



CALEXICO TRANSIT NEEDS ASSESSMENT STUDY

Final Report

DRAFT

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1 EXECUTIVE SUMMARY

The Calexico Transit Needs Assessment Study is a joint effort between the City of Calexico and the Southern California Association of Governments through a grant program (5304) funded by the California Department of Transportation (Caltrans) in Fiscal Year 2012-2013.

PROJECT OVERVIEW

The Calexico Transit Needs Assessment Study was initiated in June 2016 to identify mobility needs and develop potential solutions. The study evaluated existing (public and private) transit services operating within city limits, as well as population and employment characteristics to assess transit demand and identify service gaps. The study also included a review of adopted transportation plans applicable to transit and pedestrian mobility. Bus, shuttle, and taxicab ordinances adopted by the City of Calexico were also examined. Transit riders, community stakeholders, and members of Calexico City Council were engaged at various stages of the project to provide feedback on existing services and opportunities for improvement.

KEY ISSUES

The existing conditions phase of the study identified a number of issues related to transit services in Calexico, most notably:

Fragmented Transit Services

Three unique fixed-route providers (Imperial Valley Transit, Calexico Transit System, and L&A Shuttle) offer a wide range of local and regional services yet lack basic coordination. Fixed-route services utilize three different transit hubs within downtown Calexico, all of which lack essential customer information such as maps, schedules or fare information. The proposed Calexico Intermodal Transportation Center would be a major step towards improving the connectivity and perception of transit services.

Inadequate Bus Regulations and Enforcement Strategies

Existing bus, shuttle and taxicab regulations fail to require minimum requirements for operational safety and customer comfort. Unlike most cities in the United States, Calexico is unique in that a high proportion of local fixed-route service in the community is operated by a private company without Federal Transit Administration (FTA) funding assistance. This circumstance puts the City of Calexico in a position of adopting non-typical bus ordinances. Among the highest deficiencies with respect to Federal requirements are the lack of wheelchair lifts on Calexico Transit System buses. Also notable, but not a Federal requirement is the lack of air conditioning on board public transit buses in Calexico.

KEY RECOMMENDATIONS

This report includes a series of recommended guidelines, regulations, and strategies to improve mobility and modernize transit services. Key action items, listed by recommended sequence of implementation, include:

Adopt Transit Guidelines

Transit guidelines will assist the City of Calexico in ensuring that routes, schedules, bus stops, and public information are comparable with national best practices. This is particularly important given the unique characteristics of transit operations in Calexico. The application of recommended transit guidelines is also essential in attracting transit and retaining transit users.

Revise Bus, Shuttle and Taxicab Ordinances

The adoption of a more comprehensive set of ordinances will improve overall transit service for current and potential customers while also reducing potential risks and liabilities for the City of Calexico. Enforcement of revised ordinances will require Calexico City Council support and additional time from city staff. The reduction of unlicensed taxicab operations will similarly require a focused effort by the Calexico Police Department.

Establish an Active Transportation Advisory Commission

The establishment of an Active Transportation Advisory Commission would help the City of Calexico in achieving improvements related to transit, bicycling, and pedestrian access. Similar to other transportation commissions, this group would meet regularly to discuss needs, issues, and progress. Participation from city staff and transit providers would encourage improved coordination and communication between all parties (transit providers, customers, and regulators).

Improve the Local Route Network

Existing fixed-route transit services operating within Calexico provide important connections for residents and visitors. However, the complex and independent nature of these services limit their overall effectiveness. The creation of a more intuitive and coordinated transit network would greatly enhance mobility and connectivity.

Construct the Calexico Intermodal Transit Center

The design and construction of the proposed Calexico Intermodal Transit Center would create benefits for transit users while also breathing new life into downtown Calexico. While the Imperial Valley Transportation Commission (ICTC) has taken the lead on acquiring funds for the initial design of the facility, the City of Calexico should provide political, technical, and financial support to realize this important asset to the community and region.

REPORT ORGANIZATION

The Final Report consists of ten chapters, which are summarized below.

- Chapter 2 summarizes existing transit services operating within the City of Calexico.
- Chapter 3 summarizes relevant transportation plans.
- Chapter 4 evaluates socio-economic and demographic conditions within the City of Calexico to better understand transit demand and service gaps.
- Chapter 5 summarizes existing bus, shuttle and taxicab ordinances.
- Chapter 6 documents feedback obtained by riders, stakeholders and members of Calexico City Council.
- Chapter 7 includes recommended guidelines for routes, schedules, bus stops, and customer information.
- Chapter 8 detailed recommended revisions to ordinances related to transit, courtesy shuttle and taxicab services.
- Chapter 9 describes the benefits of establishing an Active Transportation Advisory Commission.
- Chapter 10 introduces potential transit service concepts to improve the local fixed-route bus network.
- Chapter 11 reiterates the importance of constructing the Calexico Intermodal Transit Center.
- Chapter 12 summarizes recommended guidelines, services, ordinances, and enforcement strategies.

2 EXISTING TRANSIT SERVICES

This chapter provides an overview of the public and private transit services operated in Calexico. Transit services include fixed route and demand response, providing connections within Calexico and to the surrounding region.

IMPERIAL VALLEY TRANSIT (IVT)

Service Design

Imperial Valley Transit (IVT) operates three fixed route services to Calexico, providing connections to El Centro, Imperial Valley College, and Brawley. Service span and frequency of IVT routes serving Calexico are listed in Figure 2-1. Route alignments are depicted in Figure 2-2. Detailed information on IVT services can be found at www.ivtransit.com.

Figure 2-1 Frequency and Span of IVT Fixed Routes Serving Calexico

Route	Weekday		Saturday		Sunday	
	Span	Headway	Span	Headway	Span	Headway
1: El Centro-Calexico	5:45 AM – 10:55 PM	35-70 min	5:55 AM – 8:30 PM	60-90 min	7:00 AM – 5:10 PM	6 NB / 4 SB Trips
21: Calexico-IVC	6:15 AM – 6:30 PM	6 AM NB 5 PM SB	---	---	---	---
31/32: Calexico-Brawley	6:30 AM – 5:53 PM	4 Round Trips	7:00 AM – 6:10 PM	4 Round Trips	---	---

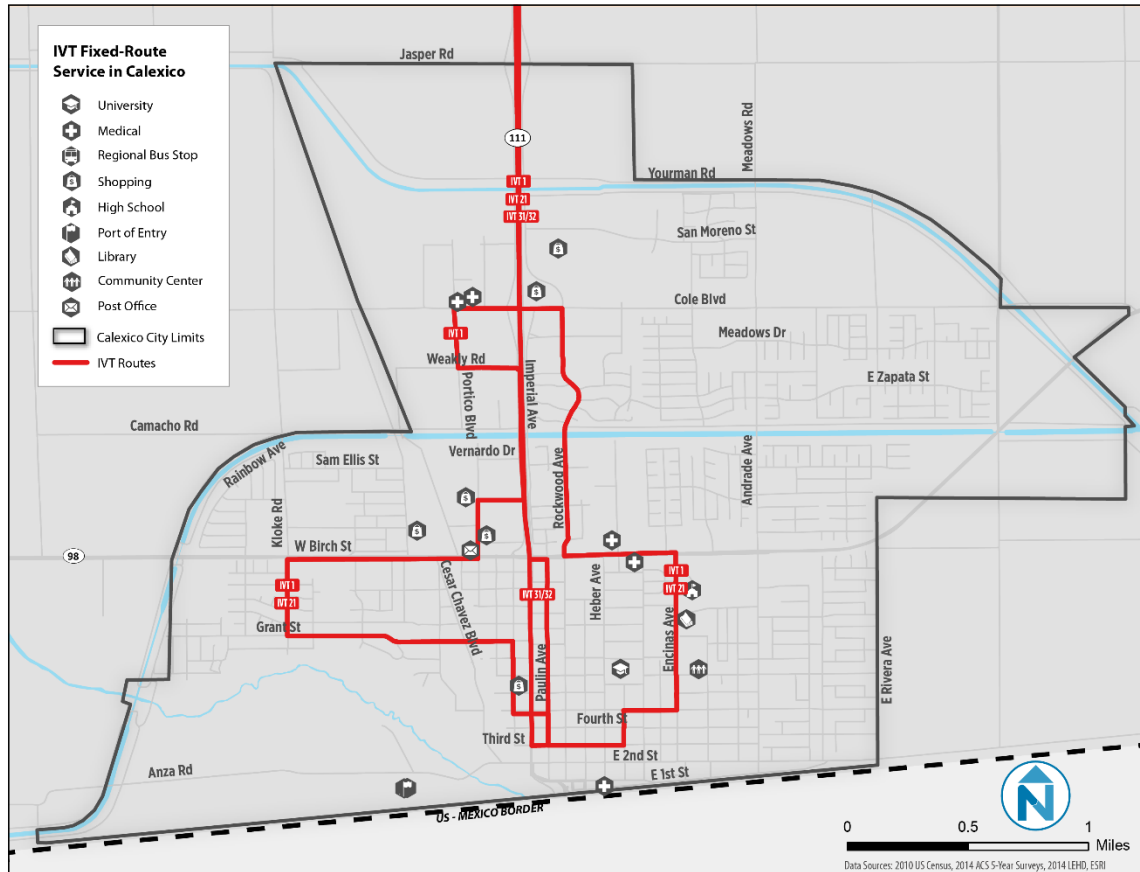
Route 1 connects Calexico with El Centro via Heber, providing multiple stops in each city. While service is primarily designed to connect riders between cities, Route 1 also circulates within Calexico. A counterclockwise loop provides service to 12 stops throughout the city. Route 1 operates every 35 minutes throughout the day on weekdays and every 70 minutes on weeknights. On Saturdays, Route 1 operates every 60-90 minutes. On Sundays six northbound and four southbound trips are operated. One of the Sunday northbound trips does not serve stops on the western half of the loop.

Route 21 is an express service connecting Calexico and Imperial Valley College. Route 21 operates six northbound and five southbound trips on weekdays only. Route 21 operates the same counterclockwise loop within Calexico as Route 1.

Route 31/32 is a direct express service connecting Calexico and Brawley. Route 31/32 operates two round trips during the morning and two round trips during the afternoon on weekdays and Saturdays, and stops in Calexico at 3rd Street and Paulin Avenue, and in Brawley at Main Street

and Palm Avenue, Main Street and 9th Street, and 5th Street and G Street (Brawley Transit Center). Route 31/32 does not circulate within Calexico.

Figure 2-2 IVT Fixed Route Services in Calexico



Fares

One-way fare for riders on Route 1 traveling between Calexico and El Centro is \$1.25. Riders may also travel within Calexico on Route 1 for \$1.00. One-way fare on Route 21 is \$1.25 for students or \$1.75 for general public. One-way fare on Route 31/32 is \$2.50. Discounted 20-ride booklets are available for use on Route 1 or Route 21 for students only.

Route Connections

IVT routes connect at the transit hub at 3rd Street and Paulin Avenue in downtown Calexico. This stop is the closest to the border crossing and is served by all three of IVT's routes in Calexico. The transit hub at 3rd Street and Paulin Avenue has the most daily boardings of any bus stop in the IVT fixed-route system.

Figure 2-3 IVT Transit Hub at 3rd Street and Paulin Avenue



Ridership

Ridership data from FY2016 is shown in Figure 2-4. Route 1, as the only all-day service, carries the most passengers by far, and 30 passengers per hour, indicating a strong ridership market between Calexico and El Centro. The IVC Express carries 40 riders per hour, which likely translates to full buses on several trip due to the bus capacity (40 seats) and route design (limited stops in Calexico and express travel to IVC). The Direct service to Brawley is less productive than the other routes, however it operates limited service and to a smaller destination than El Centro or IVC.

Figure 2-4 IVT Fixed Route Ridership (FY2016)

Route Name	Ridership	Productivity
1: El Centro-Calexico	416,083	30.5 riders per hour
21: IVC Express	72,847	40.7 riders per hour
31/32: Brawley Direct	36,942	20.4 riders per hour

Source: Imperial County Transportation Commission

CALEXICO TRANSIT SERVICE (CTS)

Calexico Transit System (CTS) is a private transit operator that operates two routes within the City of Calexico (shown in Figure 2-5) for a fare of \$1.25. Each route operates seven days per week. Calexico Transit Service operates out of the City of Calexico-owned terminal located at 1st Street and Heffernan Avenue.

Route 1 operates from 7:00 a.m. to 7:00 p.m. with service approximately every 30 minutes and Route 2 operates hourly from 8:00 a.m. to 3:00 p.m. Route 1 overlaps with much of the western half of the loop operated by IVT Routes 1 and 21 and on Rockwood Avenue. Route 2 serves areas further east than IVT along Andrade Avenue.

Formal bus stops are not present along Heber Avenue or Andrade Avenue, streets served by CTS only. CTS effectively operates as a flag stop service along these corridors, picking up customers anywhere along the route alignment.

CTS does not maintain a website or publish a phone number. Print route schedule information is also not available. A high percentage of CTS riders appear to be Mexican nationals who enter Calexico on foot and use the service to reach various employment, shopping and medical destinations. This characteristic was confirmed during discussions with CTS staff.

Figure 2-5 CTS Fixed Route Service

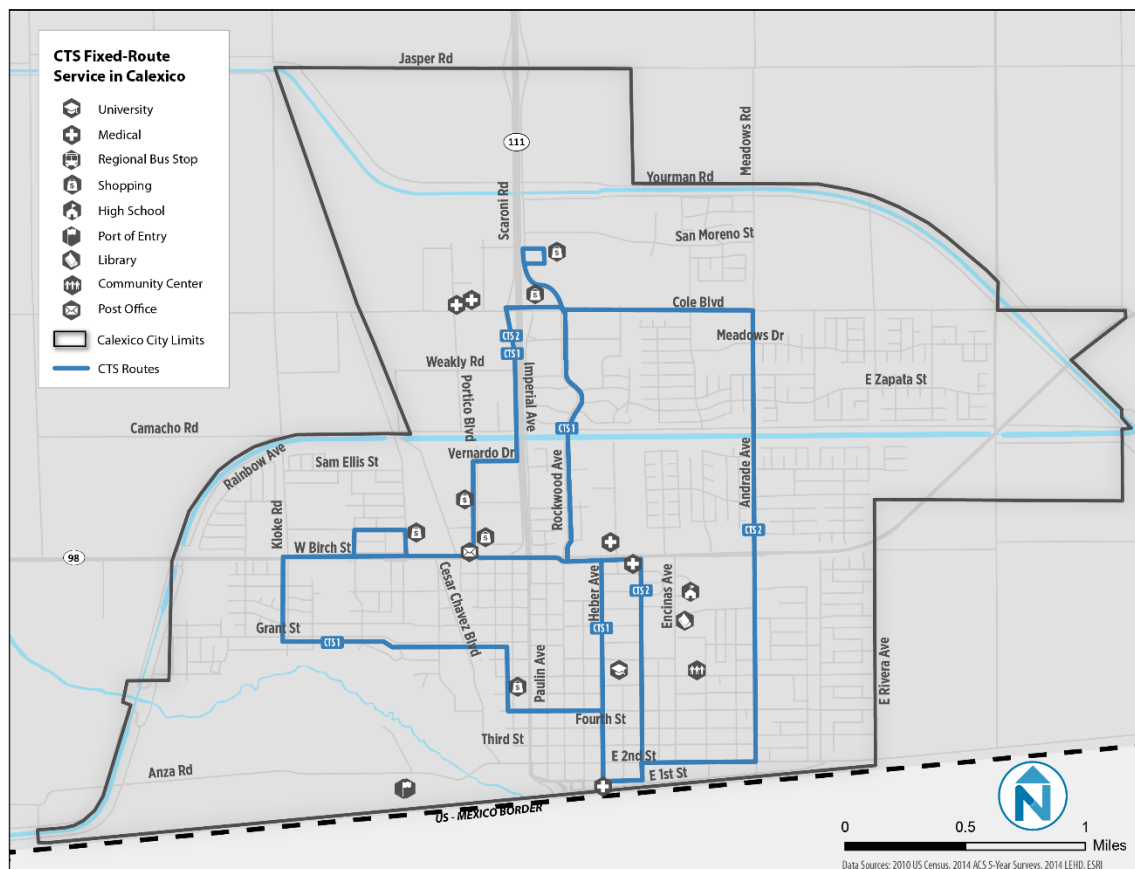


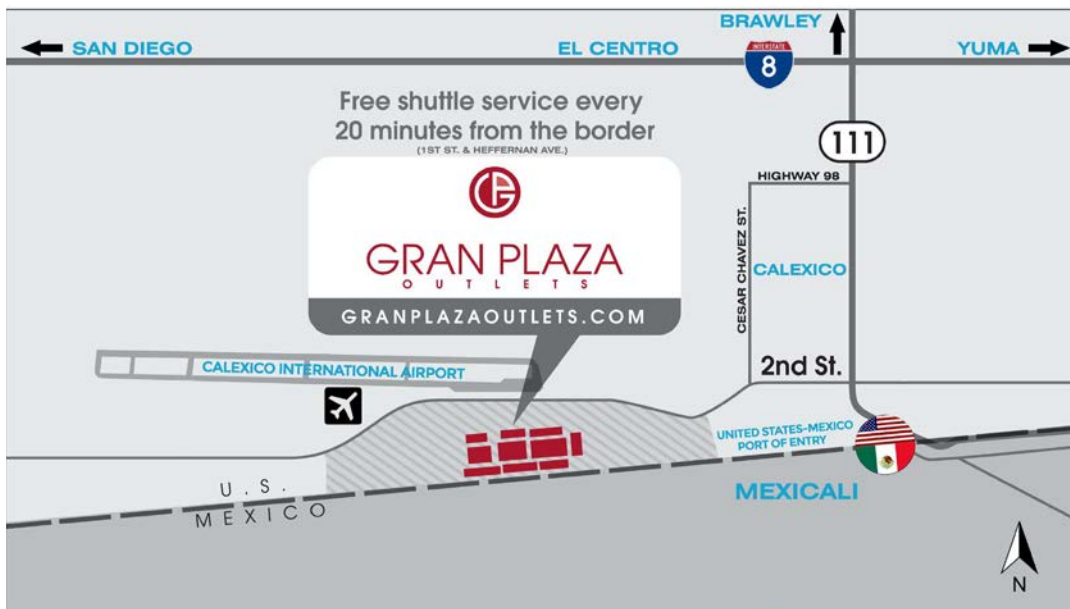
Figure 2-6 CTS and Gran Plaza Outlets Shuttle Transit Hub at 1st Street and Heffernan Ave



GRAN PLAZA OUTLETS SHUTTLE

Gran Plaza Outlets offer a free courtesy shuttle (operated by L&A Shuttle) that runs every 20 minutes from 1st Street and Heffernan Avenue to the Gran Plaza Outlets located west of downtown on 2nd Street. The shuttle operates Monday-Friday from 9:20 a.m. – 9:40 p.m. and on Sunday from 9:20 a.m. – 8:00 p.m., in line with the hours of operation of the outlets. The shuttle is marketed to customers crossing the border from Mexico on foot. The 1st Street and Heffernan Avenue terminal also provides connections with CTS buses. Route and schedule information are listed on the Gran Plaza Outlets website.

Figure 2-7 Gran Plaza Outlet Shuttle Map



L&A SHUTTLE

L&A Shuttle is a private transit operator providing service from Calexico to major destinations in El Centro, including the Imperial Valley Mall, The IVT El Centro Transit Center, the Social Security office, and the Imperial County Courthouse. Service operates on weekdays between 5:30 a.m. and 8:15 p.m. Buses run every 30 minutes until 4:00 p.m. and then every 60 minutes after. Fares range from \$2 to \$3.50 based on the trip origin and destination.

L&A Shuttle does not have a designated bus stop within downtown Calexico. As a result, the route stops at a private parking lot at the corner of 3rd Street and Rockwood Avenue.

L&A Shuttle maintains a Facebook page which provides a contact email address and phone number. However, a map of the route is not publicly available. L&A Shuttle maintains a Facebook page that includes owner contact information.

Figure 2-8 L&A Shuttle Transit Stop at 3rd Street and Rockwood Ave



SERVICE SPAN BY FIXED-ROUTE PROVIDER

The following charts depict the differences in service spans of each fixed-route operating within Calexico.

Figure 2-9 Weekday Service Span by Provider

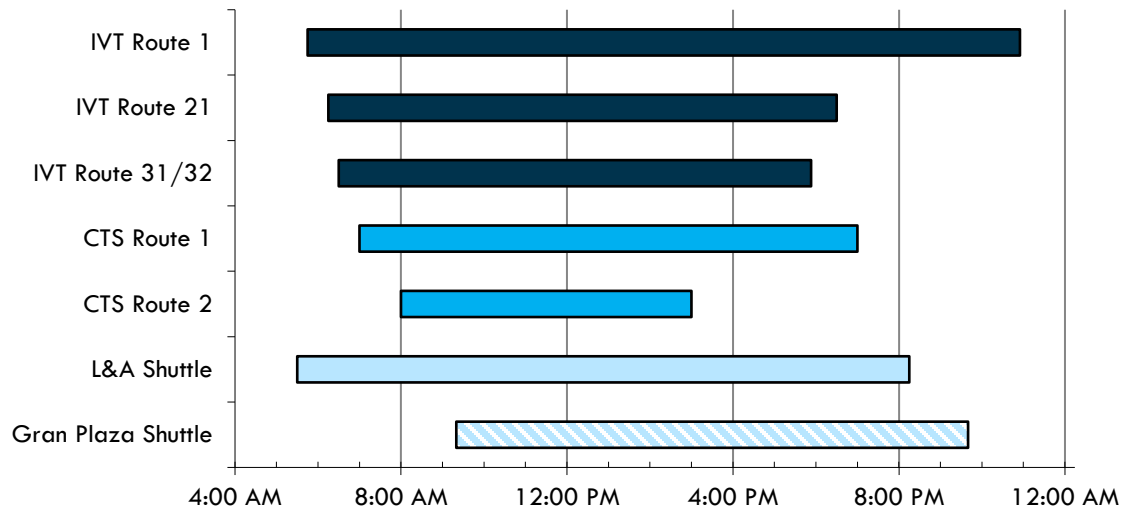


Figure 2-10 Saturday Service Span by Provider

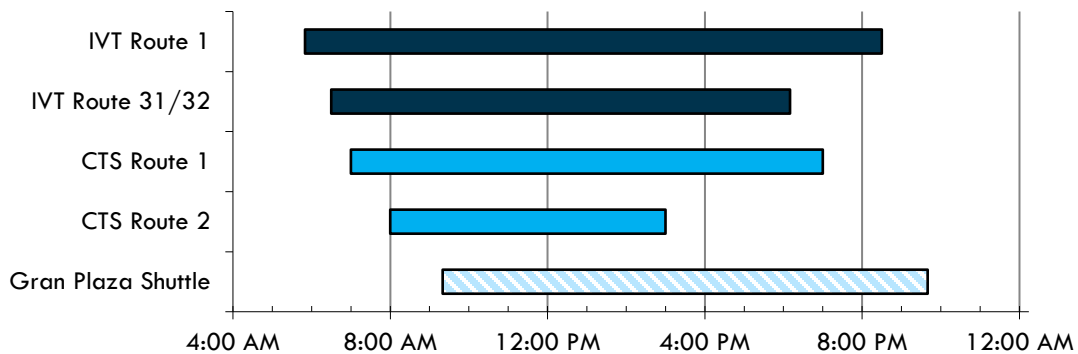
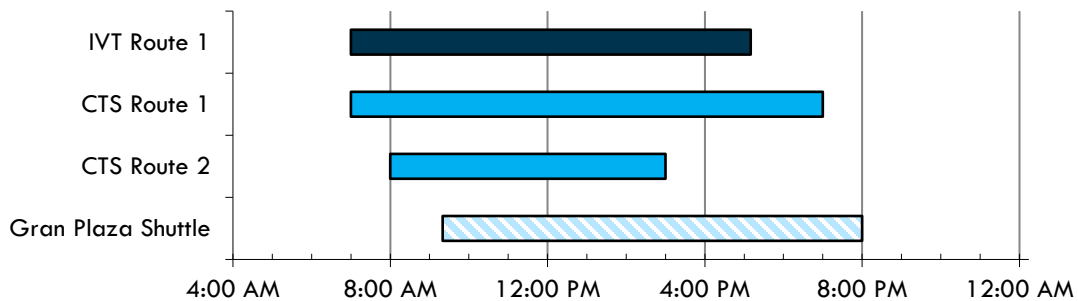


Figure 2-11 Sunday Service Span by Provider



IVT ACCESS AND IVT RIDE

Imperial Valley Transit also provides IVT Access, a curb-to-curb demand response service to Americans with Disabilities Act (ADA) certified individuals within $\frac{3}{4}$ miles of IVT Fixed Route service between 6:00 a.m. and 10:00 p.m. on weekdays and between 6:00 a.m. and 6:00 p.m. on Saturdays. Non ADA-certified persons (seniors age 60 years and over or members of the general public) may use IVT Access only if space is available. For ADA certified persons, one-way fare from Calexico is \$2.50 to all parts of the IVT service area except Heber, which is \$2.00. Non-ADA certified persons pay one and one half times the ADA fare (\$3.75 or \$3.00 for Heber). Trips may be booked up to 14 days in advance and are recommended to be booked at least 24 hours in advance, however same day requests are accommodated if space is available. Pickup times are scheduled within one hour before or after the requested pickup time.

IVT Ride is a curb-to-curb service operated by Imperial Valley Transit for seniors age 60 and over and ADA certified persons within the city limits of Calexico between 7:00 a.m. and 5:00 p.m. seven days per week. One-way fare is \$1.00 and covers the rider and one companion (either a personal care attendant, or other companion). Children under five years of age ride for free. Reservations may be made between 24 hours and 14 days in advance, with same day requests honored only if space is available.

IVT Ride and IVT Access Ridership

Figure 2-12 shows the origins, destinations, and combined ridership for IVT Ride and Access services in March 2016. About 85% of the trips were carried by IVT Ride. Trips originate in neighborhoods primarily in west, central, and north Calexico (shown in blue). Many rides originate from the Alejandro Rivera Senior Center in the Kennedy Gardens neighborhood. Trip destinations are shown in yellow. IVT Ride and Access services are used primarily to reach medical and shopping destinations in downtown, central, and north Calexico.

The top IVT Ride and IVT Access origins and destinations in Calexico are listed in

Figure 2-13. The Alegria Adult Health Center at Birch and C.N. Perry Avenue in central Calexico generates the highest ridership, with an average of 19 trips per day. The Calexico Outpatient Clinic and Fresenius Kidney Care Calexico, other frequent medical destinations, are located nearby on East Birch Street. On Cole Boulevard in north Calexico, Clinicas de Salud del Pueblo and Imperial Valley Family Care also generate frequent trips.

Another cluster of ridership activity is seen in downtown Calexico. Our Lady of Guadalupe Catholic Church at Fourth and Rockwood attracts 21 monthly rides. Many riders are dropped off at the transit center at 3rd Street and Paulin Avenue in downtown Calexico, close to banks and shopping. Two medical clinics in central Calexico—Valley Orthopedic Clinic on East 1st Street and the Child Health Disability Prevention (CHDP) Nutrition Center on Dool Avenue—generate high ridership.

Popular shopping destinations include Walmart at Rockwood Avenue and Cole Boulevard at the north end of town and Food 4 Less at West Birch and Ollie Avenue in west Calexico.

The low-income Alejandro Rivera Senior Citizen Apartments on Rockwood Avenue are the most frequent origin for IVT Ride and IVT Access trips, with 117 monthly rides in March 2016. Other frequent origins with over 40 trips per month include the Luis Moreno Senior Apartment Homes, Villa De La Flores Senior Apartments, De Anza Senior Apartments, and Calexico Senior Apartments.

Figure 2-12 IVT Ride and IVT Access Origins and Destinations

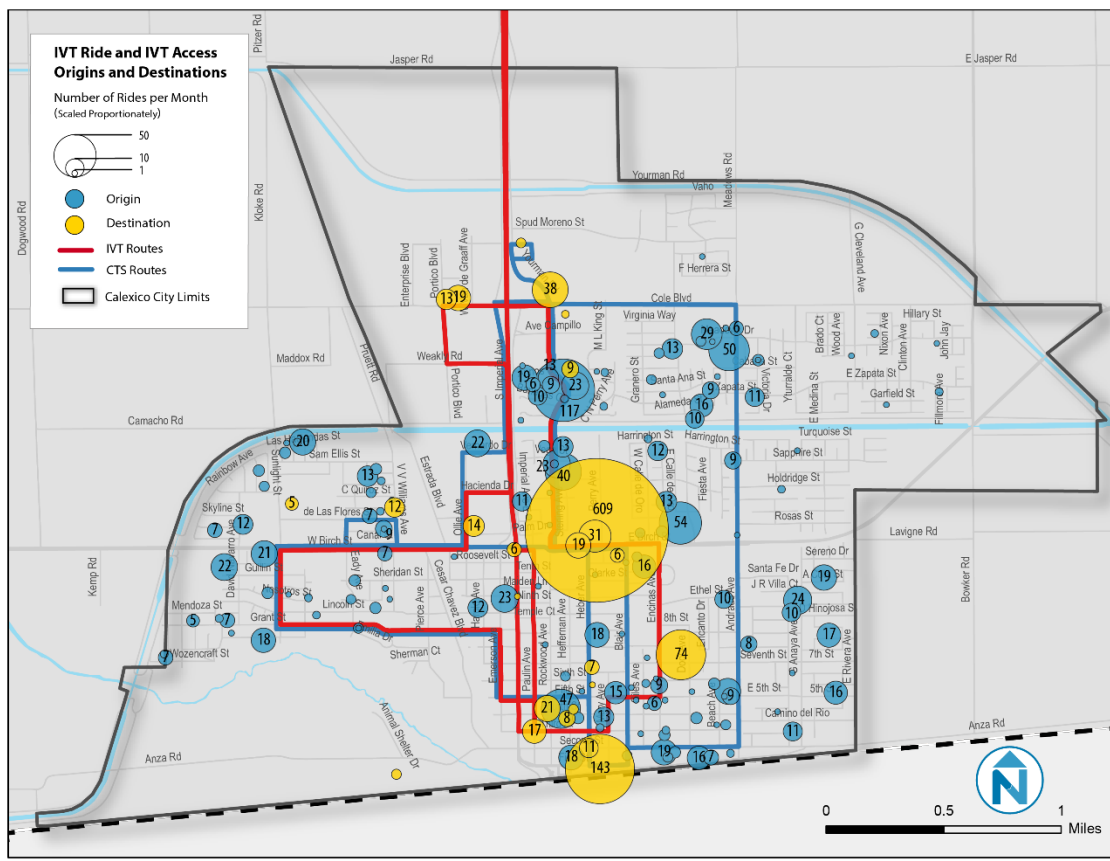


Figure 2-13 IVT Ride and IVT Access Top Origins and Destinations, March 2016

Location	Address	Monthly Rides
Destinations		
Alegria Adult Day Health Care Center	1101 C.N. Perry Avenue	609
Valley Orthopedic Clinic	352 East 1 st Street	143
Child Health & Disability Prevention Nutrition Center	707 Dool Avenue	74
Walmart	2450 Rockwood Avenue	38
Calexico Outpatient Clinic	495 East Birch Street	31
Our Lady Of Guadalupe Catholic Church	135 Fourth Street	21
Clinicas de Salud del Pueblo	223 West Cole Boulevard	19
Fresenius Kidney Care Dialysis Center	351 East Birch Street	19
IVT Transit Hub	E 3 rd Street and Paulin Avenue	17
Food 4 Less Grocery Store	109 West Birch Street	14
Imperial Valley Family Care	251 West Cole Boulevard	13
Origins		
Alejandro Rivera Senior Citizen Apartments	2151 Rockwood Avenue	117
Luis Moreno Senior Apartment Homes	1113 Rancho Frontera Avenue	54
Villa De La Flores Senior Apartments	2201 Meadows Drive	50
De Anza Senior Apartments	233 Fourth Street	47
Calexico Senior Apartments	1630 Rockwood Avenue	40
Villa Dorada Apartments	1081 Meadows Drive	29
Calexico Mobile Home Park	101 Vernardo Drive	22
Escalante Plaza Development	1840 Rockwood Avenue	13
Lincoln Trailer Park	215 Lincoln Street	12

GREYHOUND REGIONAL BUS SERVICE

Greyhound Bus Lines also provides direct regional bus service to several cities in Southern California and Arizona, including: El Centro, Indio, San Diego, Yuma, and Phoenix. Figure 2-14 lists the number of daily direct trips between Calexico and other cities.

Figure 2-14 Greyhound Intercity Trips

Origin	Destination	Daily Direct Trips
Calexico	El Centro	6
	Indio	4
	Yuma	2
	Phoenix	2
	San Diego	3
El Centro	Calexico	7
Indio		4
Yuma		2
Phoenix		2
San Diego		3

TAXICAB SERVICES

In addition to the bus services, there are several taxicab companies operating in Calexico. Calexico Taxi, California Cab and Border Cab are permitted to operate within the City of Calexico. Each registered taxicab cab company charges a flat rate of \$5.00.

The City has designated three (3) taxicab zones in downtown:

- Northbound curb along Rockwood Avenue immediately north of East 1st Street.
- Southbound curb along Rockwood Avenue immediately north of East 1st Street.
- Eastbound curb along midblock segment of East 1st Street between Rockwood Avenue and Heffernan Avenue.

Taxicab loading activity was also observed along the curb of an undesignated segment of westbound East 1st Street, west of Rockwood Avenue. Designated and non-designated (observed) taxicab loading zones are depicted in Figure 2-15.

Figure 2-15 Taxicab Loading Zones

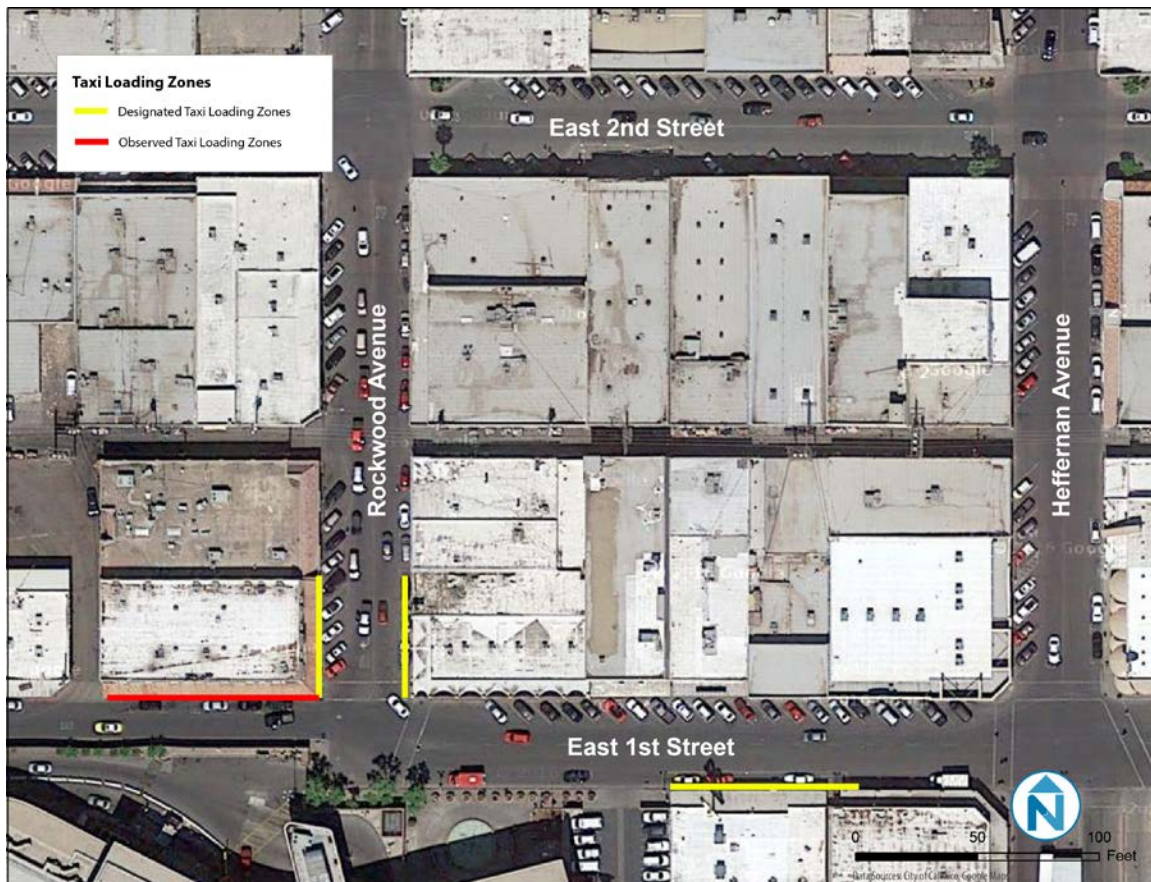


Figure 2-16 Registered Taxicab Companies in Calexico



Illegal Taxicab Operations

Registered taxicab companies, shuttle bus providers and downtown business owners report that illegal taxicab operations, known as *raiteros*, are active in downtown Calexico. These operations entice potential customers by offering a fare lower than the standard \$5 flat fee. *Raiteros* expose their customers to potential risks by not having proper permits, proof of insurance or background checks.

The City of Calexico has employed various strategies to curtail illegal taxicab operations within downtown in the past such as relocating taxicab zones. Additional strategies are necessary to further reduce the presence of *raiteros* within downtown Calexico.

TRANSPORTATION NETWORK COMPANIES

Transportation network companies (TNC's) are a more recent addition to the list of transportation options in Calexico. TNC's are essentially a smartphone-based premium taxicab service. In larger markets, TNC's are a direct competitor to taxicab cabs. In Imperial Valley, TNC's likely serve a different type of user as they require a smartphone, downloaded up, user account and credit card payment.

The largest TNC's in North America, Uber and Lyft, entered the Imperial Valley market in 2015. While Uber and Lyft are not actively operating within the City of Calexico, they each have a regular presence in nearby El Centro. Therefore, it is possible for users to arrange a ride.

AGRICULTURAL WORKER SHUTTLES

Several agricultural shuttles originate at various locations within Calexico and transport workers to areas north of Calexico. Due to the dynamic, seasonal nature of these services, information regarding destinations, number of vehicles, and rider characteristics was not collected as part of this study.

3 PLAN REVIEW

This chapter includes a summary of plans and studies relevant to this transit needs assessment, listed below.

- Imperial County Short Range Transit Plan (2010-2011)
- Calexico West Land Port of Entry Expansion Environmental Impact Statement (2011)
- Calexico Border Intermodal Transportation Center Feasibility Study (2014)
- Specific Operation Analysis for Circulator Bus Design Project (2014)
- City of Calexico General Plan Update, Circulation Element (2015)
- Imperial Valley College/San Diego State University Transit Study (2016)
- Calexico Urban Planning Feasibility Study (2016)

IMPERIAL COUNTY SHORT RANGE TRANSIT PLAN (2010-2011)

The Imperial County Short Range Transit Plan (SRTP) sets forth recommendations for the Imperial Valley Transit (IVT) fixed-route system along with demand-response services operating within Imperial County. The plan was commissioned by the Imperial County Transportation Commission (ICTC) and incorporated analyses of transit service and demographic data, bus rider meetings, and stakeholder interviews. While IVT fixed route services in Calexico focus on providing regional connections to other destinations in Imperial County, the SRTP contains findings and recommendations specific to Calexico transit riders, potential transit services, and capital facilities.

Goals and Objectives

The plan reiterates goals and objectives from the 2004 SRTP, which include:

- Providing mobility to all residents of Imperial County, with service levels determined by demand.
- Connecting Imperial County residents with medical and social services, educational facilities, and employment.
- Supporting economic development (e.g., commercial centers, retail and entertainment destinations).
- Providing transportation alternatives for the general public.

In addition to these, the plan proposes attracting choice riders as a potential goal, although this could require some shifting of resources away from services catered to transit-dependent riders.

The stated goals of the SRTP include maximizing efficiency and usage of the system by deploying appropriate resources to areas where they are needed the most, serving major trip generators, and facilitating passenger connections. Components of these goals specifically relating to local transit service in Calexico include:

- Encouraging coordination between all services, including cross-training between agencies and the ability to cover service for other providers.
- Reducing duplicate services.

Outreach Findings

Notable public input findings that relate to transit service in Calexico include:

- Passengers requested increased service between Calexico and El Centro (Route 1), Imperial Valley College (Route 21), and Brawley (Route 31/32).
- The majority of riders expressed a desire for more frequent service.
- Stakeholders requested improved service for San Diego State University-Imperial Valley (SDSU-IV) students, including an established bus stop at SDSU-IV and new service between SDSU-IV and Imperial Valley College (IVC) to support the colleges' coordinated four-year program.
- A lack of understanding among stakeholders and riders indicated a need for clear, coordinated public information about countywide transit service.

Service Evaluation Findings

The Service Evaluation assessed fixed-route service under three categories: route diagnostics, congruency analysis, and peer analysis. Notable service evaluation findings relating to transit service in Calexico include:

- The three routes serving Calexico perform consistently well and carry the bulk of IVT fixed route passengers.
 - Route 1: El Centro-Calexico has the highest ridership and productivity, and the third highest farebox recovery among IVT routes.
 - Route 21: IVC Express Calexico has the third highest ridership, second highest productivity, and highest farebox recovery among all routes.
 - Route 31/32: Calexico-Brawley has the fourth highest ridership, third highest productivity, and second highest farebox recovery ratio among all routes.
- There were instances of overcrowding on Route 1 El Centro-Calexico and Route 21 IVC Express Calexico, both of which have since seen increased service.
- IVT service coverage does not meet demand in eastern portions of Calexico, although some of it is served by Calexico Transit System routes (and dial-a-ride service for seniors and people with disabilities).
- The bus shelter at 3rd and Paulin has the second highest ridership level among IVT bus stop locations (with 45 daily boardings).
- Dial-a-ride service meets standards for farebox recovery and passengers per day, but is slightly below standards for productivity (passengers per hour).
- Calexico does not set or monitor standards for contracted dial-a-ride service.

Phased Recommendations

Phased recommendations pertaining to Calexico are as follows:

- Phase One (one to two years)

- Expand Saturday service on Routes 1 and 31/32 (implemented).
- Introduce Sunday service on Route 1 (implemented).
- Continue use of “shadow buses” to mitigate overcrowding on Routes 1 and 31/32.
- Phase Two (two to three years)
 - Address capacity issues on Route 21.
 - Consider U-PASS system for students, faculty, and staff at IVC and SDSU Calexico.
 - Construct an Intermodal transfer terminal (Calexico Intermodal Transit Center Feasibility Study is a continuation of this proposal).
- Phase Three (four to five years)
 - Implement Calexico Circulator service.
 - Introduce Saturday service on circulators.
 - Provide weekday, peak period limited-stop service between El Centro and Calexico (with additional stops at the Imperial Valley Mall to differentiate route from the privately operated L&A Shuttle service).
- Future Phases (5+ Years)
 - Modify circulators to improve performance and serve new generators.
 - Coordinate with services provided in Mexico (both intercity and local Mexicali) once Calexico Intermodal Transfer Terminal is complete.
- Long-Term Transit Vision Concepts
 - Incorporate multiple routes into one limited-stop service on SR-111 with timed transfers to circulators where possible.
 - Explore opportunities to improve connections between IVT and transit operators across the border, along with future opportunities to serve one or both of the other border crossings (on SR-7 and SR-186).

CALEXICO WEST LAND PORT OF ENTRY EXPANSION FEIS (2011)

The General Services Administration (GSA) Urban Development Program released the Final Environmental Impact Statement (FEIS) for expansion and reconfiguration of the Land Port of Entry (LPOE) in downtown Calexico in May 2011. The project seeks to mitigate deficiencies at the downtown Calexico LPOE border crossing. The project will improve safety, security, and operations of the LPOE, reduce vehicle and pedestrian queues, and enable the installation of technologically-advanced inspection devices. The existing LPOE does not meet the Federal inspection services' minimum standards for processing time and overall efficiency.

Phase 1 of the project will consist of:

- Five southbound privately owned vehicle (POV) lanes
- A southbound bridge over the New River
- Ten northbound POV inspection lanes with primary and secondary inspection canopies
- Booths and inspection equipment
- A new headhouse (command center)
- Site work to accommodate those facilities on the sloping site

Phase 2 will include:

- Additional site work
- Demolition of existing port building
- A new pedestrian processing facility
- Administrative offices
- Five additional southbound POV inspection lanes with canopies and booths
- Six additional northbound POV inspection lanes

Scheduled construction completion of fully-funded Phase 1 is January 2018. Phase 2 completion date is pending as funding sources are identified. The Calexico LPOE expansion presents an opportunity to consider mobility needs and effective connections to transit and other mobility providers for those entering Calexico from Mexicali on a regular basis.

Figure 3-1 Architect's Rendering of the Completed Expansion



Source: Calexico West Land Port of Entry Expansion Final Environmental Impact Statement, GSA, 2011

CALEXICO BORDER INTERMODAL TRANSPORTATION CENTER FEASIBILITY STUDY (2014)

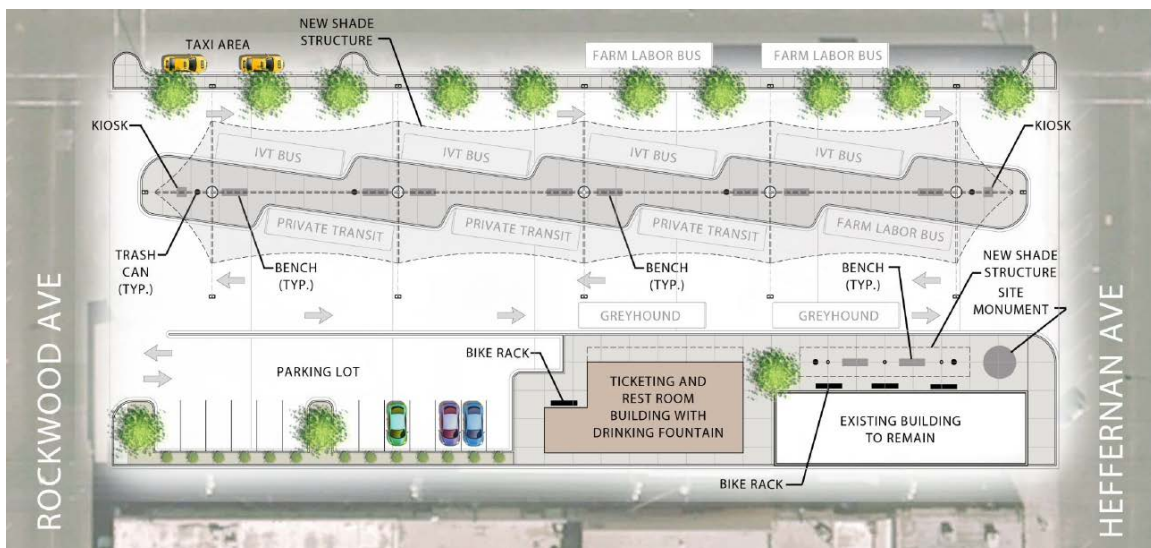
This study evaluated the feasibility of an Intermodal Transportation Center (ITC) that would connect to the pedestrian Calexico Land Port of Entry (LPOE) into downtown Calexico. The impetus for this project was the planned Calexico LPOE expansion, which will add two to five inspection stations for pedestrians. Along with facilitating a better connection to the expanding LPOE, the study goals are as follows:

- Consolidate connections among downtown transportation modes.
- Increase transit ridership.
- Minimize travel time to station and increase customer convenience.
- Implement a cost-effective transportation enhancement for downtown.

In addition to evaluating feasibility, the study also developed and assessed alternatives, identified impacts, and estimated costs and financial feasibility. The process was guided by a steering Committee with 16 members representing the City of Calexico, IVT, ICTC, Caltrans, and SCAG. Outreach activities included a community walk around, community workshop, stakeholder interviews, rider surveys, business stakeholder interviews, a public hearing, and a final presentation.

The final site location was recommended for East Third Street, between Rockwood and Heffernan Avenues. With the exception of curbside taxi, this alternative would be able to accommodate all proposed uses on site, including public and operator restrooms, a Greyhound bus ticketing and passenger office, Greyhound bus customer parking, on-site passenger pick-up and drop-off parking, information kiosks, four IVT bus bays, three private shuttle bays, bicycle storage, and separation of general auto and professional driver lanes.

Figure 3-2 Conceptual Site Plan



Although the Imperial County Long-Range Transit Plan estimates implementation of the Calexico ITC in 2018 under a financially constrained scenario, it does not assign specific funding sources to the project.

SPECIFIC OPERATION ANALYSIS FOR CIRCULATOR BUS DESIGN PROJECT (2014)

The Imperial County Transportation Commission (ICTC) conducted a circulator bus study in 2014. The plan proposed three circulator services in Calexico, Brawley, and Imperial. The intent of these routes would be to improve local transit access to facilitate connections to IVT intercity routes. As a result, IVT intercity routes would be streamlined, thereby improving travel times and frequencies.

Prior to the study, IVT operated two specially branded circulator routes (Blue and Green Lines) in El Centro. As of December 2013, IVT also operates the Gold Line, a circulator in Brawley. The route proposed for Calexico is called the Garnet Line. Outreach strategies for this planning effort included an origin-destination survey, meetings and stakeholder interviews, bus stop workshops, and public workshops.

Rider Survey Findings

- The majority of trips among sampled riders were school-related (31%) and work-related (24%).
- El Centro and Calexico had the highest share of origins and destinations.
- The majority of riders (66%) walked just a few blocks to access transit, with 16% walking between a few blocks and a quarter mile.
- One third of riders transferred to another route before or after their trip.
- Only 12% of riders said they had a car available to take their trip.
- Bus reliability was the most important aspect of bus service among riders.

Calexico Outreach and Workshop Findings

- The most frequently requested locations for new stops were Walmart, Denny's, churches, medical clinics, pharmacies, downtown, the movie theatre, Holiday Inn Express, the swap meet, Casa Retiro, banks, Nosotros Park, Imperial Irrigation District Office, community centers, high schools, and the senior center.
- Routing and schedules should account for increased activity at banks, City Council Chambers, and utility company offices at the beginning of the month.
- Requests for improvements include weekend service, later running hours, air conditioning, energy efficient buses, and improved route/schedule information.
- Some participants expressed concern that a new line would create direct competition with privately-operated local services.

Needs and Opportunities for Calexico Circulator (Garnet Line)

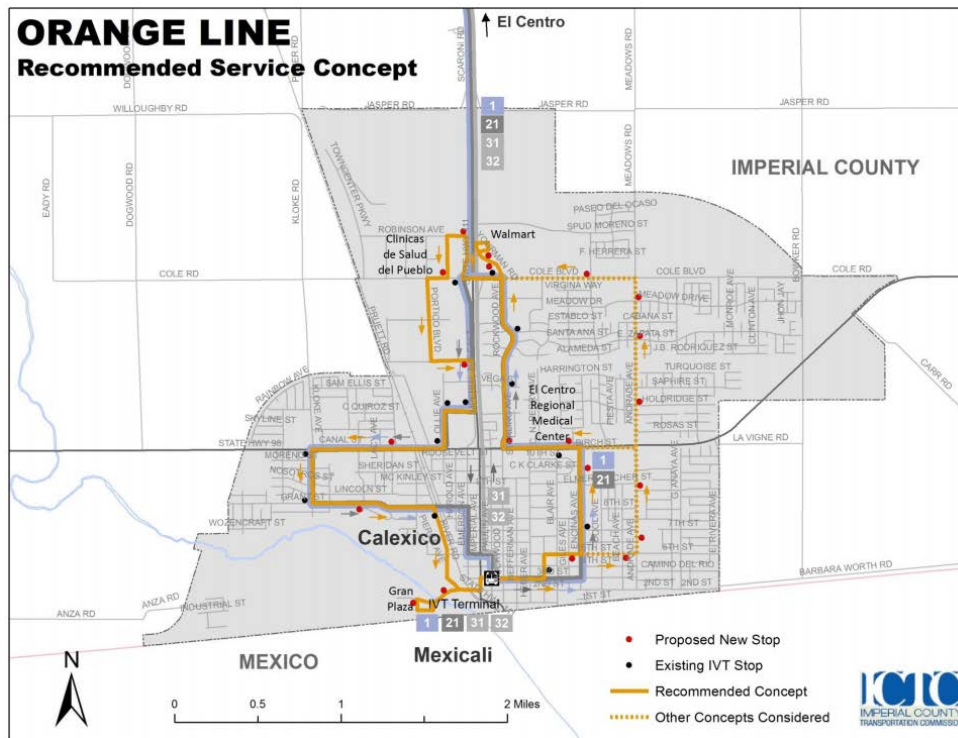
- The circulator service should coordinate with IVT fixed-routes (northbound Route 1 in the morning and southbound Route 1 in the afternoon).
- Although the Garnet Line would duplicate some of Route 1's alignment, it will serve destinations not currently served (Walmart, Gran Plaza) and will address some overcrowding that occurs on Routes 1 and 21.
- The Garnet Line would serve key locations not currently covered by IVT:

- Neighborhoods east of Encinas Avenue (served by Calexico Transit Service on Andrade Avenue).
- Businesses on Scaroni Road north of Cole Boulevard.

Garnet Line Recommendations

The proposed alignment largely follows that of Routes 1 and 21 within Calexico. Deviations will allow the Orange Line to serve key destinations, including Walmart, Clinicas de Salud del Pueblo, and Gran Plaza. Routes 1 and 21 would be re-routed in one portion of their alignment to avoid duplication on Mary Avenue and Fifth Street (instead continuing east on Second Street to Encinas Avenue). The alignment, which has been approved by the City of Calexico, is depicted in Figure 3-3. The route alignment would require 13 new stops, with the remainder of proposed stops already served by IVT routes in Calexico.

Figure 3-3 Recommended Garnet Line (formerly Orange Line) Alignment and Stop Placement



Source: Specific Operational Analysis for Circulator Bus Design Project, ICTC, 2014

The route is proposed to operate from 6:00 a.m. to 7:00 p.m. on weekdays and from 10:00 a.m. to 6:00 p.m. on Saturdays during a subsequent phase. The proposed headway is 70 minutes most of the day, allowing service to connect to every other trip on IVT Route 1 (operating every 35 minutes). Trips would be timed to connect to northbound Route 1 in the morning and southbound Route 1 in the afternoon.

The proposed service levels provide a minimal amount of bus service that does not match the service span or days of operation provided by IVT Route 1.

COORDINATED PUBLIC TRANSIT-HUMAN SERVICES TRANSPORTATION PLAN FOR IMPERIAL COUNTY (2014)

The Imperial County Transportation Commission (ICTC) updated its Coordinated Public Transit-Human Services Transportation Plan in 2014. The previous plan was completed in 2008. The primary objectives of the updated plan included the following:

- Comply with Federal Transit Administration (FTA) requirements of maintaining and updating a Coordinated Plan.
- Identify unmet transportation needs and mobility gaps.
- Promote dialogue between public and human services transportation providers.
- Establish a list of responsive and prioritized mobility projects and strategies.

The coordinated plan places special emphasis on three specific population groups: elderly persons, persons with disabilities and persons of low-income.

Consumer outreach was conducted throughout the county, including bus stops, one stop centers and major shopping destinations in Calexico. The City of Calexico Public Works staff also participated in stakeholder interviews that were held to better understand mobility gaps and transportation-related needs.

The Coordinated Plan acknowledged the significant presence of private sector transportation within Calexico, including intercity bus service, local fixed-route circulators, shopping mall shuttles, taxis and farmworker buses. Also noted was the substantial number of pedestrians crossing the U.S.-Mexico border from Mexicali to Calexico for a variety of reasons, including employment, education, shopping and medical. The Coordinated Plan mentioned the challenge in achieving collaboration and cooperation between private transportation services.

Riders and stakeholders reported regular overcrowding on IVT services (Routes 21/22) connecting Calexico and Imperial Valley College. The lack of sufficient capacity on select Route 21/22 trips continues to be an issue as of Fall 2016.

Capital and service improvements specific to Calexico that are mentioned in the 2014 Coordinated Plan include:

- Installation of transit information at major bus stops similar to the large, bilingual displays at El Centro and Brawley Transit Centers.
- Installation of a safe pedestrian crossing at SR-111 and Cole Road.
- Additional capacity on bus service between Calexico and Imperial Valley College.
- Further study of a potential transit link between SDSU-IV and SDSU (San Diego) campuses.

CITY OF CALEXICO GENERAL PLAN UPDATE (2015)

The Circulation Element of the City of Calexico General Plan Update addresses the City's transportation needs and guides its long-range vision for improving mobility for all modes of travel. The 2015 update adopts strategies from Caltrans, ICTC, and the State of California Complete Streets policy.

According to the Existing Conditions assessment, the current circulation system is auto-oriented. The primary issues it identifies are related to vehicular congestion, especially on SR-111 between SR-98 (Birch Street) and the International Border. Truck traffic, school drop-off and pick-up times, and the railroad tracks paralleling Highway 111 are also identified as factors contributing to congestion. The report identifies increased border crossing demands as an issue for both vehicular and pedestrian circulation, pointing to the need for multimodal transportation improvements.

After outlining the street classification system and recommending classifications for specific segments, the report analyzed anticipated traffic forecasts for each classified roadway and made recommendations to maintain acceptable Levels of Service (LOS). For each policy consideration, proposed policies relating to transit and pedestrian access are summarized below.

- **Land Use**
 - Locate a mix of uses near residential areas to encourage pedestrian access.
- **Transportation Systems Management**
 - Encourage ride sharing to reduce traffic generation.
 - Identify needs for park-and-ride facility locations.
- **Public Transportation**
 - Work with IVT and other local and regional transit providers to meet the needs of the community.
 - Develop a short range transit plan.
 - Evaluate to the needs of transit-dependent riders (seniors, people with disabilities, low-income, etc.) when planning transit for the City of Calexico.
 - Increase utilization of existing transit resources through education and provision of shelters/benches.
 - Require developers of new projects to coordinate with transit providers to incorporate design elements that will increase ridership potential.
 - Design transit to serve international pedestrians crossing the border.
 - Transit routes should be within walking distance of the border and should serve destinations such as Walmart, Las Palmas, Price Center, and private schools.
 - Evaluate the use of “transit village development districts” as defined and regulated by state law.
 - Support continuation of the existing shuttle service that transports farm workers from Mexico to areas in Calexico and Imperial County.
- **Pedestrian Facilities**
 - Improve/install sidewalks on both sides of the road for all urban standard streets.
 - Improve/install sidewalks on at least one side of rural streets which lead to schools or bus stops.

- **Complete Streets**

- Make Complete Streets practices a routine practice for everyday operations and apply Complete Streets policies to all roadway projects to improve the transportation network for all road users.
- Find opportunities to repurpose right-of-ways to improve connectivity for pedestrians, cyclists, and transit.

IMPERIAL VALLEY COLLEGE/SAN DIEGO STATE UNIVERSITY TRANSIT STUDY (2016)

This plan presents phased implementation recommendations for route and service alternatives to connect three college campuses in Imperial County: Imperial Valley College (IVC) near the City of Imperial and San Diego State University (SDSU) – Imperial Valley satellite campuses in Calexico and Brawley. The proposed phases, along with route and service characteristics, are summarized below.

Phase 1 – IVC Transfer Concept

With an expected implementation window between 2017 and 2025, this phase includes two shuttle routes that would connect IVC to each SDSU campus. IVC would serve as the hub, meaning that a person wanting to travel between the SDSU campuses would need to transfer. The SDSU-Calexico/IVC route would require a 60-minute cycle time, offering 60 minute headways from 6:00 a.m. to 10:30 p.m. while school is in session. It would operate on SR-111. The SDSU-Brawley/IVC route would also operate primarily on SR-111 and would have 60 minute headways, but it would begin service at 12:00 p.m. instead of 6:00 a.m. Figure 3-6 shows the proposed alignments for routes serving SDSU-Calexico (Blue) and SDSU-Brawley (Red).

Phase 2 - SDSU Express Shuttle Route

With an expected implementation window between 2020 and 2028, this phase would complement the two shuttle routes with an express route operating directly between the two SDSU campuses. The route would require a 90-minute cycle time, and would provide 90 minute headways between 12:00 p.m. and 10:30 p.m. while school is in session. The alignment would duplicate that of the routes proposed for Phase 1 (without deviating to serve IVC).

Longer Term Phases

In addition to the service and route alternatives described above, the report also identifies long-term opportunities that could be implemented once funding sources are identified.

- **SDSU Main Campus (San Diego)**
Service. Two alternatives were presented for this option. The first would operate between IVC and SDSU, primarily via I-8. The second one would run between SDSU-Calexico and

Figure 3-4 Proposed IVC/SDSU-Imperial Valley Routes



Source: IVC/SDSU Transit Study, ICTC, 2016

SDSU, eliminating the need for SDSU-Calexico students to transfer at IVC. It would operate on SR 98 and I-8.

- **Northern Arizona University (NAU) Yuma Campus Service.** This would provide service between IVC and NAU Yuma, primarily via I-8.

Additional Transit Considerations

As part of the route and service recommendations, the report identifies additional transit considerations, including new bus stop and vehicle needs. In Calexico, it recommends a new stop along East 7th Street at the SDSU main entrance. The stop would include a shelter, bench, signage, and trash containers. As it would directly serve campus facilities, the report recommends that SDSU would maintain the stop.

In order to operate with one spare vehicle, the report recommends three buses for Phase 1 and four buses for Phase 2. After receiving stakeholder and public input, it was determined that standard transit buses (35') are preferred for providing academic shuttle service.

While the report recommends branding the service as the “Imperial Valley University Transit Shuttle,” the study team assumed that ICTC would administer the service and integrate it with existing IVT routes and fare structure, thus making it available to the general public.

Additionally, the study team indicated that this plan would be taken into consideration by IVC in its upcoming SRTP, specifically in relation to proposed route alignments for Route 21 - IVC Express, in red below.

Figure 3-5 Alignment Alternative, Route 21 – IVC Express



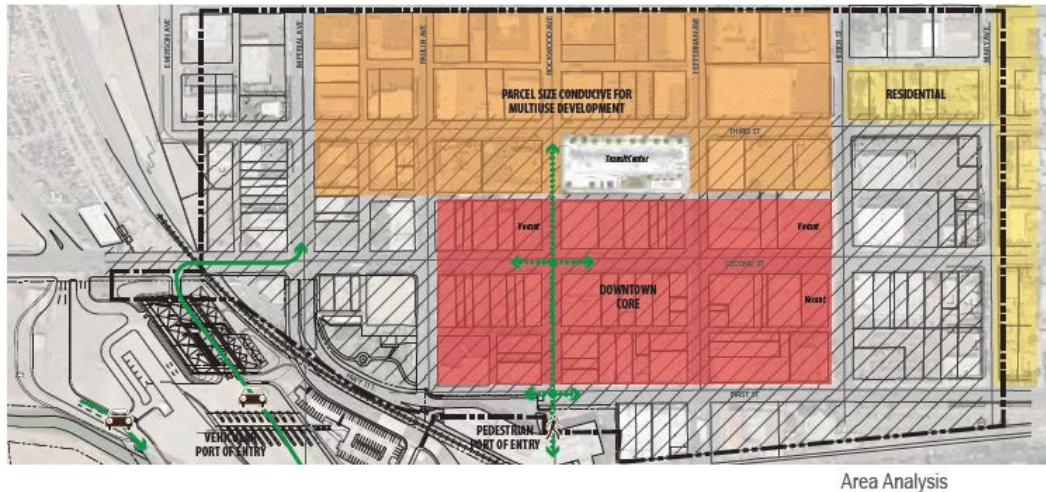
Source: IVC/SDSU Transit Study, ICTC, 2016

CALEXICO URBAN PLANNING FEASIBILITY STUDY (2016)

The Calexico Urban Planning Feasibility Study was sponsored by the General Services Administration (GSA) Urban Development Program and includes final recommendations for community-supportive design. The recommendations support community goals and identify opportunities that catalyze economic development. The study includes two primary design concepts. The study area is bounded by Emerson and Mary Avenues, and 1st and 4th Streets.

Streetscape improvement options included curb extensions to make pedestrian crossings safer, angled parking, a pedestrian spine, benches, trees and permeable pavement. The next steps are to use the concept designs for grant award purposes. These potential changes to the streetscape are important in the context of this transit needs study because of the potential impact they may have on transit operations, and creating a transit-supportive pedestrian environment.

Figure 3-6 Study Area



Source: Calexico Urban Planning Feasibility Study, GSA, 2016

Figure 3-7 Three Conceptual Streetscape Designs



Source: Calexico Urban Planning Feasibility Study, GSA, 2016

SUMMARY OF EXISTING PLANS

The vision for circulation and mobility set forth in Calexico's General Plan includes clear intentions to incorporate multiple modes into the overall transportation system, including transit. Public transportation is discussed in terms of specific groups, such as transit dependent populations and pedestrians crossing the U.S./Mexico border on foot, while improvements to sidewalks, bus stop access, and passenger amenities will benefit all riders and potentially attract new riders.

Plans that impact transit in Calexico can generally be divided into two categories: plans for transit service and plans for capital improvements. Plans for transit service focus on local circulation, regional connectivity, and special service to educational institutions, all of which exist to some degree today. Local circulation in Calexico is currently provided but multiple transit operators, which presents a barrier to implementing planned improvements because, while the community has identified desires for local circulator service, it is not clear which operator will add new service or restructure existing service to meet those needs.

Plans for capital improvements all focus on downtown Calexico. Predicted increases in border crossings due to the expansion of the Calexico LPOE will bring additional pedestrians to Calexico every day. Transit is an obvious tool to serve the mobility needs of those pedestrians once they enter the U.S., which will be facilitated by the planned intermodal center housing local, regional, and long distance transit services. In addition, plans for improved streetscape and urban design in downtown Calexico intend to spark economic development and create an enhanced destination, which may further increase demand for transit connections to downtown.

4 MARKET ANALYSIS

Populations with certain socio-economic and demographic characteristics have a higher tendency to use transit, and concentrations of these characteristics typically are good markets for transit. The following sections describe the location and density of these key groups in Calexico to illustrate which areas have the greatest need for transit.

Population, employment, and age (seniors and young adults) are mapped by census block, while persons with disabilities, low income households, rental households, and zero-vehicle households are mapped at the census block group level (the smallest available geography).

Border crossing statistics were also analyzed in order to understand the impact that Calexico's neighboring city, Mexicali, has on its mobility needs and market for transit.

POPULATION

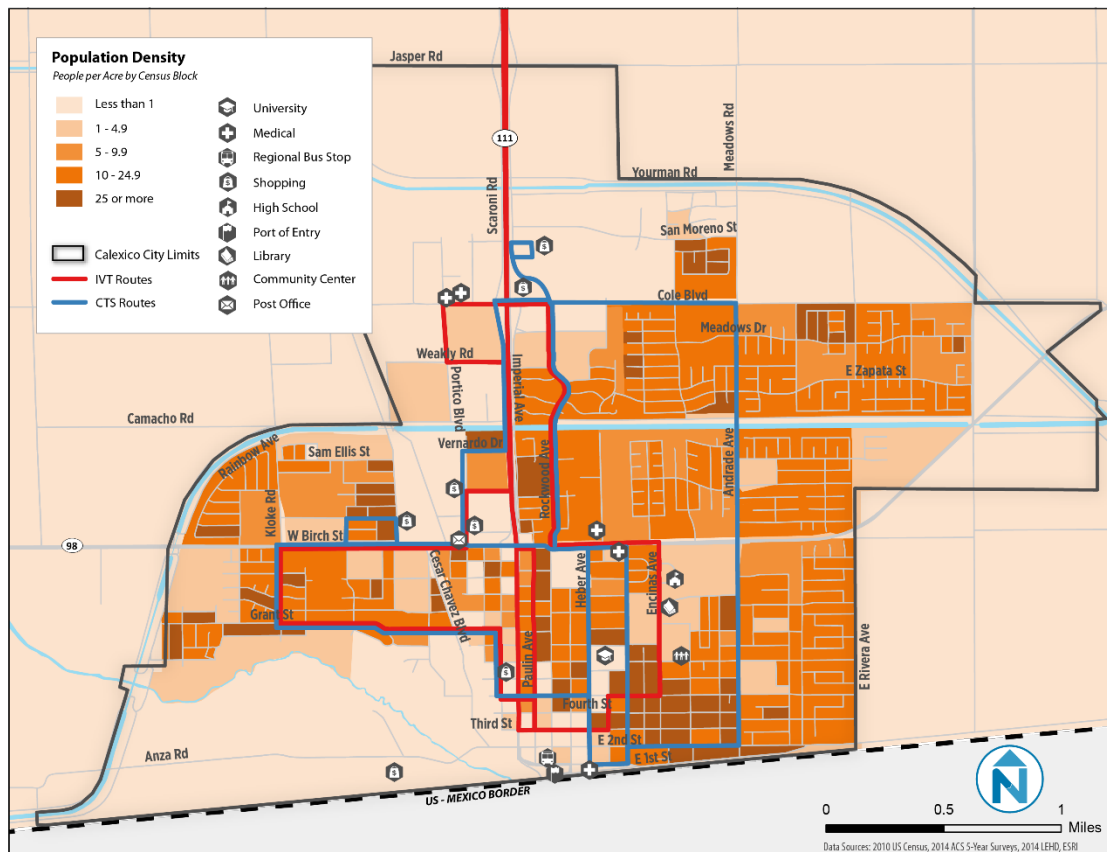
General Population

Figure 4-1 shows population density in Calexico as of 2014. Downtown Calexico, just north of the U.S.-Mexico border, between and southeast of San Diego State University Imperial Valley Campus and Andrade Avenue has the largest area of high population density in the city.

Other areas of high population density include the Anchor Trailer Park and Calexico Mobile Home Park along Imperial Avenue, Casa Sonoma Apartments and Calexico Village Apartments along SR-98 (Birch Street).

More recent high-density development has occurred in the northern end of the city, particularly near the intersection of Meadows Road and Meadows Drive.

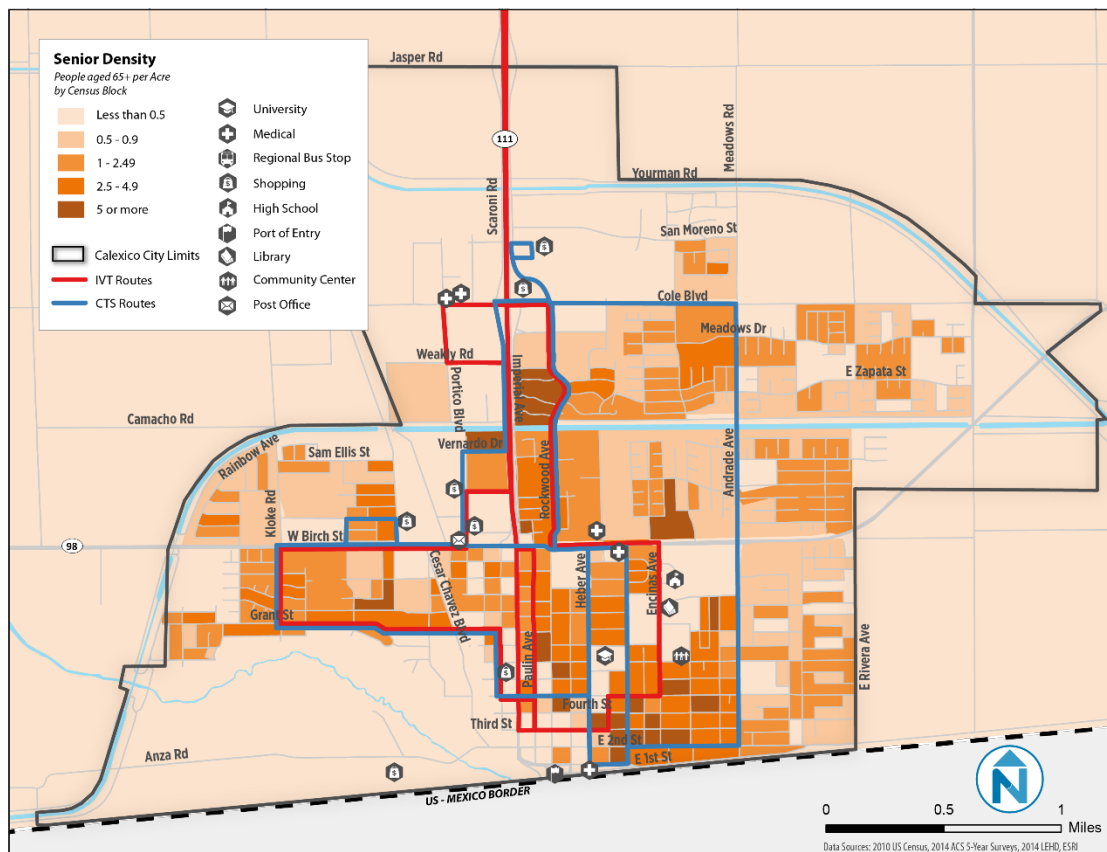
Figure 4-1 Population Density



Seniors

Figure 4-2 shows the distribution and density of people aged 65 and over. Seniors are concentrated in pockets of downtown neighborhoods, as well as senior living complexes including the Alejandro Rivera Senior Citizen Apartments on Rockwood Avenue and Luis Moreno Senior Apartment homes off of SR-98 (East Birch Street). People over the age of 65 also live in neighborhoods along Lincoln Street in west Calexico and in the Calexico mobile home park off Vernardo Drive near SR-111.

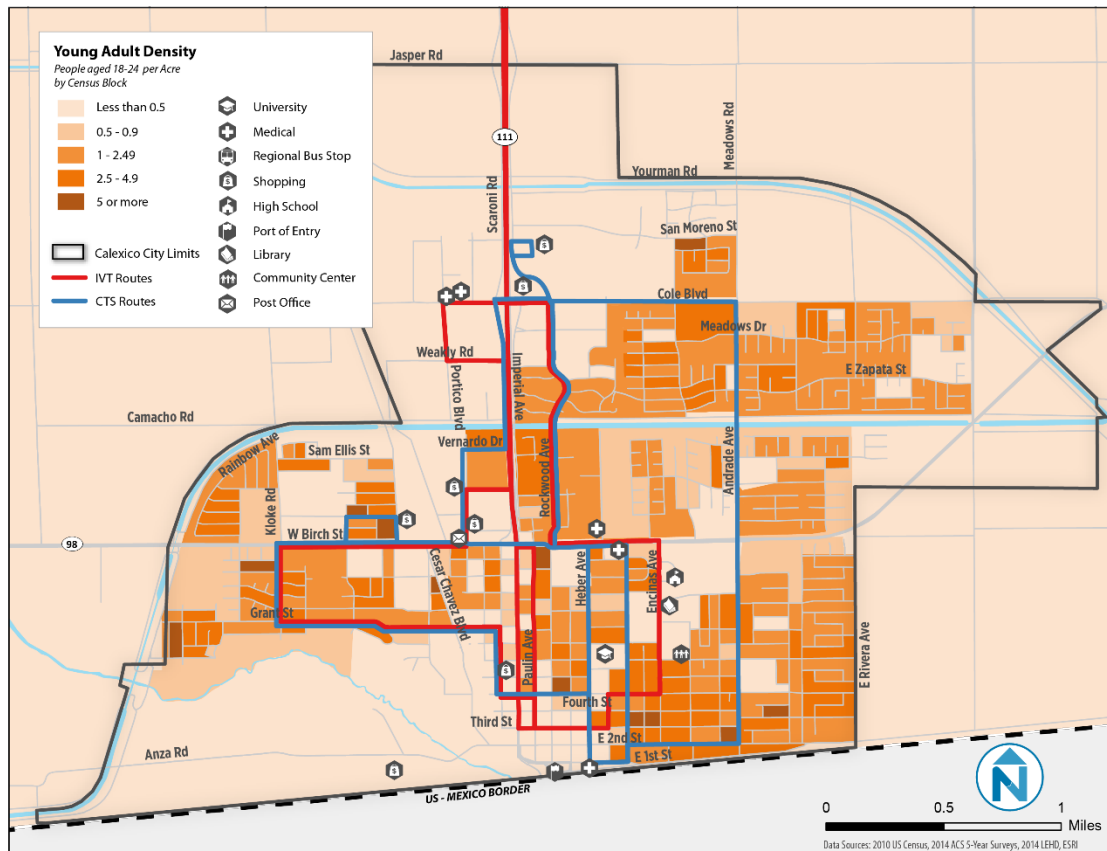
Figure 4-2 Senior Population Density



Young Adults

Young adult persons between the ages of 18 and 24 are distributed fairly evenly throughout Calexico, and mirror that of the overall population. The density of young adults is shown in Figure 4-3.

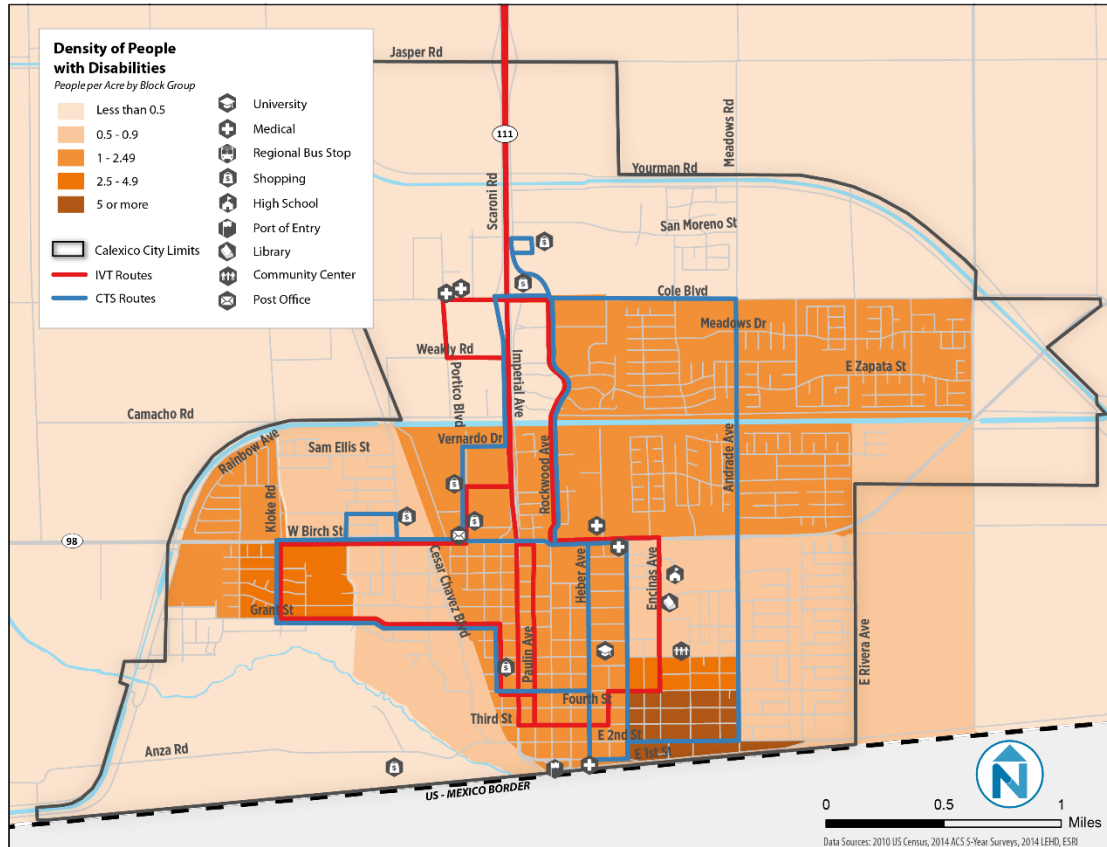
Figure 4-3 Young Adult Population Density



Persons with Disabilities

The density of persons with permanent disabilities by Census block group is shown in Figure 4-4. The neighborhoods just northeast of the U.S.-Mexico border crossing have the highest density of persons with disabilities. A moderate density of persons with disabilities is also present in the western edge of the city west of Eady Avenue between SR-98 (Birch Street) and Grant Street.

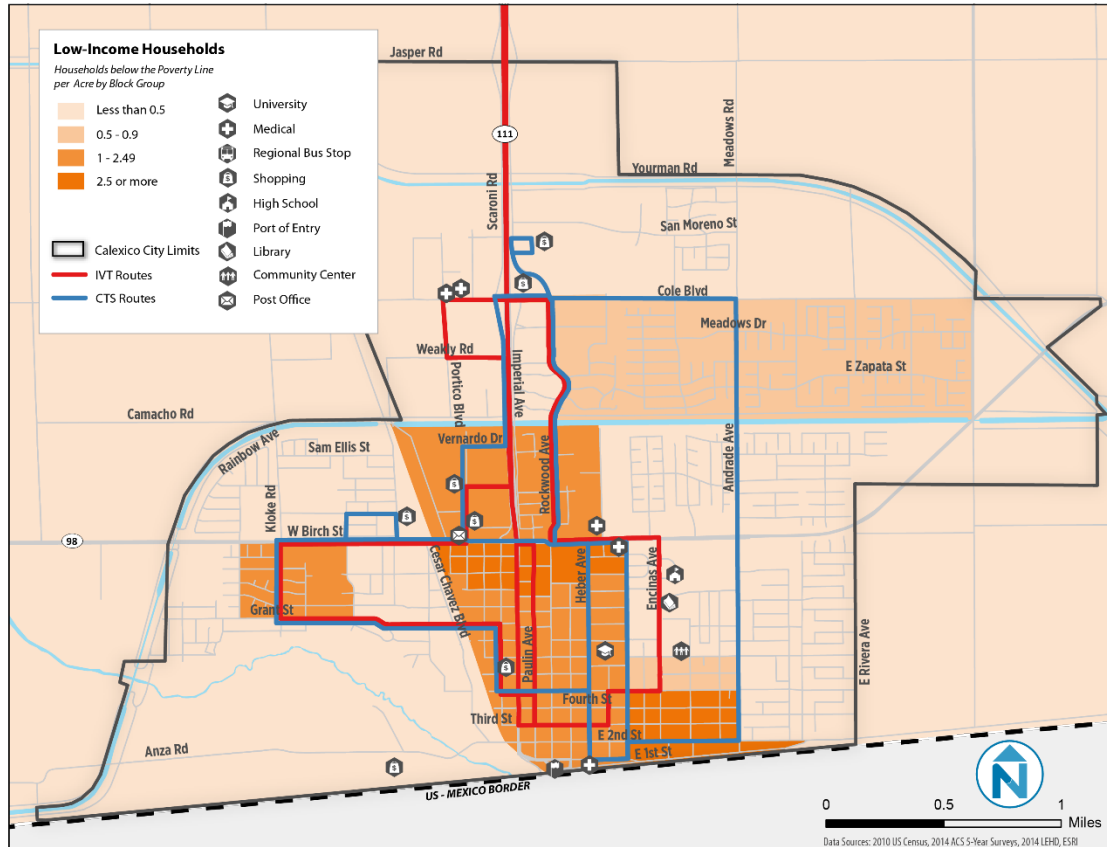
Figure 4-4 Persons with Disabilities Density



Low-Income Households

Low-income households are mainly located in the center of town, along the border, and neighborhoods in the western portion of the city. Low-income households are defined as household with incomes below the poverty line. The density of low-income households is shown in Figure 4-5.

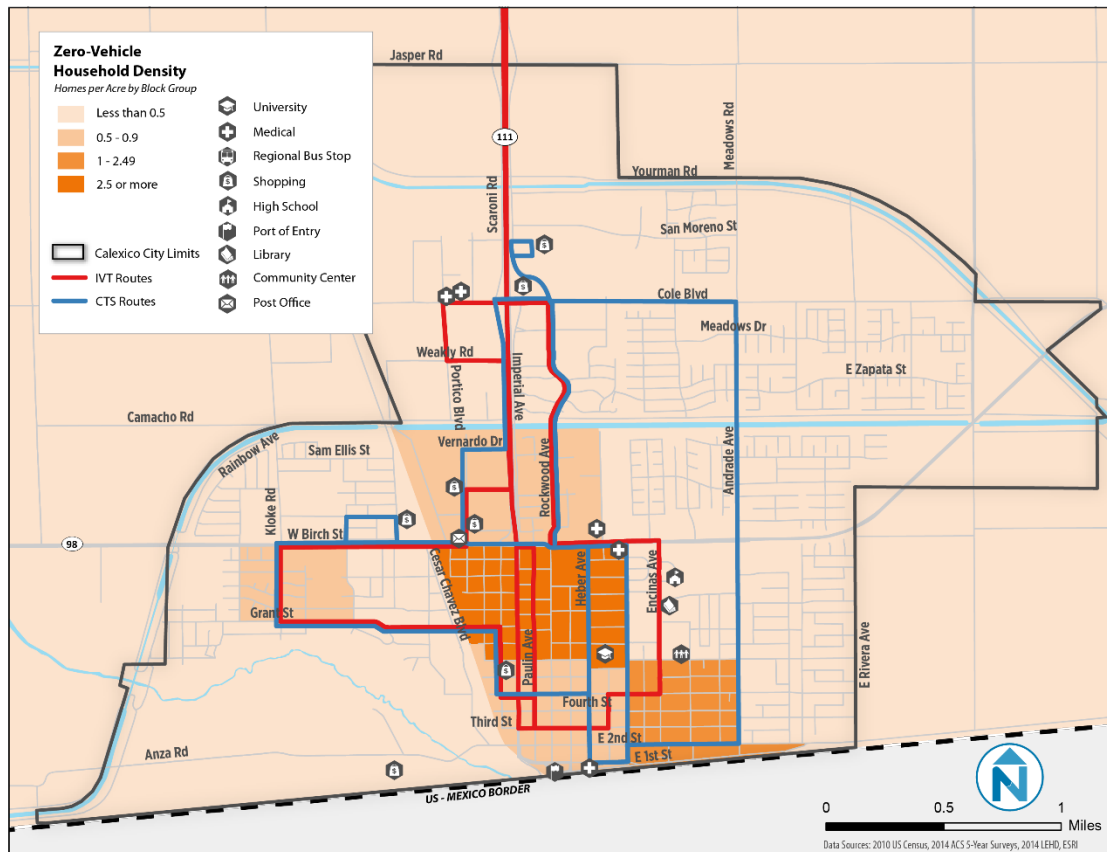
Figure 4-5 Low-Income Household Density



Zero-Vehicle Households

Households without automobile access are primarily located in neighborhoods in the center of the city between SR-98 (Birch Street), Blair Avenue, 7th Street and Cesar Chavez Boulevard. Neighborhoods east of downtown between Blair Avenue, 7th Street, Andrade Avenue and the U.S.-Mexico border have moderated densities of zero-vehicle households. The distribution of zero-vehicle households is depicted in Figure 4-6.

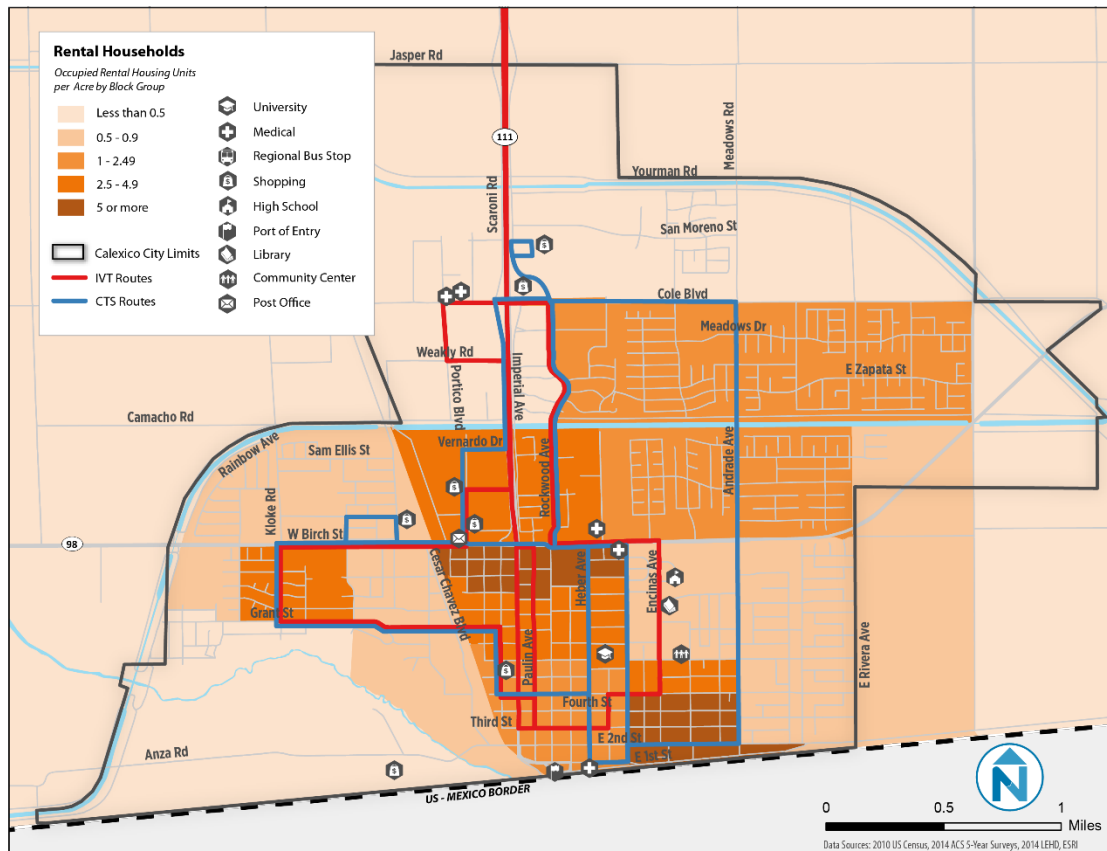
Figure 4-6 Zero-Vehicle Household Density



Rental Households

Occupied rental housing units are located throughout Calexico. The highest densities of rental households are seen in central Calexico south of SR-98 (Birch Street), and along the U.S.-Mexico border, as shown in Figure 4-7.

Figure 4-7 Renter Household Density



Transit Demand Index

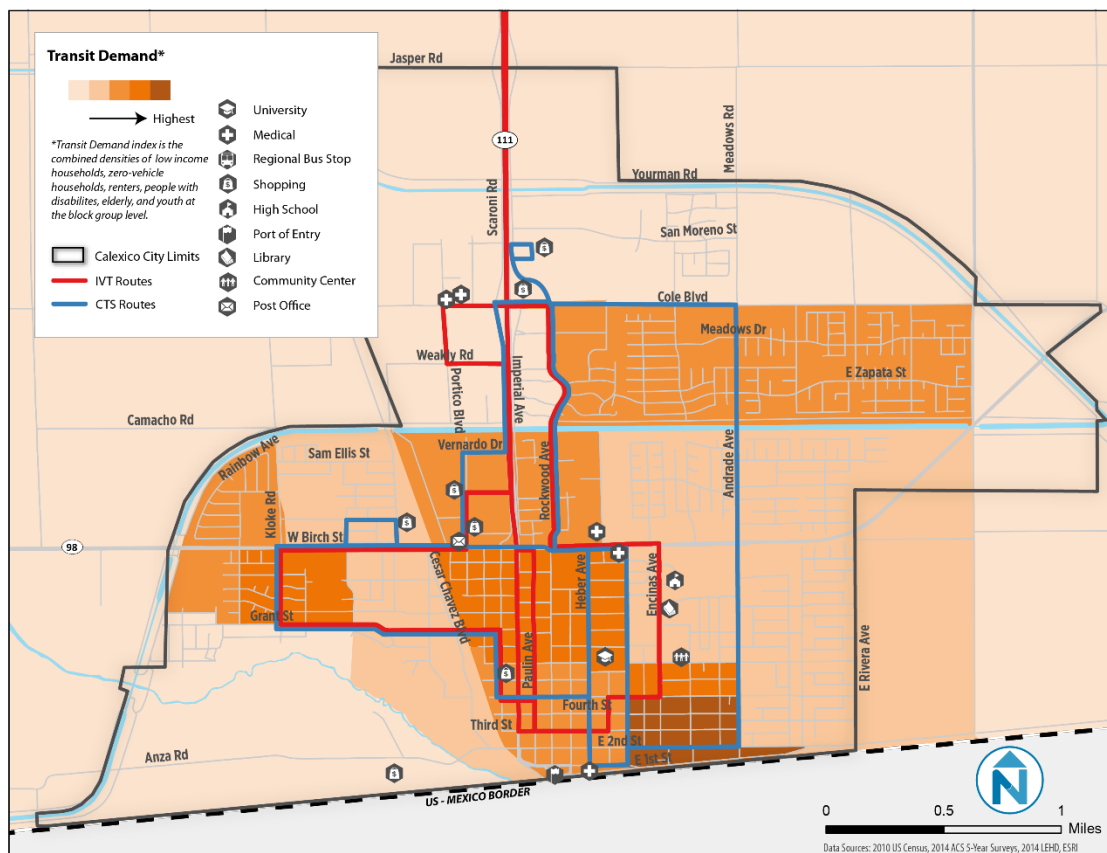
Together, select socio-demographic characteristics can show the relative demand for transit in a given area. These include the densities of seniors, young adults, persons with disabilities, low-income households, zero-vehicle households, and rental households. These characteristics have been combined into one Transit Demand Index, shown in Figure 4-8. A higher score, indicated in darker shades on the map, indicates higher predicted transit needs. The index reveals that transit demand in Calexico is highest in:

- Neighborhoods east of downtown and north of the U.S.-Mexico border
- Central Calexico from Seventh Street to SR-98 (Birch Street), east of Cesar Chavez Street and west of Blair Avenue
- West Calexico neighborhoods between SR-98 (Birch Street) and Grant Street
- Northeast Calexico neighborhoods south of Cole Boulevard and north of the All-American Canal

Figure 4-8 also overlays the current fixed route transit services with the Transit Demand Index. Many of the neighborhoods with strong transit demand are served by overlapping IVT and CTS routes. The map also reveals low transit demand along Andrade Street,

Note that the transit demand index reflects trip origins only. Destinations such as employment, shopping, medical and education are not included in this analysis.

Figure 4-8 Transit Demand Index



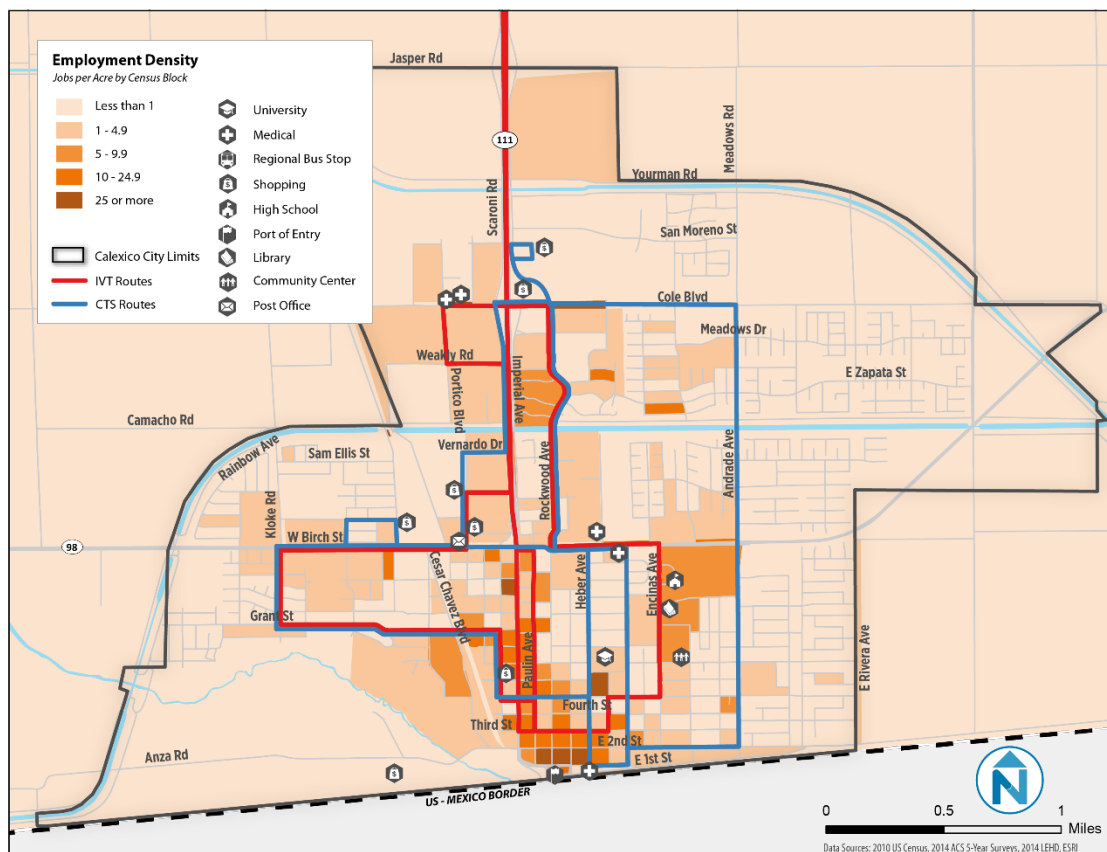
EMPLOYMENT

Overall Employment

Jobs in Calexico are primarily located near the U.S.-Mexico border, in the center of the city, and along major corridors. Corridors with high densities of employment include 2nd Street and SR-111 (Imperial Avenue). Other corridors with significant employment include Encinas Avenue (Calexico High School) and Rockwood Avenue.

The distribution of employment in Calexico is shown in Figure 4-9. Some recent employment, such as the Gran Plaza Outlets, is not include in the Census data used to create this map.

Figure 4-9 Employment Density



Low Income Employment and Worker Residences

Residences and work locations of low-income workers (earning \$1,250 or less per month) are shown in Figure 4-10 and Figure 4-11.

Residential locations of low-income workers are concentrated in central Calexico neighborhoods along Rockwood Avenue and Heber Avenue; in west Calexico off Klope Road; and the Anchor Trailer Park and Calexico Mobile Home Park along SR-111 (Imperial Avenue).

Low-wage workplaces are concentrated along commercial corridors, including Cole Boulevard in north Calexico, Rockwood and Imperial Avenues in central Calexico, and between First and Second Streets in downtown Calexico. The Alejandro Rivera Senior Citizen Apartments and Walmart shopping center also have high concentrations of low-wage workplaces.

Figure 4-12 illustrates the flow of low-income workers into and out of Calexico in 2014. Out of 6,452 low-income workers living in Calexico, over 4,000 are employed outside the city. The remaining 2,128 live and work in Calexico. Another 1,460 people are employed in Calexico but living outside the city. Worker inflow/outflow data represents home and work locations of U.S. residents only.

Figure 4-10 Home Locations of Low-Income Workers

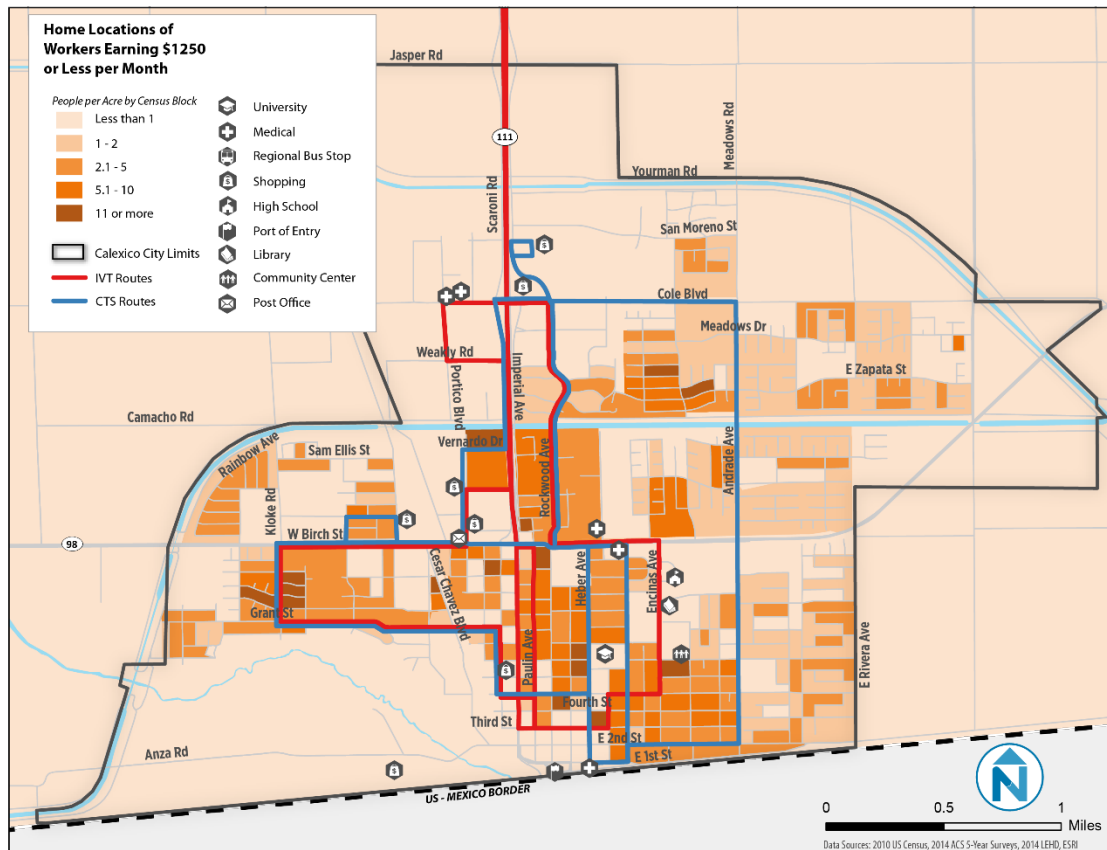


Figure 4-11 Job Locations of Low-Income Workers

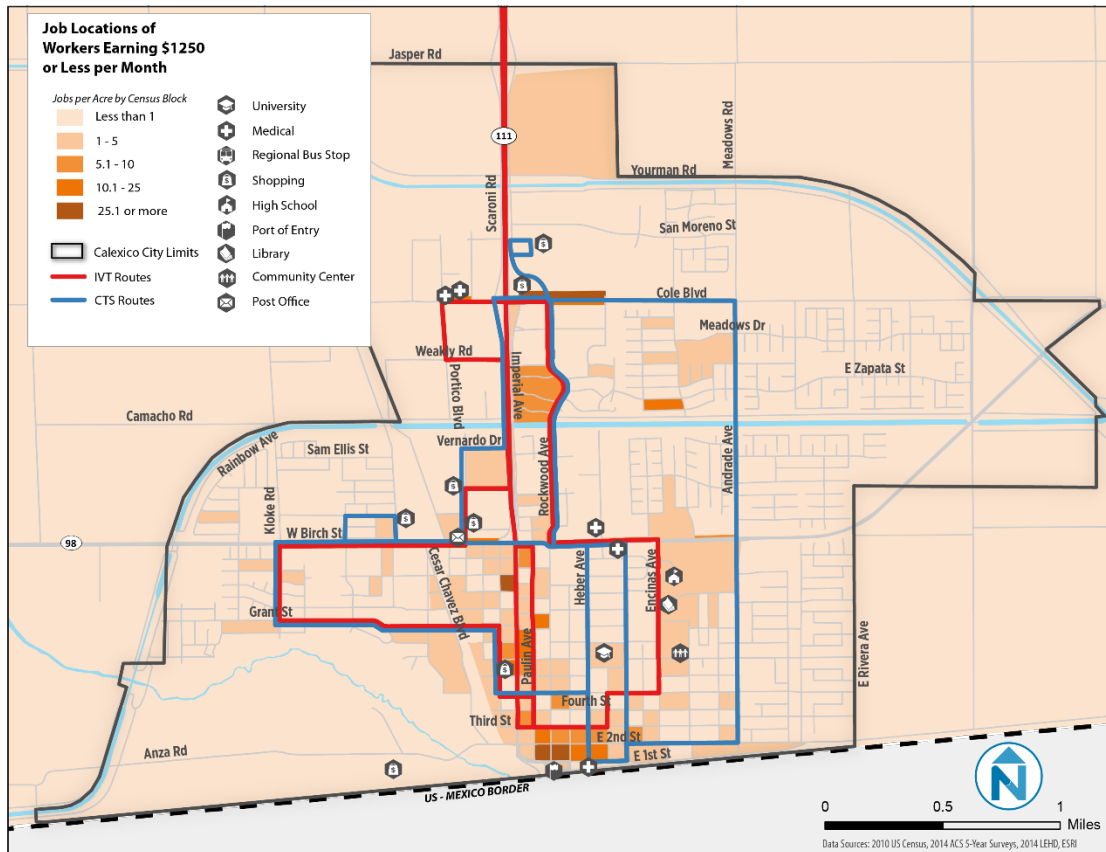
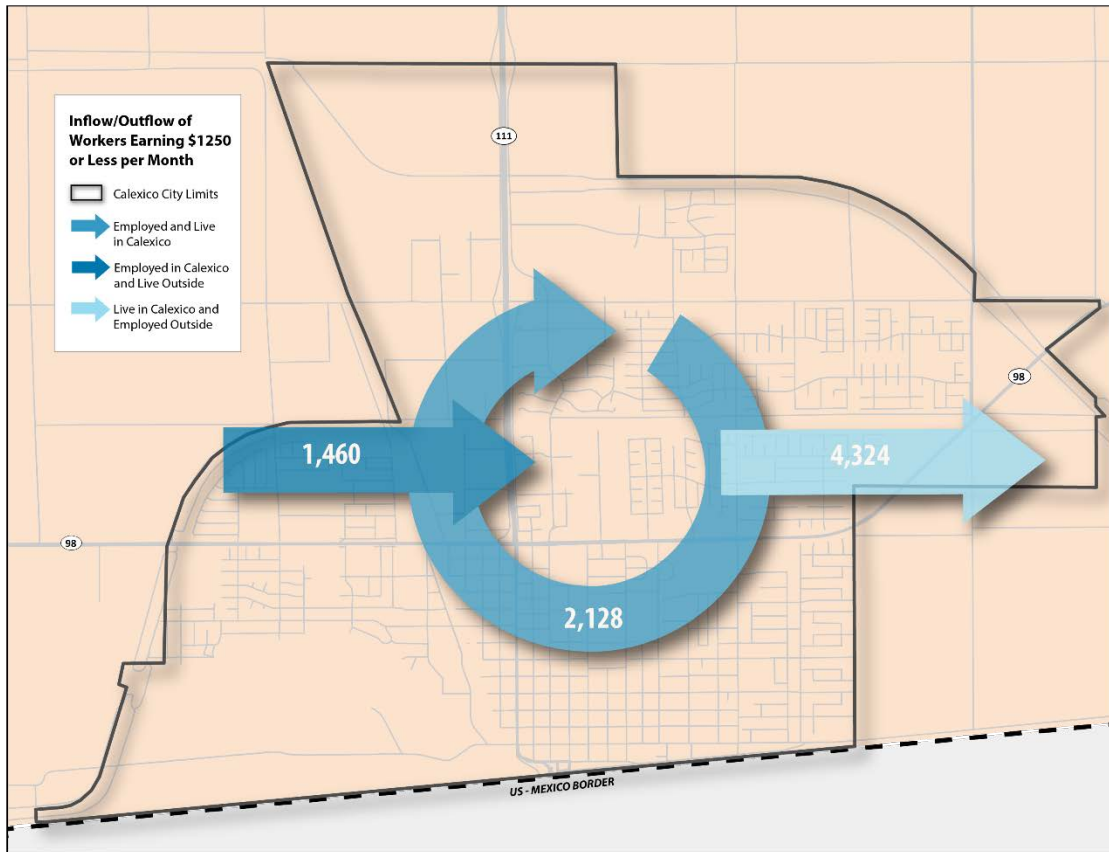


Figure 4-12 Inflow/Outflow of Low-Income Workers



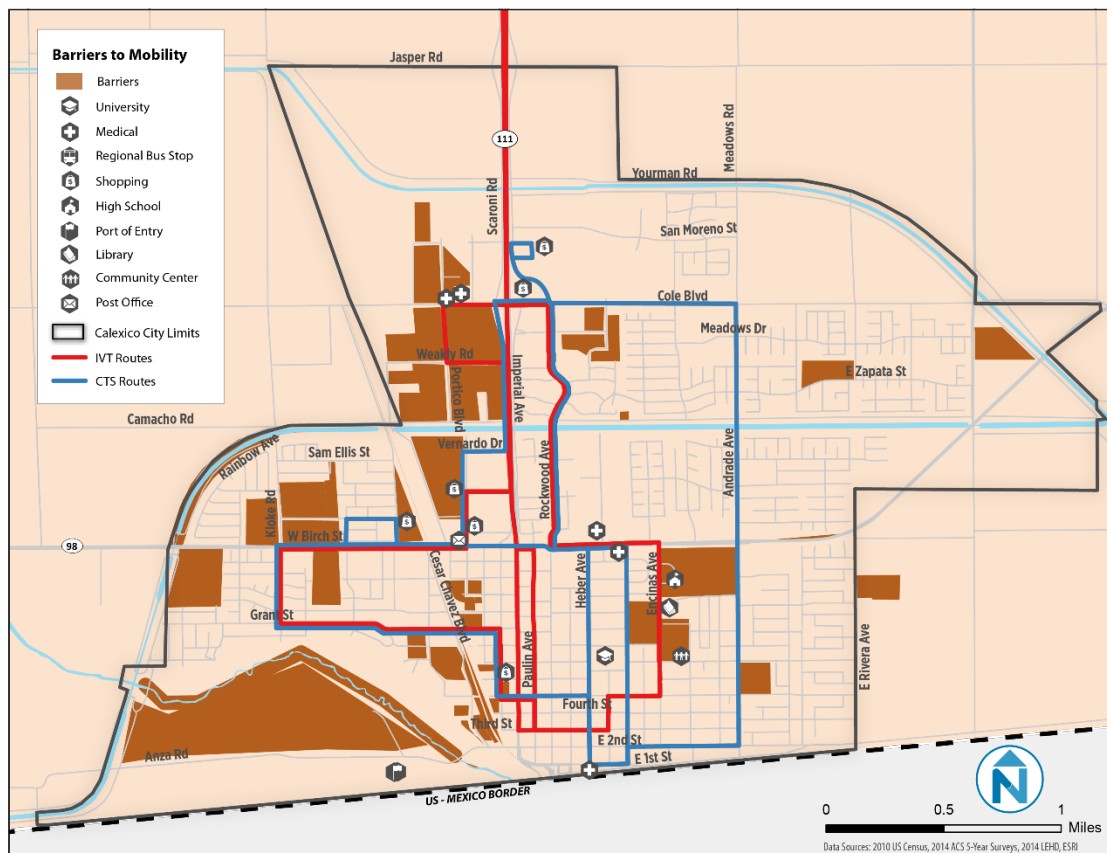
Source: 2014 LEHD

BARRIERS TO MOBILITY

Every transit trip begins and ends with a walking trip. For this reason, pedestrian access to transit is a crucial aspect of transit usage. Areas shaded in yellow in Figure 4-13 are physical barriers to mobility in Calexico, such as fenced parcels, large highways, railroads, and canals. If a rider needs to cross one of these physical barriers when accessing a bus stop or traveling to a destination, their walking time may be greatly increased due to the need to walk around, and large areas that cannot be crossed on foot. Barriers make it difficult for people to access transit, and also make it difficult for transit to deliver riders to their destinations in an efficient way. Specific locations with barriers to mobility include:

- Commercial parcels and industrial/warehouse parcels are likely to be fenced, presenting a barrier to mobility.
- Elementary, middle, and high schools also tend to have fences preventing cut-through pedestrian traffic in neighborhoods.
- Large roadways and state highways pose barriers to IVT and CTS routes that travel along SR-98, SR-111, and Cole Boulevard.
- Calexico's railroads and drainage canals cuts across town creating a barrier for north-south movements, but presenting an opportunity for a cross-town linear multiuse path in the future.

Figure 4-13 Barriers to Mobility



CALEXICO BORDER CROSSING STATISTICS

Using the U.S. Department of Transportation (DOT) Bureau of Transportation Statistics most recent full-year statistics for entry data at Calexico's Land Port of Entry (LPOE), data on personal vehicles, personal vehicle passengers, and pedestrians was queried for 2011 to 2015. The Calexico West crossing is open 24-hours per day, seven days a week, and the maximum number of open passenger vehicle lanes is ten with six pedestrian lanes. Commercial vehicles must use the Calexico East LPOE, approximately 7 miles east of Calexico crossing.

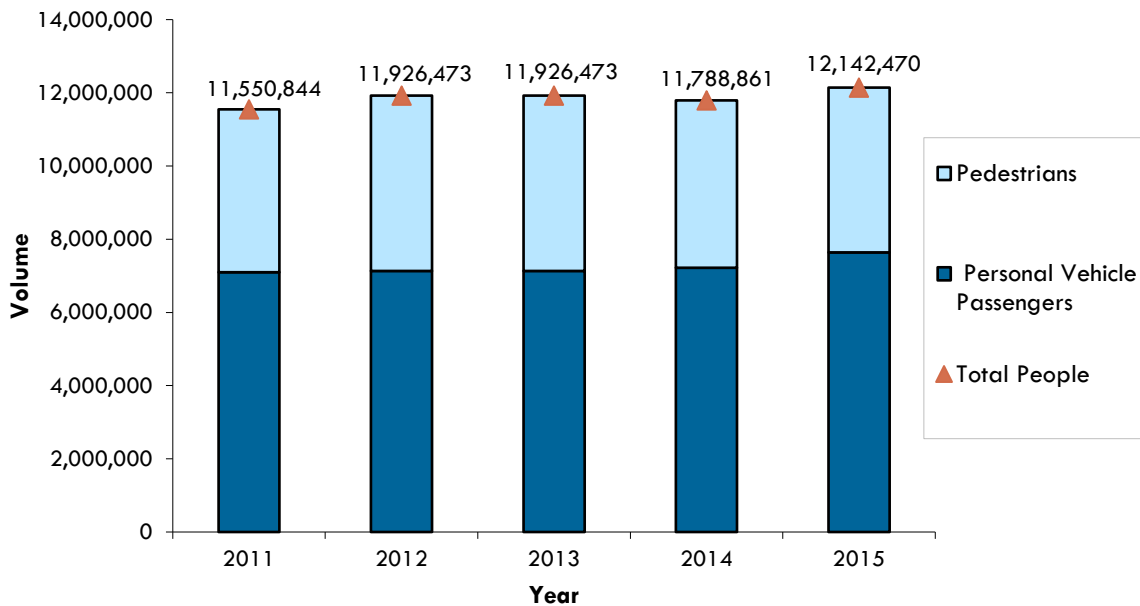
The sum of personal vehicle, personal vehicle passengers, and pedestrians has risen slightly from 2011 to 2015, from 4,095,450 vehicles and 11,550,844 passengers and pedestrians to 4,294,156 vehicles and 12,142,470 passengers and pedestrians. The volume at Calexico's West LPOE is increasing, as both Calexico and Mexicali grow in population. About 2/3 of people crossing the border do so in a vehicle, and about 1/3 of people cross as pedestrians, see Figure 4-14 and Figure 4-15 for reference.

Figure 4-14 Historical Calexico Border Crossing by Mode

	2011	2012	2013	2014	2015
Personal Vehicles	4,095,450	4,112,348	4,112,348	4,071,666	4,294,156
Personal Vehicle Passengers	7,099,725	7,132,134	7,132,134	7,221,528	7,644,148
Pedestrians	4,451,119	4,794,339	4,794,339	4,567,333	4,498,322
Total People Crossing	11,550,844	11,926,473	11,926,473	11,788,861	12,142,470

Source: USDOT Bureau of Transportation Statistics, 2011-2015

Figure 4-15 Historical Calexico Border Crossing Statistics from 2011 to 2015



Source: USDOT Bureau of Transportation Statistics, 2011-2015

5 REVIEW OF EXISTING TRANSIT ORDINANCES

This section summarizes relevant sections of the Calexico Code of Ordinances concerning buses, courtesy shuttles, and taxicabs.

BUSES

Calexico Code of Ordinances - Chapter 5.36 – Buses

The Calexico Code of Ordinances defines a bus as “any motor vehicle designed or modified for carrying more than ten persons including the drivers and not more than thirty-six; a bus shall not be longer than thirty-five feet in length.” A bus owner is regulated through a certificate obtained from the city council and confirmed through a public hearing. A certificate grantee must ensure that the bus operation is “convenient and necessary” meaning that there is demand for the service, that the service is financially responsible, and that the number, make and model of the bus fleet fits into these criteria. The effect that the bus service will have on traffic congestion and parking must also be considered as part of the “convenience and necessity” requirement. The City Council can suspend or revoke certificates if the owner fails to operate the service in accordance with the Code of Ordinances.

Operation of bus service is supervised by the Chief of Police, who can terminate operation if any equipment is “unsafe, defective or unsanitary”. All buses are subject to inspection by any police officer at any time. A policy of insurance is required for all bus operators; insurance must meet requirements set by the City Council or City Manager. The Code of Ordinances requires that the bus owner file current fare rates with the office of the City Clerk and work with the Clerk to impose any rate changes. Rate changes are also subject to public hearing.

Bus stops must be designated and approved by the Chief of Police and operators must comply with specific routes with fines imposed any time a vehicle is found operating outside a designated route.

Missing requirements:

- There are no requirements in the Code of Ordinances to ensure that buses are of a certain size, age, condition or comply with any national or state safety standards. Guidance is missing on vehicle numbering and whether or not make or model types are in compliance or prohibited. There is also no requirement that vehicles are air-conditioned.
- Moreover, the code does not mention any vehicle requirements for accessibility for seniors or persons with disabilities.
- Also pertaining to vehicles, the Code of Ordinances does not provide sufficient details about vehicle inspections and should provide more guidance for police officers and bus

operators. There is also no requirement for new vehicles to be inspected before entering service.

- There is nothing in the Code of Ordinances to require that bus stops exist in strategic locations along current routes (or the process for identifying convenient locations for bus stops) or that the buses are required to stop at bus stops. There is no requirement for any facilities at a bus stop (shelters, benches, signage, etc.).
- Moreover, the Code of Ordinances is vague about existing routes; it should require that bus operators provide route maps, schedules, and stop locations to the city clerk to keep on file and update within a reasonable amount of time after making route changes. It should also require that this information be available to the public in print, online, and via telephone.
- The Code of Ordinances does not mention a pre-suspension or pre-revocation hearing for bus operators who are not compliant with the Code of Ordinances.
- The Code of Ordinances does not provide any stipulations on required driver screening, drug and alcohol testing, or training.

COURTESY SHUTTLES

Calexico Code of Ordinances - Chapter 5.37 – Courtesy Shuttle Transportation Services

The Calexico Code of Ordinances defines courtesy shuttle transportation services as transportation service provided by a licensed business entity for “its own business clientele...without payment of any fare or compensation by passenger”. This service is used to take passengers between “non-stop fixed locations” with designated pick-up and drop-off points along a predetermined route (which is determined by the city). The drop-off point must be the operator’s place of business. If a pick-up or drop-off location is on public property, a formal application for a parking zone or variance must be submitted. Only one courtesy shuttle service is permitted per business entity.

Shuttle owners must obtain a permit through the city council and the planning commission; permit approval is dependent on a public hearing and approval process. The process includes a criterion for issuance: demonstrated need, showing inadequate transportation services to currently meet that need, and the effect on traffic congestion, parking, and public hazards.

Shuttle vehicles cannot contain seats numbering more than 12, including the driver. Vehicles must be inspected prior to entering service and police officers may make “reasonable and periodic” inspections. If a vehicle is found to be unsafe or unsuitable for service, it can be immediately removed from service. Permits can be suspended or revoked by a city manager after a pre-suspension and/or pre-revocation hearing for several reasons laid out in the Code of Ordinances.

Missing requirements:

- There is nothing in the Code of Ordinances to ensure that shuttles are of a certain size, age, condition or comply with any national or state safety standards. The Code of Ordinances also does not mention any vehicle requirements for accessibility for seniors or persons with disabilities. There is also no requirement that vehicles are air-conditioned.

- The Code of Ordinances does not provide sufficient details about vehicle inspections and should provide more guidance for police officers and bus operators.
- The Code of Ordinances does not provide any stipulations on required driver screening, drug and alcohol testing, or training.
- While the Code of Ordinances stipulates that a business may only have one shuttle system, it does not indicate if this means only one shuttle vehicle or if multiple vehicles are allowed.

TAXICABS

Calexico Code of Ordinances – Chapter 5.80 – Taxicabs

The Calexico Code of Ordinances provides definitions for: drivers, motor vehicle, owner, revocation, suspension, taxicab, taximeter, and violations:

- **"Driver"** means every individual who operates any taxicab or vehicle for hire as an employee of a business owner, independently owns the taxicab or vehicle for hire and operates under the auspices of such owner, or has independently contracted with such owner to operate the taxicab or vehicle for hire pursuant to a lease, license, or any other form of agreement.
- **"Motor vehicle"** means every motor vehicle used for public hire propelled by mechanically produced power and intended for use on public streets and highways, except streetcars, trains, and motor busses.
- **"Owner"** means every person, firm or corporation having use or control of any passenger-carrying automobile or motor-propelled vehicle, as defined in this section, whether as owner, lessee, or otherwise.
- **"Revocation"** means termination of the privileges conferred under a permit or certificate issued under this chapter, and relinquishment of a permit or certificate by the holder of said permit or certificate to the city clerk. One year after a permit or certificate is revoked, an applicant may apply for another permit or certificate as set out in section 5.80.260(E).
- **"Suspension"** means the temporary suspension of a permit or certificate for a specified period of time. Said suspension is to be imposed, and period of time set, at the discretion of the chief of police.
- **"Taxicab"** means a motor-propelled passenger-carrying vehicle that is operated at a fixed area rate, or upon a waiting time basis, or both, and which motor-propelled vehicle is used for the transportation of passengers for hire over and along the public street, but not over a defined route, irrespective of whether the operations extend beyond the limits of the city, and in accordance with and under the direction of the person hiring such vehicle.
- **"Taximeter"** means any mechanical or electronic instrument, appliance, device or machine by which the charge for hire of a motor vehicle is mechanically calculated, either for distance traveled or time consumed, or both, and upon which instrument, appliance, device or machine such charge is indicated by figures.
- **"Violation"** means a breach or infringement of any California Vehicle Code statute, and/or any breach or infringement of a provision of this code that relates to taxicabs of

handicapped persons as regulated by Ordinance 4125-N.S., hearses, ambulances, interurban trains, motor or trolley busses are not included within this definition.

According to the Code of Ordinances, a taxicab is a motorized, passenger-carrying, for-hire vehicle operated within a fixed area rate or waiting time basis rate (or both). Taxicabs do not operate along a fixed route and can extend beyond the limits of the City. Taxicab operators must obtain a certificate of “public convenience and necessity,” a limited number of these permits are granted and all are subject to a public hearing. The Code of Ordinances provides a detailed list of the materials and paperwork required in order to apply for a permit.

Whether the service is “convenient and necessary” is based on: public demand, financial responsibility and experience of the applicant, existing supply, the number, make, model of the vehicles to be used, and the effect on traffic congestion, parking, and public hazard (which must be studied independently). The chief of police can suspend or revoke the certificate for a number of reasons set out in the Code of Ordinances. Additionally, taxicab drivers must obtain a driver’s permit and undergo a screening process and drug and alcohol testing pursuant to California laws.

Owners and operators of taxicabs must establish and maintain an off-street station or parking lot where vehicles can be stored when not in use; these locations must be kept open 24 hours per day. Additionally, owners and operators shall “have available at all times taxicabs for the purpose of giving local service within the city.” The city can also establish taxicab stands in public areas. Drivers must use these taxicab stands when soliciting passengers; drivers may not repeatedly drive along main downtown streets or call out to pedestrians to solicit passengers.

Taxicab operators are required to take the most direct route in order to transport passengers to their destinations safely and quickly. Additionally, once a passenger is engaged they have exclusive rights to the passenger compartment and should not be required to share it with additional passengers. Taxicab operators are not allowed to refuse service to any passengers who present themselves for service in a “sober and orderly manner and for a lawful purpose.”

Taxicab rates must be established through a resolution adopted by the city council and the rate schedule must be kept up to date in the office of the city clerk. A public hearing will approve proposed rate changes; violations of rate schedule constitute revocation of the driver’s certificate. Rates must be posted on the exterior of the driver’s door and the passenger’s door. The Code of Ordinances also sets limits to the number of passengers allowed in a vehicle and the taxicab markings and color schemes. Additionally, the Code of Ordinances provides grounds for inspection - at the start of service and annually - as well as elements covered by inspections.

Taxicab owners must obtain insurance that meets the criteria laid out in the Code of Ordinances; insurance policies must be filed with the chief of police. Taxicab services is supervised by the chief of police; any police officer has the right to inspect vehicles and drivers at any time. Permits and certificates can be suspended or revoked for violated any provision in this Code of Ordinances.

Missing requirements:

- While there is a fee for the driver’s permit, there does not seem to be one for a taxicab owner’s certificate; if this is not the case, the Code of Ordinances should reflect this. Additionally, these terms (permit and certificate) should be defined on the first page of the Code of Ordinances. Moreover, the Code of Ordinances does not provide responsibilities and requirements of the certificate owner related to driver treatment and fees, vehicle care, data requirements, etc.

- The Code of Ordinances should provide additional guidance regarding taximeters; they must be tested by a department of weights and measures, they must dispense printed receipts, and they must be capable of gathering, storing, and retrieving information related to service data.
- The Code of Ordinances does not stipulate payment options; taxicabs should be equipped to accept both cash and credit cards.
- The Code of Ordinances does not require that taxicabs have lighting to indicate when they are available or when they need assistance.
- The Code of Ordinances does not define “unsanitary” or require a regular cleaning schedule for vehicles.
- The Code of Ordinances does not set quotas or standards for wheelchair accessible vehicles.
- The Code of Ordinances does not set any rules regarding driver appearance, cell phone use, smoking, and non-discrimination practices.
- Finally, the Code of Ordinances does not set a process, policy, and fee structure for minor violations, nor does it provide any guidelines for receiving and acting on passenger complaints.

6 COMMUNITY OUTREACH

Community outreach is an essential component of the Calexico Transit Needs Assessment. This document summarizes feedback from bus riders and transit stakeholders. Rider outreach was conducted on Monday, August 22, 2016 at bus terminals in downtown Calexico. Transit stakeholder discussions were held on Tuesday, August 23, 2016 at the Carmen Durazo Cultural Arts Center in downtown Calexico. One-on-one (in-person and phone) interviews with each City of Calexico council member will take place during the week of September 12, 2016.

BUS RIDER SURVEYS

Bus rider intercept surveys, which were conducted on Monday, August 22, 2016 from 6:30 a.m. to 3:30 p.m. at the following bus terminals to better understand passenger travel behavior and opinion:

- 1st/Heffernan (Calexico Transit System and Gran Plaza Shuttle terminal)
- 3rd/Paulin (Imperial Valley Transit terminal)
- 3rd/Rockwood (L&A Shuttle terminal)

A total of 87 surveys were retrieved from the effort, of which 32 were collected in English and 55 were collected in Spanish. Although this total does not constitute a statistically valid sample, it does provide insight into the characteristics and desires of riders using public and private bus services. This section summarizes the findings of the intercept survey.

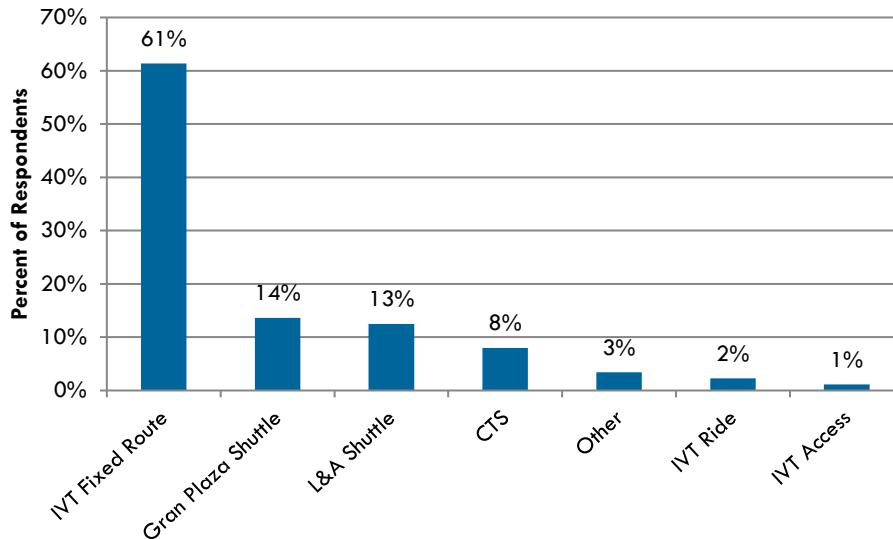
Figure 6-1 CTS and Gran Plaza Outlets Shuttle Transit Hub at 1st Street and Heffernan Ave



Bus Rider Feedback

Figure 6-2 shows the transit service that respondents were riding when they took the survey. The majority (61%) were riding IVT fixed route, followed by Gran Plaza Shuttle (14%), L&A Shuttle (13%), and Calexico Transit System (CTS) (8%).

Figure 6-2 Respondents by Transit Service



Riders were also asked to indicate which services they typically ride (Figure 6-3). The distribution of responses largely mirrors that of Figure 6-2, with most riders taking IVT fixed-route service (76%). This is followed by L&A Shuttle and Grand Plaza Shuttle (22% each), and CTS (19%). Respondents who only answered with one service were asked why they do not ride other transit services in the area. Most said they simply do not have the need. Other responses included “convenience,” that “it takes too long,” and that there is not enough information about other services.

Figure 6-3 Transit Services Riders Typically Use (Multiple Responses Allowed)

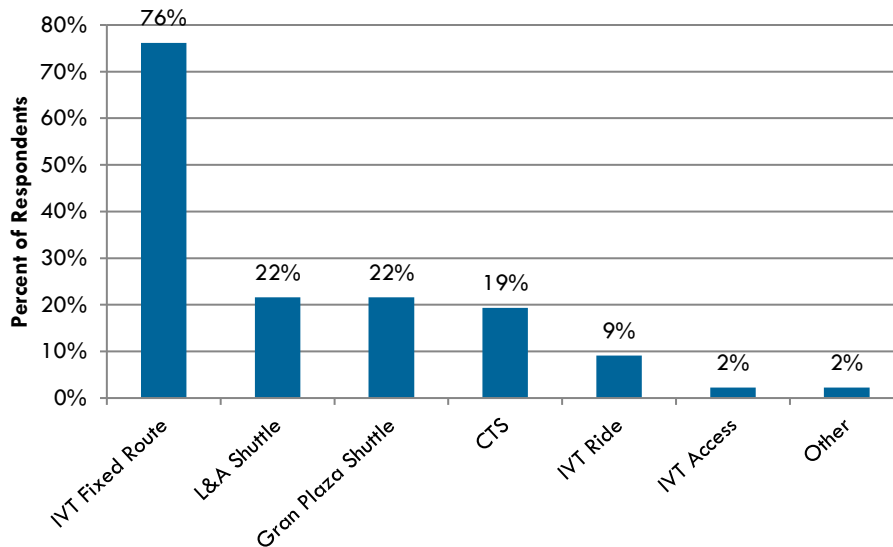
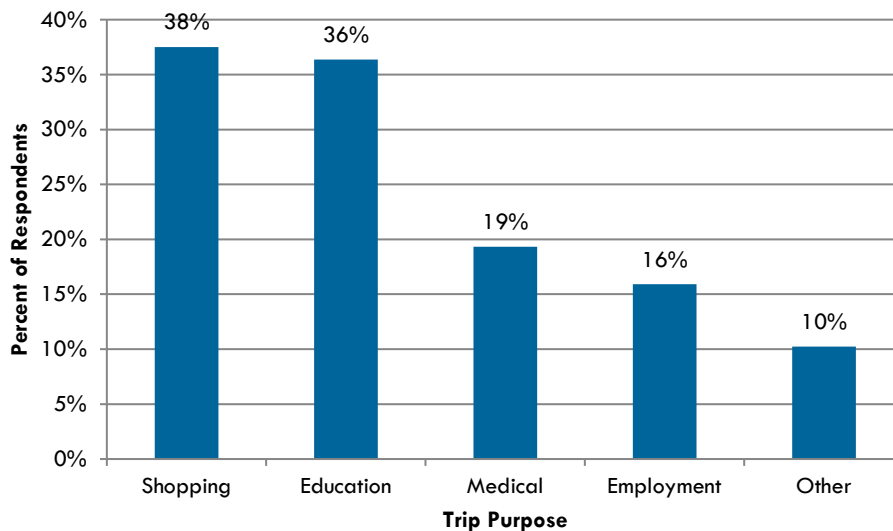


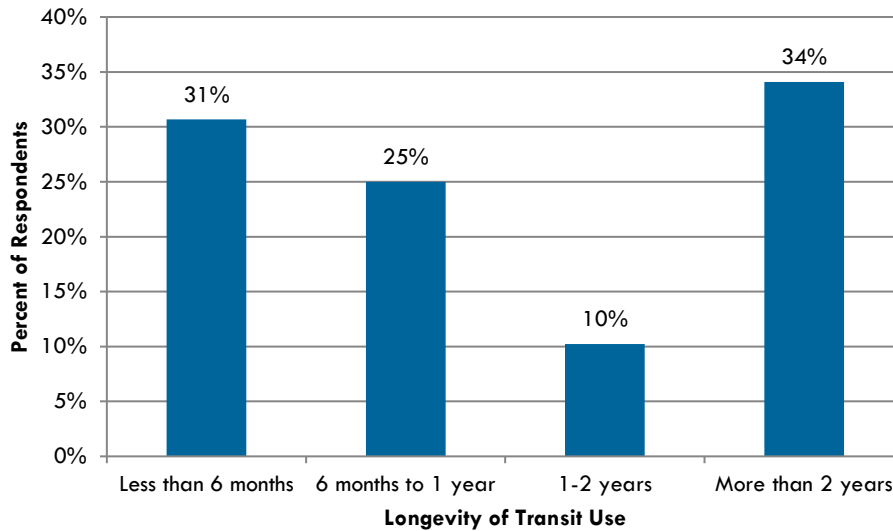
Figure 6-4 shows the typical trip purpose for respondents when riding transit, with the option to choose more than one response. The highest share of respondents (38%) use transit to go shopping, followed by 36% who use it to access education, and 19% who use it to travel to medical appointments. It should be noted that IVT Route 21 carries a high number of students traveling to Imperial Valley College. Only 16% of respondents ride transit to work, which is significantly lower than most transit markets in which work is usually the primary trip purpose.

Figure 6-4 Typical Trip Purpose when Riding Transit (Multiple Responses Allowed)



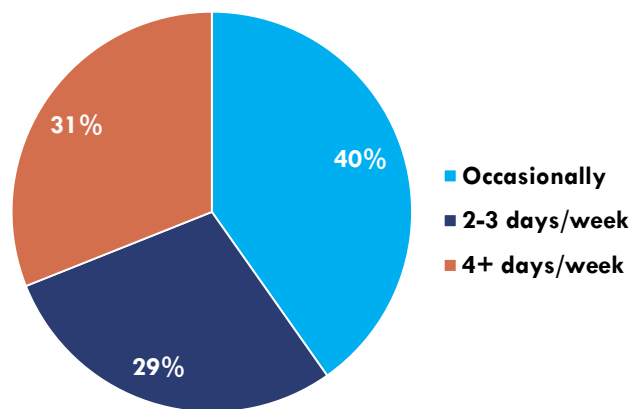
Approximately one out of three respondents have been riding transit in Calexico for more than two years (34%), while 56% of respondents have taken transit for less than one year. The high degree of turnover indicates that the majority of transit riders in Calexico are residents of Mexicali or students.

Figure 6-5 Longevity of Transit Use



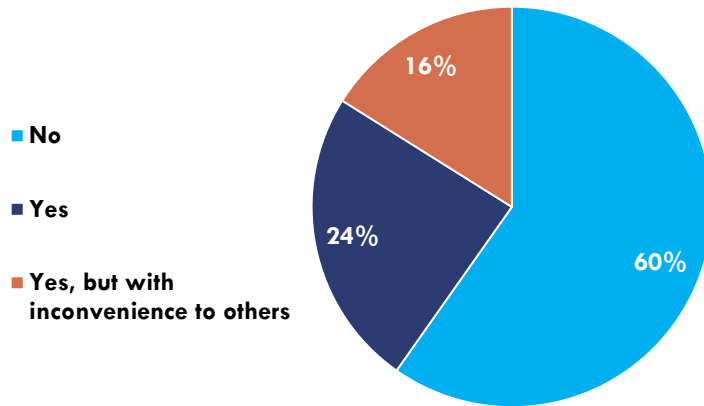
The highest share of respondents (40%) are occasional riders, taking transit one day per week or less. The remainder are nearly evenly split between those who ride two to three days per week and those who ride four or more days per week. This finding further indicates that a high percentage of riders in Calexico are not typical, everyday transit users but rather those using transit services to reach shopping and medical destinations.

Figure 6-6 Frequency of Transit Use



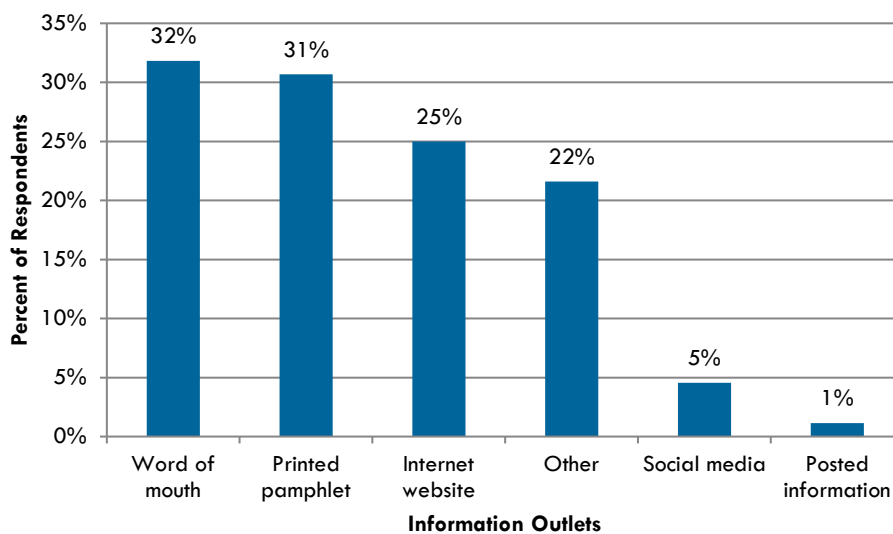
Respondents were asked to indicate if they had a vehicle available to make their current trip (Figure 6-7), of which 60% said they did not. Twenty-four percent said they did have a vehicle available, and 16% said they could have used a vehicle at an inconvenience to others.

Figure 6-7 Vehicle Availability



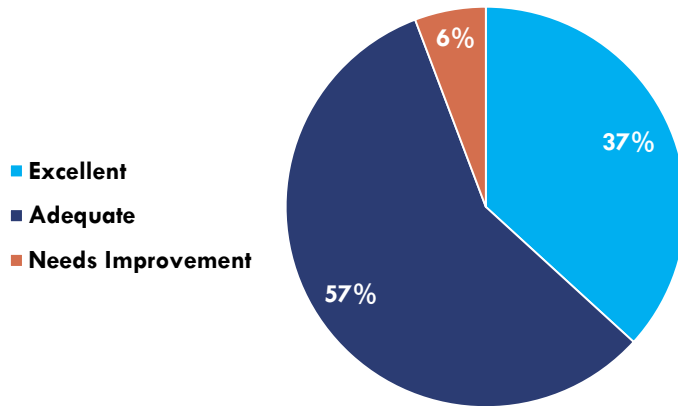
The highest share of respondents (32%) learn about transit information through word of mouth. Thirty-one percent use printed pamphlets, and 25% use a website. Imperial Valley Transit and Gran Plaza Shuttle maintain websites with route and schedule information. L&A Shuttle and Calexico Transit System do not maintain websites or did have printed materials available on board buses during the intercept survey. Among the 22% who answered “other,” many reported that they get information from the bus driver. Only 1% said they use posted information, indicating an opportunity to improve communication at bus stops and transit centers.

Figure 6-8 How Riders Access Transit Information (Multiple Responses Allowed)



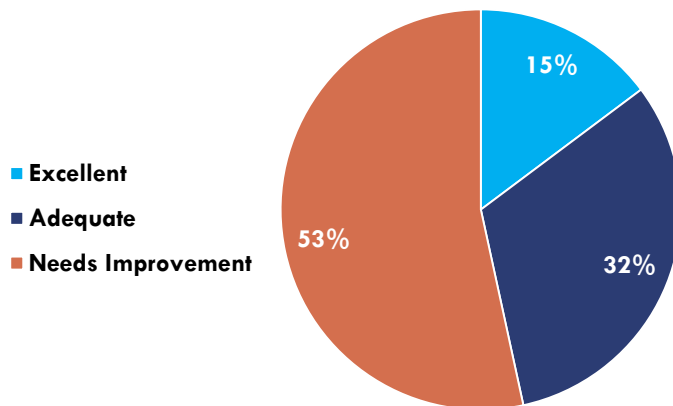
When asked about the quality of transit information (Figure 6-9), most respondents (57%) said that it was adequate, followed by 37% who said it was excellent.

Figure 6-9 Quality of Transit Information



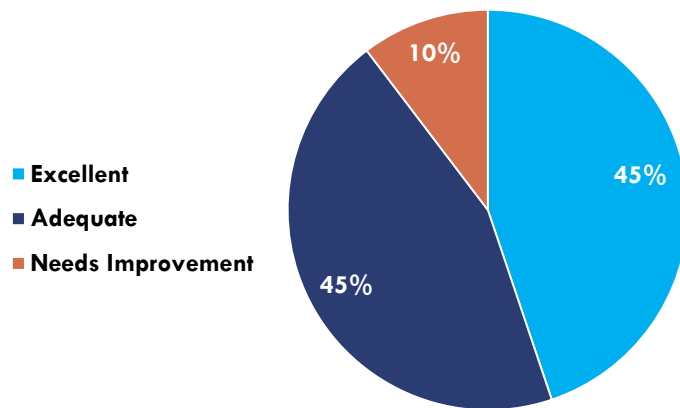
Most riders said that bus stop comfort needs improvement (53%), followed by 32% who said it was adequate. Only 15% said that bus stop comfort was excellent. Riders expressing a desire for improved bus stops were interested in shade at more locations.

Figure 6-10 Bus Stop Comfort



Riders were much more likely to report favorably on comfort while riding the bus, with responses equally split between excellent and adequate (45% each). Only 10% said bus comfort needed improvement.

Figure 6-11 Bus Comfort



Driver safety was the highest-rated service component among riders, with 62% rating it as excellent and 34% rating it as adequate.

Figure 6-12 Driver Safety

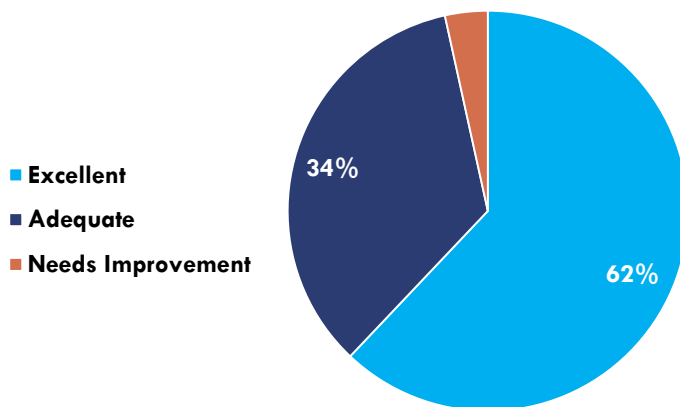
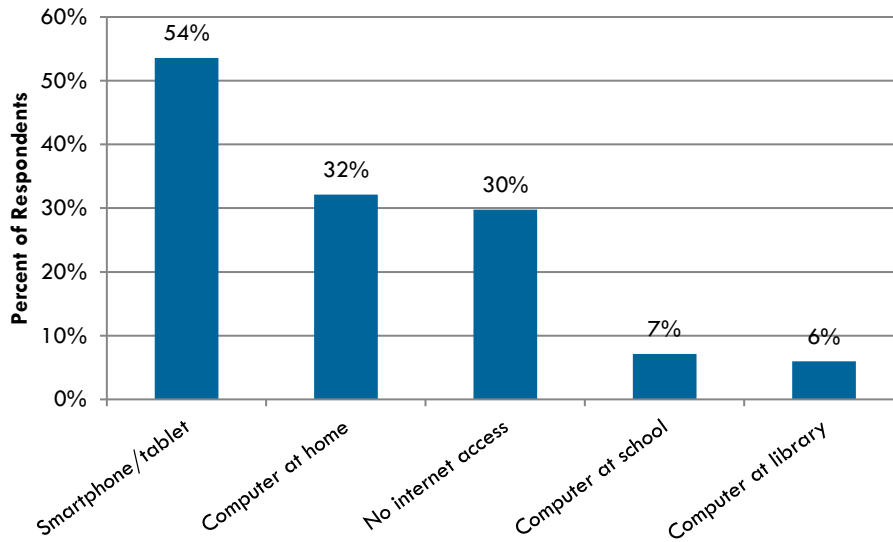


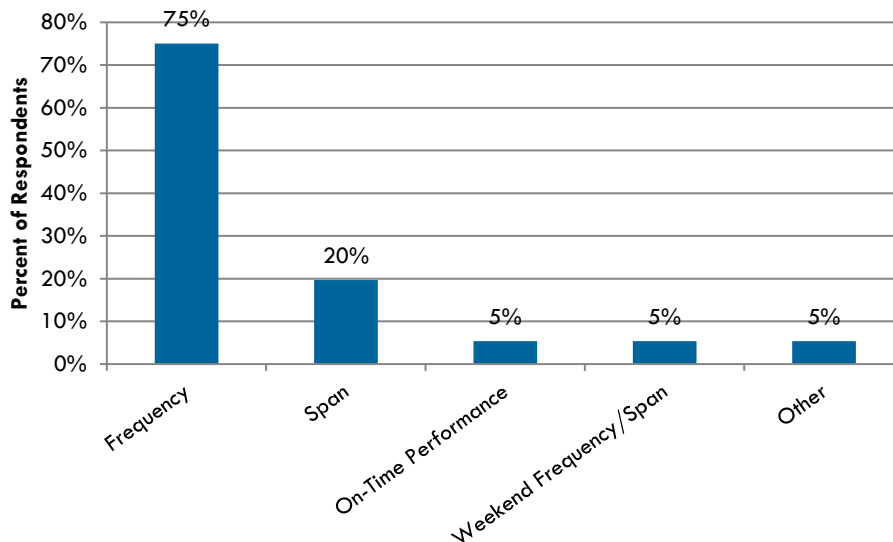
Figure 6-13 shows the means by which riders typically access the internet, with multiple responses allowed. More than half (54%) use a smartphone or tablet, followed by 32% who use a computer at home. Nearly a third of riders (30%) said they do not have access to the internet.

Figure 6-13 How Riders Access the Internet (Multiple Responses Possible)



When asked what they would like to see improved with the schedule (Figure 6-14), 75% of respondents said they would like to see improved frequency, and 20% said they would like to see extended service spans. Five percent want to see improved on-time performance. Another 5% specifically mentioned weekend service in regards to frequency and span improvements.

Figure 6-14 Preferred Schedule Improvement (Multiple Responses Allowed)



Riders were also asked if they would like to see locations served that are not currently accessible by transit. Most riders did not provide a response to this question. However, among locations given, the most common was San Diego, followed by Walmart and Clínica del Pueblo.

STAKEHOLDER DISCUSSIONS

Stakeholder discussions were held on Tuesday, August 23, 2016 at the Carmen Durazo Cultural Arts Center in downtown Calexico. Three separate meetings were held to provide stakeholders with morning, midday and afternoon schedule options. The intent of the stakeholder interviews was to obtain input on the following topics:

- Perceptions about strengths/weaknesses in current transit services
- Existing gaps in transportation services
- Likely benefits of improving local and regional transit services
- Priorities for improving transit services in the area

Invited stakeholders included representatives of organizations that serve seniors and people with disabilities, educational institutions, health care, transit providers and select City of Calexico staff. Invitees and attendance status is indicated in the following table.

Figure 6-15 Invited Transit Stakeholder

Organization	Attended
Calexico Business Improvement District	No
Calexico Chamber of Commerce	No
Calexico Health Center	No
Calexico Senior Services	Yes
Calexico Taxi	Yes
Calexico Transit System/Imperial Rapid Svc. Inc.	Yes
California Cab	No
City of Calexico: City Manager	Yes
City of Calexico: Engineering and Development Services	No
City of Calexico: Fire Department	No
City of Calexico: Police Department	No
City of Calexico: Public Works Department	Yes
El Centro Regional Medical Center: Calexico Outpatient Clinic	No
Gran Plaza Outlets Shuttle/L & A Shuttle	Yes
Imperial County Homeless Task Force	No
Imperial County Health Department	Yes
General Services Administration	No
Imperial Valley College	No
Imperial Valley Transit	Yes
Neighborhood House of Calexico, Inc.	No
SDSU-IV	No

Transit stakeholders were notified of the discussions via email and phone call. The following meeting flyer was included in the email.

Figure 6-16 Stakeholder Discussion Invitation



The flyer is a blue rectangular graphic with white and yellow text. At the top left is the 'CALEXICO TRANSIT STUDY' logo in large white letters. To its right is a '50 YEARS' anniversary logo with colorful rays and a small 'CALEXICO' logo featuring a stylized building and sun. The main text is in white, detailing the study's purpose and inviting stakeholders to a discussion on Tuesday, August 23, 2016. It lists three time slots: 8:30-9:30 am, 10:00-11:00 am, and 1:00-2:00 pm. Contact information for James Gamez and Katherine Padilla is provided on the right. A yellow banner at the bottom of the text area says 'Please attend the meeting that best meets your schedule.' The bottom of the flyer features a stylized illustration of a city skyline with palm trees, a red archway, and vehicles (a car, a bus, and another car) on a road.

CALEXICO TRANSIT STUDY

The City of Calexico, in collaboration with the Southern California Association of Governments (SCAG), is conducting a Transit Needs Assessment Study.

The purpose of the study is to:

- Evaluate existing transit services and market conditions
- Review adopted plans and city ordinances
- Identify mobility needs and opportunities
- Obtain input from riders + stakeholders
- Develop strategies to improve transit services in Calexico

You are invited to participate in a stakeholder discussion on:
TUESDAY, AUGUST 23, 2016

LOCATION
Carmen Durazo Cultural Arts Center
421 Heffernan Street, Calexico, CA

TIMES
Three separate meetings are being held at:
8:30 – 9:30 am
10:00 – 11:00 am
1:00 – 2:00 pm

Please attend the meeting that best meets your schedule.

Please contact the project consultants if you have any questions:

James Gamez
jgamez@nelsonnygaard.com
206.357.7526

Katherine Padilla
kpadilla@katherinepadilla.com
323.258.5384

Stakeholder Discussion Guide

Each stakeholder discussion meeting consisted of a project overview from the consultant team followed by a group discussion. A list of questions was developed to guide each discussion. However, the consultant team also allowed for open-ended conversation.

Discussion Guide:

1. Are you aware of transit services in Calexico?
 - a. If so, which services?
2. Have you or anyone you know used transit in Calexico?
3. If yes, would you please describe that experience?
4. If no, why do you feel you have not used transit in Calexico?
5. How high a priority is public transportation in Calexico?
6. Who are the people who most need public transportation?
7. What would most likely be their destinations? Where would they most likely board and depart the bus? What locations are most important?
8. What days of the week and times of day would the public transportation most be needed? Do you feel it is important to offer bus service on weekends? Evenings?
9. What type of transit services should be offered?
10. What would make them want to use the services?

Stakeholder Feedback

A number of major themes emerged during the stakeholder meetings. The major themes have been summarized below:

Rider Origins

- Transit riders consist of seniors, shoppers, workers and students.
- Most CTS and L&A Shuttle passengers are coming from Mexicali.
 - Many Mexicali residents are employed in the service industry.
- Some local residents take CTS, but that is declining.
- The majority of local residents take IVT.
 - Mostly going to schools, Walmart, Clinicas de Pueblo.
- CTS seeing a decline in ridership due to long waits to get across the border.

Transit Destinations

- Walmart
 - CTS is preferable due to it stopping closer to the border and serving Walmart directly.
 - IVT's terminal is further from the border and doesn't serve Walmart directly.
- Regional destinations
 - IVT trips to Imperial Valley College are often crowded.
- Medical facilities
 - Riders can easily travel to doctor appointments through IVT Ride and Access.
 - Getting back can be more challenging because people don't know when to schedule their return ride.

Service Demand

- Some gaps in terms of coverage.
- Temporal demand
 - Transit demand is highest from Wednesday through weekend.
 - Mornings are more popular.
 - Transit demand decreases during the summer.
- Sunday service
 - IVT now operates Sunday service on a limited basis but people are using it.
- Evening service
 - IVT operates evening service but not express routes.
- Headway/Frequency
 - Every 65-70 minutes between trips (IVT) is a long time to wait.
 - IVT has plans but no funding for new Calexico circulator (Garnet Line).

Seniors

- Local seniors rely heavily on transit.
- Seniors need transportation during the morning to get to the senior center.
- Not much demand for service in the evening unless there is an evening event.
 - Seniors are unable to take IVT Ride to evening events.
- Seniors have lots of complaints about IVT Ride and Access.
 - Have to wait between 1-3 hours, causing them to be late.
 - That they are not being picked up at scheduled time.
 - Hours do not align with appointments.
 - Standing in the heat for long periods of time.
 - The time needed to schedule a ride is too much.
 - ICTC now has a mobility coordinator – will do group or individual travel training.
- Prior to IVT having the service it was operated more informally, they got used to it.
 - IVT has more formal policies and seniors have had trouble adapting.
 - Seniors don't realize that the service has grown, so they don't understand that there is a limited number of seats/buses – they want to call and go today.
 - Used to being able to call and get a ride to shopping without planning ahead.
 - When they are picked up from the dining room they want to go to Wal-Mart but IVT says they can't do it anymore.
- The need for medical trips is growing.
- Some people don't know that they qualify for IVT Access.

Passenger Amenities

- Calexico Intermodal Facility
 - ICTC is waiting on funding.
- Bus stops
 - City of Calexico maintains bus stops.
 - City has an annual bus stop improvement budget.
 - Over time the City of Calexico would like to add more bus shelters and improve ADA accessibility.
 - City of Calexico is considering larger shelters to accommodate more people.
 - There are several locations that lack have shelters or benches.
 - No shelter at Cole and Van de Graff.
 - Walmart bus stop lacks shade (in front of Denny's).
- People ask for cooling mist at the bus stops.
- City of Calexico currently prioritizes investments based on observations or requests.
 - The City of Calexico would benefit from bus stop guidelines.
 - IVT has developed bus stop guidelines.

Buses

- Air conditioning on CTS buses usually does not work.
- Difficult to keep up with maintenance, especially A/C.

Customer Information

- Wayfinding
 - No existing wayfinding signage downtown.
 - Requests for wayfinding did come from the bike/pedestrian access study.
 - Need wayfinding to IVT 3rd/Paulin.
 - There used to be wayfinding.
- Route and schedule information
 - CTS/L&A don't have printed schedules.
 - CTS publicizes with flyers at 1st/Heffernan.
- Real-time arrival information for buses would be an improvement.
- Consolidated (printed) information to give to seniors to remind them of which phone numbers to call, which type of services are available, schedules, etc.

Taxi

- Shared rides
 - Some taxicab operators taking multiple people into the cab at one time.
 - Cab drivers will force passengers to deal with taking on additional passengers.
 - Some customers not comfortable picking up other passengers.
- Many Calexico residents use taxis to get across the border (e.g. going out in Mexicali).
- Fee
 - \$5 flat rate since 2007.
- Inefficiency
 - Customers will call 3 taxicab companies and take first one.

Illegal Taxicabs (Raiteros)

- L&A Shuttle has competition with *Raiteros* for trips between Calexico and El Centro.
- *Raiteros* will undercut the fare to El Centro right on the street/solicit riders where the taxicab cabs.
- Solicitors will stand at the border and walk people to where the *Raiteros* are parked several blocks away.
- Cabs will also compete with CTS routes.
- *Raiteros* move a lot of people.
- 20 *Raiteros* operating in Calexico.
 - Sanchez transportation, rocky point transportation.
- It is assumed that not all *Raiteros* are insured.
- *Raiteros* follow L&A Shuttle and steal 20% of their customers.

- L&A Shuttle has taken photos and reported but the City has not taken action.
- City of El Centro did an operation and impounded cars of five *Raiteros* – did not make a difference.
- Taxicab drivers are losing a fare to someone who is potentially not licensed to do so.
- Private transit operators are fed up with *Raiteros*.
- *Raiteros* using vans.

City Ordinances

- Ordinance has air conditioning requirement for taxis but not buses.
- Calexico code enforcement has demand that L&A Shuttle provide restrooms facilities at bus terminals.
 - CTS and IVT have not been ask to do the same.
 - No known ordinance that asks for restrooms.
 - Not all fixed-route transit operators have workers comp.
- Taxicab ordinance has been revised 5 times.
- Only time bus ordinance was amended was revision to fee structure.
- Police chief has had the authority to inspect buses in the past; not a typical role.

Funding

- CTS Need more money to provide better service.
- L&A doesn't get any grants or funding so it is difficult to maintain a quality service for customers.
- The fares are low due to local economic conditions.

Active Transportation

- Bike-friendly streets from the border to the high school and crosstown routes are desired.
- City is currently trying to do an Active Transportation Plan.
- IVT has bike racks, CTS does not

Public Health

- County Health Department is interested in increasing residents' physical activity and access to fresh fruits and vegetables.
- Transit is a good active transportation option.
- Bike racks help provide first/last mile connection.

Transit Vision

- One station with public and private bus service, taxis, parking, landscaping, biking would be a major improvement over today's operations.
- The community should have various pricing options (e.g. \$1 or \$2 - basic or premium).
- Air conditioning on buses is extremely important due to extreme temperatures.

CITY COUNCIL MEMBER INTERVIEWS

The consultant team interviewed each City of Calexico City council member in person or via telephone from September 13 to October 19, 2016. A timeline of city council member interviews is provided in Figure 6-17.

Figure 6-17 City of Calexico Council Member Interview Timeline

City Council Member	Interview Date	Interview Type
Luis Castro, Mayor	September 13, 2016	In-Person
Joong Kim	September 13, 2016	In-Person
Maritza Hurtado	September 13, 2016	In-Person
John Moreno	October 3, 2016	Phone Call
Armando "Manny" Real, Mayor Pro Tem	October 19, 2016	Phone Call

The consultant team provided a project overview and update, in addition to a summary of stakeholder and rider feedback received regarding transit and taxicab services. Each council member was asked a consistent set of questions to better understand how they view transit and taxicab services and their role in the community. Specific questions posed to city council members included:

- How familiar are you with the various bus and taxicab services operating in Calexico?
- In your opinion, who are the people who most need transit service?
- How high a priority are bus and taxicab services in Calexico?
- How high a priority is reduction/elimination of Raiteros?
- If you could improve one aspect of transit service in Calexico, what would it be?
- How do you envision transit in Calexico in 5 years, 10 years?
- How important are active transportation (biking/walking) infrastructure improvements to the city's future?
- What are your thoughts on making changes to existing city ordinances regarding bus and taxicab service?

City council members conveyed their opinions on existing challenges and opportunities for improvement. While each member provided a unique assessment with different priorities, several common points were raised:

- Calexico is a challenging environment for transit services due to the extreme heat.
- Calexico is also unique due to its high proportion of private transit operators.
- Improving customer comfort at bus stops and on the bus is a key priority, particularly for senior citizens.
- Transit funding (federal and local) within the city is limited.
- Increased enforcement and larger fines are needed to curb the illegal taxicab operations (known as Raiteros) that put customers at risk and negatively impact permitted taxicab companies.
- The need for improved active transportation infrastructure including bicycle lanes, improved sidewalks, and bike racks on all buses.

While in agreement on several key topics, city council members also had differing views on a number of other topics, including:

- The role of Imperial Valley Transit (IVT) within the Calexico.
 - Some city council members expressed support for proposed IVT Calexico circulator route known as the Garnet Line to improve local bus service.
 - Other city council members opposed to Garnet Line as they believed it would duplicate service and negatively impact CTS.
- Service coordination.
 - Some city council members favored a more integrated transit system while others noted the importance of having multiple transit options for unique markets.
- City funding towards transit efforts.
 - Select city council members expressed a desire to assist established privately-operated and locally-owned transit providers with capital funding.
 - Other city council members were in favor of the establishment of a city transit department.
- Service quality.
 - The desire to modernize existing transit services with improved customer information and newer buses than are more reliable and comfortable.
 - The need to require air conditioning on all buses operating within the city.
- Potential issues with Calexico Transit System, including:
 - Compromised operational safety.
 - Persistent vehicle maintenance issues.
 - Emissions violations.
 - Lack of adequate liability insurance.
- The proposed Calexico Intermodal Transit Center.
 - Some city council members expressed strong support of the proposed transit center location to improve transit connectivity and access.
 - Other city council members brought up the need for a northside facility.
- The highest priority for improving transit in Calexico.
 - New vehicles.
 - Construction of the proposed Calexico Intermodal Transit Center.
- Improved circulation is important; traffic backs up; city no longer walkable.
- City ordinances regarding bus, shuttle and taxicab services.
 - Select city council members expressed full support in adopting stricter ordinances.
- Potential conflicts of interest between members of city council and Calexico Transit System.

7 TRANSIT GUIDELINES

Transit guidelines are a resource for future planning and provision of transit service based on best practices nationwide. This chapter provides recommended transit guidelines for the City of Calexico to adopt and implement over time to modernize transit services. Transit guidelines are based on best practices and include the following elements:

- Route Design
- Schedules
- Bus Stop Spacing
- Bus Stop Placement
- Bus Stop Signage
- Bus Stop Amenities
- Public Information
- Bicycle Access to Transit

ROUTE DESIGN

Route design guidelines are planning tools that are used to expand service to new areas or modify existing routes. Transit providers operating within Calexico serve a vast number of residents, students, workers, and visitors. This section describes practices that will attract the most riders and balance competing demands.

Route Design in Calexico Today

In Calexico, local and regional transit services are provided by several operators:

- Imperial Valley Transit (IVT) operates three fixed route services to Calexico, providing connections to El Centro, Imperial Valley College, and Brawley.
- Calexico Transit System (CTS) is a private transit operator that operates two routes within the City of Calexico.
- L&A Shuttle is a private transit operator providing service from 3rd Street and Rockwood Avenue in Calexico to major destinations in El Centro.
- Gran Plaza Outlets offer a free courtesy shuttle (operated by L&A Shuttle) from 1st Street and Heffernan Avenue to the Gran Plaza Outlets.

The diversity of options in Calexico can make transit service confusing to the customer. For people to use transit, service should be designed so that it is easy to understand. In this way, current and potential riders can grasp and use the transportation options available to take them where and when they want to go with ease.

Route Design Guidelines

The following route design guidelines are aimed at making service in Calexico intuitive, logical, and easy to understand. Most transit networks are very complicated, and simplification is a key value in creating networks that people can navigate easily to make many kinds of trips.

Route Directness

Routes should be designed to operate as directly as possible to maximize average speed for the bus and minimize travel time for passengers while maintaining access to service. Fast and direct routes tend to be useful to more people than circuitous routes. Even if a trip requires transferring between two routes, it is likely to be faster than a trip using a circuitous route.

Route Alignment

Routes should operate along the same alignment in both directions to make it easy for riders to know how to return to their trip origin location. Exceptions can be made in cases where such operation is not possible due to one-way streets, turn restrictions, or near the end of a route where the bus must turn around. In those cases, routes should be designed so that the opposite directions parallel each other as closely as possible. Other exceptions include shuttle and circulator routes. While routes that include large loops or several deviations maximize transit coverage, they also result in out-of-direction travel that is not intuitive or attractive to potential customers.

Route Deviations

Routes should not deviate from the most direct alignment unless there is a compelling reason. Potential destinations to deviate service include major shopping centers, employment sites, schools, etc. In these cases, the benefits of operating the route off of the main route must be weighed against the inconvenience caused to passengers already on board. Additional considerations include the increase time added as a result of the deviation and the schedule coordination with connecting services. In most cases, where route deviations are provided, they should be provided on an all-day basis.





Arterial Streets

It is recommended that routes operate on arterial streets as much as possible and minimize travel on residential streets. The operation of bus service along arterials makes transit service faster and easier for riders to understand and use. Current and potential riders typically have a general knowledge of an area's arterial road system and use that knowledge for geographic points of reference.

Route Types

Figure 7-1 describes the most common route types and how Calexico's existing transit services fit in. It is important to clarify route types in order to set appropriate customer expectations.

Figure 7-1 Route Types

Route Types		Description	Benefits and Challenges
Local Circulator		A local circulator typically operates on an hourly headway and is designed to directly serve important destinations and corridors.	<p>Benefits</p> <ul style="list-style-type: none"> Stops are closer together, requiring less walking. Provides good coverage, serving a wide variety of destinations. <p>Challenges</p> <ul style="list-style-type: none"> Routes can be circuitous and make frequent stops, causing longer travel times. Typically attract fewer riders than other fixed-route services because of longer travel times.
Local Arterial		Arterial routes serve local trips but are designed to provide a higher level of service on a major corridor. Stops are spaced more widely than circulators and routes do not deviate out of direction to specific destinations.	<p>Benefits</p> <ul style="list-style-type: none"> Routes have direct alignments, improving travel times. Routes operate more frequently, adding flexibility to users. <p>Challenges</p> <ul style="list-style-type: none"> Riders may have to walk a few blocks to their destination if it is not directly on an arterial. More frequent service requires multiple vehicles, making it more costly.
Local Shuttle		Shuttle services are designed to provide an easy connection to specific destinations.	<p>Benefits</p> <ul style="list-style-type: none"> Alignments are direct in order to make the trip as fast as possible for riders. The schedule of these services is tied to the business hours of the destination. <p>Challenges</p> <ul style="list-style-type: none"> The service is designed around a very specific trip pattern
Regional Express		Regional express service is designed around typical commute or class schedules and operates in the peak direction at peak times between cities and regional destinations. Service operates mostly on highways and makes stops only to pick up and drop off at destinations.	<p>Benefits</p> <ul style="list-style-type: none"> Service is direct and travel times can be comparable to automobile travel times. <p>Challenges</p> <ul style="list-style-type: none"> Riders may have to walk a few blocks to their destination or connect to/from another route. Destinations are typically limited to major employment centers or educational institutions. Service may be limited to peak hours only

SCHEDULES

Simple and consistent schedules improve the viability and attractiveness of transit service. Schedule improvements are a strategy to make service better for existing riders and encourage new riders to try transit.

Schedules in Calexico Today

The variety of transit options in Calexico underscores the need to be as simple and consistent as possible when scheduling service. Figure 2-1 summarizes the frequency and span of fixed routes serving Calexico. Headways vary from 20 minutes (Gran Plaza Outlet Shuttle) to four round trips (IVT 31/32). In general, fixed routes that circulate Calexico operate every 30-70 minutes.

Figure 7-2 Frequency and Span of Fixed Routes Serving Calexico

Route	Weekday		Saturday		Sunday	
	Span	Headway	Span	Headway	Span	Headway
IVT 1: El Centro-Calexico	5:45 AM – 10:55 PM	35-70 min	5:55 AM – 8:30 PM	60-90 min	7:00 AM – 5:10 PM	6 NB / 4 SB Trips
IVT 21: Calexico-IVC	6:15 AM – 6:30 PM	6 AM NB 5 PM SB	---	---	---	---
IVT 31/32: Calexico-Brawley	6:30 AM – 5:53 PM	4 Round Trips	7:00 AM – 6:10 PM	4 Round Trips	---	---
CTS Route 1	7:00 AM – 7:00 PM	30 min	7:00 AM – 7:00 PM	30 min	7:00 AM – 7:00 PM	30 min
CTS Route 2	8:00 AM – 3:00 PM	30 min	8:00 AM – 3:00 PM	30 min	8:00 AM – 3:00 PM	30 min
L&A Shuttle	5:30 AM – 8:15 PM	30-60 min	---	---	---	---
Gran Plaza Outlet Shuttle	9:20 AM – 9:40 PM	20 min	9:20 AM – 9:40 PM	20 min	9:20 AM – 8:00 PM	20 min

Schedule Guidelines

Schedule considerations for Calexico include scheduling service with clockface headways and tailoring spans of service and headways to match demand.

Headways

Headways (the time between buses, in minutes) should be timed to match demand. Fixed-route services in Calexico vary in terms of headway. Regional express-type routes make trips during peak hours only. Shuttle headways vary from 20-60 minutes, while local routes have headways around 30-70 minutes. On routes with high ridership, peak headways can be shortened to alleviate overcrowding by adding additional trips.

Schedule Simplicity

A consistent pattern to the schedule is strongly recommended. While headways may vary during the day according to demand, it should not vary with apparent randomness from one trip to the next. Whenever possible, routes should also have clockface headways that divide evenly into an hour, such as every 15, 30, or 60 minutes.

Clockface headways are easier for passengers to remember and can help facilitate better transfer connections between routes. Whenever possible, headways should be set at regular clock-face intervals. Clockface headways also offer greater ease in scheduling timed connections between routes that occur consistently in each hour.

Service Span

Service span, or the number of hours per day when transit service is provided along a route, or between two locations, plays a role in determining the effectiveness of transit service for potential users. Transit service must be available near the time a trip needs to be made in order for transit to be a travel option. Ideally, transit service should operate according to the standard time periods specified (peak rush hours, midday, night, etc.) to minimize customer uncertainty.

Passenger needs and transit resources (vehicles, personnel, funding) are key considerations in setting weekday service spans, and in deciding which routes are operated on Saturdays and Sundays. Weekday routes should permit workers and students to make their morning start times, and should end late enough to provide return trips home for second shift workers. Service oriented to non-work travel can start later and end sooner. Sunday service may not be necessary on many routes.

Late night trip times should coordinate with shifts at major retail employment centers and the last classes of the day at higher education institutions, such as Imperial Valley College.

BUS STOP SPACING

Stop spacing is the distance between bus stops along a route. Stop spacing can have an impact on the speed and reliability of a service as well as on a customer's ability to access the stop or station.

Bus Stop Spacing Guidelines

Bus stop spacing guidelines are a tool to guide the placement of future bus stops, while balancing customer convenience and operating efficiency.

The optimal spacing between bus stops involves a balance of customer convenience and operating efficiency. Closely spaced stops reduce the distance to and from customer origins and destinations but result in slower bus speeds and less reliable service. On the other hand, stops spaced far apart result in faster, more reliable service but can significantly increase walking distances.

Bus stop spacing may vary in Calexico based on adjacent land uses and densities. In general, areas with higher population and employment densities, such as downtown, should have shorter stop spacing than areas with moderate or low densities. Stops in areas with high concentrations of seniors and people with disabilities, for example, should be spaced closer together to facilitate easier access to transit.

Stop spacing should also match the service level of the route. Local transit service uses stop spacing that is closer together, providing coverage to neighborhoods. More distantly-spaced stops are recommended for limited-stop or express-type services which serve high-ridership corridors.

Figure 7-3 Recommended Bus Stop Spacing

Land Use	Recommended Spacing (Feet)
Major Activity Centers	800 – 1,200'
Moderate-Density Residential Areas	1,200 – 1,600'
Low-Density Residential Areas	1,600 – 2,400'

BUS STOP PLACEMENT

Bus stop placement guidelines describe the considerations that are involved in making decisions regarding new or relocated bus stops. The proper location of bus stops is critical to the safety of passengers, pedestrians, and motorists, as well as the safe and efficient operation of buses.

Bus Stop Placement Guidelines

Bus stop placement involves a balance of customer safety, accessibility, and operations. All stops should be fully accessible with a concrete landing and access to sidewalk or pathway. Bus stops should be compatible with adjacent land use and minimize adverse impacts on the built and natural environment.

The initial step of determining placement of a new or relocated bus stop involves its proximity to the intersection. The placement of each bus stop can be classified as one of the following:

- Near-side—immediately prior to an intersection
- Far-side—immediately after an intersection
- Mid-block—between two intersections














Bus stops are generally located at street intersections to maximize pedestrian accessibility from both sides of the street and provide connectivity to intersecting bus routes. Bus turning movements, driveways, and dedicated turn lanes sometimes restrict the placement of stops at or near an intersection and necessitate a mid-block stop. Mid-block stops may also be considered when destinations are a significant distance from intersections.

Each new or relocated bus stop must be examined on a case-by-case basis to determine their exact location. The following list details bus stop placement considerations related to customer convenience and comfort, accessibility, operational safety, and adjacent land use:

- Customer Convenience and Comfort
 - Proximity to expected trip generators
 - Visibility of bus stop zone and presence of street illumination
 - Connections to intersecting bus routes
- Accessibility
 - Adequate right-of-way to ensure the bus stop meets the Americans with Disabilities Act (ADA) accessibility standards
 - Presence and conditions of sidewalks leading to trip generators
 - Marked crosswalks and curb ramps at street intersections or midblock crossings
- Operational Safety
 - Volume and turning movements of other vehicles
 - Adequate curb space to accommodate multiple buses, if necessary
 - Adequate sight distance to/from adjacent streets, intersections, and driveways
 - Proximity to rail crossings
- Adjacent Land Use
 - Ridership potential to support the investment of new stops
 - Adequate right-of-way to prevent encroachment onto private property

Key advantages and disadvantages of each bus stop placement option are described in Figure 7-4.

Figure 7-4 Bus Stop Placement Considerations

	Advantages	Disadvantages
Near-side stops	 Shortest distance from bus door to a crosswalk, which encourages riders to use crosswalks	 Most exposure to traffic delays. May require more than one traffic cycle  Increases conflict with right-turning vehicles  May block travel lane with queuing buses  May obscure motorists' view of traffic control devices and crossing pedestrians
Mid-block stops	 Typically improves access to destinations on large tracts	 May require bus pullout on high-speed streets  Encourages riders to cross street mid-block  Motorists typically do not expect mid-block crossing pedestrians
Far-side stops	 Encourages riders to use nearby crosswalks  Reduces delay as operators have better chance of avoiding red light  Allows additional right-turning capacity before intersection	 May restrict travel lanes on far-side of intersection

Parking Restrictions

The lack of parking restrictions can negatively impact bus service by limiting sight distances and passenger access. Calexico currently paints the curb of most IVT bus stops red to indicate parking is not allowed. In an effort to maximize safety and customer convenience while reducing conflicts with automobile traffic, the City of Calexico should install no parking restrictions at all bus stops in the city.

BUS STOP SIGNAGE

Modern bus stop signage includes route information (route number and terminal destination) and the customer service phone number of the respective service provider. Additional features that improve customer service include a printed schedule with arrival times and a unique bus stop identification number for future online trip planning.

Bus Stop Signage in Calexico Today

While Calexico has been successful at providing basic bus stop signage at all IVT stops, most cities places are going beyond this to provide more detailed route, schedule, and contact information.

Figure 7-5 Typical Bus Stop Signage



Bus Stop Signage Guidelines

New signage should be installed at each bus stop pole. Signage should be consistent for all transit services to minimize inventory and materials costs. The information sign should include the following:

- Logo of service provider
- Route number and name
- Customer service phone number(s) and/or website address
- ADA-accessible symbol
- Stop identification number

Bus stop signage should be placed at the far end of the stop and mark the stopping point of the bus.

BUS STOP AMENITIES

Bus stop amenities, such as benches, shelters, and trash receptacles, enhance the customer experience by improving comfort and convenience. Consequently, transit systems with well-designed and maintained amenities have the potential to attract and retain riders. Bus stop amenities also influence the community's image perception of transit in Calexico.

Bus Stop Amenities in Calexico Today

The presence of shade structures at bus stops is critical for the comfort and safety of waiting passengers due to Calexico's extreme heat. The Circulation Element of the City of Calexico General Plan Update supports the provision of shelters and benches at bus stops as a policy to increase utilization of existing transit resources. The city currently allocates \$15,000 annually towards the maintenance of bus stops. The Imperial County Transportation Commission (ICTC) has contributed an additional \$25,000 annually to bus stop maintenance in Calexico for the past two years.

The city maintains 19 bus stops in Calexico today; 16 feature signage and a bus shelter. Figure 7-6 depicts current designated bus stops in Calexico.

Figure 7-6 Designated Bus Stops in Calexico

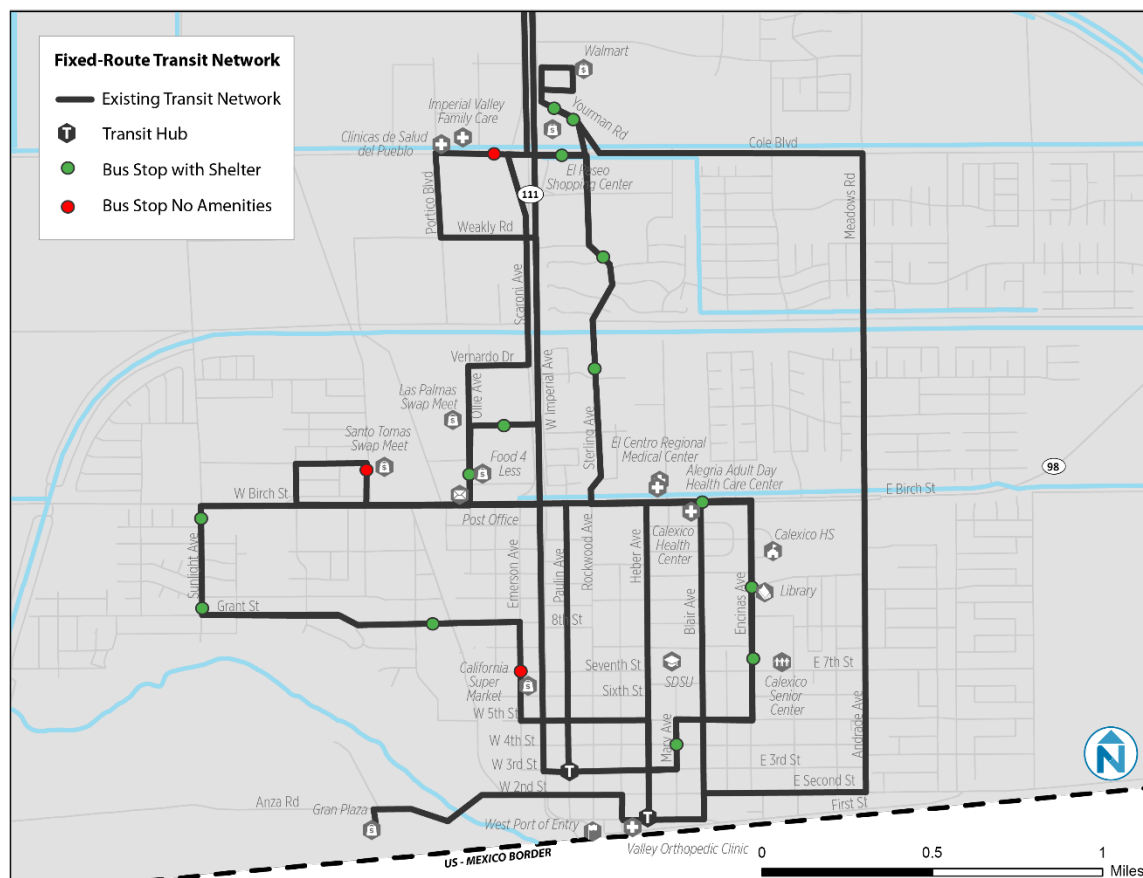


Figure 7-7 shows several examples of transit shelters, benches, shade, and other amenities at transit stops and stations in Calexico.

Figure 7-7 Bus Stop Amenities in Calexico



Bus Stop Amenities Guidelines

Limited resources make it difficult to upgrade all bus stops. A set of criteria for bus stop amenities is useful for setting priorities for bus stop improvements. Two tiers of amenities are recommended for bus stops in Calexico based on ridership (boardings) and nearby origin(s) or destination(s).

- **Basic Bus Stop:** Bus stops generating low levels of ridership activity (fewer than 10 boardings per weekday) should only include a pole and signage.
- **Bus Stop with Shelter:** Bus stops generating moderate to high ridership activity (10 or more boardings per weekday) should be considered first for a shade structure, seating, and trash receptacle.

In addition, stops that meet one of the following criteria also qualify for a shelter:

- Medical, senior, social service, public or special needs facilities within one block
- Major grocery stores within 500 feet
- Apartments or senior housing within 500 feet
- High schools, colleges, or universities within 500 feet

Circumstances that might preclude installation of shade structures, seating, or trash receptacles at a particular stop are:

- Amenities would compromise pedestrian or operational safety
- Adequate right-of-way is not available
- Installation costs are excessive
- Plans are in place to relocate or close the stops

Requiring trash receptacles at all bus stops with shade structures or seating can help to reduce littering and enhance quality of bus stops. This improvement would require city staff and equipment to support regular maintenance. Bus stop improvements along SR-98 or SR-111 would require coordination and approval from Caltrans. Currently, no bus stops are present along these corridors.

PUBLIC INFORMATION

For people to be able to use transit, they must first know that it is there and be able to understand how to use it. This means that it is extremely important for transit systems to provide clear and concise information about their available services. Most transit agencies provide a wide array of public information, telephone support, printed materials, full-featured websites, and real-time information. In some jurisdictions, transit information is made available on the jurisdiction's webpage. Information about routes and schedules is provided to the jurisdiction by the transit agency and subsequently updated on the website by city or county staff.

Public Information in Calexico Today

Calexico's diverse providers mean that public information about transit service is available in a variety of formats. This can make it challenging for customers to access information about routes and schedules. Although many transit riders in Calexico have internet access, the majority rely on word of mouth, printed pamphlets, and bus drivers to learn about transit information. A lack of understanding among stakeholders and riders in the Imperial County Short Range Transit Plan (SRTP) indicates a need for clear, coordinated public information about countywide transit service.

Of the providers in the county, only IVT provides detailed information about their transit services online. CTS does not maintain a website or publish a phone number. L&A Shuttle maintains a Facebook page which provides a contact email address and phone number.

Presently, route information and schedules are provided in print at transit centers. Few bus stops have schedule and route information on the signage. The 2014 Coordinated Public Transit-Human Services Transportation Plan called for the installation of transit information at major bus stops similar to the large, bilingual displays at El Centro and Brawley Transit Centers.

Figure 7-8 Calexico Bus Stop Lacking Customer Information



Public Information Guidelines

The predominant types of information that should be provided include:

- **System maps** that provide an overview of available services.
- **Route schedules and maps** that provide detailed information on a route-by-route basis.
- **Fare information** including the pricing of a single-ride and discounted rides, transfer policies, and pass options.

Public information should be delivered in four basic ways:

Physical Distribution

Printed maps, pocket schedule, and “ride guides” are typically distributed on board buses and at key transit locations.

Signs at Stations and Stops

At a minimum, all bus stops should have signage with route and schedule information. Installation of transit information at major bus stops similar to the large, bilingual displays at El Centro and Brawley Transit Centers is called for in the 2014 Coordinated Public Transit-Human Services Transportation Plan.

Online

Transit websites are an initial point of access for many people and provide complete information on available services. Nearly all transit systems now maintain websites in desktop and mobile format.

Information about transit services provided by all operators in Calexico (IVT, CTS, L&A Shuttle, etc.) should be made available in one place, for example, on a page on the City of Calexico website. The webpage should use a basic, simple format that can be easily updated as changes are made to routes and schedules.

Third-Party Distribution

Third-party distribution has become increasingly common and has greatly expanded the ways that people can access transit information. This approach began when Google developed a standard format for publishing transit schedule information and presenting transit information on Google Maps. That approach has since expanded to smartphone apps and to real-time travel information.

Figure 7-9 Route and Schedule Information Signage at Brawley Transit Center



Public Information Examples

Website



System Map



Route Schedules and Maps

IMPERIAL VALLEY TRANSIT

BLU - EL CENTRO

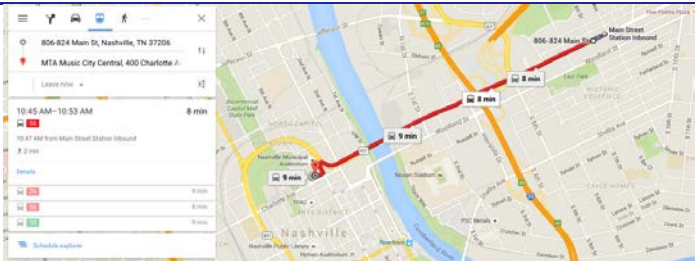
EL CENTRO STATE STREET & 7TH STREET	EL CENTRO STATE STREET & 8TH STREET	EL CENTRO STATE STREET & 14TH STREET	EL CENTRO WATERMAN AVENUE & MAIN STREET	EL CENTRO LA BRUCHERIE ROAD & ORANGE AVENUE
06:00 AM	06:01 AM	06:02 AM	06:05 AM	06:08 AM
07:10 AM	07:11 AM	07:12 AM	07:15 AM	07:18 AM
08:20 AM	08:21 AM	08:22 AM	08:25 AM	08:28 AM
09:30 AM	09:31 AM	09:32 AM	09:35 AM	09:38 AM
10:40 AM	10:41 AM	10:42 AM	10:45 AM	10:48 AM

Fare Information

FARES AND PRICING

IVT Fares One Way Per Zone	Current FY 2013-14 Fares
Local Zone Fare	\$1.00
Senior/Disabled/Medicare Cardholder Local Zone	\$0.50
Regional Zone Fare	\$1.25
Senior/Disabled/Medicare Cardholder Regional Zone	\$0.60
Direct	\$2.50

Google Transit



BICYCLE ACCESS TO TRANSIT

Improving bicycle access to transit increases catchment areas around transit stops, and provides improved mobility. Improving bicycle facilities in and around transit corridors can bring new riders to the system and help solve first- and last-mile connections. Bike access to transit centers and bus stops is improved by providing bike lanes, paths, and improvements to the roadway to make it safer to ride to transit. Bicyclist-friendly enhancements can also include added bicycle storage at bus stops and stations and racks for bikes on buses.

Bicycle Access to Transit in Calexico Today

Calexico already provides bicycle-friendly enhancements such as bicycle racks on some buses and secure bike parking in some locations. IVT buses feature double platform racks on the front of the bus. Other buses do not have bike racks. Bike parking is currently available at transit centers but not at bus stops. Future plans for the Intermodal Transit Center incorporate secure bicycle parking.

Efforts to improve bicycle access to transit are supported by the 2015 Circulation Element of the City of Calexico General Plan Update (Circulation Element). The Circulation Element proposed making Complete Streets practices a routine practice for everyday operations and apply Complete Streets policies to all roadway projects to improve the transportation network for all road users. It also encourages the City of Calexico to find opportunities to repurpose right-of-ways to improve connectivity for pedestrians, cyclists, and transit.

Bicycle Access to Transit Guidelines

There are several opportunities for improving bicycle access to transit in Calexico.

Bicycle Racks on Buses

Many transit vehicles in Calexico are able to carry bicycles using platform racks on the front of the coach, which can help transit riders get to their destination. Riders whose destinations are greater than ½ mile from the nearest transit stop benefit from bringing their bike with them on the bus. All buses should have racks that accommodate at least two bicycles.

Bicycle Racks

Easily accessible and secure bicycle storage is essential for transit customers who access bus stops by bike. The most basic form of bicycle storage is a bike rack. Bike racks can be as simple as a U-shaped metal pole, but can also be designed to function as public art. Bike lockers are a costlier, but more secure, bicycle storage option. Bike lockers are completely enclosed and are only accessible using a key, reducing the risk of theft. Bicycle storage should ideally be located in a lighted area close to a bus stop or other area with high pedestrian activity.

Bicycle racks should be considered for installation at bus stops with high boarding activity. Bicycle racks eliminate the need for customers to lock bikes to street signs, fences, or trees within public or private property. Adjacent property owners can make good partners for help designing and installing standard or custom bicycle racks near transit.

Bicycle Shelters

Bicycle storage spaces are included in conceptual site designs for the Future Intermodal Transit Center. Bicycle shelters located at transit centers can provide added storage capacity, shelter from the elements, and a greater sense of security. Bicycle shelters typically include amenities such as air pumps, tools for basic repairs, snack/drink machines, and route/schedule information (see images below).



Calexico Bicycle Master Plan

The Calexico City Council authorized an update to the Calexico Bicycle Master Plan beginning in late 2016. This update presents an opportunity to integrate the city's bicycle circulation system with the city's transit system. The city should seek opportunities to incorporate bicycle access to transit access in the plan. In addition to the guidelines suggested above, the Calexico Bicycle Master Plan should endeavor to link bicycle facilities such as bike lanes, paths, and routes to bus stops.

SUMMARY OF RECOMMENDATIONS:

The City of Calexico should install signage at all bus stops within the city served by fixed-routes.

The City of Calexico should assume responsibility for designing, procuring and maintaining new bus stop signage to ensure consistency and accuracy.

Public information guidelines (route, schedule, and fare information) should be incorporated into the Code of Ordinances Buses section.

The upcoming Calexico Bicycle Master Plan Update should incorporate bicycle access to transit.

8 FEDERAL/STATE REGULATIONS AND RECOMMENDED ORDINANCES

FEDERAL AND STATE REGULATIONS

Federal Transit Administration Certifications and Assurances for Grants and Cooperative Agreements

The Federal Transit Administration (FTA) lays out the requirements for recipients of federal assistance in its Certifications and Assurances. Grant recipients, sub-recipients, third-party contractors, or other third party participants must comply with the Certifications and Assurances according to the role they will play in using awarded funds. There are 23 categories of Certifications and Assurances, including requirements for alcohol and controlled substances testing of operators, requirements for procurement procedures in contracting services, and requirements to ensure non-discrimination in the provision of transit service.

Currently, ICTC is the only FTA grant recipient operating in Calexico. If City of Calexico were to apply for FTA funding, all relevant FTA Certifications and Assurances would need to be met by the City and any partner or sub-recipient involved in the grant. If in the future, any City of Calexico funds were to be used to support a private entity operating buses or shuttles, it is recommended that the same standards laid out in the FTA Certificates and Assurances be adhered to. 2016 FTA Certifications and Assurances can be viewed on the FTA website.

California Environmental Protection Agency Air Resources Board Emissions Regulations

The California Environmental Protection Agency (CalEPA) Air Resource Board (ARB) sets exhaust emissions standards for publicly and privately owned vehicles being operated within California. Currently, most heavy duty and cutaway transit vehicles being operated in Calexico (by IVT and CTS) are diesel-powered. Diesel-powered engines are regulated for Particulate Matter (PM) emissions which are considered toxic air contaminants.

As shown in Figure 8-1, effective January 1, 2016 the ARB requires that any heavy-duty vehicle being operated by any person or business, weighing more than 26,000 lbs, and built prior to 1995 must be retrofitted with a 2010 model year engine. In addition, those built between 1996 and 2009 must be retrofitted with a PM filter. By 2023, all vehicles built prior to 2010 must have a 2010 model year engine. Similar requirements exist for light diesel vehicles, shown in Figure 8-2. These regulations apply to all private bus and courtesy shuttle operators in the City of Calexico.

Figure 8-1 Requirements for Heavy Vehicles (26,001+ lbs)

Engine Year	PM Filter	2010 Model Year Engine
Pre-1996	Not Required	January 1, 2016
1996-1999	January 1, 2012	January 1, 2020
2000-2004	January 1, 2013	January 1, 2021
2005 or newer	January 1, 2014	January 1, 2022
2007-2009	Already Equipped	January 1, 2023

Figure 8-2 Requirements for Light Vehicles (14,001-26,000 lbs)

Engine Year	2010 Model Year Engine
Pre-1996	January 1, 2016
1997	January 1, 2017
1998	January 1, 2018
1999	January 1, 2019
Pre 2003	January 1, 2020
2004-2006	January 1, 2021
2007-2009	January 1, 2023

Public transit operators must adhere to more stringent emissions standards, laid out in Title 13 of the California Code of Regulations (Section 1956.1 and Section 2023.1). Currently, the only public transit operator in Calexico is ICTC, which has recently replaced its entire fleet of heavy-duty and cutaway (light) vehicles and is in compliance with all ARB regulations. If in the future, any City of Calexico funds were to be used to support a private entity operating buses or shuttles, it is recommended that these same standards be applied to that operator in order to reduce the public's exposure to diesel particulate matter.

The City of Calexico should coordinate with ARB to ensure compliance of emissions regulations for all private transit operators within Calexico.

CITY OF CALEXICO CODE OF ORDINANCES

The modernization of transit services operating within the City of Calexico requires the adoption of new, stricter ordinances. Recommended additions to the code of ordinances are organized by service type (bus, shuttle, and taxi) as per the current framework and detailed in this section.

BUSES

The Buses section of the City of Calexico Code of Ordinances should be amended to include the following requirements for all public and privately bus operators:

- **Vehicle Characteristics**
 - Operating air conditioning must be provided on all buses.
 - All buses must be ADA-accessible with a wheelchair lift or level boarding.
 - All buses must include a storage rack for up to two bicycles.
 - A unique 3 or 4-digit vehicle ID number must be clearly visible from the exterior of the bus.
 - The Code of Ordinances should be amended to allow buses up to 40 feet in length (the current ordinance allows buses up to 35 feet in length).
 - The Code of Ordinances should be amended to allow bus capacities up to 50 passengers (the current ordinance allows up to 36 passengers).
- **Inspection**
 - All buses must be inspected by City of Calexico Chief of Police prior to entering service.
 - All buses must comply with national and state safety and emissions standards.
- **Public Liability**
 - Valid proof of insurance and workers' compensation must be provided to the City Clerk prior to January 1.
- **Operational Safety**
 - All drivers must undergo regular drug and alcohol testing.
 - Buses are prohibited from traveling with doors open.
 - Buses are prohibited from making U-turns on city streets.
- **Public Information**
 - Require all fixed-route transit providers to make route, schedule and fare information in the form of brochures or pamphlets available on buses and at transit hubs. Customer information must be provided in English and Spanish.
 - Require all fixed-route transit providers to maintain a website that includes a system map, route schedules, fare, and contact information. The website should offer content in English and Spanish.

COURTESY SHUTTLES

The Courtesy Shuttles section of the City of Calexico Code of Ordinances should be amended to include the following requirements for all transit operators:

- Vehicle Characteristics
 - Operating air conditioning must be provided on all buses.
 - A unique 3 or 4-digit vehicle ID number must be clearly visible from the exterior of the bus.
 - The Code of Ordinances should be amended to allow bus capacities up to 20 passengers (the current ordinance allows up to 12 passengers).
- Inspection
 - All buses must be inspected by City of Calexico Chief of Police prior to entering service.
 - All buses must comply with national and state safety and emissions standards.
- Public Liability
 - Valid proof of insurance and must be provided to the City Clerk prior to January 1.
- Operational Safety
 - All drivers must undergo regular drug and alcohol testing.
 - Buses are prohibited from traveling with doors open.
 - Buses are prohibited from making U-turns on city streets.

TAXICABS

The Taxicabs section of the City of Calexico Code of Ordinances should be amended to include the following requirements for all taxicab operators:

- A fee should be established for the taxicab owner's certificate.
- The terms "permit", "certificate", and "unsanitary" should be defined on the first page of the Code of Ordinances.
- Taxicab operators are prohibited from using cell phones or smoking while operating the vehicle.

SUMMARY OF RECOMMENDATIONS:

The City of Calexico should adopt revised Code of Ordinances for Buses, Courtesy Shuttles, and Taxicabs.

The City of Calexico should assign transit ordinance enforcement duties to a member of the Public Works Department (existing employee or new hire).

9 ACTIVE TRANSPORTATION ADVISORY COMMISSION

Calexico is unique in its proportion of privately operated transit companies that do not accept FTA funding. Several prior recommendations involve the adoption of transit ordinances to modify the terms of transit operation agreements with the city.

Further recommendations include the creation of an Active Transportation Advisory Commission as an opportunity to improve coordination between the city, its transit operators, and citizens served by pedestrian, bicycle, and transit infrastructure.

Structure and Operational Procedure

As is the case with other Calexico commissions, the Active Transportation Commission would consist of five (5) appointed members. Citizens would apply via the City of Calexico Application for City Commission and Statement of Qualifications which requires that an individual must either reside, be employed, or be registered to vote in the City of Calexico. In addition, this commission would include a member of the City of Calexico's staff as a liaison between the commission and the city council.

Other commissions in Calexico are granted certain powers to study, investigate, report, recommend, and carry out plans, subject to the approval of the city council. This particular commission would assume similar duties as they pertain to pedestrian and bicycle access initiatives, the provision of transit standards and amenities, and advocating for land use and development standards that support active transportation users.

The commission would meet regularly, potentially on a monthly or bi-monthly schedule to discuss the needs and issues of their various constituencies as well as note progress made on these issues. Additionally, the commission or one of its representatives would serve as a primary stakeholder or advisory committee member on all future transportation projects, programs, plans, and/or plan updates. Another function of the commission would be to invite and interface often with city public works and transit providers to be kept informed on developments as well as voice the concerns of those they represent to those responsible for the implementation of solutions. This advocacy and outreach can be extended to include the Imperial Valley Transportation Commission, council members, and other community leaders.

Benefits

Non-profit transportation advocacy organizations have been successful in urging transit operators to adopt certain policies, provide certain amenities, and consider certain minimum levels of service, especially when a working relationship exists between the advocates, city staff, and the transit authority. The relationship works in two directions as the official agencies often help to guide the advocates into avoiding mistakes with their message, making their efforts more

impactful. A commission patterned on this model can be even more effective, especially when including a liaison directly embedded in the city staff who can turn commission findings and requests into policy.

Transit riders, cyclists, and pedestrians benefit directly from the types of proposed changes that a commission such as this can achieve through its direct link to city council and city staff and the weight of its recommendations. Providers also benefit through an increased user base which augments the financial and political capital to deliver on further improvements. The stronger voice of the active transportation community enables the city to hold operators to a higher standard and enhances accountability as changes that could negatively impact users are sure to be monitored and responded to promptly.

SUMMARY OF RECOMMENDATIONS:

The City of Calexico should create an Active Transportation Advisory Commission to promote the implementation of improved services and infrastructure.

10 POTENTIAL TRANSIT SERVICES

LOCAL ROUTE NETWORK

Transit services operating within the City of Calexico is unlike any most cities within the United States. While other cities along the U.S.-Mexico border have a myriad of regional bus options, Calexico is unique in that its local circulation is a patchwork of indirect local and hybrid routes that are not coordinated in terms of scheduling or transfers. The loop design of current local routes requires riders to travel an indirect path in at least one segment of their round-trip. The lack of a central connection point downtown, lack of coordinated fares, and disparities in service quality between providers results in a fragmented set of services with unique rider markets.

The relatively small footprint of the city should allow for a simpler and more effective network of local routes to serve both local residents and visitors from Mexico. Improved consistency of transit service in terms of vehicles, bus stops, and amenities is also needed.

The proposed IVT Garnet Line (Calexico Circulator) would address several of the existing service quality issues. However, as proposed, it would not provide a convenient level of service in terms of span (6:00 a.m. to 7:00 p.m.), headway (70 minutes), or route directness (see Figure 3-3).

Conceptual Transit Network

Two cost-unconstrained route network concepts were developed incorporating existing service coverage, population densities, major destinations, and physical barriers. Each transit network maximizes existing coverage while adopting transit planning best practices. As a system, each transit network concept offers more direct and intuitive service than current local fixed-routes.

Calexico Transit Network Concept A

Concept A would improve local connectivity, reduce on-board travel time, and simplify service, and promote better connectivity between IVT and private transit providers.

Concept A (Figure 10-1) consists of two bi-directional circulator routes serving East and West Calexico. Each circulator route would terminate at the future Calexico Intermodal Transportation Center and Walmart. Each conceptual route would operate every 60 minutes with one vehicle. An additional vehicle could be assigned to either route during peak times to offer a 30-minute headway. Both routes could also be interlined/linked to allow riders to continue through downtown or Walmart without having to transfer buses. East and West Calexico circulators do not assume operation by a specific service provider.

The central section of Calexico could be served by IVT Route 1 to provide direct access from a high-density area of the city to the two largest destinations, downtown and Walmart. By streamlining service along Rockwood (and Heber in the inbound direction south of SR-98), and eliminating the indirect loop around Calexico, the cycle time of IVT Route 1 could be reduced

from 140 minutes to 120 minutes, allowing for more attractive 30 and 60-minute headways. It should be noted that such a schedule improvement would require a restructure of IVT Blue and Green Lines, both of which operate every 70 minutes and connect with IVT Route 1.

Figure 10-1 Calexico Transit Network Concept A

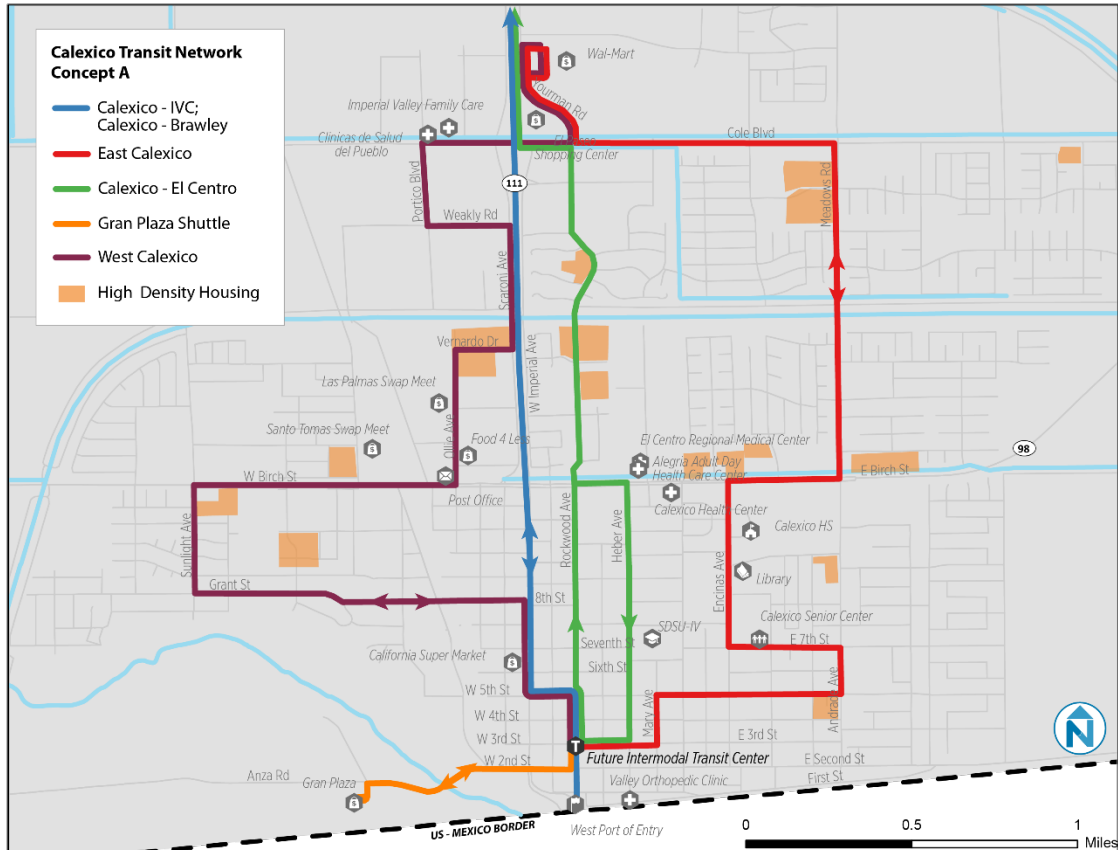


Figure 10-2 Service Characteristics of Conceptual East and West Calexico Circulators

Route	Round Trip Mileage	Cycle Time	Vehicles	Weekday Span and Headway		Saturday Span and Headway		Annual Hours
West Calexico	10.4	60	1	6 a.m. - 9 p.m.	60	7 a.m. - 7 p.m.	60	4,485
East Calexico	9.0	60	1	6 a.m. - 9 p.m.	60	7 a.m. - 7 p.m.	60	4,485
Total	-	-	2	-	-	-	-	8,970

Calexico Transit Network Concept B

Concept B provides a lower cost alternative in which East and West Calexico would be served by a single counter-clockwise loop operating every 60 minutes. This conceptual alignment is similar to the Garnet Line alternative concept, however, it would eliminate excessive layover involved with a 70-minute headway.

Figure 10-3 Calexico Transit Network Concept B

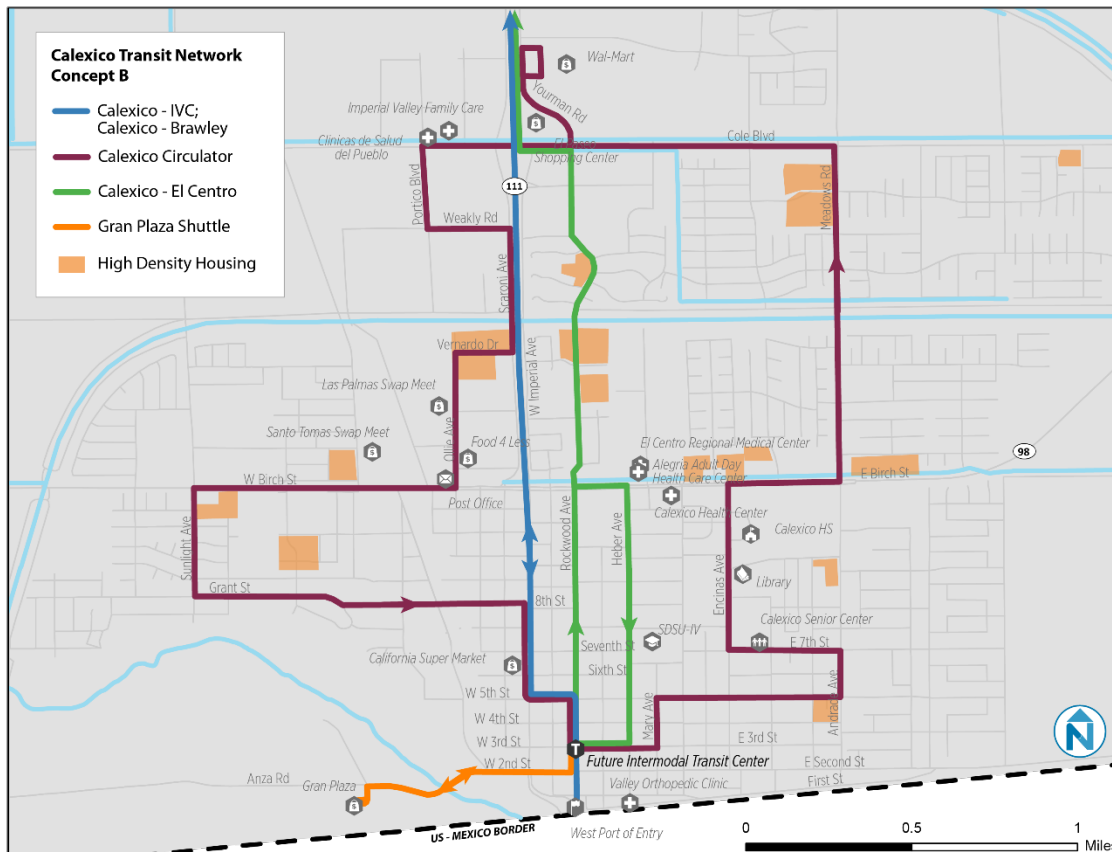


Figure 10-4 Service Characteristics of Conceptual Calexico Circulator

Route	Round Trip Mileage	Cycle Time	Vehicles	Weekday Span and Headway	Saturday Span and Headway	Annual Hours
West Calexico	9.7	60	1	6 a.m. - 9 p.m. 60	7 a.m. - 7 p.m. 60	4,485

REGIONAL CONNECTIONS

IVT Routes 21 and 22

Another important service need that currently exists is additional midday and evening trips on Routes 21 and 22 between Calexico and Imperial Valley College to address overcrowding and respond to customer requests. This service increase is high upon ICTC's list of immediate service needs that require additional funding for implementation.

IVT Routes 1 Limited Stop Overlay

One of IVT's highest priorities is the implementation of a limited stop overlay of IVT Route 1, which would provide a faster option for customers traveling between El Centro Transit Center and Calexico. This route would likely have a cycle time of 60 minutes (assuming intermediate stops were excluded), thus enabling 15-minute peak hour service (and 30-minute off-peak service) between El Centro and Calexico if offset with Route 1. IVT is currently evaluating the financial feasibility of this potential new service.

SUMMARY OF RECOMMENDATIONS:

The City of Calexico should work with fixed-route transit providers (public and/or private) to evaluate the feasibility of implementing the recommended local route network.

11 INTERMODAL TRANSIT CENTER

The mix of transit services operating within Calexico perform many functions and serve several local and regional destinations. However, the lack of a cohesive transit system and downtown transit center provides challenges in terms of customer awareness, comprehension, and convenience.

The proposed Calexico Intermodal Transit Center would provide improved connectivity between multiple modes of transportation, including walking, cycling, transit, taxicabs, agricultural shuttles, and transportation network companies. In addition, local and regional transit services (both public and private) would be better integrated by sharing a single transfer point. The proposed Intermodal Transit Center also has the potential to greatly enhance the streetscape of downtown Calexico. While ICTC continues to be the lead agency in seeking grant funding for the design, engineering and construction of the facility, the City of Calexico should pledge its full support in realizing this vital infrastructure need.

While the El Centro Transit Center serves as a fine example for the future Calexico Intermodal Transit Center, additional transit-related features should be considered including:

- Real-time passenger information displays
- A complete downtown wayfinding project integrating the Calexico Intermodal Transit Center and Calexico West Land Port of Entry
- A parking strategy that encourages discourages long-term parking

The proposed site at 3rd Street between Rockwood Avenue and Heffernan Avenue is the ideal location for the Calexico Intermodal Transit Center due to the high pedestrian volumes associated with the Calexico West Land Port of Entry and proximity to downtown businesses.

SUMMARY OF RECOMMENDATIONS:

The City of Calexico should continue to support the construction of the Calexico Intermodal Transportation Center.

Figure 11-1 El Centro Transit Center



12 NEXT STEPS

This chapter summarizes the key recommendations of Chapters 7-11 and establishes a timeline based on immediate-term (0-12 months), short-term (1-2 years), and long-term (3-5 years) implementation.

Figure 12-1 Summary of Key Recommendations

Recommendation	Timeframe
Transit Guidelines	
The City of Calexico should install signage at all bus stops within the city served by fixed-routes.	Immediate-Term (0-12 months)
The City of Calexico should assume responsibility for designing, procuring and maintaining new bus stop signage to ensure consistency and accuracy.	Short-Term (1-2 years)
Public information guidelines (route, schedule, and fare information) should be incorporated into the Code of Ordinances Buses section.	Immediate-Term (0-12 months)
The upcoming Calexico Bicycle Master Plan Update should incorporate bicycle access to transit.	Immediate-Term (0-12 months)
Federal/State Regulations and Recommended Ordinances	
The City of Calexico should adopt revised Code of Ordinances for Buses, Courtesy Shuttles, and Taxicabs.	Immediate-Term (0-12 months)
The City of Calexico should assign transit ordinance enforcement duties to a member of the Public Works Department (existing employee or new hire).	Short-Term (1-2 years)
Active Transportation Advisory Commission	
The City of Calexico should create an Active Transportation Advisory Commission to promote the implementation of improved services and infrastructure.	Immediate-Term (0-12 months)
Potential Transit Services	
The City of Calexico should work with fixed-route transit providers (public and/or private) to evaluate the feasibility of implementing the recommended local route network.	Short-Term (1-2 years)
Intermodal Transit Center	
The City of Calexico should continue to support the construction of the Calexico Intermodal Transportation Center.	Long-Term (3-5 years)