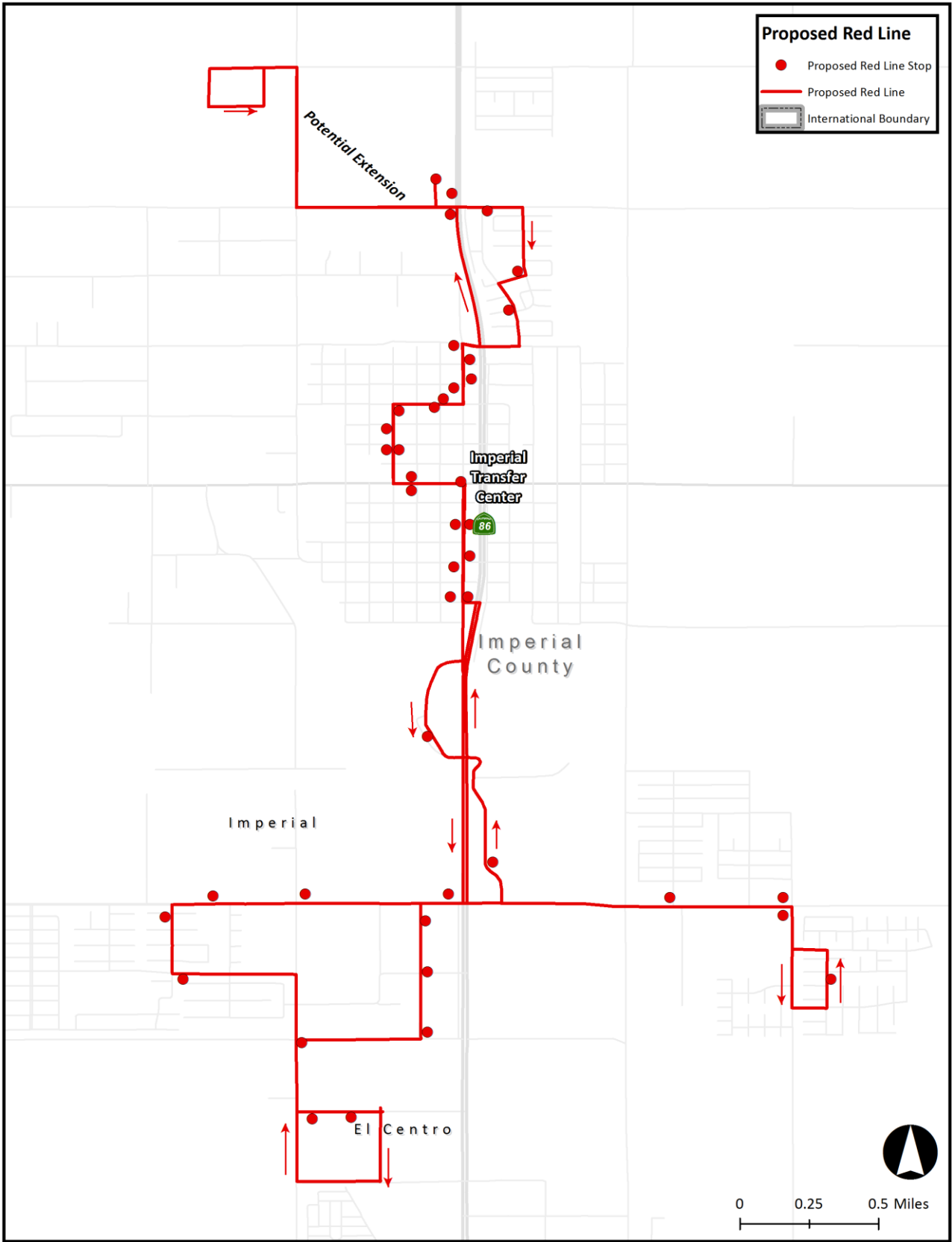
- Demand Response Service
- Estimated Additional Cost of Improvement (annual): \$1,264,010
- Estimated Additional Revenue Hours (annual): 12,480

Extend the new IVT RIDE two-zone intercity system so that it operates on weekends. This service was initially discussed as part of the Unmet Transit Needs process. Table 4-7 below shows the revenue hours and cost of the proposed service.

Table 4-7. Proposed Service Expansions – Year 10

Route	Weekday Hours	Saturday Hours	Sunday Hours	Weekly Hours	Year Ten Revenue Hours	Year Ten Cost
IVT Gold Line: implement weekend service	0	12	12	24	1,248	\$134,661
IVT Red Line: implement new route	12	0	0	60	3,120	\$336,652
New IVT RIDE two Zone Intercity Service on weekdays	0	120	120	240	12,480	\$1,264,010
Total	12	132	132	324	16,848	\$1,735,323

Figure 4-7. Proposed New IVT Red Line (Imperial Circulator Shuttle)



4.5.1.8 Other Recommendations and Pending Projects

There are other recommendations – as well as projects already underway or “pending” – that are part of the Short Range Transit Plan for the Imperial County Transportation Commission which do not fall into a specific plan year. These projects are as follows:

Brawley Bus Stop Relocation

In Brawley, the bus stop located north of Main Street at E Street and Rio Vista Avenue – which was the old transfer location prior to the opening of the new Brawley Transit Center on the Plaza – is being relocated to the intersection of Main Street and Rio Vista Avenue. This will allow for the various bus routes operating through Brawley to remain on Main Street (thus improving safety and operating speed), while still allowing for access to all of the locations served by the existing bus stop.

Regional Bus Stop Inventory

The Regional Bus Stop Inventory is currently in the process of being completed. This inventory may result in the relocation of some bus stops in the IV Transit service area; however, any route alignment changes would be specifically mentioned in this S RTP.

Use of intelligent transportation measures (i.e., Global Positioning Systems/Automatic Vehicle Locator systems)

The ICTC is already in the process of outfitting vehicles with automatic vehicle locator (AVL) systems in order to enhance its ability to collect ridership and running time data. Such systems will allow for the implementation of real-time bus travel time information, which passengers could access via telephone, the Internet, or smart phone applications.

Improved Public Information

The ICTC should consider a review of the public information offerings currently available. For example, the lack of a system map in the Rider's Guide makes it more difficult for potential riders to determine if a trip they would like to complete is feasible. It should be noted that this public information overview could perhaps be included as part of a new Comprehensive Operational Analysis (COA) for ICTC's various transit services.

Review of Fare Structure and Pricing

As operating costs increase year-over-year, additional review of the fare structure and pricing may be desirable in order to maintain mandated farebox recovery ratios. In addition, the inability to allow for free transfers between certain IV Transit bus routes should also be examined, as should the potential for a new “U-Pass” system for Imperial Valley College and SDSU students that would allow them to have unlimited use of the IVT Transit system for a fixed fee paid by all students at these campuses.

It should be noted that this fare policy study could perhaps also be included as part of a new Comprehensive Operational Analysis (COA) for ICTC's various transit services.

4.5.1.9 Long-Term Transit Vision Concepts

The Imperial County Transit Vision is a long-range transit plan intended to guide future efforts at transit planning in the county over the following 20-year period. The following concepts are intended for consideration for inclusion in any future transit vision for the county.

Pursue Connections with SunLine

In the longer term, a connection with the SunLine transit system on the northern side of the Salton Sea – thus allowing for potential connections into Coachella and Palm Springs – should be examined. Connections with SunLine may be possible from either the West Shores area or from the Brawley

Beach area, thus allowing for travel to the SunLine service area from either the west or east sides of the Salton Sea.

Pursue Cross-Border Coordination with Mexicali

Construction of the planned Calexico Intermodal Transfer Terminal would present the opportunity for coordination with transit services provided in Mexico (both intercity services and local Mexicali services). This facility should be integrated into ICTC's transit network in order to provide more seamless cross-border transportation options.

4.5.2 IVT Access Recommendations

Recommendations for both the IV Transit fixed route system and the IVT RIDE system – as well as for the new microtransit service in Calexico – have already been described.

In this section, the necessary modifications to the IVT ACCESS (i.e., the ADA-mandated complementary demand response system), which were described in the Year Eight service proposals, are further described, as are the reasons for not recommending other changes to the IVT ACCESS system.

As was previously mentioned, ICTC has recently implemented demand management and growth management strategies, so as to contain the recent increase in ADA costs as much as practically possible. The strategies recently implemented by ICTC include functional certification (where the need for ADA eligibility is tested and verified by the paratransit operator, without sole reliance on the client's physician for the certification), as well as an interview process, which was implemented in January of 2017 and where each applicant is interviewed by ICTC staff.

4.5.2.1 Year 1 – FY 2019/2020

- **Route 21 IVC Express:** Additional run in the early evening should not impact ADA service or demand. Areas served by the express route have service from other fixed routes and should have existing ADA service during the time of the additional run.
- **Route 51:** Area and times overlap Route 2 and should have ADA coverage with no need for additional ADA coverage or increased demand.
- **IVT RIDE to Heber:** IVT RIDE is a mode of transit which already provides demand responsive service to ADA-eligible populations.

4.5.2.2 Year 2 – FY 2020/2021

- **Routes 1 and 2:** The increased frequency and service expansion on Sunday will likely have no impact on the aggregate level of ADA service or demand than is currently provided.
- **Route 2:** The increased frequency on weekdays between El Centro and Brawley would also not impact ADA service, as this area is already being provided with IVT ACCESS service.
- **Route 41 Brawley FAST:** Should not impact ADA service.

4.5.2.3 Year 6 – FY 2024/2025

- **Proposed intercity IVT RIDE weekday service zones:** This new service pattern will likely have no immediate significant impact on the IVT ACCESS services.

However, the redesign of the IVT RIDE service has the potential to reduce IVT ACCESS costs in the medium-to-long terms. ADA paratransit trips within the zones could be provided by either IVT ACCESS or IVT RIDE vehicles. This has the potential to increase productivity

of IVT ACCESS and potentially could reduce the number of IVT ACCESS vehicles required to cover the zone. Trips between the zones would still require IVT ACCESS service, but many trips within each zone could be served by IVT RIDE. The potential reduction could lead to two fewer IVT ACCESS vehicles in service. A more detailed analysis of the IVT ACCESS origin-destination patterns could be used to refine the estimate and develop a better assessment of the potential for improved productivity on IVT ACCESS.

4.5.2.4 Year 7 – FY 2025/2026

- **New El Centro-Calexico FAST Route:** This new service should have no impact on ADA service as the area served is already covered by IVT ACCESS.
- **Calexico Microtransit Service:** The microtransit service should not increase any need for IVT ACCESS service within the service area. If an accessible vehicle is used, ADA paratransit trips within the microtransit zone could be served by the microtransit service, which could reduce the demand for IVT ACCESS service. However, no reduction is estimated immediately as the ability to place ADA paratransit passengers on microtransit will depend on available capacity. In addition, demand on the new microtransit should be monitored to determine if sufficient capacity is available to schedule ADA paratransit IVT ACCESS rides on the microtransit vehicles. If capacity is available, IVT ACCESS rides should be scheduled for microtransit with a potential reduction in the cost of IVT ACCESS service.

4.5.2.5 Year 8 – FY 2026/2027

- **Routes 1 and 2:** Will require IVT ACCESS service on the three additional Federal holidays. Estimated demand is likely comparable to weekend demand of less than two passengers/day. This should be served adequately by one vehicle operating for an approximate 12 hour span of service.
- **Route 31/32 DIRECT:** Service frequency increase should not impact ADA service.

4.5.2.6 Year 9 – FY 2027/2028

- **Calexico Microtransit to East Port of Entry:** This is expected to have no impact on ADA service. Any requests for complementary paratransit service in this area should be accommodated by the microtransit vehicle with no added cost for IVT ACCESS service. IVT ACCESS passengers who may need to travel outside of this service area could be transferred to or from an IVT ACCESS vehicle to complete the trip.
- **IV Campus Shuttle:** This proposed route is within areas currently served by IVT ACCESS and will have little to no impact on paratransit requirements.

4.5.2.7 Year 10 – FY 2028/2029

- **IVT Red Line:** The new IVT Red Line should have no impact on paratransit requirements as the area is already served by other routes and covered by IVT ACCESS.
- **IVT Gold Line:** New service on the weekend has the potential for a small increase in demand for IVT ACCESS service as the ADA complementary paratransit service around Brawley would be expanded slightly to more outlying areas. This increase is expected to be small and would likely be offset by the weekend IVT RIDE service – for the purposes of this SRTP, no additional IVT ACCESS service is anticipated.
- **IVT RIDE** intercity weekend service zones: The IVT RIDE zone weekend service could be used to accommodate any increase in demand for IVT ACCESS service resulting from

expansion of the complementary paratransit service area around Brawley. This also has the potential to offset potential increases for IVT ACCESS service in the medium-to-long term.

4.5.3 Demand Estimates

As part of this Short Range Transit Plan (S RTP), general “high-level” order-of-magnitude estimates regarding demand for the newly proposed services were developed and are presented in this section.

However, for the purposes of this S RTP, these demand estimates are presented solely to afford a sense of the potential level of demand – in the operating and capital funding plans presented subsequently, the financial plan assumes solely that ridership will continue to support the current systemwide farebox recovery level.

4.5.3.1 Year 1 – FY 2019/2020

- **Route 21 IVC Express:** The proposed change adjusts the schedule and adds one trip per day. The added service could result in a small increase in ridership of about 800 passenger-trips per year based on current demand patterns on this route.
- **Route 51:** This route has relatively low productivity and an additional run could increase ridership, but only by a small number of about 200 passengers per year.
- **IVT RIDE to Heber:** This is limited service added only three days a week. The service is estimated to have only 1.7 passengers per hour with a total ridership of about 12 passengers per day or 2,000 passengers per year.

4.5.3.2 Year 2 – FY 2020/2021

- **Routes 1 and 2:** Increased Sunday frequency along the entire service corridor could result in a small increase in Sunday ridership. Transit Cooperative Research Report 95 “Traveler Response to Transportation System Changes Handbook, Third Edition: Chapter 9, Transit Scheduling and Frequency” provides estimates of changes in demand related to changes in level of service including frequency of service. For the increased frequency planned on this route an increase in demand of about eight percent is expected, or an increase in annual ridership of about 600 passenger-trips per year. Because the increased frequency is limited to Sunday service, the impact on total ridership is small.
- **Route 2:** Effectively doubling the weekday service on the primary portion of this route could lead to a significant increase in ridership. The effect on demand is expected to be an increase of about 20 percent in weekday ridership on this route, or perhaps about 22,000 passenger-trips per year.
- **Route 41 Brawley FAST:** Two additional round-trips on this route are a significant increase in the level of service. However, as the service is limited in span, the potential total increase in ridership is not large. Based on current use of this route, the additional service could be expected to result in an increase of about 2,600 passenger-trips per year.

As we move beyond the initial five year planning horizon, the estimates of demand become less certain. There are numerous factors which influence demand beyond the service that is provided such as community demographics, employment type and location, the national and local economies, and the price of fuel. The estimates for future years are based on current conditions and travel patterns combined with the planned service enhancements.

4.5.3.3 Year 6 – FY 2024/2025

- **IVT RIDE:** The proposed IVT RIDE system of 15 vehicles operating on weekdays has been estimated to operate at about two passengers per hour. It is assumed that scheduling will maximize use of vehicles and the number of vehicles in service will be scaled to match the level of demand throughout the day. Based on the assumption of a total of 15 vehicles operating an average of 9 hours a day, the projected demand for this service in the two zones could be about 67,000 annual passenger trips.

4.5.3.4 Year 7 – FY 2025/2026

- **New FAST Route Between El Centro and Calexico:** Estimating the demand for a new express route type of service is a challenge. Some riders will be attracted from the existing route because of the lower travel time, but passengers using stops on the local route not served by the new route cannot take advantage of the new service. In addition, many of the riders assumed in this demand estimate may be attracted from other services providing trips between El Centro and Calexico.

Some estimates would indicate an increase in demand by as much as 75 percent over the existing route. However, this estimate would appear to be an upper limit for the route between Calexico and El Centro. A more reasonable estimate might be an increase of 40 to 50 percent over the current ridership. With ridership on Route 1 of about 220,000 annual passenger-trips, the additional demand generated by the new FAST route in the same corridor could be 150,000 to 180,000 passenger-trips.

- **Calexico Microtransit:** Service productivity for Microtransit is closer to that of demand-response service than fixed-route service. This is a new and developing technology for which demand is difficult to predict because of the lack of good historical data and trends. Using productivity for IVT RIDE, the microtransit service in Calexico is expected to serve about 2.25 passengers per revenue-hour. With three vehicles in operation, this could be about 20,000 annual passenger-trips.

4.5.3.5 Year 8 – FY 2026/2027

- **Routes 1 and 2:** Added service on three Federal holidays has been analyzed for Routes 1 and 2. The increased demand for Federal holidays on these two routes is estimated to be about 3,700 passenger-trips. There will be some increased demand for IVT ACCESS, but it is expected to be low at less than 100 passenger-trips per year as a result of adding this service on Routes 1 and 2.
- **Route 31/31 DIRECT:** Increased frequency on this route could be expected to result in a 20 percent increase in demand or about 6,400 passenger-trips per year.

4.5.3.6 Year 9 – FY 2027/2028

- **Calexico Microtransit zone to East Port of Entry:** This is a relatively low demand area to be served by one vehicle. With one vehicle in operation, productivity is estimate to be about 1.75 passengers per revenue-hour and total demand is estimated could be about 4,500 annual passenger-trips.
- **IV Campus Shuttle:** A campus shuttle operating daily would serve locations of high transit trip generations. This route is expected to do better than average system productivity. The estimated demand for 10 hours of service a day could lead to about 50,000 annual passenger-trips.

4.5.3.7 Year 10 – FY 2028/2029

- **IVT Red Line:** This new circulator route could be expected to have demand of about 24,000 annual passenger-trips based on community characteristics and weekday service.
- **IVT Gold Line:** Adding weekend service on the Gold Line in Brawley could result in a small increase in demand. The total increase is expected to be less than 2,400 passenger-trips per year.
- **IVT RIDE weekend service:** Adding the weekend service for the two IVT RIDE zones could be expected to increase demand by less than 20,000 annual passenger-trips.

4.5.4 Capital Plan

The following is the ten-year plan for ICTC's additional capital needs given the implementation of the Short Range Transit Plan (SRTP). Due to available funding, the SRTP recommendations are split into financially/cost constrained plans that can be implemented in the first five years and an financially unconstrained plan that would be implemented beyond the first five years. Included in the capital plan are replacement and expansion buses, planning and engineering for a new garage, LTF Article 3 projects, and the fleet capital reserve. A description of each element is presented below, with capital costs presented in the financial plan section.

4.5.4.1 Buses

The capital plan includes the procurement schedule for all buses that need to be purchased either as replacement buses or expansion buses. This includes all of the ICTC-funded transit programs. The ten year replacement schedule includes the five-year cost constrained lifespan of the SRTP as well as the unconstrained 10 year plan.

The bus purchase plan is presented in Table 4-8 below.

Table 4-8. Estimated SRTP Bus Purchase Plan

	2019/ 2020	2020/ 2021	2021/ 2022	2022/ 2023	2023/ 2024	2024/ 2025	2025/ 2026	2026/ 2027	2027/ 2028	2028/ 2029
IVT Transit Bus Replacement				10			6			
IVT Access Cutaway Replacement			11					11		
IVT Medtrans Cutaway Replacement			4					4		
IVT RIDE MV1 Replacement		1					1			
IVT Medtrans MV1 Replacement			1					1		
IVT ACCESS MV1 Replacement				1					1	
IVT Transit MV1 Replacement				1					1	
IVT Ride Cutaway Replacement		9	5				9	5		
IVT Transit Buses Expansion		3					4		3	
IVT Transit Cutaways Expansion						2				
Microtransit Vans Expansion							3		2	

4.5.4.2 Fleet Capital Reserve

The financing of bus replacements comes from monies that are in the capital plan. As part of the Transit Asset Management Plan, ICTC has determined that funding for replacement buses will come

from a fleet capital reserve account. To fund the fleet capital reserve ICTC will program into the capital budget an amount that spreads out the cost of the vehicles' replacement cost throughout the lifespan of the vehicle being replaced. This means that the 10% of the cost of a 10 year bus will be budgeted in each year's capital budget and 20% of the cost for a 5 year bus will be budgeted each year. This will allow ICTC to have sufficient funding to purchase replacement buses. The fleet capital reserve is presented in the finance plan.

4.5.4.3 Operations and Maintenance Facility

A new operations and maintenance facility will be needed to store and maintain the IV Transit bus fleet. This garage will include space to store and maintain vehicles for all of ICTC's transit programs. The cost for purchasing land for the facility and construction of the facility will be determined based on local real estate conditions and final design of the facility, which cannot be determined at this time. The SRTP financial plan does include funding for engineering and design of an operations and maintenance facility.

4.5.4.4 LTF Article 3

As part of the Transit Development Act, 3% of LTF is set aside for pedestrian and bicycle projects to improve access to transit services. Article 3 projects are decided upon each year, therefore specific projects are not presented in the SRTP. Per statute, the SRTP continues the trend of allocating 3% of LTF for Article 3 projects.

4.5.5 Financial Plan

This section includes the estimated fixed route and demand response financial operating plans, which include operating expenses reflecting the previously described service plans. The financial plan assumes the operations and capital included in the recommendations section of this report. The financial plan has two components, operations and capital.

4.5.5.1 Operations

Operating costs are based on the ICTC Fiscal Year 2018/2019 financial plan and escalated by 3% per year. The 3% per year operating cost escalation applies to all transit services including: IV Transit fixed route services (including circulator services), IVT ACCESS paratransit service, IVT MedTrans, IVT RIDE and the ICTC-funded Yuma County Area Transit (YCAT) service which connects Yuma with El Centro. The 3% escalation also applies to functions such as administering the IV Transit system and maintenance of bus stop amenities and transit centers. When new services are introduced, the cost basis is based on an hourly cost figure identified through the Unmet Transit Needs process and escalated at a rate of 4% per year.

Revenues to support transit operations come from a number of sources including fares collected from the farebox, federal sources, state sources, and local sources. It is important to note that the financial plan assumes that ridership will continue to support the current farebox recovery.

Federal sources include Section 5307 Urbanized formula funding and Section 5311 Rural formula funding that supports the operation of IV Transit (including circulator services), IVT ACCESS, and IVT MedTrans. Federal Section 5310 Enhanced Mobility for Seniors and Individuals with Disabilities funding is used to support administration of transit programs in Imperial County. Federal funding sources are assumed to grow by 3% per year.

State sources include Transit Development Act funding from State Transit Assistance (STA) and Local Transit Fund (LTF), which is used to fund the operations of IV Transit (including circulator services), IVT ACCESS, IVT MedTrans, IVT RIDE, ICTC-funded YCAT services, administration of transit programs in Imperial County, and maintenance of bus stop amenities and transit centers. LTF and

STA are assumed to grow by 3% per year. The local operating source is the Local Transportation Authority (LTA), which 2% is reserved for transit service, which is used to support IVT RIDE.

The financial plan for operations is presented in Appendix C, Table 4-10.

4.5.5.2 Capital

The capital program includes the purchase of items that are needed to support the transit system and is based on the capital plan presented in the previous section. Items in the capital program include replacement buses, buses for new services, planning and engineering for a new bus garage, the fleet capital reserve which is used to purchase new buses, and LTF Article 3 programs which improve bicycle and pedestrian mobility. The unit costs for all items in the capital program are escalated at a rate of 3% per year, except for the fleet capital reserve. The fleet capital reserve is based on the purchase cost of buses spread out evenly throughout the lifespan of the bus it is replacing.

The capital program is funded primarily through state and local funding. The state funds being used include CTGSP/PTMISEA/LCTOP and State of Good Repair funds (SGR). The CTGSP/PTMISEA/LCTOP funds are assumed to grow by 3% per year while SGR is assumed to stay the same amount through the life of the SRTP as it is based on a single sum that is allocated to the program. The LTF (which is also a state source) remaining from operations is used for capital. The local funding, which is used to pay for buses, is based on the amount saved represented as an expense.

The financial plan for the capital program is presented in Appendix C, Table 4-11.

Overall impacts of the financial plan are presented in Appendix C, Table 4-12.

4.6 Service Monitoring Plan

A formal procedure by which any potential modifications to IV Transit service was developed as part of this Short Range Transit Plan (SRTP). This procedure will allow ICTC staff to determine which service modifications could potentially be pursued should the need arise to select certain services for reduction.

4.6.1 Data Collection

The ICTC should endeavor to collect the following information about its riders, service, and performance:

- Origin and destination data showing travel patterns and rider characteristics every five years;
- Ridership data by route once a year;
- On-time performance checks on every route once a year;
- Boarding and alighting data for weekday and weekend trips on every route once a year; and
- Key operating, patronage, and financial statistics for each route once a month.

4.6.2 New Route Trial Period

All new services and service changes should be revaluated after 18 months. This will allow time for the service to mature and ridership to stabilize after the service change. Although this may seem to be an excessive amount of time, it may be necessary to fully establish a service. However, this guideline is not meant to imply that a new service cannot be modified during the trial period.

4.6.3 Use of Guidelines in Service Modification/Reduction Planning Process

As was previously mentioned, the guidelines presented in a prior section are meant to help guide the ICTC's service planners in their planning activities for the IV Transit system, using the data mentioned in the Data Collection section above.

In some cases (e.g., the span of service guidelines), the guideline is not easily measured as a percentage of the benchmark or target value. In these cases, the best judgment and experience of ICTC planners, IV Transit operations personnel, funding partners and other stakeholders would be used to determine if the intent of the guideline is being satisfied, and to what extent.

However, another manner in which the guidelines can be used is to compare a route or service with the benchmark values for its service type (i.e., fixed route for IV Transit services or demand responsive for IVT ACCESS or IVT RIDE services). This will help ICTC's service planners identify which transit services warrant further examination as potential candidates for service modifications or reductions, should funding shortfalls arise.

For those guidelines which can be measured as a percentage of the benchmark or target value, Table 4-9 provides useful guidelines for what types of evaluations to consider:

Table 4-9. Use of Guidelines for Service Modification/Reduction Planning Process

Relative to Service Type Classification Benchmark	Suggested Action
Above 80%	Acceptable, modify only as required
60% - 80%	Review for possible modifications, including frequency and span of service reductions
Below 60%	Unacceptable, review and consider major changes, including potential elimination <i>if coverage available from other services</i>

The main exception to a potential service elimination is coverage: if a route or service that is a candidate for elimination is the only service providing coverage in a certain area (i.e., a "lifeline" service), then it should not be considered for elimination, even if it falls below 60% of the threshold. Instead, aggressive span or frequency reductions – or a change in the type of service provided – should be considered with policy guidance from the ICTC commissioners.

4.7 Planning Emphasis Areas

There were specific "Planning Emphasis Areas" that were addressed as part of the process in developing this Short Range Transit Plan (S RTP). These areas were addressed as part of the S RTP's recommendations as follows:

- The prior S RTP had several recommendations which are still applicable – particularly, the implementation of additional circulator services, such as the IVT Red Line in Imperial, and the ongoing simplification of the IV Transit route nomenclature/identification system. However, with the proposed Microtransit service in Calexico, the previously proposed Calexico circulator (i.e., the IVT Garnet Line) is no longer being advanced for implementation, as it is no longer viewed as necessary for circulation purposes within Calexico.
- The expansion of the existing IVT Gold Line into the weekend was viewed as being a necessary addition to the S RTP; however, the IVT Blue and IVT Green Lines were not proposed for weekend service, as coverage from both IV Transit Routes 1 and 2 is more

extensive in the El Centro area on weekends. The funds from the weekend implementation of the IVT Blue and Gold Lines were instead used to help support the implementation of weekday service on the IVT Red Line circulator service in Imperial.

- This SRTP calls for the expansion of IV Transit service (i.e., Route 2) beyond the “Primary Service Corridor” into Westmorland, Calipatria and Niland on Sundays. This service expansion was initially developed as part of the Unmet Transit Needs process.
- This SRTP also calls for the operation of IV Transit Routes 1 and 2 on three Federal holidays (i.e., Martin Luther King Day, Presidents’ Day and Veterans’ Day) on a limited schedule.
- Inter-regional connections – as well as service to the West Shores area – are areas of concern that have been identified previously in various studies. This SRTP calls for connections to the SunLine transit system (serving the Coachella Valley) to be explored as part of future planning efforts beyond the ten year scope of this study – perhaps as part of a potential future Comprehensive Operational Analysis (COA). It should be noted that the proposed intercity IVT RIDE service proposed as part of this SRTP provides service to the West Shores area on the west side of the Salton Sea.
- This SRTP calls for the implementation of a new intercity IVT RIDE zonal system that will provide demand responsive service in Calipatria, Holtville, and Heber.
- The recommendations for changes to the ADA Certification and Eligibility process for IVT ACCESS have already been implemented. Dependent on any future community input that may be received as part of the implementation of this SRTP, any recommendations for changes which may be needed to improve the process may be considered.
- This SRTP calls for both a relatively modest expansion of IVC Express service in the evening hours to Calexico (as part of the early phase of fiscally constrained recommendations) as well as the implementation of the previously developed IV Campus Shuttle route.
- This SRTP calls for the improvement of Route 2 frequencies to every 35 minutes on weekdays, but only as far north as Brawley.
- Finally, this SRTP calls for the eventual extension of the new Calexico Microtransit service to the East Port of Entry.

4.8 Conclusion

This Short Range Transit Plan has provided the Imperial County Transportation Commission (ICTC) a ten-year implementation process for a range of new service initiatives and proposals for IV Transit services (including the circulator services), IVT ACCESS and IVT RIDE, including the implementation of a new “Microtransit” service in Calexico.

The SRTP’s proposals are divided into two main groups: the first five years of the service plan present a financially constrained set of recommendations that account for the existing funding streams and reasonable assumptions associated with those streams, and the last ten years of the service plan present the remaining proposals as part of a financially unconstrained set of proposals.

Appendix A . Public Outreach Documents

A.1 Stakeholder Interviews Discussion Questions and Key Points

Discussion Questions

- What is the performance of Imperial Valley Transit (IVT) and the demand responsive services sponsored by ICTC (IVT ACCESS, IVT RIDE, IVT MedTrans) in terms of:
 - Services
 - Vehicles
 - Management
 - Marketing
 - Image
 - Other
- What is the role of public transportation in Imperial County, particularly in terms of whether it should continue to prioritize serving the “transit dependent” or pursue “choice” riders?
- Are there any public transit needs or other specific issues of concern that are not being addressed by ICTC-sponsored services?
- What are the strengths and weaknesses of public transportation in Imperial County?
- Are there any additional comments regarding transit in Imperial County?

Key Comments Made

- There is a need for a more coordinated reservations process when utilizing multiple services (e.g., IVT RIDE and IVT MedTrans) compared to fragmented services that seem to stem from lack of communication
- There are issues, especially for seniors who can’t go between cities easily but can use multiple services
- There are also issues with transportation to pick-up spots for other services such as IVT MedTrans
- Southern California Association of Governments (SCAG) believes there should be some focus or investigation into servicing part of Northern Imperial County, such as Salton City or Coachella
- Area Agency on Aging (AAA) believes the services are great and the drivers are helpful
- AAA indicated they feel the riders they represent have a tough time with multiple transfers; thus, having to transfer less, or move less, would be advantageous for seniors
- AAA’s riders have had issues with services being late, times being inconvenient, and the 30 minute window for reserved riders causing issues by missing their ride
- Expanding IVT RIDE availability and increasing point to point services within the current service area are both important priorities for AAA
- AAA stakeholders communicated some key highlights from an outreach effort to their community members. AAA outreach estimated that 68% cannot drive and must rely on others. Further, it is projected that between 1990 and 2020, those 60 and over will increase by 150%, and those 85 and older will increase by 400%
- Agency clients would prefer curb-to-curb pick up on IVT MedTrans
- Imperial Valley College (IVC) offers approximately 200 evening classes but students often times face issues of not being able to get a ride home, or else having to leave class early to catch the bus
- Brawley Route (Route 22 IVC Express) has crowding issues and could be improved with more frequent trips
- Route 2 could also have its frequency increased to better service IVC as well as other community members
- Recommended running two Calexico buses (or a higher capacity bus) at a time to allow more students to travel to school at one time

- Rides to and from the certification process for IVT ACCESS are needed
- ICTC, especially Guillermo in outreach, is very responsive. Both Clinicas de Salud del Pueblo and El Centro Regional Medical Center could use fliers more regularly. IVT MedTrans could be marketed more to their clientele
- There does not seem to be enough services to Heber
- There are also issues with getting around Calexico
- IVT MedTrans users have issues with getting to San Diego on weekends
- Visually impaired riders are at a higher risk of being considered “no shows” for their rides; it is recommended the dispatcher scheduling log have a way to notify the driver if a passenger they are picking up is visually impaired and waiting inside
- There is some confusion regarding IVT RIDE’s hours of operation
- There is a need to do more marketing regarding the different services available
- Calexico to El Centro seems to have services but the northern part of Imperial County may need more access; places such as Ocotillo, Bombay Beach, Salton City, and Thermal were mentioned
- Bus stops could use some improvement
- It would be helpful to have a schedule and map of the routes that service that stop
- Schedules may not be user-friendly; it may be helpful to create a trip planner, such as the Google map trip planners that places such as San Diego uses on the website and a system map in the schedule book
- There are concerns about routes being too long; travel time reduction should be investigated

A.2 Bus Stop Workshops Discussion Questions and Key Points

Discussion Questions

- What aspects of bus service are working well?
- How could bus service be improved?
- Are there service issues that need a closer look? (e.g., senior service, disabled service, transportation to evening or weekend work shifts)
 - Does bus service start early enough in the morning for you and run late enough into the evening?
 - Does weekend service work out ok for you?
 - Can you get everywhere you'd like to go on the bus?
 - Do you make your connections ok?

Key Comments Made

- The 7:40AM departure from Calexico to IVC on Route 21 is too late to get to classes on time
- Route to the IV Mall is inconvenient because of the drop off point; requires a longer walk
- Would like more service in afternoons and local bus connections in the evenings
- Current schedule does not accommodate night classes; departures from campus can be as late as 10:00PM
- Route 21 IVC Express bus departing from Calexico is too full
- Would like to see additional buses departing to IVC in mornings
- Service on weekends is infrequent and would like to see more available
- Would like to use curb-to-curb demand responsive service; sometimes hails a cab in lieu of using transit
- Service works well
- Biggest issue is the crowded conditions on IVC Express routes
- Periodically cannot get a seat and then has to wait for a later bus
- Satisfied with stops, buses and operations overall
- Would like a way to track movement of bus

A.3 Bilingual Public Meeting Materials

Workshop Boards

Calexico Comment Cards

Niland Comment Cards

Brawley Comment Cards

El Centro Comment Cards

A.4 Public Review Session Materials

Discussion Questions

- Do you have any questions about the Draft SRTP?
- Do you have any feedback on the Draft SRTP?

Key Comments Made

- Support for IVC Express service
- Information regarding routes, times, et cetera needs to be easier to find and understand
- Desire for more IVT MedTrans service to and from San Diego
- Tickets should be easier to purchase. Riders should be able to purchase tickets near where they are accessing services, such as at the County Services Building.

Comment Cards

No comment cards were submitted during the Public Review Session.

Appendix B . Peer System Comparison

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Imperial County Transportation Commission Short Range
Transit Plan, FY 2018-2019

Table 72
Peer System Comparison

Location	Agency	Service Area Population	UZA Population	University Enrollment	Agency VOMS	Mode	Mode VOMS	Passenger Trips	Modal Passenger Trips as Percentage of Total	Operating Cost	Operating Cost per Passenger Trip	Operating Cost per Vehicle Revenue Hour	Passenger Trips per Vehicle Revenue Hour	Passenger Miles per Vehicle Revenue Hour	Passenger Miles per Vehicle Revenue Mile	Passenger Trips per Capita	Demand Response Trips per Ambulatory Difficulty Population*	Vehicle Revenue per Capita	Vehicle Revenue Miles per Capita
Hanford, CA	Kings County Area Public Transit Agency (KART)	70,267	87,941	0	21	Fixed Route	16	685,981	97%	\$3,105,206	\$4.53	\$71.72	15.8	87.6	5.5	7.8	-	0.5	7.8
						Demand Response	5	18,763	3%	\$495,904	\$26.43	\$76.52	2.9	10.2	1.1	0.2	3.3	0.1	0.7
Redding, CA	Redding Area Bus Authority (RABA)	117,478	117,731	11,000	29	Fixed Route	13	670,336	93%	\$3,836,924	\$5.72	\$89.28	15.6	101.5	6.3	5.7	-	0.4	5.9
						Demand Response	16	52,744	7%	\$1,556,079	\$29.50	\$90.63	3.1	27.8	1.6	0.4	4.7	0.1	2.6
Santa Maria, CA	Santa Maria Area Transit (SMAT)	120,097	130,447	10,000	28	Fixed Route	19	814,979	96%	\$3,912,912	\$4.80	\$67.41	14.0	61.3	4.1	6.2	-	0.4	6.7
						Demand Response	9	31,461	4%	\$742,189	\$23.59	\$65.44	2.8	15.2	1.1	0.2	4.9	0.1	1.2
Pueblo, CO	Pueblo Transit System (PT)	108,249	136,550	4,500	24	Fixed Route	13	846,666	94%	\$3,690,736	\$4.36	\$99.71	22.9	76.1	5.1	6.2	-	0.3	4.0
						Demand Response	11	56,380	6%	\$959,917	\$17.03	\$41.91	2.5	14.0	1.0	0.4	4.0	0.2	2.4
Sioux City, IA	Sioux City Transit System (SCTC)	122,128	106,494	2,000	26	Fixed Route	21	1,039,222	98%	\$3,767,172	\$3.62	\$84.18	23.2	107.5	7.9	9.8	-	0.4	5.7
						Demand Response	5	18,506	2%	\$507,912	\$27.45	\$41.37	1.5	11.9	1.2	0.2	2.8	0.1	1.2
Pittsfield, MA	Berkshire Regional Transit Authority (BRTA)	127,500	59,124	0	25	Fixed Route	17	519,542	95%	\$5,221,756	\$10.05	\$98.91	9.8	60.4	3.5	8.8	-	0.9	15.6
						Demand Response	8	28,055	5%	\$835,209	\$29.77	\$33.00	1.1	6.7	0.6	0.5	6.5	0.4	4.9
Port Tobacco, MD	County Commissioners of Charles County, MD (VanGO)	156,118	109,919	0	27	Fixed Route	16	871,161	96%	\$4,923,024	\$5.65	\$76.49	13.5	94.3	4.7	7.9	-	0.6	11.7
						Demand Response	11	37,635	4%	\$1,426,513	\$37.90	\$66.15	1.7	12.4	1.1	0.3	5.3	0.2	2.2
Jackson, MI	City of Jackson Transportation Authority (JTA)	160,248	90,057	7,000	20	Fixed Route	10	512,728	93%	\$2,567,329	\$5.01	\$98.10	19.6	53.5	4.0	5.7	-	0.3	3.8
						Demand Response	10	36,298	7%	\$1,658,729	\$45.70	\$95.50	2.1	7.4	0.6	0.4	3.0	0.2	2.4
Lebanon, PA	County of Lebanon Transit Authority (LT)	133,568	77,086	0	24	Fixed Route	8	305,693	80%	\$2,070,202	\$6.77	\$80.47	11.9	56.6	4.0	4.0	-	0.3	4.7
						Demand Response	12	51,310	13%	\$1,027,380	\$20.02	\$66.67	3.3	29.6	1.9	0.7	9.2	0.2	3.1
						Commuter Bus	4	26,931	7%	\$577,113	\$21.43	\$109.01	5.1	109.3	4.3	0.3	-	0.1	1.7
Brownsville, TX	City of Brownsville - Brownsville Metro (BMetro)	181,860	217,585	8,700	33	Fixed Route	19	1,319,894	88%	\$4,826,682	\$3.66	\$79.49	21.7	119.6	10.1	6.1	-	0.3	3.3
						Demand Response	8	32,646	2%	\$1,158,370	\$35.48	\$81.05	2.3	11.1	1.0	0.2	2.3	0.1	0.7
						Commuter Bus	6	147,146	10%	\$1,247,041	\$8.47	\$61.91	7.3	195.5	5.9	0.7	-	0.1	3.1
AVERAGE:		129,751	113,293	4,320	26	Fixed Route	15	758,620	86%	\$3,792,194	\$5.42	\$84.58	16.8	81.8	5.5	6.8	-	0.4	6.9
						Demand Response	10	36380	4%	\$1,036,820	\$29.29	\$65.82	2.3	14.6	1.1	0.4	4.6	0.2	2.1
						Commuter Bus	5	87039	10%	\$912,077	\$14.95	\$85.46	6.2	152.4	5.1	0.5	-	0.1	2.4
El Centro, CA	Imperial County Transportation Commission	174,610	107,672	7,400	26	Fixed Route	18	842,836	96%	\$3,824,708	\$4.54	\$86.06	19.0	196.3	9.8	7.8	-	0.4	8.2
						Demand Response	8	32,291	4%	\$1,580,731	\$48.95	\$116.68	2.4	41.1	1.9	0.3	2.4	0.1	2.7

Notes:

*Ambulatory Difficulty 2010 Urbanized Area data from US Census ACS 5-year data 2012-2016.

NTD annual passenger miles data were not available for Pueblo Transit during 2016, so 2015 data were used.

Appendix C . Recommendations – Financial Plan

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Table 4-10. Financial Plan for Transit Operations

Cost Items										
Operating Cost Items										
Line Item	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29
IV Transit	\$4,037,014	\$5,004,734	\$5,154,876	\$5,309,523	\$5,468,808	\$5,632,872	\$7,238,414	\$7,611,772	\$7,840,125	\$8,075,329
IVT ACCESS	\$1,839,814	\$1,895,008	\$1,951,858	\$2,010,414	\$2,070,727	\$2,132,848	\$2,196,834	\$2,266,110	\$2,334,093	\$2,404,116
IVT MedTrans	\$580,210	\$597,617	\$615,545	\$634,011	\$653,032	\$672,623	\$692,801	\$713,586	\$734,993	\$757,043
IV Transit Blue & Green Lines	\$750,867	\$773,393	\$796,595	\$820,493	\$845,107	\$870,461	\$896,574	\$923,472	\$951,176	\$979,711
IV Transit Gold Line	\$312,981	\$322,370	\$332,041	\$342,003	\$352,263	\$362,831	\$373,716	\$384,927	\$396,475	\$543,030
IV Transit Red Line	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$336,652
IVT RIDE	\$2,044,768	\$2,106,111	\$2,169,294	\$2,234,373	\$2,301,404	\$4,051,805	\$4,173,359	\$4,298,559	\$4,427,516	\$5,824,352
YCAT Routes 5 & 10	\$142,879	\$147,165	\$151,580	\$156,127	\$160,811	\$165,635	\$170,604	\$175,723	\$180,994	\$186,424
IV Campus Shuttle	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$661,414	\$681,256
Calexico Microtransit Service	\$0	\$0	\$0	\$0	\$0	\$0	\$1,179,885	\$1,215,282	\$1,677,129	\$1,727,442
Amenities/Transit Center Maintenance	\$226,600	\$233,398	\$240,400	\$247,612	\$255,040	\$262,692	\$270,572	\$278,689	\$287,050	\$295,662
Administration	\$1,838,671	\$1,893,831	\$1,950,646	\$2,009,165	\$2,069,440	\$2,131,523	\$2,195,469	\$2,261,333	\$2,329,173	\$2,399,048
Total Operations Cost	\$11,773,803	\$12,973,627	\$13,362,836	\$13,763,721	\$14,176,632	\$16,283,289	\$19,388,229	\$20,129,452	\$21,820,138	\$24,210,065

Revenue Sources										
Operating Revenue Sources										
Line Item	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29
Fares	\$1,165,024	\$1,301,568	\$1,340,615	\$1,380,833	\$1,422,258	\$1,666,689	\$2,030,663	\$2,110,732	\$2,304,470	\$2,581,843
LTA (2% Transit)	\$440,000	\$440,000	\$440,000	\$440,000	\$440,000	\$440,000	\$440,000	\$440,000	\$440,000	\$440,000
Section 5310	\$114,305	\$117,734	\$121,266	\$124,904	\$128,652	\$132,511	\$136,486	\$140,581	\$144,799	\$149,142
Section 5311	\$256,231	\$263,918	\$271,836	\$279,991	\$288,390	\$297,042	\$305,953	\$315,132	\$324,586	\$334,323
Section 5307	\$3,501,882	\$3,606,938	\$3,715,146	\$3,826,601	\$3,941,399	\$4,059,640	\$4,181,430	\$4,306,873	\$4,436,079	\$4,569,161
STA	\$1,813,324	\$1,867,724	\$1,923,756	\$1,981,468	\$2,040,912	\$2,102,140	\$2,165,204	\$2,230,160	\$2,297,065	\$2,365,977
LTF (Operating)	\$4,483,037	\$5,375,745	\$5,550,217	\$5,729,924	\$5,915,021	\$7,522,529	\$7,748,205	\$7,980,652	\$8,220,071	\$8,466,673
Total Operating Funding	\$11,773,803	\$12,973,627	\$13,362,836	\$13,763,721	\$14,176,632	\$16,220,551	\$17,007,941	\$17,524,129	\$18,167,069	\$18,907,120
Operating Surplus or Deficit	\$0	\$0	\$0	\$0	\$0	(\$62,738)	(\$2,380,288)	(\$2,605,323)	(\$3,653,069)	(\$5,302,946)

Table 4-11. Financial Plan for the Capital Program

Cost Items										
Capital Cost Items										
Line Item	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29
IV Transit Bus Replacement (16)				\$5,030,411			\$3,496,800			
IVT ACCESS Cutaway Replacement (11)			\$991,914					\$1,945,808		
IVT MedtTrans Cutaway Replacement (4)			\$382,828					\$707,567		
IVT RIDE MV1 Replacement (1)		\$60,091					\$69,662			
IVT MedTrans MV1 Replacement (1)			\$61,093					\$176,892		
IVT ACCESS MV1 Replacement (1)				\$62,894					\$73,904	
IV Transit MV1 Replacement (1)				\$62,894					\$73,904	
IVT RIDE Cutaway Replacement (14)		\$1,493,820	\$762,940				\$1,545,655	\$884,458		
Operations and Maintenance Facility			\$1,000,000							
LTF Article 3	\$194,670	\$200,510	\$206,525	\$212,721	\$219,103	\$225,676	\$232,446	\$239,420	\$246,602	\$254,000
Fleet Capital Reserve	\$1,838,707	\$1,838,707	\$2,098,404	\$2,182,386	\$2,360,257	\$2,360,257	\$2,360,257	\$2,743,086	\$3,145,993	\$3,428,457
IV Transit Buses Expansion		\$1,426,089					\$2,204,304		\$1,753,910	
IV Transit Cutaways Expansion										\$187,664
IVT RIDE Expansion						\$333,475				
Microtransit Vans Expansion							\$515,218		\$182,198	
IVT ACCESS Cutaways Expansion										
Total Capital Cost	\$2,033,377	\$5,019,218	\$5,503,705	\$7,551,306	\$2,579,360	\$2,919,408	\$10,424,343	\$6,697,230	\$5,476,512	\$3,870,122

Revenue Sources										
Capital Revenue Sources										
Line Item	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29
CTGSP/PTMISEA/LCTOP	\$972,702	\$1,001,883	\$1,031,940	\$1,062,898	\$1,094,785	\$1,127,628	\$1,161,457	\$1,196,301	\$1,232,190	\$1,269,156
SGR	\$251,390	\$251,390	\$251,390	\$251,390	\$251,390	\$251,390	\$251,390	\$251,390	\$251,390	\$251,390
Fleet Capital Reserve	\$0	\$1,553,911	\$2,198,775	\$5,156,199	\$0	\$0	\$5,112,117	\$3,714,725	\$147,809	\$0
LTF (Capital)	\$2,005,963	\$1,307,925	\$1,333,963	\$1,360,782	\$1,388,406	\$0	\$0	\$0	\$0	\$0
Total Capital Funding	\$3,230,055	\$4,115,109	\$4,816,068	\$7,831,268	\$2,734,580	\$1,379,019	\$6,524,965	\$5,162,415	\$1,631,389	\$1,520,546
Capital Surplus or Deficit	\$1,196,678	(\$904,109)	(\$687,637)	\$279,962	\$155,221	(\$1,540,389)	(\$3,899,378)	(\$1,534,815)	(\$3,845,124)	(\$2,349,576)

Table 4-12. Ten-Year Overall Funding Projection

Total Funding Picture										
Line Item	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29
Total Cost	\$13,807,180	\$17,992,845	\$18,866,540	\$21,315,027	\$16,755,992	\$19,202,697	\$29,812,572	\$26,826,683	\$27,296,650	\$28,080,187
Total Funding Available	\$15,003,858	\$17,088,736	\$18,178,903	\$21,594,990	\$16,911,213	\$17,599,570	\$23,532,906	\$22,686,544	\$19,798,458	\$20,427,665
Total Surplus or Deficit	\$1,196,678	(\$904,108)	(\$687,637)	\$279,963	\$155,220	(\$1,603,127)	(\$6,279,666)	(\$4,140,138)	(\$7,498,193)	(\$7,652,521)

