



FY 2008-2010 TRIENNIAL PERFORMANCE AUDIT OF IMPERIAL VALLEY TRANSIT



SUBMITTED TO:

Imperial County Transportation Commission

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Section I

Introduction

California's Transportation Development Act (TDA) requires that a triennial performance audit be conducted of public transit entities that receive TDA revenues. The performance audit serves to ensure accountability in the use of public transportation revenue.

The Imperial County Transportation Commission (ICTC) engaged PMC to conduct a performance audit of Imperial Valley Transit (IVT) including the regional bus system and the Blue and Green Line circulators covering the most recent triennial period, fiscal years 2007–2008 through 2009–2010. The purpose of the performance audit is to evaluate IVT's effectiveness and efficiency in the use of TDA funds to provide public transportation. This evaluation is required as a condition for continued receipt of these funds for public transportation purposes. In addition, the audit evaluates IVT's compliance with the conditions specified in the California Public Utilities Code (PUC). This task involves ascertaining whether IVT is meeting the PUC's reporting requirements. Moreover, the audit includes calculations of transit service performance indicators and a detailed review of IVT's administrative functions. From the analysis that has been undertaken, a set of recommendations has been made for the agency which is intended to improve the performance of specialized transit operations.

In summary, this TDA audit affords the opportunity for an independent, constructive, and objective evaluation of the organization and its operations that otherwise might not be available. The methodology for the audit included in-person interviews with IVT administrative and operations management, collection and review of agency documents, data analysis, and on-site observations. The *Performance Audit Guidebook for Transit Operators and Regional Transportation Planning Entities* published by the California Department of Transportation (Caltrans) was used to guide in the development and conduct of the audit.

Overview of the Transit System

IVT is the regional fixed-route transit provider for the Imperial Valley. The system was formed in 1989 under the name Imperial County Transit with five routes and a fleet of three buses running Monday through Friday. Currently, IVT operates 15 routes including ten regular routes, four express services that serve Imperial Valley College (IVC), and four direct routes between Brawley and the El Centro/Calexico areas.

The service area generally extends from Bombay Beach at the Salton Sea in the north to Calexico at the United States/Mexico international border in the south, and from Ocotillo in the west to Winterhaven near the California/Arizona border in the east. The primary zone of service is in a north/south configuration and includes Brawley, Imperial, IVC, El Centro, Heber, and Calexico. The service is operated by First Transit, Inc., and administered by the County of Imperial on behalf of

the eight member agencies of ICTC to provide fixed-route transit services throughout Imperial County.

In October 2006, the County branded and launched a circulator shuttle service within the city of El Centro known as the IVT Blue Line. The Blue Line initially began service with two bidirectional routes utilizing smaller buses, which connect government agencies and services not currently served by the regional system. Commencing in July 2009, the routes were reconfigured and split into two branded circulator services: the Blue Line and the Green Line. The Blue Line ceased its eastbound route and runs westbound serving public and social service agencies in the southern part of the city. On the other hand, the Green Line runs eastbound and serves the northern areas of El Centro. The Blue and Green Lines, being recently implemented services with different operating characteristics from the regional service, are considered separate from the IVT regional system for purposes of reporting and performance analysis.

Imperial County is geographically located in the southeastern corner of California, stretching from the United States-Mexico border on the south, Riverside County on the north, San Diego County on the west, and the State of Arizona on the east. The terrain varies from 235 feet below sea level at the Salton Sea to 4,548 feet at Blue Angel Peak. The county's geographical land area encompasses 4,175 square miles and is traversed by 2,555 miles of roadway. Major highways include Interstate 8 and State Routes (SR) 7, 78, 86, 98, 111, and 115.

Population growth has seen a marked increase in recent years. According to the 2010 U.S. Census Data, the county's population is 174,528. The California Department of Finance 2010 estimate reports a countywide population of 183,029. The county seat and largest city is El Centro, with an estimated population of 42,598 based on the 2010 U.S. Census. The population of El Centro is followed in descending order by those of Calexico, Brawley, Imperial, Calipatria, Holtville, and Westmorland.

System Characteristics

IVT operates six types of services that include regular fixed-route, express service to Imperial Valley College (IVC), direct intercity between Brawley and Calexico, lifeline, route deviation, and demand response in certain areas. Routes that are designed as demand responsive only receive service if a request is made at least one day in advance. Complementary Americans with Disabilities Act (ADA) paratransit service is provided separately by AIM Transit.

The IVT regional fixed-route system operates from 6:00 a.m. to 10:30 p.m., Monday through Friday, and from 6:00 a.m. to 7:00 p.m. on Saturdays. The service does not operate on Sundays and the following holidays: New Years Day, Martin Luther King's birthday, Presidents' Day, Memorial Day, Independence Day, Labor Day, Veterans Day, Thanksgiving, or Christmas Day. The following table contains details of each route within the IVT system:

**Table I-1
IVT Regional System**

Route Number	Description	Frequency/Operation	Destinations
50	Niland–El Centro	<p>Every 70 minutes from Brawley to El Centro. Approximately every two hours from Niland to El Centro.</p> <p>(Monday through Friday 6:03 a.m. to 10:20 p.m.) Every 2 to 3 hours (Saturday 6:30 a.m. to 7:00 p.m.)</p>	<ul style="list-style-type: none"> ▪ Niland ▪ Calipatria ▪ Westmorland ▪ Brawley ▪ Imperial ▪ Imperial Valley College ▪ K Mart/Costco-El Centro ▪ State & 14th Street-El Centro
100	El Centro–Calexico	<p>Every 70 minutes (Monday through Friday 5:54 a.m. to 10:56 p.m.) Every 2 to 3 hours (Saturday 8:20 a.m. to 6:06 p.m.)</p>	<ul style="list-style-type: none"> ▪ State & 14th Street-El Centro ▪ Library-El Centro ▪ El Centro Hospital ▪ Imperial Valley Mall ▪ Heber ▪ Calexico
150	Calexico–El Centro	<p>Every 70 minutes (Monday through Friday 5:45 a.m. to 11:23 p.m.) Every 2 to 3 hours (Saturday 6:06 a.m. to 7:20 p.m.)</p>	<ul style="list-style-type: none"> ▪ Calexico ▪ Post Office-Calexico ▪ Camarena Library ▪ Heber; ▪ Imperial Valley Mall ▪ El Centro Hospital ▪ Library-El Centro ▪ State & 14th Street
200	El Centro–Niland	<p>Every 70 minutes to 2 hours and 40 minutes (Monday through Friday 5:45 a.m. to 10:37 p.m.) Every 2 to 3 hours (Saturday 7:20 a.m. to 8:12 p.m.)</p>	<ul style="list-style-type: none"> ▪ State & 14th Street ▪ K Mart/Costco-El Centro ▪ Wal-Mart-El Centro ▪ Imperial Valley College ▪ Imperial ▪ Brawley ▪ Westmorland ▪ Calipatria ▪ Niland

Route Number	Description	Frequency/Operation	Destinations
300/350	El Centro–Holtville Holtville–El Centro	Every 90 minutes to 2 hours and 30 minutes (Monday through Friday) Two to three trips (Saturday) Winterhaven portion operates only on Wednesdays as a lifeline service. Route deviation service provided.	<ul style="list-style-type: none"> ▪ State & 14th Street ▪ K Mart/Costco-El Centro ▪ Imperial Valley College ▪ Holtville ▪ Winterhaven
400/450	El Centro–Seeley–Ocotillo Ocotillo–Seeley–El Centro	Approximately every 2 hours and 20 minutes (Monday through Friday 6:45 a.m. to 5:50 p.m.) Two to three trips (Saturday) Ocotillo portion operates only on Tuesdays as a lifeline service. Route deviation service provided.	<ul style="list-style-type: none"> ▪ State & 14th Street ▪ INS Courthouse-El Centro ▪ Seeley ▪ Ocotillo
500/550	Bombay Beach–Brawley Brawley–Bombay Beach	One southbound a.m. trip One northbound p.m. trip Thursdays only as a lifeline service. Route deviation service provided.	<ul style="list-style-type: none"> ▪ Bombay Beach ▪ Imperial Spa ▪ Fountain of Youth Spa ▪ Niland ▪ Calipatria ▪ Brawley
600/650 Direct	Calexico–Brawley Brawley–Calexico	Two bidirectional a.m. trips Two bidirectional p.m. trips (Monday through Friday)	<ul style="list-style-type: none"> ▪ Rio Vista-Brawley ▪ 3rd & Paulin-Calexico
800 FAST	Brawley-El Centro	One a.m. trip (Monday through Friday)	<ul style="list-style-type: none"> ▪ Brawley ▪ Imperial ▪ El Centro
IVC Express	Niland–IVC	Two southbound a.m. trips Two northbound p.m.	<ul style="list-style-type: none"> ▪ Niland ▪ Calipatria ▪ Westmorland

Route Number	Description	Frequency/Operation	Destinations
		trips (IVC school days only)	<ul style="list-style-type: none"> ▪ Brawley ▪ Imperial Valley College
	Calexico-IVC	Three northbound a.m. trips Three southbound p.m. trips (IVC school days only)	<ul style="list-style-type: none"> ▪ Post Office-Calexico ▪ Camarena Library-Calexico ▪ Imperial Valley College

Source: IVT

In addition to IVT's regional services, the IVT-Blue and Green Lines operate as circulator routes within the city of El Centro Monday through Friday. The following table provides a summary of the IVT-Blue and Green Line services:

**Table I-2
IVT El Centro Circulators**

Route Name	Description	Frequency/Operation	Destinations
Blue	Westbound	Every 1 hour, 10 minutes (Monday through Friday from 6:00 a.m. to 6:38 p.m.)	<ul style="list-style-type: none"> ▪ 14th & State ▪ El Centro Library ▪ Center for Employment ▪ County Jail & Clark Road ▪ Social Security ▪ Social Services ▪ El Centro Regional Hospital
Green	Eastbound	Every 1 hour, 10 minutes (Monday through Friday from 6:00 a.m. to 6:38 p.m.)	<ul style="list-style-type: none"> ▪ 14th & State ▪ DMV ▪ Bradshaw & Costco ▪ Bradshaw & Wal-Mart ▪ Senior Housing Complex & Myrtle ▪ Imperial Theaters ▪ Food 4 Less ▪ El Centro Regional Hospital ▪ Central High School

Source: IVT

Fares

During the audit period, the IVT fare structure was based on the number of zones traveled. There were five fare zones in the IVT system. The zones are outlined in the following table:

**Table I-3
IVT Fare Zones**

Zone	Destination
1	Bombay Beach & Spas
2	Calipatria & Niland
3	Brawley & Westmorland
4	El Centro, Imperial, IVC, Heber & Seeley
5	Calexico & Heber
6	Holtville & Winterhaven

Source: IVT

The community of Heber borders Zones 4 and 5; thus, riders would pay a single-zone fare to reach Zone 4 or Zone 5.

The fare schedule during the audit period is presented in the following table:

**Table I-4
IVT Fare Schedule**

Category	Fare
Local Zone Fare/El Centro Circulators	\$0.75
Senior (60+)/Disabled Local Zone	\$0.35
Regional Zone Fare	\$1.00
Senior (60+)/Disabled Regional Zone	\$0.50
IVC Express – Student Fare	\$1.00
IVC Express – Non-Student Fare	\$1.50
Direct & Fast Trip	\$2.00
Ticket Books	
20-Ride Local Zone	\$12.00
20-Ride Regional Zone	\$16.00
20-Ride Student (Express Routes Only)	\$20.00
20-Ride Senior (60+)/Disabled Local Zone	\$7.00
20-Ride Senior (60+)/Disabled Regional Zone	\$10.00

Source: IVT

Ticket booklets are available for purchase at the city halls in Calipatria, El Centro, Holtville, Imperial, and Westmorland, as well as at the Imperial Valley College library and the IVT office in El Centro. Drivers are not authorized to sell passes.

Fleet

IVT utilizes a total fleet of 20 buses plus five service and two spare vehicles as described in Table I-5. For the regional fixed-route services, IVT utilizes 17 buses ranging from 40-foot clean diesel low emission powered Gillig models to smaller cutaway buses. The Blue and Green Lines utilize three leased 30-foot cutaway buses. The 1988 and 1989 Gillig Phantom buses were retrofitted completely in 2005.

**Table I-5
IVT Fleet Inventory**

Year	Make & Model	Quantity	Fuel Type	Service Type	Seats	Wheelchair Capacity
1988	Gillig Phantom	8	Diesel	Regional Fixed Route	43	2
1989	Gillig Phantom	2	Diesel	Regional Fixed Route	41	2
2003	Ford E450 Champion	1	Gasoline	Brawley Fast	16	2
2007	Ford E450 El Dorado	1	Gasoline	Brawley Fast	18	2
2007	Ford E450 El Dorado	1	Gasoline	Brawley Fast	20	2
2008	Chevy C5500 El Dorado	2	Gasoline	Direct/Express	30	2
2009	Ford E450 El Dorado	2	Gasoline	Holtville/Seeley	20	2
2009	Ford E450 Starcraft	3	Gasoline	El Centro Circulators	20	2
Total		20				

Source: IVT

The fleet conforms to the requirements of the Americans with Disabilities Act (ADA) of 1990 in regard to wheelchair accessibility.

Section II

Operator Compliance Requirements

This section of the audit report contains the analysis of IVT's ability to comply with state requirements for continued receipt of TDA funds. The evaluation uses the guidebook, *Performance Audit Guidebook for Transit Operators and Regional Transportation Planning Agencies, September 2008 (third edition)*, which was developed by the California Department of Transportation (Caltrans) to assess transit operators. The updated guidebook contains a checklist of eleven measures taken from relevant sections of the Public Utilities Code and the California Code of Regulations. Each of these requirements is discussed in the table below, including a description of the system's efforts to comply with the requirements. In addition, the findings from the compliance review are described in the text following the table.

Table II-1 Operator Compliance Requirements Matrix		
Operator Compliance Requirements	Reference	Compliance Efforts
The transit operator submitted annual reports to the RTPA based upon the Uniform System of Accounts and Records established by the State Controller. Report is due 90 days after end of fiscal year (Sept. 28/29), or 110 days (Oct. 19/20) if filed electronically (Internet).	Public Utilities Code, Section 99243	Completion/submittal dates: FY 2008: September 29, 2008 FY 2009: September 21, 2009 FY 2010: September 23, 2010 Conclusion: Complied
The operator has submitted annual fiscal and compliance audits to the RTPA and to the State Controller within 180 days following the end of the fiscal year (Dec. 27), or has received the appropriate 90-day extension by the RTPA allowed by law.	Public Utilities Code, Section 99245	Completion/submittal dates: FY 2008: June 5, 2009 FY 2009: December 15, 2009 FY 2010: January 12, 2011 Conclusion: Partial Compliance. FY 2008 Fiscal & Compliance Audit was completed and received after the 90-day extension period.
The CHP has, within the 13 months prior to each TDA claim submitted by an	Public Utilities Code, Section 99251 B	Imperial County through its contract operator participates in the CHP Transit Operator

Table II-1 Operator Compliance Requirements Matrix		
Operator Compliance Requirements	Reference	Compliance Efforts
operator, certified the operator's compliance with Vehicle Code Section 1808.1 following a CHP inspection of the operator's terminal.		<p>Compliance Program in which the CHP has conducted inspections within the 13 months prior to each TDA claim.</p> <p>Inspection dates applicable to the audit period were February 22, 2007; February 27, 2008; March 4, 2009; and March 4, 2010.</p> <p>The County's contract operator received a satisfactory rating for all inspections conducted on IVT vehicles during the audit period.</p> <p>Conclusion: Complied</p>
The operator's claim for TDA funds is submitted in compliance with rules and regulations adopted by the RTPA for such claims.	Public Utilities Code, Section 99261	<p>As a condition of approval, the County's annual claims for Local Transportation Funds are submitted in compliance with rules and regulations adopted by ICTC. ICTC staff provides assistance as needed in completing the claims.</p> <p>The County's claims are submitted generally during the fall of the claim year as required by ICTC. During the audit period, the claims were submitted on October 10, 2008, and November 6, 2009.</p> <p>Conclusion: Complied</p>

Table II-1 Operator Compliance Requirements Matrix		
Operator Compliance Requirements	Reference	Compliance Efforts
If an operator serves urbanized and non-urbanized areas, it has maintained a ratio of fare revenues to operating costs at least equal to the ratio determined by the rules and regulations adopted by the RTPA.	Public Utilities Code, Section 99270.1	<p>IVT provides service in both urbanized and non-urbanized areas of Imperial County. ICTC, pursuant to state law (PUC Section 99270.1), is responsible for calculating an intermediate or “blended” fare recovery ratio, including the methodology for calculating the ratio, which was approved by Caltrans in March 2010 and is effective for a period of five years (2010–2014). The blended fare ratio approved by Caltrans was 14.5%. The prior blended fare ratio was 13.4%.</p> <p>The systemwide farebox recovery for IVT is as follows:</p> <p>FY 2008: 13.41% FY 2009: 15.15% FY 2010: 16.43%</p> <p>Source: ICTC Performance Summary</p> <p>Conclusion: Complied</p>
The operator’s operating budget has not increased by more than 15% over the preceding year, nor is there a substantial increase or decrease in the scope of operations or capital budget provisions for major new fixed facilities unless the operator has reasonably supported and substantiated the change(s).	Public Utilities Code, Section 99266	<p>Percentage increase in IVT’s operating budget:</p> <p>FY 2008: 9.73% FY 2009: 4.70% FY 2010: 5.02%</p> <p>The increases in the operating budget can be attributed to a rise in fuel costs.</p>

Table II-1 Operator Compliance Requirements Matrix		
Operator Compliance Requirements	Reference	Compliance Efforts
		Source: ICTC Performance Summary Conclusion: Complied
The operator's definitions of performance measures are consistent with Public Utilities Code Section 99247, including (a) operating cost, (b) operating cost per passenger, (c) operating cost per vehicle service hour, (d) passengers per vehicle service hour, (e) passengers per vehicle service mile, (f) total passengers, (g) transit vehicle, (h) vehicle service hours, (i) vehicle service miles, and (j) vehicle service hours per employee.	Public Utilities Code, Section 99247	The County's definition of performance measures as tracked and recorded by the contract operator is consistent with Public Utilities Code Section 99247. However, more consistency between data in internal and external reports is required. Conclusion: Complied
If the operator serves an urbanized area, it has maintained a ratio of fare revenues to operating costs at least equal to one-fifth (20 percent), unless it is in a county with a population of less than 500,000, in which case it must maintain a ratio of fare revenues to operating costs of at least equal to three-twentieths (15 percent), if so determined by the RTPA.	Public Utilities Code, Sections 99268.2, 99268.3, 99268.12, 99270.1	This measure is not applicable, as IVT is subject to the intermediate farebox ratio established by ICTC. Conclusion: Not applicable

Table II-1 Operator Compliance Requirements Matrix		
Operator Compliance Requirements	Reference	Compliance Efforts
If the operator serves a rural area, or provides exclusive services to elderly and disabled persons, it has maintained a ratio of fare revenues to operating costs at least equal to one-tenth (10 percent).	Public Utilities Code, Sections 99268.2, 99268.4, 99268.5	This measure is not applicable, as IVT is subject to the intermediate farebox ratio established by ICTC. Conclusion: Not applicable
The current cost of the operator's retirement system is fully funded with respect to the officers and employees of its public transportation system, or the operator is implementing a plan approved by the RTPA which will fully fund the retirement system within 40 years.	Public Utilities Code, Section 99271	The County contracts with a private provider for operations, while the cost of County staff's retirement is fully funded under the 1937 Act County Employees' Retirement Law. Conclusion: Complied
If the operator receives state transit assistance funds, the operator makes full use of funds available to it under the Urban Mass Transportation Act of 1964 before TDA claims are granted.	California Code of Regulations, Section 6754(a)(3)	ICTC expended State Transit Assistance Fund (STAF) revenues on IVT fixed-route services and makes use of available federal transit monies. Conclusion: Complied

Findings and Observations from Operator Compliance Requirements Matrix

1. Of the compliance requirements pertaining to IVT, the operation fully complied with eight out of the nine requirements. The operator was found in partial compliance with the timely submittal of its annual fiscal audits. Two additional compliance requirements did not apply to IVT (e.g., separate rural and urban farebox recovery ratios).
2. The average systemwide farebox recovery ratio was 15 percent during the triennial review period. Increases in passenger trips and revenues have resulted in higher farebox ratios. The required minimum farebox ratio established by IVT through an adopted methodology is 14.5 percent effective March 2010. The prior adopted blended ratio was 13.4 percent.
3. Through its contract operator, the County participates in the CHP Transit Operator Compliance Program and received inspections of IVT vehicles within the 13 months prior to each TDA claim. Satisfactory ratings were made for all inspections conducted during the audit period.
4. The operating budget exhibited modest increases since FY 2007, with the highest increase of 9.73 percent realized in FY 2008 due to a rise in fuel costs.

Section III

Prior Triennial Performance Recommendations

IVT's efforts to implement the recommendations made in the prior triennial audit are examined in this section of the report. For this purpose, each prior recommendation for the agency is described, followed by a discussion of the agency's efforts to implement the recommendation. Conclusions concerning the extent to which the recommendations have been adopted by the agency are then presented.

Prior Recommendation 1

Conduct regular on-time performance checks.

Actions taken by IVT

On-time performance is one of the metrics tracked by IVT as both a service efficiency and a customer service measure. The road supervisor regularly conducts on-time performance checks by either following a bus in a service vehicle or riding the route. Approximately 50 to 60 routes are checked randomly on a weekly basis. In addition, a route evaluation is performed when the route supervisor rides an entire route.

Conclusion

This recommendation has been implemented.

Prior Recommendation 2

Combine IVT regional fixed route and Blue Line farebox recovery ratios to determine TDA funding eligibility.

Actions taken by IVT

Since IVT provides service in both urbanized and non-urbanized areas of Imperial County, it is subject to a "blended" farebox formulized by ICTC and approved by Caltrans every five years. The blended ratio was adjusted in March 2010 from 13.4 percent to 14.5 percent. It was suggested that the systemwide ratio include all IVT fixed route services comprising the regional and El Centro Circulator services (Blue and Green Lines). ICTC/County staff indicated that the methodology for deriving the new blended ratio includes all IVT fixed route services. The circulator service, which have not been meeting farebox, are generally reported separately from the regional service for internal analysis and service planning.

The required ratios of fare revenues to operating costs does not apply to an extension of public transportation services until two years after the end of the fiscal year in which the extension of

services was placed into operation. The Blue Line, which was first introduced into service in October 2006, was scheduled to lose its farebox exemption status in July 2009. One of the two bidirectional routes that constituted the Blue Line was split off and designated as the Green Line in July 2009. This service change triggered another farebox exemption for another two years.

Separate TDA claims are submitted for the Blue/Green Line and the IVT regional service by the County. Although the farebox for regional and circulator services are reported separately for internal analysis, for TDA fund eligibility, a combined farebox for all IVT fixed route services is the appropriate measure given the local circulators are an extension of regional service and fall under the umbrella of IVT. ICTC has complied with this measure in its submittal to Caltrans for approval.

Conclusion

This recommendation has been implemented.

Prior Recommendation 3

Consider developing a fare revenue deviation policy within the contract operator, First Transit.

Actions taken by IVT

The purpose for adoption of a fare revenue deviation policy would include establishing an acceptable variance range between projected and actual revenues. The operator has implemented several measures to ensure more accurate reconciliation of fare revenues received with the number of passenger trips. The fare count and number of passenger trips are compared and reconciled on a daily basis. Drivers are instructed to have passengers fully unfold bills upon placement into the farebox and use only U.S. currency. In addition, drivers are trained on the correct use of the passenger counters and are not authorized to sell tickets.

Conclusion

This recommendation has been implemented.

Prior Recommendation 4

Consider installation of electronic fareboxes/passenger counts and GPS on the buses.

Actions taken by IVT

It was suggested that the farebox and passenger tracking systems be upgraded to electronic technologies for future improvements in productivity and more accurate accounting. Such technology would be able to accommodate smart cards and passes that could automatically deduct fares and track passenger trips. Global Positioning Systems (GPS) technology could also enhance dispatching and vehicle tracking processes as the system continues to grow.

In regard to the installation of electronic fareboxes, the operator indicated that such technology would not be received well by the ridership; thus, the fareboxes remain manually operated. Given that a significant number of passenger trips originate from Calexico along the U.S./Mexico border, the fare media of preference are cash and coinage.

The operator has been in discussions with ICTC about procuring grants to fund Automated Vehicle Locator (AVL) and camera systems on the buses. In the interim, IVT underwent a \$26,000 upgrade of its dispatch communication system in August 2010, utilizing Nextel advance technology. Drivers are required to report into dispatch upon departing the operations yard, at their last stop, and when loading wheelchair passengers or running five minutes behind schedule, as well as when incurring accidents, roadcalls, and passenger emergencies.

Conclusion

This recommendation has not yet been implemented, and is contingent on future funding for GPS related systems as well as further review of the feasibility of electronic fareboxes.

Prior Recommendation 5

Develop systemwide map for the Rider's Guide.

Actions taken by IVT

The IVT Rider's Guide provides schedules and maps for each individual route in the IVT system. It was suggested that a systemwide map of IVT would better assist riders to clearly visualize the full offering of the IVT services rather than on a route-by-route basis. Based on discussions with the contract operator, a systemwide map would not meet the needs of the ridership demographic. In lieu of a systemwide map, the contract operator suggested that developing schedules and maps for each route would better serve riders' needs, such as what is provided for the Blue and Green Lines in El Centro.

Conclusion

This recommendation is no longer applicable.

Section IV

TDA Performance Indicators

This section reviews IVT's performance in providing service in an efficient and effective manner. TDA requires that at least five specific performance indicators be reported, which are contained in the following table. Farebox is not one of the five specific indicators, but is shown as a compliance measure. Findings from the analysis are contained in the section following the tables, followed by the analysis.

Table IV-1
IVT Systemwide Performance Indicators

Performance Data and Indicators	FY 2007	Audit Period			% Change FY 2007– 2010
		FY 2008	FY 2009	FY 2010	
Operating Cost	\$2,763,401	\$3,032,322	\$3,174,710	\$3,334,161	20.7%
Total Passengers	327,404	479,739	556,433	592,012	80.8%
Vehicle Service Hours	29,739	32,031	31,959	33,061	11.2%
Vehicle Service Miles	647,683	662,047	645,845	663,501	2.4%
Employee FTEs	29	29	52	65	124.1%
Operating Revenue	\$333,176	\$406,618	\$481,058	\$547,709	64.4%
Operating Cost per Passenger	\$8.44	\$6.32	\$5.71	\$5.63	-33.3%
Operating Cost per Vehicle Service Hour	\$92.92	\$94.67	\$99.34	\$100.85	8.5%
Operating Cost per Vehicle Service Mile	\$4.27	\$4.58	\$4.92	\$5.03	17.8%
Passengers per Vehicle Service Hour	11.0	15.0	17.4	17.9	62.7%
Passengers per Vehicle Service Mile	0.51	0.72	0.86	0.89	76.5%
Vehicle Service Hours per Employee	1,025.5	1,104.5	614.6	508.6	-50.4%
Average Fare per Passenger	\$1.02	\$0.85	\$0.86	\$0.93	-9.1%
Fare Recovery Ratio	12.06%	13.41%	15.15%	16.43%	36.2%

Source: ICTC Summary Reports

**Table IV-2
IVT Regional Service Performance Indicators**

Performance Data and Indicators	FY 2007	Audit Period			% Change FY 2007– 2010
		FY 2008	FY 2009	FY 2010	
Operating Cost	\$2,382,612	\$2,516,431	\$2,668,835	\$2,826,722	18.6%
Total Passengers	319,427	462,784	536,703	570,231	78.5%
Vehicle Service Hours	25,151	25,615	25,869	26,695	6.1%
Vehicle Service Miles	591,639	583,749	571,772	588,027	-0.6%
Employee FTEs	25	25	39	39	56.0%
Operating Revenue	\$327,621	\$388,073	\$463,441	\$533,654	62.9%
Operating Cost per Passenger	\$7.46	\$5.44	\$4.97	\$4.96	-33.5%
Operating Cost per Vehicle Service Hour	\$94.73	\$98.24	\$103.17	\$105.89	11.8%
Operating Cost per Vehicle Service Mile	\$4.03	\$4.31	\$4.67	\$4.81	19.4%
Passengers per Vehicle Service Hour	12.7	18.1	20.7	21.4	68.2%
Passengers per Vehicle Service Mile	0.54	0.79	0.94	0.97	79.6%
Vehicle Service Hours per Employee	1,006.0	1,024.6	663.3	684.5	-32.0%
Average Fare per Passenger	\$1.03	\$0.84	\$0.86	\$0.94	-8.8%
Fare Recovery Ratio	13.75%	15.42%	17.36%	18.88%	37.3%

Source: ICTC Summary Reports

**Table IV-3
IVT-Blue Line Performance Indicators**

Performance Data and Indicators	FY 2007*	Audit Period			% Change FY 2007– 2010
		FY 2008	FY 2009	FY 2010	
Operating Cost	\$380,789	\$515,891	\$505,875	\$253,755	-33.4%
Total Passengers	7,977	16,955	19,730	15,625	95.9%
Vehicle Service Hours	4,588	6,416	6,090	3,184	-30.6%
Vehicle Service Miles	56,044	78,298	74,073	38,791	-30.8%
Employee FTEs	4	4	13	13	225.0%
Operating Revenue	\$5,555	\$18,545	\$17,618	\$9,947	79.1%
Operating Cost per Passenger	\$47.74	\$30.43	\$25.64	\$16.24	-66.0%
Operating Cost per Vehicle Service Hour	\$83.00	\$80.41	\$83.07	\$79.70	-4.0%
Operating Cost per Vehicle Service Mile	\$6.79	\$6.59	\$6.83	\$6.54	-3.7%
Passengers per Vehicle Service Hour	1.7	2.6	3.2	4.9	182.2%
Passengers per Vehicle Service Mile	0.14	0.22	0.27	0.40	183.0%
Vehicle Service Hours per Employee	1,147.0	1,604.0	468.5	244.9	-78.6%
Average Fare per Passenger	\$0.70	\$1.09	\$0.89	\$0.64	-8.6%
Fare Recovery Ratio	1.46%	3.59%	3.48%	3.92%	168.7%

Source: ICTC Summary Reports

*FY 2007 data are from October 2006 to June 2007

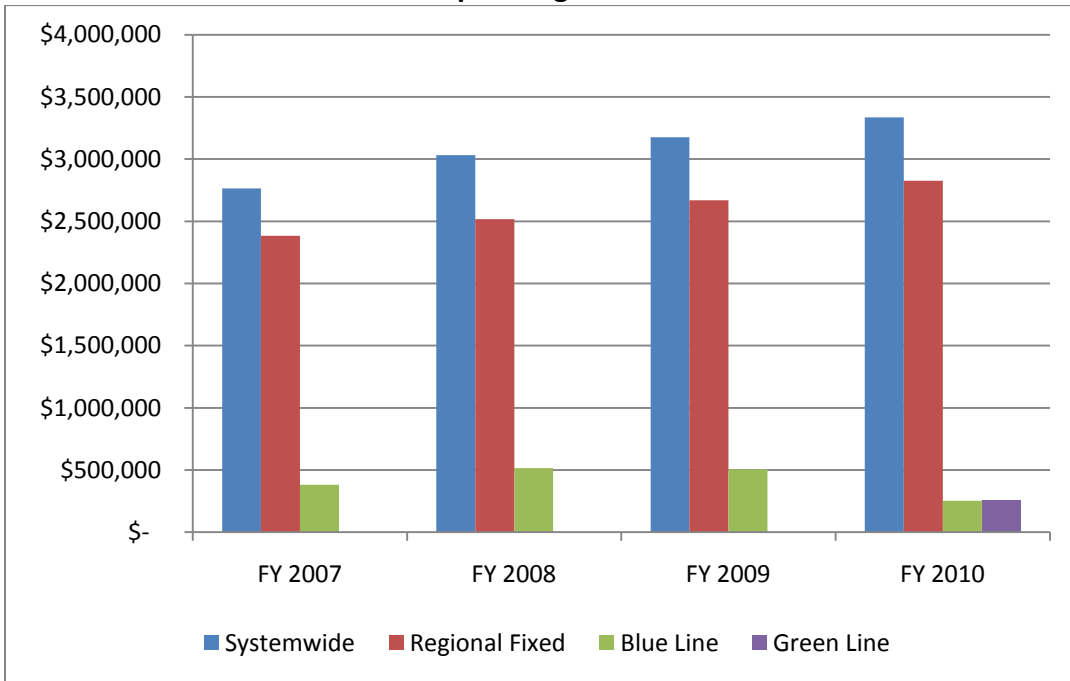
**Table IV-4
IVT-Green Line Performance Indicators**

Performance Data and Indicators	FY 2010
Operating Cost	\$253,684
Total Passengers	6,156
Vehicle Service Hours	3,182
Vehicle Service Miles	36,683
Employee FTEs	13
Operating Revenue	\$4,108
Operating Cost per Passenger	\$41.21
Operating Cost per Vehicle Service Hour	\$79.72
Operating Cost per Vehicle Service Mile	\$6.92
Passengers per Vehicle Service Hour	1.9
Passengers per Vehicle Service Mile	0.17
Vehicle Service Hours per Employee	244.8
Average Fare per Passenger	\$0.67
Fare Recovery Ratio	1.62%

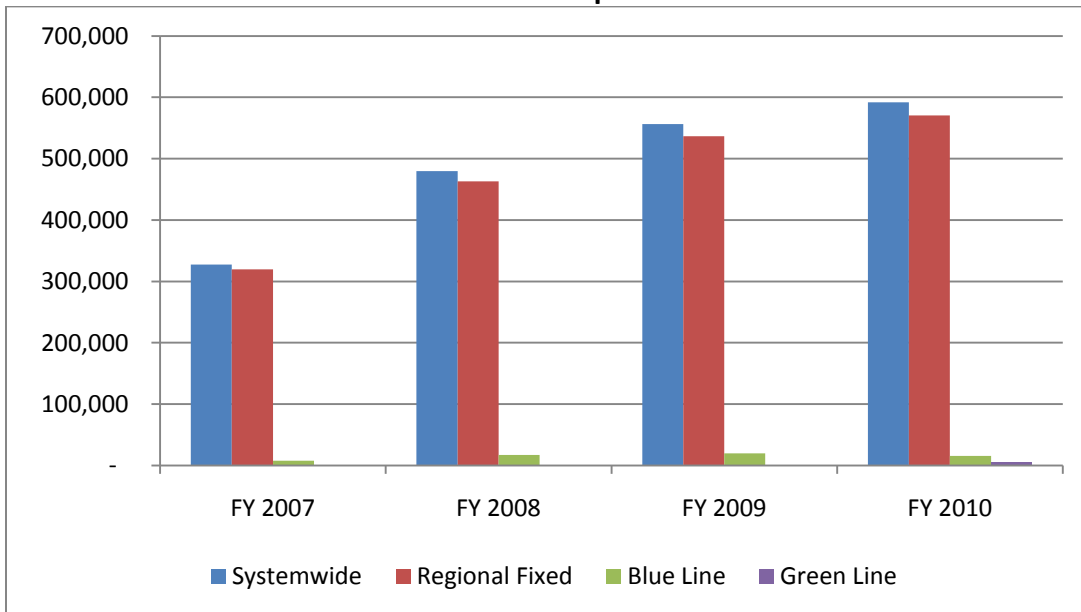
Source: ICTC Summary Reports

Column graphs on the following pages are used to depict the trends for select performance indicators (Graphs IV-1 through IV-6).

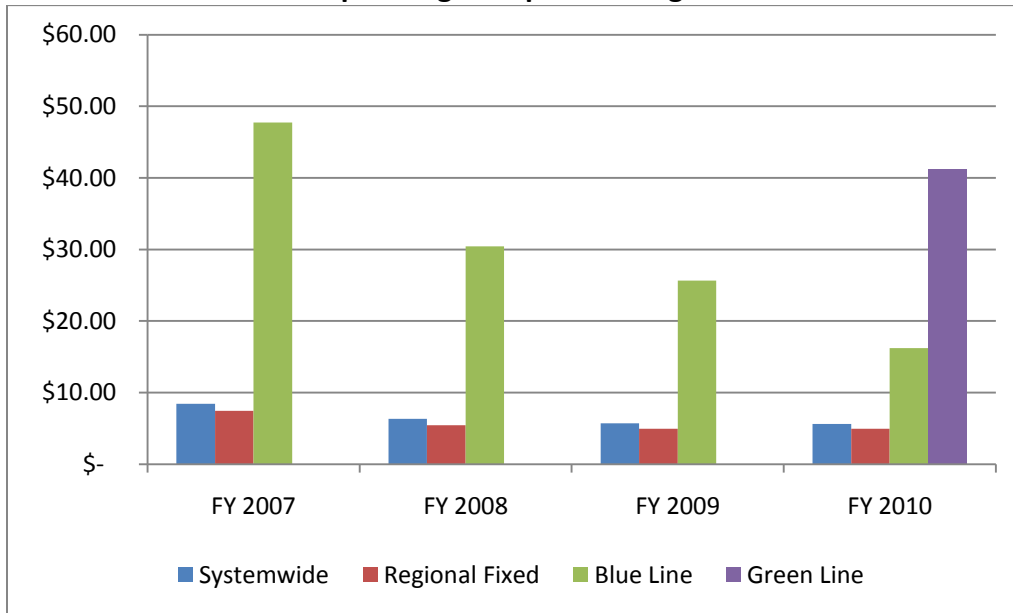
**Graph IV-1
Operating Costs**



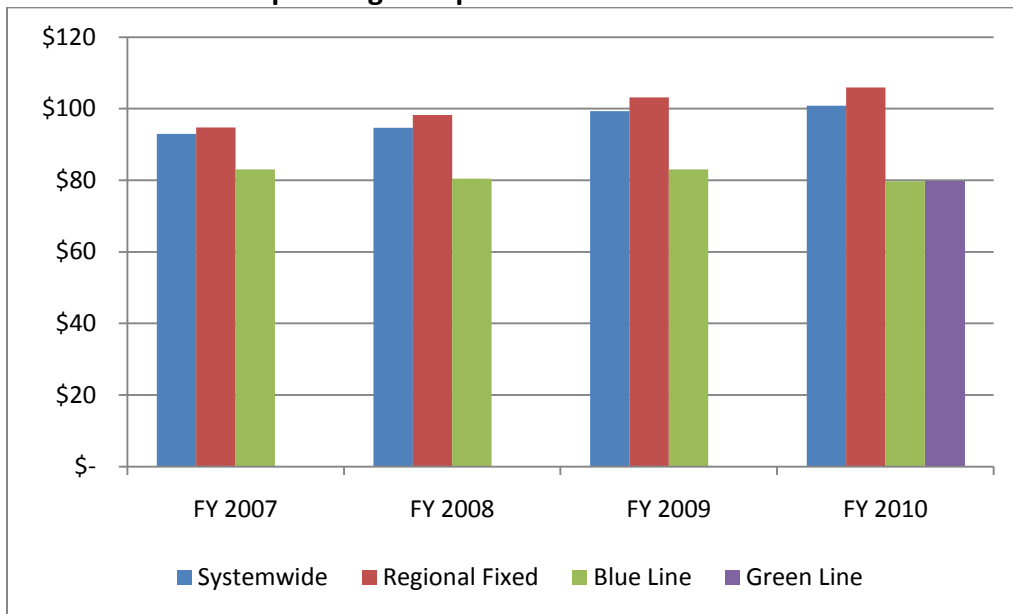
**Graph IV-2
Ridership**



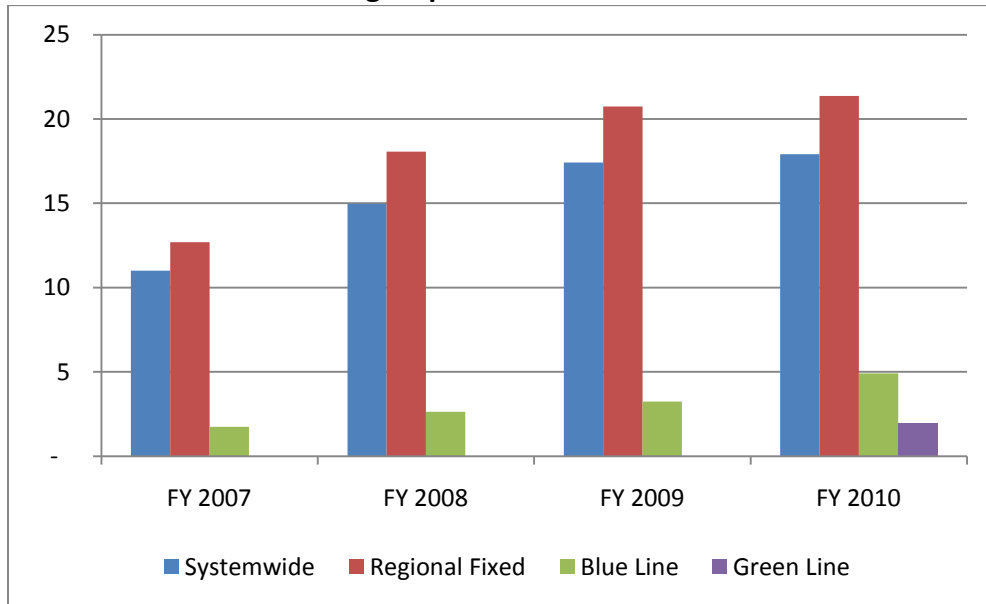
**Graph IV-3
Operating Cost per Passenger**



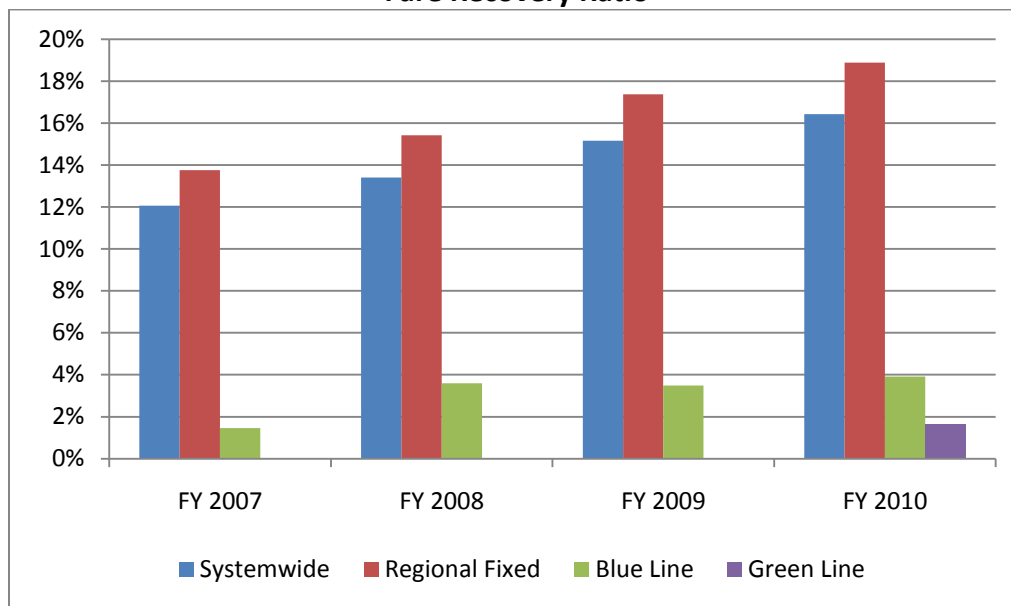
**Graph IV-4
Operating Cost per Vehicle Service Hour**



**Graph IV-5
Passengers per Vehicle Service Hour**



**Graph IV-6
Fare Recovery Ratio**



Findings from Verification of TDA Performance Indicators

1. **Operating cost per vehicle service hour**, an indicator of cost efficiency, increased 8.5 percent systemwide from \$92.92 in FY 2007 to \$100.85 in FY 2010. Overall vehicle service hours rose 11.2 percent, while operating costs exhibited an increase of 20.7 percent during the three-year period. The IVT Regional Service saw its cost per service hour increase 11.8 percent from \$94.73 in FY 2007 to \$105.89 in FY 2010. Vehicle service hours and operating costs rose by a modest 6.1 percent and 18.6 percent, respectively. On the other hand, the Blue Line circulator saw its cost per service hour decrease 4.0 percent from \$83.00 in FY 2007 to \$79.70 in FY 2010. Vehicle service hours and costs decreased 30.6 percent and 33.4 percent, respectively. Much of this decrease occurred in FY 2010, when the Blue Line's eastbound route was split off and rebranded as the Green Line. This measure for the Green Line circulator was \$79.72 for FY 2010.
2. **Operating cost per passenger**, an indicator of cost effectiveness, decreased 33.3 percent systemwide from \$8.44 in FY 2007 to \$5.63 in FY 2010. Overall ridership grew significantly by 80.8 percent during the period from 327,404 passengers in FY 2007 to 592,012 passengers in FY 2010, amounting to a 23.0 percent annualized rate of growth. This trend was mirrored on the IVT Regional Service, which saw a 33.5 percent decrease in this indicator from \$7.46 in FY 2007 to \$4.96 in FY 2010. Passenger trips grew 78.5 percent from 319,427 in FY 2007 to 570,231. Cost per passenger on the Blue Line decreased 66.0 percent from \$47.74 in FY 2007 to \$16.24 in FY 2010 as the result of increased ridership and the FY 2010 route realignment. The Green Line's cost per passenger was \$41.21 in FY 2010.
3. **Passengers per vehicle service hour**, which measures the effectiveness of the service delivered, increased 62.7 percent systemwide between FY 2007 and FY 2010 from 11 passengers per hour to 17.9 passengers per hour. This trend is reflective of the significant increase in passenger trips and the more modest rise in service hours, which increased from 29,739 hours in FY 2007 to 33,061 hours in FY 2010. Passengers per service hour on the IVT Regional Service exhibited a 68.2 percent increase from 12.7 passengers in FY 2007 to 21.4 passengers per hour in FY 2010. Moreover, the Blue Line exhibited a 182.2 percent increase from 1.7 passengers per hour to 4.9 passengers per hour. There were 1.9 passengers per vehicle service hour on the Green Line circulator.
4. **Passengers per vehicle service mile**, another indicator of service effectiveness, increased systemwide by 76.5 percent from 0.51 passengers per mile in FY 2007 to 0.89 passengers per mile in FY 2010. Overall service miles increased by a modest 2.4 percent from 647,683 miles in FY 2007 to 663,501 in FY 2010, while ridership increased by 40 times that rate. The IVT Regional Service exhibited a comparable increase of 79.6 percent from 0.54 passengers per mile in FY 2007 to 0.97 passengers per mile in FY 2010. The Blue Line saw its passengers per mile increase 183 percent from 0.14 passengers in FY 2007 to 0.40 passengers in FY 2010. The Green Line had 0.17 passengers per mile in FY 2010.

5. **Vehicle service hours per employee** decreased 50.4 percent between FY 2007 and FY 2010 from 1,025.5 to 508.6 systemwide. This correlates with the modest increase in vehicle service hours as well as the 124.1 percent increase in full-time equivalents (FTEs), as shown in ICTC summary reports. For the IVT Regional Service, service hours per employee decreased 32 percent from 1,006 in FY 2007 to 684.5 in FY 2010. The Blue Line exhibited a 78.6 percent decrease from 1,147 service hours per employee in FY 2007 to 244.9 service hours per employee in FY 2010. The Green Line had 244.8 vehicle service hours per employee in FY 2010. The large discrepancies in the data suggest that the FTEs shown in the summary report are incorrectly reflecting headcount in FYs 2009 and 2010. According to TDA definitions, FTEs are derived through the formula of dividing total annual employee hours (contractor operator staff plus ICTC/County staff) by 2,000 hours.

6. **Farebox recovery** for IVT increased 36.2 percent systemwide from 12.06 percent in FY 2007 to 16.43 percent in FY 2010. Farebox returns remained above the minimum blended TDA threshold of 13.4 percent. The blended ratio was adjusted in March 2010 from 13.4 percent to 14.5 percent. Farebox for the IVT Regional Service also increased at a comparable rate of 37.3 percent from 13.75 percent in FY 2007 to 18.88 percent in FY 2010. Although the Blue Line exhibited a 168.7 percent increase in farebox during the period, from 1.46 percent in FY 2007 to 3.92 percent in FY 2010, the service remained significantly below farebox attainment in spite of its exemption as a new service. The Green Line also struggled with low farebox returns, with a 1.62 percent farebox recovery in FY 2010.

Conclusion from the Verification of TDA Performance Indicators

IVT provides fixed-route intercity transit service throughout the Imperial Valley. Given its large service area encompassing both small urban and rural communities, it has managed to maintain healthy farebox recovery returns driven by high passenger trip demand and modest increases in operating costs. On an annualized basis, systemwide operating costs grew 6.5 percent whereas passenger trips grew 23 percent. Passenger trips jumped by more than 46 percent in FY 2008 attributed to the rise in market gasoline prices and reduced headways to 70 minutes. Fare revenues were also bolstered by the increased passenger demand as well as by a fare increase implemented in October 2008. The cost indicators reflect these trends, as evidenced by declining operating costs per passenger and moderately rising costs per hour and mile. In contrast, notable increases in passengers per hour and mile are indicative of higher levels of productivity.

The IVT Regional Service exhibited comparable increases in passenger trips and operating costs. Operating costs increased in a modest yet steady fashion, whereas passenger trips increased at a greater rate. FY 2009 saw the introduction of a new route, the Brawley Fast, that operates during the peak morning hours from Brawley to El Centro. The most productive routes are between Calexico and El Centro as well as to and from the IVC campus. However, the practice of picking up passengers at safe flag stops in the more isolated non-urban areas along the bus route may affect productivity over time. However, an approved list of flag stops has been compiled for routes in urban areas, which serves as a useful service planning tool to help determine where future stop could be sited.

The most challenging routes from a productivity standpoint have been the Blue and Green Line circulators in El Centro. Although the number of passenger trips on the Blue Line has been increasing at annualized rate of 36 percent, with a nearly 96 percent increase in trips between FY 2007 and FY 2010, the service continues to experience low farebox returns. When the service was initially implemented in FY 2007, the City of El Centro was still operating general public demand-responsive service within the city until 2008, when that system became an exclusive specialized service for seniors and the disabled. Another challenge has been the strong customer identification with the IVT Regional Service brand, which operates larger buses that provide for increased sociability. The El Centro Circulator is operated with smaller cutaway buses. In an effort to increase ridership and attain the minimum farebox return, one of the two bidirectional Blue Line routes that ran eastbound was split away and rebranded as the Green Line. This modification had the effect of lowering operating costs by nearly 50 percent and increasing the farebox recovery slightly to 3.92 percent in FY 2010.

Data Consistency

In a review of data consistency among external reports, fiscal year-end operations data was compared between the annual State Controller Report and two internal reports prepared by the contract operator and ICTC. Data for IVT detailed on the State Controller Report appear to be inclusive of the El Centro Circulator services. Table IV-5 shows the side-by-side comparison during the audit period (FYs 2008, 2009, and 2010) and including the base year of FY 2007.

Overall, there are some discrepancies and consistencies among the three data sets. A review of the two internal data sets reveals several variances in the reported data since FY 2007. There is an 11,437-passenger variance for FY 2009 and a 969-passenger variance for FY 2010 in the unlinked passenger data. For vehicle service hours, there is a 2,520-hour variance for FY 2008, a 280-hour variance for FY 2009, and a 367-hour variance for FY 2010. For vehicle service miles reported, there is a 10,965-mile variance for FY 2008, a 2,590-mile variance for FY 2009, and a 3,214-mile variance for FY 2010. On the other hand, the State Controller Report data and the ICTC Performance Summary data appear fairly consistent. As was mentioned earlier, the data may be inclusive of other IVT services such as the Blue and Green Line circulators.

**Table IV-5
Data Consistency Review**

TDA Statistic	Source	Base Year FY 2007	Audit Review Period		
			FY 2008	FY 2009	FY 2010
Unlinked Passengers	IVT Statistical Summary Report	327,404	479,739	544,996	591,043
	ICTC Performance Summary	327,404	479,739	556,433	592,012
	State Controller Report	327,404	479,379	556,433	592,012
Vehicle Service Hours	IVT Statistical Summary Report	29,738	29,511	31,679	32,694
	ICTC Performance Summary	29,739	32,031	31,959	33,061
	State Controller Report	29,739	32,031	31,960	33,061
Vehicle Service Miles	IVT Statistical Summary Report	647,686	651,082	648,435	666,715
	ICTC Performance Summary	647,683	662,047	645,845	663,501
	State Controller Report	647,683	662,047	645,845	663,501

Section V

Review of Operator Functions

This section provides an in-depth review of various functions within the IVT as well as the IVT Blue and Green Line operations. The review highlights accomplishments, issues, and/or challenges that were determined during the audit period. The following departments and functions were reviewed at the County and the contract operator:

- Operations & Planning
- Maintenance
- Marketing
- General Administration & Management

Operations & Planning

Imperial Valley Transit (IVT) is Imperial County’s principal public fixed-route transit system. The service area for IVT includes routes in the Primary Corridor area between Brawley, Imperial, Imperial Valley College (IVC), El Centro, and Heber to Calexico. The Secondary Service areas include Holtville, Seeley, Niland, Calipatria, and Westmorland. The Remote Zones (lifeline service) include Bombay Beach (Salton Sea area), Ocotillo, Seeley, and Winterhaven.

Since the implementation of the 70-minute headways, ridership has continued to grow significantly. Another added inducement for the growth in ridership has been the increase in retail fuel prices. In addition, several new demonstration and overflow services were implemented as well as new fare media and structures. The Primary Corridor lines have the highest ridership given the proximity of the Imperial Valley’s largest population and employment centers. The lines with the highest ridership are summarized in Table V-1.

Table V-1
IVT Regional – Lines with Highest Ridership Total

Line	FY 2007	FY 2008	FY 2009	FY 2010	4-Yr. Average
50 – Niland/El Centro	81,564	102,016	110,289	113,846	101,929
100 – El Centro/Calexico	61,662	77,944	95,023	106,380	85,252
150 – Calexico/El Centro	112,218	138,404	165,545	181,718	149,471
200 – El Centro/Niland	43,721	55,352	62,306	64,960	56,585
IVC Express – Calexico	25,262	26,633	29,600	41,303	30,700

Source: First Transit

Line 150 from Calexico to El Centro has the highest ridership in the IVT system with 181,718 trips in FY 2010, averaging 149,471 annually since FY 2007. The line with the second highest ridership is Line 50 from Niland to El Centro with 113,846 trips in FY 2010 and an annual four-year average of

101,929. The popularity of service to IVC is evident in the growth in ridership of the IVC Express to and from Calexico. Ridership on the IVC Express-Calexico increased 63 percent during the audit period from 25,262 trips in FY 2007 to 41,303 trips in FY 2010. In an effort to alleviate passenger overcrowding on Lines 100 and 150 at 3rd and Paulin Streets in Calexico, IVT implemented an overflow bus toward the end of FY 2010.

IVT implemented Line 800, the Brawley Fast, in July 2008 as a morning peak express route from Brawley to El Centro with an intermediate stop in Imperial. This was the result of an Unmet Transit Needs finding for FY 2008–2009, which mandated that IVT implement an in-bound peak trip at approximately 6:30 a.m. allowing southbound passengers from Brawley easier connections with other IVT intercity services and the IVT-Blue Line in El Centro. The route would operate for a 12-month demonstration period, subject to evaluation by ICTC. Toward the end of FY 2010, the line was only averaging 3.9 passengers a day. ICTC staff recommended suspension of the route due to such low ridership effective June 2010. Service in the Primary Corridor is required to average 20 passengers per trip in order to be sustainable.

Nevertheless, other service expansions were implemented during the period as the result of Unmet Transit Needs findings. IVT implemented limited Saturday service consisting of three round trips between El Centro and Seeley in July 2009. The route was implemented on a demonstration basis for a 12-month period. Another demonstration service consisted of another pair of express routes between IVC and Calexico that was implemented in August 2009. This service operates during the IVC calendar school year, including the winter and summer semesters.

IVT implemented a fare increase in October 2008 pursuant to the findings and recommendations contained in the *Public Transit Services Fare Analysis* (Nelson/Nygaard 2008) commissioned by ICTC (formerly IVAG). Local zone fares increased from \$0.60 per one-way trip to \$0.75 per one-way trip. Direct and fast-trip fares increased from \$1.50 per one-way trip to \$2.00 per one-way trip. Fares for seniors and the disabled were reduced from \$0.50 per one-way local trip to \$0.35 per one-way trip and from \$0.80 per regional zone trip to \$0.50 per regional zone trip. In addition, punch cards were eliminated and replaced by day passes and multi-ride tickets.

There were management changes within the private contract operator of the service. A new General Manager was hired in February 2010 to administer the IVT, El Centro Circulators, and Calexico Dial-A-Ride services. This individual transferred from Ohio, where he managed another transit system, and has a law enforcement background. The previous General Manager served in an interim capacity until a permanent replacement was found. In addition, the Driver Development and Safety Manager position became vacant, which First Transit recently filled.

IVT buses have been utilized in response to disaster and emergency situations according to prescribed protocol. The Imperial Valley was impacted by a 7.2 magnitude earthquake on Easter Sunday, April 4, 2010, centered in neighboring Baja California, Mexico. Structural damage occurred in various places around the valley, which was particularly evident in downtown Calexico. IVT buses were used to transport residents from Calexico to the Local Assistance Center in El Centro for three days after the earthquake. Regular transit service was only suspended for one

day. IVT and City of Calexico staffs worked closely and diligently to reroute bus stop locations away from damaged structures in downtown Calexico.

Drivers are required to report to duty in the event of an emergency. This is done to first check on their safety status and second to determine their availability in the event of emergency services activation. They also undergo special needs response training in the event of an emergency situation. In regard to another event involving a bomb threat at IVC, IVT buses transported employees and students away from the scene. As a result of this incident, the First Transit General Manager along with IVC security personnel established five pick-up locations on the campus in the event that a similar incident occurs in the future.

The service contract during the audit period between the County and First Transit provided measured increases in the hourly fixed rate paid to the contract operator for each year the contract is in effect. The operator is responsible for the collection of fare revenue, which is subtracted from the costs to determine the actual monthly subsidy. In light of rising fuel costs, the contract contains a fuel escalator clause that provides extra compensation over and above the budget amount and any savings from other areas of operations. The fuel clause protects First Transit from additional fuel expenses given the significant increase in fuel prices. Each month, First Transit invoices the County for the additional fuel expenses as a separate line item on the invoice. In this manner, the fuel clause acts as a pass-through measure for the County to reimburse the expense.

Fare receipts from the prior day's runs are counted each morning by two employees in a dedicated money room. The fare receipts are compared against the daily passenger count. The General Manager indicated that revenues received tend to be slightly more than the expected number based on passenger counts, likely due to overpayment from riders from lack of exact change. An armored guard service picks up the receipts and transports them to the bank for deposit.

Drivers are required to report into dispatch upon departing the operations yard, at their last stop, when handling a wheelchair passenger, after an accident or breakdown, during a passenger emergency, or when running five minutes late. First Transit invested \$26,000 in a communications upgrade in August 2010. The Advance Tech-Nextel System is equipped with a Tier 2 Emergency frequency. The new system is the same used by commuter traffic monitoring systems in the Los Angeles area and involves less downtime than the previous repeater radio system. Transit vehicles are not equipped with Automatic Vehicle Locator (AVL), Global Positioning Systems (GPS), or cameras. There have been discussions with ICTC about procuring grant funds for the acquisition of AVL and camera systems.

The service contract for IVT contains standards and evaluation criteria to allow for the measurement of the performance and efficiency of services provided. The performance standards measured are Passengers per Hour, Passengers per Day, Cost per Passenger, Subsidy per Passenger, Cost per Mile, Cost per Hour, and Farebox. A summary of the performance standards and the actual operation performance for each measure is presented in Table V-2.

Table V-2
IVT Regional Performance Standard Criteria

Indicator/Measure	Standard	FY 2007	FY 2008	FY 2009	FY 2010
Passengers Per Hour	20	12.7	18.1	20.7	21.4
Passengers Per Day	1,200	1,272.6	1,843.8	1,875.4	2,026.3
Cost Per Passenger	\$6.50	\$7.46	\$5.44	\$4.97	\$4.96
Subsidy Per Passenger	\$5.50	\$6.78	\$5.10	\$4.55	\$4.12
Cost Per Mile	\$4.44	\$4.03	\$4.31	\$4.67	\$4.81
Cost Per Hour	\$101.00	\$94.73	\$98.24	\$103.17	\$105.89
Farebox	13.4%	13.75%	15.42%	17.36%	18.88%

Source: First Transit

IVT has met or exceeded the performance standard criteria for most measures. Passengers per hour increased markedly from 12.7 passengers in FY 2007 to 21.4 passengers in FY 2010. The average number of passengers per day exceeded the 1,200-passenger standard during the period, peaking at 2,026.3 in FY 2010. Given the high passenger volumes, cost efficiencies were successfully maintained for most measures. Cost per passenger and subsidy per passenger met their respective standards during the period. On the other hand, cost per mile and cost per hour began the period meeting the standard and then increased slightly by FY 2010 resulting in not meeting the standard. Farebox recovery remained above the 13.4 percent standard as well as the 14.5 percent that was subsequently adopted.

First Transit provides a performance summary report that records operational data such as ridership by line, mileage, riders per service hour, on-time performance, accidents, missed trips, and roadcalls. The summary report provides data on a monthly and year-to-date basis. Two of the operational measures reported on the performance summary report are accidents and on-time performance. These measures are summarized in Table V-3.

Table V-3
IVT Accidents & On-Time Performance

	FY 2007	FY 2008	FY 2009	FY 2010	Total/Average
Accidents	3	1	4	1	9
On Time Performance	82%	90%	84%	86%	85%

Source: First Transit

The number of accidents reported during the period has averaged 2.25 accidents annually. The most accidents reported (four) occurred in FY 2009. There was one accident reported in FY 2008 and one in FY 2010. The low accident rate is reflective of the “safety first” philosophy of First Transit. On the other hand, on-time performance has tended to be below the standard. This trend averages to an 85 percent on-time performance rate for the period, which is below the 95 percent standard defined as the percentage of time-point departures maintained within five minutes of schedule.

The on-time performance challenges could be attributed in part to the practice of picking up riders at flag stops (unofficial, unmarked bus stops), which adversely impacts headways. In addition, traffic congestion along SR-111 in Calexico near the international border also impacts schedules for the main regional line connecting Calexico and El Centro. The contract operator is seeking to meet with drivers to modify route alignments and stops in an effort to improve on-time performance.

The road supervisor conducts on-time performance checks by following buses or riding an actual route. About 50 to 60 routes a week are chosen at random. A route evaluation is performed when a route is ridden for its entirety. To be compliant with the ADA, extra buses are dispatched in order to accommodate an overflow of wheelchair-bound passengers.

Another performance measure that is reported is missed trips. A missed trip is defined as a scheduled trip that did not operate for a variety of reasons including operator absence, vehicle failure, dispatch error, traffic, accident, or other unforeseen reason. Missed trips reported during the audit period are summarized in Table V-4 below.

**Table V-4
IVT Missed Trips**

	FY 2007	FY 2008	FY 2009	FY 2010	Total
Missed Trips	1	0	1	0	2

Source: First Transit

The number of missed trips reported for the period is negligible. Only two missed trips were reported since FY 2007, one in FY 2007 and one in FY 2009. This trend is indicative that the vast majority of trips scheduled are completed successfully.

Customer service levels are measured by tracking complaints and compliments on the performance summary report. In addition to being tracked on the summary report, the contract operator maintains a narrative report summarizing the type of complaint or compliment received. Complaints and compliments are summarized in Table V-5 below.

**Table V-5
IVT Complaints & Compliments**

	FY 2007	FY 2008	FY 2009	FY 2010	Total
Complaints	43	56	21	25	145
Compliments	3	0	0	0	3

Source: First Transit

The number of complaints has been showing a downward trend commensurate with improvements in service (e.g., 70-minute headways, new routes). After peaking at 56 complaints received in FY 2008, there were 21 reported in FY 2009 and 25 reported in FY 2010. Detailed summaries of the complaints are maintained in a separate customer log. The three compliments received in FY 2007 pertained to driver courtesy and skills.

IVT-Blue & Green Lines: The El Centro Circulator

The IVT-Blue Line was initiated in the city of El Centro in October 2006 as a circulator to serve medical clinics and social service agencies not easily accessible by the IVT fixed-route service. The Blue Line utilizes two smaller cutaway buses plus one spare that initially ran two bi-directional routes. ICTC has been assessing the poor performance of the Blue Route and has made adjustments based on the fare analysis study.

The IVT-Blue Line, being a new type of service to the IVT transit system, was exempt from meeting the TDA farebox recovery ratio for a period of two full fiscal years after the year the service commenced, as contained in PUC Section 99268.8. This meant that the Blue Line would be exempt from the TDA farebox recovery standard until July 2009. By the end of FY 2009, the farebox recovery on the Blue Line was only 3.48 percent. In an effort to boost productivity and farebox recovery, ICTC realigned and split the Blue Line into two branded services. This action allowed for a second exemption from the farebox recovery standard. The Blue Line ceased its eastbound route and was realigned to run westbound serving public and social service agencies in the southern part of the city. The second route, the Green Line, was aligned to run eastbound and serves the northern areas of El Centro along the Imperial Avenue commercial corridor and parts of Imperial. The majority of riders on the Green Line are senior citizens. This realignment has resulted in only modest improvement of the Blue Line's performance, whereas the Green Line's first year performance indicators have not been strong.

As with the IVT Regional Service, the service contract for IVT-Blue and Green Lines contains standards and evaluation criteria to allow for the measurement of the performance and efficiency of services provided. The performance standards measured are Passengers per Hour, Passengers per Day, Cost per Passenger, Subsidy per Passenger, Cost per Mile, Cost per Hour, and Farebox. A summary of the performance standards and the actual operation performance for each measure is presented in Table V-6.

Table V-6
El Centro Circulator Performance Standard Criteria

Indicator/Measure	Standard	FY 2007	FY 2008	FY 2009	FY 2010	
		Blue	Blue	Blue	Blue	Green
Passengers Per Hour	13.2	1.7	2.6	3.2	4.9	1.9
Passengers Per Day	310	41.6	65.5	75.9	59.6	23.9
Cost Per Passenger	\$7.45	\$47.74	\$30.43	\$25.64	\$16.24	\$41.21
Subsidy Per Passenger	\$6.46	\$53.56	\$31.45	\$26.20	\$18.00	\$43.35
Cost Per Mile	\$7.69	\$6.79	\$6.59	\$6.83	\$6.54	\$6.92
Cost Per Hour	\$95.22	\$83.00	\$80.41	\$83.07	\$79.70	\$79.72
Farebox	13.4%	1.46%	3.59%	3.48%	3.92%	1.62%

Source: First Transit

The performance indicators for the El Centro Circulator have struggled to meet performance standards for all the aforementioned indicators. Passengers per hour and per day on the Blue Line have averaged 3.1 and 60.7 passengers, respectively. For the Green Line, there were 1.9 passengers per hour and 23.9 passengers per day for FY 2010. The Blue Line's cost per passenger had shown some improvement during the period, yet by FY 2010 remained more than double the standard of \$7.45. Likewise for the subsidy per passenger, there was a downward trend but not sufficient to meet the standard. As was discussed previously, the farebox recovery continues to be significantly below the TDA standard for the service area despite gradual improvement. On the other hand, both the Blue and Green Lines have met cost efficiency standards for cost per mile and cost per hour.

Accidents and on-time performance measures have been tracked and reported. The number of accidents reported has been minimal in spite of the service area characteristics of a small urbanized area. These measures are summarized in Table V-7.

**Table V-7
El Centro Circulator Accidents & On-Time Performance**

	FY 2007	FY 2008	FY 2009	FY 2010		Total/Average
	Blue	Blue	Blue	Blue	Green	
Accidents	1	1	1	0	3	6
On Time Performance	99%	100%	100%	100%	100%	100%

Source: First Transit

An average of 1.5 accidents has occurred annually on the El Centro Circulator during the period. Out of a total of six accidents reported, three were reported on the Blue Line and three were reported on the Green Line in its first year. The services reported an on-time performance rate of 100 percent, which exceeds the standard of 95 percent.

Missed trips have also been tracked for the Blue and Green Lines. Missed trips reported during the audit period are summarized in Table V-8 below.

**Table V-8
El Centro Circulator Missed Trips**

	FY 2007	FY 2008	FY 2009	FY 2010		Total
	Blue	Blue	Blue	Blue	Green	
Missed Trips	1	0	0	0	0	1

Source: First Transit

Only one missed trip was reported on the Blue Line in FY 2007. There were no subsequent missed trips reported for the remainder of the audit period.

As a relatively new service, close attention has been paid to the number of complaints and compliments received as indicators of customer service. Table V-9 provides a summary of the number of complaints and compliments received for both the Blue and Green Lines.

**Table V-9
El Centro Circulator Complaints & Compliments**

	FY 2007	FY 2008	FY 2009	FY 2010		Total
	Blue	Blue	Blue	Blue	Green	
Complaints	12	13	2	0	0	27
Compliments	0	0	0	0	0	0

Source: First Transit

There has been an average of 6.75 complaints annually on the El Centro Circulator. The number of complaints dropped significantly in FY 2009 to 2 complaints reported, from a high of 13 complaints in FY 2008. There were no complaints reported in FY 2010. In addition to being tracked on the summary report, the contract operator maintains a narrative report summarizing the type of complaint or compliment received. Detailed summaries of the complaints are maintained in a separate customer log. There were no compliments received during the audit period.

Planning

Service planning for IVT and the El Centro Circulators relies on several approaches consisting of public forums, plans, and studies. Pursuant to the TDA claims process, ICTC conducts annual Unmet Transit Needs hearings. Unmet Transit Needs are, at a minimum, those public transportation or specialized transportation services that are identified in the Regional Short-Range Transit Plan (SRTP), Regional Transportation Plan, or similar Mobility Plan which have not been implemented or funded. Unmet Transit Needs identified during the process must also be found “reasonable to meet” based upon a set of five criteria in order to be implemented.

Testimony received during the Unmet Needs process over the course of the audit period pertained to buses running late because of too many stops, bus stop requests, implementing limited Saturday service to Seeley, implementing Sunday service, and additional service to IVC. Saturday service between El Centro and Seeley as well as additional express service to IVC were implemented. As was discussed earlier, a list of flag stops in urban areas is compiled, which aids in future service planning. Compliance with California State Assembly Bill (AB) 32 and State Senate Bill (375) also influences service planning efforts. The Unmet Transit Needs findings during the audit period affirmed the continuation and funding of IVT and the El Centro Circulators.

ICTC commissioned a fare study of the transit agencies under its jurisdiction in 2008. For several of the operators, the farebox recovery ratios had been declining over the past few years given the growth in operating costs primarily from fuel and insurance. The *Public Transit Services Fare Analysis* (Nelson/Nygaard 2008) recommended one of the fare options under the new zone, which went through the public hearing process. It was suggested in the analysis that IVT adopt a new fare structure; the study also recommended a 25 percent increase for the local fare. The analysis also recommended that IVT adopt new fare media such as a day pass, monthly pass, summer

youth pass, and ticket books. As was previously mentioned, IVT implemented fare increases for the local zone and direct/express services as well as introduced new fare media in the form of multi-ride passes and ticket booklets.

An updated SRTP was commissioned by ICTC in January 2011 and is currently being developed. The primary objectives of the SRTP will be to review existing performance and prioritize operating and capital expenditures to maintain and recommend improvements to the regional transit system. The prior SRTP was adopted in FY 2004, and the new SRTP will review and evaluate the related goals, policies, objectives, and standards developed for that plan. In addition, it will provide a five-year plan for operations including, but not limited to, specifics on fares, service levels, route changes, service policy changes, inter-operator agreements, spare ratios, and other characteristics.

A Request for Proposals (RFP) was released in March 2011 by ICTC for the provision of countywide fixed-route services. The fleet requirements for service in the Primary Corridor consist of the standard 40-foot transit bus comparable to a Gillig vehicle. Service in the Secondary Service areas and Remote Zones would require 25-foot and 30-foot vehicles comparable to a cutaway or minibus. In addition, a spare fleet ratio of 20 percent is required. The farebox standard would remain at 14.5 percent pursuant to TDA guidelines. The estimated annual hours proposed would be 27,000 hours, and the estimated annual mileage proposed would be 590,000 with operations scheduled Monday through Saturday. The new contract would also include a series of incentives and penalties through the implementation of a performance-based incentive system. The contract operator would be allowed to make recommendations as to changes to improve service on a case-by-case basis.

Maintenance

Most basic maintenance for IVT vehicles is performed at the First Transit facility in El Centro. This maintenance facility is noted for being self-sufficient in the event of an emergency situation. There are three service bays with portable floor jacks to raise the vehicles for routine inspections of the vehicle undercarriage. The Preventative Maintenance Inspection (PMI) is configured on an A-B-C-D schedule. "Dry" inspections are performed every 3,000 miles or 45 days, and "wet" inspections including oil changes are performed every 6,000 miles. Drivers complete a vehicle inspection form prior to each run. The daily vehicle inspection consists of 44 points and three major categories: (1) Vehicle Exterior Checks; (2) Vehicle Interior Checks; and (3) Brakes System Checks. The form consists of a top copy and two carbon copies. The California Highway Patrol (CHP) inspects the transit vehicles on a monthly basis as part of its commercial trucking task force, which is as thorough as an annual CHP Annual Bus and Terminal Inspection.

On-site maintenance is performed by two mechanics, which are supervised by a maintenance manager. The mechanic work shifts are staggered to ensure constant coverage throughout all hours of operation. The first shift commences at 4:45 a.m. and the second shift commences at 1:00 p.m. Major maintenance, such as engine and transmission work, is performed off-site by Automotive Service Excellence (ASE)-certified vendors. NAPA Auto Parts, located at 258 East Main Street in El Centro, performs engine rebuild work. RPM Engine Service in Pomona also performs

engine and transmission rebuild work. Vehicles are washed by staff on-site after hours with an auto washer located on the east side of the maintenance building.

First Transit utilizes the Infor Datastream 7i maintenance software program, which, among other capabilities, tracks mileage, parts inventory, and PMIs. Mileage and fuel data are manually uploaded to the system daily. The software is tied electronically to First Transit company management and can be reviewed by the area’s director of maintenance. Parts inventory is monitored at each phase of a purchase order execution: upon request, activation, and completion. The system advises when the PMIs are due and maintains separate records for 3,000-mile and 6,000-mile inspections.

The previous General Manager spent \$60,000 to recondition air conditioning units. First Transit is considering the installation of roof-mounted air units in the middle of the vehicles to assist the existing cooling systems to remove humidity. In addition, an in-frame build was conducted on three bus engines. Approximately 4 out of 10 engines have undergone rebuilds.

In order to accommodate California Air Resources Board (CARB) regulations, IVT replaced the diesel engines on two 25-foot and two 30-foot vehicles with emission-compliant gasoline engines. This had the effect of lowering emissions significantly. In addition, two 30-foot GMC vehicles were acquired to be utilized on the express routes.

The parts inventory was valued at \$28,764 as of February 2011, which was 2 percent over the allotted amount due to the availability of suspension parts. A Detailed Maintenance Index (DMI) report is generated weekly to monitor parts levels. Inventories for air conditioning compressors and belts are increased during the summer months. In addition, cycle counts are conducted quarterly. Tires are purchased new, and disposed tires are tracked. First Transit participates in a national tire recycling program sponsored by Michelin and Bridgestone.

Roadcalls are regularly tracked on the performance summary report along with a detailed narrative summary of the nature of each roadcall. Table V-10 provides a numerical summary of the roadcalls reported on the IVT regional service.

**Table V-10
IVT Regional Roadcalls**

	FY 2007	FY 2008	FY 2009	FY 2010	Total
Roadcalls	39	51	70	35	195

Source: First Transit

There were a total of 195 roadcalls, averaging about 49 roadcalls annually during the period. The most roadcalls (70) were reported in FY 2009. FY 2010 had the lowest number of roadcalls, reported at 35. A review of the narrative reports details that most roadcalls during the summer months involve air conditioning system malfunctions. Other roadcall issues detailed include wheelchair lift issues, overheating, and the engine quitting. For the Blue and Green Lines, roadcalls were also tracked and are summarized in Table V-11 below.

**Table V-11
El Centro Circulator Roadcalls**

	FY 2007	FY 2008	FY 2009	FY 2010		Total
	Blue	Blue	Blue	Blue	Green	
Roadcalls	6	11	8	2	2	29

Source: First Transit

Out of a total of 29 roadcalls on the El Centro Circulator, there was an average of 7.25 roadcalls annually. FY 2008 had the highest number of roadcalls reported. Following a downward trend, there were two roadcalls each reported on the Blue and Green Lines in FY 2010, respectively. A review of the narrative reports reveals that most roadcalls involve malfunctioning air conditioning units. Other roadcalls involve stuck fareboxes, flat tires, and wheelchair lift issues.

Marketing

IVT employs a variety of tools and strategies to market its transit services. The operator is responsible for marketing the transit service as per its contract with the County. Five percent of the annual budget is dedicated to marketing and advertising. Advertisements are paid for upfront and reimbursed by the County. The Imperial Valley Transit Rider’s Guide is widely distributed and is published in English and Spanish. The Rider’s Guide contains maps and schedules for each intercity route as well as fare information. There is no description of either the Blue Line or Green Line in the IVT Rider’s Guide, although separate print brochures for the circulator services are available. The First Transit General Manager has indicated a preference to have individual timetables for each route in lieu of the Rider’s Guide based on customer feedback. Other forms of print advertising include newspaper ads and flyers.

First Transit has done extensive marketing of the El Centro Circulator Blue and Green Line routes. Separate timetables have been developed for each route featuring a map and schedule. The challenge in boosting ridership on the circulator services, according to the First Transit General Manager, is that many riders are drawn to the larger IVT regional buses where they are accustomed to interacting socially with a larger base of other riders and drivers. When faced with a choice to ride either an IVT bus or the local circulator for the same trip in El Centro, some passengers prefer the larger IVT bus for these reasons.

Marketing outreach has included booths at local fairs and public events, as well as radio and television advertising over local stations. Brochures are available at ticket outlets where discounted ticket booklets are sold, including at health clinics, the city halls in Calexico, Calipatria, El Centro, Holtville, Imperial, and Westmorland, the IVC Parking Control Office, and at IVT offices.

IVT maintains an interactive website located at <http://www.ivtransit.com/>. The website contains links to route schedules, a trip planner, interactive map, contact form, and frequently asked questions (FAQ). There is also a link to one of the television commercials, and a link to the Blue Line entitled “Go Blue.” On the website is an informal poll/survey that currently asks riders

whether they would purchase tickets online. Next to the “yes” or “no” answers, a space for an email address and comments is provided. In order to be an effective tool as well as to incorporate real-time data applications, it is suggested that IVT consider several technological enhancements to its website which are planned.

General Administration & Management

During the audit period, IVT was administered by County staff serving under the umbrella agency IVAG. The newly created ICTC, through adopting resolution, assumed the transfer of duties and obligations as the successor agency to IVAG. Among the duties transferred included the continued management of the countywide transit system. In addition to the oversight of IVT provided by ICTC staff through contract management and monitoring, discussions about service are held through committees including the Social Services Transportation Advisory Council (SSTAC) that advises ICTC on transit matters pertaining to the needs of transit-dependent and transit-disadvantaged persons.

The contract operator, First Transit, is the United States subsidiary of First Transit PLC headquartered in the United Kingdom. U.S. operations are headquartered in Cincinnati, Ohio, and local operations are in El Centro. There are 40 employees on staff. Operational staff comprises 28 drivers (25 full-time and 3 part-time) and 4 dispatchers. The majority are assigned to IVT operations with the exception of five drivers (4 full-time, 1 part-time) and one dispatcher who are assigned to the Calxico Dial-A-Ride contract. Administrative and support staff consist of a general manager, an operations manager, one maintenance manager, two mechanics, two bus washers, and one clerical person. Non-management employees are represented by Teamsters, Local 542. The current Memorandum of Understanding (MOU) is effective through March 2012. Drivers are cross-trained and all dispatchers and staff are trained as drivers. An employee handbook provides a detailed summary of rules, policies, and benefits. Employees are required to sign the handbook acknowledgment.

Potential drivers are required to have a Class B license with a passenger endorsement. However, most drivers have a Class A license when hired. Drivers undergo classroom and behind-the-wheel instruction totaling 80 hours. The training conducted by a DMV-certified instructor on staff is audited by the Department of Motor Vehicles (DMV) on a regular basis. In addition, there is a 2-hour monthly in-service training featuring the Safety Solution Team, which reviews safety procedures. As safety awareness is the top priority for the operator, there are also quarterly safety rallies, and fluorescent green safety vests are worn by all staff members while on duty.

There is a 90-day probationary period for new employees. After probation, full-time employees are eligible for benefits. Benefits include medical, dental, and vision plans. In addition, employees receive \$10,000 in employer-paid life insurance and the option of long-term disability insurance. There are several types of employee incentives such as employee appreciation barbecues, food and raffles during monthly safety trainings, and points earned toward free lunches and television sets for zero accidents.

First Transit has a zero-tolerance policy to drug and alcohol abuse. A drug and alcohol handbook stipulates the company’s policies and protocols. Random drug testing is performed through Cal-Test Drug Testing Services in Imperial. There is no second testing on negative dilutes.

Grant Administration & Funding

The primary source of intergovernmental grant funding for IVT is derived from the County’s TDA apportionment and Federal Transit Administration (FTA) Section 5307 and FTA Section 5311 grant programs. The County annually receives substantial TDA funds, much of which is transferred among the various transit services. IVT receives both Local Transportation Fund (LTF) and State Transit Assistance (STA) support. Due to uncertain state budget conditions that have affected the STA program over the past several years, ICTC staff began shifting this funding source from the regional ADA service (AIM Transit) to IVT fixed route as a means to lessen the funding uncertainty among the local transit systems. The ADA service then received LTF to replace the lost STA revenue. STA revenues have since reverted back recently for use on the ADA service. Table V-12 provides a summary of LTF funding allocation towards the countywide fixed-route transit program.

**Table V-12
IVT LTF (SB325) Funding Allocations**

Services	FY 2007	FY 2008	FY 2009	FY 2010
IVT Regional	\$1,504,514	\$1,769,438	\$2,027,525	\$1,995,095
IVT Blue Line	\$157,637	\$611,761	\$298,551	\$358,667
Total	\$1,662,151	\$2,381,199	\$2,326,076	\$2,353,762

Source: Transit Finance Plan, ICTC

Total LTF funding support for operations increased nearly 42 percent during the audit period. Funding for IVT regional service operation increased by about one-third over the period, peaking at more than \$2 million in FY 2009. LTF support for the Blue Line circulator more than doubled since FY 2007, peaking at \$611,761 in FY 2008.

As a transit service serving both urbanized and rural areas of Imperial County, IVT, through ICTC, receives federal funding from the FTA Section 5307 and FTA Section 5311 grant programs. FTA Section 5307 urban formula grant funds totaling over \$1.55 million were drawn down during the audit period for operations of IVT and capital projects. In addition, the County/ICTC has received federal transit formula grant funds toward planned transit infrastructure projects, such as the El Centro Transfer Terminal. The County/ICTC received a \$1.22 million American Recovery and Reinvestment Act of 2009 (ARRA) earmark in FY 2010 toward the construction of the Transfer Terminal in addition to the \$3.7 million in FTA Section 5307 grant funds received. The City has been tasked with the design, engineering and construction of the Transfer Terminal.

Rural FTA Section 5311 grant funds averaged about \$348,400 annually for operation of the IVT fixed-route system for the audit period. In FYs 2009 and 2010, the grant funds increased to just

under \$400,000. ICTC submits a Program of Projects that identifies sub-recipients and projects to receive Section 5311 funds in their planning area by December 31 of each year.

Section VI

Findings and Recommendations

The following material summarizes the major findings obtained from this triennial audit covering FYs 2008 through 2010. A set of recommendations is then provided.

Triennial Audit Findings

1. Of the compliance requirements pertaining to IVT, the operation fully complied with eight out of the nine requirements. The operator was found in partial compliance with the timely submittal of its annual fiscal audits. Two additional compliance requirements did not apply to IVT (e.g., separate rural and urban farebox recovery ratios).
2. The average systemwide farebox recovery ratio was 15 percent during the triennial review period. Increases in passenger trips and revenues have resulted in higher farebox ratios. The required minimum farebox ratio established by IVT through an adopted methodology is 14.5 percent effective March 2010. The prior adopted blended ratio was 13.4 percent.
3. Through its contract operator, the County participates in the CHP Transit Operator Compliance Program and received inspections of IVT vehicles within the 13 months prior to each TDA claim. Satisfactory ratings were made for all inspections conducted during the audit period.
4. The operating budget exhibited modest increases since FY 2007, with the highest increase of 9.73 percent realized in FY 2008 due to a rise in fuel costs.
5. Out of the five prior audit recommendations, IVT fully implemented three recommendations. One recommendation was found no longer applicable, and one recommendation was not yet implemented. The one recommendation not implemented pertained to the installation of electronic fareboxes/passenger counts and GPS on the buses, which is contingent on future funding for GPS related systems as well as further review of the feasibility of electronic fareboxes.
6. Given its large service area encompassing both small urban and rural communities, IVT has managed to maintain healthy farebox recovery returns driven by high passenger trip demand and modest increases in operating costs. On an annualized basis, systemwide operating costs grew 6.5 percent, whereas passenger trips grew 23 percent.
7. Line 150 from Calexico to El Centro has the highest ridership in the IVT system with 181,718 trips in FY 2010, averaging 149,471 annually since FY 2007. The line with the second highest ridership is Line 50 from Niland to El Centro with 113,846 trips in FY 2010 and an annual four-year average of 101,929. In an effort to alleviate passenger overcrowding on Lines 100 and 150 at 3rd and Paulin Streets in Calexico, IVT implemented an overflow bus toward the end of FY 2010.

8. IVT implemented Line 800, the Brawley Fast, in July 2008 as a morning peak express route from Brawley to El Centro with an intermediate stop in Imperial. Toward the end of FY 2010, the line was only averaging 3.9 passengers a day. ICTC recommended suspension of the route due to such low ridership effective June 2010. Service in the primary corridor is required to average 20 passengers per trip in order to be sustainable.
9. IVT implemented a fare increase in October 2008 pursuant to the findings and recommendations contained in the *Public Transit Services Fare Analysis* (Nelson/Nygaard 2008) commissioned by ICTC (formerly IVAG). Local zone fares increased from \$0.60 per one-way trip to \$0.75 per one-way trip. Direct and fast-trip fares increased from \$1.50 per one-way trip to \$2.00 per one-way trip. In addition, punch cards were eliminated and replaced by day passes and multi-ride tickets.
10. A new General Manager for the private operator, First Transit, was hired in February 2010 to administer the IVT, El Centro Circulator, and Calexico Dial-A-Ride services. This individual brings a law enforcement background to transit management and has integrated a greater level of safety preparedness into the service.
11. In response to the large earthquake in the Imperial Valley in April 2010, IVT buses were used to transport residents from Calexico to the Local Assistance Center in El Centro for three days after the earthquake. Regular transit service was only suspended for one day.
12. IVT has met or exceeded the performance standard criteria for most measures. Passengers per hour increased markedly from 12.7 passengers in FY 2007 to 21.4 passengers in FY 2010. The average number of passengers per day exceeded the 1,200-passenger standard during the period, peaking at 2,026.3 in FY 2010. Given the high passenger volumes, cost efficiencies were successfully maintained for most measures.
13. IVT averaged an 85 percent on-time performance rate for the period, which is below the 95 percent standard defined as the percentage of time-point departures maintained within five minutes of schedule. Traffic congestion along SR-111 in Calexico near the international border impacts the schedules for one of the most popular bus routes. The contract operator is seeking to meet with drivers to make recommendations to modify route schedules and stops in an effort to improve on-time performance.
14. By the end of FY 2009, the farebox recovery on the Blue Line was only 3.48 percent. In an effort to boost productivity and farebox recovery, ICTC realigned and split the Blue Line into two branded services. The Blue Line ceased its eastbound route and continued to run westbound serving public and social service agencies in the southern part of the city. The second route, the Green Line, was aligned to run eastbound and serves the northern areas of El Centro along the Imperial Avenue commercial corridor and parts of Imperial.
15. Performance indicators for the Blue Line Circulator suggest that the service has struggled early to meet most performance standards including for cost effectiveness and service

effectiveness. For example, passengers per hour and per day have been below standards established for the service. However, some cost efficiency measures such as cost per hour and per mile have met their respective standards. Improvements in these measures have been made in recent years.

16. In order to accommodate California Air Resources Board (CARB) regulations, IVT replaced the diesel engines on two 25-foot and two 30-foot vehicles with emission-compliant gasoline engines. This had the effect of lowering emissions significantly. In addition, two 30-foot GMC vehicles were acquired to be utilized on the express routes.
17. As a transit service serving both urbanized and rural areas of Imperial County, IVT, through ICTC, receives federal funding from the FTA Section 5307 and FTA Section 5311 grant programs. FTA Section 5307 urban formula grant funds totaling over \$1.55 million were drawn down during the audit period for operations of IVT and capital projects. Rural FTA Section 5311 grant funds averaged about \$348,400 annually for operation of the IVT fixed-route system for the audit period.

Triennial Audit Recommendations

1. Calculate Full Time Equivalentents according to TDA Definition.

Both the internal performance data summaries and the external State Controller Reports compiled for IVT services do not properly calculate for FTEs. The FTE data appear to be an annual total of the number of employees (headcount) rather than the product of dividing total annual employee hours by 2,000. Employee hours should include those from the contract operator, ICTC staff for contract administration and monitoring, and County personnel responsible for preparing the State Controller Report. It is suggested that time dedicated to IVT be tracked as reasonably as possible and tabulated properly in the ICTC transit data summaries which feed into the State Controller Reports. The corrected FTE figure is generally lower than total headcount due to the inclusion of part time employees. Proper reporting of FTEs will result in more accurate performance indicators of productivity and responsiveness to the State.

2. Conduct a study to improve on-time performance.

While IVT continues to see growth in passenger trips, the system has not been able to meet its on-time performance standards. The on-time performance standard is 95 percent of scheduled trips, defined as the percentage of time-point departures maintained within five minutes of schedule. IVT has been averaging below that standard at about 85 percent. Although traffic bottlenecks in Calexico near the international border have been identified as well as stopping for flag stops, a more comprehensive analysis would serve IVT well in determining the impacts from these occurrences. The SRTP update that is underway as well as the local community circulator study could serve as useful tools to identify deficiencies in on-time performance as well as suggest measures and realignments to ensure more efficient operations

3. Improve IVT website to take advantage of technology.

The IVT website located at <http://www.ivtransit.com/> serves as the principal Internet portal for information about public fixed-route transit services in Imperial Valley. The website contains links to route schedules, a trip planner, interactive map, contact form, and frequently asked questions (FAQ). In order to be an effective tool as well as to incorporate real-time data applications, it is suggested that IVT consider several technological enhancements. Should IVT procure and install AVL/GPS technologies on its buses, the real-time data derived from such technologies could be uploaded to the website for access by users to find out the status on their bus.