

SHORT RANGE TRANSIT PLAN (Revised Draft 5.02.11)

2012-2016

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Prepared by:

**City of Fresno
Fresno Area Express
Planning Division
2223 "G" Street
Fresno, California 93706**

And

**Kimley-Horn and Associates
6130 Stoneridge Mall Rd., Suite 370
Pleasanton, CA 94588**

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Chapter 1: Introduction

Background

With Fresno County's population expected to grow from the current 954,000 people to 1.5 million people by 2035, the topics of growth management, transit investments and land development policies are timely for proactive planning that may stem the tide of Fresno County's past trends:

- Very little traffic congestion makes driving an automobile very attractive for those who can afford them.
- Low density development is occurring on Fresno's urban fringe where transit services don't exist now and will likely not exist in the future, ensuring automobile dependency.
- Development encroachment on farmland is an ongoing concern due to the high demand for agricultural products from this region.
- The San Joaquin Valley is the 5th most polluted airshed in the US.
- 82%¹ of FAX riders take the bus because they either don't drive or cannot afford a car. This rate is about double the transit dependency rate found in other cities of a similar size.
- Due to a number of factors the demand for Transit Oriented Development (TOD) is lower in Fresno than other US cities of similar size, making it a challenge to build, finance and market these projects.

Most of Fresno's travel market has its origins and destinations in metropolitan Fresno. 92% of Fresno residents work in Fresno County, and only 8% commute to destinations outside the county. Of the total commute trips in Fresno County, 77% drive alone, 20% carpool or vanpool, and 1% take transit, walk and work from home.² Due to heavy rural to rural commute patterns of farm workers, prison guards and teachers in the San Joaquin Valley, carpools and vanpools represent the largest mode share after the single-occupant automobile. Transportation issues in Fresno exemplify the type of challenge that many cities in California face. The recent passage of SB375 calls all metropolitan planning areas in the state for a commitment to sustainable solutions.

Changing Priorities

The Fresno-Clovis Metro region has the most freeway lane miles per capita and local major street lane miles per capita of all the major Cities in California with more lane miles planned and programmed into the long range transportation investment plan. Fresno County and City need new policies, goals and funding priorities that support a new direction in transportation and land use planning, along with education and public awareness of the issues and trade-offs that must occur with the shift away from automobile-dominated transportation planning.

Building a transportation system solely with the automobile in mind based on a level of service "C or D" for the peak 15 minute demand is one of the most expensive transportation systems to build and maintain. Fresno City and County need a new approach or thought process for determining what is needed to attain an alternative future that provides transportation alternatives to the car for a majority of the population. Fresno's metro region is a top five leader in the nation with the least

¹ Based on a 2009 FAX rider survey.

² San Joaquin Valley Express Study by Nelson Nygaard, 2009.

amount of commute congestion and travel time and travel speeds of all major metropolitan regions. In fact, the Fresno COG Travel Demand model suggests that in the next 20-30 years the travel speeds of our region will only decrease by one or two miles per hour, whereas in the same timeframe, the Sacramento metro region's travel speeds will nearly be cut in half.

Fresno County currently does not meet air quality standards, including ozone and particulates. As a result, the County must satisfy Federal requirements calling for consideration of transportation control measures to reduce emissions and demonstrate conformity with the State Implementation Plan for Air Quality. It follows that whatever transportation projects are considered and ultimately implemented must not deteriorate the existing air quality and must support efforts to bring the County into air quality attainment.

Given that auto and truck travel account for about one-third of greenhouse gas emissions, Fresno County and its Cities must consider implementing more-efficient, high-capacity modes of transportation that provide attractive options to the auto. Such transportation modes must provide suitable alternative travel options to parts of the population who have limited mobility, with a focus on higher density and mixed-use corridors where large numbers of households and businesses can be well served by transit investments. Currently the majority of Fresno's transit riders use the system out of necessity, rather than choice. To maximize transit ridership and reduce congestion in the future, it will be important to continue to serve and attract ridership among households that need transit, as well as those who might choose to take transit though they can afford to drive.

1.1.0 Purpose of SRTP

The Fresno Area Express (FAX) Short-Range Transit Plan (SRTP), FY 2012-2016, is the bi-annual update to the operating plan and the capital program. The purpose of this Plan is to promote a comprehensive, coordinated and continuous planning process for transit service in the Fresno-Clovis Metropolitan Area (FCMA) over a five-year planning horizon. This plan proposes specific recommendations for implementing the long-range objectives of Fresno County's Regional Transportation Plan, and will guide the provision of transit services in the FCMA over the next five years.

The Plan is also used to develop transit capital programming documents which are the basis for State and Federal funding decisions. The Plan provides both the Federal Transit Administration (FTA) and the Fresno Council of Governments (Fresno COG) with the detailed planning justification for awarding operating and capital grants to FAX. This Plan was developed through an analysis of existing needs and available services, and provides an evaluation of projected needs and funding availability for the next five years.

1.2.0 Summary of Existing Transit System

FAX is a department of the City of Fresno and is governed by the Fresno City Council. The City of Fresno is the responsible agency for implementing this SRTP, and for providing transit service within the city limits. FAX's ability to deliver transit service will be impacted by laws, regulations, and policy decisions of several external agencies. These agencies include: the Federal Transit Administration (FTA), the State of California Transportation Department (CALTRANS), the Fresno Council of Governments (Fresno COG), Fresno County, the City of Clovis, the Fresno County Rural Transit Agency (FCRTA), the Consolidated Transportation Service Agencies (CTSA), and various private transportation operators. Although the City of Fresno is the agency responsible for providing metropolitan transit service and for implementing the Plan's recommendations, its actions will be influenced by the actions of these external agencies.

FAX is the largest provider of transit services in the region, with 17.6 million annual boardings and an operating budget of approximately \$37 million per year. A highly efficient operation for its size, FAX service consists of 17 fixed routes in the City of Fresno with three major hubs: the downtown transit mall, the Manchester transit station along Blackstone Avenue north of downtown, and a transfer point at the River Park shopping center in north Fresno. A fourth transfer center is in the planning stage. The "Transit Village", includes 129 units of affordable housing for seniors and is located in the Ventura/Kings Canyon Road Corridor.

The standard adult fare is just \$1.25, this is below market compared to other cities this size. Children under age 6 ride for free, and seniors and the disabled pay just 60 cents. There is no express bus service for commuters, and no park and ride lots. Regular service stops at 10:00 pm on weekdays and 7:00 pm on weekends. These service characteristics limit the viability of transit for many workers, students and low-income people who need public transportation outside of current operating hours. There are no express buses in the FAX system for commuters, and all buses operate as local service, with frequent stops.

Although there doesn't appear to be sufficient travel demand to support commuter express buses now, it is estimated that by the year 2030 there will be enough travel demand along Highway 99 to warrant an investment in express commuter buses to Sacramento and the northern Bay Area.³

This document also addresses the Handy Ride program and the City of Clovis Transportation systems which are described as follows;

- The FAX fixed-route network follows a modified grid pattern with intersecting north-south and east-west bus lines. The Plan proposes to maintain the grid network in the service area, provide higher levels of service and improved amenities to make transit more attractive and implement innovative approaches to address congestion and air quality concerns. The Plan establishes an ongoing process of system evaluation and management to assess the effectiveness and efficiency of existing and proposed services.

³ San Joaquin Valley Express Study by Nelson Nygaard, 2009.

- Handy Ride is a demand-responsive program oriented toward providing a high level of service to elderly and disabled persons who, because of physical or mental disabilities, are unable to ride the fixed-route system. In December 2005, FAX awarded the contract for Handy Ride services to MV Transportation, Inc. The Plan proposes to evaluate MV Transportation to ensure that FAX meets its responsibilities under the Americans with Disabilities Act (ADA) for Handy Ride service.

FAX operates some service to the unincorporated urban areas and receives funding from the County of Fresno for this service. It is appropriate that both agencies have a role in the policy making process impacting FAX. The Plan includes a mechanism for such a role.

Clovis Transit System: Two transit lines serve the Clovis area. Stageline operates along fixed routes with regularly scheduled stops. Round Up is a demand-response service for senior (age 65+) and disabled residents who call in advance to schedule trips. The Stageline service operates weekdays from approximately 6:15 am to 6:15 pm. FAX route 28 operates in Clovis on Shaw Avenue weekdays from 6:30 am to 7:30 pm and weekends from 8:11 am to 3:15 pm. The fare for the general public from age 6 to 64 is \$1.25 per one-way trip. Seniors 65 and over, children under age 6, and the disabled ride for free. Clovis Transit accepts the Fresno Area Express regular monthly Metro Pass, which eliminates the need for transfers and makes transit more attractive to most users.

A Shift in Thinking

Two major studies of travel and land use development patterns in Fresno have recently been completed. These are the San Joaquin Valley Blueprint Study⁴ and the Public Transportation Infrastructure Study⁵, commissioned by the Fresno Council of Governments. Both studies cite the sprawling, low density land use development patterns of the past as the basis for Fresno's automobile dependency and air quality problems. And, if these trends continue into the future, the greater Fresno area will continue to decline in terms of air quality, mobility indicators and quality of life. However, changes can be brought about to provide for development patterns that will support investments in higher capacity transit modes in metropolitan Fresno. Higher density, mixed-use development projects clustered around high capacity transit corridors have been shown to shift travel away from the automobile and into transit, bicycles and walking modes.

FAX has recently been notified by the FTA that federal funding has been recommended in the next fiscal year budget to allow FAX to begin design work on two Bus Rapid Transit corridors. This first wave of funding will begin conceptual design of BRT service and capital improvements along Blackstone Avenue heading north from downtown and Ventura/Kings Canyon, heading east from downtown Fresno. These BRT corridors generate transit demand from a combination of high transit dependency (due largely to low auto availability), concentrations of commercial and retail

⁴ The San Joaquin Valley Blueprint Study was funded by eight Councils of Governments in the San Joaquin Valley, completed in January of 2009.

⁵ The Public Transportation Infrastructure Study (PTIS) was funded by the Fresno COG in late 2008 and is expected to be completed by May of 2011.

uses along the proposed BRT arterials, and concentrations of employment in downtown Fresno, which would be served by proposed BRT routes.

What the PTIS Study discovered through modeled land use scenarios, was that as density and mix of land uses grew (bringing more housing, jobs and shopping in close proximity to each other) the more people tended to take transit, walk or bicycle in the transit corridors. Other model assumptions include tightening the parking supply and pricing available parking at market rates. Most importantly, the PTIS Study demonstrated that if 52% of all new population growth was absorbed into the planned BRT corridors and downtown, a significant and measurable shift in transit mode share (up to 8.5%) and greenhouse gas reductions (as much as 8%) could be achieved.

Thus, a fundamental shift in thinking has occurred in the greater Fresno metropolitan area and at FAX that serving the transit needs of a growing population has as more to do with the support of land use regulators and developers to bring the population growth to where the bus service currently exists than it does with trying to ever-expand the bus service to meet the demands of people who choose to live on the urban fringe where these services cannot be provided in a financially sustainable way. In a sense, the responsibility has shifted from the transit providers to the community development departments and private developers to make the transit system work and to clean up Fresno's air quality. FAX administration has come to the important realization that it can no longer expand service to meet the transit needs of an ever-outward expanding low density suburban population.

1.2.1 Mission Statements

In 1997, Fax and Handy Ride adopted the following Mission Statements which set a strategic direction and a framework for making policy, planning, and budgetary decisions:

FAX Mission Statement

The mission of Fresno Area Express is to provide a comprehensive transportation system that improves the quality of life in our community.

Handy Ride Mission Statement

Handy Ride provides transportation comparable to the FAX City fixed-route bus system to meet the needs of American with Disabilities Act (ADA) eligible persons who cannot functionally use the FAX City fixed-route bus system.

1.2.2 Public Transportation Policy Directions

The policies contained in the 2011 Regional Transportation Plan for Fresno County, (adopted by the Fresno Council of Governments, July 2010) provide general guidance to transit operations within the metropolitan area. The following Goals, Objectives, and Policies provide the framework for developing a sound public transportation system throughout Fresno County. They are

specifically targeted toward the public and social service transportation systems.

The adopted FAX Policy Directions are compared with the adopted PTIS Policy Recommendations to illustrate how current policy can be integrated into an action plan for implementation.

Policy Direction for FAX

Goal: Provide public transportation mobility opportunities to the maximum number of people in the region.

Objective: Continue to pursue expanded federal, state and local funding for both public and social service transportation.

Policies:

- ✦ *Provide a transit system that meets the public transportation needs of the service area.*
- ✦ *Provide transit services that serve low income, elderly, and disabled communities.*
- ✦ *Support the coordination and consolidation of social service transportation.*

Goal: Provide quality, convenient and reliable public transportation service.

Objective: Encourage safety, appropriate frequency of bus service, reasonable fares and the provision of adequate service to satisfy the transit needs which are reasonable to meet.

Policies:

- ✦ *Provide reliable and convenient public transit service.*
- ✦ *Provide clean, attractive and comfortable vehicles and facilities.*
- ✦ *Provide a safe system.*

Goal: Provide an efficient and effective public transportation system.

Objective: Consider advantages and disadvantages of projects, including economic, environmental and social factors.

Policies:

- ✦ *Maximize public transportation patronage.*
- ✦ *Minimize operating and capital expenses.*
- ✦ *Encourage the private sector to provide service when economically feasible.*

Objective: Provide complete and accurate information that makes public transportation "user-friendly".

Policies:

- ✦ *Create and produce publications that promote the use of public*

transportation.

Goal: Provide for an integrated multimodal transportation system which facilitates the movement of people and goods.

Objective: Develop a multimodal transportation network.

Policies:

- ✦ *Coordinate service to facilitate multimodal and inter-system transfers.*
- ✦ *Coordinate fare and transfer policies along with service information programs*

Goal: Coordinate public transportation policies with land use and air quality policies.

Objective: Support transportation investments that work toward accomplishing air quality goals, optimize utilization of land, and encourage a stable economic base.

Policies:

- ✦ *Provide incentives to reduce dependency on automobile travel without compromising travel mobility.*
- ✦ *Evaluate the transportation system for air quality, energy and efficiency impacts.*

1.2.3 Strategic Plan

At the core of the FAX strategic plan are seven goals, each with specific performance measures. The performance measures encompass the full range of FAX's responsibilities. The transit specific performance measures reflect FAX's current targets for achievement and are discussed below;

Goal 1: Service Levels

FAX will provide public transportation service to a maximum number of people in the Fresno-Clovis Metropolitan Area (FCMA).

Objective A: To provide a transit system that meets the public transportation needs of the service area.

Standard 1: FAX's fixed-route bus system should be designed so that a minimum of 90% of the service area population resides within one-half mile of a bus route.

Standard 2: FAX scheduled service should provide for maximum headways of 60 minutes on every route whenever service is operated.

Standard 3: FAX should meet the demand for public transit service, at some level, seven days a week.

Objective B: To provide a transit service (both fixed-route and demand-responsive)

that adequately serves the elderly and disabled population.

Standard 1: FAX should maintain fixed-route fare levels for elderly and disabled persons no higher than one half the base fare.

Standard 2: All wheelchair lifts should be operable at all times.

Standard 3: FAX will continue to operate Handy Ride demand-response service in compliance with the requirements of the Americans with Disabilities Act of 1990.

Objective C: To secure a stable and sufficient local funding mechanism.

Standard 1: FAX should identify and coordinate funding mechanisms that will address all transportation funding needs in the Fresno Clovis Metropolitan Area.

Standard 2: FAX should identify short and long range funding needs, and maximize revenue resources utilizing all funding mechanisms including federal grants, developer impact fees, state enabling legislation and farebox revenue.

Goal 2: Service Quality

FAX will provide a quality, convenient and reliable service.

Objective A: To provide reliable and convenient public transit service.

Standard 1: FAX should operate its fixed route buses so that on time performance is achieved at least 90% of the time. A bus is considered "on time" if it leaves no more than five minutes after the scheduled departure time.

Standard 2: FAX should complete 99.5% of all scheduled trips.

Objective B: To provide clean, attractive and comfortable vehicles and facilities.

Standard 1: All buses returning to the yard after revenue service should be vacuumed and dusted before being assigned for service the following day.

Standard 2: The exteriors of FAX buses should be cleaned at least once a week, when there is inclement weather, or as needed.

Standard 3: Bus stops should be serviced weekly, to including sign, bench and shelter repair, litter removal and weed control as needed.

Standard 4: In the winter, the heaters on FAX buses should work 100% of the

time.

Standard 5: In the summer, 100% of all buses on the street should have operable air conditioners.

Standard 6: Ensure public information at facility kiosks is accurate and up to date.

Objective C: To provide a safe system.

Standard 1: FAX buses should, at a minimum, operate in excess of 100,000 miles between preventable accidents, and bus operators should be formally recognized for their safe driving.

Standard 2: Buses should be checked daily for proper operation and condition of lights, mirrors, radios and fluid. Detailed mechanical inspections should be done every 1,000 miles. Operations, Maintenance and other employees will be provided safety training at the beginning of their employment and such training will be updated on a regularly scheduled basis.

Standard 3: FAX should continue to implement a security program.

Objective D: To record and respond to all public comments.

Standard 1: FAX will continue to track, evaluate, and follow up to all compliments, complaints and inquiries from the public.

Goal 3: Provide Efficient and Effective Service

FAX will operate an efficient and effective bus system.

Objective A: To establish and maintain system-wide productivity indicators.

Standard 1: FAX should achieve a 24% farebox recovery ratio.

Standard 2: FAX should achieve a system wide standard of 40 boardings per revenue hour system wide.

Standard 3: FAX should record and report at least, monthly, the following performance indicators:

- Total Monthly Ridership
- Total Monthly Revenue
- Total Monthly Expenses
- Total Revenue Hours
- Total Revenue Miles

- Farebox Ratio
- Total Operating Expense per Passenger
- Total Operating Expense per Revenue Hour
- Total Revenue per Revenue Hour
- Total Operating Expense per Revenue Mile
- Total Revenue per Revenue Mile
- Passengers per Revenue Hour
- Passengers per Revenue Mile
- Average Weekday Ridership
- Average Saturday Ridership
- Average Sunday Ridership
- Percentage of Scheduled Trips Completed
- Percentage of Trips on Time
 - Total Road Calls

Goal 4: System Image

FAX will promote its service and image in the community and at large.

Objective A: To maintain an active marketing program.

Standard 1: FAX should stress the positive impact of its operation in the community through press releases, speeches and involvement in community activities.

Standard 2: FAX should become involved in and work with citizens' groups, the Chamber of Commerce, the Downtown Association and other area merchant associations to communicate its services and benefits both to local residents as part of a broader marketing strategy to attract new residents to Fresno who would want to live in a TOD environment.

Standard 3: FAX should maintain public outreach programs with area employers to promote transit, carpooling and rideshare programs.

Objective B: To provide complete and accurate public transit information.

Standard 1: Current bus schedules and system information should be available to the public at all major public facilities, trip generators and transfer points.

Standard 2: Service information should be available by telephone to the public at all times.

Standard 3: FAX will actively seek out and engage members of Fresno's

minority, low income and non-English speaking populations to listen to their needs and provide meaningful information to them about use of the transit system.

Goal 5: Private Sector and Citizen Involvement

FAX will provide opportunities for citizens and private business to participate in public transportation operations.

Objective A: To provide opportunities for citizen input into FAX's operations.

Standard 1: FAX will hold public hearings, as required by the federal government;

(a) When there is a change in any fare, except promotional fare changes for up to 180 days.

(b) When there is a service change leading to a 25 percent or greater reduction in total revenue service hours or revenue service miles.

Standard 2: FAX will coordinate and cooperate with the Fresno Council of Governments (Fresno COG) in its annual "unmet transit needs" process, including participation in the Fresno COG Social Services Transportation Advisory Council (SSTAC) meetings and Public Hearing.

Goal 6: Integrated Multi-Modal Transportation

FAX will provide an integrated multi-modal transportation system which facilitates the movement of people.

Objective A: Develop a multi-modal transportation network.

Standard 1: FAX will provide transit service to all airport and passenger rail facilities in the FCMA.

Goal 7: Coordinate Transportation, Land Use, and Air Quality Policies

FAX will coordinate transportation policies with land use and air quality policies.

Objective A: Support transportation investments that work toward accomplishing air quality goals, optimize utilization of land and encourage a stable economic base.

Standard 1: Evaluate FAX system for air quality, energy, and efficiency impacts.

Standard 2: FAX will coordinate with City, County, and Regional agencies to

promote efficient “Smart Growth” land use and transportation policy integration.

1.2.4 Organization

FAX

FAX is operated by the City of Fresno and is a department headed by the City's Director of Transportation. The Organizational Structure of FAX is shown on Exhibit 1.1.

Fresno City Council

The Fresno City Council consists of seven members within seven jurisdictions of the City of Fresno, and is the policy making board for FAX. The Council is responsible for setting operating policy and annually adopting the budget. FAX underwent a major reorganization of the Department in FY87. The reorganization eliminated the Research and Development Division. The Fresno COG is under a contract agreement with FAX and is responsible for planning, service evaluation, service development, and public outreach functions. This cooperative agreement between the agencies has eliminated duplication of effort and has resulted in substantial cost savings.

FAX Committees

The DAC was established by the City of Fresno in 2008 and is focused on promoting the inclusion of people with disabilities in all areas of community life. The Commission membership is representative of the diversity of the disabled community. In addition, the Social Services Transportation Advisory Committee (SSTAC) was formed by the Fresno COG Policy Board to aid in its review of transit issues with emphasis on the annual identification of transit needs within Fresno County. These include the needs of transit dependent and transit disadvantaged persons, including the elderly, disabled and persons of limited means. This Advisory Council to the Fresno COG consists of a committee of members from the public who advises the Fresno COG Board on any major transit issues. FAX staff participates as part of this committee on a regular basis.

FAX Staff

The Department of Transportation is responsible for the day to day management of FAX and reports directly to the City Manager. FAX consists of five divisions, all headed by a Director of Transportation. Divisions include Administration, Operations, Maintenance, Support Services, Planning, and Fleet Management.

The Administration Division is responsible for intergovernmental coordination, budgets, grant management, data collection, computer services, personnel, contract administration and policy development.

The Operations Division is responsible for managing the day to day operations of transit service, including driver training. In FY12, FAX vehicle operations will consist of 223 permanent bus driver

positions and 18 Transit Supervisor positions.

Table 1.1: FY2012 Staff Service Levels

		DEPARTMENT OF TRANSPORTATION FISCAL YEAR 2012 CURRENT SERVICE LEVEL	
Total No. of City Employees	409	Director of Transportation	1.00
No. of Management Employees	43.00	Assistant Director of Transportation	1.00
No. of Line Staff Employees	366		
OPERATIONS DIVISION		MAINTENANCE DIVISION	
Operations Manager	1.00	Maintenance Manager	1.00
Transit Supervisor II	1.00	Equipment Supervisor	5.00
Transit Supervisor I	15.00	Bus Mechanic Leadworker	5.00
Full Time Bus Drivers	223.00	Bus A/C Mechanic Leadworker	1.00
Senior Secretary	1.00	Body and Fender Leadworker	1.00
Account Clerk II	2.00	Bus Equipment Leadworker	1.00
Senior Administrative Clerk	1.00	Bus Mechanic I/II	17.00
Radio Dispatcher	1.00	Storekeeper	4.00
		Utility Leadworker	1.00
		Laborer	7.00
		Bus A/C Mechanic	2.00
		Body and Fender Repairer	2.00
		Equipment Serviceworker I	13.00
		Equipment Serviceworker II	1.00
		Senior Account Clerk II	1.00
		Account Clerk II	1.00
DIVISION TOTAL	245.00	DIVISION TOTAL	63.00
		ADMINISTRATION DIVISION	
		Administration Manager	1.00
		Management Analyst II	1.00
		Management Analyst III	1.00
		Information Services Supervisor	1.00
		Senior Secretary	0.50
		Principal Account Clerk	2.00
		Senior Account Clerk	2.00
		Account Clerk I/II	1.00
		Computer Systems Specialist II	1.00
		Computer Systems Specialist III	1.00
		Programmer/Analyst III	1.00
		Grant Writer	1.00
		DIVISION TOTAL	13.50

FY2012 Service Staff Levels (continued)

SUPPORT SERVICES DIVISION	
Support Services Manager	1.00
Management Analyst II	1.00
Senior Administrative Clerk	2.00
Administrative Clerk I/II	3.00
Staff Assistant	1.00
Paratransit Specialist	1.00
DIVISION TOTAL	9.00

PLANNING DIVISION	
Planning Manager (FCOG Emp.)	
Senior Transit Planner**	1.00
Fresno COG EMPLOYEES	
Planning Coordinator III	1.00
Subtotal - Contract Employees	2.00
FAX EMPLOYEES	
Transit Supervisor I	1.00
Community Coordinator	1.00
Planner II	1.00
Senior Secretary	0.50
Subtotal - FAX Employees	3.50
DIVISION TOTAL	5.50

FLEET MANAGEMENT DIVISION	
Fleet Manager	1.00
Automotive Parts Leadworker	1.00
Automotive Parts Specialist	4.00
Brake and Front End Specialist	1.00
Combination Welder II	3.00
Combination Welder Lead	1.00
Electronic Equipment Installer	2.00
Equipment Service Worker II	12.00
Equipment Supervisor	5.00
Fleet Administration Supervisor	1.00
Heavy Equipment Mechanic Lead	3.00
Heavy Equipment Mechanic II	16.00
Light Equipment Mechanic Lead	4.00
Light Equipment Mechanic II	13.00
Management Analyst III	1.00
Senior Account Clerk	1.00
Senior Administrative Clerk	1.00
Senior Secretary	1.00
Tire Maint and Repair Tech	1.00
Tire Maintenance Worker	1.00
DIVISION TOTAL	73.00

**FCOG Employees not included in the management to staff ratio listed above.

Weekday service currently requires an average of 180 drivers with Saturday and Sunday service requiring 112 drivers. The remaining drivers are designated for the extra board, vacation and sick relief. Maintenance is responsible for maintaining the fixed route vehicles, monitoring the maintenance of Handy Ride vehicles, and maintaining bus stops and shelters.

Planning prepares transit related documents such as the Short Range Transit Plan and Regional Transportation Plan, and develops routes and scheduling of transit service. The Planning Division analyzes ridership data of the FAX system in order to do system evaluation and system adjustments. The Planning Division is also responsible for public information and outreach.

Support Services is responsible for oversight of the paratransit service contract and the customer service outlets.

The newest division at FAX is Fleet Management. During city wide reorganization in 2010, Fleet Management came under the direction of the Department of Transportation. Fleet is responsible for the repair and maintenance of almost all City vehicles.

1.3.0 Overview of SRTP

The SRTP is divided into 5 chapters:

- Chapter 1 provides an overview of FAX and Handy Ride, and the purpose for the SRTP.
- Chapter 2 provides a general overview of the existing FAX and Handy Ride transit systems, including descriptions of current transit services and transit related programs.
- Chapter 3 describes the proposed service improvement plan for FAX and Handy Ride, including recommendations for enhancing customer service and improving mobility and access.
- Chapter 4 sets out the detailed five-year financial plan for FAX and Handy Ride. It also describes the Capital Plans which support the services described in Chapters 2 and 3.
- Chapter 5 provides an overview of the existing City of Clovis transit system, including descriptions of current transit services, recommendations for enhancing customer service, and a detailed five-year financial plan for the transit system.

The SRTP includes appendices which provide more detailed information on the Fleet Inventories of each transit agency. In addition, a Glossary of Terms is included in Appendix F to provide assistance in defining transportation related terms. A new Appendix chapter has been added to address Title VI Implementation plans.

Chapter 2: System Description

2.1.0 History of Fresno's Transit Service

Public transit began in Fresno, as in many cities, with horse drawn street cars. The first horse car franchise was issued to the Fresno Street Railroad in 1887, and it began operation in 1889. By the turn of the century, interest in electric streetcars had grown to a point where the Fresno City Railway (FCRY) had been granted a 50 year franchise for the operation of electric streetcars. The system started operations in 1902, and by the end of World War I (now the Fresno Traction and Rail Company) had 50 miles of track. In 1939 the bus service completely replaced the streetcar system. A description of the current services is as follows:



Fixed Route Service

From the 1930's to 1961, fixed route bus service was provided by Fresno City Lines, Inc., which was a private corporation. In 1961 the corporation sought to discontinue public transportation due to increasing deficits. The City of Fresno entered into a lease purchase agreement with Fresno City Lines, Inc., in 1961, and established the City of Fresno as the operator of transit services in the Fresno metropolitan area. The early system configuration consisted of a modified radial pattern with all routes originating in the downtown area. This pattern remained essentially the same until 1977. During FY77, FAX instituted numerous changes which increased service to nearly all of the urbanized FCMA, the most significant being the implementation of a grid system consisting of 19 lines in place of the former 13 line radial system. The change was made possible by the purchase of 50 full sized buses. Today FAX operates 17 routes on 15, 30, 45, 50, and 60 minute headways. The system continues to be operated on a modified grid pattern with nine routes intersecting in downtown Fresno, six connecting at Manchester Transit Center, and seven making connections at The Market Place Shopping Center.

Demand Responsive Service

Specialized transportation services for Fresno's elderly and disabled were started in 1967 by the West Fresno Federation, a nonprofit corporation. The City provided increasing support to the program, and in 1975 assumed the service. In April 1977, FAX began operating Handy Ride service. Handy Ride operates as a generalized demand responsive service for those who are unable to use the regular fixed route service due to a disability. Handy Ride offers advanced reservation and limited subscription service to "ADA Certified" riders. In order to effectively carry out the provisions of the Americans with Disabilities Act of 1990, FAX awarded the contract for Handy Ride service to Laidlaw (formerly Mayflower) Contract Service effective April 3, 1993. In December 2005, MV Transportation was awarded the contract to continue paratransit operations. Service hours for Handy Ride mirror those of FAX fixed route service, and reservations are required one day in advance of the scheduled trip in order to comply with ADA regulations. A

limited number of will calls are provided each day based on availability, with priority going to medical appointments. FAX is in full compliance with the ADA. For a more detailed discussion of the ADA, refer to the Americans with Disabilities Act Section 2.3 or the FAX ADA Paratransit Service Plan Updated in June 2003.

2.2.0 Bus Transit

FAX's service area consists of the urban spheres of the Fresno City and Clovis City General Plans with a combined Census 2010 population of 646,648. Within the urban spheres are the Cities of Fresno (2010 Census population of 494,665) and Clovis (2010 Census population of 95,631). The 2010 Census population of the Fresno-Clovis Metropolitan Area (FCMA), an area slightly larger than the Fresno and Clovis urban spheres, is 664,000. The FCMA contains 299 square miles with an overall average population density of 2,200 persons per square mile.

As shown in Table 2.1 below, the FCMA's population has increased 130% in the last 40 years.

Table 2.1 FCMA Population Trend		
Year	Population	Source
1970	289,200	Decennial Census
1980	358,800	Decennial Census
1990	477,400	Decennial Census
2000	570,299	Decennial Census
2010	664,000	Decennial Census

2.2.1 Bus Services

The core bus routes which are operated by FAX and other service agencies are as follows;

City of Fresno

The City of Fresno provides two categories of public transportation service in the FCMA. First, the Department of Transportation/FAX provides fixed route service for the general public seven days a week. Secondly, Handy Ride service, which is contracted through MV Transportation, Inc., provides demand responsive service seven days a week. Handy Ride generally serves those persons unable to use the regular fixed route bus service.

FAX Fixed Route - The Fresno-Clovis Metropolitan Area (FCMA) has developed north, west and east of the Central Business District (CBD). The Central Business District is the regional and local governmental center for federal, state, county, city and educational offices. In addition, Community Regional Medical Center is also located in the downtown triangle, which is bounded by Fwy 41, Fwy 180 and Fwy 99. The CBD is a regional financial and legal center, as well as regional shopping center (Fulton Mall). The Fresno Convention Center, two major hotels, various private

office buildings, and the railroad and bus station are also located in this area. Nine of FAX's seventeen routes converge in the CBD. There are five other regional shopping centers located within the FCMA. They include: Fresno Fashion Fair (First/Shaw), Fig Garden Village (Palm/Shaw), Manchester Center (Blackstone/Shields), Sierra Vista Mall in Clovis (Clovis/Shaw), and the Market Place at River Park (Blackstone/El Paso). While FAX operates service to all of these Centers, Manchester Center and the Market Place are major connection locations. Six routes converge at the Manchester Transit Center to form a major transfer point in Fresno's geographic center, and six routes serve Market Place in north Fresno.

Other commercial land uses are spread throughout the FCMA with strip commercial concentrated along Shaw and Blackstone Avenues. Additional office commercial is located along Shaw Avenue, N. First Street, and in the vicinity of the Fresno Yosemite International Airport (FYI). Significant commercial development continues in the Woodward Park community near the River Park Business Complex (Friant/Audubon) and Kaiser Permanente Hospital (First/Nees). The FAX network serves various high schools, colleges and universities as well as numerous parks and entertainment complexes.

FAX operates on a modified grid system and provides service on 15 transit corridors on weekdays and Saturdays and Sundays. The route system is composed of nine lines that provide service in two directions to and from downtown and five cross-town lines. FAX also operates a free downtown trolley service which connects to parking, retail, and restaurant services in the downtown area. The system is designed to facilitate bus travel by making transfers convenient between intersecting lines and between nine lines which converge in the CBD. The FAX system map is shown in Exhibit 2.1.

Handy Ride Demand Response - Handy Ride's service area is bounded by Copper to the north, Central Avenue to the south, Temperance Avenue to the east, and Polk Avenue to the west as identified in Exhibit 2.2. Handy Ride service is available to persons who, because of an impairment or disability, are unable to use Fresno Area Express fixed route system. Population numbers developed for the FAX Americans with Disabilities Act Paratransit Service Plan indicates that the FCMA contains between 7,000 and 12,500 persons who would be eligible for paratransit service under these guidelines.

Fresno County

Fresno County reimburses FAX to partially offset operating costs for fixed route and Handy Ride services in the unincorporated urbanized area. As of the end of 2009, an estimated 577,774 people lived within three quarters of a mile of a FAX route. Of those, 43,542 are residents of Fresno County. Fresno County also provides support for rural transit services as described below;

- **Fresno County Rural Transit Agency (FCRTA)** - In August 1979, a joint powers agency was created to coordinate and operate rural transit services in Fresno County. FCRTA, through contract providers or private carriers, provides intra city and intercity service to rural communities and downtown Fresno. Intercity service to Fresno is provided via municipal providers and through Greyhound and Orange Belt Stages. The rural systems interface with

FAX in downtown Fresno.

- **Consolidated Transportation Service Agency (CTSA)** - In 1980, the Fresno Council of Governments (Fresno COG) adopted "Assembly Bill 120 Action Plan for Fresno County" (AB120, September 1979) to coordinate social service transportation in Fresno County. The Plan co designates the City of Fresno and the Fresno County Economic Opportunities Commission (FCEOC) as the CTSA for the Fresno Metropolitan Area and the City of Clovis as the CTSA for the Clovis Urbanized Area. The Fresno County Rural Transit Agency and FCEOC are the co designated CTSA for the rural area. Social service transportation in the FCMA began in April 1983 and was initiated in the rural county area in May 1983. Services are provided through vehicle timesharing, ridesharing and consolidation and include those agencies and services listed on Exhibit 2.3.
- **Private Operators** - Intercity bus service to the FCMA is provided by Greyhound Lines, Transportes Inter-Californias, and Orange Belt Stages while Amtrak provides intercity rail service. The FCMA is served by numerous private taxi companies and a dial a ride service providing shared ride, demand responsive service. Several nonprofit agencies and private companies operate services designed to accommodate disabled riders. Exhibit 2.3 lists current public and private transportation providers in the FCMA.
- **Ridesharing** - The Fresno COG is responsible for administering the Program and retains a Rideshare Coordinator to implement the Program. The Rideshare Coordinator has been instrumental in developing an effective outreach program to major employers throughout Fresno County for providing match lists for both carpools and vanpools. In addition, through Measure C, a ½ cent sales tax approved in 2006, the Fresno COG manages a Taxi Scrip program that allows seniors 70 years of age and older to purchase taxi scrip at a reduced rate. Measure C also provides a subsidy for vanpools originating in Fresno County.
- **Regional Vanpool Program** - The CalVans vanpool program is operated by Kings County Area Public Transit Agency (KCAPTA) in five Valley counties (Fresno, Kern, Kings, Madera, and Tulare), and in Monterey and Ventura Counties. KCAPTA is receiving State and national recognition and is expected to soon become a successful national model replicated throughout the United States. The multi-county Valley transit agency is at the forefront of this pioneering vanpool effort with about 230 vanpools currently operating region-wide.

KCAPTA is a Joint Powers Agency comprised of Kings County and the Cities of Avenal, Lemoore, and Hanford. The Agency is responsible for all transit functions in Kings County, its cities and communities. The Agency also operates route service between Hanford and Visalia, as well as between Hanford and Fresno. The CalVans vanpool program provides a high quality, low cost travel option for rural to rural commuters including farm workers, prison workers and teachers.

The Merced County Association of Governments (MCAG) commissioned a study to identify markets that can support inter-county commuter express transportation services in the San Joaquin Valley region. The study, entitled "San Joaquin Valley Express Transit Study (May 2009)", finds that in the San Joaquin Valley "...for the foreseeable future, the expansion of ridesharing and vanpool opportunities should be the primary investment to increase transportation choices for

inter-county commuters in most of the region. While the whole of the Valley can benefit from enhanced ridesharing opportunities, this will be the primary alternative to single-occupancy vehicle travel for most inter-county commuters travelling to employment destinations other than those along northern SR 99 corridor, the San Francisco Bay Area, and Sacramento.” The study further supports formation of a Joint Powers Authority; use of a single valley-wide ride-matching and vanpool website; and enhanced coordination between participating COGs.

Figure 2.1: FAX Service Area Map – $\frac{3}{4}$ -Mile Catchment Area from Existing Routes

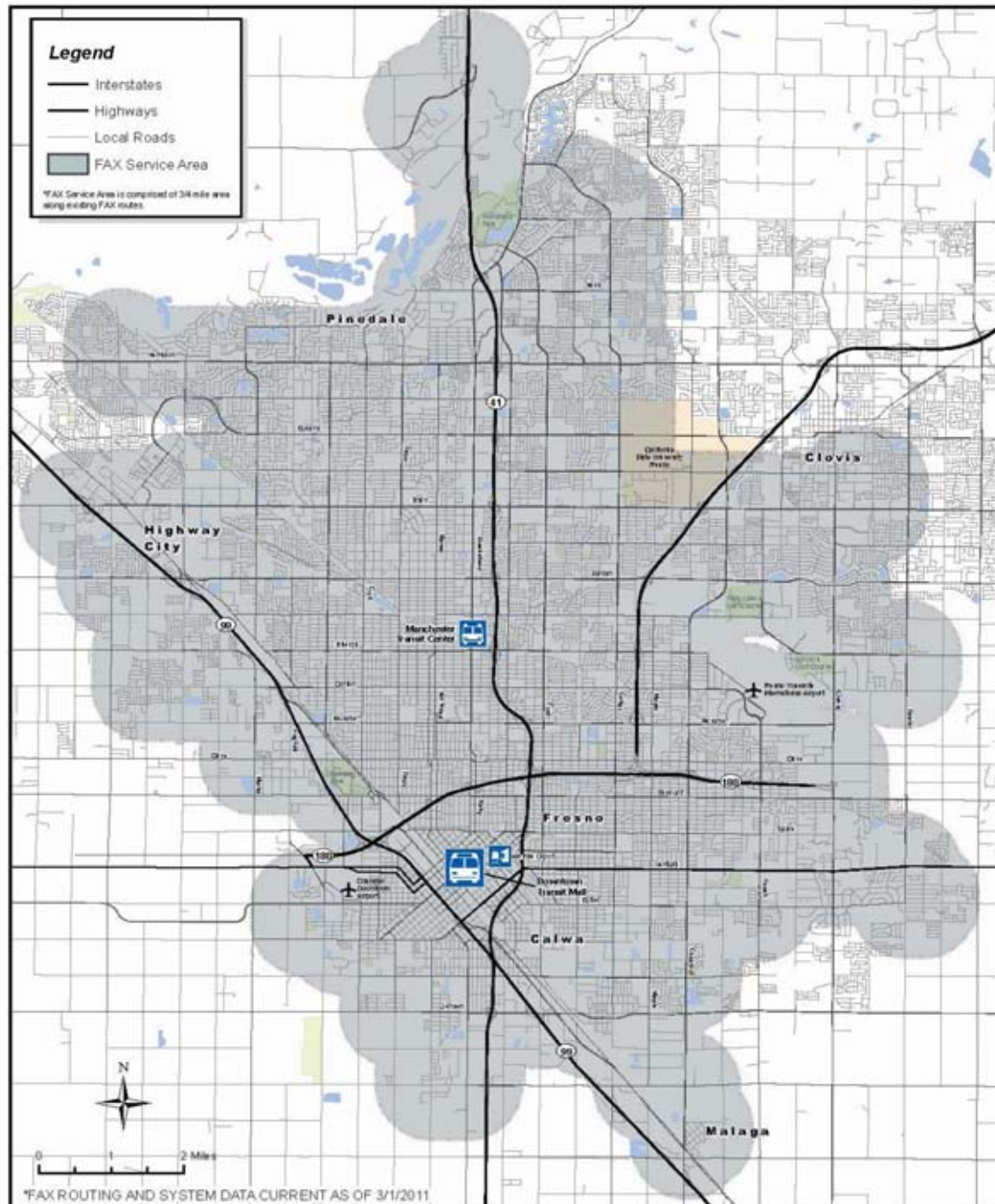


Figure 2.2: FAX Route Map

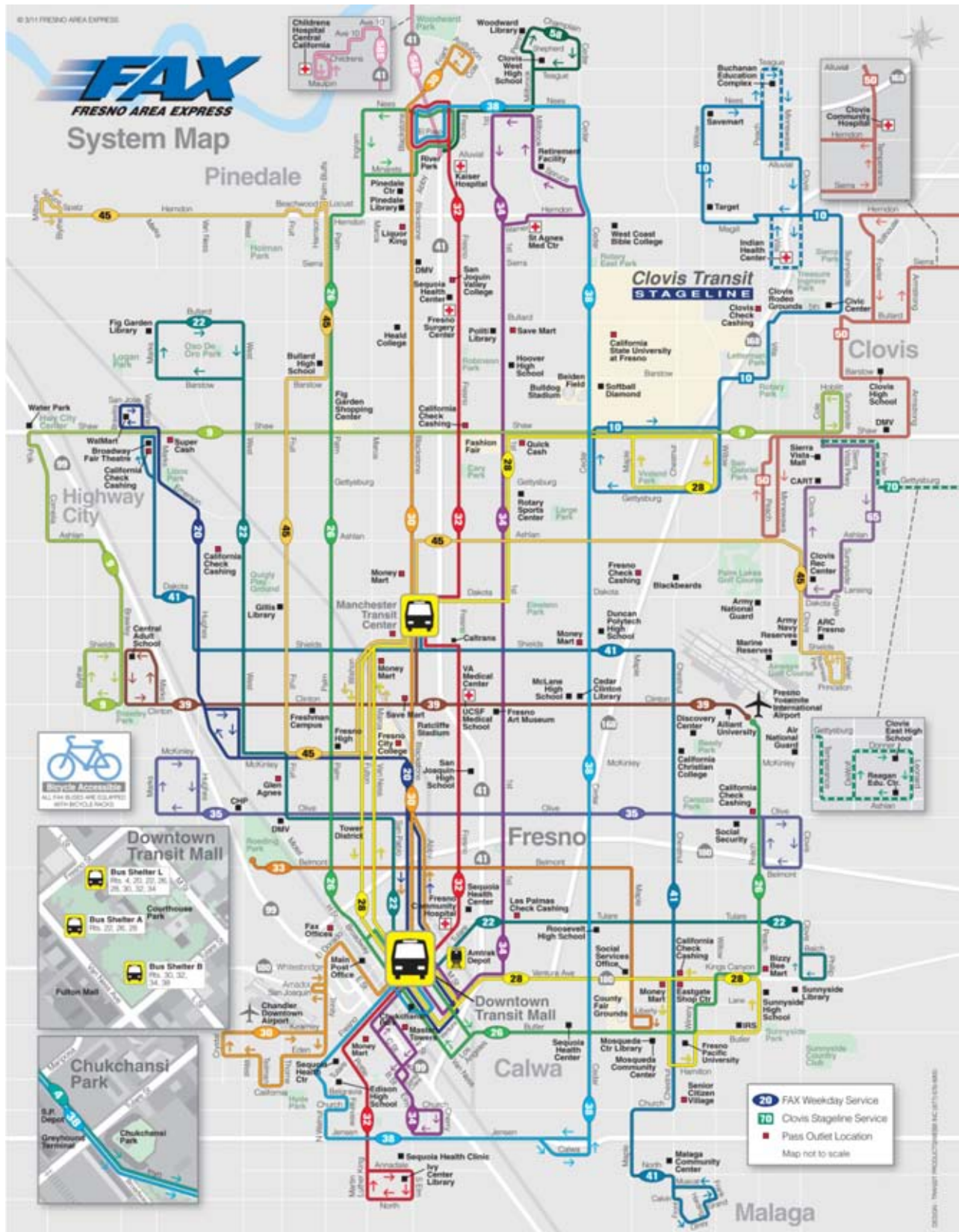


Figure 2.3 Handy Ride Service Area

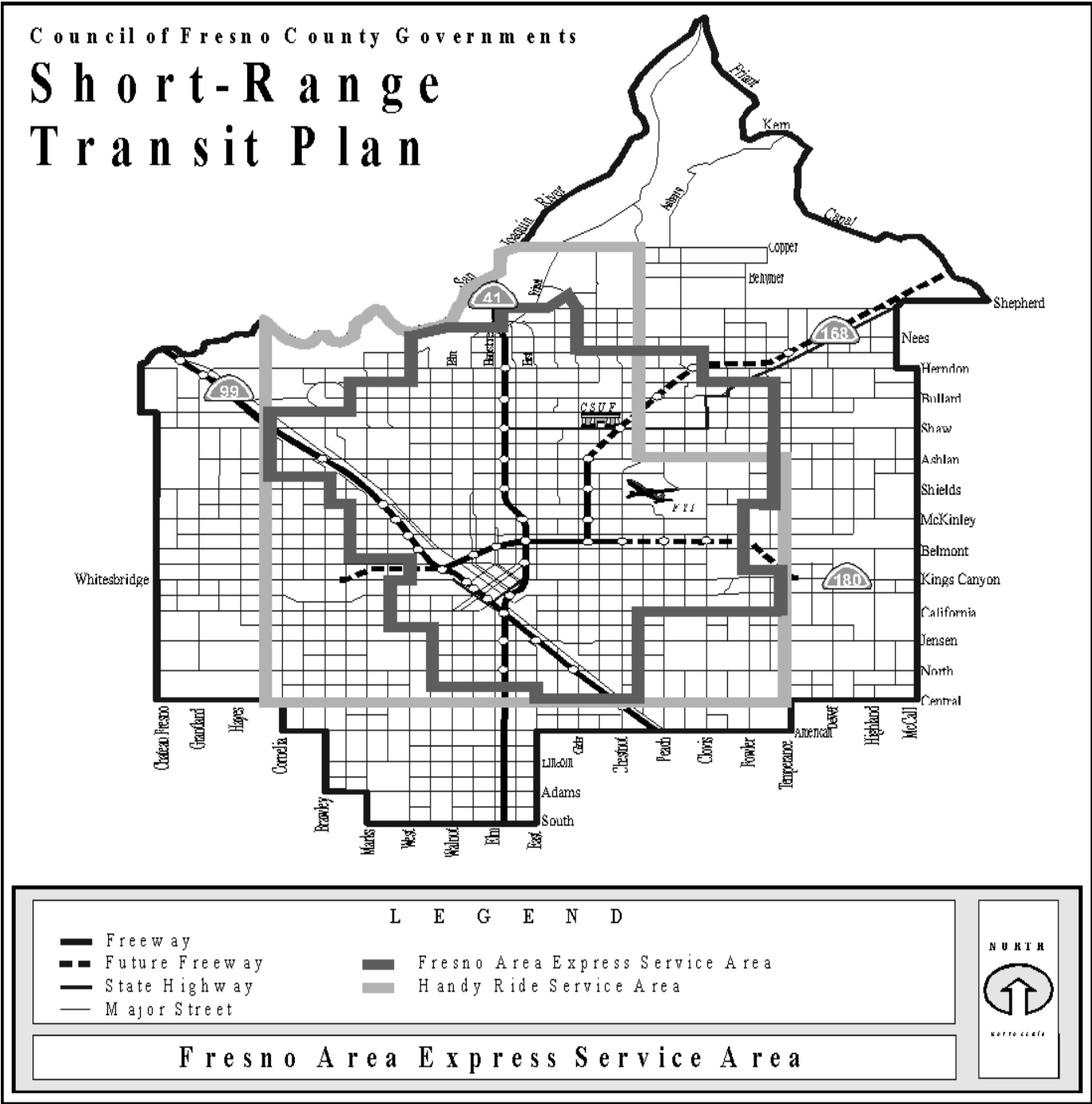


Table 2.3 Service Providers in the FCMA 2010**BUS LINES & VAN SERVICE**

Clovis Roundup*
 Clovis Stage Lines*
 Fresno County Consolidated Transportation
 Agency*
 Fresno County Rural Transit Agency*
 Fresno Handy Ride*
 Fresno Area Express*
 Greyhound Bus Lines
 Fresno Transportation Center
 Transportes Inter Californias

BUSES CHARTER & RENTAL

Fresno Transportation Center
 Golden Eagle Charter
 Got-U-There Tours
 Limo For You
 Classic Charter
 Orange Belt Stages
 Via Adventures

BUSES -- SCHOOL TRANSPORTATION**SERVICES**

Laidlaw
 DIAL-A-RIDE
 Dial-A-Lift
 Dial-A-Ride
 Handicab
 Fresno County Rural Transit Agency
 AMBULANCE NON-EMERGENCY
 Access Medical Transport
 Affordable Transport
 American Ambulance
 Comfort Med Trans Inc.
 Fresno Medical Transportation Company

TAXICABS

A1 Yellow Cab
 A-1 Taxi Cab
 AA Yellow Cab
 AAAA Yellow Cab
 Ace Yellow Cab Co.
 Airport Cab Company
 Airport Taxi Cab
 Alpha Cab
 American Taxi
 American Yellow Cab
 Azteca De Cab
 Bulldog Cab Co.
 City Cab Company
 Checker Cab Company
 Clovis City Cab Company
 Clovis Yellow Cab
 Faretta Cab Company
 Fiesta Cab Company
 Fresno Independent Cab
 Fresno Yellow Cab
 Golden Express Taxi
 One ASAP Hour Cab
 Same Day Express Delivery
 Scrip Taxi
 Taxi Azteca
 Taxi El Cora
 Taxi Latino
 Taxi Mexico
 Taxi Tren
 Taxi Value Central Company
 USA Taxi Cab Co.
 White Star Cab Transportation
 Yellow Cab
 Yellow Cab of Fresno
 Yosemite Cab

* Public Agency

Source: Pacific Bell Yellow Pages.

2.2.2 Bus Fleet

FAX- FAX's policy is to operate equipment which is suitable to the needs of the public, and is cost-effective to operate and maintain. In making decisions regarding vehicle procurement, FAX considers passenger needs and comfort, standardization of parts and equipment, ease of operation and maintenance, and conformity to the latest clean air, accessibility and safety requirements.

FAX currently has an active fleet of 122 vehicles, which includes over 75 Compressed Natural Gas buses. In addition, all new FAX buses are low floor buses, which are outfitted with ramps that are much easier to maneuver than traditional lifts. The low floor buses also have the ability to lower or kneel to reduce the angle of the ramp.

FAX's next major order of sixteen (12) standard CNG 40-foot buses, to be provided by Gillig, is anticipated to arrive in 2012. FAX will also take delivery of 30' CNG buses to replace the 28' cut-away transit coaches previously used. FAX continues to showcase its commitment to cleaner vehicles and a cleaner environment.

All new buses meet the accessibility requirements of the Americans with Disabilities Act (ADA), the standards mandated by the Federal Clean Air Act (CAA), the California Air Resources Board (CARB) exhaust emissions standards, the Federal Transit Administration (FTA) First Article Bus Durability Tests and the California Highway Patrol (CHP). Buses in the active fleet operate an average of 45,000 miles annually. An inventory of the current bus fleet is presented in Table 2.2. Bus replacement needs are detailed in Chapter 4 of this document.



Table 2.2
FAX Fleet Inventory

#	Make	Model	Year	Comments
1	New Flyer	Hybrid (Gas/Electric)	2009	40' Low Floor-Ramp
16	New Flyer	CNG	2006	40' Low Floor-Ramp
15	New Flyer	CNG	2006	40' Low Floor-Ramp
2	New Flyer	Hybrid (Gas/Electric)	2005	40' Low Floor-Ramp
10	New Flyer	CNG	2005	40' Low Floor-Ramp
25	Orion	CNG	2003	40' Lift Equipped
4	Optima	CNG	2004	30' Trolley Replica
4	Ford	240	2000	28' QRV Vehicle
10	Gillig	Phantom	1999	40' Low Floor
14	Gillig	Phantom	1997	40' Lift Equipped
4	Gillig	Phantom	1996	40' Lift Equipped
5	Gillig	Phantom	1994	40' Lift Equipped
12	Gillig	Phantom	1993	40' Lift Equipped
122	Total Active Fleet			

Handy Ride - Handy Ride offers demand responsive, curb to curb service seven days a week during the same hours as the Fixed Route service. Handy Ride service is provided throughout the service area covered by the Fixed-Route, and additionally extends out $\frac{3}{4}$ -mile further than FAX routes. The current service area is bounded by Copper to the north, Central Avenue to the south, Temperance Avenue to the east, and Polk Avenue to the west. The requests for service are accepted on a previous day basis for ADA Certified City of Fresno residents and visitors, and on the same day, if space is available, for ADA and Handy Ride general passengers. In December 2005, a contract was awarded to MV Transportation, Inc. for the provision of the Handy Ride service. FAX's Support Services Division monitors MV in order to assure compliance with the city contract and with the ADA requirements. Handy Ride's fleet is composed of 48 wheelchair lift equipped mini buses and 7 sedans, all operated and maintained by MV Transportation, Inc.

2.3.0 Accessible Transit Service

In 2008, the City of Fresno created the Disability Advisory Commission (DAC). The Commission's charge is to advise the Mayor, City Council and staff on issues affecting persons with disabilities and seek avenues for improving services for people with disabilities in the larger community. Included in this charge is public transportation. The FAX ADA Advisory Committee continues to function in a slightly reduced role, providing input to the DAC and providing sensitivity training to

bus operators.

2.3.1 Americans with Disabilities Act

The Americans with Disabilities Act (ADA) was signed into law on July 26, 1990. FAX implemented key ADA requirements and compliance regulations issued by the U.S. Department of Transportation (DOT) and the Architectural and Transportation Barriers Compliance Board as described below:

- All newly constructed transit facilities such as bus stops and transit centers must meet ADA accessibility design guidelines. The renovation of the Manchester Transit Center in 2001 helped to meet the standards. Over the last year new bus stop signs which meet the standard have been installed Citywide, and FAX has improved over 570 bus benches and 190 shelters to meet ADA requirements.
- All procurement of bus vehicles must meet the ADA accessibility design guidelines. FAX has procured over 100 buses since 1992 that meet ADA standards. All future vehicle procurement will meet the standards, including recently received Hybrid Electric buses, Vans and Clean Fuel buses.
- Information distributed to the public is also required to be made available in accessible formats, such as audio cassettes, discs, large print, via telephone, etc. FAX has prepared and distributed a video which highlights FAX fixed route services. This video provides passengers with relevant information on the FAX system and is made available to the public upon request.
- As an operator of a fixed route service, FAX is required to provide complimentary paratransit services. A combination of accessible fixed route transit service and paratransit services are provided for the transportation needs of individuals with disabilities and senior citizens.



The FAX ADA Paratransit Service Plan and subsequent updates have been adopted by the Fresno City Council and approved by the FTA. The Paratransit Service Plan addresses FAX's responsibilities under the ADA for both fixed route and demand responsive service. The FAX Complementary paratransit service has been in complete compliance with federal requirements since 1995.

Among other things, these mandated changes required FAX to expand Handy Ride hours of service to match those of FAX fixed route service.

2.3.2 Accessible Bus Service

FAX designated all buses as accessible effective July 1, 1997. All of FAX's buses are equipped with devices to secure a wheelchair or other mobility devices and with lifts and/or ramps for

boarding passengers using common mobility devices. Buses purchased since 1993 are equipped with automatic announcements to assist passengers with visual impairments. The announcements are activated when the doors are opened and provide information on the route number and destination.

FAX has adopted standard operating policies and procedures for compliance with ADA which include the following: regular maintenance and prompt repair of accessibility equipment; providing assistance with boarding; calling out bus stops and stations; providing alternative transportation if a passenger cannot be boarded because of failure of accessibility equipment; allowances for service animals; and specialized training for operators.

2.3.3 ADA Paratransit Services

Paratransit service is a specialized form of transportation operated for people, who, because of their disabilities cannot use conventional public transit service. As an operator of a fixed route bus service, FAX is required under ADA to ensure that paratransit service is provided to eligible individuals with disabilities. The level of service provided must be comparable in terms of hours of service and area served to the service provided through the fixed route bus system. Since 1990, FAX has been in full compliance with ADA paratransit provisions.

FAX - FAX contracts for paratransit services with MV Transportation, Inc. Eligible riders call MV to schedule their trips and MV provides the trips accordingly. MV also provides subscription trips according to policies developed and adopted by FAX.

In FY10, FAX's annual operating cost for MV was \$5.9 million. MV provided 238,707 paratransit trips during this period. MV's operating budget for FY11 is \$5.3 million with service demand remaining relatively flat at 230,000 passenger trips.

2.4.0 Transit Maintenance Program

FAX takes a functional approach to the maintenance and servicing of all vehicles, equipment, and facilities, and emphasizes preventative maintenance, comprehensive inspections and overall efficiency and cost-effectiveness to ensure reliable and safe transit service.

The mission of FAX's Maintenance Division is to provide clean, reliable, safe and well maintained vehicles, equipment, and facilities through the efforts of a competent and committed work force using modern facilities, tools and equipment. The purpose of FAX's Maintenance Plan is to provide consistent, systematic and integrated program guidance that will enable the Maintenance Division to properly maintain and service the assigned vehicles, equipment and facilities in support of revenue operation. Policies of the Maintenance Division reflect the following:

- Standardized procedures and practices;
- Compliance with all applicable regulatory requirements;
- An effective maintenance program.

Key components of FAX's current Transit Maintenance Program are as follows:

- A comprehensive bus vehicle maintenance program that includes daily maintenance;
- An aggressive preventative maintenance and component change out program;
- A running repair procedure to avoid removing vehicles from service;
- A centralized overhaul and repair program.

Maintenance Program

The following maintenance functions are described below:

- Bus Maintenance
- Facilities Maintenance

Bus Maintenance

Components of FAX's Bus Maintenance program are as follows:

Daily Servicing - Daily servicing items include the following:

- Vault pull
- Driver defect card analysis
- Fuel island servicing
- Interior/exterior cleaning
- Seat and window cleaning/replacement

Preventative Maintenance - Regular maintenance is performed at prescheduled cycles to ensure optimal performance, efficiency, safety and reliability of assigned equipment. Preventative maintenance inspections are performed within four hundred miles of scheduled cycles. Table 2.3 shows FAX's Preventative Maintenance cycles.



Table 2.3
FAX Maintenance Schedule

P.M. Type	Inspection	Cycle	Within
Minor/safety	A	3,000 miles	+/- 400 miles
Intermediate	B	12,000/14,000 miles	+1,000/-400 miles
Intermediate	C	18,000/21,000 miles	+1,000/-400 miles
Major	D	24,000/28,000 miles	+1,000/-400 miles
Special Service	Winter	Seasonal	
Summer	Seasonal		

Note: Services vary by mile ranges depending upon warranty and manufacturer's requirements.

Running Repair/Corrective Maintenance - This establishes a procedure to repair items identified by operators during the daily operation of a bus. These repairs are usually completed without removing or withholding a vehicle from normal service. Maintenance repairs or actions for road calls are documented in the fleet information system to assure that proper corrections are made, to provide for consideration of fleet inspections, and to modify the Preventative Maintenance Program, as needed.

Scheduled Component Change Out - FAX's component change out program is based on manufacturer's recommendations, failure history and failure analysis. Designated components are tracked and monitored to ensure that the program is efficient and cost-effective. This program allows for the preparation of complete standardized kits with standardized replacement practices for improved efficiency.

Overhaul and Repair Program - The O & R Program is a centralized maintenance program which includes paint and body repair, upholstery, farebox repair, component overhaul, and heavy repair/rebuild of engines and other components.

Facilities Maintenance

FAX's Facilities Maintenance includes overall environmental regulatory record keeping and oversight; hazardous waste disposal and manifests; timely and reliable maintenance, preventative maintenance, inspections, repair and servicing of FAX's communication system, buildings,

shelters, grounds, bus stops and related equipment.

FAX's maintenance facility consists of 49,000 square feet and can accommodate up to 150 buses. However, limited bus parking space has prevented this facility from serving more than 125 buses. The Maintenance Division provides standard bus maintenance and has facilities for body work, painting, welding, machine tooling, and air conditioning. Since the facility enables FAX to perform nearly all maintenance work in-house, reliability of the fleet maintenance is ensured.

In FY08, FAX's service level required approximately 54,000 gallons of diesel fuel per month and an additional 120,000 therms of compressed natural gas per month. FAX has four underground diesel fuel storage tanks each providing 19,500 gallons of capacity. Approximately 100 days of service could be provided with the existing fuel storage capacity. FAX has completed the installation of a CNG fueling station, which produces the required CNG fuel for the 75 CNG buses and the 12 additional CNG buses to be delivered in 2011/12.

Handy Ride - Handy Ride maintains a total of forty-eight vans and 7 sedans which are maintained and serviced by MV Transportation. The preventative maintenance schedule for Handy Ride vehicles include a regular tune-up of vehicles to ensure that the maximum performance and fuel economy are obtained. Gasoline tune-ups are performed at 12 months or 24,000km/15,000 mile intervals. Additional vehicle components such as brakes and oil filters are changed at various intervals according to MV's certified inspection interval and procedures maintenance plan.

2.5.0 Transit Passenger Facilities

This section describes FAX's passenger facilities including transit centers, transit stop improvements and amenities. It also addresses actions to improve operations and passenger convenience as part of FAX's goal to enhance customer focus and improve mobility and access.

2.5.1 Transit Improvements and Amenities

FAX

Bus Stop Accessibility - FAX maintains one transfer center at Manchester Mall and three additional transfer centers in the downtown area, all within the City of Fresno. The transfer centers are safe and convenient facilities for bus-to-bus transfers as well as for inter-modal passenger transfers. Due to age and usage, periodic rehabilitation of FAX's transit amenities have been necessary to maintain them in an attractive, safe and functional condition. Examples of rehabilitation needs include sidewalk repair, painting and repair of structures, and replacement of benches and trash receptacles. Minor enhancements planned in conjunction with rehabilitation include upgrading of information signage, security lighting, and bicycle accommodations. In 2002, the Manchester Center was improved and upgraded to accommodate more client service.

In addition, FAX has more than 2,000 bus stops which need to be maintained. An ongoing transit stop improvement program provides convenient passenger access and assures safe operation of transit service. Passenger amenities such as shelters, benches, information signs, and trash receptacles are provided at many transit stops. Transit stop improvements are provided by FAX and by private developers as conditions of project approval by the City.

As part of the Department's American Recovery and Reinvestment Act (ARRA) capital projects plan, FAX plans to enhance the look and safety of its passenger amenities. This project includes increased security cameras, lighting and electrical work at shelters and bus stops, concrete work, and a themed look for shelters, benches, trash receptacles, signage and lighting.

Bus Stop Accessibility Improvements - To assure compliance with ADA, FAX established a program to construct passenger waiting pads, sidewalk extensions, and wheelchair curb ramps where needed. These bus stop improvements benefit transit



operations by improving the efficiency of boardings by disabled patrons and reducing the need for ADA paratransit trips. These improvements also provide improved accessibility to non-disabled transit riders. In addition, it should be noted that these improvements are the responsibility of the City of Fresno and not the Transit operator.

Bus Stop Shelter Program - FAX shelters are designed to include a brown frame with a dome, lighting for security, and a bus bench and trash receptacle. Design and placement of shelters complies with ADA guidelines. FAX inspects, cleans and maintains shelters as required. FAX works closely with the community in providing shelter service and has allowed one of the local high schools to paint the bus shelter with their school colors.

Transit Stop and Information Signs - FAX maintains over 2,000 bus stop information signs throughout the service area. Since 1999, FAX replaced most of its bus stop signs with more customer friendly informational signs. As part of the ARRA funding, FAX anticipates a renewed signing program system-wide.

Bus Stop Amenities - Benches are provided at over 500 bus stops for the comfort of waiting passengers, and are often provided at bus stops with concentrations of elderly and mobility impaired patrons. Benches are installed based on passenger request, ridership and acceptable site conditions, although the current bench program consists primarily of replacement of old or damaged benches. The Veterans Administration of Central California and FAX recently partnered to enhance bus stop amenities on VA properties in the Fresno area. New wider sidewalks, larger passenger shelters, new benches, and new security lighting have been installed at three bus stops on Clinton Avenue and on Fresno Street, which serve the facility.



Bikes on Transit - In 1997, FAX installed bike racks on all fixed route buses. The Bikes on the Bus Program significantly enhanced mobility and access for cyclists in the Fresno City area and helped to increase transit ridership by creating a new ridership market. Beginning in 2008, FAX began installing three position bike racks on a limited number of buses. As funding permits, FAX will continue retrofitting buses to the higher capacity bike rack. To date, all FAX buses have bike racks which can hold at least two bicycles at a time. Future bus procurements will include a three position bike racks.

New Zero-Emission Buses - FAX is pursuing the purchase of two; full-size, zero-emission, buses, replacement batteries, and a recharging station to further development of a Downtown circulator program in the City of Fresno. This purchase presents a unique opportunity for the Department of Transportation/FAX, to provide long-term benefits related to environmental improvement based on innovative transit technology.



2.6.0 Fare Structure

After eight years without a fare increase, FAX requested and received permission from the Fresno City Council to increase its regular adult fare from \$1.00 to \$1.25 which became effective January 10, 2011. FAX also increased the Senior/Disabled one way fare from 35 cents to 60 cents. Beginning in 2005, FAX introduced the Metro Pass, which allows passengers access to unlimited use of the FAX and Clovis fixed route systems. See Table 2.4 for Fare Structure.

Table 2.4: FAX Fare Structure

Fare Category	Adult Fare FAX	Adult Fare HANDY RIDE
Single Ride	\$1.25	\$1.50
20 Tokens/50 Tokens	\$ 22.50/\$55.00	N/A
#Metro Pass (unlimited rides)	\$48.00	\$48.00
Children under 6 and Trolley Rides	Free	N/A
	Senior/Disabled Fare FAX	Senior/Disabled Fare HANDY RIDE
Single Ride	\$.60	\$1.50
Monthly pass	\$24.00	\$48.00

The FAX Metro Pass is for use on FAX and Clovis Stageline services

2.7.0 Customer Services

FAX has made a commitment to provide high quality service, and to portray a positive image of FAX, Handy Ride and public transit in general by providing customer services described below:

2.7.1 World Wide Web

FAX as part of the City of Fresno maintains a World Wide Web page on the Internet (<http://www.fresno.gov/fax>) which includes maps and schedules of the transit system.

2.7.2 Public Information Programs

Public information is the cornerstone of a successful transit system. FAX's public image has been enhanced and shaped by a focus on accuracy and consistency of message. Described below are various information services and programs FAX offers to meet the needs of our customers.

Information Services - FAX provides transit information and trip planning services by phone, through mail or in person. FAX's maps and schedule guides are available in over 30 locations citywide. In FY 2004, FAX introduced the 621-RIDE number which provides easier access for passengers to all FAX services. FAX has installed announcements on all buses which provide passengers with bus stop locations and times while on the buses. FAX has also installed On-Street Signs at the Manchester Transit Center, Downtown Shelters, Fresno State University and other locations, which provide actual real arrival and departure times for all routes while passengers are waiting for instant assurance that they have not missed their bus.

Manchester Information Center - FAX operates a walk-up Customer Service Center at the Manchester Mall in central Fresno. The center allows customers to receive personalized trip planning, pick up schedules, purchase passes and tickets, and register a passenger suggestion or complaint.

Outreach and Partnership Programs - FAX provides public outreach to various social service groups in the area including senior groups, Students and new immigrants in an attempt to familiarize citizens with the advantages of using transit. In FY10, FAX staff attended over 20 different events in the community. Staff provided these public groups with information on how to use public transit, how to read schedules and maps, and about the role transit plays in protecting the environment.

Multi-cultural Marketing Programs - FAX provides multi-lingual materials and use of multi-lingual advertisements to reach, educate, and promote ridership among the multi-cultural communities. According to 2009 ACS data the FAX service area is comprised of 63% minority population groups who speak more than 10 languages requiring translation of key FAX documents. And 39% or nearly 204,000 people need language assistance to understand and communicate their basic travel needs. (See the detailed maps of minority, low income and limited English Proficiency population concentrations in the Title VI Appendix of this document).

Employer Services Program - FAX's employer services program is designed to benefit local

employers by increasing awareness and interest in FAX services. Among the services offered are free informational and promotional materials, on-site promotions, and trip planning assistance. FAX also provides service to several major employers in the area and continues to seek ways to encourage Single Occupant Vehicle riders to consider alternative transportation choices.

Media Relations - FAX interacts as needed with local media to promote existing and new services, programs and issues involving transit. Information is provided in English, and Spanish, and is designed to provide general awareness of FAX to both the media and the public alike.

2.7.3 Transit Security Program

FAX customer's value safety and security when using the transit system and to address these concerns:

Transit Security Plan - FAX security plan provides a highly visible security presence for our transit customers and employees. FAX uses City of Fresno police officers to deliver system wide protection. Our customers see uniformed patrol officers on buses and at transit facilities. As a result of the police presence, passengers feel safer, and public property has been protected from vandalism and graffiti. Since the introduction of the police officers, the number of crimes has been reduced.



Video Surveillance System - In an effort to prevent graffiti and vandalism on buses, FAX identified the need for an On Board Video Surveillance program. It is believed that the presence of the video surveillance cameras serve as a deterrent to vandalism and other crimes. FAX is in the process of installing digital video systems on-board all of its buses. Another capital project utilizing ARRA funds is the transit facility security enhancements, including an access control system and base facility video monitoring.

2.7.4 Special Community Services

FAX considers itself a good neighbor and a vital part of the community we serve. The following programs illustrate steps FAX has taken to give more than just transit services to the community:

Project Safeplace - FAX leads the nation in transit properties for the number of youth who have taken advantage of the Safeplace Program. The program is a national partnership of community organizations, schools and neighborhood businesses that provide Safeplace designated locations for children and runaways who may be exposed to crime and exploitation. Each one of FAX's 125 buses is a designated Safeplace, and since the inception of the program, over 300 youth have been assisted through the program.

Bus Interior Public Service - In an effort to work more closely with the non-profit community, FAX provides space within the buses for various organizations to provide information at no charge. During FY10, over 20 different agencies used this service to provide information regarding social services such as Narcotics Anonymous, Girl Scouts of America, Social Security Administration, and the Workforce Development Department.

Clean Fuels Program – FAX has been very involved in converting its fleet to cleaner burning fuels in an attempt to attain maximum efficiencies and to protect the environment. As part of its overall fleet FAX has 75 CNG buses with 12 more to be delivered in 2011/12, 3 hybrid electric buses, 4 CNG trolleys, and 62 vehicles converted with aftermarket Cleaire kits which reduce NOx emissions by 30% and PM10 by 90%.

2.8.0 Integration of Transportation and Land Use

Continuing growth in the FCMA over the past decade has led to increasing traffic and air quality concerns, and has elevated the role of efficient land use planning and its relationships to transportation. Land use determines commute patterns by influencing where people live and work and what convenient means of transportation are available to them to travel between these two points. The sprawling leap frog development patterns that have characterized the growth in Fresno have placed increased pressure on the roadway system and have reduced the convenience of alternate options, such as transit, bicycling and walking. The transportation system also shapes land use patterns as development tends to occur along major transportation corridors. A key effort in achieving this goal is the City of Fresno's General Plan update which was adopted in 2003 and is being revised again this year to include Fresno's first form based codes. Implicit in this document is a section on transportation and land use strategies to create better communities with multiple transportation choices such as Transit Oriented Developments (TOD's) and Pedestrian Oriented Developments (POD's), identifying downtown Fresno as the top priority for redevelopment and reinvestment.

Benefits of coordination

It is important not just to plan for smarter growth, but to take the steps to implement it. The coordination would forge a stronger connection between regional transportation planning and local land use planning and decision-making.

Land use influences travel behavior and can be a powerful tool to improve the efficiency and effectiveness of the regional transportation system. If it is convenient for people to travel to common destinations by public transit, walking, or biking, the County can reap air quality and congestion-relief benefits at the local and regional scale.

Many aspects of the relationship between land use and transportation are well understood. We know, for example, about the effect that population and employment density have on travel behavior, and what happens to land use when a transportation investment is made.

The use of transportation funds

The City of Fresno/FAX should research a coordination program that could use transportation funds to provide financial incentives to encourage transit supportive development near transit centers and/or capital grants to local jurisdictions for small-scale transportation improvements. Proposals would be submitted by public agencies, and evaluated for how well they promote the San Joaquin Valley Blueprint and PTIS Principles, and the level of project maturity and commitment to actual physical construction. The program would fund both planning activities and construction of improvements consistent with those planning activities. It would place an emphasis on involving the public in decision-making and taking steps to create places that have the physical attributes that supports walking trips, compact development and civic vitality.

Capital grants may direct transportation dollars to support smaller-scale capital projects that can help promote transportation choices as well as support land use changes in the form of infill housing and transit-oriented development. For some specific examples of where linking land use and transportation investments have been successful in the past see the PTIS Report located at www.FaxtTrackFresnoCounty.com.

2.8.1 Development Review Program

The City of Fresno has a Development Review Committee which reviews all significant projects. Under this program, the City refers proposed new development projects to FAX for comment during the approval process. After comprehensive review, FAX submits recommendations for project conditions or mitigation measures to the City/County. The intent of the Development Review is to ensure compatibility between the transportation system and the development project. FAX reviews over 100 development submittals from the City per year and as a result has been essential in ensuring the construction of numerous transit related and transit friendly improvements by the private sector, such as new bus stops, bicycle and pedestrian pathways and street improvements. FAX continues to be involved in major project developments such as Fancher Creek, El Paseo, and others to ensure that transportation issues are given the fullest consideration.

Chapter 3: Transit Service Improvement Program

3.1.0 Introduction

FAX's Strategic Goals reflects a strong commitment to making transit a more attractive option for travelers within the FCMA. To achieve these goals, FAX plans some significant investments in system improvements. The fast growing population and employment base of the Valley has resulted in a tremendous need for additional transit services. FAX is responding to this need through an ambitious expansion plan with innovative programs and improvements to our existing services. However, in order to achieve the level of service improvements needed, FAX has to mitigate for the array of Federal, State and locally mandated programs and priorities including air quality, energy, congestion management, alternative fuels and protection of minorities, low income and non-English speaking populations. The need for additional transit funding to provide FAX the flexibility to not only conform with mandated requirements, but also to improve the quality of service and initiate progressive transit measures is crucial. The following provides an overview of these areas which will ultimately impact FAX over the next five years and beyond.

Air Quality - Fresno County is one of eight counties in the San Joaquin Valley Unified Air Pollution Control District (Valley Air District), which currently does not meet several of the air quality standards set forth in the Federal Clean Air Act or the California Clean Air Act. The Valley Air District is a designated non-attainment area for ozone ("serious") and particulates (both PM10 ["serious"] and PM2.5) and is a maintenance area for carbon monoxide. The Valley Air District similarly fails to meet California standards for these pollutants. As a result, the County must satisfy Federal requirements calling for consideration of transportation control measures to reduce emissions and demonstrate conformity with the State Implementation Plan for Air Quality. It follows that whatever transportation projects are considered and ultimately implemented must not deteriorate existing problems and must support efforts to bring the County into air quality attainment. Given auto and truck travel is a major source of critical emissions, the County must consider implementing more-efficient (e.g. increased occupancy, reduced travel times, lower costs), high-capacity modes of transportation that provide competitive options to the auto. Such transportation modes must also address the need to provide suitable alternative travel options to parts of the population who have limited mobility, and parts of the County currently inadequately served by public transportation.

Modifying travel demand is an increasingly important issue for the future, both in terms of congestion management and modifying travel demand. Current financial, energy, and environmental resources are overburdened, and the seriousness of this region's air quality problems may lead to implementation of more stringent measures to reduce future vehicle travel. Public transit will continue to play a major role in any proposed transportation systems management activities which are undertaken. This makes it critically important that the state and federal governments continue at least their present level of resource allocation to support local transit programs.

The Federal Clean Air Act Amendments of 1990 (FCAAA) placed tough requirements on the sources and causes of air pollution in areas which fail to meet federal air quality standards, such

as the San Joaquin Valley. The Amendments require substantial reductions from all pollution sources, including transportation, and established a strengthened conformity requirement to ensure that these reductions are achieved. The term “air quality conformity” refers to the process whereby transportation plans, programs and projects are shown to conform to the requirements of the Clean Air Act Amendments and applicable State implementation Plan (SIP).

The very same characteristics that make the Valley the world’s most productive agricultural region also create optimal conditions for creating and trapping pollution. Due to the Valley’s unique geography and meteorology, the bowl shaped valley is perfect for the creation of ozone in the long hot summers and the trapping of particulates in the cold damp winter months. This makes it critically important that the state and federal governments continue at least their present level of resource allocation to support local transit programs.

Federal Requirements - Federal and state legislation requires an integrated transportation/air quality planning process. The Federal Clean Air Act (FCAAA) reaffirmed that all nonattainment areas are required to attain the National Ambient Air Quality Standards. The Amendments called for implementation of all reasonably available control measures to reduce air pollution levels. Numerous specific reductions of emissions and an aggressive attainment time frame were required. Although the San Joaquin Valley Air Pollution Control District is responsible for implementing most Federal Clean Air Act requirements, Metropolitan Planning Organizations are responsible for the development and implementation of transportation control measures and conformity analyses. The FCAA established a close link between clean air goals and transportation investments. Where air quality requirements are not being met, sanctions on highway program funds may be imposed under the act.

Federal Title VI Requirements – Title VI of the Civil Rights Act of 1964, Section 601 states:

“No persons in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance.”⁶

FAX’s responsibility is to guarantee that all transit service, and access to its facilities, are equitably distributed and provided without regard to race, color, or national origin. FAX’s goal is also to ensure equal opportunities to all individuals to participate in all local, sub regional and regional transit planning and decision-making processes. Therefore, FAX is proactively giving special consideration and review as to the Title VI implications of fare increases and service reductions, to ensure that FAX takes no actions that violate federal mandates. A minority transit route is defined as a route that has at least 1/3 of its total route mileage in a census tract(s) or traffic analysis zone(s) with a percentage of minority population greater than the percentage of minority population in the transit service area. (See the Title VI population maps in Appendix C of this document).

⁶ United States Department of Justice, Civil Rights Division, Title VI of the Civil Rights Act of 1964

State Requirements - In order to ensure the future health and welfare of the people, the State's environment, and the economy, the California Clean Air Act was adopted. The passage of this bill ensured the protection despite lack of action or direction from the federal government. From a transportation perspective, the bill facilitates the adoption and implementation of regulations to reduce emissions from indirect and area wide sources, to improve motor vehicle maintenance and inspection, the use of cleaner burning fuels, the implementation of stricter than federal new vehicle emission standards, and to encourage mobile source strategies and transportation control measures (TCM) such as ridesharing, vanpooling, flexible work hours, and increased multi passenger trips through mass transit or other measures in order to reduce single occupancy vehicle usage. The federal CAA allows California to apply for a special federal preemption waiver for programs that are more stringent than federal regulations require.

State legislation was passed during FY91 which allows the formation of an eight county San Joaquin Valley Air Pollution Control District (SJVAPCD). The eight counties are Fresno, Kings, Madera, Merced, San Joaquin, Stanislaus, Tulare, and the valley portion of Kern. (The eastern portion of Kern County falls outside the San Joaquin Valley Air Basin and lies within the Mojave Desert Air Basin.) The SJVAPCD has the authority to adopt rules and regulations to protect the public health and prevent violations of ambient air quality standards in the San Joaquin Valley Air Basin. The SJVAPCD prepares attainment demonstration plans (State Implementation Plans) for criteria pollutants. Ultimately, the role of mass transit will be reflected in these plans and will become an important factor in alleviating traffic congestion and improving air quality.

SB 375 (Chapter 728, Statutes of 2008) directs the California Air Resources Board to set regional targets for reducing greenhouse gas emissions. The new law establishes a "bottom up" approach to ensure that cities and counties are involved in the development of regional plans to achieve those targets. SB 375 builds on the existing framework of regional planning to tie together the regional allocation of housing needs and regional transportation planning in an effort to reduce greenhouse gas (GHG) emissions from motor vehicle trips.

What is AB32?

AB 32, California's Global Warming Solutions Act of 2006, gives the California Air Resources Board authority over sources of greenhouse gas emissions, including cars and light trucks. According to the California Air Resources Board, transportation accounts for some 40 percent of greenhouse gas emissions, with cars and light trucks accounting for almost three-quarters of those emissions (30 percent overall).

SB 375, authored by Senator Darrell Steinberg, directs the Air Resources Board to set regional targets for the reduction of greenhouse gas emissions. Aligning these regional plans is intended to help California achieve GHG reduction goals for cars and light trucks under AB 32, the state's landmark climate change legislation.

Because the existing regional transportation planning and housing allocation processes are overseen by local elected officials selected by their peers to serve on regional agency boards, the law is intended to ensure that cities and counties are closely involved in developing an effective

plan for the region to achieve the targets. To increase public participation and local government input, the law strengthens several existing requirements for public involvement in regional planning. The new law establishes a collaborative process between regional and state agencies to set regional GHG reduction targets, and provides CEQA incentives for development projects that are consistent with a regional plan that meets those targets. Cities and counties maintain their existing authority over local planning and land use decisions.

Local Programs - In recognition of the extraordinary challenges that face the San Joaquin Valley Air Basin, AB 2522 was signed into law in 2008. This bill allows the SJVAPCD to increase the surcharge on vehicle licensing fees up to \$30 annually per motor vehicle. This bill provides significant additional funding to improve air quality through incentive-based programs. In the past, programs such as auto buy-back, heavy duty vehicle incentive for cleaner engines, vehicle exhaust smoke monitoring and related TCM's have been funded.

Federal Congestion Management System -

In June 1990, California voters approved legislation requiring that Congestion Management Plans (CA CMP) be developed in urbanized counties to address congestion on California's highways and roads. At the federal level, Congestion Management System (CMS) was first introduced in the Intermodal Surface Transportation Efficiency Act (ISTEA) in 1991. CMS became Congestion Management Process (CMP) when the Safe Accountable Flexible Efficient Transportation Equity Act – A Legacy for Users (SAFETEA-LU) was enacted in 2005. Fresno COG developed its first Congestion Management Program in November 1991, and it was updated subsequently based on legislative requirements. The passage of CA Assembly Bill 2419 (Bowler) in 1996 allowed counties to “opt out” of the California Congestion Management Program if a majority of local governments elected to exempt themselves from the California CMP. The Fresno COG Policy Board rescinded the Congestion Management Program on September 25, 1997 at the request of the local member agencies. The current Fresno County Congestion Management Process is designed to meet the federal requirement under 23 CFR 500.109 and 450.320.

The SAFETEA-LU mandates that Transportation Management Areas (TMAs), urban areas with population over 200,000, “shall address congestion management through a process that provides for safe and effective management and operation, based on a cooperatively developed and implemented metropolitan wide strategy, of new and existing transportation facilities ... through the use of travel demand reduction and operation management strategies.” It further requires that federal funds may not be programmed in a carbon monoxide and/or ozone non-attainment TMA for any highway project that will result in a significant increase in single-occupant-vehicle (SOV) capacity unless the project is based on an approved CMP. Fresno County is designated as a non-attainment TMA for ozone, and was so designated for carbon monoxide, but the Fresno Urbanized Area was reclassified as attainment for carbon monoxide effective on June 1, 1998.

Need for Additional Transit Funding - The key problem facing all transportation modes is still the lack of available financing. For public transportation, both service enhancement and ongoing operations and maintenance funding issues remain. Traditional sources of transit funding even when augmented by a locally approved 1/2 percent sales tax, are inadequate to meet identified public transportation needs within the FCMA. Other sources such as the SJVAPCD Remove grants and Moyer funds, and Petroleum Escrow Violation Account (PEVA) funds continue to be pursued. While these sources may provide some one-time capital or short-term project demonstration funds, necessary ongoing operating revenues must be obtained if public transportation is to meet the goals outlined in the Regional Transportation Plan.

The financial outlook assumes stable revenue sources over the next five years. Any significant unanticipated decline in this revenue stream likely would result in reduced levels of service to the community or increases in fares to offset any deficits.

The **Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)** is a bill that governs United States federal surface transportation spending. It was signed into law by President George W. Bush on August 10, 2005 and expired on September 30, 2009. Congress has authorized continuing resolutions to maintain funding levels and is expected to finalize a replacement bill for the next six-year period during its 2011 session.

Dedicated Local Support - On November 7, 2006 the voters of Fresno County authorized the continuation of a ½ cent retail transaction and use tax over twenty years. The sales tax extension will provide an estimated \$1.7 billion in new revenues for transportation improvements throughout the county according to projections estimated through 2027. Prior Measure C funds were allocated at the discretion of the Fresno City Council. The reauthorized measure dedicated approximately 13% of the revenue to FAX as a Local Agency Pass-through. Through Measure C, FAX is estimated to receive \$235 million over the 20-year-life of the measure. This amounts to approximately \$11.7 million per year. Fresno Area Express has established two programs to guide the expenditures of Measure C funds:

Primary Program – The goal of the Primary Program is to improve the level of public transit services within the City of Fresno and to continue to seek ways to coordinate and/or consolidate public transit services to achieve a seamless transit system for the public.

- Improve bus frequencies to every 15 minutes on the busiest routes on the public transportation system in Fresno
- Enhance the delivery of paratransit services to the disabled community consistent with federal and state law
- Install and integrate a regional Automated Fare Collection System (AFC) to enhance transit coordination and seamless passenger travel between transit systems
- Complete fleet conversion to low emission buses
- Expansion of service areas to all riders, as Fresno's sphere of influence changes
- Free general public transit fares for Seniors 65 years of age and older

Secondary Program – Secondary Programs include improvements that will be funded after

projects in the Primary Program are implemented, provided that funding is available.

- Extend weekend service hours
- Enhance the delivery of paratransit services to the senior community
- Pursue other alternative mass public transportation options such as bus rapid transit, automated people movers, light rail, etc.
- Deploy other operational and infrastructure improvements such as “real time” bus arrival and departure information displays to provide better service to transit users
- Taxi Scrip Program for Seniors 70 years of age and older

Measure C has the potential to have a major impact on public transit in the City of Fresno, and to date, a number of the programs goals have been implemented or are in the planning stages. These include free senior travel, taxi scrip, and the AFC (Fall 2011). However, with the recent economic downturn coupled with reduced state funding, FAX has delayed a number of the other projects. In 2010, Actual Measure C revenue was \$6.6 million compared to initial estimates of \$11.7 million. This is 43% lower than original projections. Fiscal year 2011 is budgeted to remain relatively flat at \$6.9. Due to the reduced funding from Measure C, projects in the Primary Program have been modified. Service frequencies have been reduced to every 20 minutes on the primary corridors and we no longer provide free transit for seniors 65 years of age and older.

3.2.0 Improvement Program for Current Service

In order to achieve the goal of maintaining financial stability, FAX must continuously seek improvements in service productivity and cost-effectiveness. Since the majority of FAX's budget is spent to provide service on the street, it is critical that service be regularly monitored to ensure these resources are being utilized to the fullest extent possible. FAX has addressed system productivity by instituting an ongoing program of service evaluation to identify inefficient use of resources and respond with corrective measures. To address cost-effectiveness, FAX has instituted programs to reduce operating costs and help achieve the highest fare box revenue return as possible. The TDA requires FAX to meet a 20% farebox, and in FY10, FAX exceeded this requirement with a 23.4% farebox return.

Bus Rapid Transit (BRT) Design on Blackstone Avenue and Ventura/Kings Canyon

FAX was recently notified by the FTA that they will be receiving \$38.55 million (at 80% match) to begin design work on Bus Rapid Transit.

Project Description: Fresno Area Express (FAX) plans to implement street-running BRT between north Fresno, downtown Fresno and the Southeast Growth Area. The Blackstone/Kings Canyon BRT project includes transit signal priority, real-time bus arrival displays and proof-of-payment fare collection; service would be operated using low-floor, low emission compressed natural gas (CNG) or CNG-hybrid buses, including eight articulated buses that would be purchased as part of the project. Dedicated lanes for the BRT vehicles would be implemented along approximately 20 percent of the alignment. BRT service would replace existing local service in the corridor and offer decreased travel times through fewer stops, more frequent service and the aforementioned priority

treatments.

Project Purpose: The Blackstone/Kings Canyon BRT project would improve the speed and reliability of service in a commercial corridor with existing high transit demand. Much of FAX's ridership in the corridor is low-income or transit-dependent. BRT service would provide faster connections between the Southeast Growth Area, which is anticipated to add up to 55,000 new residents by 2025; downtown Fresno, a regional hub for civic and governmental institutions; and North Fresno, which houses significant education campuses, medical centers, and commercial centers.

Project Development History, Status and Next Steps: FTA approved the Blackstone/Kings Canyon BRT project into project development as a Very Small Start in December 2010. Over the next year, FAX expects to conduct engineering and design activities. FAX anticipates that the project will qualify as a documented Categorical Exclusion for NEPA purposes. Revenue operations are anticipated to commence in early 2014.

The proposed alignment follows N. Blackstone Avenue in the northern portion of the corridor, O and P Streets through Downtown Fresno and Ventura Avenue-Kings Canyon Road in the eastern portion of the corridor. The alignment begins just north of the RiverPark Shopping Center on Friant Road at Audubon Drive and continues south on Blackstone Avenue to Hedges Avenue. Then the alignment follows the one-way couplet through Downtown Fresno (southbound on Blackstone Avenue to O Street, northbound on P Street and Abby Street). The distance is approximately 9.4 miles. The route is currently served by FAX Route 30, connecting downtown Fresno with Fresno City College, the Manchester Transit Center, Heald College and the River Park Transit Center.

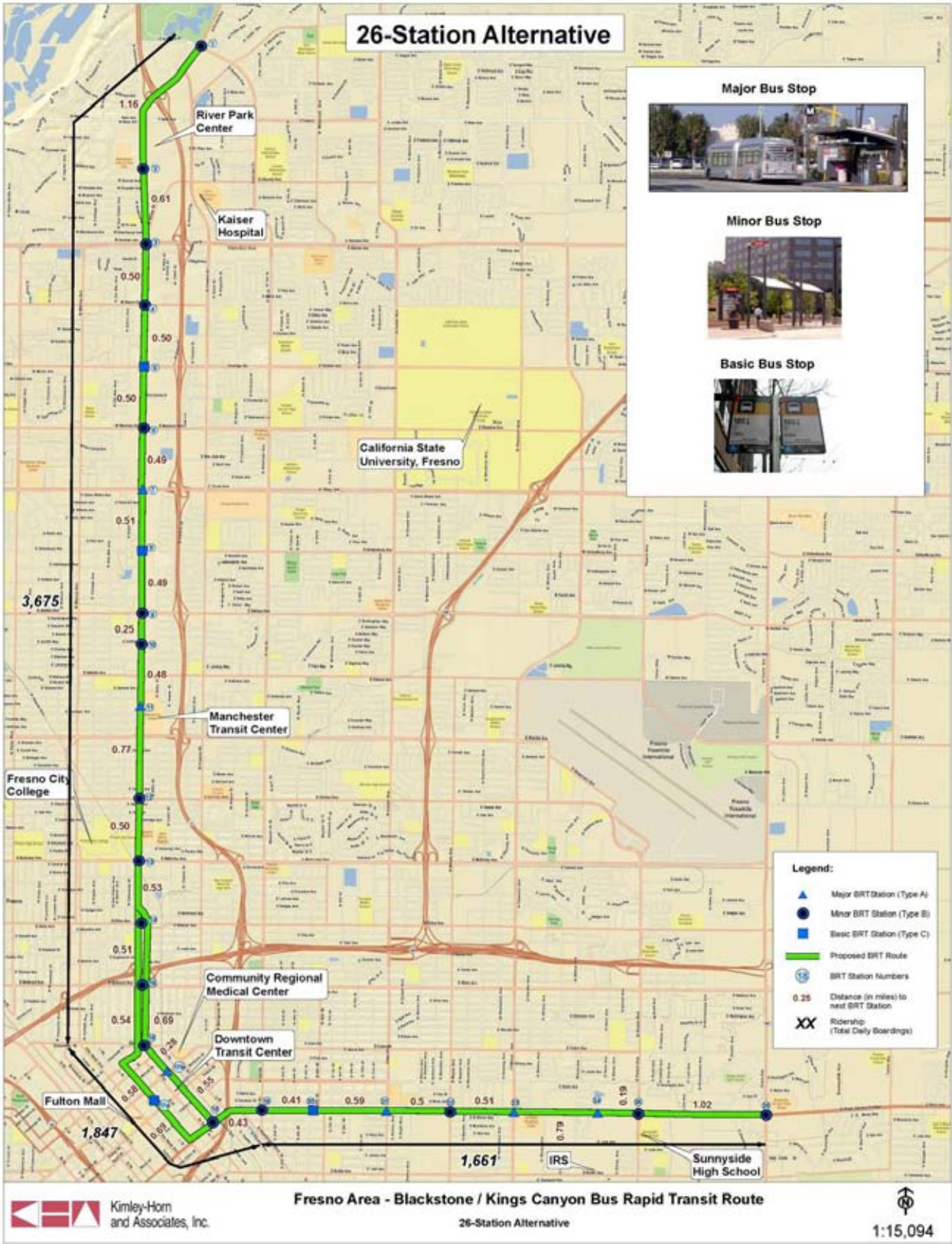


The alignment and the BRT service continues east as a single route on Ventura Avenue which turns into Kings Canyon Road east of Cedar Avenue and terminates at Fowler Avenue, a distance of approximately 5.4 miles. The Kings Canyon Road-Ventura Avenue corridor connects a major growth area of southeast Fresno (up to 55,000 new residents provided for in the 2025 General Plan) to downtown Fresno. The route is currently served by FAX Route 28, and connects downtown Fresno with the Social Services offices, Eastgate Shopping Center, Sunnyside High School, and Fresno Pacific University. A total of 26 station locations have been approved by the Fresno COG for the BRT as identified in **Table 3.1** and located on **Figure 3.1** below.

Table 3.1: Proposed BRT Station Locations

Station Location			Bus Classification (Major, Minor, Basic)	Distance from Previous Station (miles)
1	Friant Road	at Audubon Dr (End of Line)	Minor	-
2	Blackstone Avenue	at N. of El Paso (NB & SB)	Minor	1.16
3		at Herndon Ave (NB & SB)	Minor	0.61
4		at Sierra Ave (NB & SB)	Minor	0.50
5		at Bullard Ave (NB & SB)	Basic	0.50
6		at Barstow Ave (NB & SB)	Minor	0.50
7		at Shaw Avenue (NB & SB)	Major	0.49
8		at Gettysburg Ave (NB & SB)	Basic	0.51
9		at Ashlan Ave (NB & SB)	Minor	0.49
10		at Griffith Way (NB & SB)	Minor	0.25
11		at Manchester Center	Major	0.48
12		at Clinton Avenue (NB & SB)	Minor	0.51
13		at McKinley Avenue (NB & SB)	Minor	0.25
14		at Olive Avenue (NB & SB)	Minor	0.53
15		at Belmont Avenue (SB) at Abby Street (NB)	Minor	0.51
16	Stanislaus St	at P Street (NB & SB)	Minor	0.52
17	M St P St	at Mariposa St (SB) at Fresno St (NB)	Basic Major	0.43
18	Ventura St	at P St (EB & WB)	Minor	0.62
19		at 1st Street (EB & WB)	Minor	0.43
20		at 5th/6th St (EB & WB)	Basic	0.41
21	Kings Canyon Road	at Cedar Avenue (EB & WB)	Major	0.59
22		at Maple Avenue (EB & WB)	Minor	0.50
23		at Chestnut Avenue (EB & WB)	Major	0.51
24		at Helm/Transit Village/Wal-Mart (EB & WB)	Major	0.54
25		at Peach Avenue (EB & WB)	Minor	0.19
26		at Clovis Avenue (EB & WB)	Minor	1.02
Total Distance to Clovis Ave (mi)				13.79
Average Spacing (mi)				0.55

Figure 3.1: Locations of Proposed 26 BRT Stations



3.2.0 Unfunded Transit Needs

Third Shift and Weekend Evening Service - The SRTP does not provide for extended fixed-route evening service on weekends, nor does it provide for third shift service at any time. All weekend operations are completed by 7:45 P.M. The need for night service on weekends, and the potential need for third shift service to satisfy the needs of transit dependant populations to seek and maintain employment will be evaluated during the course of this SRTP and is contingent on future revenue.

From the San Joaquin Valley Express Study - For a majority of the region, investments in ridesharing are the most cost-effective strategy. The region's focus should be on expanding vanpool offerings in both the northern and southern parts of the Valley. The new Air District rule requiring trip reduction programs from large employers offers the opportunity for both a new funding stream, and an effective marketing strategy for expanded vanpool offerings.

Other projects that have been identified for implementation when funding levels to FAX are restored include:

- Owl service on all routes until midnight
- Restore peak hour 15 minute headways on all routes
- Add 2nd and 3rd shift bus service
- Extend weekend service hours
- Extend bus service to northeast Fresno
- Extend bus service to northwest Fresno
- Add East-West service on Bullard Avenue
- Add bike lockers at CSUF and various bus stop locations
- Apply for FTA funding for BRT on Shaw Avenue from Highway 99 to Clovis, and serving CSU Fresno.
- When high speed rail becomes a reality, apply for federal funding for a streetcar project as a planned complement to new development projects.

3.2.1 Route Evaluation Process

The primary assessment of transit service is accomplished by measuring individual route performance using FAX's route evaluation process. When appropriate, corrective action is taken to modify route alignments, and change the service schedule to ensure that resources are used in the most productive manner.

3.2.2 Key Transit System Performance Indicators

There are many methods for evaluating the efficiency and effectiveness of public transportation service. Because each method has unique strengths and weaknesses, FAX employs several service evaluation methods. Among the methods used are: peer review analysis, system minimums assessment, and passenger surveys.

Peer Review Analysis - Peer Review Analysis uses standard service measurement criteria to compare one system's performance against another. This kind of analysis is most valuable when standard, well controlled data sets are available, and when the systems being evaluated have similar operating environments.

FAX Peer Review Analysis - For this Peer Review Analysis, five California transit agencies were selected: Modesto Area Express (MAX), Visalia City Coach, Sacramento RTD, Bakersfield (GET), and Stockton RTD. All five agencies are Federal Transit Administration (FTA) Grant Recipients, and therefore, required to provide their system performance data to the National Transit Database (NTD). Furthermore, because these are all California agencies, they must operate under the same California State Transportation Development Act Guidelines.

Modesto Area Express (MAX) and Visalia City Coach were selected because they operate in the closest proximity to Fresno. Sacramento RTD, Stockton RTD, and Bakersfield (GET) were selected because they are closest in fleet size and operating characteristics to Fresno. None of these properties are an exact match to FAX; however, their experience will help define FAX's stature among peer agencies.

Table 3.2: System Comparison – Cost-Effectiveness
National Transit Database FY2009

* These systems are operated under contracts with private operators.

System	Passengers/ Hour	Passengers/ Mile	Cost/ Hour	Cost/ Passenger	Farebox Recovery	Score	Ranking
FAX	1	1	4	1	1	1.6	1
Bakersfield*	3	3	1	2	2	2.2	2
Modesto*	4	4	2	3	3	3.2	3
Sacramento RTD	2	2	6	4	4	3.6	4
Stockton	6	6	3	5	6	5.2	5
Visalia*	5	5	5	6	5	5.2	6

As shown in Table 3.3, System Comparison - Cost-effectiveness, FAX places very well among the selected peers in two of the four categories. With an average of 45.34 passengers per hour, 36 percent higher than the peer system average of 29.14. FAX ranked number one in this important productivity indicator. In the Cost per Passenger trip comparison, FAX is also ranked number one with a cost per passenger trip that is 41% lower than the peer system average.

Figure 3.2: FAX Passengers per Revenue Hour Comparison with Peer Operators

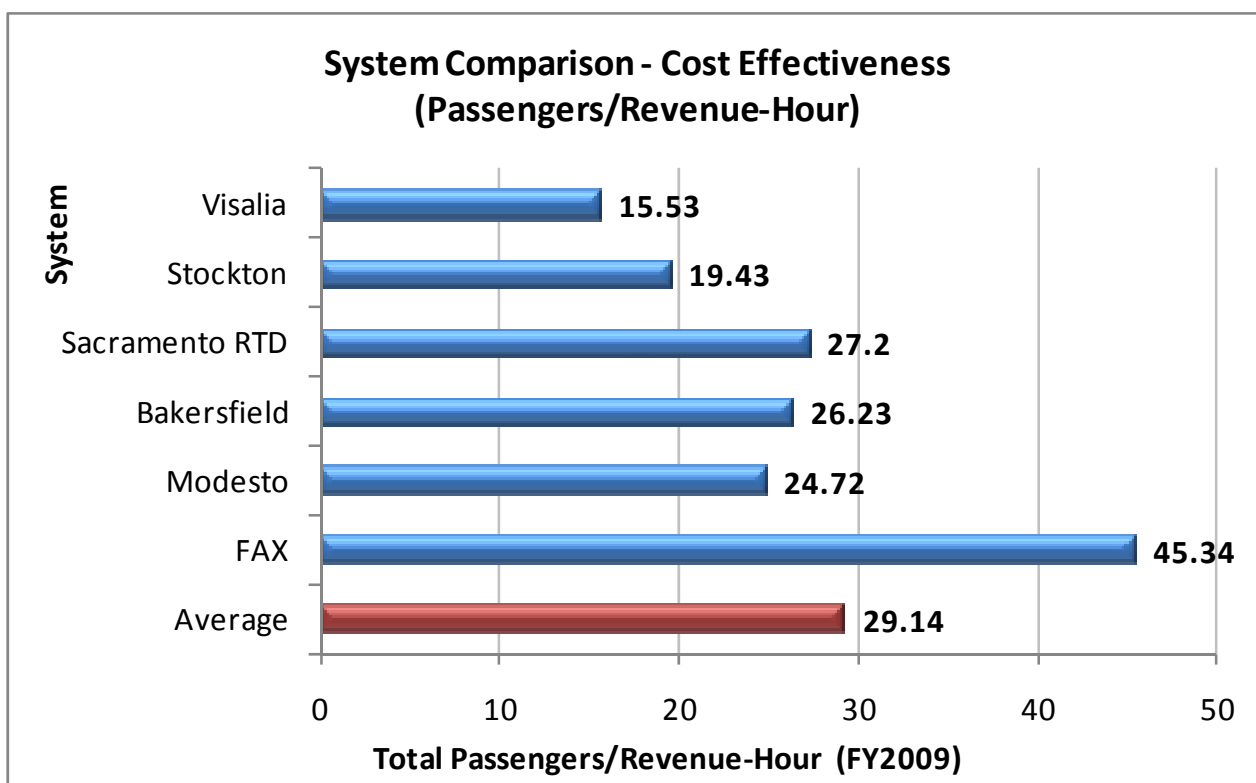
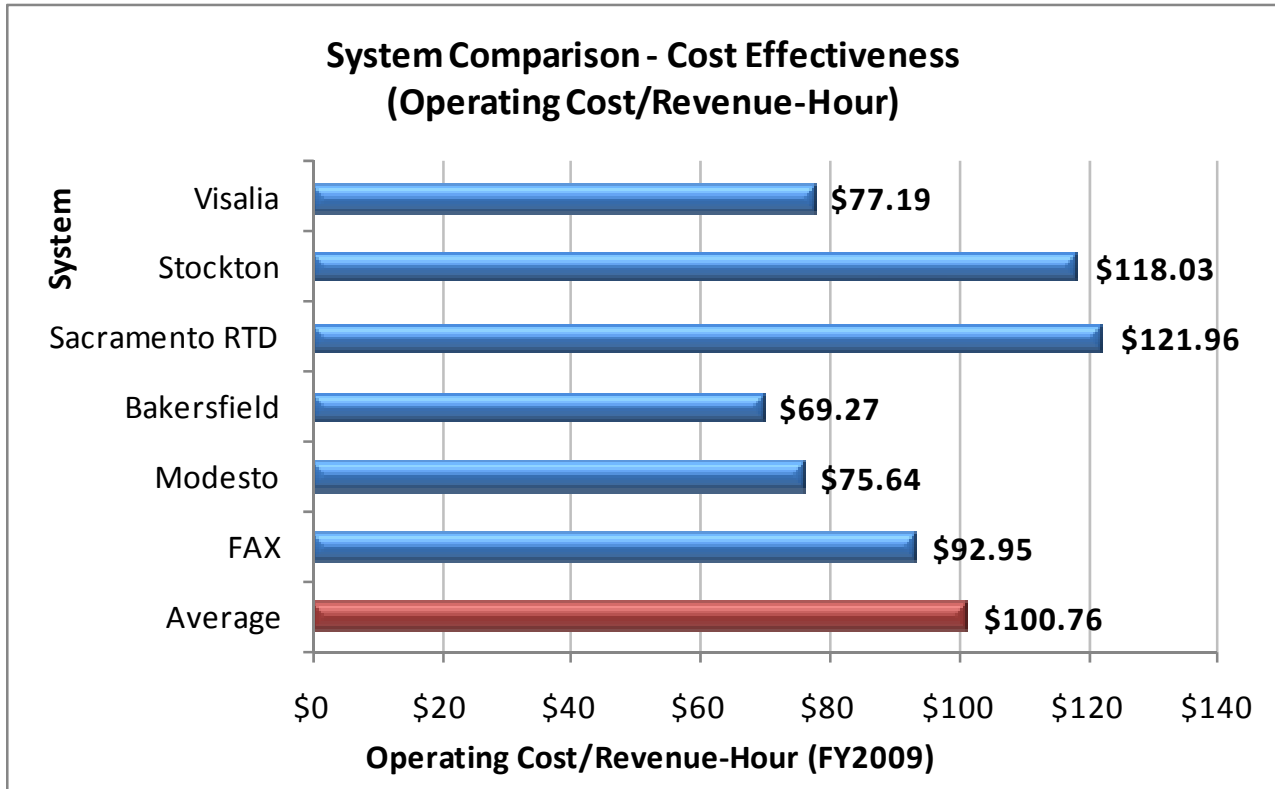


Figure 3.4 above clearly illustrates that FAX is operating an incredibly efficient transit service, carrying 15 more passengers per hour than the average of the peer operators.

Figure 3.3: FAX Operating Cost Per Revenue Hour Comparison with Peer Operators



At just over \$100 per hour, FAX is operating at just below the peer systems average cost per hour and is operating at below the cost of two of the five peer systems. FAX's operating expense per hour as \$92.95, or 7.7 percent lower than the peer system average of \$100.76. FAX ranks fourth in terms of operating expense per hour. However, an analysis of peer systems also reveals the three lowest hourly expense figures come from properties where the transit operators are contracted outside of the agencies, leading to lower labor costs.

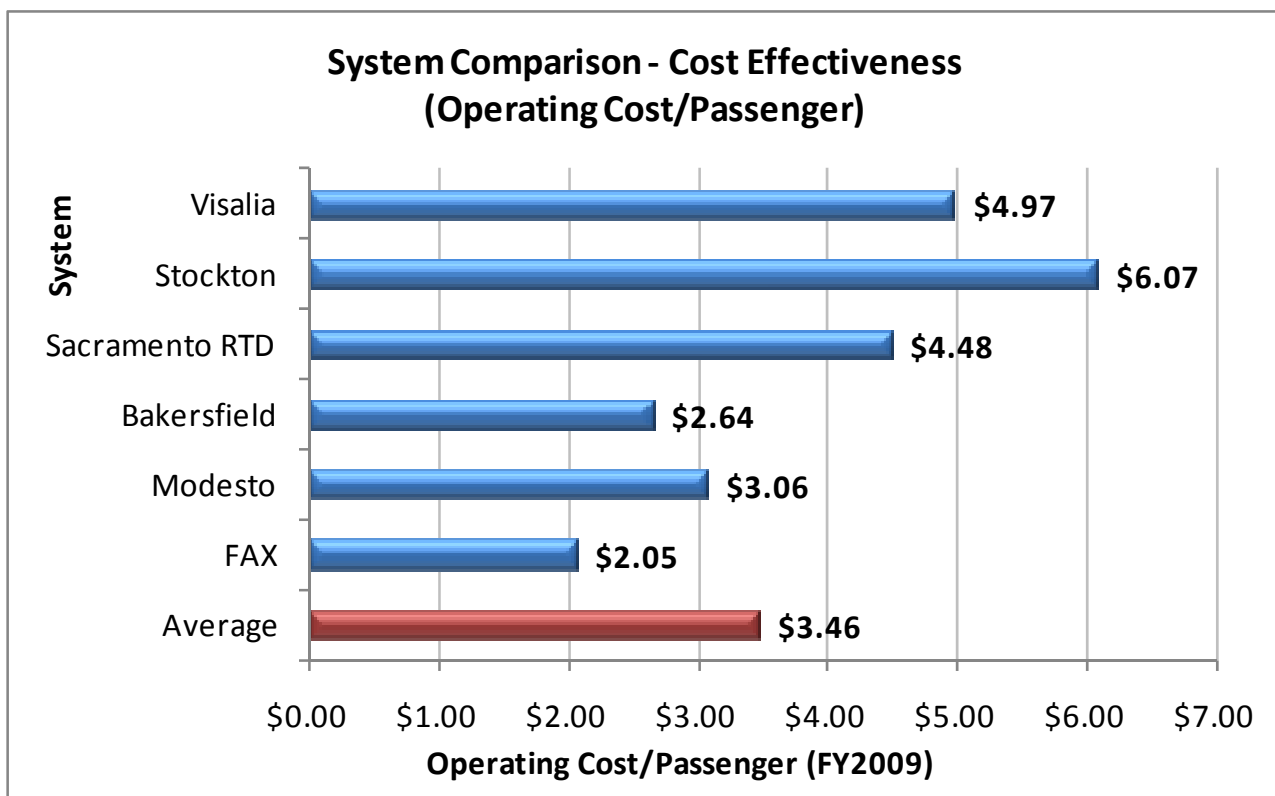
It is important to remember that each of the systems used in this comparative analysis has its own unique set of operating properties that can have significant impacts on various performance measures. For instance, Sacramento RTD's passengers per hour, while less than that of FAX, also includes longer service hours for evening and weekend service and more frequent service headways, typically RTD operates on 15-minute headways rather than FAX's typical 30-minute headways. Because night service is universally less productive, by providing longer service hours RTD's passenger productivity data is driven down.

The same is true for providing more frequent service, increasing service frequency from 30-minute to 15-minutes effectively doubles the number of service hours; however, only in very rare cases

would this lead to a doubling of passenger trips. So, while improved service frequency and longer service hours are important and positive service improvements, they also reduce overall passenger productivity.

Similarly, Stockton RTD provides a high level of commuter service to the Bay Area. Commuter services are predominantly composed of long distance express service. In terms of productivity, commuter services tend to be lower in passenger per hour and mile, and higher in cost per passenger. This is certainly reflected in Stockton RTD productivity.

Figure 3.4: FAX Operating Cost Per Passenger Comparison with Peer Operators



FAX's operating cost per hour of \$2.05 is significantly lower than the peer operators' average of \$3.46 and is the lowest of all the peer operators. FAX operates a very cost efficient transit service.

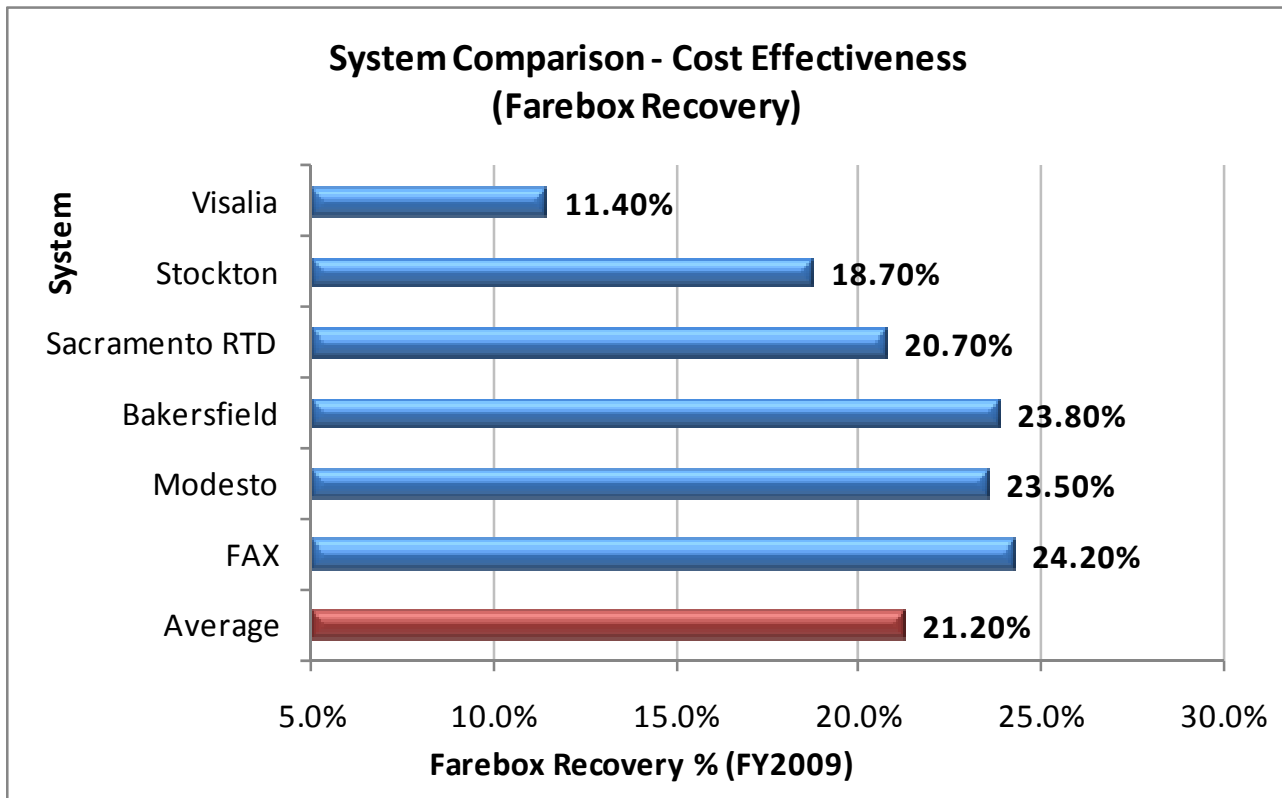
When viewing the cost per hour of the systems under comparison, one notes that costs appear to increase in unison with the size of the system, and/or of the population served. In fact, this turns out to be generally true among all transit systems. There are many reasons for this to happen. First, the cost of living tends to be higher in larger urban areas. We might compare the cost of housing in Fresno versus San Francisco or Sacramento. The higher cost of living in turn drives up the cost of labor. Another fundamental difference in larger systems versus smaller systems is the level of expectation for certain passenger amenities including transit stations and transfer facilities. Further, public information materials and supportive services such as customer service agents and

other support staff add significantly to the cost of doing business.

As with improved service frequencies and service duration, improvements in passenger amenities and supportive services are positive improvements in customer service; however, these improvements come at a significant cost.

System Minimums Assessment -- System Minimums Assessment uses measurements from the system under evaluation to assess minimum levels of efficiency and effectiveness of its component sub systems. The strength of this service evaluation method is that it makes allowances for unique operating practices and environments. FAX Minimum Standards are established both through legislation and local effort. From a legislative perspective, Federal and State regulations require public transit operators to provide and maintain service in some very specific ways. FTA has rules governing the provision of "Charter Service."

Figure 3.5: FAX Farebox Recovery Comparison with Peer Operators



FAX's farebox recovery rate of 24.2% exceeded the system average of 21.2% in FY2009.

The State TDA regulations require FAX to maintain a minimum 20 percent farebox recovery ratio. The TDA also places restrictions on the use of State Transit Assistance (STA) Funds. Regulations require transit agencies to keep cost increases under the State Cost of Living Index (CPI). If cost increases exceed the State CPI, transit agencies are not allowed to use STA Funds for operating expenses. Finally, local and regional concerns are used to develop minimum productivity standards. For FAX, these standards are developed through a coordinated, comprehensive,

continuous process carried out by the Fresno Council of Governments (Fresno COG). The Fresno COG's Regional Transportation Plan (RTP) and Short Range Transit Plan for the Fresno Clovis Urbanized Area (SRTP), set guidelines for service evaluation. Additionally, each year the Fresno COG prepares the Annual Transit Productivity Analysis. This document assesses all public transit operators in Fresno County, and reviews the most recent Triennial Audit recommendations.

In 1981, a Transit Corridor Analysis was completed which evaluated the efficiency and effectiveness of service on a route by route basis. At that time, service measures were developed to assist in evaluating individual route performance in relation to the system wide performance. Those minimum performance measures continue to be the basis of local service evaluation.

At a minimum, an individual route should exceed 60 percent of the system wide average for a number of key indicators. The 60 percent figure is an overall industry standard that assumes a transit system may tolerate some low performing routes if they provide an important component of the system, and especially if the component helps meet the needs of the transit dependant riders. FAX uses several operational indicators to measure the performance and financial status of the system and individual routes. Individual routes should achieve 60 percent of the system average, except for those indicators which measure cost efficiency. Cost performance measures should not exceed 140 percent of the total system average, with 140 percent representing the system maximum. Table 3.3 shows individual routes and their performance in various categories.

**Table 3.3: FAX Summary of Key Operational Indicators
July to June 2009 - 2010**

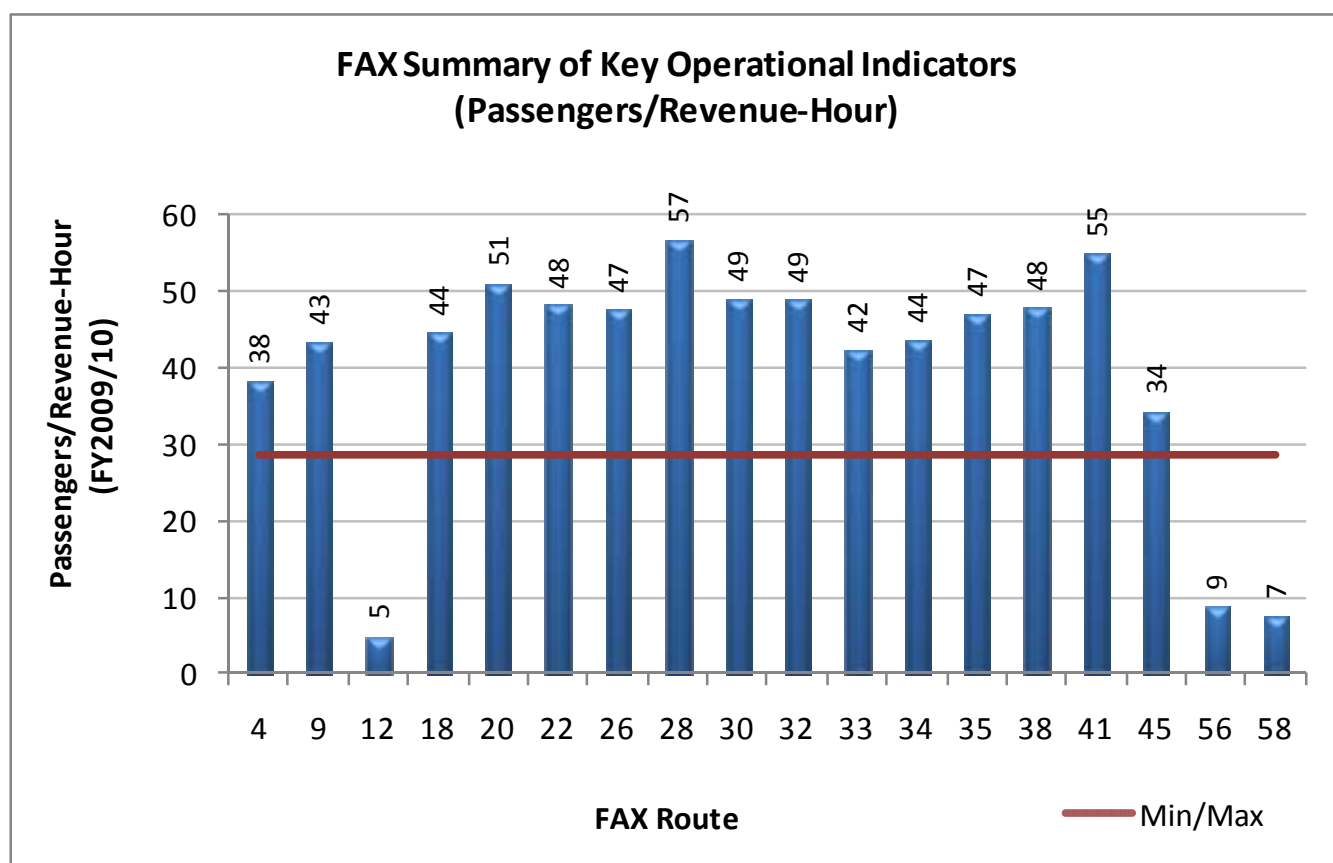
Route	Passengers	Miles	Hours	Farebox	Cost	Pass/ Hour	Pass/ Mile	Cost/ Hour	Cost/ Pass.	Fare/ Op. Cost
Route 9	978,561	293,096	22,609	\$480,335	\$2,224,599	43.28	3.34	\$98.40	\$2.27	21.6%
Route 20	675,761	185,175	13,271	\$352,946	\$1,405,478	50.92	3.65	\$105.91	\$2.08	25.1%
Route 22	1,097,013	301,242	22,854	\$523,938	\$2,286,427	48.00	3.64	\$100.04	\$2.08	22.9%
Route 26	1,857,566	516,808	39,156	\$929,353	\$3,922,573	47.44	3.59	\$100.18	\$2.11	23.7%
Route 28	2,964,716	550,114	52,341	\$1,381,292	\$4,175,365	56.64	5.39	\$79.77	\$1.41	33.1%
Route 30	1,941,169	454,871	39,686	\$916,851	\$3,452,471	48.91	4.27	\$86.99	\$1.78	26.6%
Route 32	1,377,696	303,496	28,255	\$625,444	\$2,303,535	48.76	4.54	\$81.53	\$1.67	27.2%
Route 33	293,619	99,666	6,948	\$143,104	\$756,465	42.26	2.95	\$108.88	\$2.58	18.9%
Route 34	1,662,831	454,934	38,207	\$792,289	\$3,452,949	43.52	3.66	\$90.38	\$2.08	22.9%
Route 35	615,934	177,458	13,142	\$300,988	\$1,346,906	46.87	3.47	\$102.49	\$2.19	22.3%
Route 38	2,151,200	642,889	45,113	\$1,068,548	\$4,879,528	47.69	3.35	\$108.16	\$2.27	21.9%
Route 41	1,373,318	327,080	25,078	\$658,887	\$2,482,537	54.76	4.20	\$98.99	\$1.81	26.5%
Route 45	428,551	188,302	12,531	\$217,193	\$1,429,212	34.20	2.28	\$114.05	\$3.33	15.2%
*Route 18	15,195	3,938	342	\$7,695	\$29,889	44.43	3.86	\$87.40	\$1.97	25.7%
*Route 58	28,446	44,609	3,811	\$15,356	\$338,582	7.46	0.64	\$88.84	\$11.90	4.5%
Route 12	1,112	4,236	233	\$370	\$32,151	4.77	0.26	\$137.93	\$28.93	1.2%
Route 56	17,701	37,442	2073.5	\$5,217	\$284,185	8.54	0.47	\$137.06	\$16.05	1.8%
*Route 4	106,795	24,769	2,804	\$0	\$187,997	38.09	4.31	\$67.06	\$1.76	0.0%
	17,587,183	4,610,125	368,453	8,419,806	34,990,849	47.73	3.81	\$94.97	\$1.99	24.1%
				Min/Max	28.64	2.29	\$132.95	\$2.79	14.4%	
System Wide Totals						System Wide Ratios				

Note: Routes 18, 12 and 56 were discontinued in FY2011. The bold text indicates areas where routes are underperforming.

(* Routes indicated receive funding support from outside agencies.)

It is important to note the routes marked with an asterisk. Routes 18, 58, 40 and 4, are routes that are subsidized by outside agencies. In the case of Route 18, Fresno County Office of Education pays the incremental costs associated with this service in order to maintain service to the Regional Occupational Program (ROP) Campus located at Teilman and Nielsen Avenues. This route was cancelled in FY 2011 by the FCOE due to reduced funding. Route 58 provides service to Children's Hospital of Central California (Children's Hospital), and receives incremental funding from Children's Hospital. Route 4 is the Downtown Parking Trolley service, and is paid for through an agreement with Fresno County. Incremental costs are the direct costs associated with the service (such as fuel, tires, and driver wages). Incremental costs do not include overhead costs (such as, FAX Administration costs or facility costs). Revenues received from the farebox on these routes are earned in addition to incremental costs.

Figure 3.6: FAX Passengers per Revenue Hour by Route



As Figure 3.6 illustrates, FAX Routes 12, 56 and 58 were operating below the minimum standard of 28.64 passengers per hour, which is 60% of the system average.

Routes 45 and 12 deserve further explanation. Route 45 (Herndon Avenue, MTC, Ashlan Avenue) is the only weekday route that FAX operates on an hourly headway. This route has had low

performance in every evaluation over the last ten years. In 1999, at the request of Council, Route 45 was extended north of Shaw on Palm, and east on Herndon to serve the medical center located at Herndon and Milburn. At the time, Council had received numerous requests to serve the medical facility. Currently, Route 45 is the only route providing service to the medical facilities at Herndon and Milburn, and is also the only route providing service to the Association of Retarded Citizens (ARC) Production Center located at Shields and Clovis Avenue. This route has the highest number of disabled riders in the system.

Figure 3.7: FAX Operating Cost per Revenue Hour by Route

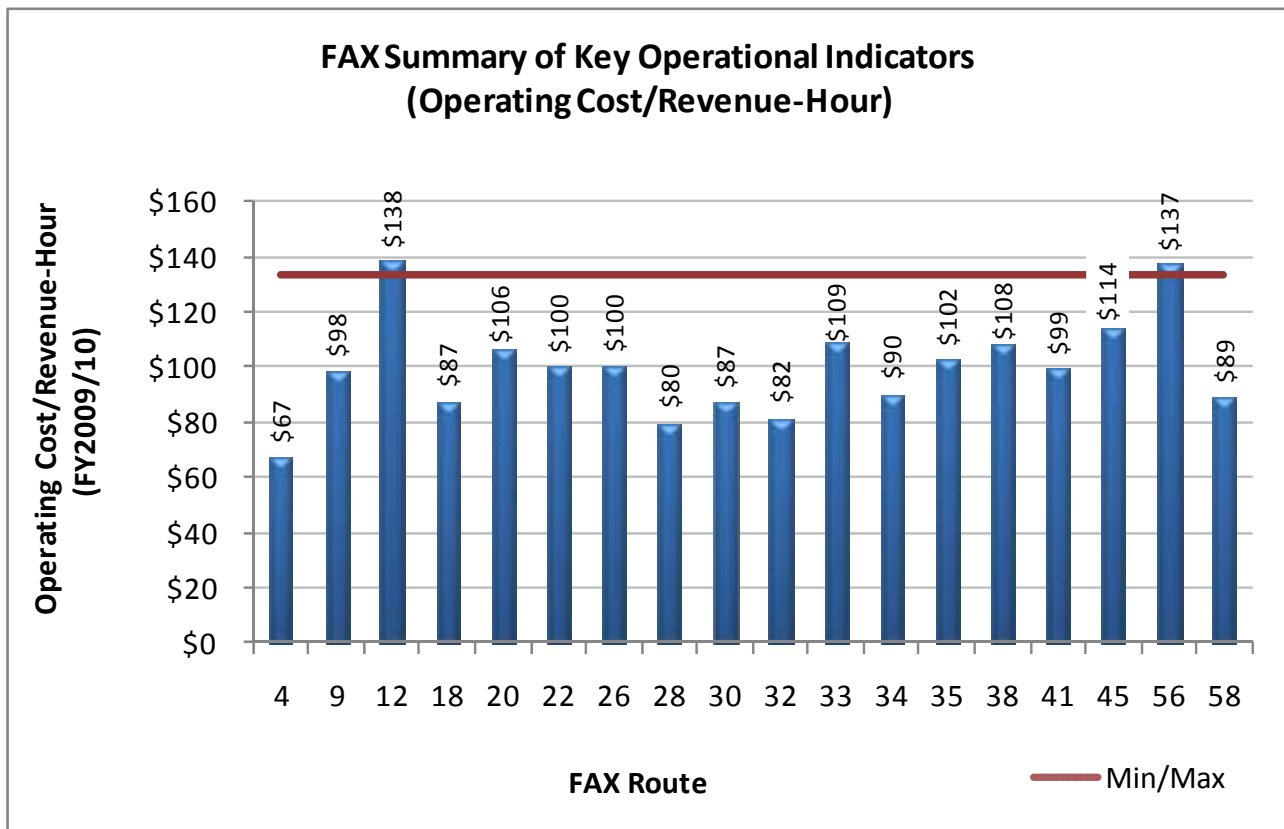


Figure 3.7 illustrates that FAX Routes 12 and 56 had the highest operating costs per hour of all FAX routes operating in FY2009. The lowest cost routes to operate were Routes 4, 28 and 32.

Route 12, the Fresno Area Neighborhood Service (FANS), is deviated fixed-route circulator service. This is an unconventional service which is a hybrid between conventional fixed-route service and demand-responsive service. Residents in this area can call as little as an hour ahead of time and reserve a ride to or from any location within the FANS service area. Other customers use the service as a conventional fixed-route system. Due to budget limitations, this route was discontinued in FY 2011.

Of the four routes performing below standard, two have been discontinued (12, 56), one receives

funding assistance (58), and the last was established by the City of Fresno governing body (45).

FAX Route Ranking – As shown in Table 3.3 reflects how each route compares with other routes in the system. Using five key indicators including, Percent of Farebox Recovery, Passenger Trips per Revenue Hour, Passengers per Mile, Operating Cost per Hour and Operating Cost per Passenger. The five key indicator scores for each route were then averaged to develop an overall route ranking score. As expected, the overall ranking places the routes which exceeded system minimum and maximum standards at the bottom of the list. Also, routes 4, 40, 18 and 58 operated on schedules limited under contracts with outside agencies. Route 18 lost its funding subsidy and has also been discontinued in FY 2011.

Figure 3.8: FAX Operating Cost per Passenger by Route

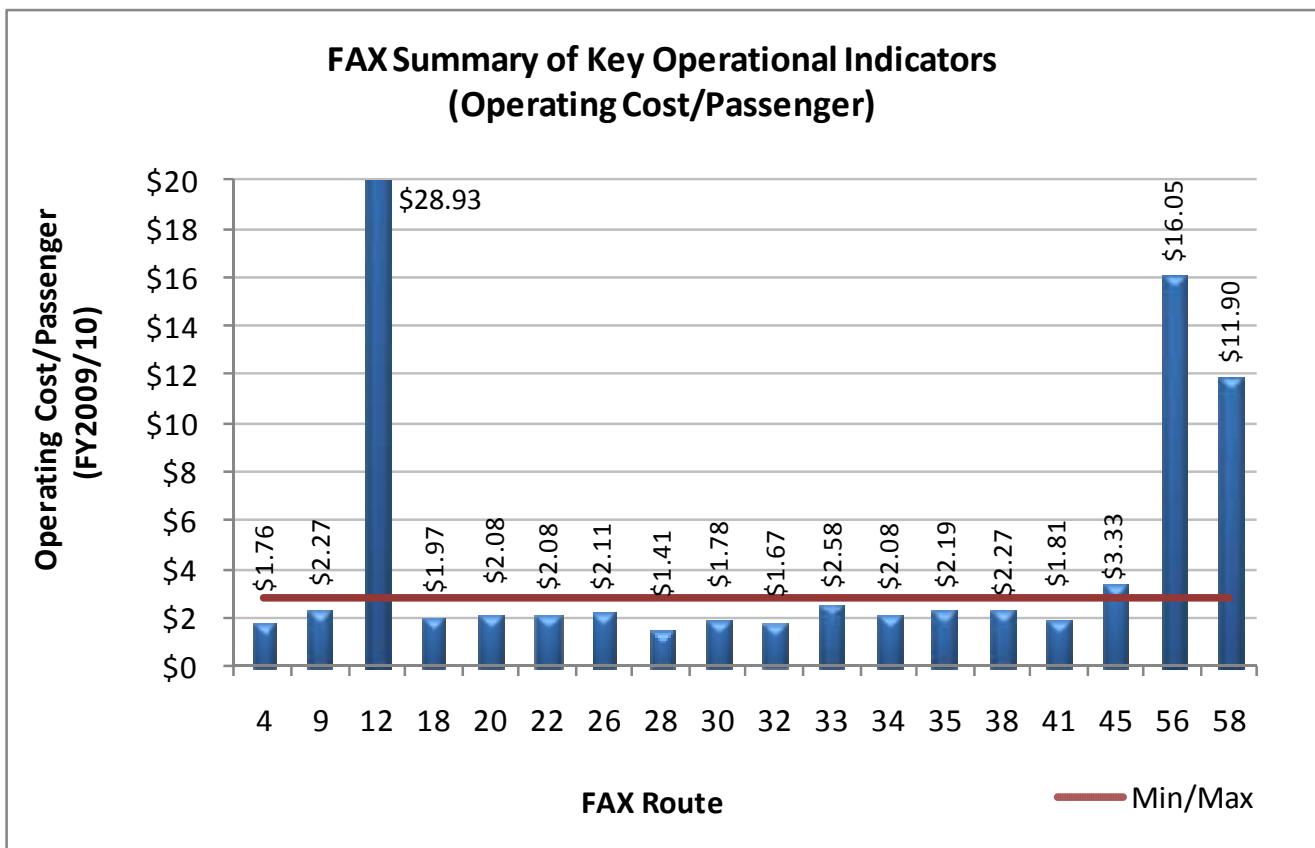


Figure 3.8 illustrates that routes 12, 56 and 58 had the highest operating cost per passenger in

FY2009.

Figure 3.9: FAX Farebox Recovery by Route

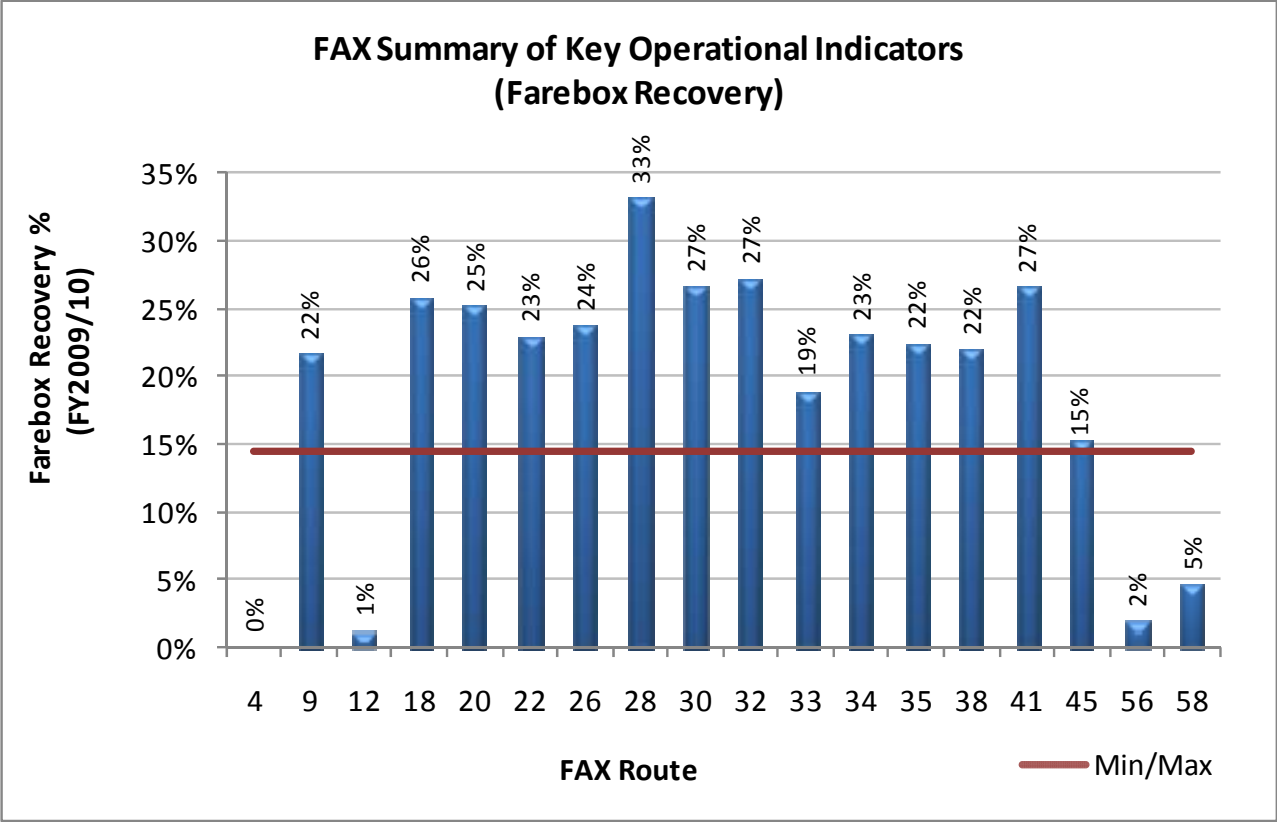


Figure 3.9 above illustrates the best farebox recovery is on routes 28 and 32. Due to the highly efficient nature of these routes operating on Blackstone and Ventura/Kings Canyon, these routes were selected to be upgraded to Bus Rapid Transit.

Table 3.4: FAX Route Ranking
July - June 2009-2010

Route	Passengers/ Hour	Passengers/ Mile	Cost/ Hour	Cost/ Passenger	Farebox Recovery	Score	Overall Ranking
28	1	1	2	1	1	1.2	1
32	5	2	3	2	2	2.8	2
30	4	4	4	4	3	3.8	3
41	2	5	9	5	4	5.0	4
18	10	6	5	6	5	6.4	5
20	3	8	13	8	6	7.6	6
4	14	3	1	3	18	7.8	7
34	11	7	7	7	8	8.0	8
22	6	9	10	9	9	8.6	9
26	8	10	11	10	7	9.2	10
35	9	11	12	11	10	10.6	11
38	7	12	14	12	11	11.2	12
9	12	13	8	13	12	11.6	13
33	13	14	15	14	13	13.8	14
58	17	16	6	16	15	14.0	15
45	15	15	16	15	14	15.0	16
56	16	17	17	17	16	16.6	17
12	18	18	18	18	17	17.8	18

Weekend Service Indicators - Table 3.4 (Fresno Area Express Saturday Service), and Table 3.5 (Fresno Area Express Sunday Service Indicators) utilize a similar methodology to assess weekend route performance. As indicated by the **bold type**, two routes show indicators outside of acceptable standards (Routes 45 and 58). System-wide, FAX's weekend service provides 45.81 passengers per revenue hour on Saturday, and 40.45 passengers per revenue hour on Sunday. The minimum acceptable would be 60 percent of those measures, or 27.48 passengers per revenue hour for Saturday and 24.27 passengers per revenue hour for Sunday.

Passengers per mile averaged 3.46 on Saturday, and 2.13 on Sunday, therefore, the minimum productivity standards is 2.08 and 1.83 respectively. Cost per passenger average on Saturday was \$2.19 and on Sunday \$2.48. Using the 140 percent standard, the Saturday maximum would be \$3.07 and the Sunday maximum would be \$3.48. The farebox recovery ratio for Saturdays

averaged 21.5 percent, while on Sundays the average farebox recovery ratio was 18.9 percent. As with the passengers per hour measure, we evaluate individual routes based on a minimum of 60 percent of the system average, or 12.9 percent for Saturdays and 11.3 percent for Sundays. As noted earlier, Route 58 receives funding support from Children's Hospital.

**Table 3.5: Fresno Area Express Saturday Service Indicators
July 2009 to June 2010**

	Revenue	Revenue	Revenue	Total	Operating		Pass/	Pass/	Cost/	Cost/	Farebox
	Miles	Hours	Hours	Passengers	Cost		Hour	Mile	Hour	Pass	Recovery
Route	2009/10	2009/10	2009/10	2009/10	2009/10						
9	58,507	40,388	2,661	118,956	\$306,545		44.70	2.95	\$115.19	\$2.58	19.1%
20	23,187	17,596	1,264	46,236	\$133,554		36.57	2.63	\$105.63	\$2.89	17.4%
22	39,483	26,808	1,983	86,446	\$203,473		43.59	3.22	\$102.60	\$2.35	19.4%
26	61,949	39,312	2,668	129,446	\$298,378		48.51	3.29	\$111.82	\$2.31	20.8%
28	101,609	45,660	3,835	222,486	\$346,559		58.01	4.87	\$90.37	\$1.56	29.3%
30	77,942	39,448	3,390	173,948	\$299,410		51.31	4.41	\$88.32	\$1.72	26.0%
32	60,852	40,667	3,454	132,421	\$308,663		38.33	3.26	\$89.35	\$2.33	19.7%
33	12,020	8,256	575	25,520	\$62,663		44.40	3.09	\$109.02	\$2.46	19.2%
34	73,108	39,960	3,351	154,170	\$303,296		46.00	3.86	\$90.50	\$1.97	24.1%
35	26,575	17,283	1,280	55,806	\$131,178		43.60	3.23	\$102.49	\$2.35	20.3%
38	84,669	54,720	3,843	177,906	\$415,325		46.29	3.25	\$108.06	\$2.33	20.4%
41	55,070	28,364	1,932	110,739	\$215,283		57.32	3.90	\$111.44	\$1.94	25.6%
45	15,657	20,187	1,344	30,742	\$153,219		22.87	1.52	\$114.00	\$4.98	10.2%
*58	953	5,116	430	1,710	\$38,830		3.97	0.33	\$90.24	\$22.71	2.5%
Totals	691,582	423,765	32,012	1,466,533	\$3,216,376		45.81	3.46	\$100.47	\$2.19	21.5%
					Min/Max		27.49	2.08	\$140.66	\$3.07	12.9%

* Note Route 58 is subsidized by Children's Hospital of Central California (Children's Hospital).

Table 3.6: Fresno Area Express Sunday Service Indicators
July 2009 to June 2010

	Total Passengers	Revenue	Revenue Miles	Revenue Hours	Operating Cost		Pass/ Hour	Pass/ Mile	Cost/ Hour	Cost/ Pass	Farebox Recovery
Route	2009/10	2009/10	2009/10	2009/10	2009/10						
9	76,812	\$38,435	36,346	2,395	\$275,866		32.07	2.11	\$115.18	\$3.59	13.9%
20	34,460	\$17,317	15,836	1,138	\$120,195		30.28	2.18	\$105.62	\$3.49	14.4%
22	72,764	\$33,122	24,126	1,785	\$183,116		40.77	3.02	\$102.60	\$2.52	18.1%
26	116,069	\$54,557	35,382	2,402	\$268,549		48.33	3.28	\$111.82	\$2.31	20.3%
28	184,748	\$82,324	41,094	3,452	\$311,903		53.52	4.50	\$90.36	\$1.69	26.4%
30	126,441	\$57,253	35,504	3,051	\$269,475		41.44	3.56	\$88.32	\$2.13	21.2%
32	112,499	\$52,127	36,600	3,109	\$277,794		36.19	3.07	\$89.35	\$2.47	18.8%
33	27,737	\$11,188	7,428	517	\$56,379		53.63	3.73	\$109.01	\$2.03	19.8%
34	118,386	\$56,764	35,964	3,016	\$272,967		39.25	3.29	\$90.51	\$2.31	20.8%
35	41,813	\$20,013	15,554	1,152	\$118,055		36.31	2.69	\$102.50	\$2.82	17.0%
38	151,987	\$73,233	49,248	3,459	\$373,792		43.94	3.09	\$108.07	\$2.46	19.6%
41	78,991	\$39,599	25,528	1,739	\$193,758		45.43	3.09	\$111.43	\$2.45	20.4%
45	21,256	\$10,625	18,170	1,210	\$137,910		17.57	1.17	\$114.01	\$6.49	7.7%
*58	1,261	\$679	4,604	386	\$34,944		3.26	0.27	\$90.44	\$27.72	1.9%
Totals	1,165,224	547,236	381,384	28,809	\$2,894,705		40.45	3.06	\$100.48	\$2.48	18.9%
Min/Max							24.27	1.83	\$140.67	\$3.48	11.3%
* Note Route 58 is subsidized by Children's Hospital of Central California (Children's Hospital).											

Weekend Service Ranking - As with the weekday service, Tables 3.6 and 3.7 use performance standards to rank each route in the system, with routes that fall below the minimum standard are ranked at the bottom.

Table 3.7: Fresno Area Express Saturday Service Ranking
July 2009 - June 2010

Route	Passengers/ Hour	Passengers/ Mile	Cost/ Hour	Cost/ Passenger	Farebox Recovery	Score
28	1	1	4	1	1	1.6
30	3	2	1	2	2	2.0
41	2	3	11	3	3	4.4
34	6	4	5	4	4	4.6
26	4	5	12	5	5	6.2
32	11	6	2	6	8	6.6
38	5	7	9	7	6	6.8
35	9	8	6	8	7	7.6
22	10	9	7	9	9	8.8
33	8	10	10	10	10	9.6
9	7	11	14	11	11	10.8
20	12	12	8	12	12	11.2
58	14	14	3	14	14	11.8
45	13	13	13	13	13	13.0

* Note Route 58 is subsidized by Children's Hospital of Central California (Children's Hospital).

**Table 3.8: Fresno Area Express Sunday Service Ranking
July 2009 - June 2010**

Route	Passengers/ Hour	Passengers/ Mile	Cost/ Hour	Cost/ Passenger	Farebox Recovery	Score
28	1	1	4	1	1	1.6
30	5	2	1	2	2	2.4
34	6	4	3	4	4	4.2
26	2	3	11	3	5	4.8
32	8	5	2	5	7	5.4
41	3	6	10	6	3	5.6
38	4	7	8	7	6	6.4
22	7	8	5	8	8	7.2
33	9	9	9	9	9	9.0
35	10	10	6	10	10	9.2
20	11	11	7	11	11	10.2
9	12	12	14	12	12	12.4
45	13	13	13	13	13	13.0
*58	14	14	12	14	14	13.6

* Note Route 58 is subsidized by Children's Hospital of Central California (Children's Hospital).

Night Service - Table 3.8 below includes productivity data for FAX night service. Night service is defined as all weekday service after 6:00 p.m. As with day-to-day service evaluations, individual routes are evaluated using system productivity standards. A minimum of 60 percent for passenger performance measures, and system maximum of 140 percent for system cost measures is applied to the system averages for service after 6:00 p.m. Again, routes not performing as required are shown in boldface type. In the case of FAX night service, Routes 33 and 45 are the only routes performing outside of productivity guidelines. We note that Route 45 service stops at 9:00 p.m., and is the earliest end time for all night service routes.

As the table shows, FAX night service performance is far lower than either day or weekend service performance; however, this is typical of transit systems across the country.

**Table 3.9: Fresno Area Express Night Service
July 2009 - June 2010**

Routes	Passengers	Miles	Hours	Revenue	Operating Cost	Pass/ Hour	Pass/ Mile	Cost/ Pass	Farebox Recovery
9	82,851	58,968	4,939	\$39,376	\$447,567	16.77	1.41	\$5.40	8.8%
20	56,199	41,580	3,276	\$21,158	\$315,592	17.15	1.35	\$5.62	6.7%
22	87,151	64,764	5,292	\$33,301	\$491,559	16.47	1.35	\$5.64	6.8%
26	134,980	116,172	9,324	\$51,022	\$881,745	14.48	1.16	\$6.53	5.8%
28	164,678	74,844	7,560	\$66,096	\$568,066	21.78	2.20	\$3.45	11.6%
30	118,841	66,024	6,048	\$46,561	\$501,122	19.65	1.80	\$4.22	9.3%
32	94,690	59,724	5,141	\$34,725	\$453,305	18.42	1.59	\$4.79	7.7%
33	14,894	22,428	1,890	\$5,751	\$170,229	7.88	0.66	\$11.43	3.4%
34	104,971	60,984	5,267	\$42,596	\$462,869	19.93	1.72	\$4.41	9.2%
35	49,294	38,052	3,213	\$17,515	\$288,815	15.34	1.30	\$5.86	6.1%
38	147,480	86,940	6,653	\$56,133	\$659,875	22.17	1.70	\$4.47	8.5%
41	117,394	76,860	5,443	\$41,522	\$583,367	21.57	1.53	\$4.97	7.1%
45	23,662	32,760	2,240	\$8,537	\$248,648	10.56	0.72	\$10.51	3.4%
System-Wide Totals						System-Wide Averages			
	1,197,085	800,100	66,286	\$464,290	\$6,072,759	18.06	1.50	\$5.07	7.6%

Clean Air Express Vanpool Program – The Clean Air Express Vanpool program came to an end in FY 2008. The original funding for this program was eliminated; however, the newly authorized Measure C has a provision for the operation of a vanpool program. The new program is administered through the Fresno Council of Governments.

Findings - FAX placed well in the peer review process, with the highest passenger per hour and passengers per mile overall. Further, FAX placed third in operating cost per passenger trip overall, and among the transit operators who employ their own drivers, FAX had the lowest operating cost per passenger trip. In an overall ranking with the peer systems, FAX tied for first place position with Modesto Area Transit (MAX), and FAX scored better than MAX in every category except Operating Cost per Hour and Cost per Passenger where MAX, as a smaller contract property, has a clear advantage.

In the systems minimum/maximum standard assessment, five routes were shown to fall outside of accepted standards. Route 58 is subsidized through a contract with Children's Hospital which pays the incremental cost of operation, and as such, provides service to the citizens of Fresno at no extra cost.

Of the three remaining routes, the City of Fresno has chosen to maintain Route 45 because of its very high patronage by disabled citizens even though it has been a poor performing route for many years. It should also be noted that Route 45, at 34.20 passengers per hour, surpasses the average ridership of Sacramento RTD (24.85), and exceeds the peer system average

performance of 26.74 passengers per hour. (See Section 3.2.2 Key Transit System Performance Indicators, FAX Peer Review Analysis)

FAX Route 12 is a deviated fixed-route service which offers limited demand-responsive trip options within a specified service area. While ridership on Route 12 has grown significantly since its inception, the nature of this hybrid service does not lend itself to high productivity. Instead, it places a premium on convenience by deviating off of its route to pick up and deliver passengers to points very near to their destinations. Route 12's productivity of 4.77 passengers per hour, is dwarfed in comparison to the FAX system average of 47.73. The operating cost per passenger for Route 12 in FY 2009 was \$28.93, while operating cost per passenger system wide was \$1.99, and for Handy Ride \$29.51.

While the deviated route concept is popular among many passengers because of the convenience it offers, the convenience comes at a significant cost. The high cost per trip of Route 12 subverts one of the primary justifications for the service; that it would reduce the demands on FAX's paratransit service Handy Ride. Route 12 was discontinued in FY 2011.

Conclusions - The bottom line of table 3.2 shows the total gross indicators, and the system wide performance measure. Starting with the first minimum indicator, Passengers per Service Hour, 60 percent of 47.73 is 28.64. Indicators that do not meet the system standard are shown in boldface type. Moving to Cost per Service Hour, the system wide average is \$94.97, and 140 percent of that is \$132.96. Route indicators which exceed this maximum are shown in boldface type.

The Third indicator is Cost per Passenger. The FAX system wide average is \$1.99, and 140 percent of that is \$2.79. As with the other indicators, those that exceed the maximum have been boldfaced. The final indicator is a farebox recovery ratio. The FAX system wide average is 24.1 percent and 60 percent of that is 14.5 percent. Again, those indicators that do not achieve the minimum are shown in boldface type.

At this point in the analysis, it is important to note the routes marked with an asterisk: Route 18, 4, 40, and 58 are routes that are subsidized by outside agencies. In the case of Route 18, Fresno County Office of Education pays the incremental costs associated with this service in order to maintain service to the Regional Occupational Program (ROP) Campus located at Teilmen and Neilson Avenues. Route 58 is the weekday service to Valley Children's Hospital (VCH), and receives incremental funding from Children's Hospital of Central California. Incremental costs are the direct costs associated with the service (such as fuel, tires and driver wages). Incremental costs do not include overhead costs (such as FAX Administration costs, or facility costs). Revenues received from the farebox on these routes are earned in addition to incremental costs. Route 4 is a free downtown shuttle service that provides transportation for County employees, jurors and the general public. This service is subsidized through parking revenues.

Passenger Surveys:

One of the most important elements of the FAX service evaluation process is the passenger survey. Passenger surveys allow public transit operators to include human aspects of service in the evaluation mix. Measurements of satisfaction, friendliness, and of opinions about services provided are most appropriately collected through customer surveys. Additionally, customer surveys provide an effective way to measure customer expectations and needs, and provide valuable information for quality decision making.

FAX utilizes a variety of survey methods including inexpensive self administered surveys which are provided in every schedule guide, and more detailed and expensive on board interviews. These surveys are used to collect information that is required by Federal and State agencies including passenger demographics, origin/destination information, and travel habits. This data also provides FAX with insights into the concerns of our passengers. For example, it was one of these passenger surveys that allowed FAX to prioritize service improvement options and select night service in 1999.

FAX Rider Origin, Destination and Needs Assessment - In conjunction with the Fresno Council of Governments (Fresno COG), FAX has hired various firms to conduct Customer Satisfaction Surveys since 1994. The purpose of the surveys is to identify areas which need improvement. Based on the survey findings, FAX has developed training programs and procedures to improve customer satisfaction in specifically identified areas. The surveys include a telephone survey and on-board surveys. The on-board surveys consisted of over 1,000 passenger interviews with randomly selected bus riders. The primary purpose of the surveys was to assess the extent to which FAX customers are satisfied with the service they receive. Results of the previous surveys are identified on Table 3.11 Specific areas of inquiry included the following:

- Frequency of riding the bus
- Trip purpose
- Availability of a car for the current trip and other trips
- The extent and ease of using the bus lift
- Interest in training on how to use the lift
- Method of fare payment
- Convenience of the locations where tokens, tickets, and passes are sold
- The extent to which drivers announce the next stop
- Helpfulness of bus stop announcements
- The extent to which riders feel safe while waiting for the bus and while on the bus
- Reasons for not feeling safe
- Effect of knowing that the bus is equipped with a working video camera
- Effect of knowing that there is a vehicle tracking system in place
- Satisfaction with evening service

- Suggestions for improving FAX's overall service
- Respondent demographics such as employment, age, ethnicity, income, and gender

Using a traditional academic grading system, FAX riders gave FAX an 'A' for the following attributes; Bus Drivers Helpfulness, Driving Skills, Safety Awareness, and Availability of Route Information. FAX received a 'B' for Buses Running on Time, Service Frequency, Driver Courtesy, Proximity of Stops, and Cleanliness of Vehicles and Stops. The lowest grade FAX received was a 'C' for hours of operation on Weekends, indicating a strong desire for service later in the evening on weekends. The overall service provided by FAX received a B+. Table 3.10 is the complete FAX report card including a description of the methodology used to develop the grading system.

Table 3.10: Fresno Area Express Passenger Survey Report Card
AIS Market Research - October 2009

Service Attribute	Mean Rating	Standard Deviation	Report Card
Buses running on time	2.56	1.29	B
Frequency of the buses	2.52	1.38	B
Length of time to complete trip	2.70	1.40	B-
Cleanliness inside FAX buses	2.75	1.39	B-
Cleanliness of the bus stops and exchanges	2.74	1.37	B-
Bus drivers' courtesy	2.10	1.20	B+
Bus drivers' helpfulness	1.94	1.11	A-
Bus drivers' driving skills	1.98	1.16	A-
Bus drivers' safety awareness	1.93	1.11	A-
The overall comfort of the bus rides	2.22	1.18	B+
Availability of FAX route/schedule information	2.17	1.31	B+
Bus hours of operation on weekdays	2.42	1.44	B
Bus hours of operation on weekends	4.20	1.77	D+
Proximity of bus stops to home	2.09	1.25	B+
Proximity of bus stops to destination	2.07	1.114	B+
Value provided by FAX for the price paid	1.82	1.08	A-
Overall service provided by FAX	2.06	1.13	B+

Table 3.11 Historical Survey Results

Research Firm	AIS 2009 *	AIS 2007*	Moore 2005	AIS 2004	AIS 2001
Trip Purpose					
Work	47.0%	41.0%	26.7%	39.0%	26%
School	40.0%	40.0%	19.0%	14.0%	31%
Shopping	31.0%	26.0%	10.5%	7.0%	20%
Medical	18.0%	11.0%	7.1%	13.0%	8%
Recreation	24.0%	16.0%	4.3%	8.0%	N/A
Personal Business	38.0%	26.0%	23.8%	9.0%	N/A
Other	N/A	6.0%	8.6%	1.0%	N/A
Transit Dependant	82%	83%	73%	73%	73%
Total Annual Household Income Less Than \$20K	51%	55%	46%	46%	46%
Employed Full or Part-time	41%	43%	41%	41%	41%
Student	30%	27%	31%	31%	31%

* Respondents were allowed to select multiple answers for trip purpose.

The most recent survey findings by AIS Market Research in October 2009 reported that 20% of FAX riders use the service 9-10 times per week, with an additional 20% using the system more than 15 times per week. Overall, over 51% of the transit riders are taking 10 or more trips per week. In 2007 and 2009, the survey allowed individuals to select more than one answer to purpose of trip. This gives us a better indication of who uses the system for multiple trip types and doesn't force a single answer. The most popular trip purpose was work at 47%, closely followed by school at 40%. Personal Business/Errands was next at 38% with recreation, medical, and shopping finishing up the list. Rider demographics are somewhat reflective of the trip purpose findings with 41 percent of all riders interviewed being employed either part time or full-time, and 30 percent of all riders interviewed were students. A noticeable trend over the last 10 years is that although a significant number of trips by passengers are still for work related activity, passengers are using the FAX system more and more for shopping and recreational activities.

Other demographics show that riders tend to be young with 56 percent of riders less than 35 years of age. In addition, Caucasians comprised 27 percent of those surveyed, while African Americans and Hispanics comprising 26 percent and 40 percent respectively. Asian Americans comprised 3 percent of the riders interviewed and Native American made up 2%. Finally, the gender split of the riders interviewed was 50% male and 50% female.

The AIS Market Research final report identified several areas for possible improvement including hours of operation on weekends and cleanliness at bus stops and transfer stations. Survey findings show that overall satisfaction with FAX as a transit provider has increased with a combined score of 73% for Satisfied or Very Satisfied. Add in Slightly Satisfied and the overall approval equals 90%. Most FAX riders do not have transportation alternatives for work or school. The fact that FAX riders tend to be young, low-income and ethnic minorities, serves to underscore the importance of FAX service in an era of welfare reform. It is also significant to recognize that there is substantial demand for providing more frequency of service and more routes. To the extent that providing such service is feasible, it might well increase access to jobs, education, and increase ridership.

Handy Ride - Handy Ride offers demand responsive, curb to curb service seven days a week during the same hours as the Fixed Route service. The Handy Ride service area is somewhat larger than the fixed route area, and is described in Chapter I. Reservations for ADA Certified individuals are accepted during normal business hours the day before the desired trip. Service hours for Handy Ride mirror those of the FAX system.

Since December 2005, MV Transportation, Inc. has been contracted to provide paratransit service for Fresno Area Express. Support Services Division of FAX is responsible for directly overseeing the administration of the Handy Ride contract and assuring full compliance with the requirements set forth by the 1990 Americans with Disabilities Act (ADA). Under this organizational structure, FAX and MV Transportation has made significant progress towards improving the efficiency and cost-effectiveness of the program. "No Shows", when a client fails to fulfill a scheduled trip, have historically hindered the paratransit service. In FY 2010 Handy Ride reduced "No Shows" to just over 2%, representing a savings of \$21,534. This contributed to an increased productivity of 2.35 Passengers per Revenue Hour, an increase of 4.2% over the previous year.

FAX continues to closely monitor Handy Ride service in order to assure compliance with the city contract and with the ADA, Handy Ride's ridership has grown from 222,428 passenger rides in FY2008 to 238,707 passenger rides in FY10. Table 3.13 presented below shows Handy Ride's annual ridership. Beginning in late 2002, Handy Ride changed its reservation system from 14 days in advance to 1 day in advance. This change originally resulted in an increase in taxi usage, which peaked in FY 2006 with over 49,000 taxi trips. In FY 2010, MV has eliminated taxi usage, and continues to experience no trip denials for Handy Ride passengers.

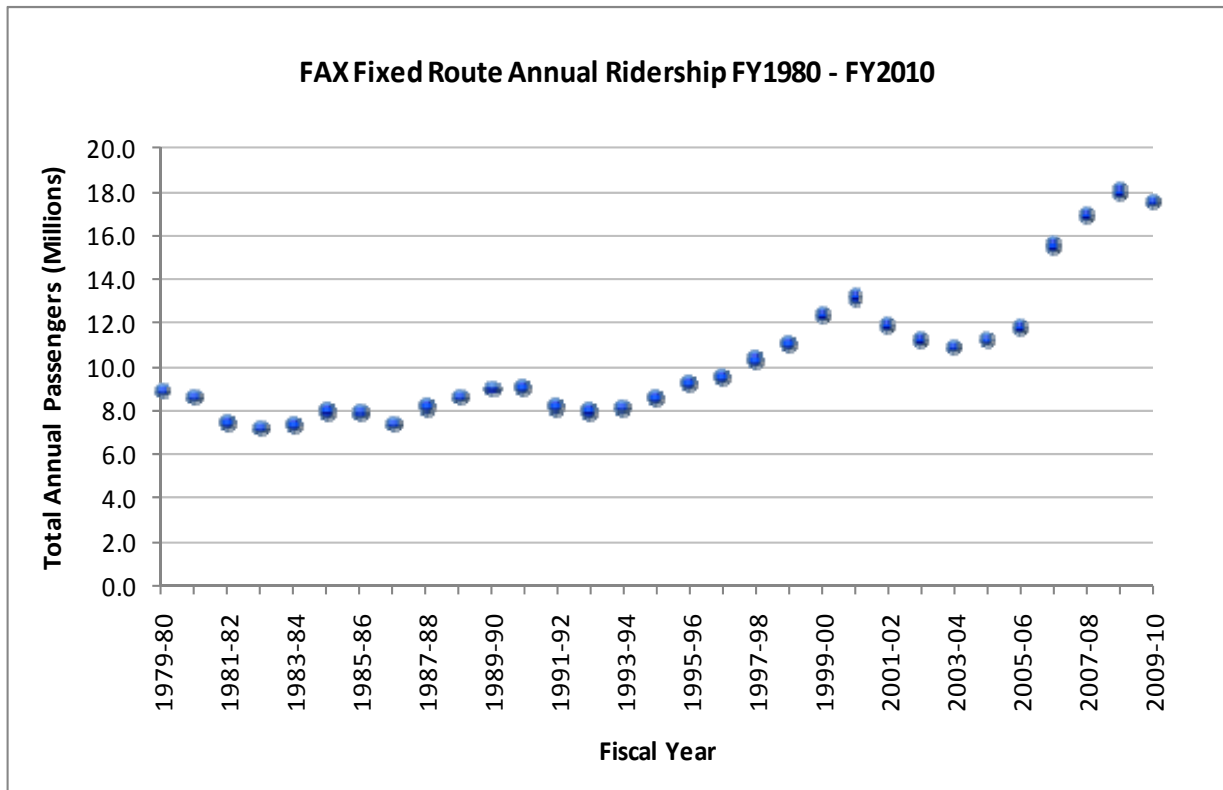


Figure 3.10: FAX Fixed Route Annual Ridership FY1980 - FY2010

Annual Ridership on FAX bus routes has more than doubled in the 30-year period of time from 1980 to 2010: from 8,890,764 riders in FY1980 to 17,589,425 riders in FY2010.

Figure 3.11: FAX Fixed Route Annual Operating Costs FY1980 - FY2010

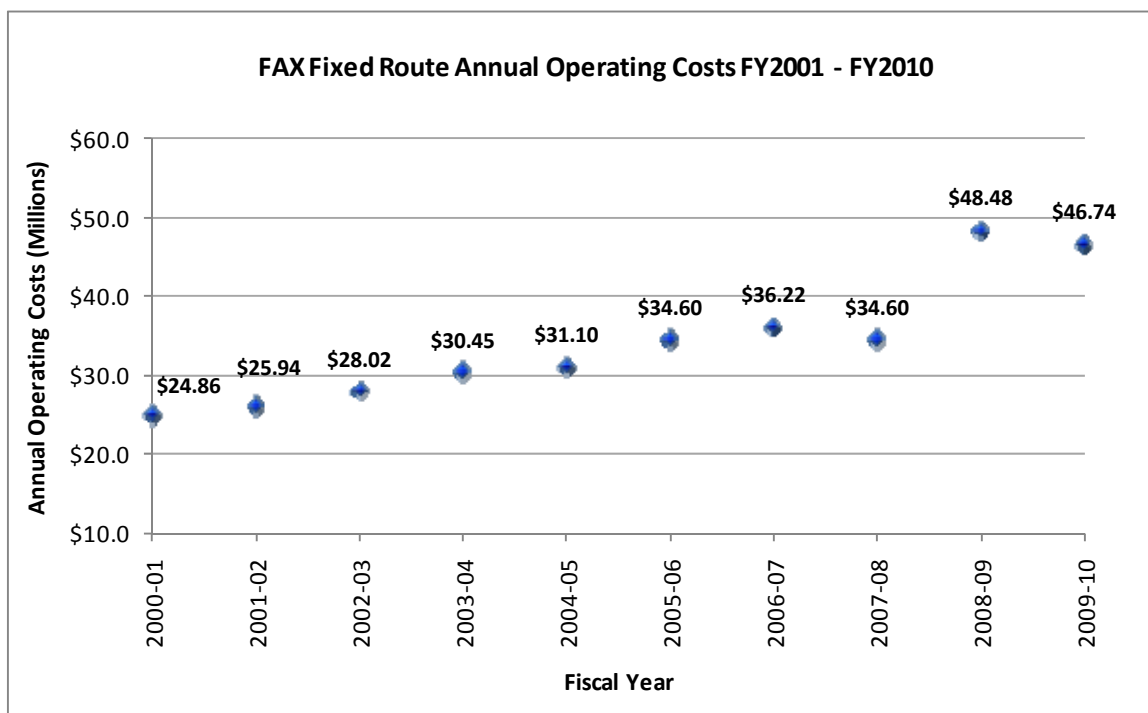


Figure 3.11 illustrates how annual operating costs for the FAX system have nearly doubled – from \$24.86 million in FY2000 to \$46.74 million in FY2010.

Figure 3.12: Comparison of Ridership vs Operating Costs

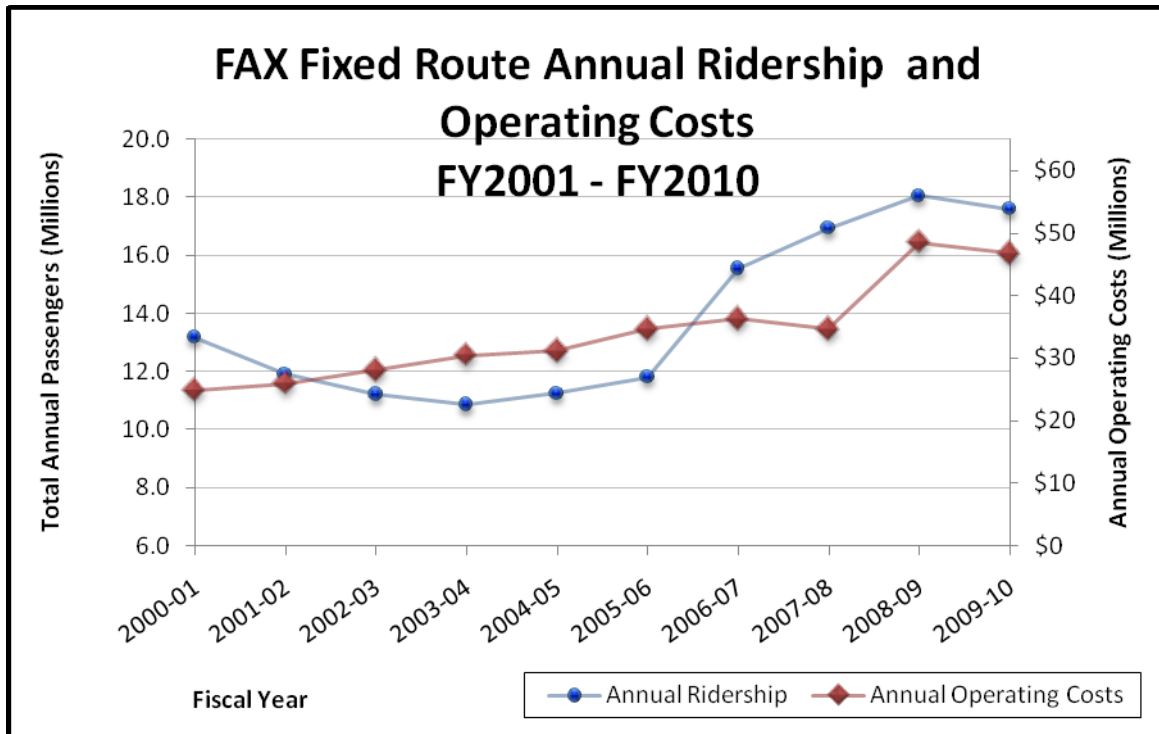


Figure 3.12 illustrates that ridership has grown faster than operating costs over the past decade. Operating budgets and costs are essentially the same at FAX: every cent of operating revenue received is spent on keeping service operating on the streets. There is no money being set aside for reserves. The difference between the demand for FAX services and the ability to provide for that demand with expanded routes or hours has created the need to cut service and raise fares in order to keep core services operating in the City of Fresno. It has also created a very tight operation, with increased crowding on the peak hour bus routes and increasing numbers of riders left behind at the bus stops because there is no room for them on the bus.

In fact, if this trend of decreasing revenues and increasing ridership continues, FAX is facing an operating budget deficit of \$6.4 million by FY2016. (See Table 4.1: Operating Revenue and Expenditure Projections)

Table 3.13: Handy Ride Annual Mileage and Ridership FY89 – FY10

FISCAL YEAR	VEHICLE MILES	% CHANGE	TOTAL PASS.	%CHANGE	MILES/ PASS.
1988-89	260,689	- 1.3%	46,040	5.9%	5.7
1989-90	255,279	- 2.1%	45,047	- 2.2%	5.7
*1990-91	274,719	7.6%	52,130	15.7%	6.1
*1991-92	266,539	- 2.9%	53,303	2.2%	5.3
*1992-93	329,387	23.5%	60,599	12.0%	5.4
1993-94	468,151	42.1%	71,227	17.5%	6.6
1994-95	575,345	22.9%	89,256	25.3%	6.4
1995-96	526,562	-8.4%	87,466	-2.0%	6.0
1996-97	402,443	-23.6%	86,504	-1.1%	4.7
1997-98	635,611	57.9%	96,026	11.0%	6.6
1998-99	687,902	8.2%	97,566	1.6%	7.0
1999-00	773,874	12.5%	95,603	-2.0%	8.0
2000-01	868,861	12.2%	100,832	5.4%	8.6
2001-02	920,744	5.9%	102,976	2.1%	8.9
2002-03	1,011,081	16.9%	133,483	29.63%	7.5
2003-04	1,182,065	5.9%	169,898	27.01%	6.9
2004-05	1,084,752	-8.23%	192,556	13.34%	5.6
2005-06	982,540	-10.4%	182,818	-5.3%	5.4
2006-07	963,836	-1.94%	180,674	-1.2%	5.4
2007-08	1,172,610	17.8%	222,428	34.0%	5.3
2008-09	1,119,986	-4.70%	234,423	5.12%	4.8

2009-10	1,609,206	30.4%	238,707	1.79%	6.7
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Handy Ride Assessment of Service and Rider Needs:

In March 1994, Bartels Research Inc. conducted the first passenger survey of Handy Ride users. The major objective of the survey was to determine whether or not the current provider, Laidlaw Contract Services, should continue to provide the service, and to determine how the service could be improved.

Overall, a report card with letter grades was generated for the first time in a report on FAX's Handy Ride satisfaction performance. Handy Ride earned 12 A's and 4 B's on the sixteen service attributes evaluated. The relatively less satisfactory performance area was Handy Ride's on-time performance. This includes scheduled reservations and Will Call pick-ups.

The other area that received a lower mark was "getting to the destination on-time". Compared to the survey in 2004, a higher proportion of riders in 2007 were allowing only an hour window between their requested pick-up time and the appointment. This may have contributed to this lower satisfaction over Handy Ride pick-up times. Only 20 percent of the sample indicated "always allowing a two hour window between their requested pick-up time and their appointment time". Riders who were late to their appointments or late getting home may have attributed the delay to Handy Ride's long wait times. Riders may feel that the "two hour window" was unnecessary as most of their rides were typically shorter than 30 minutes. Finally, excluding the wait times where Handy Ride was allegedly late, the typical and longest median pick-up times were very reasonable and well within FAX's allowable wait times.

3.3.0 Service Justification

In 2006, Fresno County voters approved a half-cent sales tax called Measure C. Measure C included a projected \$5 million reserve for the completion of the PTIS and the formation of a regional transit agency.

The PTIS is to evaluate mobility needs and opportunities, and to identify strategies for public transit and transit supportive infrastructure development that will result in wider acceptance and use of non automobile transportation modes such as public transit, bicycle and pedestrian travel. In addition to the development of viable alternative public transportation options for Fresno County, this study seeks to develop ridership projections and cost estimates for various growth and development scenarios that will be used to establish a long-range plan leading to optimum connectivity within the region.

A Regional Transit Agency Formation study was completed in 2007. The Study which included peer evaluations, policy level stake holder interviews, an evaluation of existing system performance and coordination efforts, found that Fresno County public transportation operators already have a high level of cooperation and coordination. Additionally, based on peer evaluations, Fresno County Operators are providing a cost-effective and productive service. The Study

recommends the formation of a 'Transit Coordinating Council' which would consist of policy level members and technical staff support. The purpose of the Council would be to continue to explore improved coordination potentially leading a regional transit agency.

In another step towards integrating the regions transit systems, FAX under a FTA Job Access Reverse Commute grant, will be procuring a Trip Planning Software System. This system will incorporate the schedules from FAX, Clovis Transit and Fresno County Rural Transit Agency (FCRTA) and allow users to access the information via the internet or telephone. This system will have an Interactive Voice Recognition (IVR) component to facilitate the telephone inquiries. Depending on funding availability, the IVR will be expanded to include Handy Ride reservations, cancellations and status of appointments.

3.3.1 Bus Service Expansion Program

Unmet Transit Needs

The annual Unmet Needs Report, administered by the Fresno COG has not had any findings related to FAX for the last two years and is not expecting any unmet needs to be identified in FY 2012.

The City of Fresno, in cooperation with the Fresno COG, has reached out to all the major employers in the greater Fresno metropolitan area to determine the public's awareness of the availability of the Fresno Area Express (FAX) bus service and the Valley Rides program. Both services offer excellent transportation alternatives to the drive-alone commuter and are almost sure to save the worker now driving alone to work significant savings over his or her current costs.

As a result of this study, FAX, in partnership with the Fresno COG, developed an outreach schedule to present transportation options to those employers requesting the service through the survey. Fifteen employers requested additional information about public transit and Rideshare services.

FAX has been experiencing major increases in ridership during peak period service. These capacity issues occur most frequently near schools, and are present for only short periods of time, often less than one hour. The major routes that are impacted have been improved to 20-minute frequency. This has all but eliminated the need for tripper service on these corridors. Currently, only 3 routes still require limited tripper service. They are routes 20, 26 and 41.

Service Coverage - As the urbanized area continues to spread, more and more development is occurring where public transportation does not currently exist. These newly developed areas, as a rule, do not have the density to justify fixed-route service on 30 minute headways. Additionally, adjusting trunk line service is a difficult and often very costly solution. FAX has evaluated circulator service as an option for providing service in currently un-served and newly developing areas. The FANS service, as discussed earlier, is an example of how this type of service could potentially serve these areas. The concern is the low productivity of this type of service and its ability to meet

productivity standards.

FAX continues to promote increased densities in order to create a transit system that functions more effectively and efficiently. We encourage businesses that serve the transit dependent to consider transit developed corridors whenever relocation is needed.

In FY12, FAX will be constructing a new transit facility in the Southeast corridor which will provide more transportation access to passengers in the area. The center will act as a transit multimodal center which will include access to transit, bikeways, walking and some nearby multi-family housing. This facility will be the first multimodal transportation center in Fresno.

Due to a recent reduction in State funding, as well as lower than expected revenues for Measure C, considerations for future service adjustments will be evaluated. Areas to be considered are; service frequency during peak, off peak, night, and weekends.

3.4.0 Customer Services and Public Information Program

FAX desires to increase ridership while enhancing customer satisfaction with transit services. To accomplish this, new initiatives have been implemented and described below.

Public Information and Outreach - During FY10, FAX continued the implementation of various Marketing and Service Development strategies. Efforts have been made to provide a program of public information and outreach activities with the intent to increase public awareness and ridership as well as improve public perception of public transportation in the FCMA.

FAX Planning Staff continues to work with major employers at work sites throughout the FAX service area. Work site visits were conducted to promote transit services and gather suggestions to improve existing services. Transit user guides such as transit schedules, bike rack user guides, system maps, transit commuter benefit information, FAX newsletters, and service change announcements were made available. Additionally, transit trip planning was provided to assist new passengers.

FAX is currently in the process of implementing a Trip Planning Software system that also utilizes an Interactive Voice Response (IVR) system. By the end of 2011, passengers will be able to retrieve FAX scheduled service and information 24 hours a day, seven days a week. As we move forward with our new bus stop sign project, each stop will be uniquely numbered and passengers can call in, identify the stop they are at, and get the time of the next scheduled bus. The Trip Planner, will allow customers to pre plan any trip in the Fresno-Clovis Metropolitan Area.

Fresno Area Express continues to pursue the Transit Oriented Development (TOD) along Kings Canyon Avenue, which will provide a transit shelter, some market rate housing, bus stop, access to bikeway and walkway, and other transit facilities such as an information kiosks and restrooms. This project was initiated in 2006 and should begin construction in FY 2012. The success of this TOD project will set the benchmark for future projects of this type.

One of the biggest challenges FAX has faced this year is staffing turnover. Due to the economic downturn facing the City of Fresno, FAX has experienced significant turnover in its customer service staff. This has made it difficult to maintain the high levels of service that FAX is accustomed to. The new IVR system should reduce the call volume to the service centers and allow staff to focus on the specific needs that arise.

3.5.0 Recent Planning Activities

Recent Planning Studies that have a relationship to this SRTTP are detailed below.

FAX Routes Restructure Analysis (Draft) by Nelson Nygaard, April 21, 2010

The objective of this planning effort was to build a new route structure for FAX that focuses on the many strengths of the current system while trimming the system to operate at a more sustainable level given the current economic realities. At the outset, the goal was to reduce annual revenue hours by 18%. The analysis was structured around a number of core service principles:

- Retain as much of the grid system as possible.
- Retain as much of the high frequency service as possible.
- Prepare the system for the first phase of implementation of BRT⁷
- Reduce route duplication

A restructured system was designed that cut 208 daily hours of service, eliminated the need for 17 buses and reduced daily revenue hours by 6.5 hours or 1.1% of the system total revenue hours for a total annual savings of about 53,700 hours or 16.5%.

Transit Regional Consolidation Study, Nelson Nygaard, June 2007

This study analyzed the current transit systems in Fresno County, and explored the opportunities and challenges of coordinating transit services in the County and in the longer-term to move toward a consolidated regional agency. The study concludes with recommendations for both short-term and longer-term coordination projects and a longer term vision to consolidate services.

This study was conducted, in part, to address a 2003 Fresno County Grand Jury Report that recommended school bus systems consolidate with public transit systems in Fresno County. Five school districts have formed the Southwest Transportation Agency, a Joint Powers Authority (JPA) providing transportation services. Upon completion of the Grand Jury Report, the Transportation and Air Quality Committee met with the Fresno, Clovis, Central Unified Districts and the Southwest Transportation Agency to further explore this issue. While they agreed that consolidation of transportation services may provide some efficiencies, there are many constraints that are placed on school bus transportation and publicly funded transit services which severely limit opportunities to consolidate services.

⁷ As generally outlined in the Kimley Horn and Associates, Inc. Bus Rapid Transit Report

Benefits of regional transit consolidation cited were:

- Ease of Use
- Service Branding
- Unique Fare Structure.
- Route & Structure Simplification
- Eliminate Duplication of Services
- Schedule Simplification and Coordination
- Effective Use of Transit Centers
- Maintain Service to Important Markets and Areas

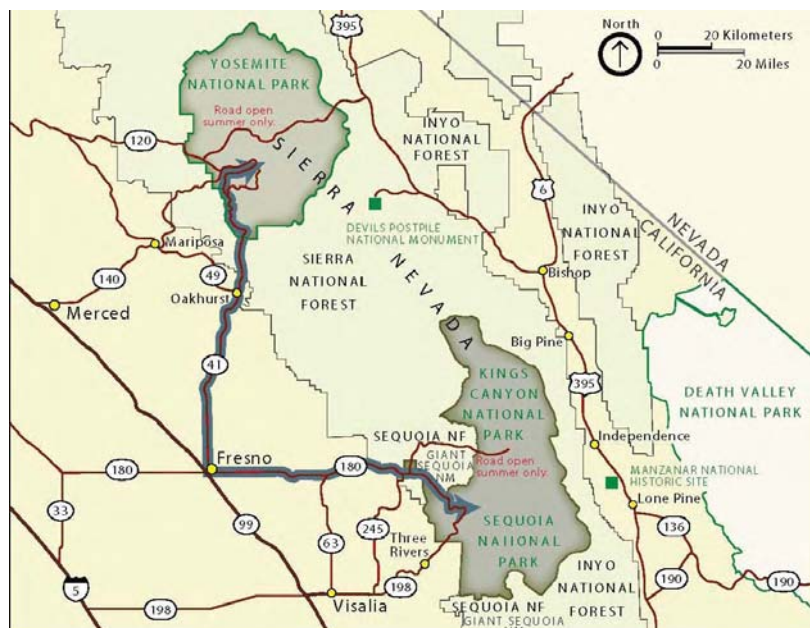
However, joint talks toward regional transit consolidation will continue to explore ways the agencies can cooperate to save money and provide a seamless transit experience between different political jurisdictions.

Yosemite, Sequoia and Kings Canyon National Park Transit Market Assessment and Feasibility Study, Fehr and Peers, February 2011

The purpose of this feasibility study is to determine the viability of implementing one or more transit routes between the City of Fresno and Yosemite, Sequoia and Kings Canyon National Parks. Feasibility is assessed based on a number of factors, including local support, ridership potential and financial sustainability.

The feasibility assessment examines two transit routes: one between the City of Fresno and Yosemite National Park and another between the City of Fresno and Sequoia and Kings Canyon National Parks.

The route to Yosemite would begin at the Fresno Greyhound Station (downtown), stop at the Amtrak station, Fresno Yosemite International Airport, Fresno State, north Fresno/State Route (SR) 41 hotels, Chukchansi Gold Resort-Casino and Oakhurst before entering Yosemite National Park (South Entrance) and stopping at Yosemite Village Center, Curry Village, Ahwahnee Hotel and Yosemite Lodge. The route (one-way) is approximately 100 miles, and one-way travel time from the Fresno Greyhound Station to



Yosemite Lodge would be about three hours.

The route to Sequoia would begin at the Fresno Greyhound Station (downtown), stop at the Amtrak station, Fresno State and Fresno Yosemite International Airport before entering Kings Canyon (Big Stump entrance) and stopping at Grant Grove (Kings Canyon), Montecito-Sequoia Lodge (Sequoia National Forest), Stony Creek Village (Sequoia National Forest) and Wuksachi Village (Sequoia National Park). The route (one-way) is approximately 85 miles, and one-way travel time from the Fresno Greyhound Station to Wuksachi Village would be about two hours and twenty minutes.

The results of the feasibility assessment indicate that substantial amounts of demand exist for both the Fresno-Yosemite route and the Fresno-Sequoia/Kings Canyon route. This is due to a combination of factors including growing attendance levels at the parks, the large population base of the Fresno region, the major transportation hubs (i.e., Fresno Yosemite International Airport, Greyhound and Amtrak Station) in Fresno, the number of hotel rooms both in Fresno and along the SR 41 corridor (Oakhurst, Wawona, etc.) and major generators such as Fresno State. The success of peer service provided by YARTS (to Yosemite National Park) and Sequoia Shuttle (to Sequoia National Park), from much smaller markets, reinforces the potential for success.

The Public Transportation Infrastructure Study (PTIS), Kimley-Horn and Associates, 2008-2011

The PTIS study was funded by Measure “C” monies and is being finalized now for presentation to elected officials in May of this year. The Final Draft PTIS Study makes detailed recommendations to enhance walking, bicycling and transit use by intensifying development densities in close proximity to the planned high capacity transit corridors. The PTIS policy recommendations illustrate how current FAX policy can be integrated into an action plan for implementation. The summary recommendations only are presented here. For the full list of proposed Smart Growth policies and strategies see the full PTIS Study Report online at www.FastTrackFresnoCounty.com.



Summary of PTIS Policy Recommendations:

Policy recommendations were made by the consulting team on the PTIS Study for implementation by the City of Fresno, Fresno County, and the cities and towns of greater Fresno County to meet the study objectives. These land use recommendations, endorsed by City of Fresno staff fall under seven broad categories:

1. Locate a major portion of all new households, office and retail/commercial employment within planned and proposed high capacity transit corridors.
2. Approve general plan and zoning authorization to support high capacity transportation corridors: 15 to 18 du/ac average residential infill density within ½ mile proximity and 8 to 12 du/ac within ½

to 1 mile proximity of planned and proposed transit corridors and downtown of Fresno.

3. Implement general plan and zoning authorization, together with other incentives and creative public-private partnerships to facilitate establishment of transit oriented

developments that provide a variety of housing types to serve broad range of household sizes and incomes within BRT and other identified transit corridors and downtowns of Fresno, Clovis and other Fresno County cities.

4. Reduce the parking requirements for new development within planned BRT and other designated transit corridors and downtown Fresno and Clovis to promote a higher return on investment for TOD projects.

5. Reduce the existing over-supply of surface parking within the planned BRT corridors and downtown Fresno, utilizing shared parking agreements, reciprocal access agreements, public parking facilities and the conversion of surface parking to other uses.

6. Limit the extent of fringe development and expansion of the sphere of influence within the County of Fresno and the incorporated cities in conjunction with the other identified strategies to promote infill development and achieve the smart growth objectives.

7. Require that proposed new development located within the fringe areas of the Fresno-Clovis Metropolitan Area and the surrounding Fresno County area bear the full costs of providing public infrastructure improvements together with the long-term maintenance of these public facilities.

Chapter 4: Financial Plan

4.1.0 Introduction

The Financial Plan presents FAX's financial forecasts associated with projected transit services including capital projects to maintain, enhance, and expand FAX services. The Baseline Plan demonstrates that FAX has the financial capacity to operate and maintain all planned services without assuming any significant new local sources of operating revenue. The Fresno COG recently conducted a survey on the Measure C funds, and determined that over the next twenty year period there will be an increased demand for transit, therefore, public policies in the future should favor support of transit. More recently, the Fresno COG is undertaking Phase II of a Regional Public Transportation Infrastructure Study which will highlight transportation needs for the future and the possible need for future funding sources such as Measure C funds.

4.2.0 Capital Program

FAX presently operates 125 buses including 4 replica trolleys, 48 Handy Ride paratransit cut-a-ways, 4 transit vans, a maintenance facility, and a transit center. Table 4.1 summarizes costs and funding sources for operations from FY12 through FY16. Costs and revenue are shown in FY11 dollars. FAX is proposing some significant capital improvements over the next five years.

The total five year Capital Improvement Program (CIP) for FY12 through FY16 is projected to cost \$153.9 million as identified in Table 4.2 Capital expenditures are targeted in seven primary project areas including:

- Heavy duty 30'/40' buses
- 60' Articulated buses
- Downtown Circulator (electric bus)
- Paratransit Facility
- Transit Signal Prioritization
- Automatic Passenger Counters
- Bus Rapid Transit
- New multimodal facility
- Passenger amenities and facility upgrades
- Handy Ride vehicle purchases, and equipment
- Security
- Non revenue vehicle replacements
- Planning

Additionally, planning expenditures for projects and services performed by Fresno COG staff assigned to FAX are included in the CIP. Preventative maintenance programs and vehicle tire leases are capitalized for reimbursement through FTA. Capital leases for paratransit vehicle tires and the paratransit facility are capitalized, as well as the paratransit maintenance program

provided through a contractual agreement with MV Transportation, Inc.

Table 4.1: Operating Revenue and Expenditure Projections

FY2012-FY2016 Operating Revenue and Expenditure Projections					
	FY2012	FY2013	FY2014	FY2015	FY2016
Resources					
One-Time Resources					
Carryover	4,175,200	2,998,400	509,956	(1,925,281)	(4,205,971)
Prior Year Adjustment					
Prior Year Grant Revenues	0	0	0	0	0
Federal Stimulus Funds	0	0	0	0	0
One-Time Total:	4,175,200	2,998,400	509,956	(1,925,281)	(4,205,971)
Operating Revenue					
State TDA/LTF Funds	17,100,000	17,613,000	18,141,390	18,685,632	19,246,201
Passenger Fares	9,779,300	9,779,300	9,974,886	10,174,384	10,377,871
Measure C	7,118,500	7,332,155	7,552,117	7,778,677	8,012,037
Federal 5307 Grant Funds	9,550,500	8,475,700	8,729,971	8,991,870	9,261,626
Federal CMAQ Grant Funds	0	0	0	0	0
CNG Tax Rebate	340,000	350,200	360,706	371,527	382,673
Transfers	159,000	159,000	159,000	159,000	159,000
Misc Revenue/Interest	6,400	110,248	59,026	102,269	102,300
Fare Increase	0	0	0	0	0
Operating Revenue Total:	44,053,700	43,819,603	44,977,096	46,263,359	47,541,709
Total Revenue	48,228,900	46,818,003	45,487,052	44,338,078	43,335,738
Expenditures					
Operating Expenditures					
Employee Services	27,936,800	28,495,536	29,065,447	29,646,756	30,239,691
Purchased Prof and Tech	5,268,900	5,426,967	5,589,776	5,757,469	5,930,193
Purchased Property Services	2,186,000	2,251,580	2,319,127	2,388,701	2,460,362
Other Purchased Services	163,300	168,199	173,245	178,442	183,796
Supplies	5,034,000	5,185,020	5,340,571	5,500,788	5,665,812
Property	-	-	-	-	-
Other Objects	447,100	460,513	474,328	488,558	503,215
Interdepartmental Charges	4,194,400	4,320,232	4,449,839	4,583,334	4,720,834
Total Operating Expenditures	45,230,500	46,308,047	47,412,333	48,544,049	49,703,902
Total Resources less Expenditures	2,998,400	509,956	(1,925,281)	(4,205,971)	(6,368,165)
Miscellaneous Expenses					
In-Lieu Payments	\$322	\$322	\$322	\$322	\$322
Interdepartmental Charges (0.03 annual increase)					
Interdepartmental Charges	\$4,194	\$4,320	\$4,449	\$4,583	\$4,720

FY2012-FY2016 Operating Revenue and Expenditure Projections					
	FY2012	FY2013	FY2014	FY2015	FY2016
Paratransit Contract (0.05 annual increase)	\$5,000	\$5,250	\$5,513	\$5,788	\$6,078
TOTAL OPERATING COSTS	45,230,500	46,308,047	47,412,333	48,544,049	49,703,902
TOTAL OPERATING SURPLUS/(DEFICIT)	2,998,400	509,956	(1,925,281)	(4,205,971)	(6,368,165)
Note: All Revenue and Operating Cost data are projected. Includes FTA reimbursements for planning, and preventative maintenance expenses.					

4.2.1 Revenue Vehicles and Vehicle Equipment

FAX's revenue service vehicles include buses and paratransit vans. Replacement of existing revenue vehicles is one of FAX's highest capital priorities. As another priority, FAX will be increasing the number of buses from 125 in 2011 to 139 during the SRTP period. The SRTP projects an annual operating budget of \$45.2 million in FY12 increasing 10 percent to \$49.7 million in FY16 (see Table 4.1). Projected operating revenues are not anticipated to offset total costs over the five year period and will result in an estimated shortfall of \$6.4 million by FY16. The projected operating budgets assume a six percent annual increase in fares and a 3.25% increase in State LTF funds. A 3% increase in FTA Section 5307 operating assistance is also assumed over the five-year period.

Bus Replacement

Cost estimates for replacement buses programmed in FY12 and beyond are based primarily on APTA survey data for 30-foot, 35-foot, 40-foot and 60-foot (articulated) buses. Primary funding for replacement buses is assumed to be from the Federal Transit Administration (FTA) in the form of Section 5307 (Urbanized Area Capital) program, with approximately 20% FAX local match and the American Recovery and Reinvestment Act (ARRA) with no local match required. In support of a gradual increase in bus service through FY16, FAX will continue to operate a small number of older buses for a limited time even after replacements for these buses have been placed into service.

Full-size buses - FAX has purchased Compressed Natural Gas vehicles which comprise the best available technology for reducing harmful vehicle emissions. With their purchase, FAX and the Fresno COG are implementing their commitment to cleaner air. The total five-year fleet replacement program cost is over \$9 million.

Paratransit buses - As part of the CIP, FAX will be ordering paratransit buses in FY12 through FY16. A total of 14 replacement vehicles are programmed for a five-year program cost of \$923,000. This figure includes any vehicle funded through the Caltrans 5310 program which includes funding for the replacement and expansion of paratransit vehicles. FAX will continue to

apply for these competitive grants in the future to help offset the costs of vehicle replacements.

Bus Expansion

System efficiencies based on productivity will continue to be the basis for shifting system resources in the future. Route cost analysis based on fully allocated costs will be an integral part in determining feasible tradeoffs and future service improvements. Within the proposed service level, service adjustments will be made during the planning period on individual routes and schedules to reflect existing and changing ridership characteristics and needs. The SRTP recommends that any future required service adjustments continue be made on the basis of the goals, standards and objectives listed in Chapter 1. This type of vehicle will provide relief for some of FAX's highest volume bus routes. Service changes will be made on the busiest routes as required to address on time performance.

Automatic Passenger Counters

Fresno Area Express currently has APC's on approximately 20% of its fleet. These units, manufactured by Red Pine will no longer be supported and will become obsolete by year's end. The procurement of APC's will allow FAX to gather data provided by the APC's that include: boardings and alightings at each stop; load factor at each stop; on-time performance at each time point; running time between time points; the number and location of each use of the wheel chair lift and bike rack; total ridership on the trip; passenger miles; and average length of each passenger trip. This data will enable FAX to determine more accurate ridership patterns and improve schedule adherence.

Paratransit Facility

Fresno Area Express (FAX) is required by law to provide transit service to ADA certified eligible citizens in an overlay of its fixed-route transit service in time and geography. This service, known as Handy Ride, is demand-response and therefore requires extensive reservation and dispatch functions, including computer and radio technology applications and the staff to operate the system. Additionally, Handy Ride includes the paratransit staff and equipment involved in the certification of ADA eligible customers, as well as a fleet of 50 vehicles that require secure parking and maintenance facilities. Due to the growth of the Handy Ride service over the years, it is currently housed in two locations. The current facilities are leased and do not adequately meet the current or long-term needs of the operation. FAX has purchased property that includes the space and structures needed to appropriately house its paratransit equipment and operations, thus meeting current and future needs for years to come. The FY 2012 budget has funds committed to the remodeling of this facility to make it compatible to our needs.

4.2.2 Support Vehicles

FAX has determined that the optimal point to replace non-revenue vehicles to minimize capital outlays, maximize reliability and minimize repair costs, ranges between six and 20 years and a minimum of 85,000 miles, depending on vehicle type and usage. Vehicles are generally scheduled for replacement according to age, mileage, vehicle condition, and reliability requirements for each

vehicle type as follows:

Field supervisor accessible handivans 6 years or 100,000 miles

Sedans & passenger vans 8 years or 85,000 miles

Mini pickups, station wagons,

Road call trucks, utility vehicles 10 years or 100,000-120,000 miles

Cargo vans, medium trucks 12 years or 100,000 -120,000 miles

Heavy trucks, utility equipment 15-20 years

FAX's fleet of non revenue vehicles assists in the operation of the fixed route service. This fleet is composed of stock vans which are used to make driver shift changes, provide for road supervisor inspection and assistance and response to road calls. Also included are large trucks, pickup trucks, forklifts and trailers which are used in maintenance and operations. The replacement program for non revenue vehicles over the next five years will cost \$80,600.

4.2.3 Passenger Facilities Expansion and Rehabilitation

FAX's passenger facility capital improvement program includes bus stop improvements, and replacement of transit passenger amenities such as information signs, benches and bike lockers.

Bus Stop Accessibility Improvements - To meet ADA requirements for bus stop accessibility, FAX has developed a program to upgrade all deficient bus stops. To date, improvements to over 550 of the over 1,900 stops have been completed. The construction of bus stop areas for convenient, comfortable, and safe passenger waiting areas will also include upgrading of benches and bus shelters in the project area. FAX has replaced over 500 benches and 190 bus shelters over the last few years, and will continue to upgrade these facilities throughout the system.

Included in the CIP is a plan to enhance the passenger amenities in the downtown area. As part of the ARRA capital projects, FAX plans to remodel the shelters at Courthouse Park, including security cameras, shelter lighting and the addition of lighted pathways for the increased safety of our passengers. This project is programmed for over \$2.8 million over the life of the SRTP.

Planning Projects - Planning projects provide support of planning functions. An ongoing planning function is necessary to provide FAX with information to adjust the system for long range and short range transit needs, and to meet the various complex Federal and State Transportation planning requirements. Fresno COG planning staff performs all service planning functions for FAX, through a contractual agreement with the City of Fresno, Department of Transportation. A Transit Supervisor is included in the FAX Planning section to perform scheduling duties. Consultant studies are also coordinated by Fresno COG staff which includes the Regional Transit District Formation Study and Regional Public Transportation Infrastructure Study, Phase II, which will be completed in 2011. Planning Projects are programmed for a total of \$4.8 million over the life of the

SRTP.

BRT Very Small Starts Application - Fresno Area Express (FAX) plans to implement street-running BRT between North Fresno, Downtown Fresno and the Southeast Growth Area. The Blackstone/Kings Canyon BRT project includes transit signal priority, real-time bus arrival displays and proof-of-payment fare collection; service would be operated using low-floor, low emission compressed natural gas (CNG) or CNG-hybrid buses, including eight articulated buses that would be purchased as part of the project.

Proposed Project: Bus Rapid Transit - 13.8 Miles, 26 Stations

Total Capital Cost (\$YOE): \$48.19 Million

Section 5309 Small Starts Share (\$YOE): \$38.55 Million (80.0%)

Annual Forecast Year Operating Cost: \$3.79 Million

Opening Year Ridership Forecast (2014): 7,200 Average Weekday Boardings

Dedicated lanes for the BRT vehicles would be implemented along approximately 20 percent of the alignment. BRT service would replace existing local service in the corridor and offer decreased travel times through fewer stops, more frequent service and the aforementioned priority treatments.

Project Purpose: The Blackstone/Kings Canyon BRT project would improve the speed and reliability of service in a commercial corridor with existing high transit demand. Much of FAX's ridership in the corridor is low-income or transit-dependent. BRT service would provide faster connections between the Southeast Growth Area, which is anticipated to add up to 55,000 new residents by 2025; downtown

Fresno, a regional hub for civic and governmental institutions; and North Fresno, which houses significant education campuses, medical centers, and commercial centers.

Project Development History, Status and Next Steps: FTA approved the Blackstone/Kings Canyon BRT project into project development as a Very Small Start in December 2010. Over the next year, FAX expects to conduct engineering and design activities. FAX anticipates that the project will qualify as a documented Categorical Exclusion for NEPA purposes. Revenue operations are anticipated to commence in early 2014.

4.2.4 Total Capital Program

The total capital program to be undertaken by FAX includes both the Capital Program and the Measure C Program.

FTA - Operating and Maintenance expense reimbursement - This project provides FTA reimbursements for expenses in programs directly related to preventative maintenance on fixed-

route and paratransit vehicles, capital lease of vehicle tires, and allowable contracted paratransit expenses. Fixed-route vehicle preventative maintenance programs are eligible for 80% FTA reimbursement. Handy Ride contracted vehicle maintenance expenses are eligible for 25% reimbursement, while contracted vehicle operations are eligible for 20% FTA funding.

Service to Newly Developing Areas - Many of the new moderate income areas within FAX's service area are developing beyond existing transit routes. The SRTP provides for limited extension of some existing routes into these new areas with proposed circulator service. However, FAX cannot assure additional expansion of service over the next five years in order to meet this tremendous growth. Additional service to new areas will be evaluated and implemented when warranted, and as funding allows.

Key Findings and Recommendations

1. The existing transit providers and carpool/vanpool programs are operating fairly efficiently considering the sprawling geographic area they are serving. The Vanpool program appears to be particularly successful in the region, serving low income farm and agricultural workers and should be expanded to serve more people.

Recommendations to improve carpooling and vanpooling in the Fresno area from the San Joaquin Valley Express Transit Study include:

- a. Continue with plans to form a Joint Powers Authority in the southern portion of the Valley to operate KART and AITS Vanpool.
- b. Prioritize vanpooling to Fresno.
- c. Provide a single Valley-wide ride-matching and vanpool website.
- d. Invest in more vanpool marketing to choice riders.
- e. Expand park-and-ride opportunities.
- f. Offer Guaranteed Ride Home throughout the Valley.
- g. Seek to influence the development of the new Air District trip reduction rule, so that it can fund and promote ridesharing to large employers.

Table 4.2: FAX Five-Year Capital Improvement Plan

FY12 through FY16

Project Descriptions	Funding Source	Fiscal Year				
		2012	2013	2014	2015	2016
40' Foot Bus Purchase	5307/5309/CMAQ/ARRA	\$5,967,600				
30' Foot Bus Purchase	ARRA	\$793,800				
60' Foot Articulated Buses	CMAQ		\$2,640,000			
HR Paratransit Vehicles & Equipment	5310/CMAQ	\$676,400	\$247,000			
Non-Revenue Vehicles	5307/ARRA	\$80,600				
Automatic Passenger Counters (APC)	ARRA	\$984,600				
Trip Efficiency Program - Handy Ride	5317 - New Freedom	\$101,000				
Bus Stop Numbering in Braille	5317 - New Freedom	\$85,000				
Bus Stop Improvements	5317 - New Freedom	\$303,000				
Travel Training - Operating	5317 - New Freedom	\$33,200				
Trip Planning Project	5316 - JARC	\$60,500				
Transportation Needs Project	5316 - JARC	\$250,000				
3 Position Bike Racks	5316 - JARC	\$132,000				
Bicycle Lockers at Transit Stops	5316 - JARC	\$125,000				
Rehabilitate Downtown Bus Shelters	RSTP		\$500,000			
Bus Video Surveillance	TSGP	\$450,000				
Facility Surveillance/Access	Prop 1B - CTSGP	\$1,270,100	\$570,000	\$570,000	\$570,000	\$570,000
Downtown Circulator	CMAQ / 5308	\$3,485,000				
DT Circulator Planning	CMAQ	\$44,000				
Bus Rapid Transit	5309	\$23,188,000	\$12,500,000	\$12,500,000		
Kings Canyon Intermodal Facility	5309/CMAQ	\$1,332,600				
Way Finding Study & Implementation	Prop 1B -PTMISEA	\$75,000				
Paratransit Facility	Prop 1B -PTMISEA	\$1,800,000				
CNG Engine Retrofits	Prop 1B -PTMISEA	\$1,800,000				
Transportation Facilities	Prop 1B -PTMISEA		\$1,000,000	\$1,000,000		
Parking Shelters w/Solar Panels	Prop 1B -PTMISEA		\$253,600	\$1,760,600		
CNG Fuel Compressor	ARRA	\$250,000				

CNG Fueling Station	5307/5309	\$302,300				
COFCG Planning	5307	\$850,000	\$385,000	\$388,000	\$390,000	\$392,000
FAX Planning	5307	\$485,000	\$489,900	\$494,800	\$499,700	\$504,700
Preventative Maintenance	5307	\$8,000,000	\$8,080,000	\$8,160,800	\$8,242,400	\$8,324,800
Paratransit Contract Service	5307	\$4,125,000	\$4,166,300	\$4,208,000	\$4,250,100	\$4,292,600
Capital Lease - Vehicle Tire Lease	5307	\$400,000	\$408,000	\$416,200	\$424,500	\$433,000
Capital Lease - Handy Ride Facility	5307	\$175,000				
Passenger Amenities	5307	\$502,900	\$118,000	\$120,000	\$122,000	\$125,000
Transit Signal Prioritization (TSP)	CMAQ	\$1,565,700				
Automatic Fare Collection System (AFC)	ARRA	\$1,141,000				
Transit Enhancements	ARRA	\$3,000,000				
Total Capital Projects (All Sources)		\$63,834,300	\$31,357,800	\$29,618,400	\$14,498,700	\$14,642,100

Table 4.3 Funding By Source	2012	2013	2014	2015	2016
Congestion Mitigation Air Quality (CMAQ) Funds	\$6,366,500	\$3,140,000	\$0	\$0	\$0
American Recovery and Reinvestment (ARRA)	\$6,191,700	\$0	\$0	\$0	\$0
Federal Projects (5307, 5308, 5309, 5310, 5316, 5317)	\$46,331,000	\$26,394,200	\$26,287,800	\$13,928,700	\$14,072,100
Proposition 1B	\$4,945,100	\$1,823,600	\$3,330,600	\$570,000	\$570,000
Measure C / STA (State & Local Funds)					
Total Match Requirement	\$12,238,956	\$7,660,403	\$7,277,400	\$4,825,788	\$4,874,868
Total Capital Funding Available	\$63,834,300	\$31,357,800	\$29,618,400	\$14,498,700	\$14,642,100
Difference	\$0	\$0	\$0	\$0	\$0

4.3.0 Transit Revenues

The outlook for funding new transit infrastructure in Fresno exists within a larger economic and transit environment. This section of the Financing Plan places the identified infrastructure expansions within this larger context, and identifies opportunities and challenges for paying to

build, operate, and maintain them. The Financing Plan includes:

- Current and future environment for transit infrastructure investment
- Potential funding sources for capital and operating needs
- Key elements of a successful financial plan
- Funding plans for specific projects
- Summary

CURRENT AND FUTURE ENVIRONMENT FOR INFRASTRUCTURE INVESTMENT

Current Environment

The situation for capital and operating transit funding in Fresno County is very challenging. Sources that traditionally fund transit capital and operating costs include sales taxes and gas taxes, and these have been adversely affected by the economic slowdown. The state of California has diverted some transportation revenues to be used for other purposes. Regional transit funds have also been affected in Fresno. In 2006 voters reauthorized the local sales tax for transportation (Measure C). Measure C was anticipated to generate \$1.7 billion over the life of the Measure. However, it is unlikely that those revenue targets will be achieved. Federal funding sources have been and are projected to be more stable over the near and mid-term.

The consequences of these revenue cutbacks can be seen by looking at the largest transit provider in the region, Fresno Area Express (FAX). When Measure C was approved, it was assumed that by FY2010, FAX would receive more than \$9 million annually in funds. The approved FY2011 budget shows that FAX is estimated to receive \$5.1 million or approximately 40 percent less.

The consequences of the revenue shortfalls can be seen in Table AA. FAX has had to reduce its budget and staff.

Table 4.4: FAX Budget Changes			
	FY2009 Actuals	FY2011 Approved Budget	Percentage Change: FY2009 to FY2011
FAX Operating Expenditures	\$38,057,191	\$24,986,600	-34.3%
Authorized Positions	420.8	342.0	-18.7%

Source: FY2010-2011 Fresno City Adopted Budget

These reductions were necessary to balance the budget, even though FAX ridership grew significantly from 1999 to 2009. Revenue miles increased from 3.3 million to 4.7 million (42.9 percent) and ridership increased from 11 million to 18 million (63.8 percent) during this period.⁸

The challenges in Fresno extend to employment as well. In December 2010, the unemployment rate in Fresno County was 17.2 percent, up from 16.9 percent in November 2010 and higher than the 16.6 percent rate in December 2009. By comparison, in December 2010, the unadjusted unemployment rate for California was 12.3 percent, and for the nation as a whole was 9.1 percent.⁹

The situation faced by FAX is mirrored by transit agencies across the country. In May 2009, the American Public Transportation Association (APTA) surveyed 98 transit agency members. The responders represented more than half of the nation's transit riders and included 10 of the top 15 agencies in terms of annual ridership¹⁰. Key survey findings include:

- More than 80 percent report flat or decreased local and/or regional funding and flat or decreased state funding.
- For those with decreased state, regional, and/or local funding, 89 percent have had to raise fares or cut service and 47 percent have had to do both.
- Half of the systems have had to eliminate staff positions.
- Of those facing decreases in either local/regional or state funds, 55 percent have transferred capital funds to support operating costs.
- Even given increased fares, service cuts, lower fuel costs, and job losses, 60 percent of the systems reported increased ridership in the first quarter of 2009 compared to the first quarter of 2008.

Future Environment

Some of the infrastructure scenarios presented in this report are based upon aggressive assumptions about population growth. In order for this growth to occur, the economic situation must change to permit the creation of new jobs. In addition, housing and job growth would need to occur along existing transit corridors, rather than being permitted to occur in outlying low density areas.

High Speed Rail (HSR) is expected to increase the demand for transit in the region; it is not clear that this would translate into additional funding for transit service in Fresno. Final plans for HSR are not yet complete. The goal is to intensify development around HSR station sites; however, locations have not been finalized and the financial impact of increased densities is not yet known. Revenue generation opportunities may be available from impact fees and other development based revenue sources.

⁸ 2011 Regional Transportation Plan, Council of Fresno County Governments.

⁹ Data are from www.labormarketinfo.edd.ca.gov, Unemployment Rates and Labor Force data for the Fresno County Local Area Profile.

¹⁰ *Challenge of State and Local Funding Constraints on Transit Systems: Effects on Service, Fares, Employment and Ridership, Survey Results, June 2009*, American Public Transportation Association.

FUNDING CAPITAL AND OPERATING NEEDS

Overview

Support for public transportation is derived from a broad range of sources, many of which have been established to avoid competing with other public services. Sales taxes are the most widely used source of dedicated local and regional funding for transit.¹¹ In Fresno, approximately 20 percent of the operating budget is supported with local sales tax revenue.

Transit revenue sources are generally grouped into two categories based on eligible uses: capital and operating. Capital funds may only be used on physical items that have a lifespan of more than a year, and meet certain cost thresholds. Examples of capital expenditures are new track, new transit stations, and the acquisition of rolling stock (such as buses and rail cars). With very limited exceptions (such as federal Congestion Mitigation and Air Quality Improvement funds), capital funds cannot be used to pay for operating costs, or for maintaining assets already built or owned. Rather, only operating funds may be used to pay for the ongoing, daily cost of operating and maintaining a transit system. Many sources of operating funds are eligible for use on either operating or capital purposes.

New or expanded transit service may consist of operations expenses and/or capital expenses. For example, a service expansion that uses existing vehicles but increases hours of service would not be eligible for capital revenues. By contrast, an expansion that requires construction (i.e., creation of a dedicated bus lane as part of Bus Rapid Transit project), would be eligible for capital revenues for those elements and the increased operating costs would require operating sources of funds.

Sources and Uses of Capital and Operating Funds

The proposed Bus Rapid Transit and Light Rail Transit investment over the next 20 years will require more than \$828 million in capital, and incremental operating costs are estimated to be more than \$17 million annually (in 2010 dollars). A phased approach to developing these services is proposed where two of the three corridors are designed for BRT service in the near term and will be converted to LRT service when demand grows to require the added capacity.

Major capital investments such as new rail lines or extensions are costly and almost always require a variety of funding sources from all levels of government. Rarely is a new fixed guideway project funded from one or two sources. Given the state of the economy, California's traditional capital funding sources have decreased or have been deferred or eliminated. Federal sources, in particular New Starts funding, remain critical for significant capital investment. The Federal Transit Administration's New Starts program is a competitive funding program for expansions to "fixed guideway" transit systems including dedicated Bus Rapid Transit. FAX submitted a proposal for

¹¹ *Local and Regional Funding Mechanisms for Public Transportation*, TCRP Report 129, Transportation Research Board, 2009.

Very Small Starts funding as a part of the New Starts program in September 2010 and has been selected for funding.

Funding transit operations is relatively more difficult than funding capital projects. The number and variety of sources is not as varied or plentiful, and most sources are not within the control of the transit agency. The possibility of fare increases is always considered as a potential revenue source because transit agencies directly control fares. There are limits to fare increases as riders will choose other modes of transportation if they cannot afford it or if they perceive that the fare is too high. Thus, fare increases alone cannot address significant funding gaps. In its Short Range Transit Plan, FAX projected that fare revenues would cover 19.3 percent of its operating costs from FY2010 through FY2015, or about \$9.2 million annually.¹²

Revenues are only one half of the financial picture. The other side of the budget equation is costs. As with transit agencies across the country, FAX has dealt with revenue shortfalls through cost cutting measures including cuts in service and layoffs.

Transit agencies are finding that service cuts and layoffs are not sufficient to address significant shortfalls. The underlying structural problem of costs increasing at a pace greater than revenues is getting serious attention. Some agencies have begun to implement efficiencies through better scheduling and routing, new work rules within labor contracts, revising benefits and pensions structures, and contracting for services. In the San Francisco Bay Area, the Metropolitan Transportation Commission has embarked on a Transit Sustainability Project to study the cost structure of the largest transit operators and how costs can be controlled through revisions to labor contracts, more efficient service provision, contracting out, and increasing revenues. AC Transit has recently implemented a contract with its operators that addresses many of these issues.

Transit capital and operations and maintenance have been funded from variety of federal, state, and regional/local sources in Fresno. Existing capital funds, most of which have been used in the past or are presently in use in Fresno, are summarized in Table BB. Operating and maintenance funds are summarized in Table CC. These revenues are currently fully used to operate the transit system and are unlikely to increase in the near future. More detailed descriptions of these sources, eligible uses, and potential for use on Fresno transit projects are provided in Appendices 1 and 2.

¹² *Short Range Transit Plan: 2010-2014, June 30, 2009*, prepared by the City of Fresno.

Table 4.6: Revenues Available for Transit Capital	
Level	Source
Federal	• SAFETEA-LU -- Congestion Mitigation and Air Quality Improvement Program (CMAQ) • SAFETEA-LU -- Surface Transportation Program (STP) • SAFETEA-LU -- Safe Routes to School • FTA Section 5307 - Urbanized Area Formula Program • FTA Section 5309 - Bus and Bus Facilities • FTA Section 5309 - Fixed Guideway Modernization • FTA Section 5309 - New and Small Starts Program³ • FTA Section 5311 - Formula Grants for Other than Urbanized Areas • FTA Section 5316 - Jobs Access Reverse Commute (JARC) • FTA Section 5317 - New Freedom Program • Highway Safety Improvement Program (HSIP) • American Recovery and Reinvestment Act (ARRA) - Various Programs
State	• Transportation Development Act/Local Transportation Fund (LTF) - Art. 4 • Transportation Development Act/State Transit Assistance Funds (STA) • Caltrans Community Based • Transportation Program (CBTP) • Bicycle Transportation Account (BTA) • Safe Routes to School (SR2S) • STIP - RTIP • STIP - TE • Proposition 1B/Traffic Light Synchronization Program • Proposition 1B/Public Transportation Modernization, Improvement, and Service Enhancement Account (PTMISEA) • Proposition 1B/TSSDRA • AB 2766 Air District Funds • Gas Tax Apportionments • AB 118 - Alternative & Renewable Fuel and Vehicle Technology Program
Regional/Local	• Measure C • Property-Based Business Improvement District (PBID) • Developer Fees • City Sources • Fare
Table 4.7: Revenues Available for Transit Operations and Maintenance	
Level	Source
Federal	• SAFETEA-LU -- Congestion Mitigation and Air Quality Improvement Program (CMAQ) • FTA Section 5307 Urbanized Area Formula Program • FTA Section 5311 - Formula Grants for Other than Urbanized Areas • FTA Section 5317 New Freedom Program
State	• Transportation Development Act/Local Transportation Fund (LTF) - Art. 4 • Transportation Development Act/State Transit Assistance Funds (STA)
Regional/Local	• Measure C • Property-Based Business Improvement District (PBID) • City Sources • Fares

Given the imbalance of cost and revenue growth in transit, most agencies continue to seek new sources of revenue in addition to implementing cost control measures. Opportunities exist for new revenue sources at all levels. Reauthorization of the federal transit bill is on the horizon and transit agencies across the nation will be weighing in with their congressional delegations and industry organizations on the content of the bill. In California, the new administration has pledged to align state and local funding with responsibility for service provision. The details of how this will impact transit are not known. Additionally, SB 375 provides a structure for transit to be part of planning for a sustainable future, and future revenues may be available to support those plans. Fresno will need to be a strong advocate for federal and state initiatives benefitting the maintenance and expansion of the system.

Numerous potential new funding opportunities are available at the regional and local level. Selected sources that might be applicable to new and existing transit service in Fresno are listed in Table DD. A more detailed description of these new sources can be found in Appendix 3.

In addition to these new revenue sources, there are sometimes existing sources that have not yet been funneled into specific grant opportunities. For example, the San Joaquin Valley Air Pollution Control District has recently increased the vehicle registration fee to collect funds to pay penalty fees mandated under Section 185 of the Federal Clean Air Act. They may collect more funds than necessary to pay the penalty, and in that case, these additional funds may be available to invest in projects that reduce emissions. It is possible for a public agency to work with the San Joaquin Valley Air Pollution Control District to create a funding opportunity for specific programs or projects. These opportunities need to be sought out and monitored by FAX and Fresno Council of Governments in order to best position transit projects to take advantage of this funding.

Implementing new revenue sources is time consuming and can be costly. Many sources require technical studies and long lead times for ballot initiatives. Certain sources do not require voter approval, but they do require approval by governing boards and some require approval of property owners or business owners. Potential sources should be evaluated for revenue yield, administrative and compliance costs, equity, political and public acceptance, and technical feasibility.

Table 4.8: New Revenues Sources	
Type	Potential Sources
Voter Approval Required	▪ Local Sales Tax ▪ Utility Users Tax ▪ Business Taxes (Payroll) ▪ Parcel Tax ▪ Local Gas Tax ▪ Regional Gas Tax ▪ Vehicle Miles Travelled Tax (VMT)
Voter Approval Not Required	▪ Parking Fees and Surcharges ▪ Transient Occupancy (Hotel) Tax ▪ Employer Sponsored Transit ▪ Development Impact Fee ▪ Benefit Assessment Districts ▪ Mello-Roos Community Facilities District ▪ Business Improvement Districts (BID)

KEY ELEMENTS OF A SUCCESSFUL FINANCIAL PLAN

It is not sufficient to identify potential capital and operating sources to build and operate expansion projects. A successful funding strategy will be based on sound project planning, and will require a good deal of political will. The efforts undertaken through the PTIS to identify strategies for transportation investments and land use policies provides an excellent foundation for the financial plan. Specifically, the following achievements will facilitate implementation of the financial plan:

- Transit needs have been identified and public consensus reached on transit investments
- Specific improvements, the rationale, and benefits have been identified
- Roles and responsibilities have been established. The Fresno Council of Governments and FAX are responsible for executing the planned improvements, partnering with the community and other local entities
- Policies to focus development on transit corridors create the potential for land based or development based revenues dedicated to transit

Building on these achievements, several important elements are needed to be successful in funding the program:

- Conduct a thorough evaluation of all existing and potential funding sources needed to support capital and operating requirements.
- Target likely sources of funds.
 - ✦ *Building on the success of Fresno's Very Small Starts application, future Small Starts and New Starts are very likely sources.*
 - ✦ *A preliminary assessment of locally controlled sources indicates that an*

expansion of the existing Development Impact Fee program could address a variety of transit needs. A nexus study is required to make transit costs eligible for Development Impact Fees.

- ✦ *Consider a parcel tax or utility tax dedicated to transit.*
- Monitor existing traditional transit sources and non-traditional sources for funding availability. Position the projects and services to take advantage of funding opportunities as they become available.
- Design and execute an advocacy strategy including:
 - ✦ *Identification of champions and community leaders for the plan*
 - ✦ *Support from elected officials at all levels*
 - ✦ *Creation of coalitions of opinion leaders, stakeholders, and citizens*
 - ✦ *Financial support for technical studies, polling, and campaigns*
 - ✦ *Preparation of public education materials*
 - ✦ *Presentations to the media and the public*
- Establish a timetable for achieving milestones on the path to full funding.
- Persist in the effort to raise new revenues. It may take longer than expected.
- Ensure that technical requirements are met. The projects must be included in regional planning documents.
- Advance project development, including both federal and California (NEPA/CEQA) environmental clearance. Project readiness is essential to take advantage of funding that becomes available unexpectedly. Project readiness is a competitive advantage.
- Stabilize and maintain existing transit service. Controlling costs and seeking new revenues to maintain the core system is essential to any expansion strategy. Financial sustainability of the system is evaluated in the New Starts rating process and it is important to the public. It is difficult to have successful ballot measures while service is being cut.

PROJECT SPECIFIC FUNDING PLANS

The previous sections presented an overview of the universe of opportunities to address operating and capital needs for projects and defined the elements of a successful financial plan for Fresno. This section focuses on the specific infrastructure investments under consideration in Fresno and how those projects might be funded.

The timing of the projects varies, depending on estimates regarding population growth, demand for transit, and funding. Two Bus Rapid Transit (BRT) projects are well underway in terms of planning, with revenue ready dates of 2013. A third BRT project is planned for to be revenue ready in 2020. Finally, the Light Rail Transit (LRT) projects are planned to replace the Blackstone and Venture/Kings Canyon BRT projects when demand grows in those corridors. They are expected to be in service in 2030. Their implementation is dependent on significant population growth, focused on the BRT corridors.

For significant capital investments in transit, the federal New Starts Program continues to be the

likely source from which to seek funding. In September 2010, FAX prepared a Very Small Starts Submittal Request to Enter Project Development for Blackstone and Ventura/Kings Canyon BRT. Financial plans include 80 percent New Starts funding with a 20 percent match from state Proposition 1B funds these two projects. FAX proposes to cover operating costs with existing operating revenues, plus new or increased revenues that can be used in support of operating costs. The net, combined annual cost of operating both services is projected to be \$4,493,568. The net cost reflects the fact that there will be some operating savings as well, since this service will replace existing service. It should be noted that the operating cost of \$4.5 million annually represents 18 percent of FAX's total FY2011 Adopted Expenditure budget.

A summary of the BRT projects and the funding plans is shown in Table 4.9.

Table 4.9: Proposed Bus Rapid Transit (BRT)	
Blackstone BRT	
Description	Service along Blackstone Ave from Audubon Dr. South to Downtown Fresno
Length	9.29 miles
Begin Revenue Operations	2013
Capital Cost (2010 \$)	\$27,870,000
Capital Revenues	\$22,296,000 – Very Small Starts Funding (New Starts) \$5,574,000 – California Prop 1B funds
Incremental O&M Cost (2010 \$)	\$2,420,781
Ventura/Kings Canyon BRT	
Description	Service along Ventura Ave/Kings Canyon Rd from Downtown Fresno east to Southeast Growth Area (SEGA)
Length	7.95 miles
Begin Revenue Operations	2013
Capital Cost (2010 \$)	\$23,850,000
Capital Revenues	\$19,080,000 – Very Small Starts Funding (New Starts) \$4,770,000 -- California Prop 1B funds
Incremental O&M Cost (2010 \$)	\$2,072,787
Shaw BRT	
Description	BRT Service along Shaw Ave and SR 168 from SR 99 east to SR 168 at Temperance Ave
Length	13.25 miles
Begin Revenue Operations	2020
Capital Cost (2010 \$)	\$39,750,000
Capital Revenues	\$31,800,000 – Small Starts Funding (New Starts) \$7,950,000 -- Local, regional, or state funds
Incremental O&M Cost (2010 \$)	\$2,641,612

Projects that exceed the thresholds for Small Starts can participate in the New Starts program. One of the features of this larger program is the need to match the New Starts funding dollar for dollar.

A third BRT project is planned for Shaw Avenue, planned to begin revenue service in 2020. Because this project is nine years in the future, the financing plan is more general. It is assumed

that the New Starts program will still be in existence with a similar structure, or that it will have been replaced by a program that is very similar. The Shaw BRT project fits within the Small Starts Program, as the total cost is less than \$250 million and the federal funding requested is less than \$75 million. Even when costs are inflated to Year of Expenditure, it should still qualify for Small Starts. For preliminary planning purposes, 80 percent federal New Starts funding is assumed. FAX would need to identify match funds, which are almost \$8.0 million in 2010 dollars.

Because the funding plans for the BRT projects include New Starts funding, it will be important for Fresno to plan for continued participation in the Small Starts portion of the program for BRT projects and to prepare for the more rigorous evaluation and analysis required under the full New Starts process for LRT projects. FAX's experience in the Very Small Starts program provides a good background for pursuing future New Starts funding.

The New Starts planning and development process is a very detailed, proscribed series of analyses and milestones undertaken by the project sponsor and the FTA together, and can take several years to complete, depending on the complexity of the project and its finances.

The New Starts project development process follows Federal statutory requirements, including coordination with local and regional planning efforts, technical evaluations using standardized methodologies in an effort to "level the playing field" for all New Starts projects, and regular coordination and review by FTA. Based on the results of the technical analyses – including an extensive review of the financial condition of the project and the project sponsor – FTA must approve the project to enter into Preliminary Engineering and Final Design. Upon approved entry into Final Design, FTA may enter into a multi-year commitment to fund a portion of the project's construction, referred to as a full funding grant agreement.

The ongoing technical analyses and updates provide FTA with data for evaluating the project readiness against several mandated criteria including project cost-effectiveness, transit supportiveness of existing and future land uses, and the local financial commitment. Additional requirements include assurance that the cost and benefit analyses are reliable, and that the project sponsor has the financial and technical capacity to design, build, operate and maintain the project both within budget and schedule. Projects in the New Starts pipeline are required to conduct more extensive technical analyses than those not funded by New Starts.

FAX will need to demonstrate the financial capacity to operate and maintain the service, once it is built. Given the current fiscal realities, new funding sources and innovative service delivery options are needed in the next few years to help achieve financial stability and to demonstrate future financial capacity as required by FTA.

SUMMARY

Transit in Fresno County faces the challenge faced by transit agencies across the nation, namely operating and maintaining current service levels. A financial strategy is needed in the very near term to ensure that current transit service levels can be maintained and that future expansions are affordable. A variety of funding sources will be required to accomplish the vision set out in the PTIS. Initiating the development of a strategy now will help realize the funding needed over the

next 20 years.

Projected revenues and expenditures for operation of the transit system are summarized in dollars.

FAX State TDA and STA – Transportation Development Act (TDA) revenue is received through the State of California based on gas tax revenue and population allocation. In recent years Proposition 42 revenues were added to this revenue source. State TDA funds have been impacted in two ways this year, resulting in a \$2.6 million impact to transit operating revenues.

- Reduced fuel usage in California has resulted in decreased TDA revenues.
 - ✦ *With a \$1 million annual impact to FAX operating revenues.*
- With sales tax revenues decreasing, the State has looked to transit funds to help solve State budget issues. Millions of dollars in gas tax revenues that have historically been used to fund transit have been diverted to other State funding needs. Transit experts do not expect to see these funds returned to transit for several years.
 - ✦ *Resulting in a \$1.6 million annual impact to operating revenue and*
 - ✦ *Approximately \$2 million annual impact to capital revenue.*

Measure C funds - Local funding for public transit historically has been limited to general revenue sharing funds. FAX, however, currently receives no general revenue funds. In November 2006, a local proposal to continue a one half cent sales tax county wide for the next twenty years was approved by a majority of voters in Fresno County. The reauthorized Measure C local sales tax dedicates a percentage directly to FAX as the local public transit operator. Revenues from this recently reauthorized local transportation sales tax have declined as a result of reduced consumer spending.

- In FY12 Measure C local tax funds for transit are expected to be \$7.1 million
- When the measure was reauthorized in 2006 it was anticipated that by FY10 FAX would receive over \$9 million annually in Measure C funds.

Farebox and Other Revenues from Operations - FAX Strategic Plan envisions an increase in transit service with major gains in ridership and farebox revenues. Fare revenues are projected based on ridership forecasts and assume an increase in ridership based on the increases over the last few years. In FY10, FAX provided over 17.6 million passenger rides. FAX is budgeting for \$9.8 million from fare revenue in FY12.

In August 2007, FAX contracted with Lamar Transit Advertising to provide exterior and interior advertising on all FAX buses. To date, over 90% of the buses have some form of advertising and over the five year contract this program will provide FAX with over \$2.2 million in revenue.

Table 4.10: Potential New Revenue Sources for Fresno Transit Projects

Source	Description	Capital or Operating Expenditure Eligibility	Legal/ Legislative Requirements	Voter Approvals Required	Revenue Stability	Ease of Administration and Collection	Implementation Experience
Local Sales Tax	An incremental addition to County/local sales for transportation	Both	Requires governing Board to approve a ballot measure to be submitted for voter approval	Approval by two thirds of the electorate	Medium	High	Half Cent Sales tax measure (Measure C) in place in Fresno since 2006; most counties in California
Utility Users Tax	Tax imposed on utility services to be used for a specific or general purpose	Both	Requires governing Board to approve a ballot measure to be submitted for voter approval	Approval by two thirds of the electorate if dedicated to specific use, such as transit	High	High	Pullman, Washington
Business Taxes (Payroll)	A local payroll tax imposed through employer withholding	Both	Requires the Board of Supervisors to approve a ballot measure to be submitted for voter approval	Majority vote of the electorate if general tax. Two thirds approval required if dedicated (special tax).	Medium	Medium	San Francisco
Parcel Tax	Flat tax on each parcel of real property.	Both	Requires governing Board to approve a ballot measure to be submitted for voter approval	Approval by two thirds vote of the electorate	High	High	Cities and counties throughout California; AC Transit in Alameda and Contra Costa Counties
Employer Sponsored Transit	Employers participate financially in the transit service serving their business.	Both	None	None	Low	Low	San Mateo, San Francisco, and Alameda Counties
Local Gas Tax	Tax imposed on each	Both	Governing Board must	Two thirds vote of	Low	Medium	None known

Source	Description	Capital or Operating Expenditure Eligibility	Legal/ Legislative Requirements	Voter Approvals Required	Revenue Stability	Ease of Administration and Collection	Implementation Experience
Regional Gas Tax	gallon of gas sold in local community		approve ballot initiative.	the electorate.			
	Tax imposed on each gallon of gas sold in the region	Both	Governing Boards of any communities in the region affected must approve ballot initiative	Approval by two thirds of the region's electorate	Medium	Medium	None known
Parking Fees and Surcharges	Local government imposed fee or surcharge on on-street and garage parking, usually metered	Both	Governing Board approval	None	Medium	High	Most California cities, including Fresno; revenue dedicated to transit in San Francisco
Transient Occupancy (Hotel) Tax	Tax imposed on hotel users by local government	Both	Governing Board approval	None	Low	High	Most California cities, including Fresno
Vehicle Miles Travelled Tax (VMT)	Tax on automobile miles travelled	Both	Likely to require state enabling legislation and Governing Board approval of ballot initiative.	Two thirds vote of the electorate.	Medium	Low	Oregon pilot project
Development Impact Fee	One- time fee charged on new development.	Capital	State law requires demonstration of a direct nexus between the fee charges and the impact improvements funded. Approval by governing Board required.	None	Low	Low	Cities and counties throughout California. Only San Francisco specific to transit.
Benefit	An assessment on	Both	Local government to	Property owners	Low	Medium	Cities and counties

Source	Description	Capital or Operating Expenditure Eligibility	Legal/ Legislative Requirements	Voter Approvals Required	Revenue Stability	Ease of Administration and Collection	Implementation Experience
Assessment Districts	properties within a defined area; the assessment is related to the amount of benefit that the property receives.		determine funding needs and establish boundaries.	within the district must approve. A majority of the weighted ballots exceed the weighted ballots opposing the creation of the district.			throughout California. Los Angeles specific to transit.
Mello-Roos Community Facilities District	Tax on properties within a defined area to fund public improvements within that district.	Capital	Local government establishes boundaries and sets rate.	Two-thirds majority vote of property owners within the proposed boundaries of the district.	Low	Medium	Cities and counties throughout California
Business Improvement Districts (BID)	Assessment district in which business owners choose to be assessed a fee, which is collected on their behalf by the City, for use in improving the business in the area	Both	Governing Board approves creation of the district	A majority of business owners may protest the formation of the BID.	Low	Medium	Cities and counties throughout California. Emeryville specific to transit.

Table 4.11 - FAX Operating Budget - FY01 through FY10

FY	(\$ thousands)				
	Transit Department	% Costs	Paratransit	% Costs	Total Operating Costs
2001	\$22,967	92.4%	\$1,891	7.6%	\$24,858
2002	\$23,987	92.5%	\$1,957	7.5%	\$25,944
2003	\$25,172	89.8%	\$2,844	10.2%	\$28,016
2004	\$26,965	88.6%	\$3,480	11.4%	\$30,445
2005	\$27,596	88.7%	\$3,505	11.3%	\$31,101
2006	\$31,184	90.1%	\$3,418	9.9%	\$34,602
2007	\$32,506	89.7%	\$3,716	10.3%	\$36,222
2008	\$36,944	90.1%	\$5,192	9.9%	\$34,602
2009	\$43,657	90.1%	\$4,818	9.9%	\$48,475
2010	\$41,847	89.5%	\$4,891	10.5%	\$46,738

Table 4.11 reflects FAX's overall operating budget for both fixed route and demand responsive service for the past 10 fiscal years. As shown, fixed route service has decreased from 92.4% of the budget to 89.5%. This is a direct result of the increased cost of providing paratransit services, which has increased from 7.6% of the total operating budget to over 10% in FY10.

Table 4.12: FAX Operating Budget by Major Cost Category					
FY	FY06 through FY10 (\$ thousands)				
	2006	2007	2008	2009	2010
Employee Services	\$22,101	\$22,598	\$24,406	\$25,394	\$25,679
Operations, Maintenance & Training	\$6,346	\$6,298	\$7,945	\$8,810	\$7,069
Interdepartmental	\$2,737	\$3,288	\$4,271	\$4,313	\$3,886
In Lieu Payments	\$322	\$322	\$322	\$322	\$322
Paratransit	\$3,418	\$3,716	\$5,192	\$4,818	\$4,891
Total Operating Costs	\$34,924	\$36,222	\$42,136	\$43,657	\$41,847
Percentage of Total Annual Operating Budget					
FY	2006	2007	2008	2009	2010
Employee Services	63.3%	62.4%	57.9%	58.2%	61.4%
Oper., Maint., & Training	18.2%	17.4%	18.9%	20.2%	16.9%
Interdepartmental	7.8%	9.1%	10.1%	9.9%	9.3%
In Lieu Payments	0.9%	0.9%	0.8%	0.7%	0.8%
Paratransit	9.8%	10.3%	12.3%	11.0%	11.7%
Total Operating Costs	100%	100%	100%	100%	100%

Table 4.12 shows the Transit Division's operating budget broken out by major cost categories for the same period and includes the following categories: "Employee Service"; wages, salaries, and fringe benefit costs, "Operation, Maintenance and Training"; fuel, parts, inventory, supplies, building maintenance, training and travel, "Interdepartmental Charges"; self insurance, fleet rental, data processing, and fixed reimbursements to the General Fund, "In-Lieu Payments", and "Paratransit"; the cost of providing Handy Ride services. The Transit Division's operating budget has increased from \$34.9 million in FY06 to \$41.8 million in FY10.

Handy Ride - In August 1980, the State Attorney General's Office ruled that Handy Ride and Transit's divisional budgets could be combined for purposes of using Transit Division's farebox recovery revenues in excess of 20% to offset Handy Ride's farebox recovery requirements. Thus, in September 1980, Handy Ride became part of the general use system and part of the Transit

Division's 20% farebox recovery requirements. The operating budget for Handy Ride as part of the overall budget has averaged approximately 12% over the last five years.

Federal Government (FTA) - The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) is a bill that governs United States federal surface transportation spending. It was signed into law by President George W. Bush on August 10, 2005 and expired on September 30, 2009. Congress is expected to begin working on a replacement bill for the next six-year period during its 2012 session.

The \$286.4 billion measure contains a host of provisions and earmarks intended to improve and maintain the surface transportation infrastructure in the United States, including the interstate highway system, transit systems around the country, bicycling and pedestrian facilities, and freight rail operations.

FTA Section 5307 (formerly Section 9) capital grants have been the primary funding source for capital expenditures, with City or State funds used to meet the local 20% share requirement. The federal government appears committed to funding capital assistance. The Plan, therefore, assumes that nearly 80% of all capital projects (including PM) for the next five years will be funded by FTA and CMAQ grants.

State of California - The State's Transportation Development Act (TDA) provides two sources of transit revenue, the Local Transportation Fund (LTF) and the State Transit Assistance Fund (STA). The LTF is generated by a quarter cent statewide sales tax and then apportioned back to counties by population. The Fresno COG apportions these funds within Fresno County on the basis of population. In FY12, the City of Fresno is projected to receive approximately \$17.1 million from these funding sources. All of these funds are allocated to FAX.

Table 4.13 TDA Fund History 2001-2010
(thousands)

FY	LTF Article 6	STA	Total	% Change
2001	\$11,059,197	\$818,100	\$9,296,666	
2002	\$11,951,407	\$830,000	\$12,781,407	37.48%
2003	\$12,578,340	\$1,057,424	\$13,635,764	6.68%
2004	\$13,509,775	\$852,069	\$14,361,844	5.32%
2005	\$14,573,134	\$1,103,979	\$15,677,113	9.16%
2006	\$16,288,683	\$1,093,151	\$17,381,834	10.87%
2007	\$15,993,000	\$1,800,000	\$17,793,000	2.37%
2008	\$17,701,300	\$2,529,900	\$20,231,200	13.70%
2009	\$17,733,000	\$1,976,800	\$19,709,800	-2.58%
2010	\$12,578,200	\$715,800	\$13,294,000	-32.55%

The LTF resources are legislated to continue indefinitely, and the Plan's projected LTF revenues are based upon projections provided by the Fresno COG, but the actual revenue will fluctuate based on the economy and inflation. To qualify for LTF, FAX must recover a minimum of 20% from farebox revenues.

Transit operators cannot rely on the availability of STA funds from year to year. Further, as a condition for receiving STA funds, Senate Bill 3 (Katz) also requires operators to meet an efficiency standard based on operating cost per hour beginning in FY92.

City of Fresno

1. General Fund: FAX receives no revenue from the City of Fresno General Fund.
2. Local Option Sales Tax - Measure C: In FY07 a continuing source of local funding support remained available to FAX as a result of the reauthorization of Measure C in November 2006. The passage of a dedicated one half cent local option sales tax represents unprecedented voter approval to improve the State highway network and provide funding for local transportation projects within Fresno County. The local option sales dollars will lead to completion of portions of the urban and rural highway system, as well as support transit needs over the next 20 years.

Unlike the previous Measure C, the reauthorization dedicates nearly 20% to Regional Public Transit Agencies, without the discretion of the City Council as to how the funds are allocated. This ensures that FAX gets a larger share of the revenue that will be consistent over the next 20 years.

Consolidated Transportation Service Agency (CTSA) - In 1980, the state mandated through Assembly Bill 120 that an inventory of social service agencies be conducted to determine the degree of transportation services provided by these agencies and to identify additional transportation needs. The objective of the legislation was to improve the efficiency of providing transportation within the community through the formation of Consolidated Transportation Service Agencies and to promote increased coordination and consolidation of transportation services. The Fresno COG developed an action plan that designates the City of Fresno/FAX and the Fresno County Economic Opportunities Commission (FCEOC) as the CTSA co-designates for the Fresno Urbanized area. The City of Clovis is the CTSA designate for its area.

The sources of funding for the CTSA are, 45% from Transportation Development Act, (Article 4.5 funds allocated by Fresno COG), a 45% match from participating social service agencies and 10% from farebox recovery.

As the primary CTSA transportation provider in the Fresno metropolitan area, FCEOC provides transportation brokerage service to all eligible social service agencies assuring efficient, low cost transportation service within the Fresno urbanized area.

4.4.0 Financial Summary and Reserve Projections

For FY12, FAX system revenues from FTA grants represent 21.1% of the total, while LTF revenue equals 37.8% of the total revenue. Measure C makes up an additional 15.7% of FAX's total budget revenues. The remaining revenue comes from passenger fares, other revenue and fund transfers.

Under a contract with the City of Fresno, the County pays for a portion of the public transit and paratransit services provided for County residents who live within the fixed-route service area as described by the Transportation Development Act (TDA). County residents within the service area receive the same level of transit and paratransit service as Fresno City residents who live within the service area.

Chapter 5: City of Clovis SRTP

5.1.0 Purpose of SRTP

The City of Clovis Short-Range Transit Plan (SRTP), FY 2012-2016, is the bi-annual update to the operating plan and the capital program. The purpose of this Plan is to promote a comprehensive, coordinated and continuous planning process for transit service in the Fresno-Clovis Metropolitan Area (FCMA) over a five-year planning horizon. This plan proposes specific recommendations for implementing the long-range objectives of Fresno County's Regional Transportation Plan, and will guide the provision of transit services in the FCMA over the next five years.

5.1.1 Summary of Existing Transit System

This document will address the City of Clovis Transportation systems which are described as follows;



The City of Clovis provides the general public fixed-route service through Clovis Stageline. This service consists of two fixed-routes, a deviated fixed-route and specialized school transportation within the City of Clovis. The City of Clovis offers demand-responsive service to disabled persons through Clovis Roundup. The City of Clovis also offers service to residents of the Tarpey Village county island through a reimbursement agreement with the County of Fresno.

FAX operates some service within the City of Clovis and the unincorporated urban areas and receives funding from Clovis and Fresno County for this service. It is appropriate that both agencies have a role in the policy making process impacting FAX. The Plan includes a mechanism for such a role.

5.1.2 Public Transportation Policy Directions

The policies contained in the Regional Transportation Plan for Fresno County, (adopted by the Fresno Council of Governments, April 2011) provide general guidance to transit operations within

the metropolitan area. The following Goals, Objectives, and Policies provide the framework for developing a sound public transportation system throughout Fresno County. They are specifically targeted toward the public and social service transportation systems.

In 1985, the Clovis City Council adopted the following policies for Clovis Transit as part of the transit planning process. The Council reviews and amends these standards as needed. Chapter 1120 of the 1979 California Statutes and Assembly Bill 120; Action Plan declare policies and goals which apply to CTSA services.

Policy Direction for Clovis

- \$ Centralized administration for the elimination of duplicated administrative requirements.
- \$ Identification and consolidation of all sources of funding for the provision of more effective and cost efficient services
- \$ Centralized dispatching for more efficient vehicle use.
- \$ Centralized maintenance for adequate, regular and more cost effective vehicle maintenance.
- \$ Adequate driver training programs for safer vehicle operation, and lower insurance costs.
- \$ Combined purchasing for more effective cost savings.

5.1.3 Strategic Plan

At the core of the City of Clovis' strategic plan are four goals, each with specific performance measures. The performance measures encompass the full range of Clovis' responsibilities. The transit specific performance measures reflecting Clovis' current targets for achievement are discussed below;

Goals for Clovis

GOAL 1: SERVICE LEVELS

Clovis Transit will provide public transportation service to a maximum number of people in the Fresno-Clovis Metropolitan Area (FCMA).

Objective A: To provide a transit system that meets the public transportation needs of the service area.

Standard 1: Clovis Transit fixed-route service (Stageline) should operate weekdays (Monday-Friday) from 6:15 a.m. to 6:15 p.m. and Saturday from 7:30 to 3:30pm; demand response service (Roundup) will operate during the same hours as the Stageline service.

Standard 2: Clovis Transit shall implement real time dispatching for demand responsive service to improve overall operations and increase ridership.

Objective B: To provide a transit service that adequately serves the elderly and disabled population.

Standard 1: Clovis Transit should maintain base fare level for elderly and disabled riders, those qualifying for ADA/curb to curb. Door to door service is an additional \$1.25.

Standard 2: As per ADA, all new vehicles purchased must have ADA lifts.

Objective C: To secure a stable and sufficient local funding mechanism.

Standard 1: Clovis Transit should identify and coordinate funding mechanisms that will address all transportation funding needs in the Clovis Area.

Standard 2: Clovis Transit should identify short and long-range funding needs and maximize revenue resources, utilizing all funding mechanisms including federal grants, State enabling legislation and farebox revenue.

GOAL 2: SERVICE QUALITY

Clovis Transit will provide a quality, convenient and reliable service.

Objective A: To provide reliable and convenient public transit service.

Standard 1: Clovis Transit should operate its demand responsive service within five (5) minutes before the scheduled pick-up time and no more than fifteen (15) minutes after the scheduled pick-up time. Drivers shall not wait for patrons for more than five (5) minutes after arrival at the designated pick-up time. Passengers going to Fresno must be ready an hour before their appointment time and may wait 45 minutes to one hour for a ride back to Clovis.

Objective B: To provide clean, attractive and comfortable vehicles and facilities.

Standard 1: All vehicles returning to the yard after revenue service should be swept and dusted before being assigned for service the following day.

Standard 2: The exteriors of Clovis Transit buses should be cleaned at least once a week.

Standard 3: In the winter, the heaters on Clovis Transit buses should work 100% of the time.

Standard 4: In the summer, at least 95% of all vehicles on the street should have operable air conditioners.

Objective C: To provide a safe system.

Standard 1: Clovis Transit buses should operate in excess of 150,000 miles between preventable accidents, and bus operators should be formally recognized for their safe driving.

Standard 2: Buses should be checked daily for proper operation and condition of lights, mirrors, radios and fluid; detailed mechanical inspections should be done every 3,000 miles/45 days. Operations, maintenance and other employees will be provided safety training at the beginning of their employment and such training will be updated on a regularly scheduled basis.

Objective D: To record and respond to all public comments.

Standard 1: Clovis Transit will continue to track and evaluate all compliments, complaints and inquiries from the public.

GOAL 3: SERVICE PRODUCTIVITY

Clovis Transit will operate an efficient and effective bus system.

Objective A: To establish and maintain system-wide productivity indicators.

Standard 1: Clovis Transit should achieve a 10% farebox recovery ratio for demand responsive (Roundup service) and 20% for fixed route (Stageline Services).

Standard 2: Clovis Transit should record and report, at least monthly, the following performance indicators.

Total Monthly Ridership	Total Monthly Revenue
Total Monthly Expenses	Total Revenue Hours
Total Revenue Miles	Farebox Ratio
Total Operating Expense Per Passenger	Total Op Expense Revenue Hour
Total Revenue Per Revenue Hour	Total Op Expense Revenue Mile
Total Revenue Per Revenue Mile	Passengers Per Revenue Hour
Passengers Per Revenue Mile	Average Weekday Ridership
Average Saturday Ridership	Average Sunday Ridership
Percentage of Trips on Time	Percentage of Scheduled Trips Completed
Total Road Calls	

GOAL 4: SYSTEM IMAGE

Clovis Transit will strive to promote its service and image in the community.

Objective A: To develop and implement a Clovis Transit Marketing Program.

Standard 1: Clovis Transit will continue to review and update its marketing efforts.

Standard 2: Clovis Transit should stress the positive impact of Clovis Transit in the community through press releases, speeches, and involvement in community activities at least once a month.

Standard 3: Through effective marketing, Clovis Transit should increase overall system ridership by at least 5% during the fiscal year.

Objective B: To provide complete and accurate public transit information.

Standard 1: Current bus schedules and system information should be available to the public at all major public facilities and via the internet.

Standard 2: Telephone service information should be available to the public at all times.

Objective C: To provide for community involvement in transit system affairs.

Standard 1: Clovis Transit should become involved in and work with citizens groups, the Chamber of Commerce, the Old Town Association and other area merchant associations, to communicate the services and benefits of Clovis Transit.

Standard 2: Clovis Transit should develop a public relations program with area schools to educate children about the bus system.

5.1.4 Organization of City of Clovis

In 1988, The Clovis City Council designated its Roundup service solely as a Consolidated Transportation Service Agency (CTSA). Local Measure C dollars are used to provide the

necessary match of TDA/LTF Article 4.5 funds. The most significant social service provider in Clovis is the Clovis Senior Service Center. Most social services in the area are provided by or through the Senior Center.

Clovis City Council

The City of Clovis consists of five at-large members one of which is selected to be mayor for a two year term.

Committees

The City of Clovis has two standing committees which provide input into the decision making process. The ADA Advisory Committee is a standing committee which consists of City staff and members of the public and makes recommendations regarding transit ADA issues. The Social Services Transportation Advisory Committee (SSTAC) also consists of members from the public with varied interests, and makes recommendations on policy and technical issues to the City of Clovis and to the COG.

Clovis Staff

The Transportation department is under the City of Clovis Community Services Division and is part of the General Services Department. The Transit Division is overseen by a Transit Supervisor who manages the day to day operations of Clovis Transit and the General Services Manager who oversees projects and planning for transit. The division includes a staff of 54 +/- full and part-time employees.

5.2.0 Introduction to Clovis Transit System

The City of Clovis operates two types of public transit service. Clovis Stageline provides general public, fixed-route service within the City limits and into Fresno near Fresno State University. Clovis Roundup operates specialized demand-responsive service for disabled residents with scheduled trips within Clovis and into Fresno. The City of Clovis has designated Roundup services as the Consolidated Transportation Service Agency (CTSA) for the Clovis transit service area.



5.2.1 Bus Service

Fixed Route- This service was originally offered in July 1980 as demand responsive, replacing fixed-route service formerly provided by FAX. On August 13, 1990, Stageline's fixed route service was initiated. Originally operated by contractors, the City of Clovis personnel brought the Stageline system in-house to be operated by City employees in September 1999. Clovis Stageline operates 2 routes on 30 minute headways, a deviated fixed-route, and special routes in early morning and late afternoon to accommodate school transportation. Stageline buses connect within minutes to and from four of FAX's routes. The service operates Monday through Friday from 6:15 a.m. to 6:15 p.m. and Saturdays from 7:30 a.m. to 3:30 p.m. Clovis Stageline generally operates within the Clovis city limits (See Exhibit 5.1). FAX and Clovis Stageline accept inter-system transfers, and Clovis Stageline vehicles are lift equipped. Clovis presently reimburses FAX, through a formal contract, to offset operating costs for fixed-route service to Clovis. FAX Lines 9 and 45 currently provide service to Clovis residents.

Demand Response - The second service provided by Clovis Transit is Clovis Roundup, which is a demand-responsive system providing both curb to curb and door to door service. It is the backbone of disabled transportation in the Clovis area. Service is available to qualified riders requesting transportation within the service area and provides essential service to many ambulatory and non-ambulatory passengers. Service is provided by radio dispatched; lift equipped mini buses and passenger vans. The City of Clovis has designated Roundup services as the Consolidated Transportation Service Agency (CTSA) for the Clovis transit service area.

The City of Clovis' demand-responsive service, Clovis Roundup, (See Exhibit 5.2) transports ADA certified disabled residents within its sphere of influence, primarily along Shepherd Avenue to the north, Dakota Avenue to the south, DeWolf Avenue to the east and Winery Avenue to the west. Zonal service is provided within the City of Fresno as far north as Shepherd Avenue, south to Kings Canyon, west to West Avenue and south to Kings Canyon Ave including downtown Fresno. The system operates on



weekdays from 6:15 a.m. to 6:15 p.m., and on weekends 7:30 a.m. until 3:30 p.m. Fresno is served Monday to Friday from 7:00 a.m. until 4:00 p.m. Service is provided on both an advance reservation and a real time space available basis. Passengers may make reservations up to 14 days in advance or the required 24 hours in advance. Roundup policy requires passengers to be

ready at least one hour before a scheduled Fresno ride and 45-minutes for a Clovis ride with pick-up within five minutes of the designated pick-up time and no longer than 15 minutes after the designated pick-up time.

Service is available to those persons over the age of six who are certified that because of a disability, are unable to use the Clovis Transit's fixed route system. To become certified, the applicant must complete an ADA application including a doctor's certification, which is evaluated by Clovis Transit staff or an outside agency if questionable. Roundup does not restrict trips based on purpose. Dispatchers schedule as many trips as can be accommodated beyond pre-scheduled subscription trips. The service does not restrict the number of trips provided to an individual nor is a waiting list maintained. Roundup's operational practices do not allow for substantial numbers of untimely pick-ups, trip denials, missed trips or excessively long trips which would limit availability of service.

5.2.2 Bus Transit

The service area is consistent with the Planned Urbanized Area (PUA) of the City of Clovis General Plan and represents the area planned for urban growth during the 20 year planning period. Within the PUA are the Cities of Fresno (2000 census population of 427,652) and Clovis (2000 census population of 68,468). The 2000 census population of the Fresno-Clovis Metropolitan Area (FCMA), an area slightly larger than the PUA, is 570,169 (Fresno COFCG). The FCMA contains 299 square miles; and a population of 628,655 (2000 Census) and the overall average population density is 3 persons/acre. In the more populated areas of the FCMA, the average density ranges from four to fifteen persons per acre.

*According to data from the Department of Finance. Source: City of Fresno Consolidated Plan 2010-2014

5.2.3 Bus Fleet

City of Clovis - The City of Clovis has a fleet of thirty (30) transit buses, five vans (two of which are wheelchair accessible) and two trolleys which are serviced by the City of Clovis fleet department. Roundup operates with seventeen lift equipped passenger buses and three passenger vans including the two wheelchair accessible vans. Stageline uses 13 lift equipped buses and two vans for driver switch-out, and the two trolleys are used as rentals for special events.



In FY 08-09, Clovis Transit received a Proposition 1B Homeland Security grant for the purchase of bus security camera systems. The cameras were installed in February 2009 in 11 new buses and 5 existing buses. The systems have five cameras per bus with different views, record both video and audio on an on-board digital video recorder, and allow for the ability to view the events on a bus live by using a lap top located within 500 feet of the vehicle. The ability to see live footage is important in the event of a hijacking or other threatening situation. In FY 10-11 additional Proposition 1B Homeland Security funds were available which allowed for camera installation in a total of 28 Clovis Transit buses. Also in FY 10-11, Proposition 1B PTMISEA funds were used to install Zonar pre-trip and GPS systems in all the transit buses.

5.2.4 Accessible Bus Service

City of Clovis - All City of Clovis Stageline buses used to provide fixed route Service are wheelchair accessible. Roundup service also meets the ADA compliance requirements. For additional reference to the ADA requirements, see Section 2.3.0.

5.2.5 Transit Maintenance Program

City of Clovis - The City of Clovis has a City-wide maintenance facility which is used to maintain and service Clovis Transit's 37 vehicles.

5.2.6 Fare Structure

The fare for the Clovis Stageline service is \$1.25 with a convenience pass sold for \$23.00 for 20-rides and the Clovis Roundup fare varies from \$1.25 to \$2.75 depending on the end location. A monthly Metro Pass is available for use on both Stageline and FAX and costs \$48.00 per calendar month. See Table 5.1 for current Fare Structure.

Table 5.1: Clovis Fare Structure

Fare Category	STAGELINE
Single Rider (Adult)	\$1.25
Persons with a Disability and Seniors Age 65+	\$.Free
Monthly Pass	\$23 for 20 rides or \$48 Monthly Metro Pass
Children Under Age 6 Seniors Age 65+	Free with fare paying adult Free
	ROUNDUP
Within Clovis	\$1.25
To/From Fresno south to McKinley & west to Palm	\$2.00
To/From Fresno south to Kings Canyon and west to West Ave.	\$2.75
Door-to-Door service	\$1.25 additional
Monthly passes	\$23.00 for 20 Zone 1 rides \$36.00 for 20 Zone 2 rides \$50.00 for 20 Zone 3 rides

Figure 5.1: Clovis Stageline Service Area

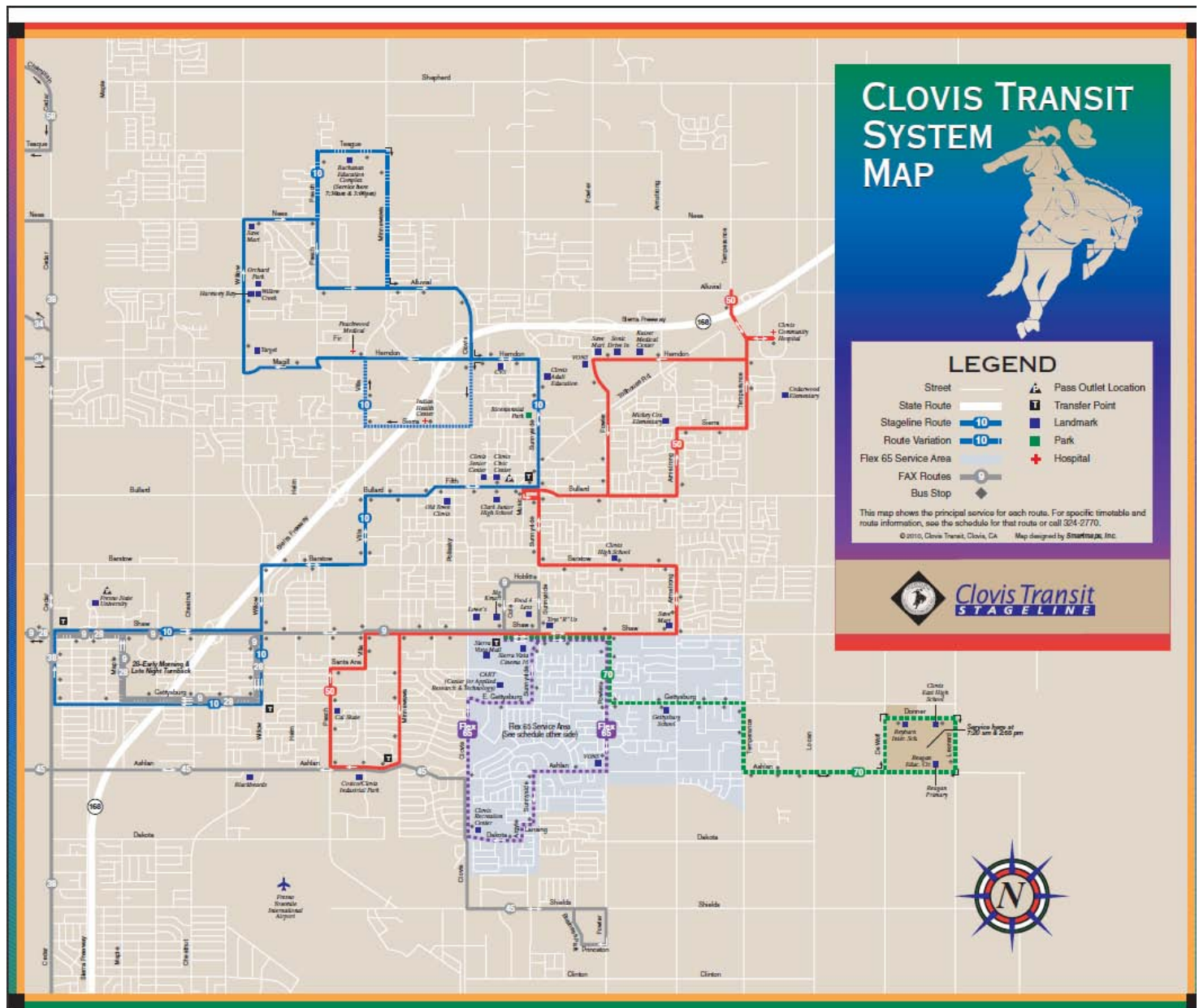
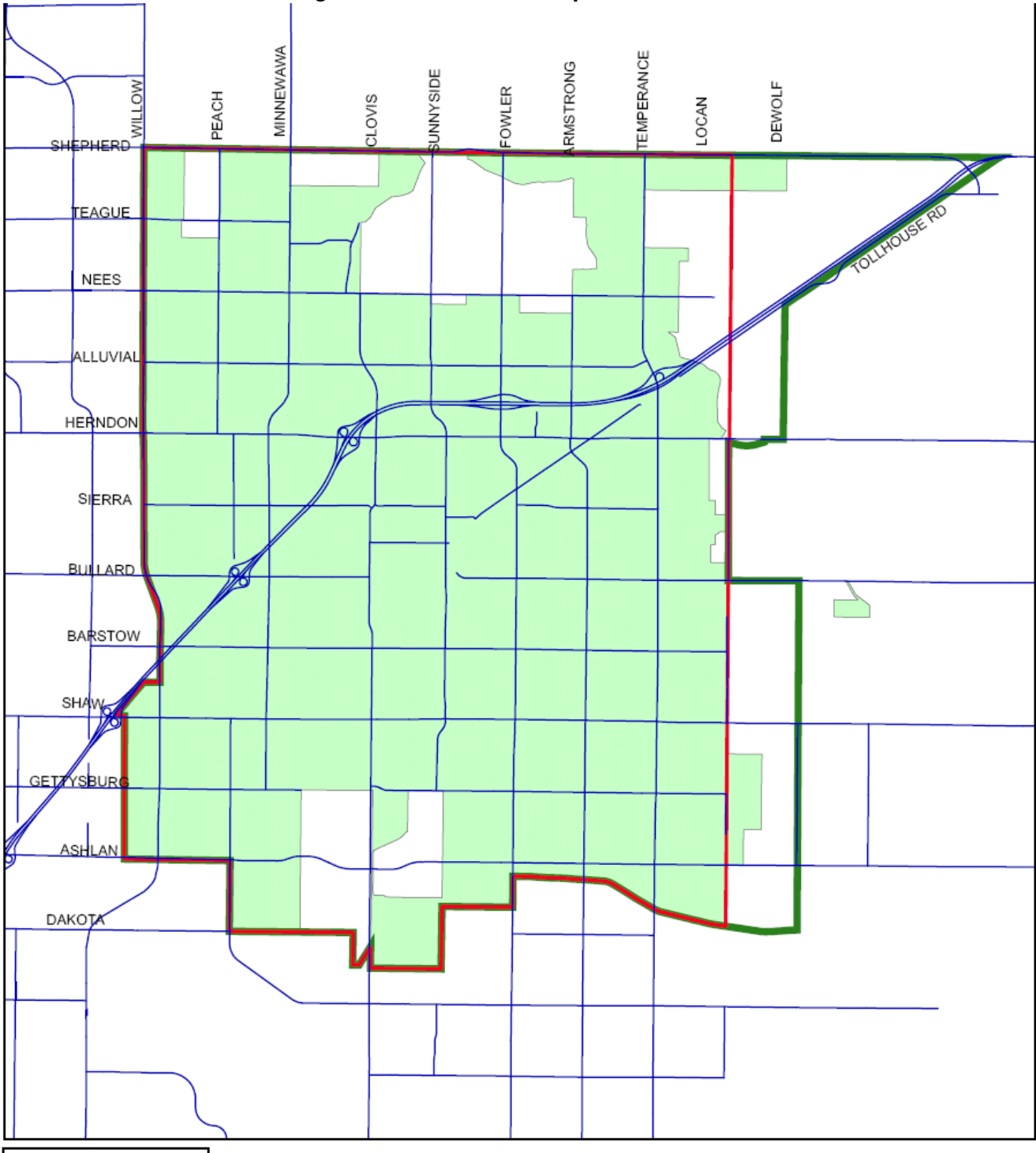


Figure 5.2 Clovis Roundup Service Area



5.2.7 Integration of Transportation and Land Use

The Clovis Air Quality Element establishes a policy foundation for implementation of local government control measures. The Element also provides the framework for coordination of air quality planning efforts with surrounding jurisdictions. The amount, location and type of land uses in the Clovis Project Area have long term air quality implications. A pattern of land uses that facilitates an efficient urban form is essential to improving and maintaining air quality. The integration of land uses can eliminate the length and number of vehicle trips. Automobile use is the single greatest contributor to air pollution in California. Most of the air quality problems stems from our dependence on the automobile. A very effective strategy for improving air quality involves making fewer automobile trips and when such trips are necessary, making them shorter. The provision and availability of alternative modes of transportation are essential to the success of this strategy. Alternative transportation demand strategies can increase the efficiency of the transportation system, reduce congestion and improve regional air quality.

Clovis Transit obtained full fleet compliance for the December 31, 2010 California Air Resources Board fleet emission requirements by reducing NOx and PM10 to the required levels. Many transit agencies had difficulty in meeting the required reductions but Clovis Transit attained the goal.

5.2.8 Development Review Program

The strategy which will be undertaken by the City of Clovis involves the appropriate management of the transportation system. With the ever increasing traffic volumes and limited resources to expand the capacity of some of the existing streets, transportation system management will play an important role in the future. The goal of the Clovis Transportation Management system is to expand the carrying capacity of streets and transit systems through the implementation of low cost strategies. The strategies are to be used to prolong or avoid costly expansion of the facility or service. Traffic signal timing or coordination, additional lanes at intersections, transit service enhancements, parking management and traffic management are all examples of transportation system management strategies which can be expected to be used by Clovis throughout the development review process. Coupled with air quality and congestion management, these strategies will result in significant improvement of the operating characteristics of the existing facilities and services.

5.3.0 Key Transit System Performance Indicators

Clovis Transit - The past few years for Clovis Transit have been tumultuous. With the passage of Measure C, weekend fixed-route service was added with good results. However, a reduction in LTF funding, STA funding and increasing fuel costs required the elimination of the weekend fixed-route service in 2009. In 2010, the service returned with the influx of one-time STA funds that

could be used for capital. However, with fuel prices looming at \$5.00 per gallon, weekend fixed-route service could be suspended again. A large increase in ridership for FY08 and FY09 are due to the addition of weekend service and the 7.8% reduction is due to the loss of weekend fixed-route service.

Overall Roundup ridership has increased 3.1% from FY08 to FY10. However, more trips into Fresno and an expanded service area cause longer trips and more mileage. With the addition of Proposition 1B PTMISEA and Homeland Security Funds, the following projects were completed between FY08 and FY10 or are currently in process:

- 14 new transit buses for both fixed-route and paratransit were received in 2009. These were purchased using STA and PTMISEA funds
- Camera systems were purchased for each bus using FY07-08 and FY08-09 Prop 1B Homeland Security funds. Each bus has 5 cameras and records the data to a hard drive which is easily removed for playback.
- Zonar electronic pre-trip system was installed in 2011. Each bus has been equipped with a handheld device which the driver utilizes to complete the pre-trip inspection. The information is sent wirelessly to the fleet shop.
- ADA Bus stop improvements were completed on 20 bus stops in 2010 and an additional 41 bus stops are being completed and equipped with a bench. PTMISEA funds were used for this purpose.
- Solar bus stop lighting will be installed using Prop1B Homeland Security funds during FY 11-12.

The following is a list of additional planned improvements between FY 2012 and 2016 (depending upon funding):

- Registering farebox system allowing for a single pass system between local agencies.
- Dispatch software program with AVL/GPS and real-time dispatching capabilities. Calculation of required reports will also be included.
- The purchase of replacement vehicles as the current vehicles age out.
- Additional ADA bus stop improvements.

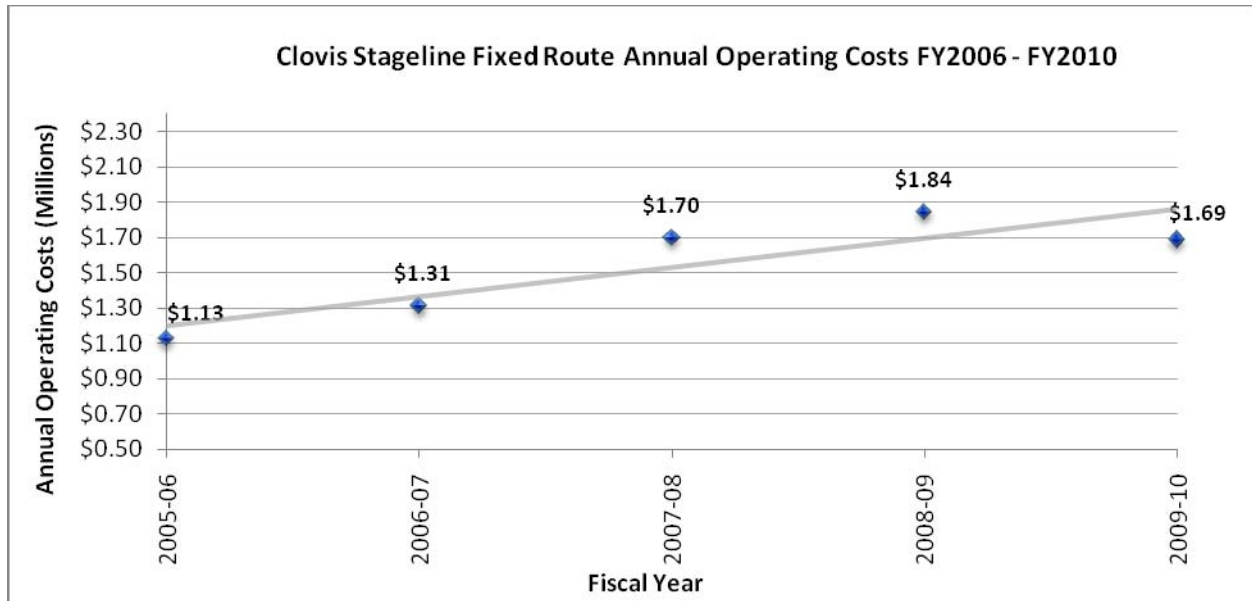
It is important to note that due to the economic crisis and state budgetary concerns, service levels may be adjusted in accordance with budgetary limitations. While the Measure C implementation plan lists specific projects for the funding, the revenue from Measure C is significantly lower than projected. The City of Clovis will continue to monitor funding streams and provide service to the community within funding levels and productivity requirements. Also, impact from the State's gasoline tax for diesel tax swap is unknown. This will begin in FY 12-13. The status of additional STA funds is also unknown.

As we look forward to the next five years, there are some potential areas that will continue to be evaluated. Some of those include:

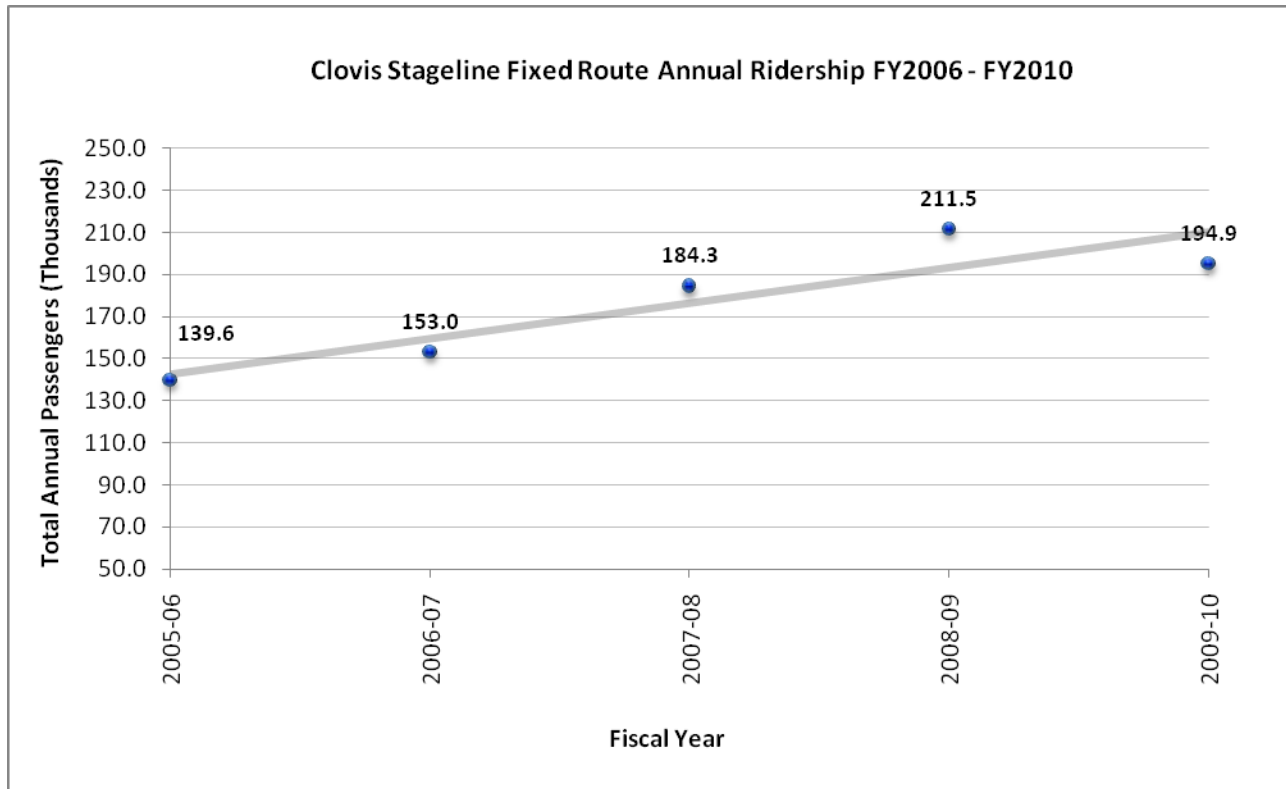
- Expand service into new build areas, particularly in the north and east of Clovis.
- Service to the Willow/International College campus and the adjacent Clovis North High School Campus.
- Analysis of possible bus rapid transit on Shaw Avenue.
- Analysis of the results of a regionalization study being conducted by the Fresno Council of Governments.

Table 5.2: Clovis Stageline Operating and Productivity Trends FY06- FY10

	FY					/		% Change	
Indicator	FY06	FY07	FY08	FY09	FY10	FY07	FY08	FY09	FY10
Total Passengers	139,622	153,012	184,264	211,502	194,947	9.6%	20.4%	14.8%	-7.8%
Vehicle Hours	16,825	16,801	20,015	21,542	19,538	-0.2%	19.1%	7.6%	-9.3%
Vehicle Miles	277,718	276,022	334,461	354,412	311,961	-0.6%	21.2%	6.0%	-12.0%
Operating Costs	\$1,125,486	\$1,309,979	\$1,697,431	\$1,842,611	\$1,685,682	16.4%	29.5%	8.6%	-8.5%
Fares	\$225,097	\$261,996	\$339,486	\$368,522	\$337,136	16.4%	29.5%	8.6%	-8.5%
Employees	10.25	10.25	13	13	13	0.0%	26.8%	0.0%	0.0%
Passenger/Hour	8.3	9.11	9.21	9.82	9.98	9.8%	1.1%	6.6%	1.6%
Passenger/Mile	.50	.55	.55	0.60	0.62	10.0%	0.0%	9.1%	3.3%
Cost/Vehicle Hour	\$66.89	\$77.97	\$84.81	\$85.54	\$86.28	16.6%	8.8%	1.0%	1.0%
Cost/Vehicle Mile	\$4.05	\$4.75	\$5.08	\$5.20	\$5.40	17.3%	6.9%	2.4%	3.8%
Veh Hours/Employee	1,683	1,639	1,539	1,657	1,503	-2.6%	-6.1%	7.7%	-9.3%
Op Subsidy/Passenger	\$7.24	\$7.69	\$8.42	\$8.17	\$7.94	6.2%	9.5%	-3.0%	-2.8%
Farebox Ratio	20%	20%	20%	20%	20%	0.0%	0.0%	0.0%	0.0%
Fbox ratio w/out Measure C	10.1%	10.2%	8.6%	8.4%	8.1%	1.0%	-15.7%	-2.3%	-3.6%

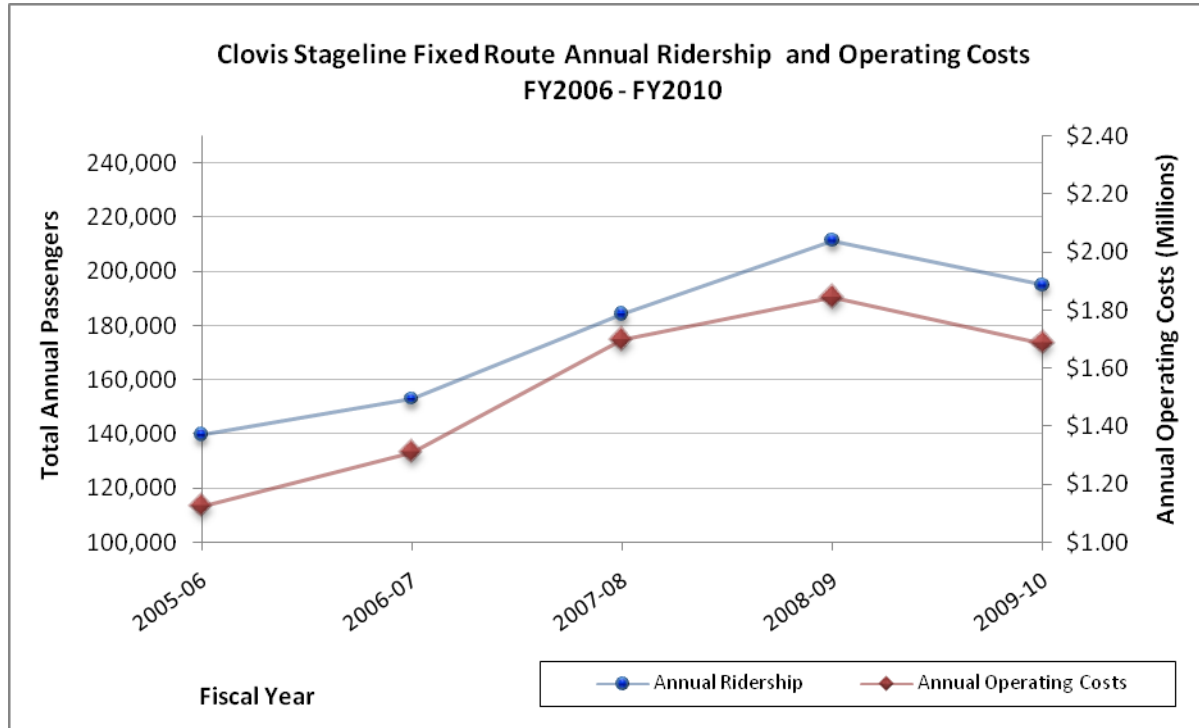
Figure 5.3: Clovis Stageline Fixed Route Operating Costs FY2006-2010

Operating costs for Clovis' fixed route system have grown steadily from \$1.13 million per year in FY2005/06 to \$1.69million per year in FY2009/10, keeping pace with inflation.

Figure 5.6: Clovis Stageline Fixed Route Annual Ridership FY2006 - 2010

Clovis Stageline Ridership has grown over time, an overall increase of 67% over the past five years. Ridership is down slightly since FY2008, however.

Figure 5.7: Clovis Stageline Fixed Route Annual Ridership and Operating Costs Comparison FY2006 – 2010

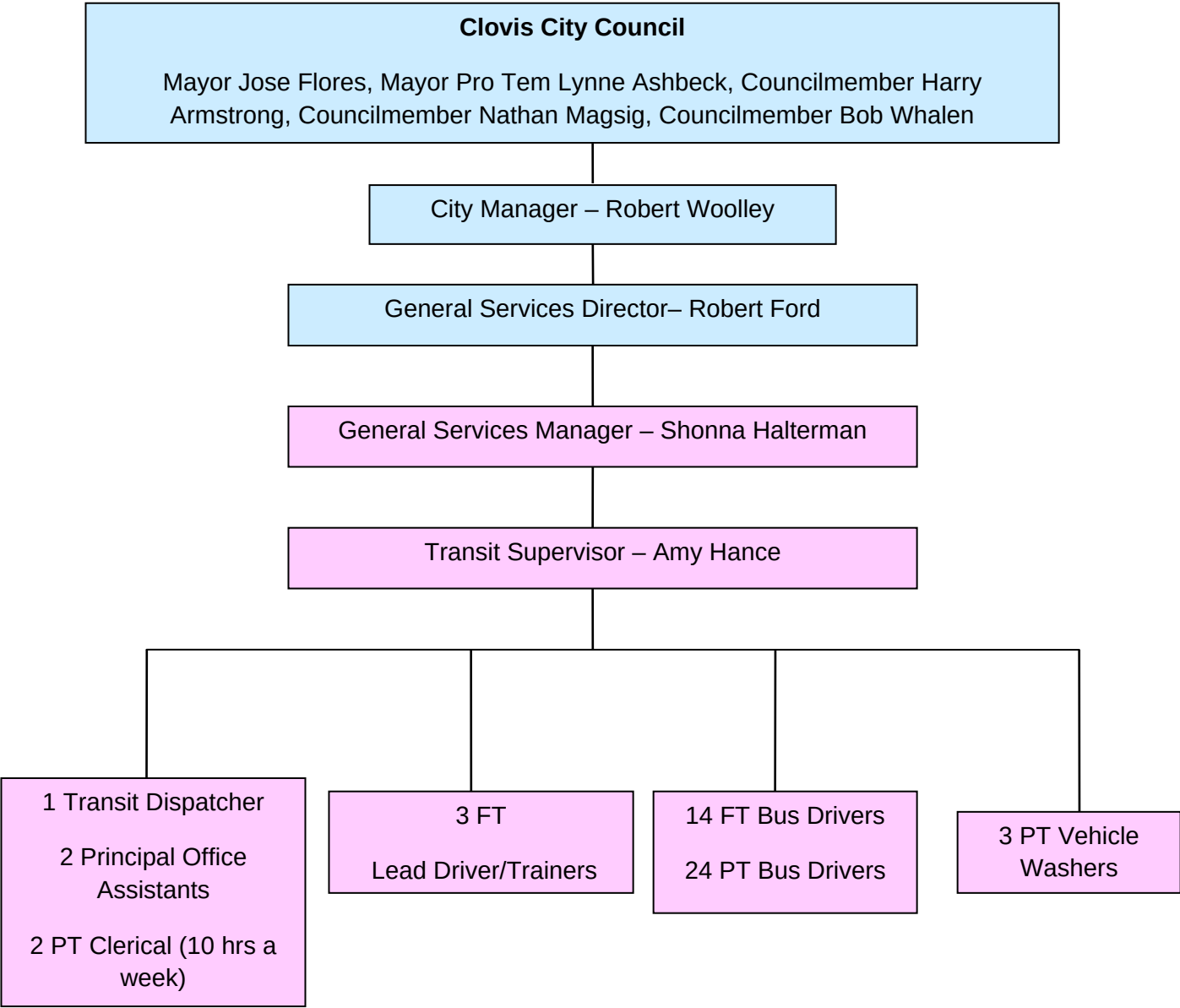


Comparing annual ridership to operating costs over time show that Clovis cost increases are matching annual ridership pretty evenly over time. Both ridership and costs fell by about 9% over the course of the last fiscal year.

Table 5.3: Roundup Operating and Productivity Trends FY06-FY10

	FY				% Change				
	FY07	FY08	FY09	FY10	FY07	FY08	FY09	FY10	FY06
Total Passengers	45,531	47,594	55,645	58,280	57,367	4.5%	16.9%	4.7%	-1.6%
Vehicle Hours	19,784	22,055	26,185	28,809	27,807	11.5%	18.7%	10.0%	-3.5%
Vehicle Miles	268,930	286,937	339,160	371,651	375,063	6.7%	18.2%	9.6%	1.0%
Operating Costs	\$1,181,610	\$1,375,107	\$1,492,983	\$1,672,364	\$1,935,337	16.4%	8.6%	12.0%	15.7%
Fares*	\$118,161	\$137,510	\$149,298	\$167,236	\$193,534	16.4%	8.6%	12.0%	15.7%
Employees	9.	9.5	14	15	15	5.5%	47.4%	7.1%	0.0%
Passenger/Hour	2.30	2.16	2.13	2.02	2.06	-6.1%	-1.4%	-5.2%	2.0%
Passenger/Mile	.17	.17	.16	.16	.15	0.0%	-5.9%	0.0%	-6.3%
Cost/Vehicle Hour	\$59.73	\$62.35	\$57.02	\$58.05	\$69.60	4.4%	-8.6%	-8.6%	19.9%
Cost/Vehicle Mile	\$4.39	\$4.79	\$4.40	\$4.50	\$5.16	9.1%	-8.2%	2.3%	14.7%
Veh Hours/Employee	2,198	2,321	1,716	1,920	1,854	5.6%	-26.1%	11.9%	-3.4%
Op Subsidy/Passenger	\$24.52	\$27.37	\$25.41	\$27.16	\$31.95	11.6%	-7.1%	6.9%	17.6%
Farebox Ratio	10%	10%	10%	10%	10%	0.0%	0.0%	0.0%	0.0%
Fbox ratio w/out Measure C	5.5%	5.3%	5.3%	5.3%	5.3%	-3.8%	0.0%	0.0%	0.0%

Figure 5.8: Clovis Transit Organization Chart



5.4.0 Capital Financial Plan

Clovis - Clovis Transit's five year Capital Plan projects a balanced budget despite the increase in service demand. Clovis Transit took delivery of 14 new buses in January and February 2009. State Proposition 1B funds for PTMISEA grants and the Proposition 1B homeland security grants are on hold due to the inability of the state to sell the bonds. Sales tax revenue from Measure C is considerably lower than expected. While the CIP includes service improvements such as modification and expansion of the system, the current funding crisis may curtail any expansion over the next two years. The Plan also includes management programs such as updating documents, transit productivity evaluation and monitoring for ADA and STA conformance.

Table 5.4 - Stageline Operating and Revenue Budget FY04-FY08

Operating Revenue	2003/04	2004/05	2005/06	2006/07	2007/08
Grants/Other		\$39,347	\$39,265	\$39,919	\$404,039
Passenger Fares	\$56,237	\$67,783	\$77,164	\$90,186	\$109,902
Measure C	\$125,000	\$162,000	\$120,000	\$130,000	\$532,446
LTF	\$778,188	\$1,079,081	\$977,233	\$1,231,815	\$618,132
STA		\$119,437	\$261,137	\$767,779	\$0
Total Operating Revenues	\$959,425	\$1,467,648	\$1,474,799	\$2,259,699	\$1,664,519
Operating Costs	2003/04	2004/05	2005/06	2006/07	2007/08
Employee Services	\$489,173	\$595,141	\$634,818	\$653,669	\$917,843
Operations, Maint. & Training	\$217,451	\$306,223	\$329,321	\$288,896	\$361,370
Direct Operating Expenses	\$107,051	\$111,614	\$127,359	\$134,449	\$168,259
Transit Contracts	\$176,867	\$184,822	\$193,340	\$199,116	\$217,047
Capital	\$52,358	\$46,853	\$0**	\$31,945**	\$541,426
Total Operating Costs	\$1,042,900	\$1,244,653	\$1,284,838	\$1,308,075	\$2,205,945

* Roll-over funds from prior year. **Funds for vehicle purchase rolled-over into following year.

Table 5.5 - Roundup Operating and Revenue Budget FY04-FY08

Operating Revenue	2003/04	2004/05	2005/06	2006/07	2007/08
Passenger Fares	\$55,893	\$61,884	\$65,553	\$82,805	\$78,801
Measure C	\$150,000	\$190,000	\$200,000	\$200,000	\$528,000
LTF	\$880,552	\$681,416	\$917,782	\$1,082,460	\$1,357,994
STA	\$112,140	\$0	\$0	\$0	\$396,131
Total Operating Revenues	\$1,298,585	\$933,300	\$1,183,445	\$1,365,265	\$1,833,454
Operating Costs	2003/04	2004/05	2005/06	2006/07	2007/08
Employee Services	\$658,028	\$663,928	\$748,263	\$871,234	\$958,761
Operations, Maint. & Training	\$153,628	\$194,722	\$295,829	\$298,976	\$366,276
Direct Operating Expenses	\$128,436	\$136,269	\$137,019	\$176,464	\$167,948
Capital	\$257,393	\$502	\$0**	\$28,431	\$91,584
Total Operating Costs	\$1,197,485	\$995,421	\$1,181,111	\$1,375,105	\$1,584,569

* Roll-over funds from prior year. **Funds for vehicle purchase rolled-over into following year.

Appendices

Appendix A: Caltrans Public Transportation, Ridesharing, Park-and-Ride and Bicycle Policies

Caltrans will support the provisions of public transportation services, as appropriate, within urban areas, within rural areas, and between regions. In both urban and rural areas, adequate public transportation services are required to meet the mobility needs of the poor, the elderly, and the disabled (in general, those person who are financially unable or physically incapable of owning and operating an automobile). In urban areas, public transportation is also needed to serve additional objectives (particularly as they relate to home to work or commuter trips); namely, relief of congestion, savings in energy consumption, and improvement in air quality. Interregional intercity or longer distance public transportation is needed, both to serve the transit dependent population and to serve long-term environmental and social objectives such as reduction in energy consumption.

The Department's authorities and responsibilities in the transit area were clarified and broadened in 1979 with the passage of SB 620, which enables the Department to engage in the design and construction of transit facilities. The statute also indicates the Legislature's intent that there be a state commitment to investments in rail and guide way systems, transit stations, park and ride lots, and local transit services. It is departmental policy to aggressively make such investments as expeditiously as possible.

In a more general sense, Caltrans will concentrate its transit activities in the following five areas (not listed in order or priority):

- 1) Assure adequate transportation facilities and services for low mobility people in all regions of the State.
- 2) Foster development of interregional public transportation. The Department will promote a continuing program of intercity and commuter rail service and intercity bus services.
- 3) Support measures to better integrate transit facilities and services with other parts of the transportation system in a given area. Specifically, along these lines, the Department will:
 - a) Support measures to increase bus ridership on State highways in urban areas, thus making more efficient use of these highway facilities;
 - b) Aid in the securing and protection of corridors for fixed guide way transit service, either on a shared basis with existing highway or rail routes or along abandoned rail lines or vacant highway rights of way;
 - c) Develop a program of Intermodal transfer facilities to provide connections between different modes and to connect interregional transit services with local transit systems;
 - d) Support measures to coordinate social service transportation and increase services provided by the private sector.

- 4) Sponsor and evaluate transit demonstration projects where the results of the project may have applicability in several jurisdictions.
- 5) Provide technical, financial, and other assistance and services to transit operators to ensure equitable, efficient, and effective use of available resources.

Ridesharing and Park and Ride Policies

A goal of the State is to reduce the automobile's contribution to air pollution, energy use, and traffic congestion. Two of the primary means of achieving this goal are to reduce the number of vehicles entering urbanized areas and increasing the number of passengers per vehicle entering these areas. These are emphasized through departmental programs which:

- *Provide for the development of fringe area park and ride lots rather than the development of new single occupant vehicle parking facilities in core areas.
- *Give priority on freeways to high occupancy vehicles (HOV's) by providing special lanes for these vehicles which results in reduced commute time.
- *Provide centralized offices in several areas of the District that coordinate and encourage the use of carpools, van pools, and bus pools by all employers in the area.
- *Set an example for the private sector by providing preferential parking facilities for HOV's.
- *Encourage RTPA's to plan and coordinate local governments and private industry to implement urban parking strategies which are measures taken to alter the supply or cost of parking to either reduce automobile travel in a selected area or to make the operation of the urban street system more efficient.

Bicycle Policies

It is departmental policy to develop programs and projects which encourage the use of bicycles as an alternative to use of the automobile. Particular emphasis is toward bicycle facilities in urban areas to increase use of the bicycle for commute and other short utilitarian trips. In order to encourage bicycle use, it is Department policy to:

- 1) Provide for continuous and convenient bicycle routes to places of employment, shopping centers, universities, and other high activity areas with potential for increased bicycle use.
- 2) Encourage the development of safe bicycle storage facilities, and other support facilities, i.e., those which would encourage increased bicycle usage.
- 3) Provide coordination and assistance to Federal, State, regional, local, and private agencies in developing plans and facilities to encourage bicycle usage.
- 4) Give consideration to bicyclists' needs through TSM and Air Quality Maintenance Plan (AQMP) strategies.
- 5) Encourage the integration of bicycles with other modes of transportation such as promoting the carrying of bicycles on mass transit vehicles or the provision of safe bicycle storage at

transit terminals.

- 6) Make improvements on or adjacent to State Highway corridors to increase safety and convenience of bicyclists.
- 7) Provide route information and education materials to bicyclists.

Appendix B: Elderly and Disabled Service Considerations

Fixed Route Service

Fresno Area Express' (FAX) fixed route service presently serves areas of significant concentrations of elderly population. In evaluating new service requests special consideration is given to areas of significant senior citizen and disabled population.

The entire FAX bus fleet is wheelchair lift equipped making all FAX buses accessible to persons with disabilities. All FAX fixed routes were accessible to persons in wheelchairs starting in October of 1991, and starting in 1993, all base period buses were wheelchair accessible.

The fare structure for the fixed route service provides for a senior citizen (65+) disabled base fare (\$.60) or approximately 50% of the general fare (\$1.25). Monthly passes on FAX regular buses for disabled persons are \$24.00, representing a \$24.00 discount compared to the Handy Ride system and the monthly Metro Pass. FAX had a fare increase in 2011, the first in eight years. FAX accepts red, white and blue Medicare Cards, DMV Disabled Parking Placards, ADA Paratransit Certification, and FAX Special Rider I.D. cards for reduced fares. FAX also accepts all appropriate identification showing ages 65 and older for reduced fares.

Fare Category	Adult Fare FAX	Adult Fare HANDY RIDE
Single Ride	\$1.25	\$1.50
20 Tokens/50 Tokens	\$ 22.50/\$55.00	N/A
#Metro Pass (unlimited rides)	\$48.00	\$48.00
Children under 6 and Trolley Rides	Free	N/A
	Senior/Disabled Fare FAX	Senior/Disabled Fare HANDY RIDE
Single Ride	\$.60	\$1.50
Monthly pass	\$24.00	\$48.00

Demand Responsive Service

Service for the elderly and disabled population also is provided by Handy Ride which covers the same service area as the fixed route system. The system is demand responsive, and trip requests are accepted 24 hours in advance for certified users. No priority is given to trip type, and there are no trip number limits. Senior and disabled persons pay a \$1.50 cash fare or \$48.00 for a monthly convenience pass. An attendant may ride free with the passenger.

As discussed in Chapter 2, The Americans with Disabilities Act of 1990 has had a significant impact on FAX fixed route and demand responsive service. A more detailed analysis of the impact of transit services to the elderly and disabled population in the metropolitan area is contained in the FAX ADA "Paratransit Service Plan".

Appendix C: Title VI Compliance

As a condition of receiving assistance from the Federal Transit Administration (FTA), FAX complies with the requirements of Title VI of the Civil Rights Act of 1965, which requires reporting to FTA every three years, and FAX prepared a triennial report in 2008. Relevant excerpts from FAX's Title VI Update are provided below:

I. GENERAL TITLE VI REPORTING REQUIREMENTS

All applicants, recipients and sub-recipients shall maintain and submit:

A. A list of all active lawsuits or complaints alleging discrimination on the basis of race, color or national origin with respect to service or other transit benefits.

FAX currently has no active complaints naming the agency with alleged discrimination on the basis of race, color, or national origin, with respect to service or other transit benefits.

B. A description of all pending applications for financial assistance currently provided by other Federal agencies to the grantee.

FAX has the following FTA grant applications for financial assistance pending:

Section 5309 Small Starts Share (\$YOE): FTA amount: \$38.55 Million (80.0%) – FRE1111356 – Bus Rapid Transit (BRT) Blackstone/Kings Canyon corridors. 13.8 mile corridor on Kings Canyon Road from Fowler Avenue on the east to Downtown Fresno; and on Blackstone Avenue from Friant Road on the north to Downtown Fresno; 2.8 miles of which will be bus-only use and the other 11 miles will be mixed traffic lanes. There will be 26 stations along the route, each with two stops, one in each direction (except at the northern and eastern terminus). All signalized intersections will have traffic signal coordination and transit signal priority. Real-time bus arrival information will be displayed at stations and on the internet and major stops will have ticket vending machines. 17 60-foot low-flow hybrid-propelled or CNG hybrid buses will run on the system, 14 peak vehicles and 3 spares.

§ 5317 New Freedom Program – FRE095320 – FTA amount \$68,000. Bus stop efficiency improvements: bus stop numbering in Braille.

§ 5317 New Freedom Program – FRE095321 – FTA amount \$120,000. Bus stop concrete improvements.

§ 5317 New Freedom Program – FRE095322 – FTA amount \$16,800. Trip efficiency program. For the purchase of a vehicle to implement the Trip Efficiency Program for Handy Ride customers.

§ 3037 Job Access and Reverse Commute – FRE095318 - FTA amount \$200,000. Transportation needs project.

§ 5316 Job Access and Reverse Commute – FRE095319 - FTA amount \$105,600. Bike racks.

§ 5316 Urbanized Area Formula Program – FRE021501 - FTA amount \$2,440,000. Various planning projects/FAX Staff/Annual Planning O&M Expenses and Special Projects.

§ 5307 Urbanized Area Formula Program – FRE021502 - FTA amount \$2,277,800.

Various planning projects/FAX Staff/Annual Planning O&M Expenses and Special Projects.

§ 5307 Urbanized Area Formula Program – FRE021503 – FTA amount \$30,144,700. Preventive maintenance expense.

§ 5307 Urbanized Area Formula Program – FRE021504 – FTA amount \$15,222,500. Contracted Paratransit Service Operations.

§ 5307 Urbanized Area Formula Program – FRE021505 – FTA amount \$483,100. Capital lease, Handy Ride facility.

§ 5307 Urbanized Area Formula Program – FRE021506 – FTA amount \$1,210,300. Capital lease, vehicle tire lease.

§ 5307 Urbanized Area Formula Program – FTA amount \$339,200 and § 5307 ARRA – FTA amount \$4,750,000 – FRE021510. Passenger shelters/structures, benches, trash receptacles and lighting; On-street signs; Bus stop repairs and miscellaneous amenities to benefit transit passengers.

C. A summary of all civil rights compliance reviews conducted by other local, State or Federal agencies in the last 3 years.

No civil rights compliance review activities were conducted in the last three years.

D. The most recent date of the grantees signed Annual Certifications and Assurances.

The most recent signed Annual Certifications and Assurances on file with FTA was executed by the City of Fresno, Director of Transportation

II. PROGRAM SPECIFIC REQUIREMENTS FOR GRANTEES IN URBANIZED AREAS OF POPULATIONS 200,000 AND OVER

A. Submit a copy of the agency's Title VI internal review process for service delivery and capital programs decisions, along with the name and position titles of the persons responsible for administration of the process and who have ultimate responsibility for approving these decisions.

The Locally Developed Evaluation Procedure was formalized by FAX in their 2008 Title VI Report to the FTA.

FAX, like most other public transit systems, has limited resources and must weigh proposed service changes carefully based on demand and available resources. The Transit Rates and Services Committee is the primary vehicle for reviewing service changes. The Transit Rates and Services Committee is comprised of seven individuals representing each of the Council districts and one person representing the Mayor's office. This committee is responsible for evaluating current fixed-route service, recommending service changes, and assessing Title VI compliance, as well as other related activities.

Committee meetings are held with varying frequency throughout the year, but on average monthly. The Committee considers proposed changes as needed, based on data collection findings. Ridership data, schedule adherence, and running time statistics collected throughout the year are the primary basis from which recommendations are developed. Comments and requests from the public are also reviewed at these meetings. A list of proposed service changes is developed for consideration by the Director of Transportation, Ken Hamm. If the recommended changes are significant, they are also considered by the City Council in a public hearing forum, as required by the Federal Transit Administration. In accordance with FTA regulation, FAX attempts to notify all concerned citizen organizations that may be affected by proposed service changes of their opportunity to comment on the proposals. Notice is placed in area newspapers, in both English and Spanish, at key bus stops, transfer locations, and on board buses.

The internal review process for capital program decisions is carried out in the monthly executive staff meetings. The members of the executive staff include the division managers of each of the six divisions, the Director of Transportation and the Assistant Director of Transportation. The Fresno City Council has ultimate responsibility in approving these decisions.

Planning and Development Responsibilities for BRT

The project sponsor for the Blackstone/Kings Canyon Rd BRT project is the Fresno Area Express (FAX), the agency that operates public transit services provided to the City of Fresno and adjacent unincorporated areas. FAX carries approximately 16.9 million passengers (unlinked trips) annually, all on fixed-route services.

Primary FAX responsibilities related to the project include:

- Manage the planning, scope, design and engineering, construction administration, and construction inspection;
- Provide oversight for project technical issues;
- Develop recommendations for resolutions for unique problems arising unforeseen conditions brought to light during project planning, development, and implementation; and
- Develop responses to Project Management Oversight (PMO) contractor requests to prevent the deterioration of budget and schedule.

FAX divisions involved in the development phase of the Blackstone/Kings Canyon BRT project include, Planning, Operations, Maintenance, and executive staff. City of Fresno FAX is a department of the City of Fresno under the direction and management of the City Manager and

oversight by the City Council. Funding and major project recommendations made by the FAX staff are subject to the approval of the City Council. FAX submitted a formal Project Management Plan for the BRT project with the Very Small Starts application to FTA detailing roles and responsibilities on the project.

Fresno Council of Governments (Fresno COG) - Fresno COG is the regional planning agency for the Fresno County area. Fresno COG functions as both the regional transportation planning agency and as the region's metropolitan planning organization (MPO). As such, it is responsible for regularly updating the Regional Transportation Plan, a comprehensive blueprint for the development of mass transit, highway, railroad, bicycle, and pedestrian facilities.

Federal Transit Administration - FTA will review and approve the Before and After Study work plan. FTA also will review any before and after data developed during the project planning and development phase, as well as draft and final reports.

PMO Contractors - The PMO contractors designated by FTA will assist in reviewing project data.

B. Provide a narrative documenting implementation of the Title VI internal review process for at least one service delivery or capital program decision that was implemented during the past three years.

FAX has experienced significant reductions in local sales tax revenue, while ridership levels have continued to increase in recent years. As a result, FAX has found it necessary to implement both service reductions and fare increases simultaneously to keep core service operating. The recent fare increase is presented here as an example of service delivery internal review process decisions.

FAX's Transit Rates and Services Committee began discussing the need for a fare increase across the board starting in February of 2010, and continued to discuss the fare increase every month until November of 2010. The Committee is comprised of eight members of the public and five FAX staff. FAX was facing a \$5 million loss in operating revenues from Measure C funds and would need to raise fares or cut service or both in order to keep core transit service operating on the streets. FAX had not implemented a fare increase since 2001 and its regular fare, at \$1.00 per ride was the lowest transit fare in the state. The proposed fare increase would bring general fares up to \$1.25.

To effectively pursue this fare increase, FAX conducted an alternatives analysis to find alternatives to increasing fares, such as cutting operating costs wherever possible and researching new sources of operating funds. FAX Administrators examined several fare scenarios in an effort to increase operating revenue in order to meet the substantial need that is in the public interest to keep core transit service operating on the most productive routes. A fare impact study was conducted and four fare scenarios were evaluated for implementation by the Transit Rates and Services Committee.

The four scenarios evaluated included a lowest impact scenario that would raise the daily adult

fare to \$1.25 and included some service reductions, a moderate scenario that would raise the daily adult fare to \$1.35 with some service cuts, and an aggressive scenario that would raise the daily adult fare to \$1.50, but with no service cuts. FAX management pointed out that raising fares alone would not close the budget deficit and service cuts would be necessary in addition.

A comparative analysis was conducted to compare the preferred alternative (the lowest fare increase of \$1.25) to the fares charged by peer transit agencies in the area. That analysis is provided in the following table:

Table C.1: Peer System Fare Comparison (as of March 2011)								
System	Local Fare	Monthly Pass	Student Fare	Monthly Student Pass	Senior Daily Trip	Senior Monthly Pass	Paratransit Daily Trip	Paratransit Monthly
FAX (proposed)	\$1.25	\$48.00	Same as adult fare	Same as adult fare	\$0.60	\$24.00	\$1.50	\$48.00
Modesto Area Express	\$1.25	\$41.00	\$1.00	\$31.00	\$0.60	\$20.00	\$2.50	\$22 for 10 rides
Bakersfield	\$1.25	\$35.00	n/a	Summer youth pass \$48 for 3 mos	\$0.75	\$20.00	\$2.50	\$25 for 10 rides
Sacramento RTD	\$2.50	\$100.00	\$1.25	\$50.00	\$1.25	\$50.00	\$5.00	n/a
San Joaquin RTD	\$1.50	\$65.00	\$1.25	\$40.00	\$0.75	\$30.00	\$3.00	\$27.50 for 10 rides
Visalia	\$1.25	\$30.00	n/a	n/a	\$1.00	\$30.00	\$1.75 to \$3.25	\$50.00 to \$60.00 per month or \$17.50 to \$22.50 for 10 rides*
* Dial-A-Ride vans in Visalia will also pick up non-ADA customers at a higher fare than the regular bus.								

Table C.1 illustrates that the proposed FAX fare increase to \$1.25 puts them in line with three other transit systems in the area at the lower end of the fare range. The FAX fare is still lower than Sacramento RTD fares and San Joaquin RTD fares. Areas where other transit systems provide price discounts that FAX does not offer include a student fare and a summer youth pass and discounts for purchasing 10-ride tickets. FAX fare for their Handy Ride paratransit system are still significantly lower than any other peer system, indicating an area for future increases to keep pace with market pricing.

Ken Hamm presented the proposed fare increase to City Council on December 16th, 2010

requesting a fare increase to \$1.25 cash fare for fixed route and \$2.50 for Handy Ride with some changes to the monthly pass. The pass on fixed route was being recommended to increase to \$48; the Handy Ride Pass was being recommended to change to a Multi-Ride Pass for 42 single rides and increase to \$60. Passengers would then pay the cash fare for each single ride after reaching their 42 single rides. The City Council approved a \$48.00 Handy Ride monthly pass fare.

Table C.2: The New FAX Fare Structure

Fare Category	Adult Fare FAX	Adult Fare HANDY RIDE
Single Ride	\$1.25	\$1.50
20 Tokens/50 Tokens	\$ 22.50/\$55.00	N/A
#Metro Pass (unlimited rides)	\$48.00	\$48.00 (limit 60 rides)
Children under 6 and Trolley Rides	Free	N/A
	Senior/Disabled Fare FAX	Senior/Disabled Fare HANDY RIDE
Single Ride	\$.60	\$1.50
Monthly pass	\$24.00	\$48.00 (limit 60 rides)

The FAX Metro Pass is for use on FAX and Clovis Stageline services

Note: FAX fare increase became effective January 10, 2011.

Conclusion

According to Circular 4702.1A, Title VI Guidelines for FTA Recipients, "Recipients can implement a fare increase or major service reduction that would have disproportionately high and adverse effects provided that: 1) the recipient demonstrates that the action meets a substantial need that is in the public interest; and 2) alternatives would have more severe adverse effects than the preferred alternative."

FAX's proposal to implement the lowest fare increase of the four alternatives considered is still well within the low end of fares being charged at similar transit systems in the area. In addition, the other alternatives (higher fares) would have more adverse effects than the preferred alternative.

Public notification of the proposed fare increase began on December 7th of 2010 with public notices posted on the buses, media releases, website postings and radio announcements, including half-sheet fare increase messages translated into Spanish and Hmong. On December 15th and 16th public hearings were held to discuss the fare increase and take public comments. A total of 45 people spoke to protest the fare increase and none spoke in favor. The fare increase was implemented on January 10th, 2011. Ads were taken out in the Fresno Bee to announce the fare increase had been approved to inform riders of the new fares on January 10th and 12th, and February 7th, 9th, 11th and March 7th.

- C. Grantees are required to establish internal monitoring processes relative to levels of quality of service. If any disparity has been found during the last three years as a result of these analyses, provide a narrative describing the disparity and the action the**

agency has taken to remedy the situation.

FAX has not collected data in the past to allow system administrators to determine the fare payment method of Title VI populations who ride the bus. It has not been possible to determine if disparities exist in the impacts to protected populations. FAX will be adding fare payment method to its next passenger survey so that future disparities can be measured and specific mitigation strategies can be developed to address these particular Title VI subgroups.

D. Submit a copy of any service standards and policies that have changed over the past three years. Describe the impact of the service standard or policy changes on the minority community. Changes resulting in an adverse impact on the minority community must be identified, including the action the agency has taken or plans to take to eliminate, minimize or mitigate the adverse impact.

FAX implemented three significant changes in service standards and policies in the past year in order to balance the budget with a rapidly declining operating revenue source:

1. A system-wide elimination of peak 15-minute headways that were replaced by 20-minute headways all day long. Because this was a system-wide change, there was no disproportionate impact on low income or minority populations.
2. A fare increase from \$1.00 adult basic fare to \$1.25. To mitigate for the impact on low income riders FAX offers a discounted token rate on purchases of 20 or 50. It amounts to about a 10% discount.
3. Three transit routes were cut entirely. These were routes 12, 18 and 56. Routes 12 and 18 were the lowest performing routes in the system, and route 18 was subsidized by a third party and lost its subsidy.

FTA Circular 4702.1A states that a recipient can implement a major service reduction or fare increase that would have a disproportionate high and adverse effect provided that it is demonstrated that the action meets a substantial need that is in the public interest and that alternatives would have more severe adverse effects than the preferred alternative.

In this analysis we have shown that the approved fare increases, frequency of service reductions and service cuts were a last resort for balancing the FY2011 budget -- after consideration of various alternatives. Additionally, FAX took other actions to close the budget gap such as a reduction in force, moving money from the capital budget over to the operating budget, and cutting current service levels.

Even with the FY2011 fare increases, the fares charged on FAX remain equal to low in comparison to peer transit systems in the area. FAX has not collected data in the past that would allow it to evaluate the impact of the fare increase to particular Title VI subgroups in order to develop a mitigation plan.

E. Submit a list of projects included in the Transportation Improvement Program (TIP) of

each transit construction and/or major mobility improvement project along with a discussion of the impact on the minority community. If this information has been provided in an environmental assessment or planning study to the regional office, please reference the documents and pages where the discussion can be found.

Fresno Council of Governments 2011FTIP – Formal Amendment No. 3 adds the Very Small Starts Application – FRE1111356 – Section 5309 Small Starts Share (\$YOE): \$38.55 Million (80.0%). Bus Rapid Transit (BRT) Blackstone/Kings Canyon corridors. 13.8 mile corridor on Kings Canyon Road from Fowler Avenue on the east to Downtown Fresno; and on Blackstone Avenue from Friant Road on the north to Downtown Fresno; 2.8 miles of which will be bus-only use and the other 11 miles will be mixed traffic lanes. There will be 26 stations along the route, each with two stops, one in each direction (except at the northern and eastern terminus). All signalized intersections will have traffic signal coordination and transit signal priority. Real-time bus arrival information will be displayed at stations and on the internet and major stops will have ticket vending machines. 17 60-foot low-flow hybrid-propelled or CNG hybrid buses will run on the system, 14 peak vehicles and 3 spares.

Preliminary Environmental Assessment

The proposed BRT project improves local bus service on corridors with existing bus service. No impacts on the minority community are anticipated, except for bus service improvements. The project is not anticipated to displace existing structures or disrupt existing land uses. Limited right-of-way may be acquired to provide end-of-line terminals with bus turnarounds and limited areas for kiss-and ride and possibly park-and-ride. Easements or small right-of-way takes could be required to provide adequate areas for station improvements but only where space is available and not currently in use other than as open space/landscaping.

Based on the proposed features and operation of the project, a preliminary (non-formal) assessment of potential environment issues indicates the following impacts could occur:

- Traffic operations impacts along the arterial segments where dedicated bus lanes are Proposed
- Intersection level of service impacts at locations where lane reductions are proposed and/or queue jump and TSP improvements are targeted.
- Parking displacements in station areas and in the segment of Ventura Avenue/Kings Canyon Road where BRT vehicles are proposed to operate in the curbside parking lane.

FAX has conducted initial evaluations of traffic conditions in the corridor and level of service at signalized intersections. The preliminary findings were traffic volumes are low to at most 110 moderate in the segment of Ventura Avenue/Kings Canyon where a traffic lane in each direction will be dedicated to buses only; intersection level of service will not be adversely affected by BRT operations or impacts can be eliminated by incorporating relatively low cost improvements into the project; and parking supply is more than adequate along the on-alignment BRT arterials and in adjacent lots so that displacements resulting from BRT improvements do not adversely affect

overall supply or restrict access to local businesses and residences.

Furthermore, sidewalk station improvements do not appear to be located near significant cultural resources, such as historic structures or public parks or public institutions. Or the improvements can be located to avoid such resources should they become evident.

Future phases of the project will advance the initial evaluation of impacts to much greater detail.

Nevertheless, based on these preliminary assessments, FAX has concluded a Categorical Exemption (Type "D") is likely to be appropriate under NEPA. To date, formal environmental studies of potential project impacts have not been performed. Studies in the form of a Preliminary Environmental Assessment (NEPA) and Initial Study (California Environmental Quality Act) will be performed beginning in early fall 2009 to confirm this approach, with any determination made in coordination with FTA Region IX in San Francisco. Regional staff has previously been contacted to discuss possible environmental review procedures for the Blackstone/Kings Canyon BRT, but certainly FTA has made no determination on the matter.

F. Provide a description of the type of service changes (e.g., route extensions, deletions, changes in hours or days of operation, fare increases, etc., including any changes as a result of contracting out service) proposed by the transit property over the next three years, and a statement of the anticipated effect of these changes on the minority communities and the minority transit user, provide the justification for each change.

Local bus service on Blackstone Avenue and Ventura/Kings Canyon Avenues will likely be reduced or eliminated as a result of BRT implementation which replaces local bus service. There may be impacts in terms of spacing of bus stops from the current $\frac{1}{4}$ mile spacing to the proposed $\frac{1}{2}$ mile spacing for BRT. Some regular bus routes are being realigned now or will be realigned soon to support the BRT route and to feed into BRT stations for facilitated transfers.

Most of the impacts to minority populations will be positive: BRT brings improved service frequencies, attractive rail-like stations and improved pedestrian crossings, lighting and signage. Depending on the point of origin for specific transit riders, particular riders may experience shorter or longer walk distances to the nearest BRT station compared with their current bus stop location.

III. INTERNAL REVIEW PROCESS

This element of the Title VI Report documents FAX's internal processes with respect to the delivery of transit services and improvements. Fresno Area Express established the following minimum standard policies in order to provide the best possible service to all people within the service area. Considerations include cost-effectiveness, vehicle load, vehicle headway, access, bus stop frequency, on-time performance, and the distribution of transit amenities.

Maximum Vehicle Load:

Maximum seat to passenger load ratio of 1:1.1, or 110 percent of vehicle capacity.

Vehicle Headway:

Vehicle headway is determined primarily by ridership on the route, and is limited by available resources. As a policy, FAX will not establish vehicle headways greater than 60 minutes on any route whenever service is operated.

On-Time Performance:

FAX should operate its fixed-route buses so that on-time performance is achieved 90 percent of the time. A bus is considered “on-time” if it arrives no more than five minutes after the scheduled arriving time. The system average for FY2010 was 83 percent. Routes that consistently fall below the system standard are examined and evaluated by the Service Evaluation Committee.

Distribution of Transit Amenities (Transit Access):

FAX does not operate any rail stations, park and ride lots, escalators, or similar amenities. As such, FAX does not have a policy for the distribution of such amenities. FAX does, however, place and maintain bus stop signs at all bus stop locations. Other amenities revolve around bus stop improvements such as benches, shelters, bus bays, and major transfer centers. The determination of how bus stops are improved is limited by financial resources and site specific considerations, accessibility to persons with disabilities, vehicle operating safety, and passenger volume. These standards are published in the FAX Transit and Facilities Standards document dated December 2005 and are made available to planning agencies and developers upon request. Construction of bus stop amenities such as curb cuts, sidewalks, and bus bays are the direct responsibility of city and county public works and traffic engineering departments. FAX is required to coordinate with those departments when planning for and constructing such improvements.

Service Availability:

FAX’s fixed-route bus system should be designed so that a minimum of 90 percent of the service area population resides within one-half mile of a bus route.

A policy recommendation from the Fresno COG’s PTIS Study is to locate half of new households in close proximity to the planned BRT corridors and downtown Fresno. Implementation of this policy by local governments will increase significantly the number of people who live within the ½ mile walk shed from a high capacity transit corridor in the future.

IV. Title VI Populations in the FAX Service Area

FAX analyzes the impacts of service and fare changes on the specific protected populations of minority, low income, and Limited English Proficiency (LEP). The FAX service area is comprised of 63% minority population groups. About 17% of families in the FAX service area live below the Federal poverty limit, and as many as 22,000 families may not be able to afford a car and are considered transit dependent. And 39% or nearly 204,000 people need language assistance to understand and communicate their basic travel needs.

The tables and maps below provide details on the Title VI populations and their geographic concentrations within the FAX service area. Many of the neighborhoods identified as low income are also minority households who do not speak English well. Service changes and fare increases to these specific geographic areas will be given considerable analysis to minimize and mitigate the impacts to these protected populations.

Table C.3: Minority Populations

Number of Persons in Minority Population within FAX Service Area		
Ethnicity	Estimate	Percent
White (Non-Hispanic or Latino)	212,745	36.82%
Hispanic or Latino	246,260	42.62%
Asian	62,988	10.90%
Black or African American	38,926	6.74%
American Indian and Alaska Native	2,742	0.47%
Native Hawaiian and Pacific Islander	827	0.14%
Other	1,858	0.32%
Two or more races	11,428	1.98%
Total Survey Participants	577,774	100.0%
[1] Source: US Census Bureau - American Fact Finder 2005-2009		
[2] Minority populations defined according to the FTA Circular 4702.1A, page II-5		
[3] Average % Minority in FAX Service Area (areas within ¾-mile of transit route) = 63%		

About 63% of FAX's customers are minorities. Of those, Hispanics or Latinos represent the largest group (43%) followed by Asians (11%) and Blacks or African Americans (about 7%).

As can be seen in Figure C.1 below, heavy minority concentrations in the FAX service area include all of Edison, Central and Roosevelt neighborhoods, with lower concentrations following Highway 99 to the north and west of downtown.

Figure C.1: Minority Population Concentrations within the FAX Service Area

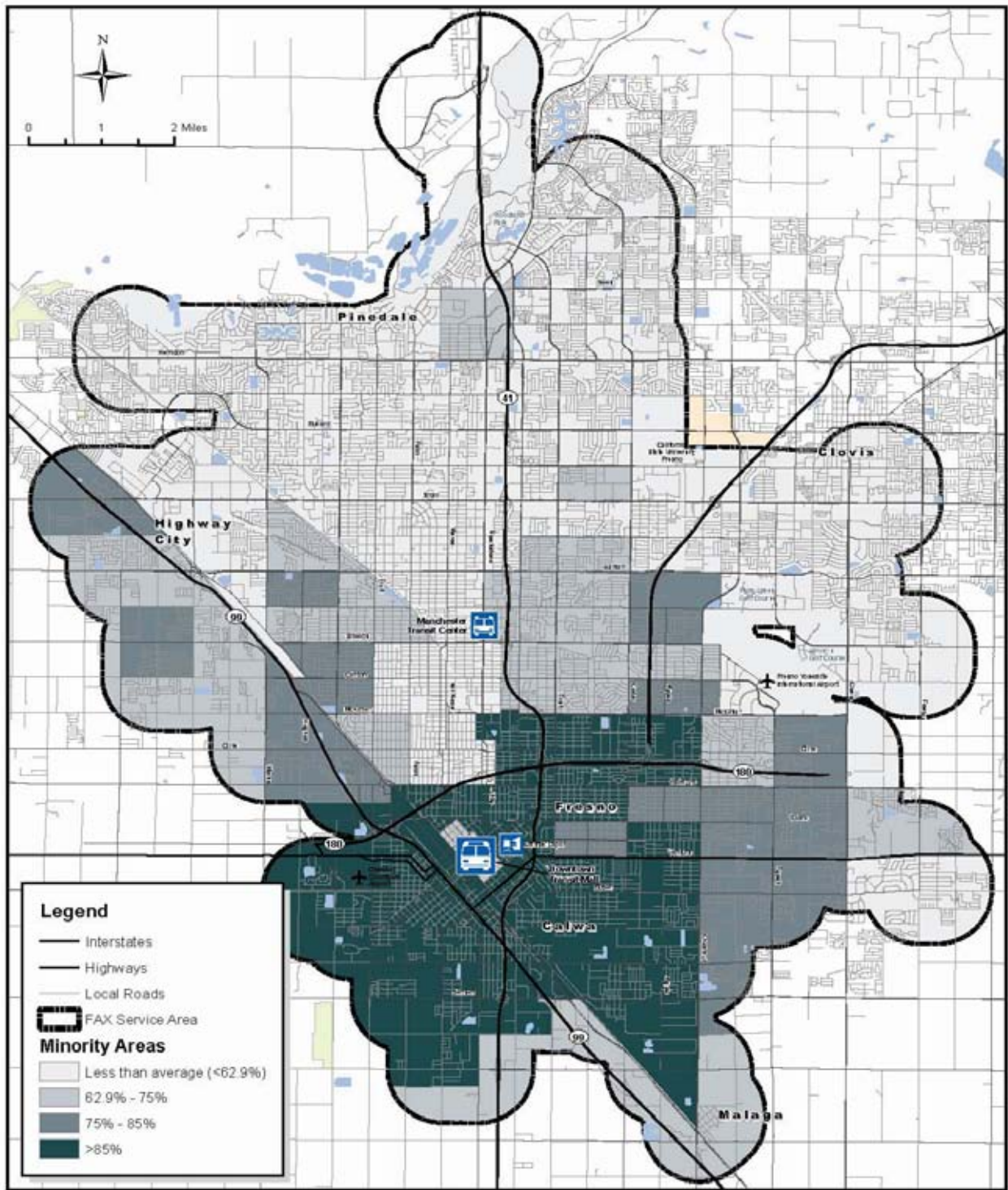


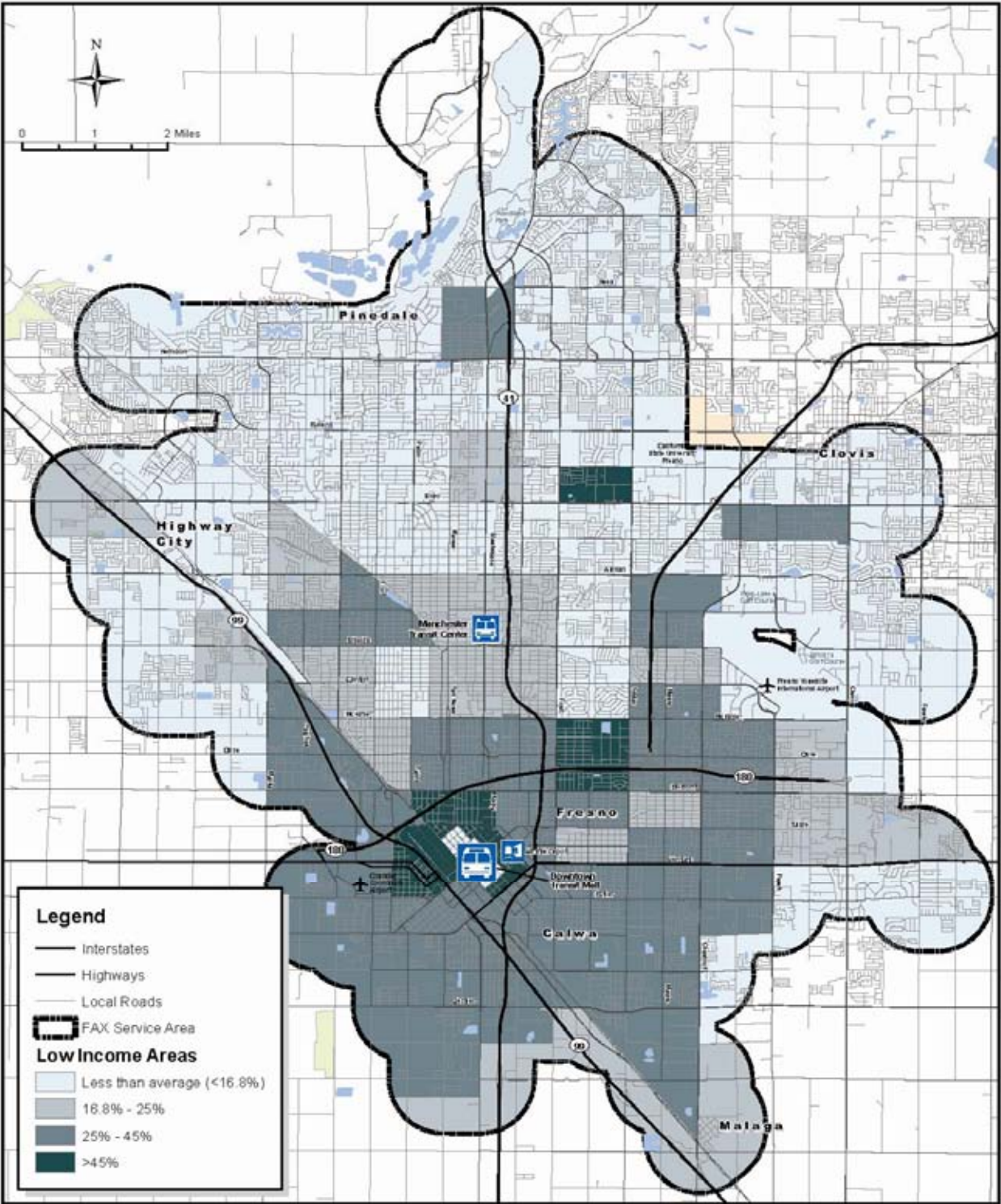
Table C.4: Low Income Population

Number of Families At or Below 100% of Poverty Level within FAX Service Area		
Number of Families	Estimate	Percent
At or Below Poverty Line	21,931	16.79%
<i>75%-100% of Poverty Line</i>	6,893	5.28%
<i>50%-74% of Poverty Line</i>	6,345	4.86%
<i>Less than 50% of Poverty Line</i>	8,693	6.65%
Above Poverty Line	108,697	83.21%
Total Survey Participants	130,628	100.0%
[1] Source: US Census Bureau - American fact Finder 2005-2009. (Income-to-Poverty Level Ratio for Families)		

About 17% of families in the FAX service area live below the Federal poverty limit, and as many as 22,000 families live at or below the poverty line and may not be able to afford a car (considered to be transit dependent).

Figure C2 below shows the concentrations of low income populations in the FAX Service Area. Low income populations are clustered in the downtown area (Central neighborhood) , between the Roosevelt and McLane neighborhoods on either side of Highway 180, and the neighborhoods just east of CSU Fresno, comprised mostly of student housing. Other low income neighborhoods exist around the airport and southwest of downtown.

Figure C.2: Low Income Population Concentrations within the FAX Service Area



Outreach to Persons with Limited English Proficiency

To be consistent with Policy Guidance from the FTA Concerning Recipients' Responsibilities to Limited English Proficient (LEP) Persons (2006), FAX will be providing translation services and a proactive public outreach campaign in FY2011 to at least 9 language subgroups other than English that exist in the FAX service area that constitute 1,000 or more persons who are likely to be affected by future service and fare changes.

The FTA Policy Guidance states as follows:

“Safe Harbor. The following actions will be considered strong evidence of compliance with the recipient's written-translation obligations:

- (a) The DOT recipient provides written translations of vital documents for each eligible LEP language group that constitutes 5% or 1,000, whichever is less, of the population of persons eligible to be served or likely to be affected or encountered. Translation of other documents, if needed, can be provided orally; or*
- (b) If there are fewer than 50 persons in a language group that reaches the 5% trigger in (a), the recipient does not translate vital written materials but provides written notice in the primary language of the LEP language group of the right to receive competent oral interpretation of those written materials, free of cost.*

These safe harbor provisions apply to the translation of written documents only. They do not affect the requirement to provide meaningful access to LEP individuals through competent oral interpreters where oral language services are needed and are reasonable.”

It was found that 39% of the people living in the FAX service area either do not speak English well or not at all, representing nearly 204,000 individuals who are in need of language assistance.

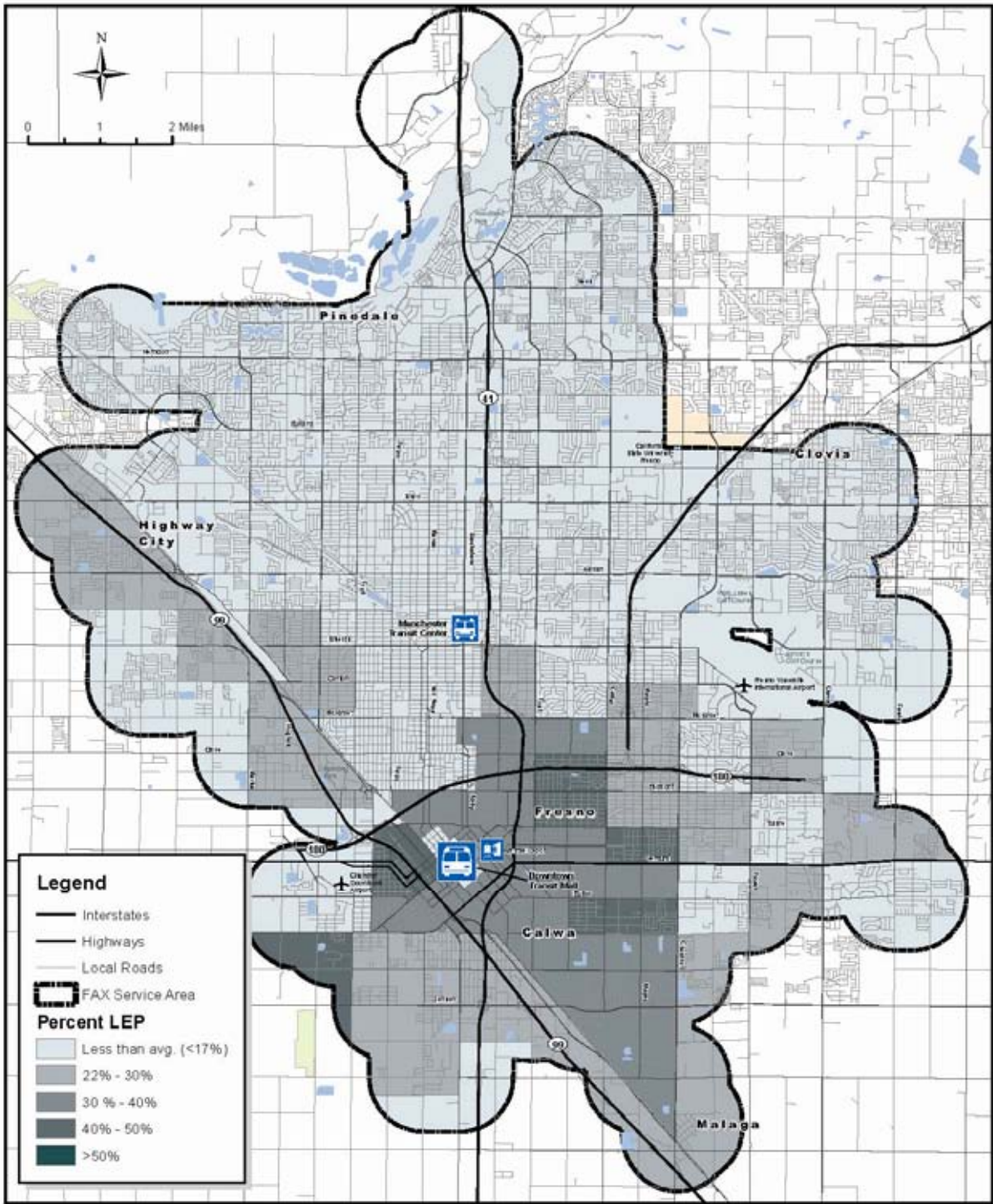
A total of 9 language groups were identified that meet the FTA threshold of 1,000 persons or more speaking that language in the transit agency service area. The LEP language groups in the FAX service area include Spanish, Hmong, Laotian, Cambodian, Chinese, Armenian, Vietnamese and Tagalog. There are additional languages included in the category of “other Indic Languages” which may include Standard Hindi and Urdu, Bengali, Punjabi, Marathi, Gujarati, Oriya, Sindhi, Nepali, Sinhala, Saraiki and Assamese. The exact concentrations of the Indic language subgroups spoken in the FAX service area will be determined by the next passenger survey.

Table C.5: Language Spoken at Home

Number of Persons Over 5 years of age with the Ability to Speak English Less Than "Very Well" within FAX Service Area		
Language	Estimate	Percent
English Only	323,370	61.35%
Spanish (or Spanish Creole)	59,712	11.33%
Hmong	10,140	1.92%
Other Indic languages	3,161	0.60%
Laotian	2,538	0.48%
Mon-Khmer, Cambodian	2,143	0.41%
Chinese	1,712	0.32%
Armenian	1,359	0.26%
Vietnamese	1,307	0.25%
Tagalog	1,130	0.21%
Arabic	781	0.15%
Korean	637	0.12%
Russian	499	0.09%
Persian	414	0.08%
Japanese	338	0.06%
Total Survey Participants	527,086	100.0%
[1] Source: US Census Bureau - American fact Finder 2005-2009		
[2] The following languages represent languages spoken at home with the ability to speak English less than "very well" by less than .05% of the population in the FAX service area: Hindi, Thai, German, French (Patois, Cajun), African languages, Portuguese, Urdu, Italian, Greek, Hebrew, Scandinavian, Polish, Hungarian, French Creole, Yiddish, Navajo.		
[3] Average % LEP in FAX Service Area (areas within 3/4-mile of transit route) = 17%		

Figure C.1 below identified the areas with heavy concentrations of people in the FAX service area who either do not speak English well, or not at all. These areas can be described roughly as the Central and Roosevelt neighborhoods, with a stretch of LEP populations following Highway 99 to the north and west.

Figure C.3: – Limited English Proficiency Areas



V. QUALITY OF SERVICE ASSESSMENT COMPLIANCE

There are many methods for evaluating the efficiency and effectiveness of public transportation service. Because each method has unique strengths and weaknesses, FAX employs several service evaluation methods. Among the methods used are peer review analysis and system minimums assessment, and geographic information systems (GIS) based impacts analysis of service and fare changes on specific low income, minority and Limited English Proficiency concentration areas.

Peer Review Analysis:

Peer Review Analysis uses standard service measurement criteria to compare one system's performance against another. This kind of analysis is most valuable when standard, well controlled data sets are available, and when the systems being evaluated have similar operating environments. FAX has selected the following transit agencies as peers for comparison purposes: Modesto Area Express (MAX), Visalia City Coach, Sacramento RTD, Bakersfield (GET), and Stockton RTD. All five agencies are Federal Transit Administration (FTA) Grant Recipients, and therefore, required to provide their system performance data to the National Transit Database (NTD). Furthermore, because these are all California agencies, they must operate under the same California State Transportation Development Act Guidelines.

Appendix D: Vehicle Fleet Replacement Schedules

Table D.1: Fixed-route Vehicle Fleet Replacement Schedule

	FY12	FY13	FY14	FY15	FY16
Total Fleet	148	148	153	155	160
Active Fleet	122	122	125	127	130
Peak Service	95	95	100	102	105
Spare Fleet	19	19	20	20	21
Contingency Fleet	7	7	6	6	6
Bone Pile Fleet	15	0	0	0	0
Replacement Buses	9	5	0	7	0
Expansion Buses	0	0	5	0	0
Disposition	15	0	0	7	0
Spare Bus Ratio	20%	20%	20%	20%	20%

Table D.2: Handy Ride Vehicle Fleet Replacement Schedule

	FY12	FY13	FY14	FY15	FY16
TOTAL FLEET	48	48	48	48	48
ACTIVE FLEET	46	46	46	46	46
PEAK SERVICE	44	44	44	44	44
SPARE FLEET	2	2	2	2	2
INACTIVE FLEET	2	2	2	2	2
BONE PILE FLEET	0	0	0	0	0
REPLACEMENT BUSES	6	0	6	0	6
EXPANSION BUSES	0	0	0	0	0
SPARE BUS RATIO	8%	8%	9%	7%	8%

Appendix E: Glossary

ADA	<i>Americans with Disabilities Act</i> was signed into law on July 26, 1990. The law requires transit systems to make services fully accessible to persons with disabilities, as well as to underwrite a parallel network of paratransit service for those who are unable to use the regular transit system.
AVO	<i>Average Vehicle Occupancy</i> is determined by the number of employees who arrive at a worksite divided by the number of vehicles those employees use to arrive at the worksite.
AVL	<i>Automated Vehicle Location</i> is the use of electronic technologies to allow fleet managers to know where vehicles are located at a given time. In addition to its primary use by transit dispatchers and supervisors, AVL can be linked into other systems and used to provide real time arrival information for transit customers.
AQMP/AQAP	<i>Air Quality Attainment Plan</i> is a plan prepared by an Air Pollution Control District/Air Quality Management District designated as a nonattainment area, for incorporation into the State Implementation Plan for purpose of meeting the requirements of the National and/or California Ambient Air Quality Standards.
BRT	Bus Rapid Transit is an advanced form of bus service that operates much like light rail trains, often in designated rights-of-way, but without the tracks or catenary wires. BRT features include shaded and elevated station platforms and ticketing machines at the stations.
CALTRANS	<i>California State Department of Transportation</i> is responsible as the owner operator of the state highway system for its safe operation and maintenance. Caltrans is the implementing agency for most state highway projects, intercity rail, interregional roads, sound wall, toll bridge and aeronautics programs.
CAA	<i>Clean Air Act</i> is a federal law established in 1970 that regulated air emissions. The CAA gives the U.S. Environmental Protection Agency (EPA) authority to establish National Ambient Air Quality Standards (NAAQS) for the protection of the public and the environment. The Act was amended in 1990 (FCAAA).
CARB	<i>California Air Resources Board</i> is a state regulatory agency charged with

regulating the air quality in California.

CEQA	<i>California Environmental Quality Act</i> is a state law intended to protect the California environment. CEQA established mandatory ways by which governmental decision makers are informed about the potential significant environmental effects of proposed projects and identifies ways to avoid or significantly reduce damage to the environment.
CIP	<i>Capital Improvement Plan</i> is a seven year program of projects developed to maintain or improve the traffic level-of-service and transit performance standards, and to mitigate regional transportation impacts identified in the CMP Land Use Analysis Program, which conforms to transportation related vehicle emissions air quality mitigation measures.
CONFORMITY	<i>Conformity</i> means that under the Federal Clean Air Act transportation plans, programs and projects are required to conform to applicable state implementation plans. The conformity determinations must be based on the most recent estimated of emissions and those emissions estimates must be based upon the most recent population, employment, travel, and congestion estimates as determined by the MPO's.
CMA	<i>Congestion Management Agency</i> is responsible for developing the Congestion Management Program and coordinating and monitoring its implementation.
CMP	<i>Congestion Management Program</i> is a state mandated multi-jurisdictional program to reduce traffic congestion. Required of every county in California with an urbanized area as defined by the Census Bureau of at least 50,000 people.
CMAQ	<i>Congestion Mitigation and Air Quality Improvement Program</i> is a new funding program established by ISTEA specifically for projects and programs that will contribute to the attainment of a national ambient air quality standard. The funds are available to non attainment areas for ozone and carbon monoxide based on population and pollution severity.
COG	<i>Council of Governments</i> is a voluntary consortium of local government representatives, from contiguous communities, meeting on a regular basis, and formed to cooperate on common planning and solve common development problems of their area. COG's can function as the Regional Transportation Agencies and Metropolitan Planning Organizations in

urbanized areas.

CO SIP	<i>Carbon Monoxide State Implementation Plan</i> is a required by the Federal Clean Air Act to attain and maintain national ambient air quality standards for Carbon Monoxide (CO). CO is a colorless, odorless gas resulting from the incomplete combustion of fossil fuels. The plan is adopted by local air pollution control districts/air quality management district and the State Air Resources Board.
CTC	<i>California Transportation Commission</i> is a body appointed by the Governor and confirmed by the legislature that reviews Regional Transportation Improvement Programs (RTIP) and the Proposed State Transportation Improvement Program (PSTIP) and adopts some transportation projects from these programs into the State Transportation Improvement Program (STIP).
CTSA	<i>Consolidated Transportation Services Agency</i> is responsible for contract services to various social service agencies within the Fresno County area. The CTSA also receives funding from TDA and LTF Article 4.5 revenues.
DBE	<i>Disadvantaged Business Enterprise</i> Program was designed to ensure maximum opportunity for disadvantaged business enterprises to compete for and perform FAX contracts. Consistent with Federal requirements, the definition of socially disadvantaged and economically disadvantaged individuals for the DBE program includes women as well as minority business enterprises.
DOT	<i>Department of Transportation</i> is the department of the federal government that includes the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA).
EPA	<i>Environmental Protection Agency</i> is the Federal Agency charged with setting policy and guidelines, and carrying out legal mandates for the protection of national interests in environmental resources.
FCMA	<i>Fresno/Clovis Metropolitan Area</i> includes the geographical boundaries of both the Cities of Fresno and Clovis and the unincorporated areas within the City of Fresno.
FCRTA	<i>Fresno County Rural Transit Agency</i> provides fixed route services throughout the rural unincorporated cities which link communities with each

other and with the FCMA.

FHWA	<i>Federal Highway Administration</i> is a component of the US Department of Highways (US DOT), established to ensure development of an effective national road and highway transportation system. It assists states in constructing highways and roads, and provides financial aid at the local level.
FTA	<i>Federal Transit Administration</i> is the Federal Department of Transportation, which is under USDOT. The sister agency to FHWA.
FTIP	<i>Federal Transportation Improvement Program</i> is a federally required document produced by the regional transportation planning agency that states the investment priorities for transit and transit-related improvements, mass transit guide ways, general aviation and highways.
GHG	<i>Greenhouse Gas</i> emissions are now being measured and tracked under California SB375 and AB32 legislation in order to reduce vehicle emissions that cause global warming.
ISTEA	<i>Intermodal Surface Transportation Efficiency Act of 1991</i> is a piece of legislation passed by Congress in December of 1991 that provides for a major restructuring of the highway program. Key components of this Act include an increased flexibility in the programming of projects, a level playing field between highway and transit projects with consistent 80/20 matching ratio, ties to the Federal Clean Air Act and American with Disabilities Act.
LTF	<i>Local Transportation Funds</i> are derived from the ¼ cent of the statewide sales tax. LTF revenue is returned to local governments for transportation purposes with public transportation the primary focus. LTF is distributed to each city and unincorporated area based on population.
MEASURE C	A Fresno County ballot measure that raised the local sales tax by one quarter cent for a twenty year period until 2006. The measure identified a specific program of priority transportation improvement project throughout the County.
MPO	<i>Metropolitan Planning Organization</i> is the federal designation for Fresno COG. MPO works with technical advisory committees, interested citizens, and other government agencies. A coordinated effort has been made to

develop a multi modal regional transportation plan for Fresno County.

PAC	<i>Policy Advisory Board</i> is composed of the Chief Administrative Officer of each member agency. With the exception of urgency matters, all items must be considered by the PAC before submission to the Policy Board.
PM-10	<i>Particulate Matter</i> is a major air pollutant consisting of solid or liquid matter such as soot, dust aerosols, fumes and mists less than 10 microns in size.
RTIP	<i>Regional Transportation Improvement Plan</i> is a State mandated document which includes a list of proposed transportation projects submitted by the CTC and by the regional transportation planning agency as a request for State funding. The RTIP has a seven year planning horizon, and is updated every two years.
RTP	<i>Regional Transportation Plan</i> is a comprehensive twenty year plan for the region, updated every two years by the regional transportation planning agency. The RTP includes a policy, an action, and a financial element.
SIP	<i>State Implementation Plan</i> is a document prepared by each State describing existing air quality conditions and measures which will be taken to attain and maintain National Ambient Air Quality Standards. It is adopted by local air pollution control districts/air quality management districts and the State Air Resources Board.
SJVAPCD	<i>San Joaquin Valley Air Pollution Control District</i> is the designated air district for the eight county nonattainment areas which includes San Joaquin, Stanislaus, Merced, Madera, Kings, Kern, Fresno and Tulare Counties.
SSTAC	<i>Social Services Transportation Advisory Council</i> is a council composed primarily of elderly, handicapped, and persons of limited means that was established in 1988 by Fresno COG. The council participates annually in identifying transit needs and working closely with Fresno COG to recommend appropriate action.
STA	<i>State Transit Assistance</i> is a fund derived from a portion of the Motor Vehicle Fuel Tax. The STA supports public transportation services, and is apportioned through the Regional Transportation Planning Agencies to their member agencies on a population basis.

STP	<i>Surface Transportation Program</i> is a new funding program established by ISTEA that allows for mass transit and highway projects. Ten percent of the projects funded under this program must be transportation enhancement activities and 10 percent for safety projects.
TCM	<i>Transportation Control Measures</i> are intended to reduce pollutant emissions from motor vehicles. Examples of TCM's include programs to encourage ridesharing or public transit usage, city or county trip reduction ordinances, and the use of cleaner burning fuels in motor vehicles.
TDA	<i>Transportation Development Act</i> is a California law which provides funding for transit through the Local Transportation Fund and the State Transit Assistance fund.
TIP	<i>Transportation Improvement Program</i> is an expenditure program that is updated every two years. It lists the highway and transit capital improvement projects that have been prioritized in the County for state and federal gas tax funds.
TMA	<i>Transportation Management Area</i> is defined by ISTEA, and is designated by the Secretary of Transportation for all urbanized areas over 200,000. TMA's must include a congestion management system in their planning process. In TMA areas, MPO's are responsible for project selection.
TSM	<i>Transportation Systems Management</i> is designed to identify short term, low cost capital improvements that improve the operational efficiency of the existing transportation infrastructure.
TTC	<i>Transportation Technical Committee</i> is a part of the Area wide Transportation Policy Committee, composed of technical staff from member agencies, other interested agencies, public members and Caltrans. TTC evaluates specific regionally-significant issues and projects.
VMT	<i>Vehicles Miles Traveled</i> is the sum of the linear distance covered by all vehicles in a given time period.
VSS	<i>Very Small Starts</i> is the FTA grant funding source applied for to plan, design and build the Bus Rapid Transit system in Fresno.

Appendix F: Bus Service and Air Quality

A comparison of emissions per passenger mile and bus occupancy

The following charts compare emissions per passenger mile traveled from urban transit buses with various rider occupancy rates to emissions per passenger mile for an average calendar year 2001 light-duty vehicle with 1.2 passengers. The bus model years were selected to represent NO_x emission rates of 4.0, 2.0, and 0.2 g/bhp-hr.

Emission rates

The following table shows the model years of the buses selected to represent NO_x emission rates of 4.0, 2.0, and 0.2 g/bhp-hr.

Table F1: Applicable NO_x and PM Standards

Model Year of Bus	NO _x (g/bhp-hr)	PM (g/bhp-hr)
2001	4.0	0.05
2003	2.5 (NO _x +HC)	0.01
2008	0.2	0.01

The 2.5 g/bhp-hr emission standard for NO_x plus HC is typically associated with 2.0 NO_x and 0.5 HC. EMFAC 2000, version 2.02 was used to determine the grams per mile emission rates for each bus model year. Since the 2.5 g/bhp-hr standard first applies in the last quarter of 2002; model year 2003 was selected so that the EMFAC model run would accurately reflect full implementation of the 2002 standard. Similarly, the 0.2 NO_x standards will apply in 2007; thus, model year 2008 was selected for the EMFAC model run.

The bus emission standards shown above are for the diesel path of the Transit Bus Regulation. In 2007 the diesel path and alternative-fuel path have the same emission limits. Emission rates in grams per mile for transit buses and average light-duty vehicles are shown below.

Table F2: Grams per Mile

	NO _x	ROG	PM ₁₀
Bus MY 2001	18.31	1.23	0.39
Bus MY 2003	6.81	0.65	0.06
Bus MY 2008	0.67	0.34	0.06
LDVs CY 2010	1.18	1.24	0.02

Source: EMFAC 2000, version 2.02

Methodology:

The bus emissions represent urban diesel bus emissions divided by VMT for the chosen model years. Emissions are based on EMFAC 2000, version 2.02. The light-duty vehicle emissions represent light-duty cars, trucks, and motorcycles for the typical calendar year 2001 fleet. Emissions are from starts, soaks, running evaporative, and running exhaust were divided by VMT. (Resting losses and diurnal emissions were excluded.)

The vehicle occupancy rate for light-duty vehicles was assumed to be 1.2 persons per vehicle based on the peak-period occupancy rate given in the 1991 Statewide Travel Survey.

Caveats

Three issues associated with transit travel are not accounted for in the charts. First, studies show that about 25% of transit riders are transit dependent*, meaning they could not make the trip without transit. This means it would take about 19 passengers to represent 15 light-duty vehicles replaced on the road.

Second, transit passengers often arrive at the transit station by way of light-duty vehicle. Therefore, there are emissions associated with traveling by way of transit that are not represented in the grams per mile emissions of the transit bus itself.

Last, the light-duty vehicle fleet is getting cleaner as time goes by due to the LEV II program. As a result, the number of bus riders needed to offset bus emissions in calendar year 2008 will be more than in 2001. This is because the typical light-duty vehicle in 2008 will be substantially cleaner than in 2001.

* While many metropolitan transit rider surveys indicate that over 50% of bus riders are “transit dependent” (they don’t own a vehicle), over half of this population say they would have someone drive them to their destination if transit was not available. Thus, about 25% of bus riders would

Table 1. ARB Calculation Methodology Emission Factors (g/mi) and Passenger Offsets

	NOx		ROG		Total Ozone		PM10	
	Emission Factor	Number of Passengers	Emission Factor	Number of Passengers	Emission Factor	Number of Passengers	Emission Factor	Number of Passengers
Diesel Bus	20.4	*	1.17	13	21.57	*	0.58	*
CNG Bus	8.60	25	0.65	7	9.25	21	0.025	3
Light-Duty Vehicle	0.35	N/A	0.1	N/A	0.45	N/A	0.01	N/A

* Indicates that bus emissions exceed light-duty vehicle emissions (per passenger) at full capacity (i.e., 40 passengers on the bus).

make the trip in a vehicle.

Table 2. 2002 EMFAC Summer Ozone/Annual PM10 Emission Factors (g/mi) and Passenger Offsets

	NOx		ROG		Total Ozone		PM10	
	Emission Factor	Number of Passengers	Emission Factor	Number of Passengers	Emission Factor	Number of Passengers	Emission Factor	Number of Passengers
Transit Buses	11.88	14	3.52	4	15.39	9	0.24	7
Light-Duty Vehicles	0.9	N/A	1	N/A	1.91	N/A	0.04	N/A

