



Fresno Council
of Governments

March 2019

Draft Final

Fresno County Regional Long-Range Transit Plan 2019-2050



Draft Final Fresno County Regional Long-Range Transit Plan

March 13, 2019

Prepared For:



2035 Tulare Street, Suite 201
Fresno, CA 93721
Ph: (559) 233-4148 Fax: (559) 233-9654

Prepared By:



4630 W. Jennifer, Suite 105
Fresno, CA 93722
Ph: (559) 271-1200 Fax: (559) 271-1269

With:



Development of this Plan was funded by a Caltrans Sustainable Transportation Grant

TABLE OF CONTENTS

Chapter I. Introduction: The LRTP Vision and Goals.....	2
Background, Purpose, and Need for the LRTP	2
Looking Beyond the RTP/SCS Horizon: Key RTP/SCS Plan Elements	2
Vision, Goals, Objectives, and Performance Measures for the Fresno LRTP	4
Chapter II. Prior Transit Planning in the Region	8
Introduction.....	8
Existing Transit Plan Review	8
General Plan Review.....	36
Chapter III. Public Outreach	52
Public Engagement Plan	53
Public Participation Objectives.....	53
Public Engagement Activities	54
Public Engagement Activities Conducted.....	55
Workshop Noticing.....	57
Conduct of Workshop Sessions	57
Summary of Workshop Findings	58
Other Completed Public Engagement Activities	64
Survey Findings.....	66
Stakeholder Interviews.....	66
Summary of Outreach Findings.....	70
Chapter IV. Development of Alternatives for the Plan	73
Introduction and Overview	73
Ridership Alternative: Recommended Policies, Strategies and Projects	74
Coverage Alternative: Recommended Policies, Strategies and Projects	77
Blended Alternative.....	82
Evaluation of the Alternatives	85

Fresno County Regional Long-Range Transit Plan

Chapter V. Development of LRTP Project List	89
Introduction and Overview	89
The Long-Range Transit Plan Project List	89
Chapter VI Implementation and the Way Forward Next Steps	100
Introduction and Overview	100
Implementation Policies and Strategies.....	100
Funding the LRTP.....	104
Challenges and Opportunities	110
Next Steps.....	116

LIST OF FIGURES

Figure 1 - Growth in Fresno County Vanpools	28
Figure 2 - Most Important Service Improvements (Fresno Workshop)	60
Figure 3 - Most Important Transit Features (Fresno Workshop)	61
Figure 4 - Most Important Service Improvements (Selma Workshop)	62
Figure 5 - Most Important Transit Features (Selma Workshop)	63
Figure 6 - Online Web Portal Preliminary Concept	84
Figure 7 - Transit Strategy Evaluation Criteria.....	86

LIST OF TABLES

Table 1 - Completed Public Engagement Activities.....	56
Table 2 - LRTP Project List.....	90
Table 3 - Recommended Implementation Strategies.....	103
Table 4 - Existing Major Revenue Sources.....	105
Table 5 - Strategies for Addressing Key Transit Opportunities and Challenges	114

Appendices

- A - Public Outreach: Reference Materials
- B - First/Last Mile: Sample Scope of Work and Analysis Results
- C - Comments and Response to Comments

Chapter I

Introduction: The Long-Range Transit Plan Vision and Goals



Chapter I. Introduction: The LRTP Vision and Goals

Background, Purpose, and Need for the LRTP

This Fresno County Regional Long-Range Transit Plan (LRTP) is intended to guide transit and related multimodal investments and services in the Fresno region through the year 2050. The plan builds on the Fresno Council of Governments (COG) 2018 Regional Transportation Plan (RTP) and Sustainable Communities Strategy (SCS) and prior transit planning studies (see Chapter II). It is intended to inform the public transportation element of the next RTP/SCS that will be adopted in 2022.

On another level, the LRTP seeks to integrate appropriate and effective public transportation planning and projects into the fabric of the region's overall circulation networks and systems – to make transit a more integral part of the community. The LRTP is also intended to be a living document updated as conditions change.

The LRTP was developed to align with state and federal transportation goals, guidance and funding programs to enhance the opportunity for funding from higher level government sources. It creates a blueprint for a sustainable, safe, innovative, integrated, and efficient transit system to enhance the region's economy and livability for all. Specifically, the LRTP aims to:

- ✓ Integrate the efforts, projects, and future operations of the major transit providers serving Fresno County through the year 2050.
- ✓ Identify a preferred long-range vision for Fresno County's public transit system.
- ✓ Provide guidance for future investments, projects and programs to enhance transit service
- ✓ Identify transit projects and alternatives that consider and improve sustainability, preservation, mobility, safety, innovation, economy, health and equity.
- ✓ Integrate regional bicycle and pedestrian planning with public transit plans and projects.

The plan development process was guided by a diverse Steering Committee comprising senior staff from all three transit operators, COG, City and County staff, and community-based organizations. The Plan itself was developed by a multi-firm consulting team with diverse and extensive experience in transit and transportation planning. Substantial community engagement was undertaken (summarized in Chapter 3), including workshops and pop-up outreach events in both urban and rural areas and a variety of surveys and stakeholder interviews.

Looking Beyond the RTP/SCS Horizon: Key RTP/SCS Plan Elements

One very important rationale for the LRTP is to generate more, better, and forward-looking transit projects for the 2022 RTP/SCS. The 2018 RTP includes Bus Rapid Transit (BRT) expansion and improvements to the core fixed route networks in

Fresno County Regional Long-Range Transit Plan

Fresno, Clovis and in the County and its 13 smaller cities, as well as projects to renew and maintain existing services. The LRTP incorporates and builds on the 2018 RTP/SCS transit projects.

To expand the 2018 RTP/SCS transit project list, the LRTP reviewed prior regional transit plans and all local general plans, and conducted public and stakeholder outreach to conceive of additional transit improvement projects.

Key transit strategies recommended include:

- ✓ A unified Transit Web Portal with real time information to allow riders to track buses, and plan trips (FAX has implemented this, so future projects would focus on FCRTA, Clovis and interconnectivity between services). The goal is seamless integration of real time information, transfer windows and fare payments.
- ✓ More convenient fare and transfer programs (e.g., employee and student pass programs).
- ✓ Employer and school sponsored (and potentially subsidized) bulk purchases of monthly passes.

The low-density areas on the periphery of Fresno and Clovis and within the smaller communities in the County do not warrant fixed-route service. However, even when population size or density doesn't support regular transit service, a transit option remains a vital need for many residents – and they asked for this at LRTP outreach events. The steering committee, the outreach workshops and surveys, and the stakeholder interviews have suggested new types of projects to serve low-density areas including:

- ✓ “First/Last mile to transit” solutions:
 - Attractive, safe local bicycling, pedestrian infrastructure (building on COG’s new Fresno County Regional Active Transportation Plan).
 - Carshare and bikeshare projects that complement transit.
- ✓ Transportation Network services, with real-time dispatch like Uber and Lyft, but ideally community based.
- ✓ More demand-response zones, with quicker dispatch.
- ✓ Volunteer driver programs.
- ✓ Community shuttles, where a local nonprofit operates a vehicle own by a transit agency.
- ✓ Other community mobility services, including community developed services using app-based booking, vehicle tracking, and fare payments.
- ✓ Vanpools and carpools encouragement for travel needs not suited to transit.

The consultant team also sees value in projects, some recently or soon to be implemented, which improve the operators’ and COG’s ability to monitor and manage transit performance, e.g.:

- ✓ Automatic Passenger Counters (APC), including programs to analyze and respond to APC data.
- ✓ Electronic farecards and app-based payments, including programs to analyze responses to fare policies by subgroups of riders that electronic payment facilitates.
- ✓ Vehicle Location Data.
- ✓ Projects enabling faster bus travel times (such as queue jumps and bus-actuated signals).
- ✓ Electrification and other projects to enhance both environmental and customer appeal.

Fresno County Regional Long-Range Transit Plan

The LRTP strategies collectively seek to provide: the right type of transit service for each community and cost-effective mobility for individuals without access to an auto. The LRTP strategies also aim to attract “choice riders” from households with access to automobiles.

Vision, Goals, Objectives, and Performance Measures for the Fresno LRTP

Following several weeks of discussion and debate, the Steering Committee adopted an overall Vision for Transit in Fresno County - what the County-wide transit system should be in the long term. The Vision points the way to a better public transportation future for the County and provides a focal point for developing a comprehensive and measurable Long-Range Transit Plan. The Vision is intended to be comprehensive and to capture the broad array of public transportation system needs in a county as large and diverse as Fresno:

VISION: “A responsive, integrated, and welcoming public transportation system that is safe, affordable, uses innovative technologies, provides equitable access, enhances regional and local mobility, and provides sustainable transportation options. The system will have multiple operators to ensure responsiveness to local constituents but will be perceived by users as one seamless system throughout Fresno County.”

¹ A Policy, per the RTP/SCS, is a direction statement that guides present and future decisions on specific actions. Policies should support the attainment of objectives.

Goals were then developed to articulate the Vision. The 2018 Fresno COG RTP/SCS defines a Goal as the end toward which the overall effort is directed; it is timeless, general and conceptual. Goals provide a framework for more concrete objectives policies, and performance measures. An **Objective** provides clear, concise guidance toward obtaining a goal. Per the Fresno COG RTP/SCS, Objectives are successive levels of achievement in movement toward a goal. Individual objectives are capable of being realistically attained. Objectives also establish the basis for establishing more specific policies and performance measures that can be used to evaluate system performance. ¹

The LRTP team then articulated a set of Goals and Objectives building on the Goals, Objectives, and Policies that have been developed for the Fresno COG 2018 RTP. These are presented on the next two pages. Following that are some discussion points intended to help refine and extend the Goals and Objectives and add Policies and Performance Measures.

Fresno County Regional Long-Range Transit Plan: Goals and Objectives

A. Goal: Operate an efficient and fiscally responsible public transportation mobility system.

- ✓ A.1 Objective: Pursue federal, state, regional and local funding for both public and social service transportation, to provide mobility opportunities to the maximum number of people in the region.

Fresno County Regional Long-Range Transit Plan

- ✓ A.2 Objective: Provide a wide array of high-quality public transportation mobility services that meets the diverse urban and rural mobility needs of residents, employees and visitors to the region of all ages, incomes, and mobility levels.
- ✓ A.3 Objective: Maximize the mobility system ridership by matching available resources to demonstrated demand for public mobility services.
- ✓ A.4 Objective: Encourage public/private partnerships by allocating resources that encourage provision of cost-effective services to meet the array of mobility needs in Fresno County.
- ✓ A.5 Objective: Incorporate lifecycle cost, risk, and performance trade-offs into capital programming and operations and maintenance budgeting.

B. Goal: Create a safe, affordable, environmentally responsible, reliable and interconnected multimodal transportation system.

- ✓ B.1 Objective: Provide a safe public mobility system that strives for zero injuries and fatalities in the operation and maintenance of the mobility system.
- ✓ B.2. Objective: Emphasize convenient high frequency service where demand warrants and financial resources are sustainable.
- ✓ B.3 Objective: Provide mobility services that operate on-time and provide local community access and reliable connections to both local and regional fixed route services.
- ✓ B.4. Objective: Develop a seamless public mobility network with reliable interconnected transfers and affordable fares between Fresno's

rural and urban areas as well as within communities.

- ✓ B.5 Objective: Broaden the stakeholders' involvement in planning and funding allocation for mobility services in both rural and urban parts of the region.
- ✓ B.6 Objective: Create a framework that facilitates the coordinated administration of transit services throughout Fresno County.
- ✓ B.7 Objective: Invest capital resources in infrastructure and equipment that minimize air pollution and greenhouse gas emissions.

C. Goal: Collaborate on land use decisions that facilitate increased ridership, improve air quality, and reduce greenhouse gas emissions.

- ✓ C.1 Objective: Support compact mixed-use development near transit nodes to improve transit ridership and reduce auto vehicle miles traveled.
- ✓ C.2 Objective: Encourage the location of jobs, services, and amenities in both rural and urban areas that minimizes the need for long rural to urban vehicle trips.
- ✓ C.3 Objective: Encourage transit use and reduce driving by supporting the location of jobs near transit and in areas where transit can be viable.
- ✓ C.4 Objective: Limit expansion of fixed route services with frequencies of 60 minutes or less to areas and activity centers that do meet density and demand thresholds.

D. Generate community support for the mobility options available to Fresno County residents, employees and visitors.

Fresno County Regional Long-Range Transit Plan

- ✓ D.1 Objective: Provide complete and accurate information that make public transportation “user-friendly.”
- ✓ D.3 Objective: Create and produce multilingual publications and internet information that promote the use of the public transportation mobility system by all segments of the region.
- ✓ D.2 Objective: Embrace technology advancements that improve customer information and broaden affordable mobility options.

Performance Measures

Performance Measures gauge the degree to which the L RTP is fulfilling its goals for the transit system. Based on L RTP objectives and performance measures, project-level evaluation criteria can be developed to score and prioritize projects to ensure sound investment decisions. The L RTP Performance Measures should be readily collected statistics that

quantify the goals and objectives of the Fresno County regional transit system. Systemwide goals, objectives and performance measures become the basis for project-level evaluation criteria, which can be developed to score and prioritize projects to ensure sound decisions about transit investments.

After discussion, the L RTP team decided to assess the performance of potential L RTP strategies using the 2018 RTP/SCS Project evaluation criteria, Chapter IV provides a detailed summary of the process. Before projects could be assessed, the L RTP first developed a set of “strategies” or project-types. The development project types followed: 1) a thorough review of existing conditions as documented in transit and general plans in the region; and 2) six months of public outreach to all segments of the Fresno region. The plan review is presented in the following chapter, and a summary of public outreach efforts is found in Chapter III.



Chapter II

Prior Transit Planning in the Region



Chapter II. Prior Transit Planning in the Region

Introduction

This Chapter presents a current snapshot of transit and transit planning in the Fresno region via a review of prior plans and studies relevant to long-range public transportation in Fresno County and its 15 Cities. There are three major public transit operators in the region: The City of Fresno's Fresno Area Express (FAX) is the largest transit operator, offering high capacity fixed-route service on 16 routes and a demand responsive service for disabled riders (HandyRide). The City of Clovis' Stageline offers four fixed routes with 30-minute headways, limited weekend fixed-route service, and a demand-responsive paratransit service (Round Up). In smaller cities and rural communities, the Fresno County Rural Transit Agency (FCRTA) provides limited fixed-route service and demand responsive services within and between communities through several community-focused transit subsystems. FCRTA also provides linkage to FAX and Stageline services in the Fresno-Clovis Metropolitan Area (FCMA).

According to the California Air Resources Board (ARB)², transit ridership represents 1.6 percent of all passenger vehicle trips in the Fresno region, with most transit use occurring in the two largest cities, Fresno and Clovis. According to ARB's analysis,

Fresno's transit mode share is similar to that of the six-county Sacramento region.

The remainder of this chapter reviews plan documents of two types: The first section reviews plans that focus directly on public transportation; these plans are reviewed in chronological order. The second section reviews the Cities and County General Plan, each of which is required to contain a circulation element that relates to its planned land uses and other development policies; the general plans summaries begin with Fresno County, followed by 15 Cities general plans in alphabetical order.

Existing Transit Plan Review

FAX Transit Master Plan

This study, conducted for FAX and Fresno COG by WSA Consultants in 1995, represents the first study of Long-Range Transit Needs in the Fresno Region. It studied the potential for LRT or other high-capacity transit in Fresno, identifying Blackstone and Kings Canyon Corridors as most promising candidates. It noted the importance of promoting transit-supportive land uses, especially in these premium transit corridors. These findings were reiterated in a 2001 update to the Master Plan.

² California Air Resources Board, Technical Evaluation of the Greenhouse Gas Emissions Reduction Quantification for the Fresno Council of Governments' SB 375 Sustainable Communities Strategy, January 2015, p. 7.

Fresno County Regional Long-Range Transit Plan

Fresno County Public Transportation Infrastructure Study (PTIS) Phase 2 (2011)

Following the PTIS Phase 1 (2005) and planning for the San Joaquin Blueprint Study, Fresno's Public Transportation Infrastructure Study (PTIS) Phase 2 identified strategies for transportation investments and land use policies that would result in measurable reductions in vehicle miles traveled (VMT) and improve mobility choices for greater Fresno County residents. Improving transportation choices for Fresno County and City residents means making transit, bicycling and walking more attractive than driving alone for every trip, and less reliance on the automobile translates to air quality improvements, setting achievable benchmarks for reducing greenhouse gases.

The topics of growth management, transit and land use development policies are discussed in the PTIS, which saw proactive planning needed to stem the tide of Fresno County's past trends:

- ✓ Low levels of traffic congestion makes driving an automobile very attractive for those who own 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.

PTIS Study Process

The PTIS Study researched existing and future conditions – travel patterns, travel demand, current land use development trends – as part of a needs

analysis. This analysis determined where people are traveling to and from, and by which modes of transportation. The PTIS identified the current transit providers in the region, the significant trip generators and transit travel demand by market sector:

- ✓ Commuters by Necessity.
- ✓ Commuters by Choice.
- ✓ Intra-City vs Inter-County Commute Patterns.
- ✓ Discretionary Riders (includes recreational, shopping and entertainment destinations).
- ✓ Institutional Riders (includes seniors, college students and the disabled).

With respect to interregional travel, car- and vanpooling is significant (20% to 29%) of commuters. Transit represents between 3% and 6% of interregional commute trips by county. Although the PTIS determined that there was insufficient travel demand to support commuter express buses in the near term, it 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.

The PTIS also noted key arguments for greater public transit provision and use:

- ✓ The San Joaquin Valley is the 5th most polluted airshed in the US.
- ✓ Poor air quality hurts residents health, farming, and can have fiscal impacts: the San Joaquin Valley Air Pollution Control District was fined a \$29M penalty in 2010 for failing to meet ozone standards.
- ✓ Over 90% of Measure "C" funds are committed to roads on the fringe, encouraging sprawl.

Fresno County Regional Long-Range Transit Plan

Alternative Transportation Investments

A significant part of the PTIS Study is the assessment of transportation technologies and determining which choices would be right for Fresno. Separate studies were conducted on the following technology options for Fresno:

- a. A BRT Feasibility Study and Federal Transit Administration (FTA) Very Small Starts (VSS) application for funding for BRT on Blackstone Avenue and Ventura/Kings Canyon.
- b. A Streetcar Feasibility Study for Downtown Fresno, which was coordinated with and integrated into the Fulton Corridor Specific Plan being prepared by the City of Fresno.
- c. A test case application of Personal Rapid Transit (PRT) operating at the California State University, Fresno campus.
- d. An assessment of an expanded BRT system for the future to include a third BRT corridor operating on Shaw Avenue serving CSU Fresno and connecting to Clovis.
- e. An assessment of the feasibility of upgrading BRT on Blackstone and Ventura/Kings Canyon to Light Rail Transit (LRT) by the year 2025.

The PTIS Study makes recommendations for investments, the timing of those investments, and funding sources augmenting Measure C sales tax revenue to pay for them. In addition, the PTIS study made policy recommendations for City and County elected officials and planning administrators to shape future growth in such a way that it supports the transit investments.

Transit Investment Recommendations

- a. Continue to pursue funding to build BRT on Blackstone and Ventura/Kings Canyon.
- b. Consider adding a third BRT corridor on Shaw Avenue from a future Park & Ride lot on Highway 99, connecting to CSU Fresno and east to Clovis.
- c. If forecast population and job densities have been reached in the transit corridors and downtown by the year 2025, look at upgrading BRT on Blackstone and Ventura/Kings Canyon to LRT with a fixed guideway and new LRT stations.
- d. If or when high-speed rail becomes a reality (the project is under construction and new development projects are coming to the downtown area) apply for federal funding for the streetcar project as a complement to the planned development projects.
- e. Personal Rapid Transit (PRT) was not found to be economically viable in Fresno now, but place types were identified that may work for PRT technology in the future, including:
 - ✓ Major activity center(s).
 - ✓ Very large institutional or corporate campuses.
 - ✓ A downtown with widespread venues.
 - ✓ Remote parking for major employers and regular events.
 - ✓ Connecting major travel modes (e.g. rail to rail).
- f. Continue existing demand-responsive service currently provided in the smaller

Fresno County Regional Long-Range Transit Plan

towns until the demand for transit warrants fixed route service. An expansion of the vanpool program was recommended for other employment destinations due to the success of the existing farm worker vanpools.

- g. Expansion of the Valley Rides carpool matching database and promotion campaign was recommended to serve the demand for carpools.
- h. At some future date when intra-County commuting to the downtown has grown to the point that express bus service is warranted, begin express commuter service along Highway 99 from Kingsburg, Selma, and Fowler and construct Park & Ride lots to serve them.

PTIS Policy Recommendations

Policy recommendations were made by the consulting team on the PTIS Study for implementation by the City of Fresno, Fresno County, Local Agency Formation Commission (LAFCo), and the cities and towns of greater Fresno County to meet the study objectives. The following summary recommendations were presented in 2010:

- 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 transit 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 Transit-Oriented Development (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.

Fresno County Regional Long-Range Transit Plan

Fresno Bus Rapid Transit Master Plan (2008)

Study Purpose

The Fresno Bus Rapid Transit Master Plan (2008) assessed the potential implementation of bus rapid transit (BRT) in metro area of Fresno and Clovis. The overall vision of the BRT Master Plan was to demonstrate how improved efficiency, speed, and service can attract new transit ridership, improved customer satisfaction, and benefit the broader community by providing a quality of service similar to light rail systems with bus technology.

“Bus Rapid Transit” is an integrated system of facilities, equipment, services, and amenities that improve the speed, reliability, and identity of bus transit. BRT is, in many respects, like rubber-tired light rail transit (LRT) with greater operating flexibility and potentially lower costs. The BRT mode has gained favor as an effective way to move people efficiently and in a cost-effective manner—in terms of both capital and operating costs. The goal of BRT is to attract new transit riders in a cost-effective manner.

Study Methodology

The Fresno BRT Master Plan includes a market analysis of geographic distributions of population and employment as two major factors that influence travel demand. It also includes a summary of the relevant findings and recommendations from the Downtown Transportation and Infrastructure Study (DTIS), completed in 2007, which influenced the Fresno BRT Master Plan.

Stakeholder outreach to leaders of community groups and a city-wide community open house were undertaken to effectively understand the issues affecting study area communities with respect to public transportation and the BRT concept.

In the development of the proposed BRT network, the four highest ranked transit corridors from prior studies and corridors suggested by stakeholder interviews were reviewed. Each corridor was field reviewed and analyzed in terms of current FAX patronage.

Three levels of BRT investment were considered to simplify the evaluation of corridors for the master plan. The alternatives are intended to show how varying levels of investment can impact capital and operating costs, ridership, and implementation feasibility. These investment alternatives are defined as follows:

1. Basic Investment: Commonly known as “Rapid Bus”, this level of investment is considered a minimum investment to achieve the benefits of BRT. Buses operate in mixed flow lanes.
2. Moderate Investment: This level of investment focuses on incremental improvements to both right-of-way for vehicles and passenger amenities at stations.
3. High Investment: The high level of investment takes into consideration a full light-rail concept but with BRT vehicles. Buses operate in at-grade in dedicated lanes that are horizontally separated from mixed flow traffic.

Fresno County Regional Long-Range Transit Plan

Key Recommendations

The Plan recommends a network of BRT services and their relationships to the basic FAX local bus services. A service concept is described for the BRT services along with ridership estimates. The process of defining the recommended BRT network and early implementation corridor relied heavily on current FAX patronage profiles, inputs from the stakeholders and the public open, house meeting as well as land use coordination opportunities in the region.

The Plan recommends the following four corridors to form the BRT network:

- ✓ Ventura Avenue/Kings Canyon Road
- ✓ Blackstone Avenue
- ✓ Shaw Avenue
- ✓ Cedar Avenue

The first two corridors have retail-oriented land uses along former state highways with somewhat reduced traffic congestion. Also, both corridors provide opportunities for coordinated development of pedestrian/transit-oriented land uses in conjunction with enhanced BRT transit services. These two corridors were considered a potential “spine” for the rapid transit network. As such, the ridership assessment combined these two arterial streets into one corridor.

The latter two corridors are adjacent to the California State University, Fresno—a major employment center in the region. Shaw Avenue has substantial commercial and residential uses along the corridor and can provide direct service into downtown Clovis. Cedar Avenue on the other hand

is mostly residential with several schools along the corridor—students are a major customer market for FAX.

Transit ridership and revenue forecasts were performed for each of the three proposed corridors to inform overall project feasibility, to help screen the range of alternatives, and to facilitate phasing of BRT implementation, including selection of a preferred corridor for implementation. Overall, the Kings Canyon Road-Ventura Avenue-Blackstone Corridor had the highest ridership.

The first phase of BRT implementation was proposed along the Ventura Avenue/Kings Canyon Road corridor. Included in the BRT Master Plan is an implementation element for establishing this first corridor of BRT service. The analysis included field investigations to identify suitable locations for BRT stations and recommendations for corridor improvements representing a range of investment levels. The implementation element proposes a route alignment and station areas. It also lays out a variety of station and corridor service options for factors such as boarding, fare collection, station type, and vehicle type. The implementation element estimates operating and capital costs for three levels of investment. Lastly, the implementation element identified and recommended several different potential funding sources.

Implications for Long-Range Transit Plan

The City of Fresno recently implemented a bus rapid transit service along the Blackstone/Kings Canyon corridor, named the “Q”, with operations beginning in 2018. The initial route spans 15.7 miles and

Fresno County Regional Long-Range Transit Plan

feature 27 stops connecting Fresno's major north-south corridor, Blackstone Avenue, and a major east-west corridor, Ventura Avenue and Kings Canyon Road through Downtown Fresno. The Q represents an investment of more than \$54 million. The service includes 10-minute frequencies during peak times, potential transit signal priority, real-time bus arrival displays and proof-of-payment fare collection. Service is operated using 17 low-floor, multi-door, low emission compressed natural gas (CNG) vehicles. BRT service replaces existing local service in the corridor and offers decreased travel times through fewer stops, more frequent service and the priority treatments.

The 2018 RTP/SCS identifies Shaw Avenue as a proposed second BRT corridor. The other BRT corridors included in the RTP/SCS are California Avenue in Southwest Fresno, Cedar Avenue BRT, and the Southeast Growth Area BRT extension. These corridors form vital links to existing and planned activity centers within Fresno. The 2007 Downtown Transportation and Infrastructure Study (DTIS) found that by 2050, the number of trips served by transit to, from, and within downtown is targeted to increase fourfold. This increased demand will require a variety of travel modes to accommodate it. BRT corridors are an integral part of high capacity transit corridors that link major activity centers within the urbanized area.

Fresno County Public Transportation Gap Analysis and Service Coordination Plan (2015)

Study Purpose

The purpose of the Fresno County Public Transportation Gap Analysis and Service Coordination Plan (hereinafter referred to as the Gap Analysis and Service Coordination Study) was to qualitatively and quantitatively define where mobility gaps exist between public transportation and human service agency transportation and to develop specific coordination strategies to address the existing mobility gaps.

The *Coordinated Public Transit-Human Services Transportation Plan*, or the Coordinated Plan, brought together human service organizations and public transit agencies to identify and meet the mobility needs of older adults, persons with disabilities and persons of low income. The Coordinated Plan was the primary stand-alone product from the Gap Analysis and Service Coordination Plan Study.

Primary Study Methodologies

In order to receive the extensive qualitative and quantitative input to guide the formulation of specific strategies to address mobility and information gaps in Fresno, several different public outreach and research efforts were employed and the most important are highlighted below:

Fresno County Regional Long-Range Transit Plan

- ✓ Surveys were conducted with 573 transportation disadvantaged individuals in person at locations throughout Fresno County.
- ✓ An e-survey was conducted of 600 social service agency employees who work directly with clients to provide social, medical, legal or other types of services which focus on low-income, elderly, disabled and non-English speaking populations.
- ✓ In-depth stakeholder interviews with 45 individuals representing 28 organizations.

Extensive demographic analysis was also conducted using Census and other data.

Key Conclusions

1. **Fresno County's population includes large segments likely to be transportation disadvantaged** due to low income (nearly one quarter of the population lives below the poverty level); limited English proficiency (19% speak English at a level lower than very well); not having a vehicle (9.1% of households); or due to being young, elderly or disabled.
2. **There is a wide array of mobility services providing access to and from locations throughout Fresno County.** There is a very strong foundation of mobility services in Fresno County and the effort to develop these services have been nationally recognized for mobility management practices and rural connectivity. Fixed route transit, demand response services, vanpools, social service transportation and an array of other mobility strategies have been put in place to serve the diverse needs of residents in both urban and rural areas.
3. **There is heavy utilization of public transit and carpooling among the study population.** In the intercept survey of likely transportation disadvantaged individuals, 19% of all employed respondents ride the bus (22% if you include human service transportation) compared to 1% in the general population. 27% carpooled/vanpooled, compared to 12% of the population. Only 36% drove alone compared to 80% of the general population who drove alone according to the 2012 ACS survey.
4. **There are important partnerships in Fresno County that facilitate mobility for the transportation disadvantaged.** In Fresno County, there are exemplary partnerships that provide an array of mobility services. Just a few of the examples include partnerships between FCRTA and FEOC, FCRTA and CalVans, social service agencies and transit agencies to purchase transit passes, and Children's Hospital and FAX.
5. **Most of the study population (57%) says that their transportation needs are adequately met** through private transportation, carpooling and existing transportation services. This is equally true for rural and urban populations.
6. **Ridesharing and walking are just as important as public transit to those without the option of driving themselves**— for both commute trips and medical trips.
7. **There is reasonably high awareness for public transit services among the transportation disadvantaged population; however, it is based largely on word of mouth and information from drivers.** There is a desire for better sources of information – printed schedules, bus stop information displays, internet information and information from social service agencies – which

Fresno County Regional Long-Range Transit Plan

would make the services easier to understand and access.

Key Recommendations

A critical priority is to sustain the network of mobility services in Fresno County. It has taken decades to develop this significant coordinated network of services which meets a diversity of needs. Preservation and enhancement of this important foundation is critical to providing high quality mobility services in Fresno County in the future.

It is critical that local non-profit and public agencies continue to receive FTA 5310 funding for replacement bus, expansion buses and equipment needs. FTA 5310 funding can also be utilized for mobility management initiatives.

To provide an institutional framework for coordinating and ensuring implementation of the recommendations in the Coordinated Public Transit-Human Services Transportation Plan, a high priority strategy is the establishment of a Countywide Mobility Manager. A key function of the Countywide Mobility Manager would be overseeing a team of four to six local community mobility managers who would provide a human link between mobility networks and transportation disadvantaged populations.

To address the information gaps, the Gap Analysis and Service Coordination Study plan recommended a four-pronged approach that provides (1) a one-stop online tool termed "Find-A-Ride," (2) human resources to educate and inform hard to reach transportation individuals about mobility options (3)

better information at bus stops so that individuals who speak different languages can get information at the bus stop nearest their home and (4) multi-lingual printed information.

Implications for Long-Range Transit Plan

Sustaining and enhancing the strong foundation of transit services in Fresno County is very important to transportation disadvantaged populations in Fresno County. However, equally important is enhancing ridesharing and active transportation options. Improving the infrastructure and human resources necessary to fully communicate in multilingual and accessible forms the mobility options that are available for the transportation disadvantaged population segments need to make is a critical necessity.

Fresno Clovis Metropolitan Area Public Transportation Strategic Service Evaluation, Final Network Implementation Plan

Study Purpose

The purpose of the Fresno Clovis Metropolitan Area (FCMA) Public Strategic Service Evaluation (Strategic Service Evaluation), sponsored by the Fresno Council of Governments, was to "Define changes that make transit a better option than the auto." The study focused on three main transit considerations: 1) Long-term policy goals; 2) Cost-effectiveness; and 3) Customer service and safety.

Fresno County Regional Long-Range Transit Plan

Primary Study Methodologies

In May 2014, Fresno COG published a Public Transportation System Assessment that evaluated current policies, existing public transit service, and transit auto travel patterns. It also developed a set of recommended policy and transit service changes to better meet the mobility needs of the FCMA. Three scenarios were developed that demonstrated the trade-offs between competing design priorities, primarily ridership productivity versus coverage. The three scenarios were the 1) Existing Network Scenario 2) Ridership (Productivity) Scenario 3) Coverage Scenario. After the three scenarios were presented to the Fresno City Council on May 22, 2014, feedback from the public was solicited in May and June 2014. This included three workshops where participants could engage with the planning team to reflect on productivity versus coverage scenarios. This led to the development of the Preferred Network Plan. A key assumption in the review of the three scenarios was that there would be a net zero change in vehicle service hours.

Summary of Study Conclusions

The Public Transportation System Assessment demonstrated that FAX is a cost-effective operation for a mid-size transit system. It clearly demonstrated that FAX has a very high passenger per vehicle revenue hour, which speaks in large part to the strong demand for transit in the Fresno area. However, FAX's operating cost per vehicle service hour is above average. FAX and Clovis Stageline have existing routes that cover most of the major destinations within the Clovis/Fresno area.

There was no conclusion presented on the three possible configurations of future FAX and Stageline services. As clearly stated in the assessment, "These scenarios are presented to guide an understanding of what is possible given the constraints of this exercise-net zero change in service hours. The Ridership Scenario began, necessarily, by cutting low ridership coverage. Under the Coverage Scenarios, whose goals is expanded coverage despite low ridership, there is no choice but to cut relatively high ridership service."

Key Recommendations

1. **Establishment of a Frequent Service Network.** The establishment of a Frequent Service Network is the cornerstone of the Preferred Network. The routes would operate 15-minute or better frequencies throughout the peak and midday period. The proposed Frequent Service Network would make it possible to travel between any two points with a simple L-shaped trip, using two routes and a single transfer. It established four priorities for frequent route network implementation, starting with BRT on the Kings Canyon/Blackstone BRT. Future service would be implemented at a split of 90 percent productivity and 10 percent allowed for additional coverage.
2. **Simplification of the Route Structure.** The study concluded that transit service should avoid out of direction movements. This would not only improve the clarity of each of the lines on the route for customers, it would also improve the route efficiencies. Route restructuring in six geographic areas was recommended with three primary rationales: 1)

Fresno County Regional Long-Range Transit Plan

Respond to system changes required by the introduction of BRT; 2) Redesign routes to accommodate a future Riverpark Transit Center; and 3) Improve efficiency and usefulness of the network. In addition to route restructuring, bus stop spacing would be modified to ¼ mile spacing. The study emphasized that stop spacing be implemented as part of the Frequent Service Network because fewer stops mean faster travel times, providing savings that will improve service frequency and increase ridership.

3. **Increase availability of service during evenings and weekends.** A key finding of the community outreach was a demand for more late-night service. Extending service to 12:00 am should be a priority for lines serving major retail employment and universities, notably Routes 9 and 30. The recommendation would provide coverage for evening classes at Fresno City College and California State University, Fresno.
4. **Provide significant capital improvements for on-street transfer enhancements, new transit centers, and bus stop improvements.** Bus stop enhancements are recommended at eight key transfer locations in the Frequent Service Network. Four new transit centers are proposed as part of the capital improvement program, including downtown, River Park area, California State University, Fresno and Fancher Creek. At bus stops across the network, recommendations were made for enhanced on-street customer information, improved ADA accessibility, and connectivity to bike and pedestrian networks.
5. **Improve customer service through improvements to on-time performance,**

customer information, and reduction in overcrowding. One of the policy recommendations includes clarifications to the on-time performance standard. A new branding campaign is recommended for implementation, so the system is simple for riders and non-riders to understand. Such improvements would include easy-to-read schedules and maps, and naming bus lines by streets and locations. To relieve overcrowding, “trippers” should be added to provide additional service during the most crowded times of the day.

Current Status and Implications for Long-Range Transit Plan

FAX recently (August 2018) completed a Fixed-Route System Restructure Public Involvement Services study. The study included an FTA required Service Equity Analysis, and provided public involvement and input leading to a recommended and adopted FAX Preferred Network Plan.

The adoption of the FAX Preferred Network Plan in concert with BRT implementation will provide the framework for implementing the priorities of the Strategic Service Evaluation as amended and approved by the Fresno City Council in the Fixed-Route System Restructure Public Involvement Services Study. Many of the priorities of the Strategic Service Evaluation do not currently have funding. However, they do provide the basis for a long-term bus network in the City of Fresno.

Fresno County Regional Long-Range Transit Plan

Fresno Council of Governments Transportation Needs Assessment (2016)

The Fresno Council of Governments created the Transportation Needs Assessment (TNA) project to address significant accessibility problems within Fresno County, with a particular focus on disadvantaged communities.

This study focused on options for non-motorized transportation modes e.g., biking and walking. While there is passing mention of transit, it is mainly concerned with projects and programs that can directly encourage non-motorized travel with flow-on to public health in Fresno County communities.

The project focused on two tasks:

- ✓ Task 1: Analyzed bicycle and trail facilities in the region, identified gaps between local jurisdictions, and recommended projects to remedy these gaps.
- ✓ Task 2: Analyzed the connectivity between communities within the region and ten major regional and sub-regional facilities identified by Fresno COG and the Needs Assessment Committee.

Implications for Long-Range Transit Plan

Since the TNA focuses mainly on bicycle and pedestrian demand to identify and prioritize gaps in the trail and bicycle network, it does not directly apply to transit planning. The GIS-based analysis of demand included proximity to transit.

Fresno County Regional Active Transportation Plan (2018)

The Fresno Council of Governments developed the Active Transportation Plan (ATP) to coordinate active transportation (pedestrian and bicycle) plans planning throughout Fresno County and its Cities. One important component of the regional ATP was the development of new local ATPs for the majority of Fresno County's smaller Cities that did not have one.

The Fresno County Regional ATP is aimed at helping each jurisdiction in the County identify needed bicycle and pedestrian projects, and to help local agencies qualify for new funds to implement the projects. It is important that the Plan be context sensitive to local needs and vetted with local staff and the community. Development of the Regional ATP was approved by the Fresno COG Policy Board on February 22, 2018 and received input from all cities in Fresno County and from the County of Fresno representing the unincorporated communities.

This study focused on options for non-motorized transportation modes e.g., biking and walking. While transit stops are noted as pedestrian and bicycle destinations and attractor, with projects and programs to encourage non-motorized travel in Fresno County communities, there was no detailed study of how pedestrians and cyclists use and access transit.

To achieve its goals, the ATP proposes a comprehensive network of citywide bikeways trails, and sidewalks; crossing improvements at key

Fresno County Regional Long-Range Transit Plan

intersections; and locations for recommended bicycle parking. At build out, the recommended network would:

- ✓ Add 248 miles of Class I Bikeways (bike paths),
- ✓ Add 1,591 miles of Class II Bikeways (bike lanes)
- ✓ 59 miles of Class III Bikeways (bike routes),
- ✓ 11 miles of Class IV Separated Bikeways, and
- ✓ 89 miles of sidewalks.
- ✓ Improve 80 intersections and street crossings for pedestrians and
- ✓ Add 175 bicycle parking locations.

The ATP estimates a cost of \$506 million for improvements in communities in the region without local Active Transportation Plans in 2017, and \$1.9 billion for all cities and the county, including four cities with preexisting ATPs. Implementation of the entire regional network is expected to occur over several decades. Some improvements can be implemented relatively easily; however, other improvements are more complex and are not anticipated to occur in the near future. Facilities will be constructed in conjunction with adjacent land development, roadway maintenance and capacity enhancement projects, as well as active transportation infrastructure projects using funds available from various local, state, and federal funding sources.

Implications for Long-Range Transit Plan

The Fresno COG ATP represents an important base and information source for the development of First/Last mile projects. The LRTP developed prototypes and a process that supplements and augments the countywide ATP with projects focused

specifically on pedestrian and bicycle facilities that improve access to transit.

Fresno Area Express Short-Range Transit Plan 2018-2022

Study Purpose

The Fresno Area Express (FAX) Short-Range Transit Plan (SRTP), FY 2018-2022, is the biennial update to the operating plan and the capital program. The purpose of the SRTP 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 COG's RTP/SCS, 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.

Study Methodology

This SRTP 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. The primary assessment of transit service was accomplished by measuring FAX's system and individual route performance. The following service evaluation methods were used:

- ✓ Peer Review Analysis - Uses standard service measurement criteria to compare one system's performance against another. Five peer transit

Fresno County Regional Long-Range Transit Plan

agencies were chosen based on a variety of contextual factors.

- ✓ Systems Minimums Assessment - Uses measurements from the system to assess minimum levels of efficiency and effectiveness of its component sub systems.
- ✓ Passenger Surveys - FAX utilizes detailed on-board surveys to collect information about passenger demographics, origins/destinations, and travel habits.

System Overview

The City of Fresno provides two categories of public transportation service in the Fresno-Clovis Metropolitan Area. FAX provides fixed route service for the public and Handy Ride provides demand responsive service for persons unable to use FAX fixed route service. FAX is the largest provider of transit services in the region, with more than 10 million annual boardings and an operating budget of approximately \$42 million per year. The route system is composed of nine lines that provide service in two directions to and from downtown, five cross-town lines, and two neighborhood shuttle routes. Handy Ride offers demand responsive, curb to curb service seven days a week during the same hours as the fixed route service.

Key Findings from the System Evaluation

- ✓ Peer Review Analysis - FAX scored first among the selected peers for passengers per hour (34.3), passengers per mile (2.75), and farebox recovery (24.9%). FAX placed second in cost per passenger, and fifth in cost per hour.

- ✓ Systems Minimums Assessment – Only two routes were shown to fall outside of accepted standards. The first, Route 58, is subsidized through a contract with Valley Children’s Hospital which pays the incremental cost of operation, and as such, provides service to the citizens of Fresno at no extra cost. The second, Route 45, the City of Fresno has chosen to maintain because of its very high patronage by disabled citizens even though it has been a poor performing route for many years.

- ✓ Passenger Survey:
 - 36% of passengers take more than nine trips per week. The most popular trip purpose was work at 46%, closely followed by school at 43%.
 - Riders tend to be young with 55% of riders less than 35 years of age. In addition, Hispanics/Latinos comprised 46% of those surveyed, while Caucasians and African Americans comprised 25% and 18% respectively.
 - Most FAX riders do not have transportation alternatives for work or school.

Recent and Near-Term Improvements

On May 1, 2017 FAX extended weeknight hours on the most highly traveled sections of five of its routes until 1:00 am. FAX also added more frequent 30-minute weekend service on another five routes. Earlier in the year FAX purchased 20 new transit vehicles to enable 15-minute headways on a busy corridor, added more service to school routes, and began a remodel of a transit center.

Fresno County Regional Long-Range Transit Plan

The S RTP notes FAX plans to implement street-running bus rapid transit (BRT) to improve the speed and reliability of service in a commercial corridor with existing high transit demand. The BRT service runs between north Fresno, downtown Fresno and southeast Fresno. The Blackstone/Kings Canyon BRT project includes transit signal priority, real-time bus arrival displays and proof-of-payment fare collection; service is operated using low-floor, low emission compressed natural gas (CNG). BRT service replaces existing local service in the corridor and offers decreased travel times through fewer stops, more frequent service and the priority treatments. Operation of the BRT service began in 2018.

The Fresno Clovis Metropolitan Area Public Transportation Strategic Service Evaluation Final Network Implementation Plan, completed in 2014, recommended five key service improvements that makeup a Preferred Network. FAX recently completed a Fixed-Route System Restructure/Public Involvement Services study. The study included an FTA required Service Equity Analysis, and public involvement and input leading to an adopted FAX Preferred Network Plan.

Implications for Long Range Transit Plan

The following provides an overview of factors that will impact FAX over the next five years and beyond.

- ✓ Air quality - The San Joaquin Valley faces the serious environmental problem of poor air quality during most the year. Modifying travel demand is an increasingly important issue for the future, both in terms of congestion management and air quality. Public transit will continue to play

a major role in any proposed transportation systems management activities which are undertaken.

- ✓ Need for Additional Transit Funding - Traditional sources of transit funding are inadequate to meet identified public transportation needs within the FCMA. Necessary ongoing operating revenues must be obtained if public transportation is to meet the goals outlined in the Regional Transportation Plan. Needed and unfunded improvements include:
 - Weekend, and evening service.
 - Expanded vanpool in the northern and southern parts of the valley.
 - Additional service in strategic locations.
 - Enhance on-street transfer locations.
 - New transit centers at CSU Fresno, River Park, and Fancher Creek.
- ✓ Dedicated Local Support – Measure C has the potential to have a major impact on public transit in the City of Fresno, and to date, several programs goals have been implemented.
- ✓ High-Speed Rail (HSR) is expected to increase the demand for transit in the region. The goal is to intensify development around HSR station sites. When HSR service is available, there will be a need to evaluate how to best restructure FAX service for connections to and from HSR.

City of Clovis Short-Range Transit Plan FY 2018-2022

Study Purpose

The City of Clovis Short-Range Transit Plan (S RTP), FY 2018-2022, is the biennial update to the operating plan and the capital program. The purpose of this

Fresno County Regional Long-Range Transit Plan

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 the Fresno COG's Regional Transportation Plan, and will guide the provision of transit services in the FCMA over the next five years.

System Overview

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 California State University, Fresno. Clovis Stageline operates two routes on 30-minute headways, and two special routes in early morning and late afternoon to accommodate school transportation. Stageline buses connect 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. Stageline uses 13 lift equipped buses and three vans for driver switch-out, and the trolley is used as a rental for special events.

The second service provided by Clovis Transit is Clovis Round Up, which is a demand-responsive system providing service to persons with disabilities. Service is available to qualified riders requesting transportation within the service area and provides essential service to many ambulatory and non-ambulatory passengers. Round Up operates the same hours as the Stageline routes. The City of Clovis has designated Round Up services as the Consolidated Transportation Service Agency (CTSA) for the Clovis transit service area. Round Up operates

with 17 lift equipped passenger buses and three passenger vans including two wheelchair accessible vans.

Near-Term Improvements

A new transit station, (groundbreaking in 2018) will house a ticket sales outlet and selected administrative functions. The transit center will be part of a three-building campus that includes a library and senior center. The agency also plans to embark on a comprehensive evaluation and strategic redesign of the Stageline bus routes to coincide with the opening of the new transit station. Additionally, the agency is currently researching the potential for electrification of the bus fleet and will likely start with a pilot program.

Clovis Transit's five-year Capital Plan projects a balanced budget. Clovis Transit took delivery of two new Champion buses in 2015 and are preparing to order two more and a replacement paratransit bus. State Proposition 1B funds for Public Transportation Modernization, Improvement, and Service Enhancement Account (PTMISEA) grants and the Proposition 1B homeland security grant funds have provided for capital purchases. Sales tax revenue from Measure C is starting to rebound as the economy improves. Recently, Senate Bill 1 (SB 1) was passed which will provide additional revenue for the operation.

The following is a list of planned capital improvements between FY 2018 and 2022 (dependent upon funding):

Fresno County Regional Long-Range Transit Plan

- ✓ The purchase of replacement vehicles as the current vehicles age out, including the possible introduction of electric buses.
- ✓ Additional ADA bus stop improvements.
- ✓ Additional vehicles for fleet expansion to keep up with new service or ADA “no denial” requirements
- ✓ for paratransit.
- ✓ A ‘real-time’ bus locator system and end user application for next bus data accessible by passengers.

Implications for Long-Range Transit Plan

The following are additional potential improvements that will be considered in the future:

- ✓ Expand service into new development 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 gap analysis study and a strategic service evaluation study.
- ✓ Increased service hours later in the day and on weekends.
- ✓ Potential partnership with California State University, Fresno working on electrification of the bus fleet.
- ✓ A new maintenance facility.

Fresno County Rural Transit Agency Short Range Transit Plan 2018-2022

Study Purpose

The Short-Range Transit Plan (SRTP) for the rural Fresno County area was developed by the Fresno County Rural Transit Agency (FCRTA). The plan is updated every two years and covers a 5-year period. The SRTP serves four purposes:

1. Provides a five-year action plan for implementation of the Public Transportation Element of the Regional Transportation Plan.
2. Provides a basis for local governments to demonstrate that public transportation needs within their jurisdiction have been, and may continue to be, reasonably met – a requirement of the Transportation Development Act.
3. Serves as the “planning basis” for Federal and State funding programs.
4. Serves as a valuable resource document of specific information for citizens and local elected officials.

Study Methodology

The report first describes the goals, objectives, policies, and standards for each of the four areas of operation: transportation, maintenance, service planning, and administration. This section is followed by a chapter describing current rural service area providers, agency processes and policies, past improvements, and funding. A key chapter provides an analysis of performance statistics for each of the rural transit services and makes recommendations for improvement. The final chapter describes the financial status of the system.

Fresno County Regional Long-Range Transit Plan

Highlights of the Productivity Analysis

The Fresno County Rural Transit Agency (FCRTA) is the primary provider of public transit services in rural areas of Fresno County. The agency operates several sub-systems that serve 13 incorporated cities and 29 unincorporated rural areas. Sixteen sub-systems provide service within cities and communities. Fourteen sub-systems provide service that connects cities and communities.

- ✓ At least once during the Fiscal Years of 2015 and 2016, 19 of the subsystems operated beyond reasonable performance expectations for at least one of the six productivity criteria used to evaluate FCRTA's annual performance.
- ✓ Between Fiscal Year 2015 and 2016 FCRTA's ridership has declined on 15 of its 24 subsystems. Overall ridership has been trending downward for the last four years. The report lists several potential reasons for the decline related to the declining economy of the region.
- ✓ The FCRTA's fares have been unchanged for the past 15 years. The FCRTA Staff and Board have been reluctant to raise their fares because they know their constituents cannot afford any further impacts to limited incomes and they recognize just how vital the transit services are to their residents.

Recent and Near-Term Improvements

Included in the SRTP is an analysis of each subsystem and service recommendations. Below are the highlights of the recommendations.

- ✓ Auberry Transit: Maintain service to elderly residents attending the nutrition program.

- ✓ Del Rey Transit: Encourage further grouping of passenger trips to address increased requests for service within the community.
- ✓ Firebaugh Transit: Consider the introduction of a second service vehicle if sufficient TOA revenues are available for such purposes.
- ✓ Laton Transit: Consider service expansion to five days a week, with Measure C funding, for intercounty services to medical facilities.
- ✓ Mendota Transit: Consider the need for the operation of a second vehicle, to be funded by Measure C, to enhance the service. Consider the need to implement additional transit services to support the new Western Fresno County Regional Job Initiative Center.
- ✓ Sanger Transit: Consider the need for the operating additional service vehicles to address increased travel demands.
- ✓ San Joaquin Transit: Additional marketing activities.
- ✓ Most subsystems: Maintain current service levels. Continue to monitor farebox recovery. Implement improvements as indicated by performance measures. Seek additional local non-governmental funding. Introduce additional marketing.

FCRTA should be commended for its supportive partnership with the multi-county CalVans vanpooling program. An example of the FCRTA's support is their purchase of 35 vehicles to be as used as farm labor vanpools for CalVans to administer for Fresno County farm workers.

Implications for Long-Range Transit Plan

Fresno County Regional Long-Range Transit Plan

The FCRTA has built a strong foundation for local mobility. The rural inter-city and inter-community services provided by FCRTA provide vital regional links for Fresno County residents. Additionally, the FCRTA subsystems that operate within rural communities provide local connections for residents of these small communities. Core mobility options need to be sustained and strategically enhanced as dollars become available to ensure the continued mobility of rural residents and workers.

Fresno County's Vanpool Program: A Model for Partnerships Enhancing Mobility

Partnership Model

An overarching aim of the Fresno County Regional Long-Range Transit Plan is to facilitate partnerships. A model of this effort is the existing partnerships among CalVans, Fresno Council of Governments, Fresno County Rural Transit Agency, major employers and Fresno County growers.

According to the 2015 Gap Analysis and Service Coordination Study, in 2014 CalVans operated a network of 48 farmworker vanpools and 127 commuter vanpools with an origin or destination in Fresno County. The partnership arrangements have had a symbiotic impact on vanpool growth in Fresno County:

- ✓ CalVans manages and operates the vanpool program.
- ✓ FCRTA recently purchased vans to support the program and lower monthly rider fares.

- ✓ Measure C and San Joaquin Valley APCP both provide valuable incentives to start and sustain vanpools.
- ✓ Use of vouchers by agricultural contractors and growers continue to grow.
- ✓ State and Federal employees continue to be a large vanpool market segment: State workers can receive \$65 per month while Federal workers can receive up to \$130 per month for their commute.

Background

CalVans was formed in October of 2011 as a joint powers authority with 11 members representing 13 counties, officially as the California Vanpool Authority. The origins of CalVans was a vanpool program started by the Kings County Area Public Transit Authority in 2001. This was expanded to seven adjoining counties before the statewide formation of CalVans in 2011. The Board of Directors is comprised of one person from each member agency.

General Public Vanpool Program Element

The general public vanpool program is open to anyone and includes both individual and employer-based vanpools program. Agricultural vanpools are discussed below after the general vanpool program.

The key to public vanpool growth in Fresno County by lower and moderate-income employees has been to lower monthly seat costs. With both the FCRTA purchase of 70 vanpools and the use of Cap and Trade Funds by CalVans to purchase 80 vanpools, the purchase of the vans allowed CalVans to lower

Fresno County Regional Long-Range Transit Plan

monthly rate paid by riders over what they had been required to pay the normal monthly lease/purchase cost of a new van. This made the vanpool fare more affordable.

The other successful ingredient has been the significant levels of incentives offered to form and sustain vanpool programs in Ventura County. Partners of CalVans have played a significant role overall in accomplishing this. With Measure C, a general vanpool group can receive \$600 a month for the first year and \$300 per month the second year. The San Joaquin Valley Air Pollution Control District provides \$30 monthly vouchers for any rider in its eight-county region. The vouchers are good for three years and represent a \$1.2 million subsidy to San Joaquin Valley vanpoolers.

Agricultural Industries Transportation Services (AITS) Vanpools

An unfortunate tragedy was the genesis of the agricultural vanpool program. In the morning light of August 9, 1999 near the town of Five Points, thirteen farmworkers died in a tragic accident involving an unsafe van with wooden benches in place of factory-installed seats. After this, the California Highway Patrol found 101 other dangerous vehicles and ordered 36 off the road immediately. This led to the introduction of a formal agricultural vanpool, Agricultural Industries Transportation Services (AITS), with the goal of providing qualified

farmworkers with a means to transport themselves and others to work in a shared ride vanpool vehicle.

AITS has had a very long history of institutional and regulatory barriers. In simple terms, under Federal Department of Labor Regulations, workers were prevented from paying any money—even to reimburse the driver for fuel—unless the driver was a registered Farm Labor Contractor. These barriers have been overcome after many years of effort, and a memorandum between CalVans and the Department of Labor has formalized a collaborative relationship.³

Through Measure C, an agricultural vanpool can receive up to \$30 per day or \$150 per week in subsidy support. The use of agricultural contractors and growers continues to grow. According to a recent audit report of CalVans, “Growers like the use of vouchers because it gives them the ability to attract workers while complying with field health and safety rules.” In addition, it allows workers to travel greater distances to work, where they would not have traveled on their own.

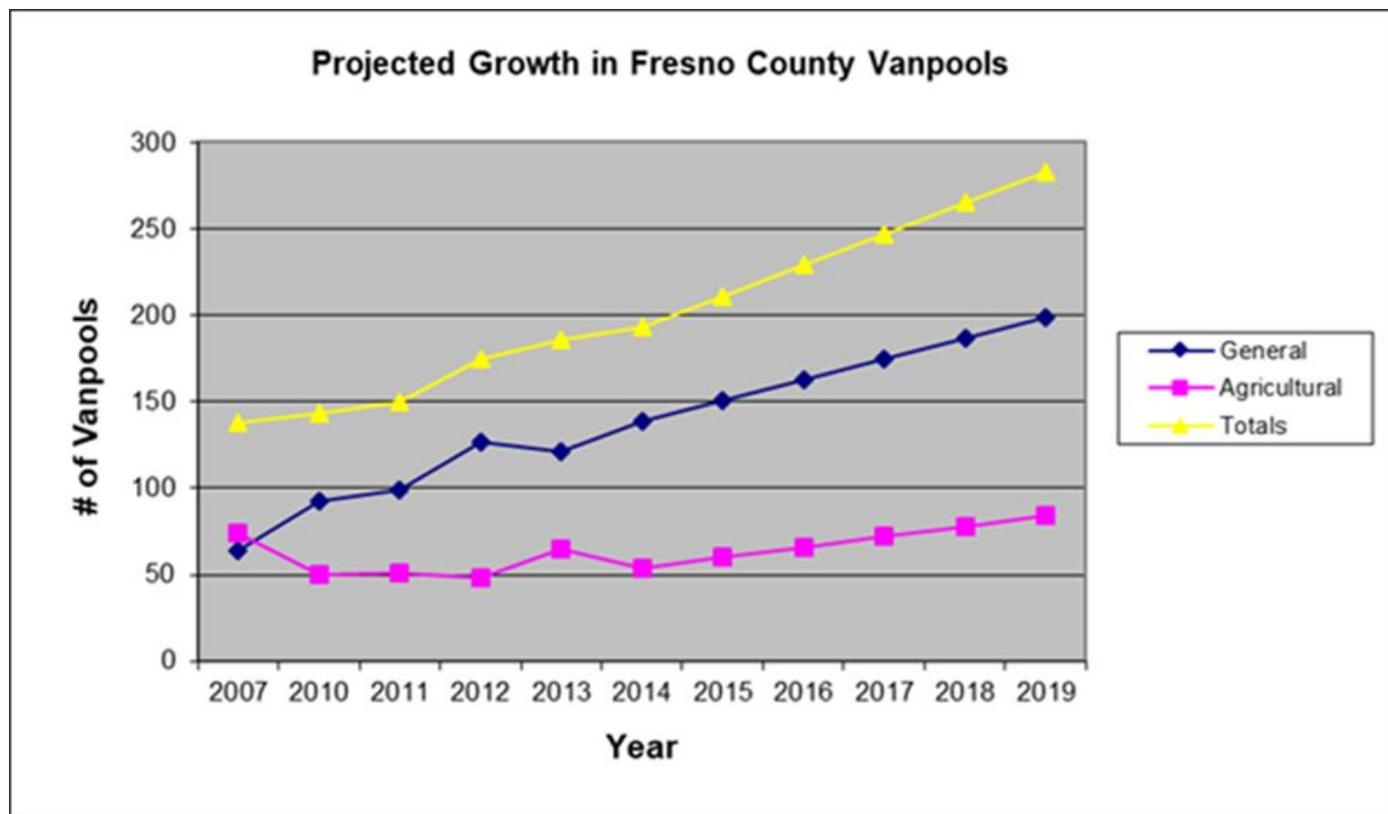
History of Vanpool Growth in Fresno County

The growth of vanpools in Fresno County as shown in Figure 1 is the result of active partner coordination.



³³ See the following for a 33-page history of the development of AITS program:
<http://www.calvans.org/sites/default/files/downloadable-pdfs/AITS-booklet.pdf>

Figure 1 - Growth in Fresno County Vanpools



Fresno County Regional Long-Range Transit Plan

2018 Fresno COG Regional Transportation Plan/Sustainable Communities Strategy

The Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) is the fundamental transportation plan for the Fresno region. Under current federal and state law RTP/SCS must be updated every four years. Regional Transportation Plans address the transportation facilities and services needed to keep our region moving and our communities connected. Fresno COG's 2018 Regional Transportation Plan and Sustainable Communities Strategy outlines a fiscally constrained mobility projects designed to meet the region's travel needs through the year 2042. Fresno COG's 2018 Regional Transportation The current Fresno COG RTP/SCS was adopted in August 2018.

The RTP/SCS is a massive document, covering existing and future transportation related needs, examining all modes of travel, analyzing alternative solutions, and identifying what can be completed with anticipated available funding. Over 3,000 projects and multiple programs included within it. This summary focuses on the elements of the RTP/SCS most relevant to long-range transit planning.

Urban Mass Transportation (Section 4.4)

Rural Area Public Transportation & Social Service Transportation (Section 4.5)

These two sections of the RTP/SCS summarize and review existing and planned transit services. Existing mass transportation services in Fresno County consists of both public transit and Amtrak rail passenger service. The transit services include inter-

city, fixed-route, and demand-responsive operations. Common carriers within Fresno County include Amtrak, Greyhound, Orange Belt Stage Lines, and others.

In the Fresno-Clovis Metropolitan Area (FCMA), urban public transportation is provided by Fresno Area Express (FAX) the major transportation service provider in the area. As a department of the City of Fresno, FAX provides two categories of public transportation service in the area: fixed-route service for the general public, and Handy Ride's demand-responsive service. Handy Ride provides service to elderly and disabled individuals who are unable to ride the fixed-route system.

The City of Clovis provides public transportation services, which include Clovis Stageline, a general public fixed-route system, and Clovis Round Up, which provides demand responsive, curb-to-curb transportation service to the elderly and disabled. Both Clovis Stageline and Clovis Round Up provide transport service within Clovis City limits.

The Fresno County Rural Area is served by common carriers, the general public and social service providers. The primary provider of rural general public transportation is the Fresno County Rural Transit Agency (FCRTA), which provides local and regional fixed-route services that link communities with each other and with the Fresno-Clovis Metropolitan Area. Intra-community public transport services (fixed-route and/or demand-response) are provided through public, and private or non-profit agencies. These services address the needs of the elderly, disabled, as well as the general public.

Fresno County Regional Long-Range Transit Plan

The RTP/SCS notes that “public transportation” may take many forms. It may be operated by either the public, private or nonprofit sectors. Service may be provided in either a conventional manner, such as, fixed-route, scheduled service, or as a “demand responsive” service. Public transportation may take the form of shared ride taxis, car and van pools, subscription bus services, and specialized accessible service for disabled persons.

Funding constraints have made efforts to maintain reliable and accessible transit service commensurate with reasonable needs difficult. Measure C’s 2006 reauthorization was meant to establish a stable funding source for Fresno Area Express; however, actual revenues have been significantly lower than expected. During the recession years, Measure C revenues dipped below \$6 million per year. This rose to nearly \$10 million in FY 2017, but is still below the \$11 million per year anticipated when Measure C passed in 2006.

revenue.

Transit in the region has, and will continue to focus on transportation disadvantaged populations, including low-income, elderly, and disabled persons. The RTP/SCS notes that transit is also expected to address other challenges, including improving air quality, reducing congestion and expanding service for an ever-increasing population. If it is to be effective it must increasingly attract “choice riders” who have access to automobiles.

Regarding social service transportation, Fresno COG designated three Consolidated Transportation Service Agencies (CTSAs) within Fresno County. They

include: the Clovis CTSA, the Fresno Metropolitan CTSA and the Fresno County Rural CTSA. The CTSAs are responsible for consolidating their existing services to achieve cost savings. CTSAs are to coordinate their services, to the maximum extent possible, with existing public and private transportation providers.

Rail

The San Joaquin Amtrak route provides passenger rail service to Oakland, Sacramento, and Bakersfield seven times daily. Amtrak also provides bus service from various rail stations along the San Joaquin route to cities that are not accessible by rail, including Los Angeles and San Diego.

The California High-Speed Rail Authority (Authority) is responsible for planning, designing, building and operation of the high-speed rail system. California High-Speed Rail Authority plans, designs, builds and operates the HSR system. The Authority produced a 2018 Business Plan that defines an initial route between San Francisco and Bakersfield, with trains operating as early as 2027. Ultimately the system is planned to extend to Sacramento and San Diego, totaling 800 miles with up to 24 stations. In addition, the Authority is working with regional partners to implement a state-wide rail modernization plan that will invest billions of dollars in connecting local and regional rail lines to provide a comprehensive system.

Fresno County Regional Long-Range Transit Plan

RTP Policy Element (Vision, Goals, Objectives, and Policies)

RTP Mission and Vision

- ✓ **Mission:** To foster a region of diverse partners building a progressive future as one voice.
- ✓ **Vision for 2042:** A region of diverse transportation options that fosters sustainable growth and a vibrant economy, and contributes to improved air quality and healthy communities.

Policy Element Introduction

The RTP/SCS Policy Element seeks to identify the transportation goals, objectives, and policies that meet the regional needs. Goals, objectives, and policies are established to direct the courses of action that will provide efficient, integrated multimodal transportation systems to serve the mobility needs of people, including accessible pedestrian and bicycle facilities, and freight, while fostering economic prosperity and development, and minimizing mobile sources of air pollution. The 2018 RTP/SCS reflects transportation planning for Fresno County through the year 2042. Because Fresno County is one of eight Metropolitan Planning Organizations (MPOs) that make up the San Joaquin Valley Air Basin, we are linked for regional transportation planning through air quality guidelines. As such, the Needs Assessment is addressed on the regional Valley level and can be found in the San Joaquin Valley Regional Transportation Chapter; the Regional Setting, State and Federal Issues Chapter; and is further developed in the Needs Assessment and Action Element

Chapter. The Action Element describes the programs and actions necessary to implement the Goals of the Policy Element. The Financial Element Chapter summarizes the cost of plan implementation constrained by a realistic projection of available revenues.

The 2018 RTP/SCS seeks to improve the transportation system to provide for accessibility and mobility to support land use patterns developed by the Sustainable Community Strategies scenarios.

Goals and Objectives of the RTP/SCS

Definitions: For the purpose of the RTP/SCS, the following definitions will apply:

- ✓ **Goal:** A “Goal” is the end toward which the overall effort is directed; it is timeless, general and conceptual. The intent of the overall goals is to provide a framework for subsequent objectives and policies.
- ✓ **Objective:** An “Objective” provides clear, concise guidance to obtaining the goal. Objectives are successive levels of achievement in movement toward a goal. Individual objectives are capable of being realistically attained.
- ✓ **Policy:** A “Policy” is a direction statement that guides present and future decisions on specific actions. Policies should support the attainment of objectives.

RTP goals, objectives and policies are organized into six broad transportation mode-based categories:

- ✓ General Transportation (content applies across all transportation modes)
- ✓ Highways, Streets, and Roads

Fresno County Regional Long-Range Transit Plan

- ✓ Mass Transportation
- ✓ Aviation
- ✓ Active Transportation
- ✓ Rail

This review focuses on the Mass Transportation goals, policies and objectives.

Mass Transportation Goals

- ✓ A. Goal: An efficient, safe, and fiscally responsible public transportation mobility system.
 - A.1 Objective: Pursue federal, state and local funding for both public and social service transportation, to provide mobility opportunities to the maximum number of people in the region.
 - Policy i: Provide a transit system that meets the public transportation needs of the service area.
 - Policy ii: Provide transit services that serve low income, elderly, and disabled communities, and include those users in the project review process.
 - Policy iii: Support the continued coordination and consolidation of social service transportation.
- ✓ B. Goal: A quality, convenient, safe and reliable public transportation service.
 - B.1 Objective: Encourage and Prioritize safety, appropriate frequency of bus service, reasonable fares and the provision of adequate service to satisfy the transit needs which are reasonable to meet.
 - Policy i: Provide reliable and convenient public transit service.
 - Policy ii: Provide clean, attractive and comfortable vehicles and facilities.
 - Policy iii: Provide a safe system.
- ✓ C. Goal: An efficient and effective public transportation system.
 - C.1 Objective: Consider/evaluate advantages and disadvantages of projects, including economic, environmental and social factors.
 - Policy i: Maximize public transportation patronage.
 - Policy ii: Minimize operating and capital expenses.
 - Policy iii: Encourage the private sector to provide service when economically feasible.
- ✓ D. Goal: Public transit's services with a positive public image in communities served.
 - D.1 Objective: Provide complete and accurate information that makes public transportation "user friendly."
 - Policy i: Create and produce publications that promote the use of public transportation to all segments of the region.
- ✓ E. Goal: An integrated multimodal transportation system which facilitates the movement of people and goods.
 - E.1 Objective: Develop a seamless multimodal transportation network.
 - Policy i: Coordinate service to facilitate multimodal and inter-system transfers.
 - Policy ii: Coordinate fare and transfer policies along with service information programs.

Fresno County Regional Long-Range Transit Plan

- ✓ F. Goal: A coordinated policy for public transportation that complements land use and air quality/climate change policies.
 - F.1 Objective: Support transportation investments that work toward accomplishing air quality and climate change goals, optimizing the utilization of land and encouraging a stable economic base.
 - Policy i: Provide incentives to reduce dependency on single occupancy vehicle travel without compromising mobility.
- ✓ G. Goal: Achieve or maintain transit networks in a state of good repair.
 - G.1 Objective: Maintain assets more effectively, using condition-based approaches and using predictive and preventive maintenance strategies to reduce costs while improving service delivery.
 - Policy i: Implement a Transit Asset Management (TAM) program that uses asset conditions to help prioritize funding.
 - Policy ii: Establish Condition Assessment Process and Measurement Procedures.
 - Policy iii: Incorporate lifecycle cost, risk, and performance trade-offs into capital programming and operations & maintenance budgeting.

Title VI and Environmental Justice Overview

Title VI of the Federal Civil Rights Act (1964, as amended) states that “No person...shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied benefits of, or be subjected to discrimination under any program or

activity receiving Federal financial assistance.” Title VI establishes the basis for transportation agencies to disclose to the public the benefits and burdens of proposed projects on minority populations. Civil rights have expanded to include sex, age, disability, low-income populations through the Federal-Aid Highway Act of 1973, Age Discrimination Act of 1975, the Rehabilitation Act of 1973, Americans with Disability Act of 1990, and Executive Order 12898, 1994 (discussed further below). Title VI was further amended in 1987 to extend non-discrimination requirements for federal aid recipients to all of their programs and activities, not just those funded with federal funds. At the state level, California Government Code Section 11135 prohibits discrimination on the basis of sex, race, color, religion, ancestry, national origin, ethnic group identification, age, mental disability, physical disability, medical condition, genetic information, marital status, or sexual orientation by any agency receiving state funding.

Additionally, Title VI not only bars deliberate or intentional discrimination, but also unjustified disparate impact discrimination, even when the impacts are unintended. Disparate impacts result from policies and practices that are neutral on their face (i.e., there is no evidence of intentional discrimination), but have the effect of discrimination on protected groups. Title VI prohibits discrimination by recipients of federal financial assistance on the basis of race, color, and national origin, including the denial of meaningful access for limited English proficient (LEP) persons.

Furthering the principles of environmental justice, a 1994 Presidential Order (Executive Order 12898)

Fresno County Regional Long-Range Transit Plan

directed every federal agency to make environmental justice part of its mission by identifying and addressing disproportionately high and adverse human health or environmental effects of all programs, policies, and activities on minority populations and low-income populations. Reinforcing Title VI, this presidential order ensures that every federally funded project nationwide considers the human environment when undertaking the planning and decision-making process. The Presidential memorandum accompanying E.O. 12898 underscored certain provisions of existing law that help ensure all communities and persons live in a safe and healthful environment, and identified Title VI as one of several federal laws that should be applied “to prevent minority communities and low-income communities from being subject to disproportionately high and adverse environmental effects.” Federal and state agencies have issued a series of orders, regulations and guidance on environmental justice over the past two decades to implement and ensure compliance with Title VI and E.O. 12898.

The overlap between the statutory obligation placed on Federal agencies under Title VI to ensure nondiscrimination in federally assisted programs administered by State and local entities, and the administrative directive to Federal agencies under the Executive Order to address disproportionate adverse impacts of Federal activities on minority and low-income populations explain why Title VI and Environmental Justice are often paired. The clear objective of the Executive Order to ensure that Federal agencies promote and enforce

nondiscrimination as one way of achieving the overarching objective of environmental justice.

At the federal level, Environmental Justice and Title VI requirements include:

- ✓ Federal environmental justice objectives aimed at avoiding disproportionately high and adverse effects on minority and low-income populations.
- ✓ Civil rights protections against discrimination in federally-funded programs and federal aid recipients on the basis of a person’s race, color, or national origin.

At the state level, requirements include civil rights protections against discrimination on the basis of:

- ✓ Sex (Gender)
- ✓ Race
- ✓ Color
- ✓ Religion
- ✓ Ancestry
- ✓ National Origin
- ✓ Ethnic Group Identification
- ✓ Age
- ✓ Mental Disability
- ✓ Physical Disability
- ✓ Medical Condition
- ✓ Genetic Information
- ✓ Marital Status
- ✓ Sexual Orientation

Environmental justice is defined as the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to developing, implementing and enforcing environmental laws, regulations, and policies. Fair treatment means that no group of people should

Fresno County Regional Long-Range Transit Plan

bear a disproportionate share of the negative environmental consequences resulting from industrial, governmental and commercial operations or policies.

Meaningful involvement means:

- ✓ People have an opportunity to participate in decisions about activities that may affect their environment and/or health
- ✓ The public's contribution can influence the regulatory agency's decision
- ✓ Community concerns will be considered in the decision-making process
- ✓ The decision-makers seek out and facilitate the involvement of those potentially affected

Fresno COG and its RTP/SCS: Environmental Justice Approach

At the regional level, Fresno COG has adopted environmental justice principles and objectives that promote equity throughout the agency's regional planning efforts. Specific goals and strategies are identified in the RTP/SCS in Chapter 2: Policy Elements and Chapter 4: Action Element. Appendix H of the RTP/SCS summarizes the full Environmental Justice Analysis.

For Fresno COG, Environmental Justice means identifying and addressing disproportionately high and adverse effects if any as a result of the RTP/SCS programs and policies on minority populations and low-income populations. The overall goal is to achieve an equitable distribution of benefits and burdens of transportation investments, programs and activities. This also includes the full and fair

participation by all potentially affected communities in the transportation decision-making process. Considering Environmental Justice helps policymakers, local jurisdictions and the public understand the equity-related implications of implementing the RTP in the region, especially in the disadvantaged communities.

Environmental justice analysis helps policymakers, local jurisdictions and the public understand the equity-related implications of implementing the RTP in the region, especially in the disadvantaged communities. The 2018 RTP/SCS includes a detailed analysis (summarized in Appendix H of the RTP/SCS). This analysis demonstrates Fresno COG's compliance with federal and state requirements related to Title VI of the Civil Rights Act and related Environmental Justice policies.

Fresno COG has enunciated three main principles underlying its environmental justice efforts:

- ✓ To avoid, minimize, or mitigate disproportionately high and adverse human health or environmental effects, including social and economic effects, on minority and low-income populations.
- ✓ To provide opportunities for full and fair participation by all potentially affected communities in the transportation decision making process.
- ✓ To prevent denial of, reduction in, or significant delay in the receipt of benefits by minority and low-income populations

The RTP/SCS Environmental Justice Analysis attempted to measure both the benefits and burdens associated with the transportation

Fresno County Regional Long-Range Transit Plan

investments included in the 2018 Regional Transportation Plan, and to ensure environmental justice communities living within Fresno County share equitably in the benefits of the Plan's investments without bearing a disproportionate share of the burden.

Implications for Long-Range Transit Plan

The LRTP, like the 2018 RTP was developed with meaningful and extensive participation from key stakeholders, including community-based advocates, public agencies, the private sector, and individual residents. The next chapter (Chapter III) describes the public outreach efforts, many of which were specifically aimed at reaching and engaging EJ communities and disadvantaged population groups. No LRTP projects will go forward until they are first incorporated into a future RTP/SCS subject to a detailed Title VI and Environmental Justice Analysis as was performed for the 2018 RTP/SCS.

General Plan Review

County of Fresno General Plan

Transit systems provide alternatives to automobile use and are especially important for those who do not travel by automobile. As Fresno County continues to grow the need for transit will increase. The General Plan supports expansion of the existing transit system, especially in connection with new development. The Goals, Policies, and Implementation Measures in the Transportation and Circulation Element section seek to develop a safe and efficient mass transit system by promoting transit services within urban corridors of dense

population and employment, developing multi-model stations that link rail with other transportation modes, addressing user needs, developing convenient transfers between transportation systems, and ensuring adequate funding for the system.

Goals, Policies, and Implementation Programs

The County of Fresno's Transportation and Circulation Element contains the following goals, policies, and implementation programs related to transit:

- ✓ **Goal TR-B:** To promote a safe and efficient mass transit system that provides service to residents without access to automobiles and, in urban areas, helps to reduce congestion, improves the environment, and provides viable non-automotive means of transportation.
 - **Policy TR-B.1:** The County shall work with transit providers to provide transit services within the county that are responsive to existing and future transit demand and that can demonstrate cost-effectiveness by meeting minimum farebox recovery levels required by State and Federal funding programs.
 - **Policy TR-B.2:** The County shall promote transit services in designated corridors where population and employment densities are sufficient or could be increased to support those transit services, particularly within the spheres of influence of the cities and along existing transit corridors in the rural area of the county.
 - **Policy TR-B.3:** The County shall work with

Fresno County Regional Long-Range Transit Plan

the Cities of Fresno and Clovis and other agencies to achieve land use patterns and densities in areas planned for development that support transit services, preserve adequate rights-of-way, and enhance transit services in the designated transit corridors.

- **Policy TR-B.4:** The County shall work with the Fresno Council of Governments and transit service providers to pursue all available sources of funding for transit services when consistent with General Plan policies and long-term funding capabilities.
- **Policy TR-B.5:** The County shall consider the transit needs of senior, disabled, low-income, and transit-dependent persons in making recommendations regarding transit services.
- **Policy TR-B.6:** The County shall encourage the development of facilities for convenient transfers between different transportation systems (e.g., train-to-bus, bus-to-bus).
 - **Program TR-B.A:** The County shall work with the Fresno COG and transit providers in the county to periodically review and update the short-range transit plans in the county at least as often as required by State law. (See Policy TR-B.1)
 - **Program TR-B.B:** The County shall encourage transit providers and Fresno COG to prepare, adopt, and implement a long-range strategic transit master plan for the County or subareas of the county. The master plan shall review the transit corridors in this Policy Document and designate a set of transit corridors so that appropriate planning can be

concentrated on these corridors. The plan(s) shall be reviewed and updated on a regular basis. (See Policy TRB.1)

- **Program TR-B.C:** Through its representation on the Fresno COG Board and the Fresno County Rural Transit Agency, the County shall work with these agencies to identify and pursue funding for transit. (See Policy TR-B.4)
- ✓ **Goal TR-E:** To plan for a safe, efficient, and environmentally-sound rail system to meet the needs of all Fresno County residents, industry, commerce, and agriculture.
 - **Policy TR-E.5:** The County shall support multi-modal stations at appropriate locations to integrate rail transportation with other transportation modes.
 - **Policy TR-E.6:** The County shall support the development of a statewide high-speed rail service through the Central Valley that serves downtown Fresno and that parallels the Burlington Northern/Santa Fe corridor south of the City of Fresno, the Union Pacific corridor through the City of Fresno, and is capable of accommodating the rapid movement of freight during nighttime, nonpassenger usage hours.
 - **Program TR-E.C:** The County shall participate in the Fresno COG Rail Committee to support improvement, development, and expansion of rail services in Fresno County. (See Policy TR- E.6)

Fresno County Regional Long-Range Transit Plan

City of Clovis General Plan

Goals and Policies

The City of Clovis' Circulation Element contains the following goals and policies related to transit:

- ✓ **Goal 3:** A multimodal transportation network that is safe and comfortable in the context of adjacent neighborhoods.
 - **Policy 4.5 Transit stops:** Improve and maintain safe, clean, comfortable, well-lit, and rider-friendly transit stops that are well marked and visible to motorists.
 - **Policy 4.6 Transit priority corridors:** Prioritize investments for, and transit services and facilities along the transit priority corridors.
 - **Policy 4.7 Bus rapid transit:** Plan for bus rapid transit and transit-only lanes on transit priority corridors as future ridership levels increase.

Loma Vista Specific Plan

The City of Clovis General Plan identifies Urban Centers where outward growth may occur, and to ensure that this growth is consistent with the General Plan's goals and policies. The Loma Vista Urban Center is implemented by the Loma Vista Specific Plan, which outlines guiding principles and a comprehensive land use plan.

Loma Vista is located immediately east of the City of Clovis. The area encompasses approximately 3,307 acres and is bounded by Locan Avenue to the west, McCall Avenue to the east, portions of Bullard

Avenue and Shaw Avenue to the north, and the Gould Canal to the south. The concept for the development of Loma Vista is that of a high-quality residential community focused around two core areas, called community centers, a business campus, and the Reagan Educational Center. Key features of Loma Vista are four Master Planned Communities: Community Center South, Community Center North, Gettysburg/Ashlan, and the Eastern Village. These Master Planned Communities identify distinct areas that are unified around a central amenity, such as a golf course, mixed-use urban village, community center, recreational feature, and/or lake.



Transit

The Specific Plan details how the City of Clovis operates two types of public transit service, Clovis Stageline and Clovis Round Up. Clovis Stageline provides to the general public a fixed-route service within the City limits. Clovis Round Up provides elderly and disabled residents with a specialized demand-responsive service, with scheduled trips

Fresno County Regional Long-Range Transit Plan

within Clovis and Fresno. Additionally, the City of Clovis has designated Round Up services as the Consolidated Transportation Service Agency for the Clovis transit service area. The location of bus transit routes is in response to land use plans and changing ridership patterns. These local and regional bus transit routes shall occur along expressways, arterials, and collector streets to provide access to activity areas such as the Community Center North, Community Center South, the Reagan Educational Center, and the Eastern Village.

The following policies govern the development of transit facilities:

- ✓ Bus bays shall be constructed where bus stops serve activity areas to preserve major street capacity.
- ✓ Bus stop facilities, furniture, and shelters may be designed to reflect the character, style, and materials of their locations as permitted by the Director.
- ✓ Pending adoption of a Transit Facilities Master Plan, the Fresno Area Express Transit Facilities and Development Standards shall guide the City's evaluation of transit facilities.

Transit planning in Clovis is performed through the City of Clovis Short-Range Transit Plan (SRTP). The purpose of the SRTP 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.

Shaw Avenue Corridor Plan

Through the General Plan, the City of Clovis identified a two-and-a-half-mile stretch of Shaw Avenue as a focus area for long term planning and reinvestment. Shaw Avenue links California State University, Fresno (Fresno State) and older, economically disadvantaged neighborhoods to the west with Loma Vista, the newly developing community on the east side of the City.

The Shaw Avenue Corridor Plan covers a 2½-mile stretch of Shaw Avenue from State Route 168 on the west to Clovis Avenue on the east. The overall study area also includes land roughly one-half mile north and south of Shaw Avenue (Barstow Avenue and Gettysburg Avenue, respectively). The study area encompasses the City of Clovis, City of Fresno, and the Fresno State.

Transit

Fresno Area Express (FAX) and the City of Clovis' Stageline provide fixed-route bus service along the Shaw Avenue Corridor. Bus stops are located along multiple locations along Shaw Avenue, which include the following:

- ✓ FAX Route 9 travels the length of the corridor, connecting the plan area to Sierra Vista Mall, Fresno State, Fashion Fair Mall, Fig Garden Village, and other businesses along Shaw Avenue in Fresno.
- ✓ FAX Route 28 serves the western end of the corridor, traveling eastbound on Shaw Avenue before turning south on Willow Avenue, and back west on Gettysburg Avenue.

Fresno County Regional Long-Range Transit Plan

- ✓ The Clovis Stageline Route 10 also serves the western end of the corridor, traveling southbound on Willow Avenue before turning west on Gettysburg Avenue, and traveling eastbound on Shaw Avenue before turning north on Willow Avenue.
- ✓ Stageline Route 50 serves the eastern end of the corridor, traveling westbound on Shaw Avenue before turning south on Minnewawa Avenue, and traveling northbound on Villa Avenue before turning eastbound on Shaw Avenue.

The Shaw Avenue Corridor Plan will also consider the use of bus rapid transit (BRT) by FAX, and other transit systems that could connect Shaw Avenue with major employment centers, and with CSU Fresno.

City of Coalinga General Plan

Transit Overview

The Fresno County Rural Transit Agency provides transit service to rural communities throughout Fresno County, including the City of Coalinga. Passenger fares for these services are subsidized to encourage frequent trips. Coalinga Transit provides demand responsive weekday service in the City of Coalinga, and scheduled round-trip inter-City service to the Fresno-Clovis Metropolitan Area is available Monday through Saturday. Coalinga's Dial-A-Ride Program provides transportation services within the city limits and operates five days a week, Monday through Friday.

Goals, Policies, and Implementation

The City of Coalinga's Circulation Element contains the following goals, policies, and implementation measures related to transit:

- ✓ **Policy C1-6:** Shall encourage the use of transportation alternatives that reduce the use of personal vehicles.
 - **Implementation Measure C1-6.3:** Support positive incentives such as carpool and vanpool parking, bus turnouts, and pedestrian-friendly project designs to promote the use of transportation alternatives.
- ✓ **Policy C1-7:** Shall require that transit service is provided in all areas of Coalinga, so that transit dependent residents of those areas are not cut off from community services, events, and activities.
 - **Implementation Measure C1-7.1:** Shall require that any local or regional transit agency serving Coalinga serve all areas of the city.

City of Firebaugh General Plan

Transit Overview

The FCRTA provides transit services Monday through Friday during regular business hours to the elderly, disabled, low-income, and general public within each of the thirteen rural incorporated cities of Fresno County, including Firebaugh. Firebaugh Transit, operated by FCRTA, provides local in-city transit services Monday through Friday. The FCRTA's Westside transit route also provides multiple

Fresno County Regional Long-Range Transit Plan

scheduled round trip inter-city service through Firebaugh to the Fresno-Clovis Metropolitan Area (FCMA).

Goals, Objectives and Action Plans

The City of Firebaugh's Circulation Element contains the following goals, objectives, and action plans related to transit:

- ✓ **Goal 1:** Promote alternative modes of transportation, by improving transit service and encouraging transit use.
 - **Objective 1:** Facilitate the provision of convenient, frequent, dependable and efficient transit for Firebaugh residents.
 - **Action Plan B:** Improve and expand transit line coverage and frequency throughout Firebaugh and to adjacent cities, with particular emphasis on service to the downtown, employment centers, and social services.
 - **Action Plan C:** Conduct surveys of riders periodically to determine effectiveness of the system.

City of Fowler General Plan

Transit Overview

The Fowler General Plan describes the importance of encouraging public transit systems and increased use of alternative modes of transportation. The public transit system alternatives for the City of Fowler include fixed route public transit systems, common bus carriers, and other local agency transit and paratransit services. The City also supports reliable

and efficient paratransit services such as carpooling, van pooling, taxi service, and dial-a-ride programs by encouraging development of service systems that satisfy the transit needs of the elderly and physically disabled.

The FCRTA operates fixed-route services that link communities with each other and with the Fresno-Clovis Metropolitan Area. FCRTA's fixed routes connect all the cities and unincorporated communities in Fresno County, including the City of Fowler. FCRTA supports a number of specialized transportation programs, including shared-ride car and vanpool services, social service dial-a-ride, and specialized services for seniors and persons with disabilities

Fowler Transit provides local in-city transit services from Monday through Friday. The FCRTA's Southeast Transit route provides multiple scheduled round trip inter-city service through Fowler to the Fresno-Clovis Metropolitan Area (FCMA).

Goals, Policies and Standards

The City of Fowler's Circulation Element contains the following goals, policies, and standards related to transit:

- ✓ **Goal 5-10:** Encourage the use of public/mass transportation services to reduce reliance on the automobile.
- **Policy 1:** Encourage transit alternatives to meet the basic transportation needs of the young, the elderly, the disabled, and people without access to an automobile.

Fresno County Regional Long-Range Transit Plan

- **Policy 3:** Support the expansion and improvement of transit systems and ride sharing programs to reduce the production of automobile emissions.
- **Policy 5:** Support transit operators' programs to increase transit usage.
- **Policy 6:** Support all operator efforts to maximize revenue sources for short- and long-range transit needs that utilize all funding mechanisms available including federal grants, state enabling legislation, and farebox revenue. This can be accomplished through Fresno COG and the Fresno County Rural Transit Agency through the development of the Short- and Long-Range Transit Plans.
- **Policy 7:** Support programs developed by transit agencies/operators to provide paratransit service.
- **Policy 8:** Incorporate the potential for public transit service in the design of major trip attractors (i.e. community centers and employment centers).
- **Policy 9:** Support continued improvements to Amtrak rail passenger service within Fresno County and throughout the San Joaquin Valley.

together these systems potentially serve a population of 650,000. The FAX bus system includes 15 standard fixed routes of bus service and one express bus connection between the Riverpark regional commercial center, and Children's Hospital of Central California. Many routes converge on Downtown and meet at the main transit center located on M Street and Fresno Street. Most of the FAX routes operate at 30-minute frequencies, with four routes providing 20-minute frequencies during peak commute periods.

The FAX bus system also provides connections to the Amtrak passenger rail station and the Greyhound bus station, both of which are located in Downtown. Both Amtrak's San Joaquin line, and Greyhound provides daily services traveling both northbound to the San Francisco Bay Area and southbound to Los Angeles. Intercity bus service is also provided by Orange Belt Stages and Transportation Inter-Californias. Handy Ride, a demand-response service, provides transportation for older adults and persons with disabilities. The FCRTA provides transit services to communities located outside of the Fresno-Clovis Metropolitan area. Additionally, the Fresno County Economic Opportunities Commission provides transportation for access to specific social services.

City of Fresno General Plan

Transit Overview

The City of Fresno operates Fresno Area Express (FAX), the City's major provider of urban public transportation services. The FAX fixed route conventional bus transportation system integrates with the City of Clovis' fixed route system, and

Bus Rapid Transit (BRT)

A first phase of the Bus Rapid Transit (BRT) system is operating along the Ventura Street/Kings Canyon Road and the Blackstone Avenue corridors, meeting in Downtown Fresno. In addition, Shaw Avenue will be served by enhanced bus service while BRT is envisioned on California Ave. as part of the second phase.

Fresno County Regional Long-Range Transit Plan

The General Plan supports the BRT system through designation of complementary land uses along and near its routes, such as higher-density development and land uses that may gravitate toward use of the BRT.

High-Speed Rail (HSR)

The California High-Speed Rail (HSR) will also serve as a regional transportation system for Fresno and surrounding communities. The proposed HSR line, if approved and funded, would ultimately extend through the San Joaquin Valley, linking San Francisco with Los Angeles. When HSR is built, the City ultimately plans to link the FAX and BRT systems with the Downtown Fresno HSR station.



Objectives and Policies

The City of Fresno's Mobility and Transportation Element contains the following objectives and policies related to transit:

- ✓ **Objective MT-8:** Provide public transit options that serve existing and future concentrations of residences, employment, recreation and civic

uses and are feasible, efficient, safe, and minimize environmental impacts.

- **Policy MT-8-a: Street Design Coordinated with Transit.** Coordinate the planning, design, and construction of the major roadway network with transit operators to facilitate efficient direct transit routing.
- **Policy MT-8-b: Transit Serving Residential and Employment Nodes.** Identify the location of current and future residential and employment concentrations and Activity Centers throughout the transit service area in order to facilitate planning and implementation of optimal transit services for these uses. Work with California State University, Fresno to determine locations within the campus core for bus stops.
- **Policy MT-8-c: New Development Facilitating Transit.** Continue to review development proposals in transportation corridors to ensure they are designed to facilitate transit. Coordinate all projects that have residential or employment densities suitable for transit services, so they are located along existing or planned transit corridors or that otherwise have the potential for transit orientation to FAX, and consider FAX's comments in decision-making.
- **Policy MT-8-d: Coordination of Transportation Modes.** Plan, design, and implement transportation system improvements promoting coordination and continuity of transportation modes and facilities, such as shared parking or park and ride facilities at Activity Centers.

Fresno County Regional Long-Range Transit Plan

- **Policy MT-8-e: Regional Coordination.** Continue to work with local and regional governmental institutions to promote efficient transportation policies and coordinated programs.
- **Policy MT-8-f: Multi-modal Downtown Transportation Facility.** Support the development of a multi-modal transportation facility in Downtown.
- **Policy MT-8-g: High Speed Train.** If the State moves forward with HST, ensure it is constructed through Fresno in a manner that minimizes impacts to surrounding property owners and creates the most opportunity for redevelopment around the HST station.
- **Policy MT-8-h: Move Forward with High Speed Train Station Area Planning.** Work with local residents, property and business owners, and other stakeholders to develop a station area plan to provide the most opportunity for growth and prosperity in concert with development of the Fresno HST station.
- **Policy MT-8-i: Legislative Support.** Monitor State and federal legislation that creates incentives to reduce auto dependency and support the use of alternatives to the single occupant vehicle and support legislation that is consistent with the General Plan.
- **Policy MT-8-j: Transit Services.** Emphasize expansion of transit service in low income neighborhoods that lack appropriate service levels.
- ✓ **Objective MT-9:** Provide public transit opportunities to the maximum number and diversity of people practicable in balance with providing service that is high in quality, convenient, frequent, reliable, cost- effective, and financially feasible.
- **Policy MT-9-a Equitable Transit Provision:** Provide transit that can serve all residents, including older residents and persons with disabilities.
- **Policy MT-9-b: Transit Service Productivity Evaluation.** Continue to evaluate transit service productivity and cost efficiency indicators in the City's Short-Range Transit Plan, and make necessary and appropriate service adjustments when operationally and financially feasible.
- **Policy MT-9-c: Addressing Unmet Transit Needs.** Continue to participate in the Fresno Council of Governments' annual unmet transit needs evaluation process, particularly with respect to identifying need for access to medical and educational services; perform market analysis to identify potential transit choice riders; and pursue public education and information programs to identify changes in demand characteristics and opportunities to increase ridership.
- **Policy MT-9-d: Long-Range Transit Options.** Advocate and participate in regional transportation analyses and identify appropriate long-range measures to support incorporation of light rail transit and other advanced transit service within major transportation corridors, freeway and railroad alignments.

Fresno County Regional Long-Range Transit Plan

- **Policy MT-9-e: Area Specific Transit Improvements.** Continue to evaluate and pursue the planning and implementation of area specific transit improvements, such as street car facilities.

City of Huron General Plan

Transit Overview

The City of Huron's transit needs are served by the FCRTA, through a local Dial-A-Ride service to the residents and visitors of Huron, as well as an inter-city fixed route service between Huron and Coalinga and to the Fresno-Clovis Metropolitan Area. Transit services are available Monday through Friday.

Goals, Objectives, and Policies

The City of Huron's Circulation Element contains the following goals, objectives, and policies related to transit:

- ✓ **Goal 1:** To design and maintain a fully integrated local network that provides for safe and convenient circulation using a variety of transportation modes.
 - **Objective B:** Enhance the availability and accessibility of alternative modes of transportation, such as walking, bicycling, carpools, buses and rail.
 - **Policy 5.66:** Ensure choices among modes of travel and give priority to each mode when and where it is most appropriate.
 - **Policy 5.67:** Provide incentives for the use of transit, carpools and vanpools.

- **Policy 5.68:** Coordinate the City's dial-a-ride system with regional transit services.
- **Policy 5.69:** Arterials and collectors will be designed to allow transit vehicles to pull out of traffic. This policy may be implemented with either a continuous parking lane with bus stops, or with special bus pull-out lanes.
- **Policy 5.70:** Give a high priority to public transportation systems which are responsive to the needs of the commuter, aged, handicapped, and disadvantaged.

City of Kerman General Plan

Transit Overview

Kerman Transit's Dial-A-Ride provides demand responsive services to the general public within the Kerman Unified School District boundaries. This public transit system is operated by the City of Kerman, with cooperative funding provided by the County of Fresno.

The FCRTA operates the Westside Transit, which provides multiple scheduled round trip inter-city service through Kerman to the Fresno-Clovis Metropolitan Area (FCMA).

Policies and Action Plans

The City of Kerman's Circulation Element contains the following policies and action plans related to transit:

Fresno County Regional Long-Range Transit Plan

- ✓ **Policy 1:** The City shall promote all modes of transportation, including mass transit (buses, etc.) bicycle and walking.
 - **Action A:** Through the 5-year capital budget, the City Council should insure that gasoline tax and transportation fund are spent on all modes of transportation

City of Kingsburg General Plan

Transit Overview

Within the City of Kingsburg, mini-bus service provides local in-city demand response and inter-city fixed-route transit services. The Kingsburg to Reedley College Transit provides scheduled round trip service between Kingsburg, Selma, Fowler, and Parlier to Reedley College, Monday through Friday. The FCRTA's Southeast transit route also provides multiple scheduled round trip inter-city service through Kingsburg to the Fresno-Clovis Metropolitan Area (FCMA).

In time, bus service in the City of Kingsburg may be expanded to a scheduled bus system. The planning for a bus system is to be considered a fundamental policy of the General Plan.

City of Mendota General Plan

Transit Overview

Mendota Transit provides local in-city demand responsive transit services to the general public Monday through Friday. FCRTA services are available to the elderly (60+), disabled, low income and

general public patrons within 13 incorporated cities of Fresno County, including Mendota. The FCRTA has transit subsystems that are offered on a demand responsive and/or scheduled, fixed route basis. The FCRTA's Westside transit route also provides multiple scheduled round trip inter-city service through Mendota to the Fresno-Clovis Metropolitan Area (FCMA).

The General Plan discusses how future transit needs in Mendota include both internal circulation and commute services, and how policies in the General Plan support the use and expansion of transit services. The City will continue to coordinate with FCRTA to expand service within Mendota, and between Mendota and other Fresno County destinations. The City will also work with regional transit agencies to coordinate services between the City and major employment centers within Fresno County.

Goals and Policies

The City of Mendota's Circulation Element contains the following goals and policies related to transit:

- ✓ **Goal C-5:** Provide public and private transportation system options to facilitate the mobility of all City residents while reducing potential traffic congestion.
 - **Policy C-5.1:** Encourage increased public transportation within the City.
 - **Policy C-5.2:** Expand available public and private transit options for Mendota residents.

Fresno County Regional Long-Range Transit Plan

City of Orange Cove General Plan

Transit Overview

The City of Orange Cove's General Plan explains that the FCRTA generally provides transit services Monday through Friday during regular business hours to the elderly, disabled, low income, and general public within each of the thirteen rural incorporated cities of Fresno County, including Orange Cove.

Orange Cove Transit provides local in-city transit to the general public Monday through Friday. Orange Cove Transit also provides multiple scheduled round trip inter-city service through Orange Cove, Reedley, Parlier, and Sanger to the Fresno-Clovis Metropolitan Area.

Goals, Objective and Action Plans

The City of Orange Cove's Circulation Element contains the following goals, objectives, and action plans

related to transit:

- ✓ **Goal II.** Reduce automobile use by improving transit service and encouraging transit use.
 - **Objective 1.** Facilitate the provision of convenient, frequent, dependable and efficient scheduled transit for Orange Cove residents.
 - **Action Plan A:** New developments adjacent to arterial or collector streets shall include bus loading zones at appropriate locations.
 - **Action Plan B:** All arterial streets shall be designed to accommodate buses and bus loading zones.

- **Action Plan C:** Improve transit line coverage and frequency throughout Orange Cove and to adjacent cities, with particular emphasis on service to the downtown, employment centers, and social services.

City of Parlier General Plan

Transit Overview

The FCRTA is the primary provider of rural transportation for the general public. The FCRTA provides fixed- route services which link communities with each other and with the Fresno-Clovis Metropolitan Area. Intra-community public transportation service (fixed route and/or demand-response) is provided through public, private or non-profit entities. FCRTA currently contracts with the Rural Consolidated Transportation Services Agencies (CTSA) public transit subsystems, including Parlier Transit.

Parlier Transit provides demand responsive service in the community from Monday through Friday. Orange Cove Transit also provides multiple scheduled round trip inter-city service through Parlier, to the Fresno-Clovis Metropolitan Area.

Objective, Policies, and Standards

The City of Parlier's Circulation Element contains the following objectives, policies, and standards related to transit:

- ✓ **Objective A:** Promote the use of alternative modes of transportation to reduce dependence

Fresno County Regional Long-Range Transit Plan

on the private automobile and reduce air emissions.

- **Policy 1.** Encourage transit alternatives to meet the basic transportation needs of the young, the elderly, the handicapped, and people without access to an automobile.
 - **Standard A:** Maintain opportunities for a transit center within the City where alternative transit modes would connect.
 - **Standard B:** Encourage and provide for ride sharing, park and ride, and other similar commuter energy savings programs.

City of Reedley General Plan

Transit Overview

The City of Reedley's Community Services Department runs a twelve-passenger advance-reservation van, with on-call door-to-door van service from Monday through Friday. These vans provide service to the City's downtown stores and offices (including City Hall, Post Office, and Library), the Hot Meals program at the Community Center, the shopping centers at Buttonwillow and Manning Avenues, the Adventist Medical Center Hospital and the other locations within a two-mile radius of Reedley. These vans are also used to transport children from their housing to the local schools.

The General Plan also discusses how Reedley College operates a bus which connects Sanger, Fowler, Selma, and Parlier with Reedley College. The Kings Canyon Unified School District also provides bus

service within its service area, however both operations are limited solely to students.

Reedley Transit provides local in-city demand responsive service from Monday through Friday. The FCRTA operates Orange Cove Transit, a bus service that provides inter-city transit from Monday through Friday, twice a day each way, from Orange Cove to the City of Fresno. There are three stops in the City of Reedley at Manning and Buttonwillow, East and Springfield, and Manning and Reed.

Dinuba Area Regional Transit (DART) operates a bus that runs from Reedley College, Adventist Medical Center Hospital and Palm Village to the Dinuba Transit Center. The service operates at different times ranging from five times a day during the school year to seven times a day in the summer.

Goals and Policies

The City of Reedley's Circulation Element contains the following goals and policies related to transit:

- ✓ **Goal 3.5A:** Promote the variety of public transit connections with other nearby cities and locations.
 - **Policy 3.5.1:** Continue to evaluate public transit needs.
 - **Policy 3.5.2:** Explore increased transit opportunities with nearby cities.

Fresno County Regional Long-Range Transit Plan

City of San Joaquin General Plan

Transit Overview

The City of San Joaquin is a member of the FCRTA. The FCRTA is responsible for overall coordination of intra-city and inter-city service for the rural public transit services.

Under an inter-agency agreement with the City of San Joaquin, the FCRTA contracts with the Fresno County Economic Opportunities Commission as the Rural CTSA. This Contract allows San Joaquin Transit to maintain a publicly operated demand response accessible transit service, Monday through Friday. Currently, San Joaquin Transit provides in-city and inter-city service from San Joaquin to Tranquility, Cantua Creek, Halfway, El Porvenir, and Three Rocks.

Goals and Objectives

The City of San Joaquin's Circulation and Transportation Element contains the following goals and objectives related to transit:

- ✓ **Goal CIR 3:** An accessible and affordable transportation system.
 - **Objective CIR 3.2:** Maintain a fixed route bus system to serve San Joaquin and provide access to surrounding cities.
 - **Objective CIR 3.3:** Maintain carpool and vanpool programs that serve the residents and businesses of the City of San Joaquin.
 - **Objective CIR 3.4:** The City supports regional efforts to implement improved bus service that encourages residents to utilize public

transportation and rideshare services and decreases dependency on single-occupancy vehicles.

City of Sanger General Plan

Transit Overview

In cooperation with the FCRTA, Sanger Transit provides a fixed route and demand responsive intra-city transit service. This service links residential and commercial development within the community, and is available Monday through Friday. Orange Cove Transit also provides multiple scheduled round trip inter-city service through Sanger to the Fresno-Clovis Metropolitan Area. Passenger rail service is available at the Amtrak terminal located in Downtown Fresno, and is accessible via Orange Cove Transit.

As growth and development occur, future transit needs for the City of Sanger will be identified through development of the FCRTA Short Range Improvement Plan and the Fresno County Regional Transportation Plan.

Goals and Policies

The City of Sanger's Circulation and Transportation Element contains the following goals and policies, related to transit:

- ✓ **Goal 5:** Promote development of a safe, efficient, convenient and economical community, inter-community and citywide public transportation system.

Fresno County Regional Long-Range Transit Plan

- **Policy 1:** Support transit service through the Fresno County Rural Transit Agency that adequately serves low-income residents, students, and the elderly and physically disabled.
- **Policy 2:** The City, through FCRTA and development of the Fresno County Short Range Transit Plan (SRTP), should help identify short and long-range transit needs and maximize revenue sources utilizing all funding mechanisms including federal grants, State enabling legislation, and farebox revenue.
- **Policy 3:** The City and FCRTA should distribute complete and accurate public transit information.
- **Policy 4:** Support the coordination and consolidation of social service transportation through the Fresno County Consolidation Transportation Service Agency (CTSA) administered by the Fresno County Economic Opportunities Commission (EOC) to promote efficiency and optimum use of existing transit resources.
- **Policy 5:** Encourage safety, reasonable fares and the provision of adequate service to meet reasonable transit needs.

City of Selma General Plan

Transit Overview

The City of Selma is served by a City fixed-route transit system and Dial-a-Ride system. The FCRTA's Southeast transit route also provides multiple scheduled round trip inter-city service through Selma to the Fresno-Clovis Metropolitan Area.

Policies and Standards

The City of Selma's Transportation and Circulation Element contains the following goals, policies, and implementation measures related to transit:

- ✓ **2.1:** Coordinate demand-responsive transit service in conjunction with the Fresno Council of Governments and Fresno County.
- ✓ **2.2:** Coordinate convenient and efficient transit service to the elderly, handicapped, and low income population of the City and its environs.
- ✓ **2.3:** Coordinate transit services through the City Manager and in conjunction with surrounding cities, and the County of Fresno, and Fresno Council of Governments.
- ✓ **2.4:** Cooperate with Fresno COG in providing transit service and planning to meet the social and economic needs of all segments of the community.
- ✓ **2.5:** Encourage benches, telephones and shaded areas at major transit destinations so people can utilize the transit system safely and comfortably. The City shall determine such need based on site plan review procedure and other planning implementation methods.
- ✓ **2.6:** Major arterials, arterials, and collectors will be designed to allow transit vehicles to pull out of traffic. This policy may be implemented with either a continuous parking lane with bus stops, or with special bus pull-out lanes.
- ✓ **2.7:** Transit centers/stops shall be established to encourage the interface between commercial centers, high density residential uses and the transit system.

Key Findings from the Existing Conditions and Plan Review

- ✓ Bus Rapid Transit (BRT) long-planned, is a reality. BRT will form the core of the regional transit system in the decades ahead.
- ✓ Though many General Plans' policies support it, transit-friendly land use remains scarce. While some progress is evident (e.g. downtown Fresno developments and recent Specific Plans in Clovis), much of Fresno County is not transit-oriented.
- ✓ Coverage and Ridership are important, and sometimes conflicting goals for transit.
- ✓ The importance of Active Transit is growing, as are interest and funding.
- ✓ Sustainable funding is an ongoing challenge.
- ✓ Operators' farebox revenues have been declining (this is true throughout California).
- ✓ Vanpooling is a success story, and represents a good model for partnerships.
- ✓ Communications technology is fundamentally changing the transit environment.



Chapter III

Public Outreach



Chapter III. Public Outreach

Following the Plan Review, an extensive public outreach effort was conducted for the LRTP. Public outreach is a problem-solving approach, which brings together community members and planners to discuss complex issues facing the communities and their residents. Working together to achieve a common goal, this partnership encourages affected parties to bring forward unique ideas and solutions to potential issues. As each community member is different, so too are their hopes and aspirations regarding transit and the ways to implement it. By listening to as many voices as possible, the decisions generated will reflect the greater community at large.

The process of community engagement is most successful when the process is transparent with access to decisions, services, and information for all interested stakeholders and community members. The active participation of the community ensures that the outcomes are better tuned to meeting the community's needs today and into the future. State and federal transportation laws, regulations, policies, and guidance require and encourage public involvement throughout the planning process, particularly in regard to environmental justice populations and underserved communities, including low-income and minority populations.

Public Engagement Plan

It was vital to have a written document that clarified the outreach program for the Fresno County Long-Range Transit Plan (LRTP) to ensure that affected

agencies, and the public understood how they could become involved and provide input during the Plan development process. Hence, a Public Engagement Plan (PEP) was prepared that clearly describes the outreach program.

The aim of the LRTP PEP was to connect with community stakeholders; including community members, schools, public agencies, underserved populations, business communities, and community-based organizations, youth, seniors, and elected officials. An integral part of the plan was to reach bus passengers, businesses, and property owners, particularly those near transit routes. The database of contacts developed by the Fresno Council of Governments (Fresno COG), Fresno Area Express (FAX), Fresno County Rural Transit Agency (FCRTA), Clovis Transit, and the Consultant Team's existing databases covering Fresno County served as the mailing list for meetings, announcements, dissemination of Plan documents and other initial Plan notices.

Multiple public engagement and information strategies and activities were conducted to generate interest and participation from the community. Key among these strategies were public workshops, pop-up events, and community surveys.

Public Participation Objectives

For the public and agencies to effectively provide input to the LRTP, they should be adequately informed about the Plan and understand the details associated with the analysis. The PEP was designed to provide a roadmap for the process that maximizes public engagement and information at the same

Fresno County Regional Long-Range Transit Plan

time that it creates opportunities for stakeholders and interested members of the public to provide input. The objectives of the PEP were:

- ✓ Establish a cooperative, continuous, and comprehensive framework for making transit and transportation investment decisions.
- ✓ Encourage early and continuous engagement of L RTP stakeholders and the public.
- ✓ Maximize engagement opportunities and disseminate L RTP information in a proactive and timely manner.
- ✓ Provide clear, concise information regarding the L RTP.
- ✓ Build awareness among the general public and decision makers utilizing innovative methods and combinations of diverse public engagement techniques and strategies.
- ✓ Establish opportunities for early and continuing public engagement with adequate notice for participation.
- ✓ Provide stakeholders and the public with timely information and reasonable access to technical and policy information utilized in the development of plans and programs.
- ✓ Provide stakeholders and the public a reasonable opportunity to comment on the proposed Plan by utilizing methods, aside from traditional public meetings, such as email correspondence and web-based outreach strategies.
- ✓ Include a formal process that shows consideration to comments from public participants and responds to stakeholder and public input received during the public engagement process.

Public Engagement Activities

To go beyond official plans, and receive input on the L RTP development process, the L RTP Team utilized several participation and communication methods and techniques. An important goal was to ensure continuous public access to L RTP information throughout the planning process. Public engagement activities and related materials incorporated the use of the L RTP's vision statement:

*"A welcoming, responsive, integrated, public transportation system that is **safe**, affordable, uses **innovative technologies**, provides equitable **access**, **enhances regional and local mobility**, and provides sustainable transportation **options**. The system will have multiple operators to ensure **responsiveness to local constituents**, but will be perceived by users as **one seamless system** throughout Fresno County."*

It is important to ensure that the public, interested parties, and stakeholder groups have ample opportunities to provide informed input throughout the planning process. For this to happen, a variety of public engagement activities were used to reach each unique audience segment in the most effective manner.

Factors that were considered in determining the most appropriate public engagement tool include the size and type of audience, level, awareness and knowledge of transportation issues, geographic distributions, and preferred formats. The most effective public engagement efforts use a combination of methods and technologies to convey and receive information; build awareness; provide resources; and develop relationships. The public

Fresno County Regional Long-Range Transit Plan

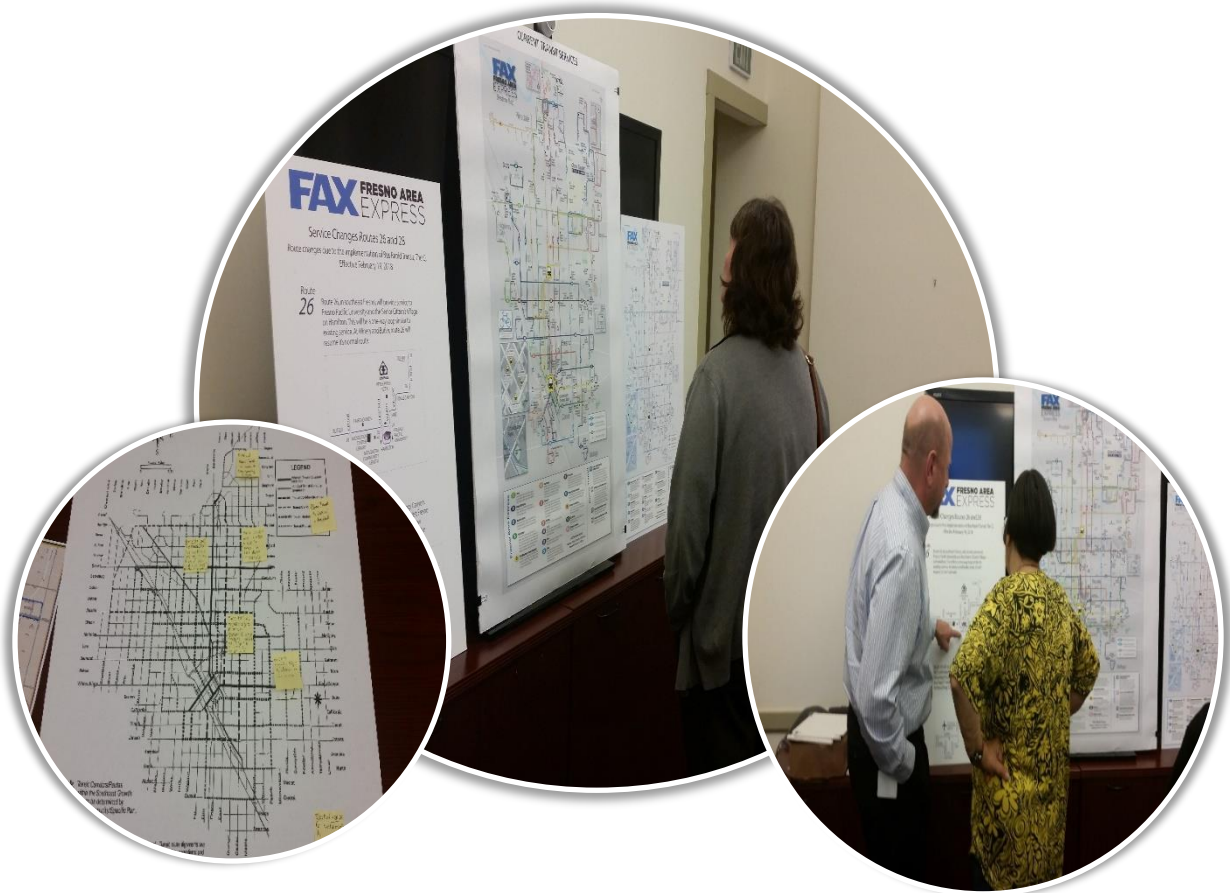
outreach methods used during the LRTP planning process included:

- ✓ Public Engagement Plan
- ✓ Steering Committee
- ✓ Stakeholder Database
- ✓ LRTP webpage on the Fresno COG website
- ✓ Presentations, Meetings, Workshops, and Pop-up events
- ✓ Community Surveys
- ✓ Response to Public Comments

LRTP included receiving comments and input from the public. To help achieve public input during this phase of the Plan, the LRTP Team participated in multiple outreach activity events from October 2017 through March 2018. These outreach events included public workshops, pop-up events, in-person surveys, and an online community survey. Location and general activities for each event are noted below. Event specifics and summaries can be found in Table 1.

Public Engagement Activities Conducted

One of the major components of the planning process used to help inform the development of the



Fresno County Regional Long-Range Transit Plan

Table 1 – Completed Public Engagement Activities

Type of Outreach Event	Name	Dates	Location	Activities
Pop-up Event	Big Fresno Fair	Saturday, October 14 and Sunday, October 15, 2017	1121 S. Chance Avenue Fresno, CA 93702	Bilingual Plan flyers, including upcoming Selma workshop information, were handed out
Workshop	Public and Stakeholder Workshop, Selma	Tuesday, November 14, 2017	Selma Senior Center 2301 Selma Street Selma, CA 93622 5:30 pm to 7:30 pm	Open house format workshop with interactive activities
Pop-up Event	City of Firebaugh's Annual Christmas Street Fair and Electric Light Parade	Saturday, December 2, 2017	Downtown Firebaugh, CA 93622 12:00 pm to 8:00 pm	Handed out bilingual Plan fact sheets; transit issues opinion survey
Survey	Bus Stop Surveys	Wednesday, December 20, 2017	1100 Van Ness Avenue Fresno, CA 93721	Bilingual surveys and comment cards distributed to bus riders
Survey	Health Clinic Surveys	January 2018	Fourteen (14) Health Clinics in Fresno County	Transit issues opinions survey
Workshop	Public and Stakeholder Workshop, Fresno	Tuesday, January 30, 2018	Fresno City College Old Administration Building, Room 126 1101 E. University Avenue Fresno, CA 93741 5:30 pm to 7:30 pm	Open house format workshop with interactive activities
Survey	Rural Community Surveys	February 2018	Rural communities in Fresno County	Leadership Counsel distributed transit issues opinion survey
Survey	Online Surveys	February and March 2018	LRTP webpage on the Fresno COG website	Bilingual transit issues opinions survey

Fresno County Regional Long-Range Transit Plan

Workshop Noticing

All workshop noticing was completed in both English and Spanish and was posted online and in the targeted newspaper at least one (1) week, but no more than two (2) weeks prior to scheduled workshops. Noticing strategies included the following:

- ✓ Email content created for all workshops scheduled. Content included a workshop flyer with the date, time, and location. Content was distributed via email to the LRTP Stakeholder Database, which included well over 400 contacts including stakeholders, elected officials, the general public, and other government agencies.
- ✓ A regional workshop notice was placed in the Vida En El Valle (Spanish version of the Fresno Bee) newspaper in advance of both workshops.
- ✓ Workshop flyers were provided to Fresno COG and posted to the LRTP webpage.
- ✓ Graphical posters were created and distributed to FCRTA for placement on transit buses. All information was provided in English and Spanish.

Finally, the LRTP Team coordinated with Fresno COG staff and other members of the LRTP Steering Committee to ensure that members of disadvantaged and disabled communities were engaged and invited to the workshops. The LRTP Team also contacted Community-Based Organizations (CBOs), Faith-Based Organizations (FBOs), health associations, youth organizations, and college and school districts identified in the LRTP Stakeholder Database to assist with the identification and noticing of workshop participants.

Conduct of Workshop Sessions



Two (2) workshops were held as part of the outreach efforts for the LRTP. The first workshop was held in the City of Selma and was structured to discuss transit issues and strategies facing rural communities in Fresno County. The second workshop was held in the City of Fresno and was designed to discuss transit issues and strategies in the Fresno-Clovis Metropolitan area. Each of the venues used for the workshops met the following criteria: equitable geographic distribution; adequate space for attendees, displays, and involvement exercises; low venue cost; Americans with Disabilities Act (ADA) accessible; and directly accessible to public transportation. Spanish language interpreters and headsets were available at all workshops.

The workshops followed an open house format and included the following elements:

- ✓ An introductory PowerPoint presentation that provided an overview of the LRTP planning process.
- ✓ During the Selma workshop the FCRTA Services Map was available to attendees so that they could post comments regarding a specific route or issues using markers or Post It Notes. This

Fresno County Regional Long-Range Transit Plan

made it easier for the LRTP Team to identify attendee issues with specific routes and other route amenities/characteristics.

- ✓ During the Fresno-Clovis Metropolitan Area workshop the FCRTA Services Map, FAX System Map, Clovis Transit System Map, and the Fresno General Plan Principal Transit Corridor and Route Concept Map was available to attendees so that they could post comments regarding a specific route or issues using markers or Post It Notes, which made it easier for the LRTP Team to identify attendee issues with specific routes and other route amenities/characteristics.
- ✓ Two group exercises were conducted at each of the workshops to receive critical feedback regarding funding priorities for Important Transit Features and Important Transit Service Improvements.
- ✓ The LRTP Team incorporated the use of Turning Point polling software, a tool that allows the Team to not only educate, but to gather ideas and input simultaneously from everyone attending a workshop. Turning Point can solicit answers, selections, and priorities using a real-time response key pad. The software provides the opportunity to stratify the polling results by stakeholder group and other demographic information received during the poll.
- ✓ Comment cards were available for comments and feedback.



- ✓ As noted above, translation was provided at all workshops using available translation equipment.
- ✓ The LRTP Team also provided stations for registration, comments, and refreshments.

Summary of Workshop Findings

Polling

Polling results from each workshop are provided in Appendix A. A total of 25 workshop attendees participated in the polling exercises. Major findings for combined workshop polling results include:

- ✓ 68% of workshop attendees live in the City of Fresno, 16% live in the unincorporated county area outside of Fresno, and 16% live in another Fresno County city on or east of SR 99.
- ✓ 28% of attendees were between the ages of 16 and 25, while 24% were between the ages of 51 and 65.
- ✓ A third of workshop attendees were public citizens; students accounted for a quarter of attendees.
- ✓ 64% of attendees have regular access to a motor vehicle. More than half of the attendees drove a car to the workshop location; 16% arrived via bus.
- ✓ If a car is not available, 24% of attendees ask a friend, neighbor, or relative for a ride, 24% use Uber/Lyft, and 20% of attendees use the bus for transportation.
- ✓ 24% of attendees take a bus/van in Fresno County two (2) or more days a week, with the most important trip noted as personal business trips.

Fresno County Regional Long-Range Transit Plan

- ✓ 56% of attendees heard about the workshops through a noticing email.

Group Exercises

As mentioned previously, two group exercises were conducted at each of the workshops to receive critical feedback regarding funding priorities for various transit services improvements and transit features. For both group exercises attendees were given ten (10) tokens and were asked to drop one or more tokens in buckets representing important transit service improvements and important transit features.

Results from the Important Service Improvements and Important Transit Features exercises for the Fresno and Selma workshop are shown in Figures 2 through 5.



Figure 2- Most Important Service Improvements (Fresno Workshop)

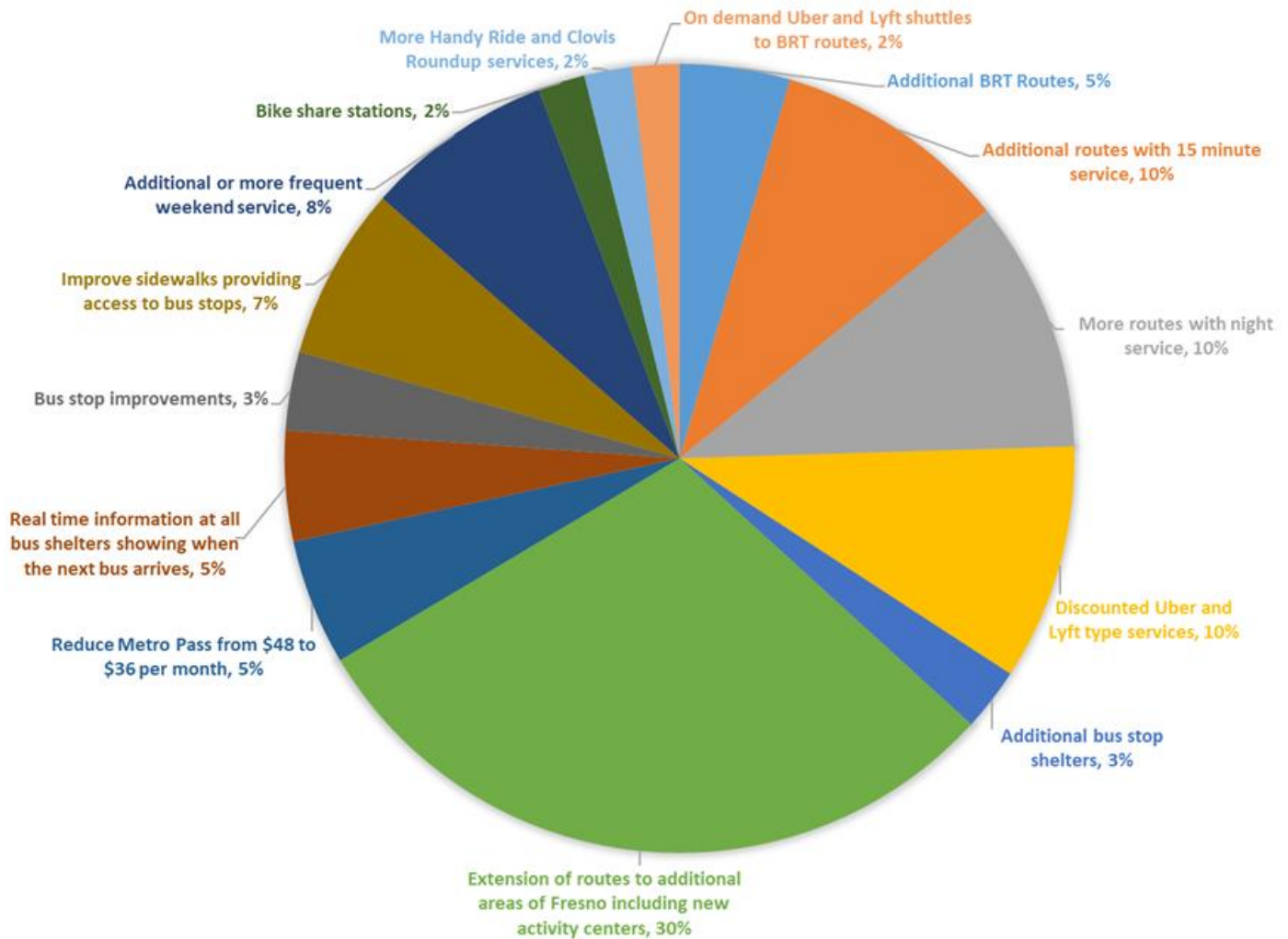


Figure 3 – Most Important Transit Features (Fresno Workshop)

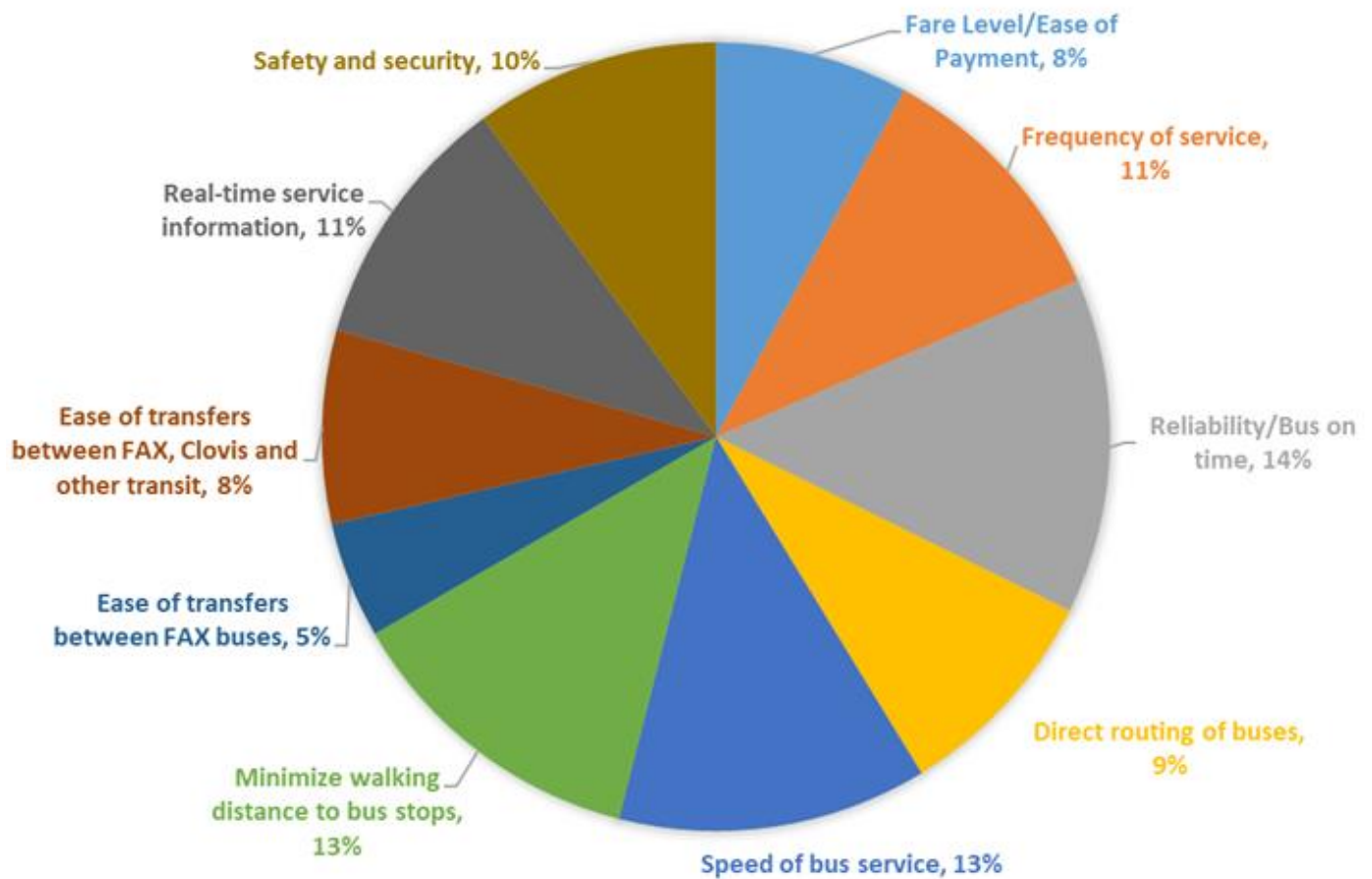


Figure 4 - Most Important Service Improvements (Selma Workshop)

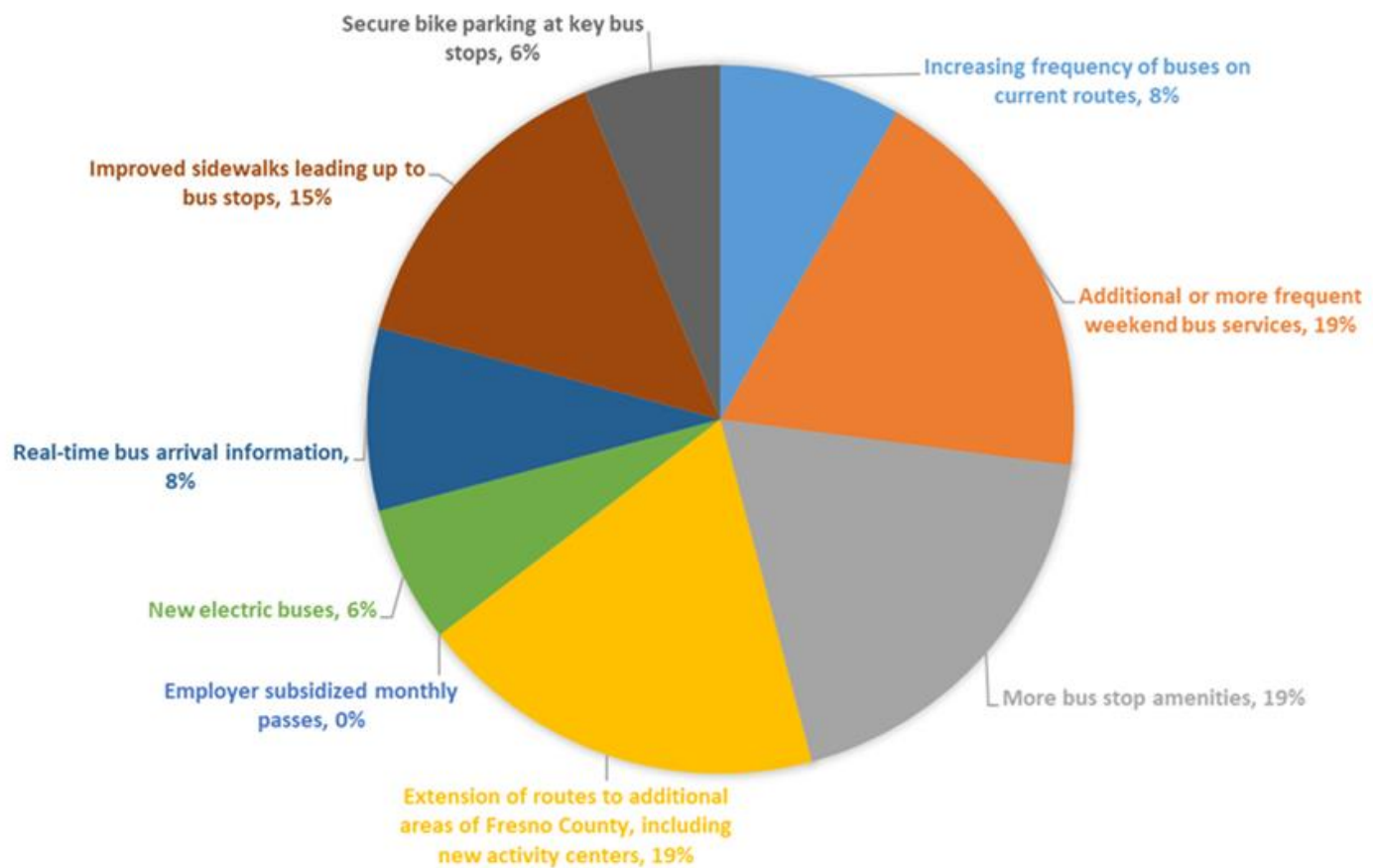
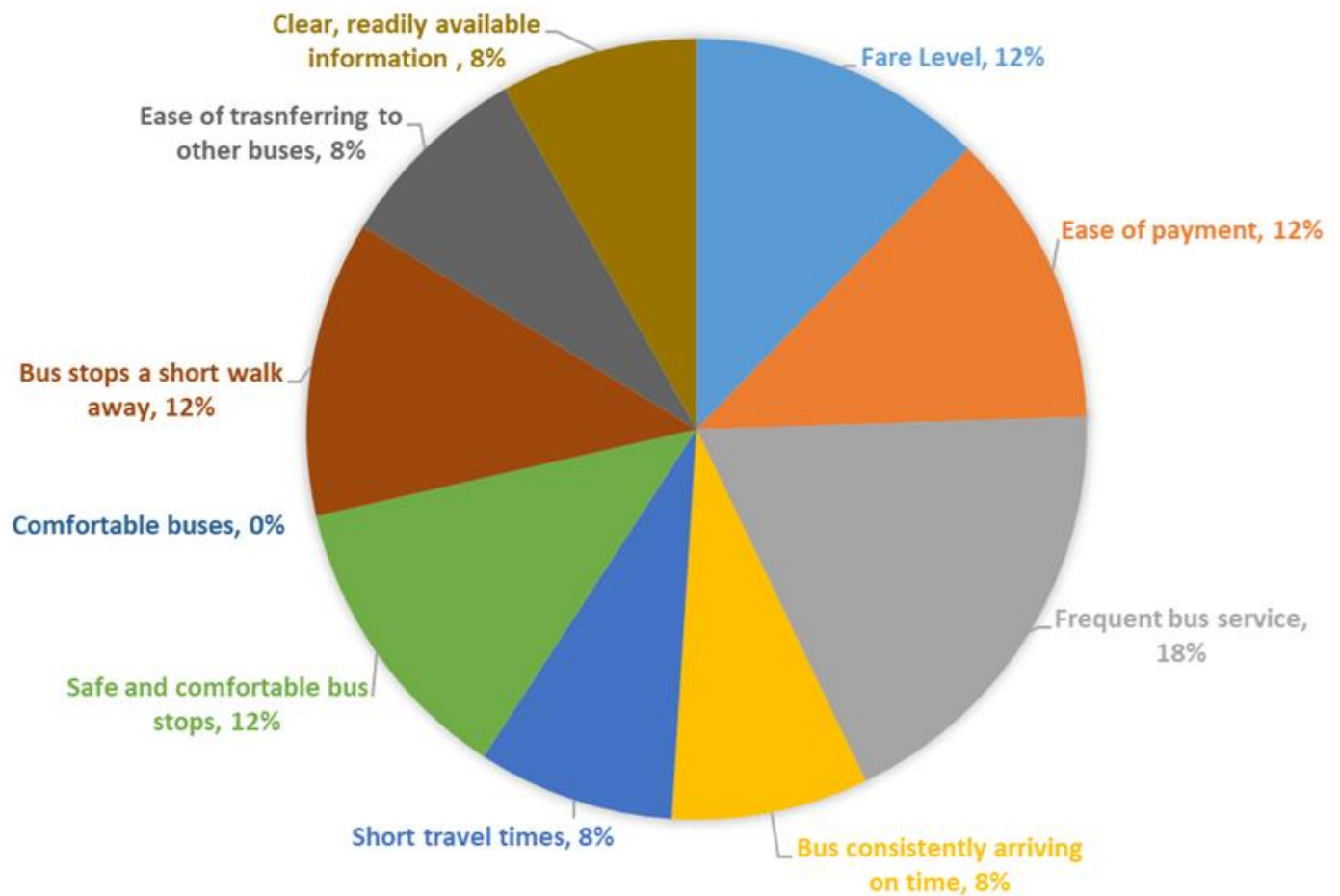


Figure 5 - Most Important Transit Features (Selma Workshop)



Fresno County Regional Long-Range Transit Plan

Comment Cards

Comment cards were available for comments and feedback at each of the public workshops. Comments received at each individual workshop and comments received during or following the workshop series can be found in Appendix A. Primary comments received include:

- ✓ Increased weekend and evening service for farmworker communities.
- ✓ Planning for sidewalks and lighting in unincorporated areas through Fresno COG and County of Fresno collaboration.
- ✓ Planning for bike paths in rural areas through collaboration with other agencies for increased funding sources.
- ✓ Adding bus stops that will connect with future High-Speed Rail services.
- ✓ Collaboration with County of Fresno to encourage infrastructure development in unincorporated communities for safe active transportation.
- ✓ Provide transit from Sanger to Amtrak and the Fresno Yosemite International Airport.
- ✓ Expand transit routes to Clovis Community College.

Mapping

As mentioned previously, services and systems maps for FCRTA, FAX, Clovis Transit and the Fresno General Plan Principal Transit Corridor and Route Concept were available to attendees for markup, allowing them to post feedback, suggestions, and comments regarding a specific route or issue using markers or

Post It Notes. Mapping comments received at each individual workshop can be found in Appendix A. Primary mapping comments received include:

- ✓ Need sidewalks to access rural bus stops.
- ✓ Coordination among agencies.
- ✓ Need FAX and Clovis Transit bus routes to Clovis Community College.
- ✓ Expand Clovis Transit services to the area at DeWolf and Bullard.
- ✓ Need more east/west routes in Fresno/Clovis.
- ✓ Density and walkability. Put walking and cycling first, transit second, and cars last. Maybe driving restrictions.
- ✓ More bus rapid transit (BRT) with traffic light priority – faster and more frequent service will improve alternatives to driving.
- ✓ Ensure visible bus stops with shelters.
- ✓ Electrification for sustainability.

Other Completed Public Engagement Activities

Pop-Up Events

Pop-up event materials were available for dissemination at short, but meaningful interactions with the public that allowed their feedback to be incorporated into the LRTP while ultimately reaching a significantly higher number of residents than a traditional public workshop. Pop-up events allowed the LRTP Team to engage with the public at events of interest to them. The LRTP Team worked with Fresno COG staff and the LRTP Steering Committee to provide materials for dissemination at high-volume events in Fresno County. Such locations included the Big Fresno Fair and the City of

Fresno County Regional Long-Range Transit Plan

Firebaugh's Annual Christmas Street Fair and Electric Light Parade.

Materials disseminated at the Fresno COG booth located at the Big Fresno Fair (October 14 and 15, 2017) were informational Plan flyers that included date, time, and location details for the Selma workshop held in November 2017. Fresno COG personnel staffed the booth and were available to answer questions from fair attendees as needed.

Materials distributed at the City of Firebaugh's Annual Christmas Street Fair and Electric Light Parade (December 2, 2017) included, the LRTP Fact Sheet, comments cards, two (2) short ranking activities related to Service Improvements and Transit Features as well as a short survey (described below). While the ranking activities were not completed by any visitors to the LRTP booth, the booth was staffed by two (2) Consultant Team members that were able to personally engage the approximated thirty-five (35) both visitors. Additionally, one of the Consultant Team members was a bilingual speaker, which assisted in reaching out and gathering input from the large Spanish speaking population that resides in Fresno County. Bilingual services also ensure that Environmental Justice requirements for planning and programming projects are met.

Targeted Surveys

The LRTP Team developed and implemented a survey instrument consisting of ten (10) questions aimed at determining participant opinions on key issues during the LRTP planning process. The LRTP Team worked with Fresno COG staff and the LRTP

Steering Committee to identify and provide surveys to high-volume transit locations in Fresno County. Surveys were distributed to the following groups:

- ✓ Transit users at the Courthouse Park Downtown Fresno Transit Center.
- ✓ Clinic staff and patients at fourteen (14) health clinics across Fresno County.
- ✓ Residents of rural communities, Leadership Counsel volunteered to assist in the LRTP planning efforts by distributing these surveys. This was a valuable asset for the LRTP Team as Leadership Counsel has long established relationships with the rural communities of Fresno County and are trusted by these residents. They are also able to communicate with residents in their native language improving understanding and the opportunity for feedback.

Online Survey

The LRTP Team augmented the previously mentioned in-person survey for purposes of an online community survey. The survey consisted of a series of multiple choice and priority ranking questions; and was available to survey participants in both English and Spanish. The survey was accessible through the Fresno COG LRTP webpage and was available from February through March 2018. A notification concerning the online survey's availability to the public was distributed via email to the Stakeholder Database, and by news bulletin on the Fresno COG webpage.

Fresno County Regional Long-Range Transit Plan

Survey Findings

The survey form and combined results from the survey can be found in Appendix A. Approximately 110 completed surveys were submitted by participants. Major survey findings include:

- ✓ 45% of survey participants lived in the City of Fresno; 23% lived in one of the other Fresno County cities. Most of the remaining 32% live in unincorporated Fresno County.
- ✓ 28% of participants were between the ages of 26 and 35, while 28% were between the ages of 51 and 65.
- ✓ On the day they filled out the survey, 19% of participants were traveling using FCRTA or FAX buses.
- ✓ More than a third did not own or have regular access to a vehicle.
- ✓ If a car is not available for their use, 35% of survey participants ask a friend, neighbor, or relative for a ride, 32% use the bus for transportation, and 21% walk to their destination.
- ✓ 34% of participants take a bus/van in Fresno County two (2) or more days a week.
- ✓ 17% cite shopping trips as their most important reason for riding the bus; 16% list personal business trips.
- ✓ 48% of participants believe that hardly any of their most important daily trips can be made by walking or biking.
- ✓ If Fresno County were to obtain funding, 52% believe that more demand responsive paratransit service is the best option to service low density areas of Fresno County that have limited or no bus service.

- ✓ 56% of participants felt that more demand responsive paratransit service would help offset a smaller city in Fresno County having only one or two bus stops.

Stakeholder Interviews

The Consultant Team sought stakeholder input on the LRTP. Approximately 25 interviews were conducted by telephone or in person with key stakeholders. Stakeholder groups consulted included major employers and educational institutions, FAX management, other transit/transportation providers, City and County officials, health providers, educational institutions and youth groups, and environmental advocates. The stakeholder outreach was coordinated with stakeholder outreach for FAX's 2018 Fixed-Route Restructure Study.

Stakeholder Interviews: Key Themes

There are several major trends that the LRTP should address:

- ✓ Aging of population will increase demand for ADA and demand response services.
- ✓ Transit ridership has recently been dramatically declining, increasing pressure on farebox recovery ratios.
- ✓ At the same time significant growth is occurring in farmworker vanpools, Uber/Lyft ride services, and informal ridesharing.
- ✓ While there is movement toward more compact growth in some areas, sprawl continues and makes transit services more difficult to provide.

Fresno County Regional Long-Range Transit Plan

- ✓ Costs of providing transportation services and maintaining infrastructure are increasing.
- ✓ Declining sense of personal secureness and safety for riding the bus, biking, and walking makes alternatives to driving even more difficult

A prevalent issue raised is the growing need for services between rural and urban areas for medical trips, jobs, school, and human service agency appointments.

- ✓ Fresno/Clovis, Dinuba, and Visalia were all named as important destinations for rural and outlying communities.
- ✓ Lack of “Access to opportunity” (e.g., jobs and education) for residents in rural communities was mentioned by several stakeholders.
- ✓ There is significant appreciation for FCRTA services, but these services are fiscally constrained. Funding allocation, farebox recovery requirements, and geographic dispersion limit transit options for rural to Fresno/Clovis urban area trips.
- ✓ Though there is connectivity between FCRTA, Clovis, and FAX, the LRTP should seek to improve this connectivity and make inter-operator trips faster and more seamless.
- ✓ In the future, traditional fixed-route and Dial-A-Ride (DAR) services may only be part of the solution. Multimodal options including community-based options such as Van y Vienen, Green Raiteros, vanpools, and microtransit need to be considered.

There is an imperative need to maintain and enhance existing services and infrastructure before proposing more grandiose plans.

- ✓ Existing services need improved frequency, later evening service, and improved connectivity before expansions are considered. Need to reduce the time it takes by transit to get from point A to B.
- ✓ Funding is often available for capital, but not operating and maintenance costs. The LRTP needs to address the costs related to operate and maintain the transit services offered to Fresno County residents.
- ✓ Sidewalks and bike lanes are needed in low-income and rural communities.

Funding allocations needs to be more flexible, multimodal, and equitable to low-income, minority, and rural needs communities.

- ✓ Rural and minority communities have historically not received equitable distribution of funding.
- ✓ Community-based mobility options and vanpools need improved recognition and dedicated funding. Community-based options are typically grant based: the LRTP should look at dedicated funding sources. Vanpools can generate funding for transit agencies.
- ✓ Funding formulas for funding allocations need to be more equitable between rural and urban interests.

Fresno County Regional Long-Range Transit Plan

Compact development, economic development, infill, and improved local mobility services in rural areas will increase local services and dampen demand and need for transit trips to urban centers.

- ✓ People moving to rural communities are aging in place and finding that services are not available in their local community.
- ✓ Resources have been diverted toward new development rather than improving existing rural communities.
- ✓ Programs to better protect agriculture, such as 1:1 farmland mitigation would be an incentive for developing in existing communities, thereby reducing sprawl.
- ✓ Transit is more involved with land use decisions, but local control over land use decisions still leads to decisions without consideration of transit, pedestrian and bicycle mobility options.
- ✓ There is a need for more affordable housing adjacent to transit. Mixed use development is possible, but current zoning is often a hindrance; inclusionary zoning is needed.
- ✓ Local government officials need better access to training or education about the value and benefits of Transit-Oriented Development (TOD) and mixed-use communities.
- ✓ One stakeholder sees conflicts between investing in rural communities versus greenhouse gas (GHG) emission reduction, since dense, walkable, transit-oriented communities that reduce vehicle use are typically found and proposed for urban areas.
- ✓ Improved investment in local community mobility options and traditional demand response services are needed.

There was almost universal stakeholder consensus that electric transit vehicles, both for fixed-route and paratransit are the future.

- ✓ FCRTA is converting to an electric fleet and hopes to have this conversion completed by 2025. Thirteen (13) solar charging units in all incorporated cities in Fresno County have been installed; these are free and open to the public.
- ✓ For the Fresno Economic Opportunities Commissions (FEOC), there is insufficient funding flexibility for purchasing electric vehicles. Addressing alternative fuel vehicles and related infrastructure will be a significant capital need in the LRTP.
- ✓ The Kings Canyon Unified School District has its first electric school bus. Wider adoption has been limited due to vehicle range issue, but this is changing as battery storage capabilities improve.
- ✓ One agency serving the rural community complained that greener technology (e.g., electric and hybrid vehicles) is not readily available to their transportation disadvantaged population. (Note: FCRTA's plans for full electrification by 2025 will address this concern.)

There is a great deal of uncertainty as to what autonomous vehicles will mean for mobility in general and for transit in particular.

- ✓ Strong general support in concept, but significant uncertainty on such issues as affordability, wheelchair accessibility, and safety.
- ✓ It is very unclear what autonomous vehicles might mean for public transportation demand.

Fresno County Regional Long-Range Transit Plan

- ✓ Most stakeholders felt that Fresno County will be late adopters of this technology. However, most stakeholders felt it was important to be prepared. How to prepare is the bigger question?

While investments in the rail trail and Class I bicycle facilities have paid dividends, there is a low bicycle and pedestrian market share compared to auto uses, making future investments more difficult.

- ✓ Reedley and Orange Cove both pointed to success of rail trails.
- ✓ Low bicycle mode share in the City of Fresno is an impediment to greater bicycle facility investment.
- ✓ Rural city stakeholder: "Transit needs to be relevant before people will get on their bikes or walk to transit."
- ✓ Significant infrastructure work is needed for bike path access, sidewalk improvements, and repairs to bus stops.
- ✓ "Active transportation infrastructure improvements are what we hear about the most."
- ✓ There was support for secure bike parking at transit facilities and bike racks at bus stops.

Reliable connections to and from future High-Speed Rail services from rural communities will be needed.

- ✓ Connectivity to schedules is important, seamless connections are critical.
- ✓ Affordability of High-Speed Rail (HSR) is a concern; adding on transit fares may be too much for transportation disadvantaged populations.

- ✓ Land use opportunities for affordable housing and mixed-use development adjacent to HSR is an important opportunity.

Several stakeholders said that transit education and information is critically important.

- ✓ People don't know what multimodal options are available to them.
- ✓ Better information on vanpool options is critical.

Perceptions about safety, convenience and "image" are issues for transit.

- ✓ Perceived issues with safety and security when riding the bus, biking, and walking make consideration of alternatives to driving difficult for some.
 - Transit volunteers – regular riders with simple uniforms were suggested by some stakeholders. Volunteers would provide directions and a sense of order on buses and would be able to summon aid without involving the driver in minor incidents.
- ✓ Transit to many is not safe or "cool" per several stakeholders: Yosemite Area Regional Transportation System (YARTS) was offered as an example of a safe, cool, and fun transit option.
 - Wi-Fi on buses would make transit more attractive.
 - Bathrooms at or near major stops were also a much-desired amenity.

Educational institutions and major employers are opportunities for transit.

- ✓ The community colleges are growing and there will be a deficit of available parking – providing

Fresno County Regional Long-Range Transit Plan

an improved transit market if the right services can be provided.

- ✓ Bulk fare programs (e.g., where a college ID becomes a fare card) are viewed as a good way to promote ridership but needs strong marketing and messaging campaigns along with a well-known champion to work even at the colleges where they are currently implemented.
- ✓ Other, non-educational employers and medical providers were intrigued by bulk fare programs for their employees but had no plans to implement such a program.

Improving pedestrian access to transit would bring multiple benefits.

- ✓ Sidewalk improvements and quality bus stops are needed to improve pedestrian access and experiences.
- ✓ Active transportation infrastructure improvement is “in style”. Transit needs to coordinate and benefit from active transportation plans and projects.
- ✓ Connectivity to schedules of intercity transportation providers is important; seamless connections are critical.
- ✓ Land use opportunities for affordable housing and mixed-use development adjacent to HSR is an important opportunity for more pedestrian access to transit.

Collaborative decision-making

- ✓ Collaboration among all government and nongovernmental entities is needed for effective transit services. Prevailing interests are often at odds with the needs of the riding public.

- ✓ Need to do a better job including voices that have been historically been excluded.
- ✓ School districts and high school and college students need to be at the table. High school students offered very insightful and detailed critiques of services and issues.

Summary of Outreach Findings

General Public

The multiple workshops, surveys and stakeholder interviews reveal an array of opinions, concerns and ideas for transit in Fresno County. Although only a minority of those who participated in the outreach were regular transit riders (only one-third ride transit twice a week or more), most express appreciation for public transportation. It plays an important role for those without a car in Fresno County: nearly half of survey respondents reported that walking and biking would not be adequate to make their most important daily trips. Most riders are transit dependent and their primary use of public transportation is for shopping and personal business trips.

When a car is not available more than a third of survey participants depend upon cars: their first choice is to ask a friend, neighbor, or relative for a ride. Another third would use the bus for transportation, and one-fifth would walk to their destination. A few would bike or use a taxi, or forgo traveling.

If Fresno County were to obtain additional funding, just over half of survey respondents believe that

Fresno County Regional Long-Range Transit Plan

more demand responsive paratransit service is the best option to service low density areas of Fresno County that have limited or no bus service. More than half of all participants felt that more demand responsive paratransit service would help offset a smaller city in Fresno County having only one or two bus stops.

Comfortable and secure bus stops were important to many survey respondents and workshop participants. As important are paved walkways to the bus and safe street crossing. This suggests that active transportation improvements will help transit riders, particularly improvements to pedestrian facilities.

Stakeholders

Overall, stakeholders expressed appreciation for FAX, FCRTA and Clovis Transit services. Public sector stakeholders understand the dilemmas posed by

increasing costs of providing transportation services and maintaining infrastructure with limited funding.

One important theme expressed by stakeholders was the need to make transit and paratransit more visible and “relevant”. Although transit and paratransit are vital to those who depend on it, the vast majority of Fresno residents – and community leaders – are not transit riders and know it only superficially. Integrating transit better with the communities they serve – and the larger community as well – is an important goal if transit is to be sustained and expand.

Some stakeholders understand constraints on FAX, e.g., funding source limitations and the need to meet farebox requirements to receive state funding – but many were not aware of these requirements. Thus, there is some tension between demands for transit service and the feasibility of providing it.



Chapter IV

Development of Alternatives for the Plan



Chapter IV. Development of Alternatives for the Plan

Introduction and Overview

The LRTP team developed three alternative transit futures for Fresno County in the mid-21st century. The three alternatives – Ridership, Coverage and Blended – differ in the types of strategies and programs they emphasize, but are not exclusive of one another.

- ✓ The Ridership Alternative is intended to maximize the number of transit riders in the region, thereby maximizing the social, environmental and fiscal benefits accruing from a well-patronized public transportation system.
- ✓ The Coverage Alternative is intended to maximize the geographic reach of transit, enabling as many residents as possible in all areas of the county to use public transportation.
- ✓ The Blended Alternative is intended to combine the most promising and productive programs and elements of Ridership and Coverage Alternatives, adding projects that enhance systemwide integration.

Overarching issues, themes and trends considered in the development of each Alternative include:

- ✓ A need to increase **awareness of and to integrate transit into Fresno communities**: 95% of County residents are non-riders, or inactive regarding the use of transit.
- ✓ Declining and uncertain transit revenue, and intense competition for public transportation/transit **funding**.

- ✓ New plans and initiatives for **active transportation** (pedestrian and bike), which will ideally complement transit in both urban and rural areas, recognizing their different needs and dynamics.
- ✓ Ongoing **State policies** and pressure for transit to help meet Valley air quality and greenhouse gas (GHG) goals.
- ✓ Changing **travel demand** resulting from internet-based communications and commerce (e-tailing [the sale of goods and services through the internet] and telework).
- ✓ Changing **transportation supply**: Bus Rapid Transit (BRT), on-demand modes (e.g.: Transportation Network Companies or TNCs, car-sharing, bike-sharing, etc.).
- ✓ High-levels of car ownership are expected to continue, but congestion and other costs will be increasing, leading to increased demand for alternatives to driving.
- ✓ **Electrification** of transportation modes: cars, scooters and bikes, as well as vans and buses for inter-city and intra-city transit, and high-speed rail.
- ✓ Implications of the **High-Speed Rail** station on downtown Fresno and the routes that will connect to it.

Each of the three alternatives also:

- ✓ Builds on the Plan Vision, Goals and Objectives developed for the Long-Range Transit Plan (LRTP).
- ✓ Incorporates Fresno Area Express's (FAX) short-range expansion plans along with medium-range projects FAX desires to implement but cannot currently afford. The FAX Restructure Study has finalized this list.

Fresno County Regional Long-Range Transit Plan

- ✓ While financially unconstrained, the alternatives are cognizant of the baseline transit budget established in the Fresno COG 2018 RTP/SCS Financial Element for all public transportation projects.
- ✓ Based on analysis of the 2018 RTP/SCS, a baseline budget of between \$1.5 billion and \$2 billion through 2050 is applied in this study. The LRTP identifies a comprehensive list of potential funding sources should the Preferred LRTP alternative establish a basis and justification. Again, the LRTP was not required to be fiscally constrained, so all projects with potential can be considered, subject to funding for implementation.

Ridership Alternative: Recommended Policies, Strategies and Projects

The overall goal of the Ridership Alternative is to:

- ✓ Enhance transit in the urban core.
- ✓ Increase the number of Fresno-Clovis residents living within ½ mile of fixed route service who ride transit for at least some of their trips.
- ✓ Seeks to further Integrate rural and lifeline transit into this enhanced urban core transit system.

1. Recommended Transit Supportive Policies:

- ✓ Develop minimum thresholds for trip density and ridership productivity to merit 30- and 60-minute fixed route bus service headways.
- ✓ Revise developer minimum off-street parking requirements including school parking policies.

- ✓ Facility reuse of empty parking and other infill developments within the current fixed route service area, particularly along principal transit corridors.
- ✓ Infill development in downtown Fresno and at the Manchester Center would be particularly beneficial to transit and this should be strongly encouraged.
- ✓ Consider a nexus funding plan and integrate it into the current traffic impact fee program.

These policy measures would be low cost and have the potential to significantly increase ridership. The more pedestrian friendly densities and less free parking the better the environment would be for bus services. Bus services become less efficient in low density areas. It is also true that infill growth adds virtually no added costs, and in fact adds revenue. Fringe area development is very costly to serve with buses.

2. Recommended Fare Policy and Demand Management Strategies:

- ✓ Expand and market employee/student pass programs, bulk pass purchases.
- ✓ Implement modern fare payment systems, where applicable.
- ✓ Incentivize monthly and annual pass use.
- ✓ Target large employers, educational Institutions, and special events (e.g.: The Big Fresno Fair).

Pricing and policies to encourage transit ridership can be effective low-cost measures.

Fresno County Regional Long-Range Transit Plan

3. Expand BRT and Frequent Bus Networks

- ✓ BRT (Q service) on Shaw, extensions of current BRT, new BRT routes to serve all areas of Fresno and Clovis – including new BRT services on Cedar and Shaw Avenues.
- ✓ Additional frequent bus service increases in the metro core, connecting with BRT.

Expanding BRT and Frequent Bus service has long been envisioned to increase ridership. California BRT is an adopted RTP project and is retained in the LRTP. The consultant team suggests that the California BRT corridor may be better served by enhanced frequent bus service.

4. Strengthen Network Connectivity

- ✓ Enhance outer route and end-of-line terminal connections.
- ✓ Consider restructuring crosstown services in the medium-term as conditions warrant.
- ✓ Strengthen seamless FAX integration with Clovis service.

Mid-route transit hubs are difficult to operate but tying ends of routes together for increased connectivity is normally simple. Although FAX has restructured its routes to a grid system with convenient transfer points, crosstown routes that do not require transfer may increase ridership. A seamless transfer between FAX and Clovis Stage Lines is important and should be strengthened.

5. Bus Speed Enhancements

- ✓ All doors boarding.
- ✓ Off-board ticketing.
- ✓ Queue jumps at intersections.
- ✓ Traffic Signal Prioritization (TSP).

The faster buses run the better service they provide to passengers and the lower their operating costs.

6. Review Opportunities to Tailor Bus Services to More Efficiently Serve Low Demand Times and Routes

- ✓ Partnering with TNCs (private and community-based) and other transportation service providers to lower costs and improve rider convenience during the late night and on weekends.

After 7:00 pm on weekdays ridership demands decline and service becomes less productive. Exploring alternative delivery methods to service low-demand times and areas has the potential to reduce costs and improve service.

7. Increase service frequencies, improve reliability and expand service to new growth areas

- ✓ Upgrade to 10-minute headways on all principal bus routes, 15-minute on other major routes and 20 minutes on low ridership routes.
- ✓ Upgrade reliability using Big Data and aggressive management actions.
- ✓ Phase in service to new growth areas like the area west of State Route (SR) 99.

Fresno County Regional Long-Range Transit Plan

The more frequent service becomes the more convenient it is for passengers and the anxiety of missing a bus drops off. Concentrating service during high demand periods should provide benefits to more riders and is more likely to attract new, choice riders.

8. Integration with Plans for High-Speed Rail Station and Downtown Plans

- ✓ A Central Fresno Circulator to connect major activity centers and transportation hubs.
- ✓ Revise Courthouse Park hub in relation to High-Speed Rail station bus hub plans and strategies.

With respect to high-speed rail, operationally its link to local bus service will be important. For example, should local buses focus on the High-Speed Rail station like regional feeder buses or should they continue to focus on Courthouse Park? Also, with 10-minute headway bus service in the future, should buses continue to layover at the Fresno Courthouse or make a simple stop? Street changes also are likely with the High-Speed Rail station and bus routings will be affected.

The consultants contacted California High-Speed Rail Authority (CHSRA) staff regarding current plans for a high-speed rail station in downtown Fresno. The CHSRA anticipates that between 2027-2033 FAX will supplement existing bus service/stops, not replace existing bus service/stops at the Courthouse on Van Ness Avenue. The Authority would like FAX to implement a transit spine on G Street with coordinated stops and a service hub on the Chinatown side of the rail corridor for access to the

HSR Station near Mariposa Street, between Fresno Street and Tulare Street.

9. New Transit Hubs Outside of Downtown Fresno

- ✓ A new transit hub at Fresno State, ideally implemented in conjunction with Shaw Avenue BRT.
- ✓ Four to six transportation nodes around the periphery of the Metropolitan Fresno area. These will be interface points between rural and urban services. Some may include Park & Ride.

10. First/Last Mile Improvements

- ✓ Dedicated funding for sidewalk and pedestrian access improvements near key stops (requires partnerships with Public Works Departments).
- ✓ Upgrade bus stop facilities including real time passenger information.
- ✓ Bike-share systems in Fresno and Clovis at key stops and beyond.
- ✓ Explore innovative opportunities to enhance first/last mile links at Fresno City College and CSU Fresno.

First and last mile improvements are critically important for ridership, and novel methods of serving the final link between origins and destinations should be continuously sought out and implemented.

11. Technology and Climate Change Initiatives

Electrification of transit fleets will make all forms of public transportation more environmentally friendly. Other emerging technologies that can increase the appeal and productivity of transit include:

- ✓ Consider use of smaller vehicles, e.g.: 30-foot buses on low ridership routes/times.
- ✓ Continue to enhance security using monitoring cameras on board buses.
- ✓ Enhanced real-time transit tracking with real-time reservation and payment; allow transit to be located, reserved and paid for from anywhere.
- ✓ Key Bus Stop and onboard WI-FI, entertainment and information (goal is to change travel time to useful time).
- ✓ Driverless buses; watch deployment elsewhere and prepare to implement in Fresno.
- ✓ Integration of TNCs (Uber and Lyft and community-based) with transit.

Change is occurring rapidly in the transportation industry including the potential for driverless cars and buses. These changes will be challenging but hopefully rewarding. Nimbleness and flexibility will be important to deal with rapidly changing conditions.

12. Upgrade Bus Storage and Maintenance Facilities

As the electrification of fleets progresses, there will be impacts to the overnight storage and

maintenance requirements for transit vehicles. This could have implications on the need to expand FAX's current facility or to develop a second satellite facility. Transitioning to battery electric buses will also have implications of support facilities and staffing. There should also be proactive coordination with electricity utilities for deployment of enroute charging infrastructure.

13. Ambassador Programs

This would be a program in which college and high school students are credentialed to educate their school communities about the use and benefits of public transit. Ambassadors would be volunteers with knowledge of and interest in serving as a bridge between FAX (and other transit) and their schools. Selection would be governed by FAX staff with input from school administration. They would receive a transit information, transit passes, promotional items, and training from FAX Marketing staff. Ambassadors could potentially provide guidance and assistance to riders, freeing up drivers' time.

Parallel Ambassador programs might be developed in collaboration with other groups, e.g.: senior citizens and merchant groups in commercial clusters served by transit.

Coverage Alternative: Recommended Policies, Strategies and Projects

The overall goal of the coverage alternative is to enhance transit and other shared ride modes in low-density areas where demand is too dispersed to warrant standard bus service; it also aims to

Fresno County Regional Long-Range Transit Plan

integrate these services with fixed-route service in the urban core. The following are key strategies that are recommended to be utilized to enhance the coverage alternative.

1. Enhance the Fresno County Rural Transit Agency (FCRTA) inter-city transit network

Over the years, FCRTA has enabled demonstration programs to test the market potential for new inter-city services. Measure C funds can be used to provide new/demonstration services. The service must meet the performance standards of each transit agency.

There are now four core corridors that serve the Fresno-Clovis Metropolitan Area:

- ✓ Coalinga-Huron-Five Point-Lanare-Riverdale-Caruther-Raisin City-Easton Corridor (Coalinga Route).
- ✓ Firebaugh-Mendota-San Joaquin-Kerman Corridor.
- ✓ Kingsburg-Selma-Fowler Corridor (Southeast Route).
- ✓ Orange Cove-Reedley-Parlier-Sanger Corridor (Orange Cove Route).

There are three different intercity corridors that provide linkages among Fresno County rural communities including:

- ✓ Huron- I-5 and Highway 198 developments-Harris Ranch-West Hills College-Coalinga (Huron Route).
- ✓ Sanger-Reedley Corridor (Sanger Express).
- ✓ Kingsburg-Selma-Fowler-Parlier-Reedley Corridor (Kingsburg-Reedley Route).

The Routes and services that as of 2016 had a farebox recovery ratio of 10% or more include:

- ✓ Del Rey Transit.
- ✓ Dinuba to Reedley Transit.
- ✓ Huron Transit.
- ✓ Kingsburg-Reedley Transit.
- ✓ Orange Cove Transit.
- ✓ Southeast Transit.
- ✓ West Side Transit.

An example of providing long-term transit improvements to the FCRTA inter-city network is increasing the number of daily round trips between Orange Cove and Fresno from one to two round-trips daily. Based on funding received from the Measure C New Technology Program for 2 electric buses, FCRTA will be operating 2 new express routes starting in Orange Cove and Coalinga and traveling into Fresno. The Orange Cove Express route will provide an additional round trip to Fresno with 6 stops compared to 15 on the current inter-city route.

Rural services are currently only available on many routes from Monday to Friday, with the Coalinga, Reedley, Selma, Sanger and Kingsburg Routes being examples of routes with Saturday service. A long-range project might be to have Saturday service on all intercity routes that can maintain a 10% farebox recovery ratio or better.

Fresno County Regional Long-Range Transit Plan

2. Explore community-based transportation opportunities taking advantage of technology innovations where and when feasible

The 2015 Fresno County Public Transportation Gap Analysis and Service Coordination Plan (Gap Analysis) surveyed 573 transportation disadvantaged individuals and found that 39% shared a ride to social service or medical appointments, making ridesharing the dominant mode of travel.

Communities in Huron, Cantua Creek and El Porvenir have received grants to launch pilot green community-based ride-share programs with electric vehicles. If proven successful, such programs can be modeled county-wide.

The LRTP will expand efforts to implement community-based transportation based on the mobility needed and as determined by the local community. Efforts are needed to provide both wheelchair-accessible traditional demand responsive service, as well as additional demonstration projects for providing innovative ridesharing services. These demonstration projects could employ partnerships with emerging carpool apps such as Scoop, Carma, and Waze Carpool.

In the medium- to long-term of the LRTP planning horizon, autonomous vehicles may be deployed to extend the cost-effective range of community-based transportation services. Demonstration projects that can combine the efficiencies of autonomous

electric vehicles with incentives for shared rides in rural communities should be fostered and encouraged when safety issues have been fully resolved. The potential for expanding mobility coverage with autonomous electric vehicles is potentially very significant. Coach operators in micro-transit vehicles could be replaced by attendants that would enable the elderly to live in place, for example, with “door through door” services provided that enable seniors to shop, make medical appointments, and go to the local senior center in a very cost-effective manner.

3. Provide Micro-Transit services in low demand areas where traditional fixed-route transit cannot meet minimum performance standards

Fresno Area Express (FAX) often receives requests to provide traditional transit services with a 40-foot bus to new developments in low population density areas that cannot meet minimum FAX performance standards. The goal of this strategy is to implement micro-transit demonstration projects to provide basic mobility for residents of these areas located in the periphery of FCMA, and to provide connections to FAX, FCRTA and Clovis Transit Stageline transfer locations.

“Micro-transit” is a term without an accepted and common meaning that has recently come into widespread use. There are many variations of micro-transit services that are currently being implemented. They include:

Fresno County Regional Long-Range Transit Plan

- ✓ **First and last mile services to and from rail stations.** An example is the Flex service of Alameda-Contra Costa Transit (AC Transit) around the Newark and Castro Valley BART stations. In this model an app powered by DemandTrans is utilized by passengers to access service from a designated bus stop for a trip within a defined area around the BART station or to and from the BART station itself. Regular scheduled service is offered at the BART station itself.
- ✓ **General public demand response services with an app.** An example is the relatively new micro-transit services in Citrus Heights, Orangevale, Fair Oaks and the Folsom light rail station, sponsored by Sacramento Regional Transit. An app powered by Transloc, allows passengers to create an account and request a real time trip by the app. On the app, the passenger chooses a pickup and drop-off location by typing in the addresses within the designated service. The passenger confirms the passenger details, and then requests a ride on the app. The passenger receives a real-time prediction of when a wheelchair-accessible vehicle will pick the passenger up and then the passenger taps a confirm ride button. Passengers can also reserve rides online and by phone.

The micro-transit service could provide both trips within a designated service area, but also for timed transfer with a local fixed route service. FAX has selected two areas for a demonstration project in Northeast and Northwest Fresno, contingent on available funding.

4. Develop a network of transportation nodes that provide seamless schedule, transfers, and fare payment integration

The most prevalent issue raised in interviews with stakeholders representing rural mobility interests is the growing need for services between rural and urban areas for medical trips, jobs, school, and social service agency appointments.

The establishment of key transportation nodes that would improve the ability of rural residents to connect to services in the urbanized areas will be developed in this LRTP to address these issues.

In concept, the key transportation nodes would be located at the interface where urban and rural transit meet. An example might be the western terminus of the proposed Shaw BRT route. The node would have the following conceptual features:

- ✓ Transfer locations for Micro-Transit buses from peripheral areas surrounding the transportation node, relevant FCRTA inter-city buses, FAX BRT and other relevant FAX buses with direct connections to key medical and social service agency destinations.
- ✓ Convenient bike share options for both first and last mile (with e-bikes, perhaps first and last 5-miles) access to the node. Bike share stations would also be located at key activity centers in rural communities.
- ✓ Solar panel shelters for the transfer locations to both provide re-charge buses during layovers, should technology make these feasible and appropriate.

Fresno County Regional Long-Range Transit Plan

- ✓ An integrated, app-based fare payment system such as Transit Token available for automatic payment of trip interchanges at the transportation node.

There would be 4-6 such transportation nodes established around the periphery of the Metropolitan Fresno (FAX and Clovis Transit) service area.

5. Enhance and expand partnerships to expand mobility opportunities

The Fresno area has a significant number of existing partnerships in place that have expanded mobility opportunities for residents living and employees working in Fresno County. This project would support and expand these partnerships and others that foster improved mobility throughout Fresno County.

Nurturing and expanding these partnerships in providing both public and social service agency transportation will continue to provide mobility options across the expansive geography of Fresno County. Expansion of these partnership would ensure, for example, that social service agencies are eligible for clean energy grants for electric vehicles, charging stations, etc.

6. Expand the vanpool program in Fresno County

Historical Background

There has been tremendous success with vanpools in Fresno County, and this strategy would build upon this extremely successful foundation. As of 2014, CalVans was operating a network of 54 farmworker vanpools and 139 commuter vanpools, representing 1,616 daily trips within, to, or from Fresno County. The agricultural vanpool program has gained acceptance by the growers. CalVans now has more than 75 vanpools that receive vouchers from their employers to cover the total cost of their trip. Both the general and agricultural vanpool programs are excellent examples of filling mobility gaps not being served by traditional transit.

In particular, FCRTA has been an extremely valuable partner in this endeavor. Over the past several years, FCRTA purchased 70 vanpools for utilization by Fresno County residents. This purchase of the vans allowed CalVans to lower the monthly rate paid by rider over what they had been required to pay the normal monthly lease/purchase cost of a new van. Coupled with incentives from the San Joaquin Valley Air Pollution Control District (SJVAPCD) and the Measure C Transportation Sales Tax in Fresno County, the growth in vanpools in Fresno County has been quite impressive as was shown in Figure 1 in Chapter 2. The number of CalVans vanpools in Fresno County grew from 138 in 2007 to 193 in 2014.

There remains untapped potential for increasing vanpooling in Fresno County. In consultation with

Fresno County Regional Long-Range Transit Plan

CalVans staff, it is projected that increasing the number of vanpools by 18 each of the next five years is an achievable objective.

Blended Alternative

The Blended Alternative is a hybrid of the most promising features of the first two Alternatives. This alternative will select strategies from the Ridership and Coverage Alternatives that collectively:

- ✓ Attract and sustain system ridership.
- ✓ Extend coverage to more people and destinations as cost effectively as possible using new technologies and new forms of mobility coordinated and integrated with fixed-route transit.
 - Ensure that regional/Countywide system is productive (ridership and farebox) and fiscally sustainable by ensuring that the system has reliable community, political and financial support.

Recommendation 1: Explore Options for Mobility Management for the Fresno Region

Create an Online Web Portal to Enhance Mobility Management

Mobility management is defined by the National Resource Center for Human Service Transportation Coordination as “a process of managing a coordinated community-wide transportation service network comprised of the operations and infrastructure of multiple trip providers in partnership with each other.” Referenced in Federal legislation, mobility management and the array of

tools it employs seeks to better connect persons with the mobility services they need. Mobility management is a specific strategy mentioned in the FTA Circular for FTA 5310 monies.

An Online Web Portal can be developed to provide access to comprehensive information about local transportation options and programs

While making countywide transit trip planning easier will address some needs, it will not resolve the special transportation challenges faced by many transportation disadvantaged populations and the social service agencies that serve them. To communicate the diverse array of transportation services and programs that have been implemented in Fresno County, the development of a comprehensive web portal for conveying comprehensive local transportation information is recommended.

A preliminary concept for such a portal, which can be used both by residents and agencies, is illustrated in Figure 6. This presents the conceptual screen shots for find-a-ride web portal that invites some information about the trip origin and destination and brings back matches from a search of available transportation services.

Key Features of the Web Portal

Key Features of the Web Portal would include:

- ✓ Quick links to all major transportation providers and programs.

Fresno County Regional Long-Range Transit Plan

✓ Find a Ride Search Tool. This will be a search function which will allow the user to input their origin, destination and special factors which may qualify them for additional services (e.g. age, disability and trip purpose). It will then return a list of all transportation services that might meet the need. These will be grouped by service type:

- Public Transit Services.
- Paratransit or Dial-a-Ride services (if the person qualifies).
- Special Transportation Services (e.g. Measure C programs or social service transportation).
- Vanpool and Carpool options for both recurring commute trips and nonrecurring trips such as medical trips.
- Private Transportation Providers (NEMT, Taxi Companies, etc.).

For each service, basic pieces of information will be provided (as applicable to the type of service).

- ✓ Service provider and phone number.
- ✓ Days and hours of service, frequency.
- ✓ Who service is open to.
- ✓ Advance Reservation Requirement.
- ✓ Wheelchair Accessible.
- ✓ Fare or payment options.

A link would be provided to the provider website or to an email address that will allow the searcher to secure complete detailed information.

✓ Countywide Transit Trip Planner. The trip planner previously discussed (either Google Transit or the FAX trip planner) will be on the homepage for easy planning of transit trips

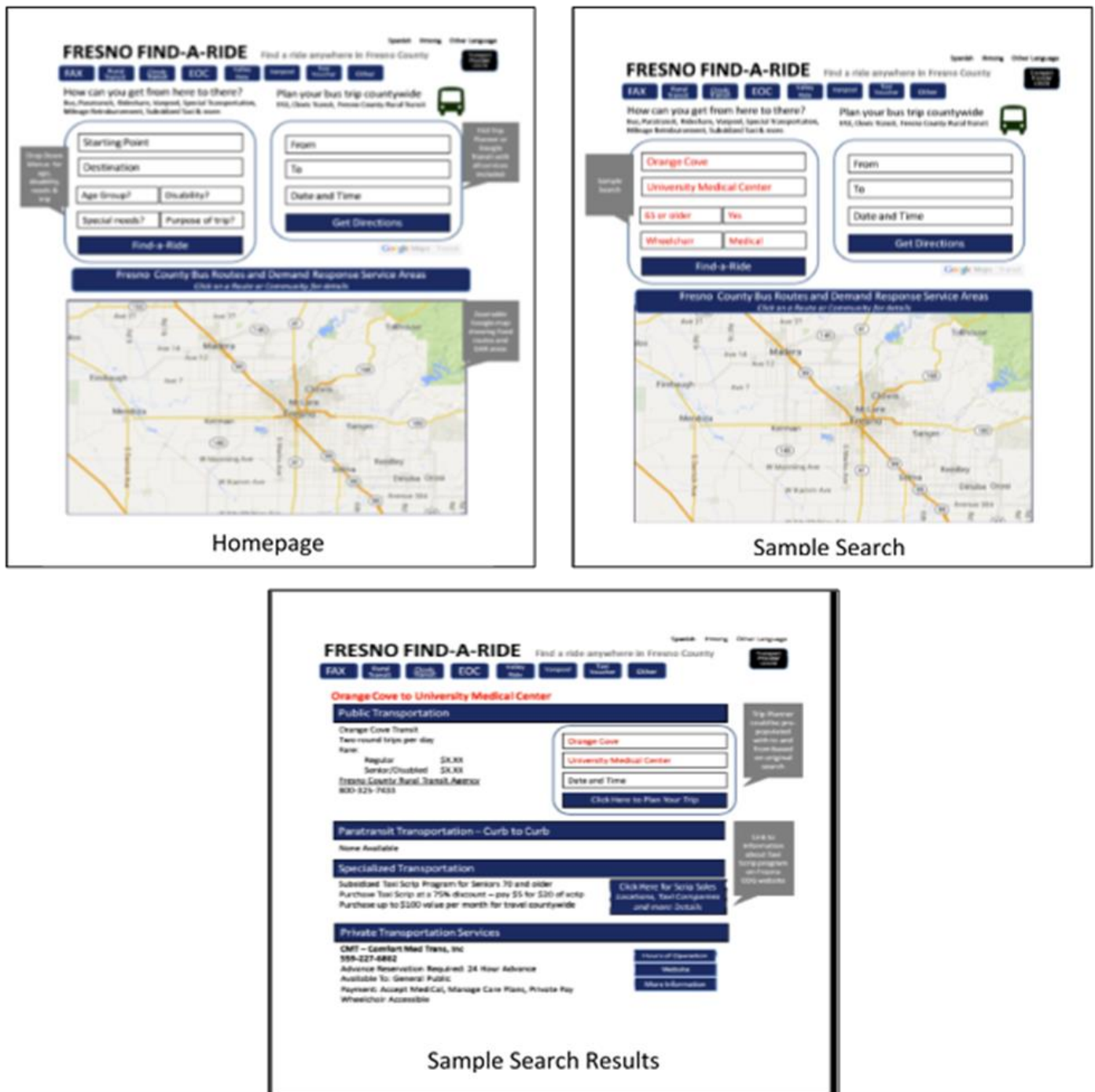
countywide. If a person does a Find a Ride search for a trip that can be made on public transit, the results will include the trip planner with their origin and destination pre-populated so they can immediately see trip options including routes, schedules and fares.

✓ Zoomable County Map with clickable transit routes and paratransit/Dial-a-Ride (DAR) service areas. A customized Google Map (based on the GTFS data) would show the fixed routes within Fresno County. In addition, DAR and paratransit service area boundaries could be “drawn in.” An example of a zoomable map of this type can be found at <http://sctransit.com/maps-schedules>.

✓ Multi-lingual Functionality. A clearly visible link at the top of the homepage should allow the site to be viewed in Spanish, Hmong or other languages. This feature will allow the site to be useful both to mono-lingual individuals and to the people who assist them. For example, the Transportation Coaches described under the Mobility Management Program strategy could use the website as a resource to help mono-lingual (which they might be themselves) or illiterate individuals.

✓ Provider Access to Content Management System. Websites built using a Content Management System such as Word Press can be easily updated and maintained by multiple individuals. The web portal should be designed such that providers can easily update their own listings.

Figure 6 - Online Web Portal Preliminary Concept



Fresno County Regional Long-Range Transit Plan

Recommendation 2: Pursue Funding for Innovative Transit Projects

Funding opportunities will be pursued for innovative transit projects that are not eligible under traditional transit funding. Such traditional transit funding sources typically have restriction and requirement for ADA accessibility and farebox recovery ratios, which innovative transit projects might have difficulty to meet in the beginning. Transit agencies will seek funding opportunities that are more flexible in these areas.

Evaluation of the Alternatives

The recommended policies strategies described above were evaluated using detailed scoring criteria (Figure 7). To ensure compatibility with Fresno COG's 2018 RTP/SCS, the criteria are based on the criteria used to score RTP/SCS projects, with

additions and modifications appropriate to a longer-term perspective.

The policies/strategies were then independently evaluated by the consultant team and members of the Project Steering Committee. A detailed summary of the scoring is included in Appendix A. The consensus of the scoring exercise was that *all* of the policies/strategies and project types merited further development. Therefore, specific projects were developed for each of the strategy types described above.

The next step was development of more specific projects by the three transit operators, the consultant team, and other members of the Steering Committee. The project list developed – the LRTP preferred alternative – is described in the next chapter.



Fresno County Regional Long-Range Transit Plan

Figure 7 - Transit Strategy Evaluation Criteria

Transit Strategy Evaluation Criteria
Long Range Transit Plan

1	Is consistent with current local plans, policies, and Short Range Transit Plans		Notes
	Implements: current RTP; local plans & policies; and Short Range Transit Plans		
	1	Yes	
	0	No	Consistent is defined as: a project listed within a plan or a project supports a plan's goal, policies, or objectives. [Accounts for 2% of total points available.]

2	Provides improved access to activity centers		Notes
	Improves access to activity centers through an expanded transit system		
	5	Substantially Improves service at an activity center	
	3	Directly serves an activity center	
	1	Indirectly serves an activity center	
	0	Does not directly or indirectly serve an activity center	Substantially improves means significant increase in service, speed, or quality of service to an activity center. Directly serves is defined as: a transit project that leads straight to or alongside an activity center. Indirectly serves is defined as: a transit project that does not lead straight to or go alongside an activity center but is within 1 mile of an activity center. Activity Center defined as: A medical center or civic center, school, office, park, employment or commercial area. [Accounts for 10% of total points available.]

3	Project will maintain established productivity standards		Notes
	The project can be supported and operated over time		
	5	Will exceed established productivity standards	
	3	Yes, all existing productivity standards can be maintained	
	1	Two or more productivity standards can be maintained	
	0	Productivity standards cannot be maintained by the project	Productivity standards are based on the definitions in the Short Range Transit Plan (i.e. TDA performance indicators, ridership and farebox). [Accounts for 10% of total points available.]

4	Project provides for or promotes intermodal connectivity		Notes
	The project enhances the regional transportation system		
	5	The project provides intermodal connectivity reliable transfers AND seamless affordable fares	
	3	The project provides intermodal connectivity reliable transfers OR seamless affordable fares	
	1	The project provides intermodal connectivity	
	0	The project does not provide intermodal connectivity	Intermodal connectivity is defined as: bus to train, bus to airport, bus to a Park & Ride, bus to a Vanpool or Carpool, or bus to a Bike Facility. A project that accomplishes one of the connections listed receives 1 point, 2 connections, 3 points, and 3 or more connections 5 points, for 10% of total points available.]

5	Project serves a transit dependent population and/or community		Notes
	Project provides access to essential services for the transit dependent population		
	5	The project will improve the quality of service to a transit dependent population	
	3	The project will serve a transit dependent population that is currently not served at all	
	1	The project will serve a transit dependent population that currently has some service or access within 1 mile	
	0	The project will not serve a transit dependent population	Transit Dependent is defined as: individuals, or groups of individuals that limited access to driving, and are primarily dependent on the availability of public transportation and paratransit service. Quality of service refers to the frequency, speed, and affordability of service [Accounts for 10% of total points available.]

6	Project enhances interagency transit service coordination		Notes
	Enhances regional transportation system connectivity and ability to consolidate regional trips		
	2	Yes, the project is being developed in collaboration with another agency or group	
	0	No, the project is not being developed in collaboration with another agency or group	Examples include: vanpool, rideshare programs as well as coordination between transit operators. [Accounts for 4% of total points available.]

7	Project reduces reliance on private automobiles		Notes
	Enhances air quality and reduces peak automobile travel		
	2	The project involves new or enhanced commuter service	
	1	The project involves new or enhanced access to an activity center	
	0	The project does not involve new or enhanced commuter service or access to essential services	
			Activity Center defined as: A medical center or civic center, school, office, park, employment or commercial are. A maximum of 2 points may be awarded. [Accounts for 4% of total points available.]

Fresno County Regional Long-Range Transit Plan

Figure 7 - Transit Strategy Evaluation Criteria (continued)

8	Project will enhance part of an existing transit service		Notes
	Addresses continued system continuity		
2	The project will enhance or extend an existing transit facility or service		[Accounts for 4% of total points available.]
0	The project is a stand alone project not connecting or enhancing an existing facility or service		
9	Project reduces vehicle congestion		Notes
	Reduces commuter or special event trips		
2	The project involves new or enhanced express transit service along a congested (LOS D - Rural or F - Urban) corridor		[Accounts for 4% of total points available.]
1	The project involves shuttle service for major events in congested areas such as in a City center		
0	The project will not reduce traffic congestion along a deficient corridor or in a City center		
10	Supports SCS growth principles		Notes
	Project furthers implementation of the SCS		
4	Supports compact development		[Accounts for 8% of total points available.]
2	Provides Greenhouse Gas reduction and/or Criteria Pollutant transit emission reductions by, e.g., replacing gas/diesel with ZEV, hybrids or CNG		
1	Provides Greenhouse Gas reduction and/or Criteria Pollutant emission reductions by eliminating SOV with larger capacity buses		
11	Health Priority Index		Notes
	Project benefits areas that are most health burdened		
2	Projects that benefit areas with 3-4 health burden measures		Visit Fresno County Department of Public Health's website at http://www.co.fresno.ca.us/DivisionPage.aspx?id=71385 (Health Priority Index) for a map to determine project areas level of health burden. Health Burden measures include: Pre-term Birth rate, Pollution Burden, Year of potential life lost, Composite Mortality Index. A maximum of 2 points may be awarded. [Accounts for 4% of total points available.]
1	Projects that benefit areas with 1-2 health burden measures or that falls within an economically disadvantaged community		
0	Projects that do not benefit areas with significant health burden measures		
12	Estimated Project Timing		Notes
	More imminent projects are higher priority than those that are not ready to be open to traffic		
3	Project is scheduled to be operating within the next 5 years		A maximum of 3 points may be awarded. [Accounts for 6% of total points available.]
2	Project is scheduled to be operating in 5 to 10 years		
1	Project is scheduled to be operating in 15 to 25 years		
0	Project is scheduled to be operating in in more than 25 years		
13	Leveraging Funding Through Partnerships		Notes
	Project establishes new funding for transit and mobility services		
4	Project provides substantial new funding for transit and complementary services		A maximum of 4 points may be awarded. [Accounts for 8% of total points available.]
2	Project provides limited new funding for transit and complementary services		
0	Project does not provide new funding for transit and complementary services		
14	Technology to Improve Customer Experience		Notes
	Projects		
4	Project makes it easier to locate AND pay for transit and complementary services in real time		A maximum of 4 points may be awarded. [Accounts for 8% of total points available.]
2	Project makes it easier to locate OR pay for transit and complementary services in real time		
0	Project does not include passenger information technology		
15	Expand Mobility Choice		Notes
	Project increases mobility choices		
4	Project provides a new mobility option with high ridership potential		A maximum of 4 points may be awarded. [Accounts for 8% of total points available.]
2	Project provides a new mobility option with moderate ridership potential		
0	Project does not entail a new mobility option		

50 TOTAL MAXIMUM POINTS AVAILABLE

Chapter V

Development of Long-Range Transit Plan Project List



Chapter V. Development of LRTP Project List

Introduction and Overview

With the direction provided by the analysis of various types of projects under the three alternatives discussed in Chapter IV, specific projects were developed for inclusion in the LRTP as the preferred alternative.

These projects were developed by each of the Fresno three transit operators, FAX, Clovis Transit, and FCRTA. They were in some instances modified or refined based on discussions with the consultant team and the LRTP Steering Committee. All projects that were new or that represent substantial changes to projects included in the Fresno COG 2018 RTP/SCS were placed under the rubric of one or more of the “macro” strategies and projects described Chapter IV.

The three operators’ proposed projects constitute the bulk of the Preferred Alternative Project list, but there were some important additions. The consultant team, led by Nelson\Nygaard, established strategic projects to implement comprehensive “First/Last mile to transit improvements” in Fresno County and its 15 Cities. The goal of these strategic projects is to ensure timely assessment of and measurable progress towards improvements for effective First/Last mile safety remediation and connectivity for active transportation modes in the county. The articulation of the strategy includes a sample scope of work for conducting a first and last

mile analysis and an example of some of the analysis results (see Appendix B for details).

Projects to enhance active transportation for the first and last mile will provide important connections to public transportation. Walking or biking to and from transit entail one of the most cost-efficient and environmentally sustainable travel choices a person can make. Although Fresno’s transit system often makes up the core of the non-auto transportation network, the ways and means by which one accesses that system can determine whether someone chooses to ride transit or not. Even when the physical distance between a person’s origin and a transit station is short, the issues of comfort, safety, convenience, and cost all affect that person’s travel choices. Efforts to improve any of these characteristics along key routes to transit stations can have a wider influence on a community’s quality of life; areas where people are walking, biking, and taking transit are often more vibrant and pleasant than auto-oriented areas. Providing convenient, affordable, and safe options to access transit and other modes reduces traffic congestion and greenhouse gas emissions and supports economic and physical health – important goals in the Fresno region and the Valley and State of California as well.

The Long-Range Transit Plan Project List

Table 2 on the following pages constitutes the final LRTP project list. The table includes 2018 RTP projects as well as additional projects.

Project timing is indicated and color-coded in the table as follows:

Fresno County Regional Long-Range Transit Plan

- ✓ Short term (1-10 years)
- ✓ Medium term (11-20 years)
- ✓ Long term (21 or more years)

The transit projects in Table 2 have the endorsement of each transit agencies' management. Endorsement of each operators' governing boards will be sought prior to finalization of the LRTP.

Table 2 - LRTP Project List

Fresno County Long-Range Transit Plan Transit Project List by Transit Agency				
#	Strategy	Project Description	Year(s)	Estimated Cost
FAX Project List				
1	R-1: Transit Supportive Policies	Bus route shall not deviate from major arterial unless the change would increase total productivity (boardings/rev hour) of the route by at least 10% counting riders lost due to increased travel time for through riders	Short	\$0
2	R-2: Fare Policy and Demand Management Strategies	Implement a smart card based fare payment system	Short	\$500,000
3	R-2: Fare Policy and Demand Management Strategies	Upgrade transit passes to Smart Card	Short	\$500,000
4	R-2: Fare Policy and Demand Management Strategies	Implement a mobile fare payment system	Short	\$500,000
5	R-3: Expand BRT and Frequent Bus Networks: Stand Alone Projects	Add BRT service on Cedar Avenue transit corridor.	Short	\$75,000,000
6	R-3: Expand BRT and Frequent Bus Networks: Stand Alone Projects	Extend the Kings Canyon BRT corridor to Fancher Creek.	Short	\$1,000,000
7	R-3: Expand BRT and Frequent Bus Networks: Stand Alone Projects	Add BRT service to Shaw Avenue transit corridor.	Short	\$100,000,000
8	R-3: Expand BRT and Frequent Bus Networks: Stand Alone Projects	Purchase 60-foot articulated transit buses to increase passenger capacities as ridership increases.	Short	\$20,000,000
9	R-3: Expand BRT and Frequent Bus Networks: Stand Alone Projects	High Frequency Service from Fresno State to Clovis	Short	\$1,000,000
10	R-3: Expand BRT and Frequent Bus Networks: Stand Alone Projects	High Frequency Service from downtown to southwest Fresno, including the North Pointe Industrial Park (Amazon Fulfillment Center)	Short	\$1,000,000
11	R-4: Strengthen Network Connectivity	Park and Ride Lots. (Construction of Park and Ride lots to serve transit corridors.)	Short	\$10,000,000
12	R-5: Bus Speed Enhancements	Install Queue Jump lane Blackstone & Nees	Short	\$1,000,000
13	R-5: Bus Speed Enhancements	Install Queue Jump lane Blackstone & Shaw	Short	\$1,000,000
14	R-5: Bus Speed Enhancements	Install Queue Jump lane Blackstone & Shields	Short	\$1,000,000

Fresno County Regional Long-Range Transit Plan

Table 2 - LRTP Project List (continued)

#	Strategy	Project Description	Year(s)	Estimated Cost
FAX Project List				
15	R-5: Bus Speed Enhancements	Install TSP on Shaw Ave.	Short	\$760,000
16	R-5: Bus Speed Enhancements	Install TSP on Cedar Ave.	Short	\$800,000
17	R-6 (C-3): Review Opportunities to Tailor Bus Services to More Efficiently Serve Low Demand Times and Routes	Late Night Service Weekdays/Weekends	Short	\$2,000,000
18	R-6 (C-3): Review Opportunities to Tailor Bus Services to More Efficiently Serve Low Demand Times and Routes	Establish partnership with TNC's to facilitate late night service	Short	\$1,000,000
19	R-7 : Increase Service Frequencies, Improve Reliability and Expand Service to New Growth Areas	15 minute frequency on Elm from North Ave into Downtown	Short	\$1,000,000
20	R-7: Increase Service Frequencies, Improve Reliability and Expand Service to New Growth Areas	15 minute frequency on MLK (Fig) from North Ave into Downtown	Short	\$1,000,000
21	R-7: Increase Service Frequencies, Improve Reliability and Expand Service to New Growth Areas (C-7)	Service on California Ave. from Veterans Home into Downtown	Short	\$1,000,000
22	R-7: Increase Service Frequencies, Improve Reliability and Expand Service to New Growth Areas	Service to relocated Fresno County Department of Social Services	Short	\$50,000
23	R-7: Increase Service Frequencies, Improve Reliability and Expand Service to New Growth Areas	15 minute frequency on Route 41	Short	\$1,000,000
24	R-7: Increase Service Frequencies, Improve Reliability and Expand Service to New Growth Areas	15 minute frequency on Route 34	Short	\$1,500,000
25	R-7: Increase Service Frequencies, Improve Reliability and Expand Service to New Growth Areas	15 minute frequency on Route 29	Short	\$1,000,000
26	R-7: Increase Service Frequencies, Improve Reliability and Expand Service to New Growth Areas	New service on Peach Ave south of Kings Canyon	Short	\$1,000,000
27	R-7: Increase Service Frequencies, Improve Reliability and Expand Service to New Growth Areas	Establish Route 45 as an Ashlan Ave crosstown	Short	\$1,000,000
28	R-7: Increase Service Frequencies, Improve Reliability and Expand Service to New Growth Areas	30 minute frequency on Route 45	Short	\$750,000
29	R-7: Increase Service Frequencies, Improve Reliability and Expand Service to New Growth Areas	Establish a Bullard Ave crosstown route connecting to Fresno State	Short	\$2,000,000
30	R-7: Increase Service Frequencies, Improve Reliability and Expand Service to New Growth Areas	15 minute service on Route 9 into Clovis. Extending route to Fowler Ave and North to 3rd Street (Clovis Transit Center)	Short	\$2,000,000

Fresno County Regional Long-Range Transit Plan

Table 2 - LRTP Project List (continued)

#	Strategy	Project Description	Year(s)	Estimated Cost
FAX Project List				
31	R-8: Integration With Plans for High-Speed Rail Station and Downtown Plans	New Intermodal Transit Station in Downtown Fresno, at High Speed Rail, to replace existing facilities located at Courthouse Park. (Develop/build downtown transit station at the new Fresno High-Speed Rail station.)	Short	\$15,000,000
32	R-8: Integration With Plans for High-Speed Rail Station and Downtown Plans	Downtown Circulator Program – provide service within downtown Fresno during peak commute hours. Purchase electric or near zero emission buses and recharging stations.	Short	\$5,000,000
33	R-9: New Transit Hubs Outside of Downtown Fresno	Fancher Creek Transit Center	Short	\$1,000,000
34	R-9: New Transit Hubs Outside of Downtown Fresno	Clovis Transit Center at Clovis Ave and 3rd Street	Short	\$4,000,000
35	R-10 (B3): First/Last Mile Improvements	Implement Microtransit in select areas	Short	\$1,000,000
36	R-10 (B3): First/Last Mile Improvements	Establish partnership with TNC's to facilitate 1st mile/last mile services and improve transportation options in the region.	Short	\$2,000,000
37	R-11 (B4): Technology and Climate Change Initiatives	Purchase Zero-Emission or Near-Zero Emission Buses for transit service.	Short	\$21,250,000
38	R-11 (B4): Technology and Climate Change Initiatives	Make Wi-Fi available for passengers on all FAX fixed route and paratransit vehicles.	Short	\$500,000
39	R-11 (B4): Technology and Climate Change Initiatives	Replace CAD/AVL/GPS system on FAX fleets	Short	\$3,500,000
40	R-11 (B4): Technology and Climate Change Initiatives	Design/install vehicle parking shelters with solar panels to "green" main FAX facility.	Short	\$5,000,000
41	R-11 (B4): Technology and Climate Change Initiatives	Upgrade all Fresno County transit vehicles to cellular based on-board equipment	Short	\$200,000
42	R-12 (B5): Upgrade Bus Storage and Maintenance Facilities	Evaluate the need and potential property acquisition for additional FAX facilities for future expansion.	Short	\$500,000
43	R-12 (B5): Upgrade Bus Storage and Maintenance Facilities	Install infrastructure to support electric bus charging stations.	Short	\$20,000,000
44	R-13: Ambassador Programs	Expand the Travel Training program to include schools and other social service programs	Short	\$500,000
45	C-3: Provide Micro-Transit Services in Low-Demand Areas	Complete Microtransit demonstration project.	Short	\$2,000,000
46	B-1: Create an Online Web Portal to Enhance Mobility Management	Mobility Management Portal will build on Google Transit (All systems to provide real time GTFS)	Short	\$2,000,000
47	R-2: Fare Policy and Demand Management Strategies	Reduce cash fare payment at the point of sale	Medium	\$1,000,000
48	R-3: Expand BRT and Frequent Bus Networks: Stand Alone Projects	Median Running BRT on Ventura/Kings Canyon and Blackstone corridor.)	Medium	\$395,000,000
49	R-3: Expand BRT and Frequent Bus Networks: Stand Alone Projects	Feasibility Study: Premium Transit on the 168 freeway corridor	Medium	\$1,000,000
50	R-3: Expand BRT and Frequent Bus Networks: Stand Alone Projects	Feasibility Study: High Capacity Premium Transit in the 41 freeway corridor	Medium	\$1,000,000
51	R-4: Strengthen Network Connectivity	Bicycle Lockers at Transit Stops	Medium	\$50,000
52	R-5: Bus Speed Enhancements	Install TSP on Shields Ave.	Medium	\$480,000

Fresno County Regional Long-Range Transit Plan

Table 2 - LRTP Project List (continued)

#	Strategy	Project Description	Year(s)	Estimated Cost
FAX Project List				
53	R-7: Increase Service Frequencies, Improve Reliability and Expand Service to New Growth Areas	Church Ave crosstown	Medium	\$1,000,000
54	R-7: Increase Service Frequencies, Improve Reliability and Expand Service to New Growth Areas	Veteran's Blvd to Grantland	Medium	\$1,000,000
55	R-9: New Transit Hubs Outside of Downtown Fresno	River Park Transit Center	Medium	\$2,000,000
56	R-9: New Transit Hubs Outside of Downtown Fresno	CSU Fresno Transit Center at Shaw and Maple	Medium	\$4,000,000
57	R-7: Increase Service Frequencies, Improve Reliability and Expand Service to New Growth Areas	30 minute frequency on Willow Ave from Shields to Clovis Community College	Medium	\$1,000,000
58	R-1: Transit Supportive Policies	90% of service hours dedicated to productive service exceeding the productivity standard of 60% of the system average for riders/rev hour	Long	\$0
59	R-1: Transit Supportive Policies	Maintain minimum spacing of every one-half mile except in areas of higher density, employment, schools or a combination of 16 or more persons per acre	Long	\$4,000,000
60	R-3: Expand BRT and Frequent Bus Networks: Stand Alone Projects	Add BRT service to California Avenue transit corridor.	Long	\$25,000,000
2018 Regional Transportation Plan Projects				
61	R-1: Transit Supportive Policies	Purchase and develop land in support of revitalization and mixed-use development along high capacity/high frequency transit corridors.	Short	\$5,000,000
62	R-10 (B3): First/Last Mile Improvements	Passenger amenity improvements (bus stops/stations) throughout FAX route system, including concrete improvements, shelters, lighting, signage, etc. Annual average \$150k.	Short	\$4,500,000
63	R-3: Expand BRT and Frequent Bus Networks: Studies	Initial planning and environmental work related to implementing new BRT service on Cedar Avenue.	Short	\$500,000
64	R-10 (B3): First/Last Mile Improvements	FAX will evaluate and potentially modify fixed route system bus stop locations to determine best locations for optimal nexus to meet passenger needs and increase system efficiency.	Short	\$2,500,000
65	R-12 (B5): Upgrade Bus Storage and Maintenance Facilities	FAX will evaluate or hire consulting firm to evaluate need for new or expanded facilities to accommodate future service expansion.	Short	\$500,000
66	R-12 (B5): Upgrade Bus Storage and Maintenance Facilities	Remodel of FAX operations and maintenance facilities.	Short	\$20,000,000
67	C-3: Provide Micro-Transit Services in Low-Demand Areas	Handy Ride (paratransit) service contract. Annual average \$5M (capital maintenance portion annual average \$2M).	Short	\$150,000,000
68	R-11 (B4): Technology and Climate Change Initiatives	Implement public transit projects/activities that support the California Transformative Climate Communities (TCC) program to reduce greenhouse gases.	Short	\$10,000,000
69	R-10 (B3): First/Last Mile Improvements	Acquire and install bicycle racks and other bike-related amenities on FAX buses and facilities to encourage bike/bus connections.	Short	\$250,000
70	R-11 (B4): Technology and Climate Change Initiatives	Research and incorporate ITS technologies into FAX operations (e.g., collision avoidance system).	Short	\$1,000,000
71	R-1: Transit Supportive Policies	Partner with MPO to align limited resources with adopted SCS goals and strategies.	Short	\$2,000,000

Fresno County Regional Long-Range Transit Plan

Table 2 - LRTP Project List (continued)

#	Strategy	Project Description	Year(s)	Estimated Cost
FAX Project List				
72	R-1: Transit Supportive Policies	Various planning projects to support FAX service. Annual average \$500k.	Short	\$15,000,000
73	R-11 (B4): Technology and Climate Change Initiatives	Maintain/repair all FAX facilities and vehicles as needed. Annual average \$8M.	Short	\$240,000,000
74	R-12A (B5A): Vehicle Replacement	Purchase 30', 40', 60' buses, and paratransit vehicles to replace end-of-life vehicles in FAX fleet.	Short	\$56,000,000
75	B-2: Pursue Funding for Innovative Transit Projects	Pursue funding for operating support for new/expanded services, including new BRT services on highly utilized corridors, like Shaw, Cedar, Shields, etc.	Short	\$15,000,000
76	R-1: Transit Supportive Policies	Initial planning and environmental work related to implementing new BRT service on Shaw Avenue.	Short	\$500,000
77	R-12 (B5): Upgrade Bus Storage and Maintenance Facilities	Purchase replacement support vehicles for FAX maintenance and operations.	Short	\$1,500,000
78	R-12 (B5): Upgrade Bus Storage and Maintenance Facilities	Tire lease contract for FAX fleets. Annual average \$325k.	Short	\$9,750,000
79	R-12 (B5): Upgrade Bus Storage and Maintenance Facilities	Security and safety projects on buses and at transit stations/stops and facilities, including generator upgrades; building and lot access control; video surveillance; improved lighting; fire safety systems; etc.	Short	\$4,000,000
			TOTAL	\$1,288,340,000
Fresno County Rural Transit Agency Project List				
1	R-12 (B5): Upgrade Bus Storage and Maintenance Facilities	Construction of a Maintenance facility located in Selma; 6-8 service bays to accommodate up to 40ft buses, offices for staff and training and a dispatch center.	Short	\$4,000,000
2	R-11 (B4): Technology and Climate Change Initiatives	A public fast-fill CNG fueling station at the FCRTA maintenance facility located in Selma to serve public vehicles and private customers.	Short	\$1,500,000
3	R-11 (B4): Technology and Climate Change Initiatives	Software enhancements to accommodate the conversion and implementation of ZEV fleet and entail dispatching and web portal with internal and external applications along with Wi-Fi connections.	Short	\$500,000
4	R-12 (B5): Upgrade Bus Storage and Maintenance Facilities	Security lighting and cameras at the city yard's of the rural incorporated cities in Fresno County which will upgrade city facilities and storage for buses.	Short	\$150,000
5	R-10 (B3): First/Last Mile Improvements	Install security cameras at FCRTA bus shelters to improve safety for passengers and increase ridership.	Short	\$150,000
6	R-12 (B5): Upgrade Bus Storage and Maintenance Facilities	Continue to install automated security gates at the city yard's of the rural incorporated cities in Fresno County which will upgrade city facilities.	Short	\$250,000
7	R-12 (B5): Upgrade Bus Storage and Maintenance Facilities	Fast-fill CNG fueling stations at approximately five (5) city yards in rural Fresno County to enhance county wide fast-fill CNG fueling accessibility.	Short	\$1,300,000
8	C-5: Enhance and Expand Partnerships to Expand and Market Mobility Opportunities	Rural transit system wide marketing plan to increase ridership and incorporate new technology combined with shared mobility implementation.	Short	\$300,000
9	C-5: Enhance and Expand Partnerships to Expand and Market Mobility Opportunities	Update website and incorporate any new technology applications or enhancements.	Short	\$10,000

Fresno County Regional Long-Range Transit Plan

Table 2 - LRTP Project List (continued)

#	Strategy	Project Description	Year(s)	Estimated Cost
Fresno County Rural Transit Agency Project List				
10	C-5: Enhance and Expand Partnerships to Expand and Market Mobility Opportunities	Shared mobility rides will require "individualized" and "group" mobility training to accommodate the EV sedans and microtransit efforts with non-traditional transit vehicles. This mobility training will be for both passengers and drivers to minimize incidents and/or accidents and increase ridership.	Short	\$100,000
11	R-11 (B4): Technology and Climate Change Initiatives	Deployment of seven (7) electric buses to expand the inter-city routes as well as replace gas fleet and augment CNG fleet vehicles on the existing intra-city routes.	Short	\$6,000,000
12	C-5: Enhance and Expand Partnerships to Expand and Market Mobility Opportunities	A zero emission vehicle education and outreach program focused in the low-income and DAC communities in Fresno County in partnership with other local organizations and agencies.	Short	\$500,000
13	R-11 (B4): Technology and Climate Change Initiatives	An electric vehicle charging depot at the FCRTA maintenance facility in Selma for private and public electric vehicles, with 2 levels of charging- Level 2 & Level 3.	Medium	\$2,000,000
14	R-11 (B4): Technology and Climate Change Initiatives	Conversion of the existing FCRTA bus vehicle fleet to 100% zero emission bus fleet by 2025.	Medium	\$100,000,000
15	C-3: Provide Micro-Transit Services in Low-Demand Areas	FCRTA is actively pursuing planning funds for shared mobility projects specifically designed for rural applications using the latest technology for software, apps and communication technology to enhance subsequent implementation of EV vehicles (sedans, vans and buses).	Medium	\$1,000,000
16	B-2: Pursue Funding for Innovative Transit Projects	FCRTA will be pursuing funding for operations to implement shared mobility projects with specific emphasis on intra-city and inter-city modes. These anticipated funding projects are in line and consistent with the recently adopted and approved RTP (June 2018) and should align within the goals and objectives of the LRTP. Updates of the SRTP and LRTP would include the analysis and strategic plans to include these new technology enhanced projects.	Medium	\$5,000,000
17	C-4: Develop a Network of Inter-system Transportation Nodes	Expand the existing interregional transit systems with adjacent counties surrounding Fresno County- i.e., Madera, Tulare and Kings County. Which would include interregional bus passes and targeted activity centers in the respective cities within the counties.	Medium	\$2,000,000
18	R-11 (B4): Technology and Climate Change Initiatives	Expand the EV charging network within Fresno County in both direct connected and solar charging units which requires analysis of the utilities within each city and load capacity based on the existing network for each oversight utility company. Pursue funding opportunities to create and sustain projects.	Medium	\$5,000,000
19	R-11 (B4): Technology and Climate Change Initiatives	Continue the upfitting of fleet vehicles with (safety) equipment- i.e., cameras, DVR's, tablets, emergency 2-way radios.	Medium	\$500,000
20	R-8: Integration With Plans for High-Speed Rail Station and Downtown Plans	Integrate both regional and inter-regional rural transit routes with the HSR station for multimodal compatibility.	Medium	\$500,000
21	R-11 (B4): Technology and Climate Change Initiatives	Pursue planning grants to assess and collaborate with the utility companies to assess the grid system in order to support EV infrastructure and technology in rural Fresno County which could require regulatory changes.	Medium	\$500,000

Fresno County Regional Long-Range Transit Plan

Table 2 - LRTP Project List (continued)

#	Strategy	Project Description	Year(s)	Estimated Cost
Fresno County Rural Transit Agency Project List				
22	R-11 (B4): Technology and Climate Change Initiatives	A new technology vocational training facility for new emerging technology including EV, solar and CNG, that will service the Fresno County region and the San Joaquin Valley in collaboration with the state and community college district; Reedley College, West Hills College, Fresno State and Fresno City College along with the rural unified school districts.	Medium	\$1,000,000
2018 Regional Transportation Plan Projects				
23	R-10 (B3): First/Last Mile Improvements	Bike Racks at, FCRTA facilities, bus stops, and within FCRTA buses providing service within the 13 incorporated Cities	Short	\$50,000
24	R-12A (B5A): Vehicle Replacement	Countywide bus replacement	Short	\$16,000,000
25	R-10 (B3): First/Last Mile Improvements	Bus Shelters at FCRTA bus stops within the 13 incorporated Cities	Short	\$100,000
26	R-11 (B4): Technology and Climate Change Initiatives	Camera System for FCRTA providing service to the 13 incorporated Cities	Short	\$350,000
27	R-7: Increase Service Frequencies, Improve Reliability and Expand Service to New Growth Areas	In addition to existing transit service, route info: Coalinga-33-196-268-41-Fresno, twice daily w/ EV.	Short	\$375,000
28	R-7: Increase Service Frequencies, Improve Reliability and Expand Service to New Growth Areas	Expanded service hours and adding Sat to existing 5 days a week service	Short	\$375,000
29	R-11 (B4): Technology and Climate Change Initiatives	Dispatch Center within a small city along Highway 99	Short	\$200,000
30	R-11 (B4): Technology and Climate Change Initiatives	EV Charging Stations within the 13 incorporated Cities	Short	\$7,500,000
31	R-7: Increase Service Frequencies, Improve Reliability and Expand Service to New Growth Areas	In addition to existing transit service, route info: OC-Manning-180-Fresno, twice daily w/ EV.	Short	\$375,000
32	R-7: Increase Service Frequencies, Improve Reliability and Expand Service to New Growth Areas	New transit service, route info: West Park-Jensen-41-Fresno Courthouse Park, twice daily w/ Diesel bus.	Short	\$375,000
			TOTAL	\$157,960,000
Clovis Transit Project List				
1	R-7: Increase Service Frequencies, Improve Reliability and Expand Service to New Growth Areas	Enhanced bus service on Cedar Ave.	Short	\$50,000
2	R-7: Increase Service Frequencies, Improve Reliability and Expand Service to New Growth Areas	Enhanced bus service on Willow Ave.	Short	\$50,000
3	R-3: Expand BRT and Frequent Bus Networks: Stand Alone Projects	BRT extension on Shaw Ave.	Short	\$10,000,000
4	R-7: Increase Service Frequencies, Improve Reliability and Expand Service to New Growth Areas	Loma Vista Special Event Shuttle Services	Short	\$200,000
5	R-4: Strengthen Network Connectivity	Clovis Transit Route Restructure study 2019-2020	Short	\$500,000

Fresno County Regional Long-Range Transit Plan

Table 2 - LRTP Project List (continued)

#	Strategy	Project Description	Year(s)	Estimated Cost
Clovis Transit Project List				
6	R-7: Increase Service Frequencies, Improve Reliability and Expand Service to New Growth Areas	Express routes to medical center/research technology park/medical school/lodging service	Short	\$2,000,000
7	R-7: Increase Service Frequencies, Improve Reliability and Expand Service to New Growth Areas	Additional YARTS stops/locations	Short	\$500,000
8	R-7: Increase Service Frequencies, Improve Reliability and Expand Service to New Growth Areas	Fresno County DSS service on Ashlan Avenue	Short	\$1,000,000
9	R-4: Strengthen Network Connectivity	Improved connectivity for paratransit service in the urban area	Short	\$2,000,000
10	R-7: Increase Service Frequencies, Improve Reliability and Expand Service to New Growth Areas	Integration of high volume destinations into planning including the airport, high speed rail station, medical facilities, and urban villages (Years 10-20, cost \$5,000,000)	Medium	\$5,000,000
11	R-7: Increase Service Frequencies, Improve Reliability and Expand Service to New Growth Areas	Service to yet-to-be-named northeast urban village	Long	\$1,000,000
12	R-11: Technology and Climate Change Initiatives	Induction charging, other built-in electric infrastructure	Long	\$10,000,000
2018 Regional Transportation Plan Projects				
13	R-10: First Last Mile Improvements	Ashlan-N/s east of Berndine (TRANSIT: CURB CUT)	Short	\$80,000
14	R-10: First Last Mile Improvements	CLOVIS, 1320' N/O SHEPHERD (TRANSIT)	Short	\$50,000
15	R-10: First Last Mile Improvements	Clovis-E/s north of Ashlan (TRANSIT: CURB CUT)	Short	\$80,000
16	R-10: First Last Mile Improvements	HERITAGE GROVE MAIN STREET, 200' E/O WILLOW (TRANSIT: CURB CUT)	Short	\$50,000
17	R-10: First Last Mile Improvements	HERITAGE GROVE MAIN STREET, 600' E/O MINNEWAWA (TRANSIT)	Short	\$50,000
18	R-10: First Last Mile Improvements	HERITAGE GROVE MAIN STREET, 600' W/O PEACH (TRANSIT)	Short	\$50,000
19	R-10: First Last Mile Improvements	MINNEWAWA, 1000' N/O SHEPHERD (TRANSIT)	Short	\$50,000
20	R-10: First Last Mile Improvements	Minnewawa-W/s at Weldon Elementary (TRANSIT: CURB CUT)	Short	\$80,000
21	R-10: First Last Mile Improvements	Minnewawa-W/s north of Rall (TRANSIT: CURB CUT)	Short	\$80,000
22	R-10: First Last Mile Improvements	Minnewawa-W/s south of Holland (TRANSIT: CURB CUT)	Short	\$80,000
23	R-10: First Last Mile Improvements	Shaw-N/s west of Pollasky TRANSIT: CURB CUT)	Short	\$80,000
24	R-10: First Last Mile Improvements	Shaw-S/s east of Minnewawa (TRANSIT: CURB CUT)	Short	\$80,000
25	R-10: First Last Mile Improvements	Shaw-S/s east of Villa (TRANSIT: CURB CUT)	Short	\$80,000

Fresno County Regional Long-Range Transit Plan

Table 2 - LRTP Project List (continued)

Fresno County Long-Range Transit Plan Transit Project List by Transit Agency				
#	Strategy	Project Description	Year(s)	Estimated Cost
Clovis Transit Project List				
26	R-10: First Last Mile Improvements	Sunnyside-W/s between Third & Fourth (TRANSIT: CURB CUT)	Short	\$80,000
27	R-10: First Last Mile Improvements	Villa-E/s north of Portals (TRANSIT: CURB CUT)	Short	\$80,000
28	R-10: First Last Mile Improvements	Villa-W/s just south of Bullard (TRANSIT: CURB CUT)	Short	\$80,000
29	R-10: First Last Mile Improvements	Villa-W/s just south of Bullard (TRANSIT: CURB CUT)	Short	\$80,000
30	R-10: First Last Mile Improvements	WILLOW, 1000' N/O INTERNATIONAL (TRANSIT)	Short	\$50,000
31	R-10: First Last Mile Improvements	WILLOW, 1000' N/O SHEPHERD (TRANSIT)	Short	\$50,000
			TOTAL	\$33,610,000
			Transit Operators Subtotal	\$1,479,910,000
Active Transport Access to Transit Projects				
R-10: First/Last Mile Improvements - Accessibility Studies and Project Development				
		FAX Transit Accessibility Studies x 4 study areas	Short	\$100,000
		Clovis Transit Accessibility Study x 1 study area	Short	\$25,000
		FCRTA Accessibility Study x 15 study areas	Short	\$150,000
R-10: First/Last Mile Improvements - Transit Accessibility Capital Costs				
		FAX Transit Accessibility Capital Costs	Medium	\$7,344,000
		Clovis Transit Accessibility Capital Costs	Medium	\$1,836,000
		FCRTA Transit Accessibility Capital Costs	Medium	\$14,458,500
			TOTAL	\$23,913,500
			REGIONAL TOTAL	\$1,503,823,500

Chapter VI

Implementation and the Way
Forward | Next Steps



Chapter VI Implementation and the Way Forward | Next Steps

Introduction and Overview

Based on the foregoing tasks, the VRPA Team developed policy recommendations and implementation strategies to better connect the LRTP with the overall goals and future formulations of Fresno COG's Sustainable Communities Strategy (SCS). The policy recommendations and implementation strategies presented in this chapter also align LRTP projects, and future plans and efforts, with State and Federal Planning goals. This chapter also describes key funding sources for transit. It then discusses a number of key challenges and opportunities for transit in the Fresno, and describes next steps for the LRTP.

Implementation Policies and Strategies

Fresno COG's 2018 Sustainable Community Strategy, following the requirements of SB 375 (the legislation that mandates SCS development in conjunction with the RTP), does the following:

- ✓ Identifies future land use patterns.
- ✓ Identifies areas to accommodate long-term housing needs as well as 8-year housing needs.
- ✓ Considers resource areas and farmland.
- ✓ Identifies transportation needs and planned transportation networks.
- ✓ Sets forth a future land use pattern to meet GHG emission reduction targets by reducing vehicle

miles traveled (VMT) by cars and light duty vehicles.

The SCS has the elements of a comprehensive regional land use and transportation plan, although there is no mandate for specific land use policies at the local level. Indeed, SB 375 specifically states that land use planning remains the sole prerogative of the County and the 15 Cities. Nonetheless, the RTP/SCS does make Fresno COG an advocate for transportation and land use policies that reduce VMT and associated GHG emissions. Increasing transit's mode share is one means for reducing driving and auto emissions.

Federal Planning Goals under the 2015 FAST Act continue to stress safety and maintenance of transit assets. In terms of funding, the "Small Starts" program is the likeliest source of federal funding for the larger transit capital projects included in the LRTP. Requirements for "small starts" remain as they have been since 2005. Applicants must:

- ✓ Complete the environmental review process including developing and reviewing alternatives, selecting locally preferred alternative (LPA), and adopt it into a fiscally constrained long-range transportation plan.
- ✓ Gain commitments of all non-Small Starts funding.
- ✓ Complete sufficient engineering and design.

State transit policy is embodied in several laws and policy documents including the Smart Mobility Framework, Complete Streets legislation, the California Transportation Plan (CTP) 2040 and most of all SB 375. In sum, the State of California aims to integrate transit with interregional transportation

Fresno County Regional Long-Range Transit Plan

(particularly rail) statewide, while better integrating it with pedestrian, bicycle and other “first and last mile” forms of mobility.

State and federal requirements for air quality can be viewed as a catalyst for more transportation efficient land use patterns and more cost-effective transit. The aim should be to offer a choice of transportation mode corridor to residents, employees and businesses locating in the corridor.

Land Use Considerations

While there is a close relationship between land use patterns and transportation choices, Fresno COG and Fresno County transit operators do not have direct authority over land use decisions. This section presents ideas that land use planners and decision-makers should consider in the preparation of General and Specific Plan to integrate transit into future development.

Presently, Fresno’s land use patterns, and transportation facilities do not favor transit. Thoughtful land use and site plan features can make transit usage more convenient. Promotion of transit-friendly features in local planning requirements and guidelines could help benefit future transit services, farebox and reduce dependence on the private automobile. Moreover, they can help attract funding from state and federal sources.

Mixed use development tends to be more pedestrian oriented and helps discourage automobile trip “chaining” or multiple stop trips. Any land use pattern which favors pedestrians also favors transit. Clustering mixed use projects into higher density

activity centers also facilitates efficient and convenient public transit service. Office parks with restaurants minimize the need for automobiles for lunch time trips and retail developments with residential components reduce auto shopping trips.

Increased development densities augment the number of patrons and trips within convenient walking distances of transit service. For example, 12 dwelling unit per acre developments result in three times the number of patrons and trips within a one-quarter mile walk of transit service compared to four dwelling unit per acre development. In general, doubling of residential densities typically yields a 20 to 30 percent decrease in VMT per household.

Virtually all transit trips begin and end as walking trips. Thus, direct and inviting pedestrian facilities are important to transit riders. Retail and office buildings should be located near arterial and major collector streets served by public transit. Large surface parking lots desirably should be located in the rear of the site or on the side, but not between the street and the building. Cul-de-sac street systems and environmental sound walls complicate direct pedestrian access to bus stops. Pedestrian openings should be required for sound walls which impede access to bus stops.

Free off-street parking is a significant subsidy and encourages travel by car rather than by bus. Vast parking lots also increase pedestrian walking distances and serve to reduce development densities. All of these factors make transit a less attractive travel mode. A surface parking space typically costs as much to maintain as a FAX monthly bus pass (\$48). Air quality objectives are based on increased ride sharing and transit; this provides

Fresno County Regional Long-Range Transit Plan

another incentive for developers and employers to “get on the bus.”

It is infeasible to provide high quality public transit in all corridors: the LRTP reflects this by focusing BRT and frequent bus service in certain corridors. Residents and employers who value high quality transit can thus have a meaningful choice for their residential and employment locations.



To promote and accomplish SCS objectives (and enhance the funding prospects of LRTP projects), the first section of Table 3 lists and describes policies and strategies related to land use. This list will ideally be

referenced in General and Specific Plans, distributed to major developers, and included in environmental checklists for development projects. Under SB 743, the focus of project-level environmental impact analysis changes from *roadway level of service impacts* of development to *VMT generated* by development. With SB 743 taking full effect in 2020, developers and local jurisdictions should be made aware that designing projects that are transit-supportive can expedite the environmental review of those projects.

Other Policy Considerations: Marketing and Community Integration

Transit plays a vital role in the lives of those who cannot use cars to reach their daily needs. Increasing transit ridership can improve the environment and meet state and federal requirements. These are important reasons to maintain and enhance transit. But most Fresno County residents do not use transit, and therefore it may not seem important to them.

The second section of Table 3 lists and describes policies and strategies that serve to make transit more a part of the Fresno community, including the majority of residents who may never be regular riders. They address marketing of transit to diverse populations, increasing the number of “choice riders” who have access to an automobile, and encouraging more drivers to at least occasionally use transit.

Fresno County Regional Long-Range Transit Plan

Table 3 – Recommended Implementation Strategies

Recommended Implementation Strategy	Description
Land Use Recommendations and Strategies	
Direct Development Toward Transit Corridors	Recommend to locate a substantial portion of new households, office and retail/commercial employment within planned and proposed high capacity transit corridors.
Promote Transit-Supportive Density	Recommend general plan and zoning authorization to support high capacity transit corridors.
Promote Transit-Oriented Development in Plans and Codes	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 key transit corridors and downtowns of Fresno, Clovis and other Fresno County cities.
Reform Parking Requirements	Recommend to 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. Set maximum parking requirements for residential and commercial land uses.
Manage Parking in Transit Corridors	Reduce the existing over-supply of surface parking within the planned BRT corridors and downtown Fresno. Utilize shared parking agreements, reciprocal access agreements, public parking facilities and the conversion of surface parking to transit-supportive uses.
Develop Within Urban Spheres	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.
Full Cost Infrastructure Funding	Recommend that proposed new development located within the fringe areas of the Fresno-Clovis Metropolitan Area (FCMA) and the surrounding Fresno County area bear the full incremental costs of providing public infrastructure improvements, including maintenance costs.
Maintain and Enhance Paratransit in Rural Communities	In Fresno's small cities and rural communities, continue to enhance the existing demand-responsive service currently provided.
New Mobility for Low Density Areas	In both fringe areas of the FCMA and the rural areas, develop pilot programs to test new forms of mobility that can effectively serve these areas.
Marketing and Community Engagement Strategies	
Institute Bulk Transit Pass Programs	Encourage employers and institutions (e.g. colleges and medical centers) to purchase universal transit passes to enable all employees and students to ride transit. Fares are discounted to reflect actual usage. Such universal transit pass programs encourage occasional riders, and are viewed as a meaningful fringe benefit.
Form Pass Sale Partnerships	Engage businesses in transit corridors to offer transit pass and information to their customers who are also riders or potential riders.
Establish Adopt-a-Stop Programs	Encourage businesses in transit corridors to adopt and enhance key bus stops, in exchange for advertising and other considerations.
Regional Transit Marketing Plan	Develop a regional Marketing Plan for Fresno County in conjunction with each Long Range Transit Plan updates.
Operator Transit Marketing Plans	Develop a Marketing Plan for each of the three major transit operators in Fresno County.

Fresno County Regional Long-Range Transit Plan

Funding the LRTP

Fresno County has seen significant investment in transit in recent years, from the new Q BRT service expansion to investments in zero-emissions fleets to serve and connect rural communities. However, the County faces significant challenges. Multiple factors – e.g. an improving economy, decreased unemployment, low gas prices, and increased auto sales have led to declines in transit ridership. This is making it more difficult to meet farebox recovery ratios, and that in turn can endanger State funding for transit.

Funding tied to fare-box revenues is not growing at the State level (TDA and LTF/STA) and federal transit funding has become somewhat inconsistent. Given that public transit is operating in an environment where there is increased competition for funding, this situation may ultimately cause a reduction in service levels. Despite these challenges, improving transit system connectivity, maintenance, and operations will play a critical role in supporting key regional and state goals, such as reducing greenhouse gas (GHG) emissions, and increasing access to employment and key services. Supporting state goals and mandates should enhance the Fresno region's competitive stance for transit funding.

Existing Major Revenue Sources

Table 4 describes funding programs that are considered to be the principal sources anticipated to be available for funding of the LRTP projects.



Fresno County Regional Long-Range Transit Plan

Table 4 - Existing Major Revenue Sources

Revenue Sources	Description
Federal Funding Sources	
Congestion Mitigation and Air Quality Improvement Program (CMAQ)	Provide a flexible funding source to State and local governments for transportation projects and programs to help meet the requirements of the Clean Air Act. Funding is available to reduce congestion and improve air quality for areas that do not meet the National Ambient Air Quality Standards for ozone, carbon monoxide, or particulate matter (nonattainment areas) and for former nonattainment areas that are now in compliance (maintenance areas). States that do not contain any areas considered as non-attainment areas or maintenance areas still receive a minimum apportionment of CMAQ funding for air quality projects or other elements of flexible federal aid highway spending.
Surface Transportation Block Grant Program (STBG)	The Fixing America's Surface Transportation (FAST) Act converts the long-standing Surface Transportation Program into the Surface Transportation Block Grant Program (STBG). STBG provides flexible funding that states and local governments may use for projects on any federal-aid highway, including the National Highway System (NHS); bridge projects on any public road; transit capital projects and; public bus terminals and facilities.
Highway Safety Improvement Program (HSIP)	The FAST Act continues the Highway Safety Improvement Program (HSIP) to achieve a significant reduction in traffic fatalities and serious injuries on all public roads, including non-State-owned public roads and roads on tribal lands. The HSIP requires a data-driven, strategic approach to improving highway safety on all public roads that focuses on performance.
Federal Transit Administration Section 5303, 5304, 5305 (Metropolitan & Statewide and Nonmetropolitan Planning)	Provides procedural and funding requirements for multimodal transportation planning in states and metropolitan areas. Planning must be cooperative, continuous, and comprehensive leading to long-range plans and short-range programs that reflect transportation investment priorities.
Federal Transit Administration Section 5307 (Urbanized Area Formula Grants)	The Urbanized Area Formula Funding program provides Federal resources to urbanized areas and to Governors for transit capital and operating assistance and for transportation related planning. As determined by the U.S. Department of Commerce - Bureau of the Census, an urbanized area is defined as an area with a population of 50,000 or more.
Federal Transit Administration Section 5311 (Formula Grant for Rural Areas)	This program provides capital, planning, and operating assistance to states and federally recognized Indian tribes to support public transportation in rural areas that have populations less than 50,000.
Federal Transit Administration Section 5309 (Fixed Guideway Capital Investment Grants)	The Capital Investment Grant (CIG) program provides funding for fixed guideway investments such as new and expanded rapid rail, commuter rail, light rail, streetcars, bus rapid transit, and ferries, as well as corridor-based bus rapid transit investments that emulate the features of rail. There are four categories of eligible projects under the CIG program: New Starts, Small Starts, Core Capacity, and Programs of Interrelated Projects.
Federal Transit Administration Section 5310 (Enhanced Mobility of Seniors and Individuals with Disabilities)	This program seeks to assist in improving mobility for seniors and individuals with disabilities by removing constraints to transportation service and expanding transportation mobility options. The program is supportive of transportation services planned, designed, and carried out to meet the special transportation needs of seniors and individuals with disabilities in all areas – large urbanized (over 200,000), small urbanized (50,000-200,000), and rural (under 50,000). Projects eligible for funding include traditional capital investment and nontraditional investment beyond the Americans with Disabilities Act (ADA) complementary paratransit services.

Fresno County Regional Long-Range Transit Plan

Table 4 – Existing Major Revenue Sources (continued)

Revenue Sources	Description
Federal Funding Sources	
Federal Transit Administration Section 5337 (State of Good Repair)	The State of Good Repair grants program provides capital assistance for maintenance, replacement, and rehabilitation projects of high-intensity fixed guideway and bus systems to help transit agencies maintain assets in a stage of good repair. Programs grants are also eligible for the development and implementation of Transit Asset Management plans.
Federal Transit Administration - Access and Mobility Partnership Grants	The Access and Mobility Partnership Grants seeks to improve access to public transportation by partnering with health, transportation and other service providers. The program provides competitive funding to support innovative projects for the transportation disadvantaged that will expand the coordination of transportation services and non-emergency medical transportation services.
U.S. Department of Transportation - Better Utilizing Investment to Leverage Development (BUILD) Transportation Grants Program	Formerly known as the Transportation Investment Generating Economic Recovery (TIGER) grant program, BUILD transportation grants seek to fund investments in surface transportation infrastructure that will have a significant impact on local or regional facilities. BUILD funding is available for roads, bridges, transit, rail, ports, or intermodal transportation projects.
FTA Section 5339(a) (Grants for Bus and Bus Facilities)	The Bus and Bus Facilities Infrastructure Investment Program (49 U.S.C. 5339) provides federal resources to states and direct recipients to replace, rehabilitate and purchase buses and related equipment. This programs also allows for the construction of bus-related facilities including technological changes or innovations to modify low or no emission vehicles or facilities. Program funding is provided through formula allocations and competitive grants. A sub-program, the Low- or No-Emission Vehicle Program, provides competitive grants for bus and bus facility projects that support low and zero-emission vehicles.
FTA Rural Transportation Assistance Program – 5311 (b) (3)	The Rural Transit Assistance Program (49 U.S.C. 5311(b)(3)) provides funding to assist in the design and implementation of training and technical assistance projects and other support services designed to meet the needs of transit operators in nonurbanized areas.
State Funding Sources	
State Transportation Improvement Program (STIP)	The State Transportation Improvement Program (STIP) is a multi-year capital improvement program of transportation projects on and off the State Highway System. Generally, STIP programming occurs every two years. The programming cycle commences with the release of a proposed fund estimate in July of odd-numbered years, followed by California Transportation Commission (CTC) adoption of the fund estimate in August (odd years). The fund estimate identifies the amount of new funds available for the programming of transportation projects..
State Transit Assistance Fund (STA)	The State Transit Assistance Funds (STA) is one of two major sources of public transportation funding from the Transportation Development Act (TDA). The STA is 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 (RTPA) to their member agencies based on the statute that requires that 50% of STA funds be allocated according to population and 50% be allocated according to transit operator revenues from the prior fiscal year. STA funds may be used for mass transit (capital or operating expenses) or transportation planning but not streets and roads.

Fresno County Regional Long-Range Transit Plan

Table 4 – Existing Major Revenue Sources (continued)

Revenue Sources	Description
State Funding Sources	
Local Transportation Fund (LTF)	The Local Transportation Fund (LTF) is one of two major sources of public transportation funding from the Transportation Development Act (TDA). Local Transportation Funds (LTF) are derived from ¼-cent of the statewide sales tax. LTF revenue is returned to local governments, primarily for public transportation; however, bicycle and pedestrian facilities, and streets and roads may also qualify. The LTF is distributed to each city and unincorporated area based on population.
Transit and Intercity Rail Capital Program (TIRCP)	The Transit and Intercity Rail Capital Program (TIRCP) was established to provide grants from the Greenhouse Gas Reduction Fund to fund transformative capital improvements that will modernize California's intercity, commuter, and urban rail systems, and bus and ferry transit systems to reduce emissions of greenhouse gases by reducing congestion and Vehicle Miles Traveled (VMT) throughout California.
Local Partnership Program (LPP)	Local Partnership Program funds are for counties that employ local transportation funding taxes or that have imposed fees, including uniform developer fees. As part of SB 1, there are two parts to the program: 50% of the funding is provided by a formula and 50% of the funding is provided by a competitive program. Eligible projects may include transit facility improvements and transit equipment purchases.
Solutions for Congested Corridors Program	Solutions for Congested Corridor Program (SCCP) funds projects designed to reduce congestion in highly traveled and highly congested corridors through performance improvements that balance transportation improvements, community impacts, and that provide environmental benefits. Improvements may be on the state highway system, local streets and roads, public transit facilities, bicycle and pedestrian facilities or required mitigation or restoration or some combination thereof. All projects nominated for the SCCP must be in a multimodal corridor plan and will only fund the construction component of a project.
Low Carbon Transit Operations Program (LCTOP)	The Low Carbon Transit Operations Program (LCTOP) provides transit agencies with operating and capital assistance to reduce greenhouse gas (GHG) emissions and improve mobility, with an emphasis on serving disadvantaged communities. LCTOP projects support new or expanded bus or rail services, expanded intermodal transit facilities, and may include equipment purchasing, fueling, maintenance and other costs to operate those services or facilities, while reducing GHG emissions. For agencies whose service area includes disadvantaged communities, at least 50 percent of funds received are used on projects to benefit disadvantaged communities.
Assembly Bill 2766 – Air District Funds	Since 1991, local governments have received AB 27661 funds to implement programs that reduce air pollution from motor vehicles. The AB 2766 Subvention Program provides a funding source for cities and counties to meet requirements of federal and state Clean Air Acts, and for implementation of motor vehicle emission reduction measures. The legislation creating this revenue source provides for oversight of the use of these monies by local governments. Air districts that receive AB 2766 monies report annually to CARB on the use and results of the programs funded by the fees.
Alternative and Renewable Fuel and Vehicle Technology Program	Assembly Bill (AB) 118 created the California Energy Commission's Alternative and Renewable Fuel and Vehicle Technology Program. The program authorized the Energy Commission to assist in attaining the California's climate change policies by developing and deploying alternative and renewable fuels and advanced transportation technologies

Fresno County Regional Long-Range Transit Plan

Table 4 – Existing Major Revenue Sources (continued)

Revenue Sources	Description
Local Funding Sources	
Measure C	Measure C is a 20-year ½ cent local sales tax passed by Fresno County voters in 1986 and extended by votes in 2006. The revenue generated from Measure C are designated towards improving the overall quality of Fresno County's transportation system, which is inclusive of the County and all 15 cities within the County. The tax is expected to generate approximately \$1.4 billion dollars to be administered through the Fresno County Transportation Authority (FCTA). Local agencies will receive at least 34.6% of the approximately \$1.4 billion dollars, for a wide variety of transportation programs and projects on their respective transportation network.
City/County Revenue Funds	Multiple transportation funding sources have their origins in city revenues. These include general fund revenues used for street purposes, gas tax shares, proceeds from bond sales for street purposes, street assessment levies and traffic safety fund revenues.
Transit Farebox Revenue	<p>Requirements:</p> <ul style="list-style-type: none"> -20% - for operators or claimants serving an Urbanized Area (FAX and Clovis). -10% - for operators or claimants serving a Non-Urbanized Area (FCRTA). <p>Note: Farebox revenue is broadly defined: it includes bulk fare purchases (such as for pass programs at educational institutions and major employers). Under SB 508 (2015) it can include any nonfederal or nonstate grant or other revenues generated by, or distributed to the operator.</p>
Other Local Funds	Street taxes and developer fees, RSTP exchange funds
Other Potential Revenue and Funding Opportunities	
Environmental Enhancement and Mitigation Program	<p>Applicants may apply to undertake environmental enhancement and mitigation projects that are directly or indirectly related to modifying existing transportation facilities, or for new transportation facilities' design, construction or expansion. The EEM project must be over and above required mitigation for the related transportation project.</p> <p>All participating project costs incurred are funded in arrears on a reimbursement basis of the state's proportionate share of actual costs. No matching funds or cost shares from the applicant or other funding sources are required to apply for an EEM grant; however, projects with the greatest funding match will be rated highest. Individual project grants are generally limited to \$500,000. Any local, state, or federal agency or non-profit entity may apply for and receive grants.</p>
Cap-and-Trade Funds	<p>AB 32 requires California to return to 1990 greenhouse-gas-emission levels by 2020. All AB 32 programs contribute to GHG reductions, and will deliver an overall 15 percent reduction compared to the 'business-as-usual' scenario in 2020.</p> <p>The cap-and-trade program is a key element in California's climate plan. It sets a statewide limit on sources responsible for 85 percent of California's GHG emissions, and establishes a price signal needed to drive long-term investment in cleaner fuels and more energy efficiency. The program is designed to provide covered entities the flexibility to seek out and implement the lowest-cost options to reduce emissions.</p>
Public and Private Parking Fees	This mechanism increases public and private parking charges and institutes parking fees where parking is now free. Major metro areas in California have become more aggressive in pricing downtown parking -- both at meters and in lots. In some cities, extending parking lot hours and substantially greater enforcement have increased parking fee revenues. Often these funds are treated as a general fund source rather than tied to specific transportation expenditures

Table 4 – Existing Major Revenue Sources (continued)

Revenue Sources	Description
Other Potential Revenue and Funding Opportunities	
Vehicle Miles Traveled Fee	This financing mechanism is a vehicle-use fee based on the number of miles driven, which has the potential to generate substantial revenues, implement increased-mobility policy goals and is strongly related to transportation demand and congestion. Vehicle Miles Traveled (VMT) fees would appear to be a stable and growing source of revenue given Californians' propensity to use their automobiles. VMT fees also would maintain an ability to capture revenues from a growing fleet of alternative fuel vehicles within the state.
Emissions Fee	An emissions fee could work in a manner similar to the Vehicle Miles Traveled fee program, except that user charges would be based on emission levels rather than miles traveled. The measure would be recorded at the time the vehicle is smog checked, and the driver would pay a fee based on a sliding scale. Revenue formulas would have to be adjusted due to California's vehicle fleet becoming "cleaner" as older polluting vehicles are retired and replaced with vehicles that have improved emission technology.
Transportation Infrastructure Finance and Innovation Act (TIFIA)	The Transportation Infrastructure Finance and Innovation Act (TIFIA) program provides credit assistance for qualified projects of regional and national significance. Many large-scale, surface transportation projects - highway, transit, railroad, intermodal freight, and port access - are eligible. Eligible applicants include state and local governments, transit agencies, railroad companies, special authorities, special districts, and private entities. The TIFIA credit program is designed to fill market gaps and leverage substantial private co-investment by providing supplemental and subordinate capital. Each dollar of Federal funds can provide up to \$10 in TIFIA credit assistance and support up to \$30 in transportation infrastructure investment. MAP-21 reforms included a 10 percent set-aside for rural projects; an increase in the share of eligible project costs that TIFIA may support; and a rolling application process.
Public-Private Partnerships	A Public-Private Partnership (PPP or P3) represent a broad category of financing mechanisms that are being used to harness public sector participation. PPPs have been used with mixed success in several states nationwide. A PPP can take many forms, e.g., private participation in the planning, design, construction, finance, operation and maintenance of a transit-related project.
Advertising Revenues	Revenue received from advertisers trying to reach the public with their message. Advertising may be placed on buses, bus shelters, farecards, etc.
Other Emerging Potential Funding Sources	As mobility innovations emerge in Fresno County, the region should explore implementation of new forms of revenue collection to ensure that new forms of mobility are deployed in an optimal manner.

Challenges and Opportunities

At least six key challenges/opportunities face Fresno County's transit system:

- ✓ Declining ridership.
- ✓ Service coverage in low-density Areas (both rural and urban fringe).
- ✓ Challenges with matching level of service demanded with resources available.
- ✓ Transit revenue and competition for funding.
- ✓ Uncertainty around emerging technologies.
- ✓ Changing Demographics and Demand for Paratransit

Each of these issues and their associated challenges and opportunities are described in this section. Strategies for addressing each issue are also described and summarized in Table 5.

Issues

Declining Ridership

In recent years, Fresno County has seen declines in transit ridership. While the new Q BRT service, and new services by FCRTA and Clovis Transit that link to it show promise, the large-scale factors described above present an ongoing challenge. Car ownership in Fresno County is widespread, convenient, and perceived as inexpensive, and much of the population lives in suburban and rural areas distant from their daily needs. Increasing ridership is a challenge. Moreover, since State transit funding is tied to farebox recovery ratios, a decline in ridership can lead to a decline in funding availability, which will

make it challenging to implement projects and strategies that will increase ridership.

Detached single-family housing will continue to be the norm in Fresno County, due to the availability and low cost of land and housing construction. Together with the low-density and dispersed character of development in much of the County, this represents a challenge for conventional forms of mass transit. Increasing service coverage would support access to lifeline services and employment for rural populations. However, this type of expansion is costly, requiring vehicles to travel long distance to serve relatively few, and will be challenging to implement without worsening farebox ratios.

Transit Level of Service

Fresno County has an ongoing challenge to provide a high level of transit service to all riders. As the County is geographically large and population density is low in many areas, service frequency remains low in many neighborhoods and communities. The LRTP includes projects to improve connectivity in the network, improve the consistency of runtimes, and improve the quality of trips. Developing additional projects and strategies to improve the convenience, reliability, and quality of service will help to make transit a more desirable mode of travel for more people.

Fresno County Regional Long-Range Transit Plan

Transit Revenue and Competition for Funding

Despite Measure C, and the success in obtaining State and federal funding agencies for BRT, Fresno faces a revenue shortfall for system expansion due to limited funds and intense competition for those funds. This shortfall is expected to continue because Measure C revenues to support the transportation network's maintenance and improvements have been below levels anticipated. Furthermore, reliance on sales tax revenues is not as reliable as in the past. The increasing prevalence of on-line retail may not result in as much sales tax revenue as traditional brick-and-mortar retail.

Gasoline taxes have not historically been indexed for inflation, and the previously strong connection between revenue and miles driven has deteriorated due to more fuel-efficient cars. Fortunately, SB 1 has been enacted by the Legislature and sustained by California voters, which will provide \$5.2 billion in annual transportation funding. Transit agencies will receive some of this funding, as will cities and counties. While SB 1 provides a much-needed source of revenue funding, continuing to seek and secure other sources of funding for transit agencies is critical to the health of Fresno County's transit system.

Uncertainty Around Emerging Technologies

The once clear separation between public and private transport is becoming increasingly blurry – new forms of mobility are emerging, and future mobility is about more than just technology. The new mobility reflects a connectivity, and the need to continuously adapt to, create, and imagine our

future. The rise of 'smart' infrastructure and the changing behavior of citizens is likely to have significant impacts on all aspects of the transportation system moving forward. With respect to the transit system, uncertainty stems from the following:

- ✓ The profit motive of private companies to provide quasi-public transport may be an issue since private firms focus on the most profitable areas. This is typically in areas where transit demand is strongest. Letting profit-orient TNCs expand without regulation could undermine the economic sustainability of public transport systems. Regulated and community-based TNCs (as exemplified by Huron's Green Raiteros and Cantua Creek's Van y Vianan) are a better option for complementing, rather than competing with Fresno's fixed-route transit.
- ✓ The changing world of work – The rise of the 'gig' economy and zero-hour contracts (where employers hire staff with no guarantee of work and employees only accept work when they want to) is already changing work patterns and further change can be expected.
- ✓ Automated and connected vehicles are on the horizon, but the distance to that horizon and what it should look like is hotly debated. Fresno COG and Fresno's transit operators should seek and support implementation of automated *buses and shared-use vehicles*. Driverless buses are in use in China, and a good case can be made that it will be easier and more beneficial to automate a thousand transit and paratransit vehicle versus a million private cars.
- ✓ Increased connectivity between vehicles and users seems likely to accompany vehicle automation. "Mobility as a service" (MaaS) in

Fresno County Regional Long-Range Transit Plan

which people become consumers of transport rather than owners or users, blending modes in real time from a multimodal palette to meet our on-demand travel needs is a realistic outcome of this trend.

- ✓ Behavioral adaptation is key. Technology does not drive the future; how people respond to it does. How people will react to new technologies is a major “known unknown”.
- ✓ Governance and financing are also important considerations. The size and dominance of private sector players involved in TNCs, vehicle automation and future mobility generally creates a need for careful negotiation in any partnerships between transit agencies and the private sector.

Changing Demographics and Demand for Paratransit

As Fresno County’s population ages, there is likely to be an increasing number of seniors living outside of this area resulting in an increased demand for paratransit services (Handy Ride, Round Up, and FCRTA’s demand-response services). Fortunately, dispatch of paratransit services in Fresno County typically can be made the same day, and dispatch times are continuing to be reduced. This addresses the need for both seniors and those with disabilities who have last-minute or changing transportation needs. Nonetheless, increasing numbers of elderly may strain the demand for paratransit services, particularly because of high costs and scheduling challenges. While more costly than fixed-route transit, it is important to remember that expansion of paratransit services does have many positive social benefits.

Support Fresno County Transit Agencies innovative marketing campaigns

The LRTP calls for new marketing initiatives aimed at increasing ridership. A new single web portal aimed at increasing ridership with information about all transit and paratransit services for all of Fresno County’s diverse population is also included as an LRTP project. Supporting each transit agency in Fresno County with innovative marketing campaigns that potential riders can relate to, may help to increase the diversity of riders and ultimately increase ridership.

Establish First and Last Mile partnerships with Local Communities and Community Groups

The Green Raitero and Van y Vianan programs described above are one example of a potential partner. Other transit agencies are increasingly partnering with Transit Network Companies (TNCs) to increase service offerings. Opportunities exist to partner with community based or regulated TNCs to provide discounted transportation for economically disadvantaged riders, or those within certain geographies, helping to address first-last mile challenges. Carefully negotiated agreements with alternative transportation providers may help to improve access to transit.

Improve First and Last Mile Experience through Active Transportation improvements

Active Transportation improvements – i.e., those improving the ease and appeal of walking and biking

Fresno County Regional Long-Range Transit Plan

through public realm improvements are included in the LRTP to help to reduce first-last mile challenges. Improved wayfinding and signage around stops and stations, improved sidewalks and crossings can help to increase the willingness and ability of residents to access transit. Improving bike paths, lanes, routes and storage facilities as well as improving drop-off or park and ride at major BRT station, can also help to address the first-last mile challenge.

Fresno County is fortunate in having a new (2018) Regional Active Transportation Plan (ATP) that also provided local ATPs for all Cities in the County that lacked one. What works best for improving first-last mile varies by locality, so each community will need a tailored plan with projects that best serve local needs. Appendix B includes a detailed roadmap for implementing and supplementing the new ATP with improvements focused on access to fixed-route transit.

Emerging technologies and transit

The pace of technological change in the transportation industry is rapid, and it remains uncertain as to exactly how these changes will impact traditional public transportation systems. Currently, advancements in transportation technology are being driven by the private sector, and by consumer choices. It is important that Fresno COG and transit providers in the county closely observe and investigate ongoing changes, and consider the potential impacts of emerging technology on transit and paratransit services in ongoing decision-making and in creation of new policies.

Work toward last-minute paratransit bookings

Fresno County Rural Transit has always aimed to provide same day reservations for its paratransit services. Exploring last minute booking options, e.g., using mobile apps, may allow for a more efficient use of resources and better service for those who need it most. Opportunities to partner with community TNCs to provide paratransit services should be explored, subject to ADA requirements.

Facilitate communication among transit agencies to share ideas and integrate service and fares

While each transit service provider in Fresno County has a unique context and challenges, Fresno COG can play a key role in helping to facilitate communication and information sharing between the agencies, to allow for knowledge sharing. Fresno COG can also help to facilitate discussions around simplifying service and fare and that may ultimately lead to improved service and increased cost efficiencies.

Support the development of transit-oriented areas to attract population growth while mitigating potentially negative impacts

Supporting the development of transit-oriented areas identified in the Fresno COG Sustainable Communities (SCS) will be beneficial to both transit and the goals of the SCS. Supporting transit friendly development will enable households in the County have access to employment centers through transit. The SCS and environmental review under SB 743

Fresno County Regional Long-Range Transit Plan

offer substantial legal and policy support for transit-friendly development.

Table 5 – Strategies for Addressing Key Transit Opportunities and Challenges

Strategies	Issue 1: Declining Ridership	Issue 2: Service Coverage in Low-density Areas	Issue 3: Transit Level of Service	Issue 4: Transit Revenue & Funding	Issue 5: Uncertainty Around Emerging Technologies	Issue 6: Changing Demographics and Demand for Paratransit
Strategy 1: Continue to enhance programs that support rideshare and transfers to transit through incentive programs and the provision of First/Last mile improvements	X					
Strategy 2: Improve passenger convenience by investing in real-time data tools and mobile integration.	X		X			
Strategy 3: Continue to support BRT and Frequent Bus services in key corridors to improve travel efficiency in the FCMA.	X	X	X			
Strategy 4: Support increased service coverage in disadvantaged areas.	X	X	X			
Strategy 5: Support Fresno Transit Agencies innovative marketing campaigns aimed at increasing youth ridership.	X					
Strategy 6: Establish First and Last Mile partnerships with alternative transit providers	X	X	X	X	X	X

Fresno County Regional Long-Range Transit Plan

Strategies	Issue 1: Declining Ridership	Issue 2: Service Coverage in Low-density Areas	Issue 3: Transit Level of Service	Issue 4: Transit Revenue & Funding	Issue 5: Uncertainty Around Emerging Technologies	Issue 6: Changing Demographics and Demand for Paratransit
Strategy 7: Improve First and Last Mile Experience through public realm improvements	X	X	X	X	X	X
Strategy 8: Consider emerging technologies in decision and policy making processes.					X	
Strategy 9: Explore options for real- time dispatching						X
Strategy 10: Improve transportation options and access to information		X	X			
Strategy 11: Facilitate communication between Fresno County's transit agencies to share learning and simplify service and fare structures	X	X	X	X	X	X
Strategy 12: Support the development of transit-oriented areas to absorb population growth while mitigating potentially negative impacts.	X	X				X

Next Steps

Once comments from the public have been received and incorporated in the Draft LRTP, the Long-Range Transit Plan will be finalized. The Final LRTP will be presented for acceptance by the Fresno COG Board, Caltrans (the funding agency), as well as the governing boards of FAX, Clovis Transit and FCRTA. It will then become a key guidance document for the operators and Fresno COG to develop their plans as well as individual projects. It will also be used by Fresno COG as a starting point for developing the Mass Transportation elements of the 2022 Regional Transportation Plan and Sustainable Communities Strategy.

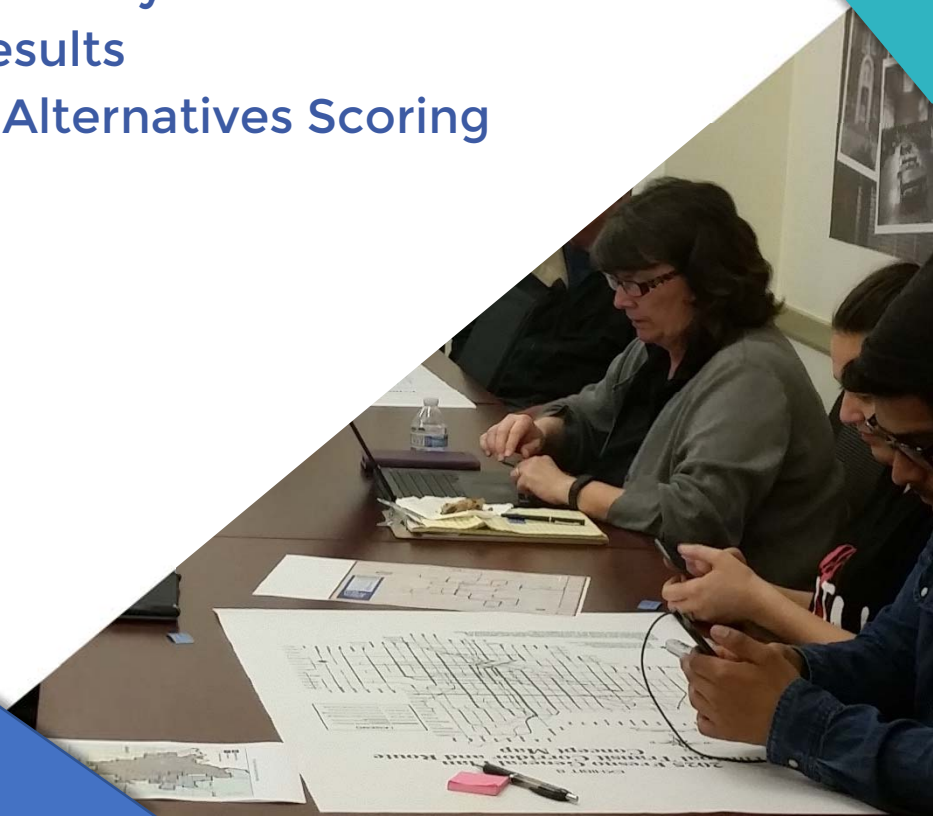


Appendix A

Public Outreach: Reference Materials

Contents

- Public Workshop Polling Instrument and Results
- Public Workshop Comment Cards
- Public Workshop Mapping Exercise and Comments
- Public Workshop Survey Instrument and Combined Results
- Evaluation of the Alternatives Scoring Summary



Public Workshop Polling Instrument and Results

November 2017

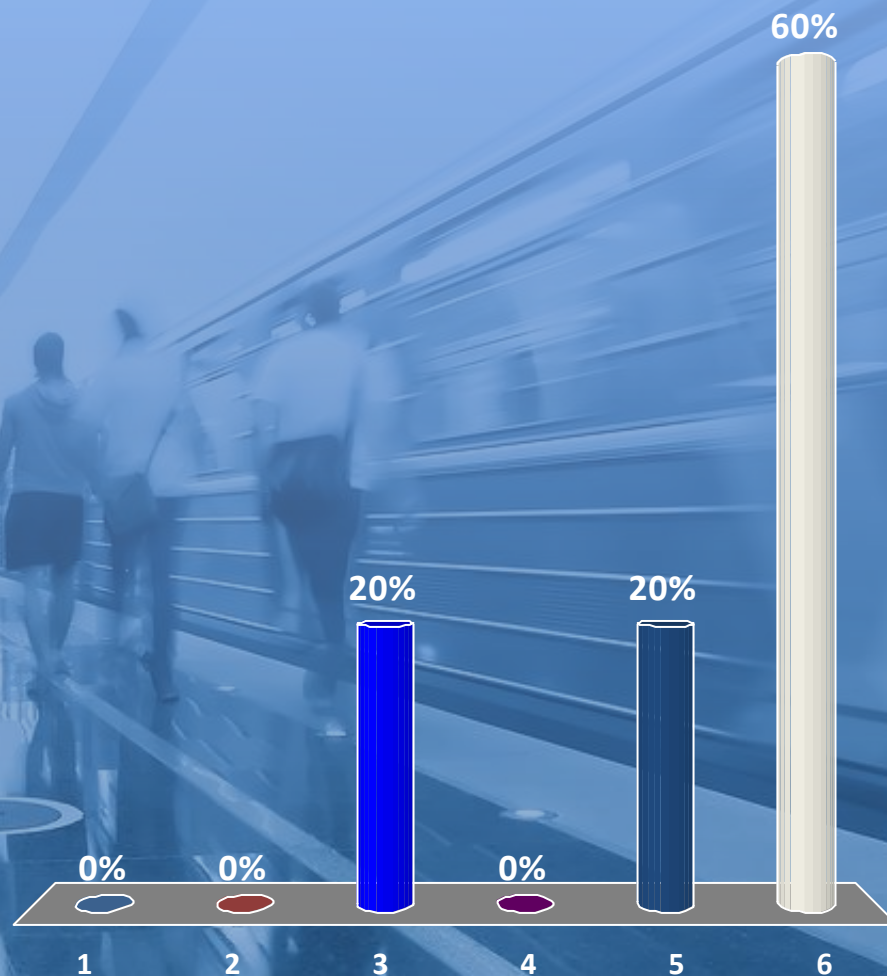
Fresno County Regional Long Range Transit Plan

Polling Questions

Rural Community Workshop, Selma

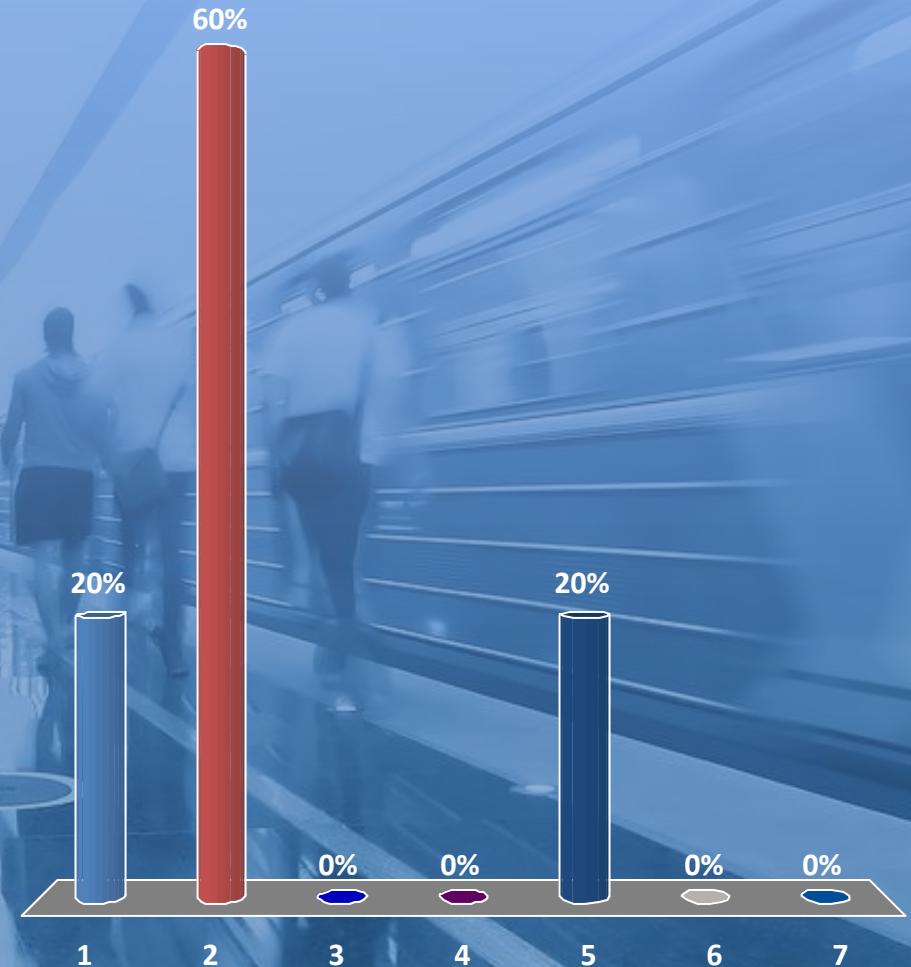
What is your age?

1. Less than 16
2. 16-25
3. 26-35
4. 36-50
5. 51-65
6. Greater than 65



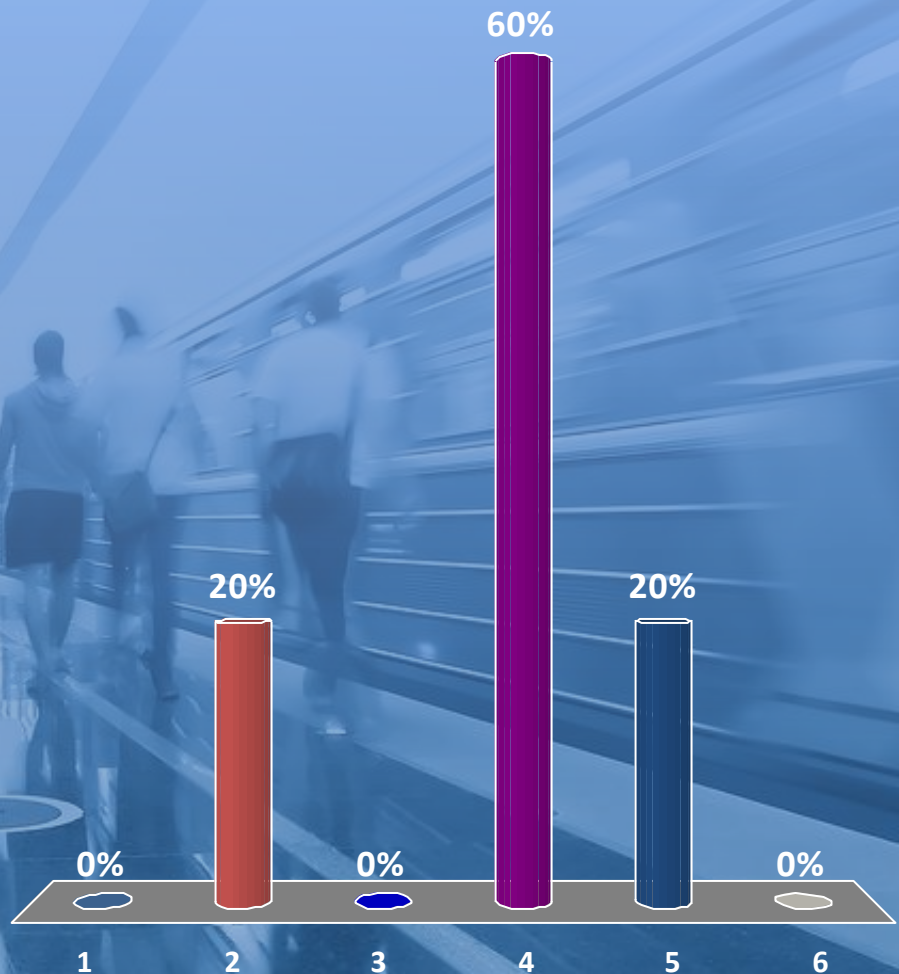
What is your racial or ethnic background?

1. Anglo/White
2. Hispanic/Chicano/Latino
3. American Indian/Native American
4. African American/Black
5. Asian/Oriental/Pacific Islander
6. Other
7. Rather not answer



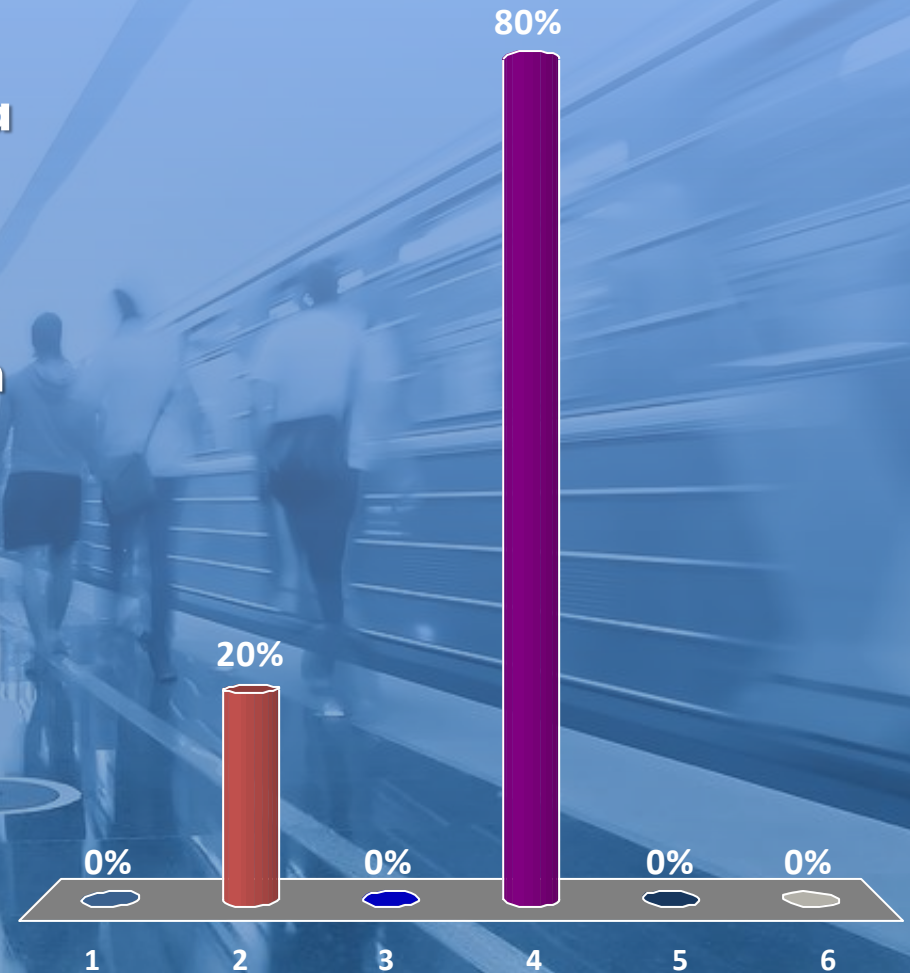
What is your household income?

1. Less than \$25,000
2. \$25,000 - \$49,999
3. \$50,000 - \$74,999
4. \$75,000 - \$99,999
5. More than \$100,000
6. Rather not say



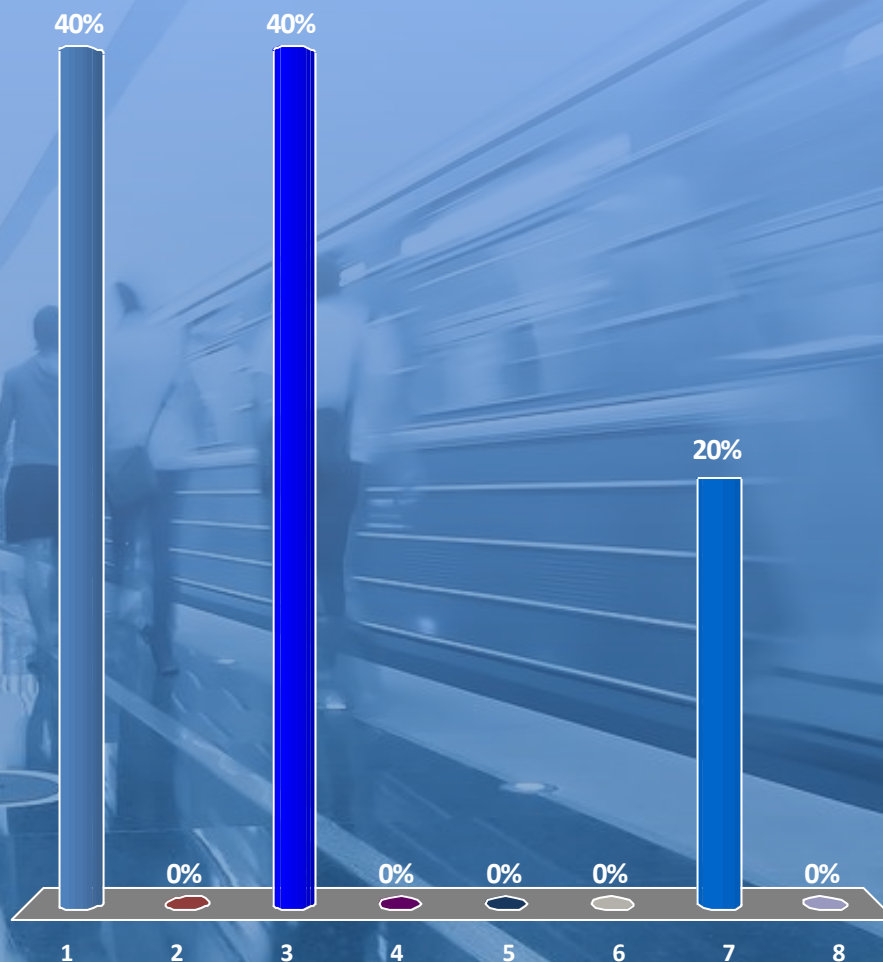
Where do you live?

1. City of Fresno
2. Unincorporated County Area outside of City of Fresno
3. City of Clovis
4. Other Fresno County City on or East of Highway 99
5. Other Fresno County City West of Highway 99
6. Outside of Fresno County



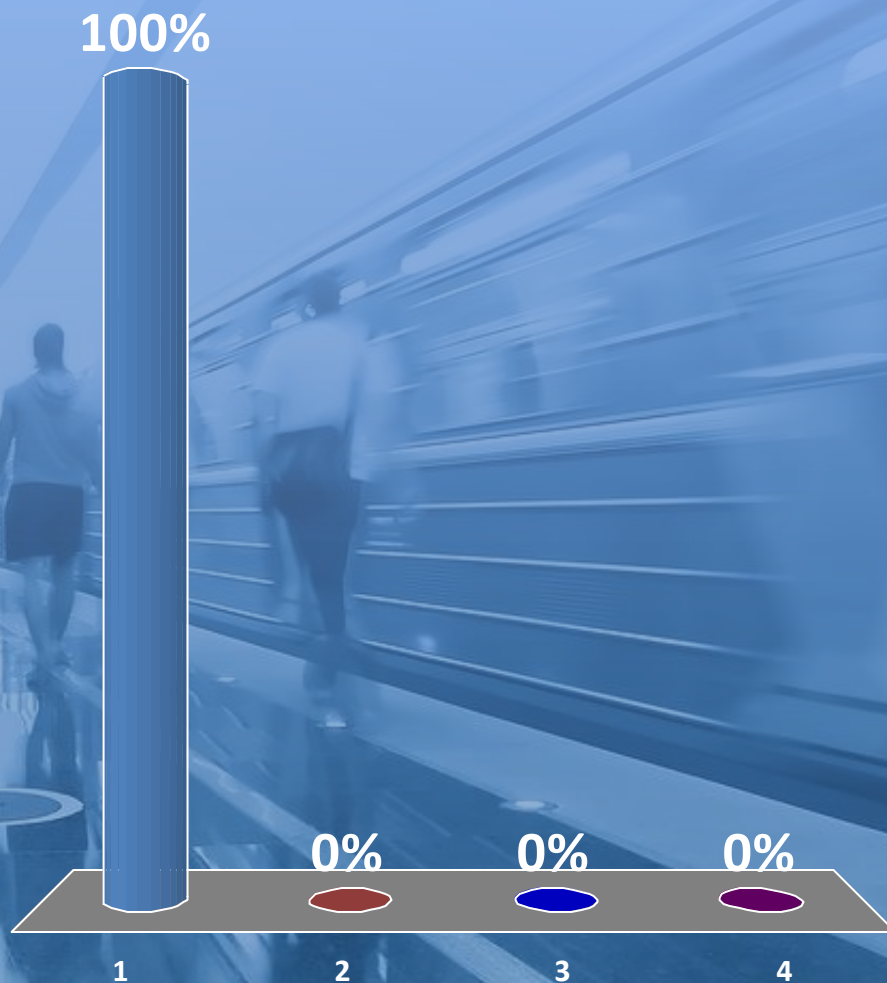
Which of the following subgroups BEST describes you?

1. Elected Official
2. Appointed Official
3. Private Citizen
4. Student
5. Public Agency Staff
6. Community Based Organization/Faith Based Organization
7. Environmental Justice Advocate
8. Other



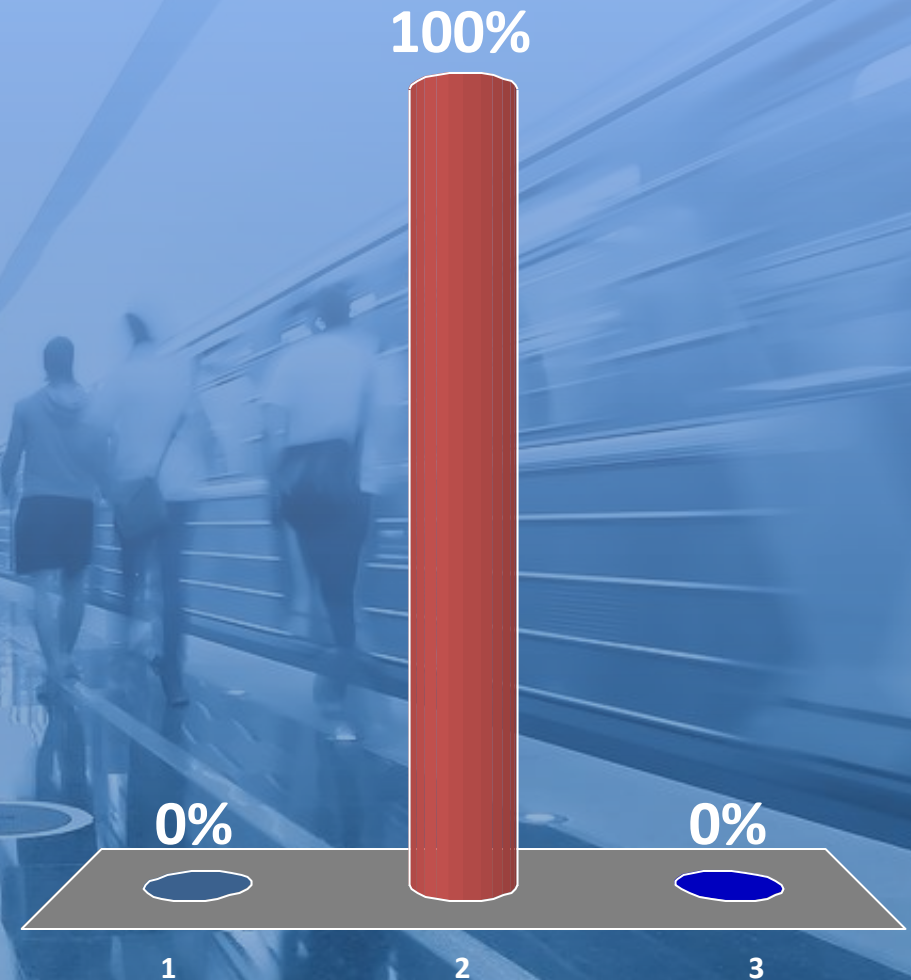
What is your preferred language?

1. English
2. Spanish
3. Southeast Asian dialect (Hmong, Laotian, etc.)
4. Other



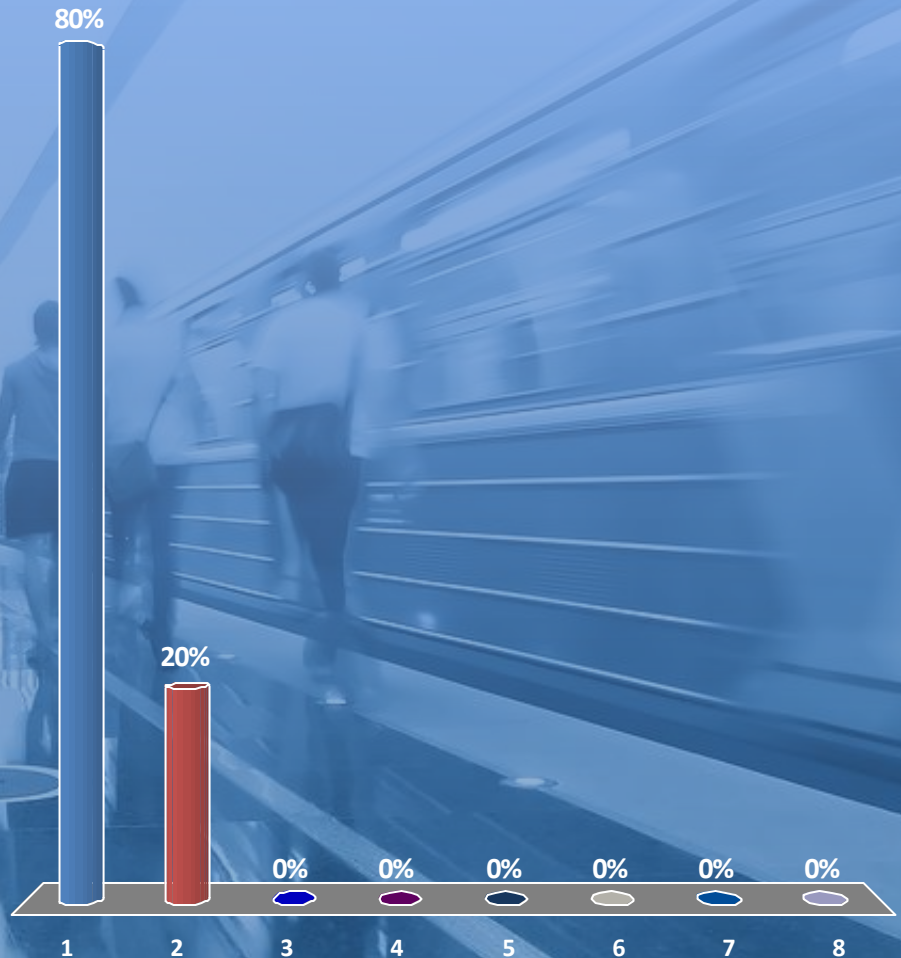
Do you have a disability that either prevents you from getting to or from a bus route, accessing a bus, or understanding how to use the bus system?

1. Yes
2. No
3. Prefer not to answer



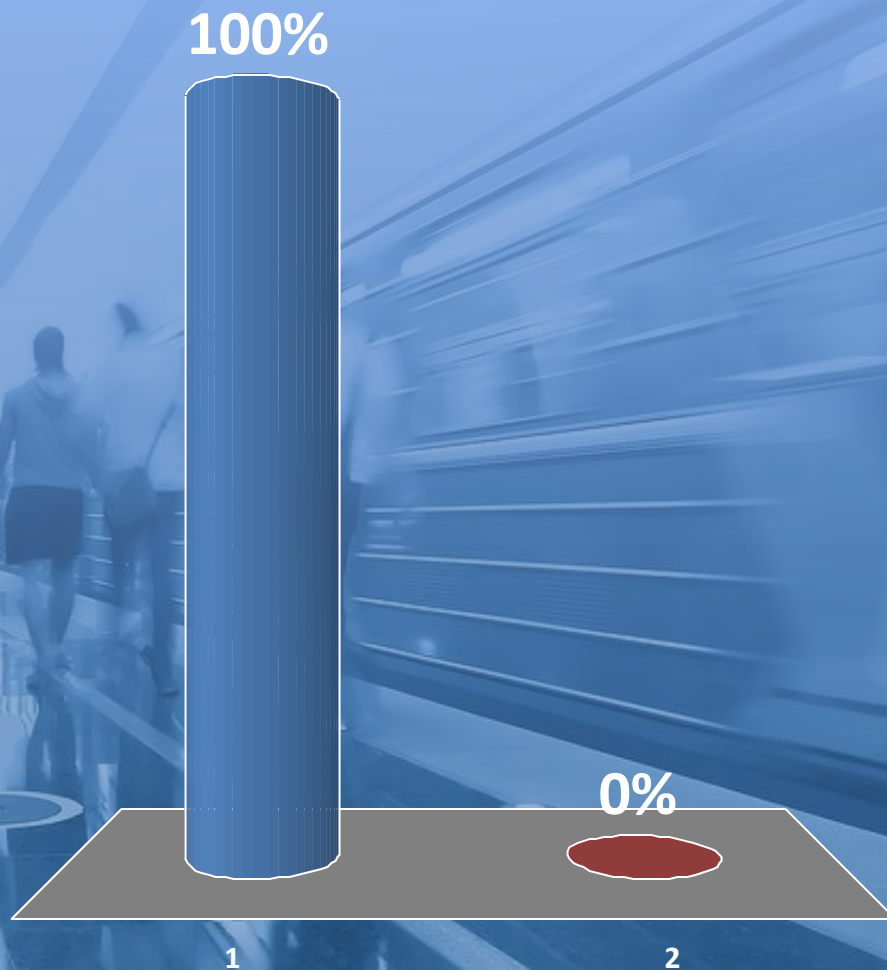
How did you get to this workshop today?

1. Drove a car
2. Rode in a car with family/friends
3. Rode on a motorcycle
4. Took Uber/Lyft
5. Took the bus
6. Rode a bike
7. Walked
8. Other



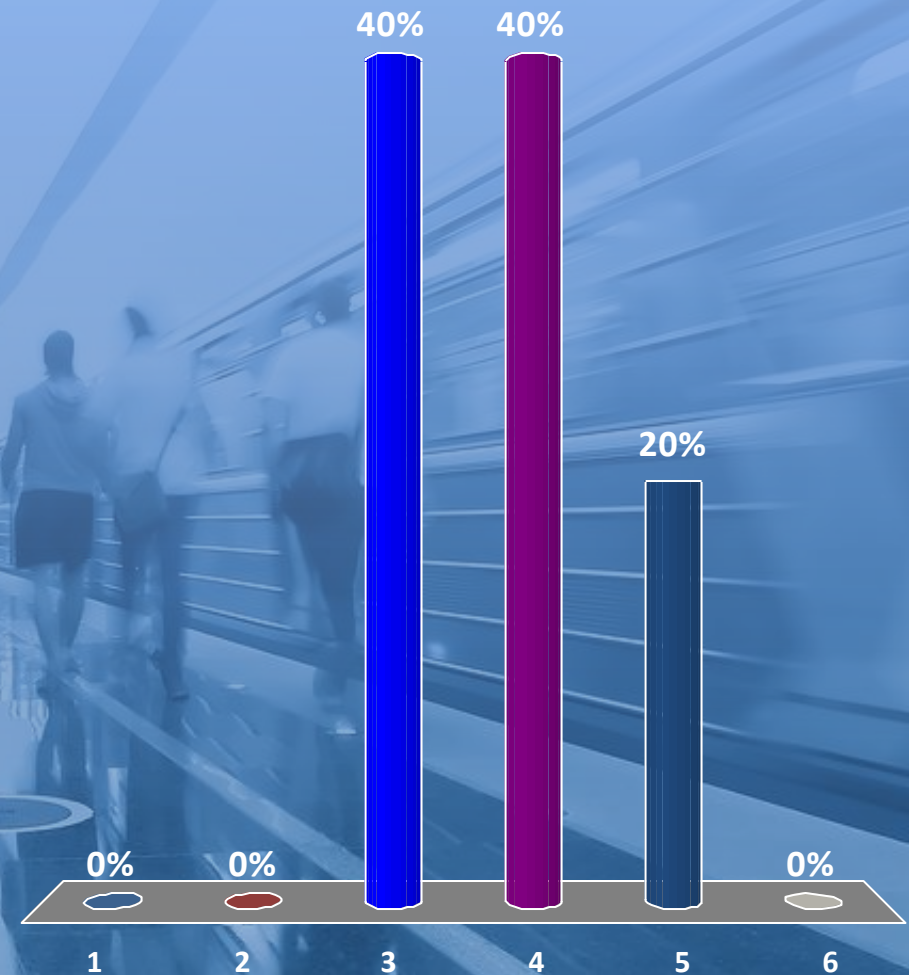
Do you own or have regular access to a vehicle?

1. Yes
2. No



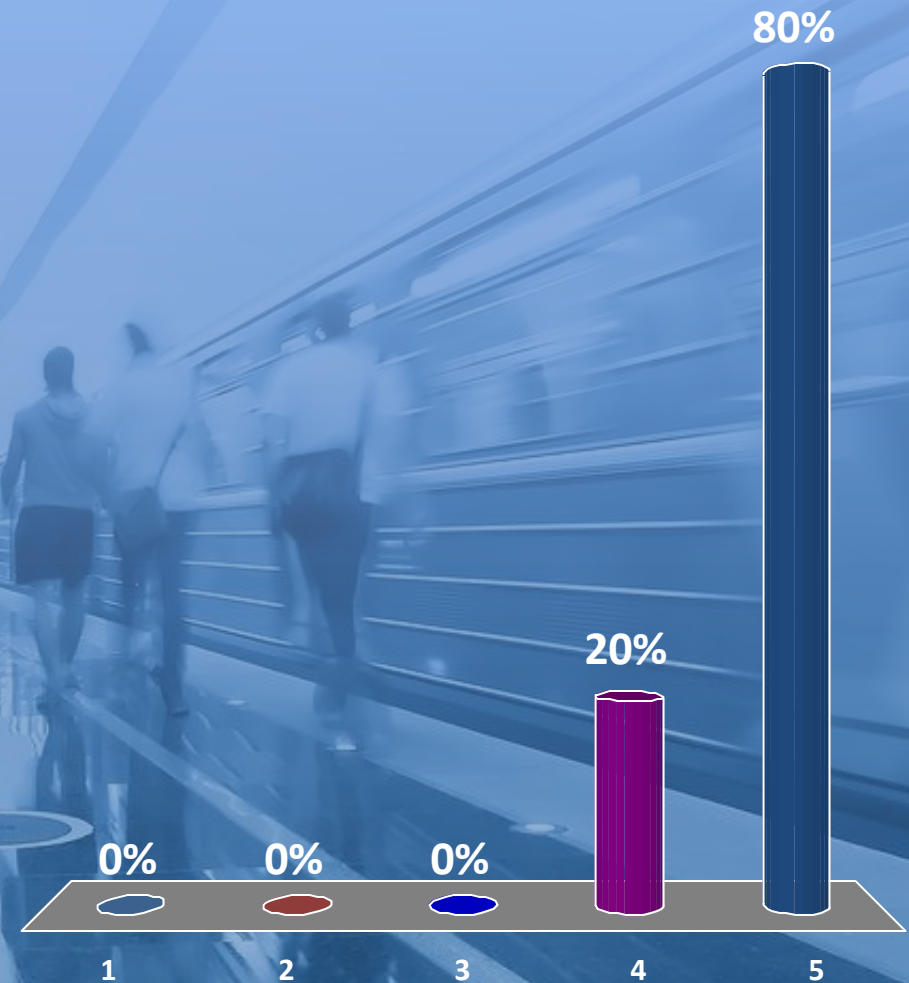
If a motor vehicle is not available, what type of transportation do you use?

1. Bus
2. Bicycle
3. Walk
4. Ask for a ride from friend, neighbor or family member
5. Uber/Lyft
6. Other



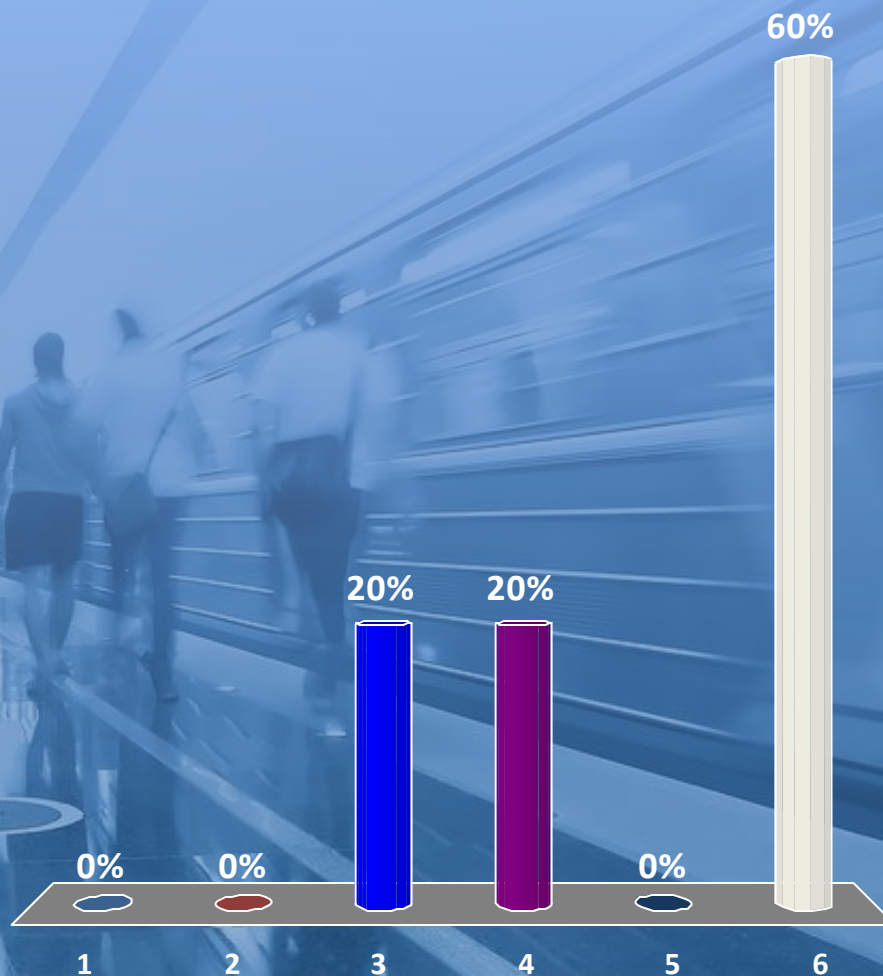
How often do you ride a bus in Fresno County?

1. Four or more days a week
2. Two to three days a week
3. About once every week or two
4. About once a month
5. Rarely/Never



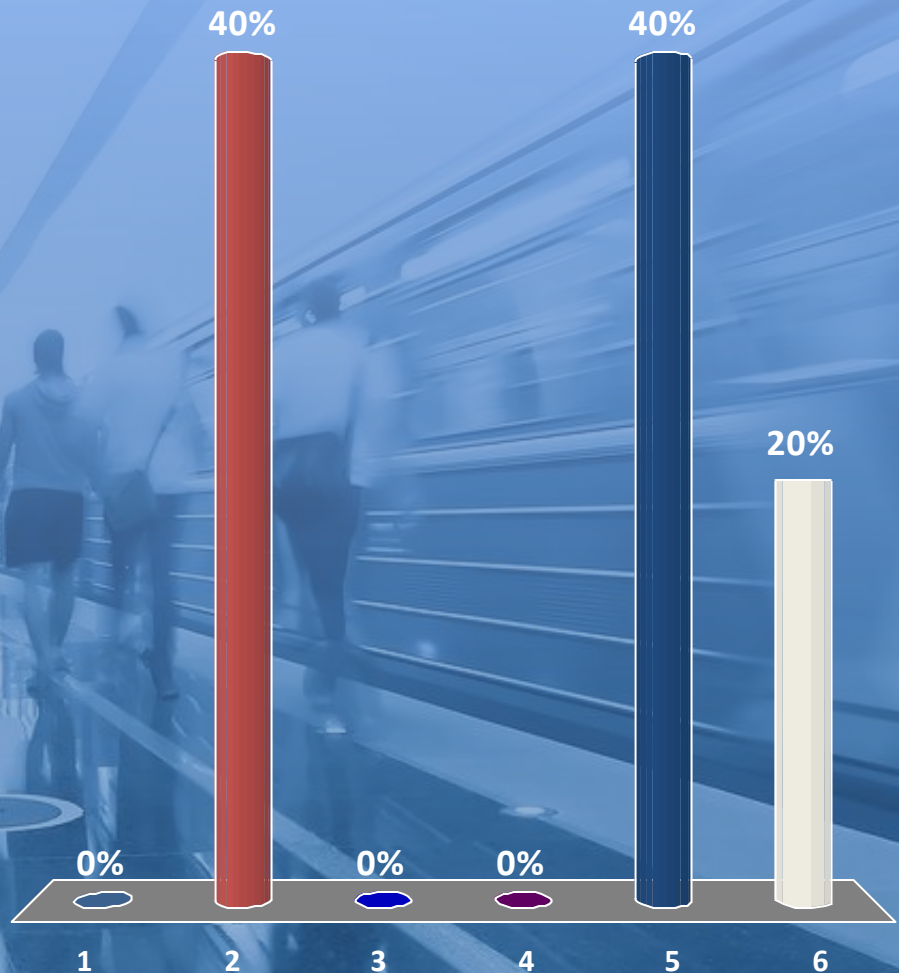
What do you currently ride the bus for (most important trip only)?

1. Trips to and from work
2. Shopping trips
3. Education trips (school, college, job-related classes)
4. Personal business trips (doctor, haircut, etc.)
5. Social and recreational trips (visiting friends/family, entertainment)
6. Do not ride the bus



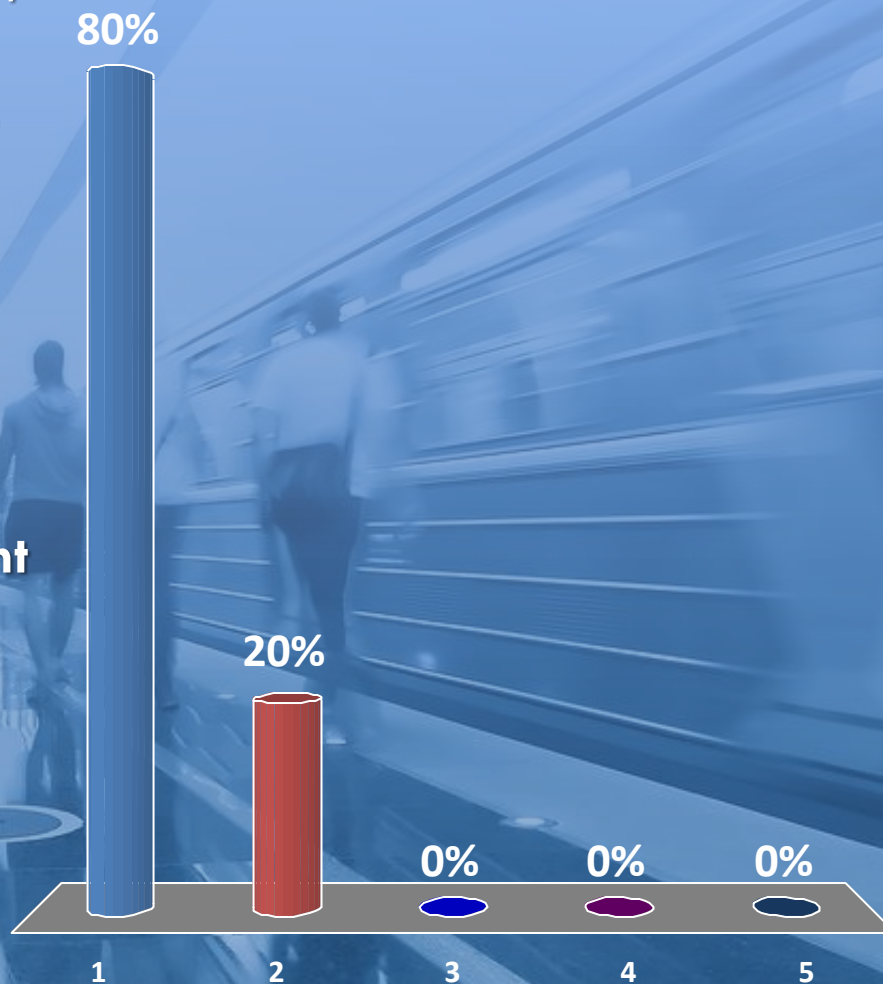
FCRTA provides service throughout the County, but some unincorporated rural communities do not have fixed route bus service. *If* Fresno were to obtain more funding, what is the best option for these areas?

1. No additional service is needed in these areas.
2. More demand responsive paratransit service
3. More secure bike parking at bus shelters
4. Bikeshare system in these areas
5. Private or community based Uber/Lyft or taxi services
6. Other (please describe on comment card)



To make intercity bus service timely, there are only one or two stops in cities. What would help offset this?

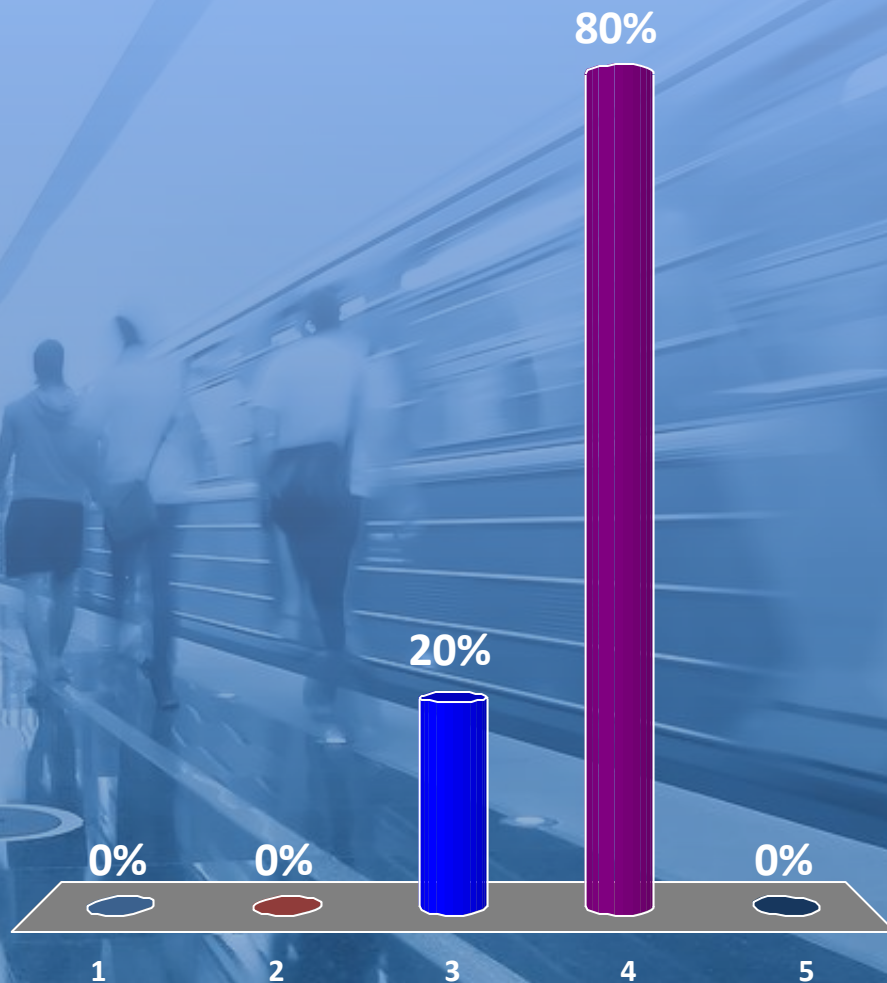
1. More amenities at stops – shade, seating, etc.
2. Ensure that sidewalks and other pathways to stops are well-paved, well-lighted and safe (a City responsibility, not FCRTA)
3. Better bike access/more secure bike parking at key bus stops.
4. Nothing more is needed – current demand responsive service is enough
5. Other (please describe on comment card)



Meeting Evaluation

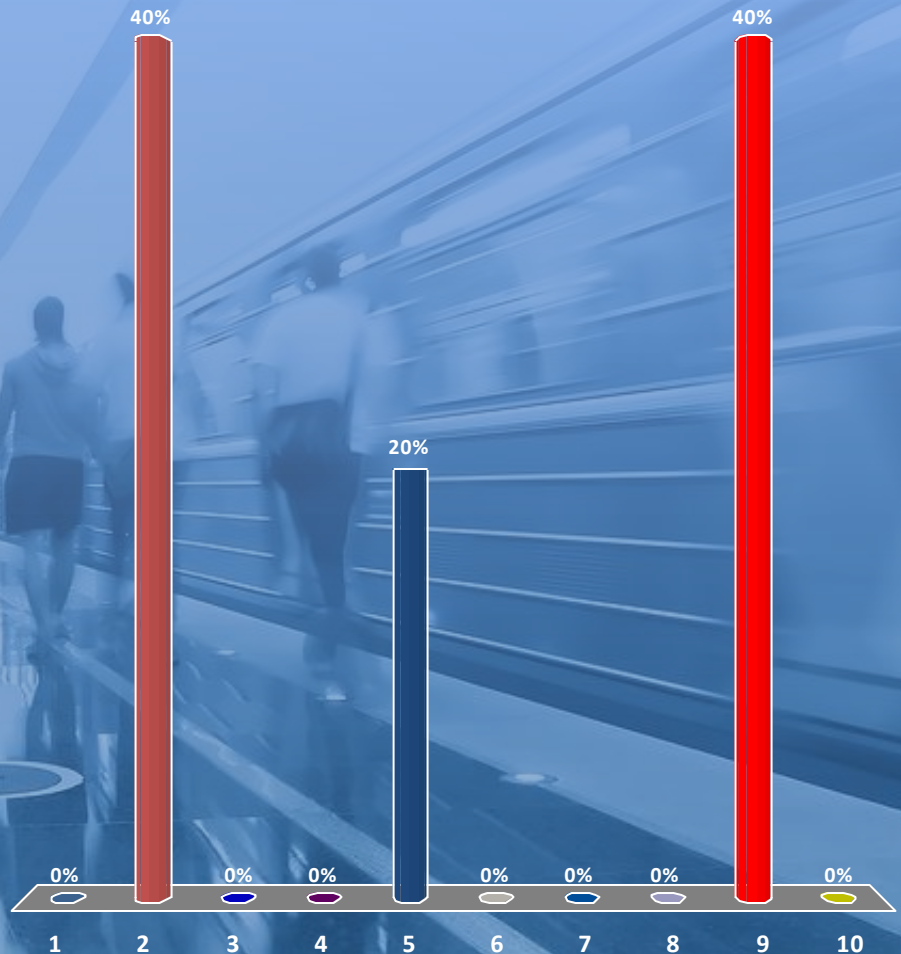
How effective has this meeting been so far to express your opinions?

1. Not at all effective
2. Not very effective
3. Somewhat effective
4. Effective
5. Very effective



How did you learn about today's workshop?

1. Received a flyer
2. Received an email
3. Heard about it on television
4. Radio
5. Newspaper
6. Social Media
7. Internet
8. Saw advertisement on bus
9. Word of mouth
10. Other



January 30, 2018

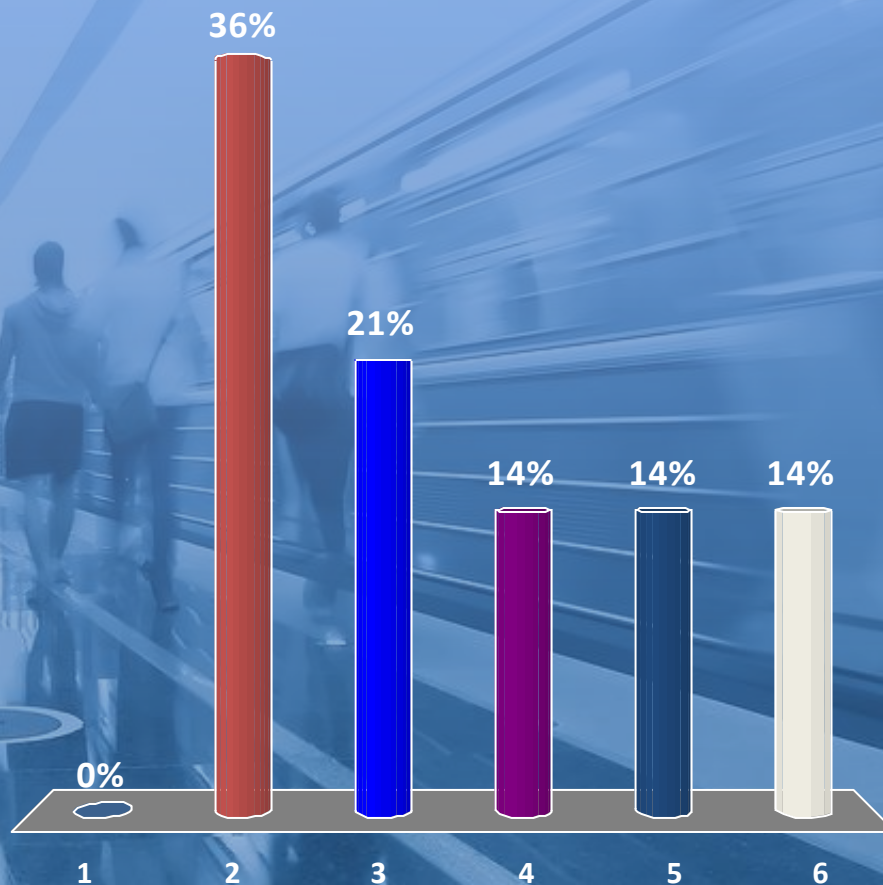
Fresno County Regional Long Range Transit Plan

Polling Questions

Fresno-Clovis Metro Area Workshop

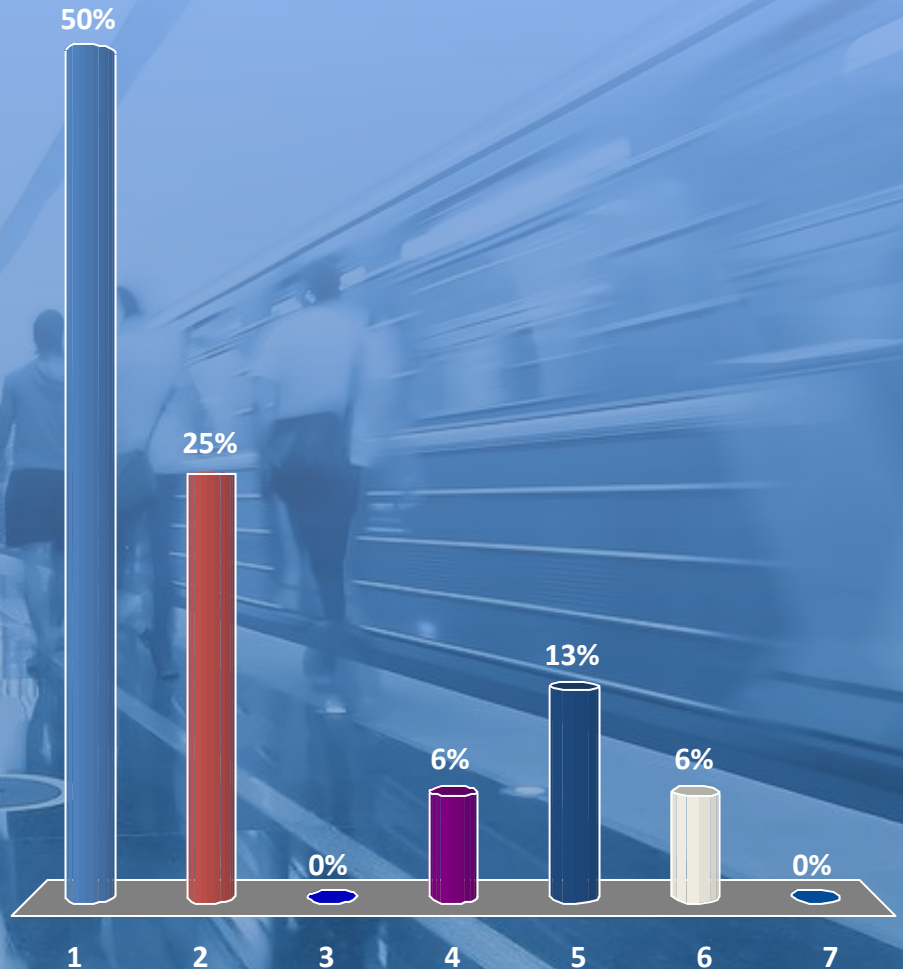
What is your age?

1. Less than 16
2. 16-25
3. 26-35
4. 36-50
5. 51-65
6. Greater than 65



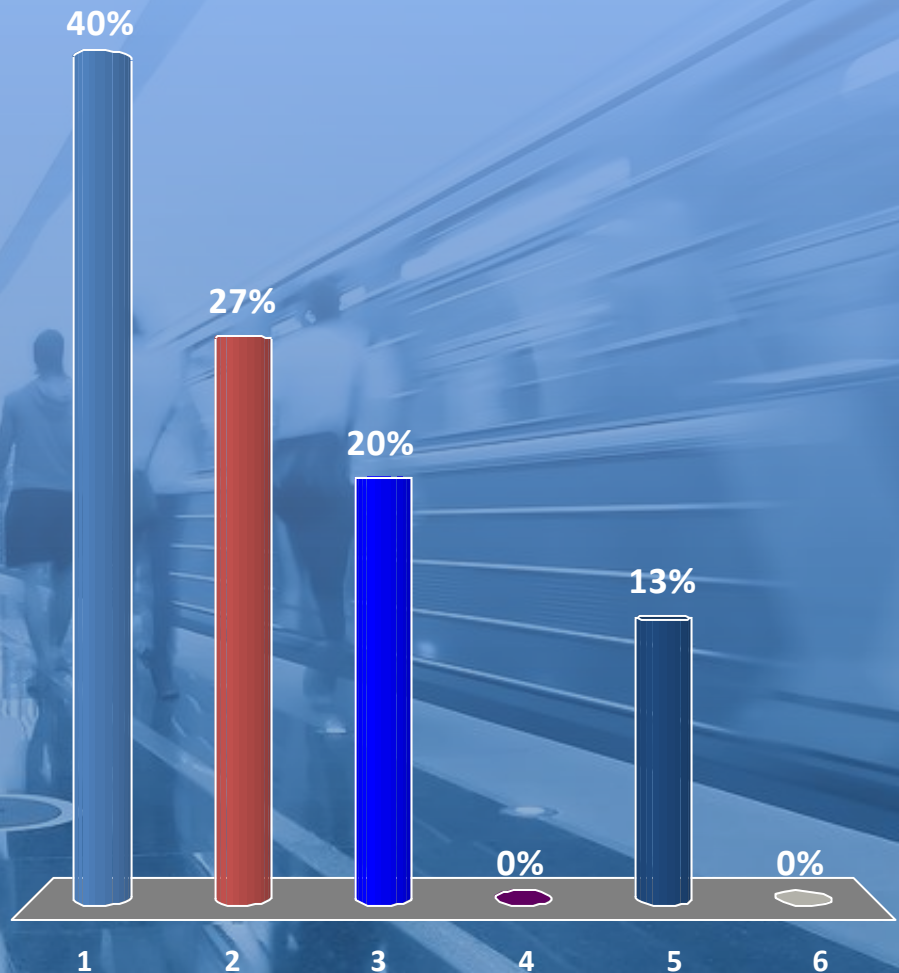
What is your racial or ethnic background?

1. Anglo/White
2. Hispanic/Chicano/Latino
3. American Indian/Native American
4. African American/Black
5. Asian/Oriental/Pacific Islander
6. Other
7. Rather not answer



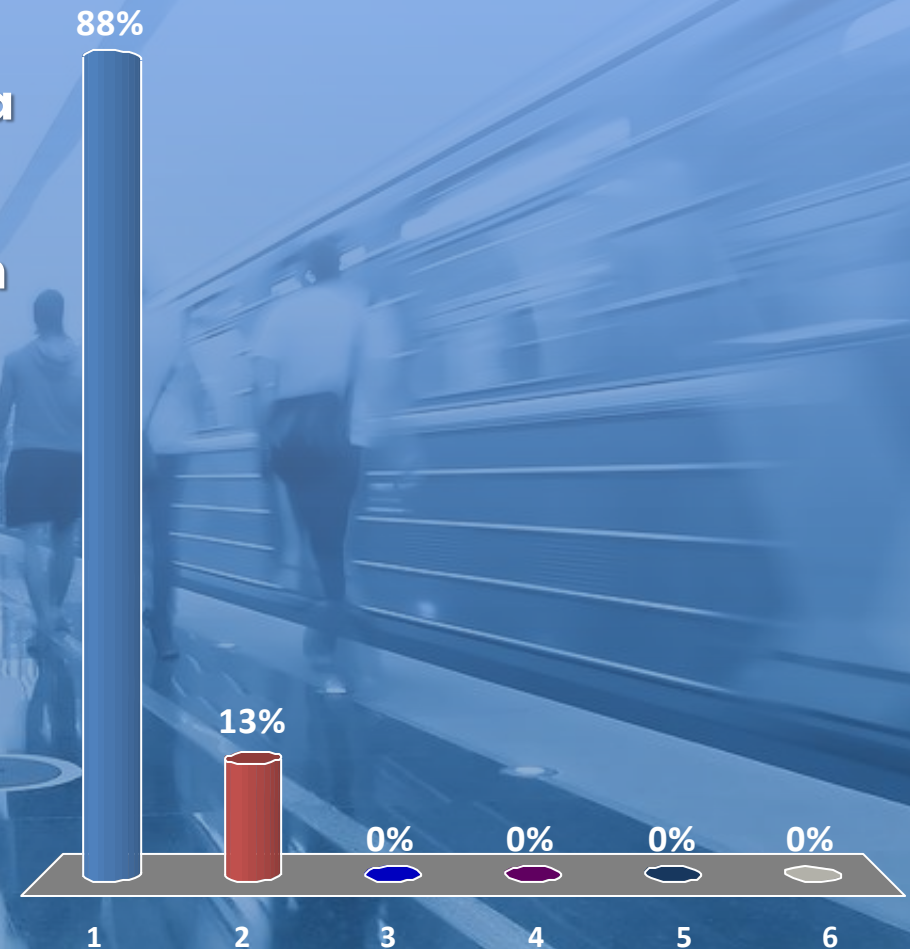
What is your household income?

1. Less than \$25,000
2. \$25,000 - \$49,999
3. \$50,000 - \$74,999
4. \$75,000 - \$99,999
5. More than \$100,000
6. Rather not say



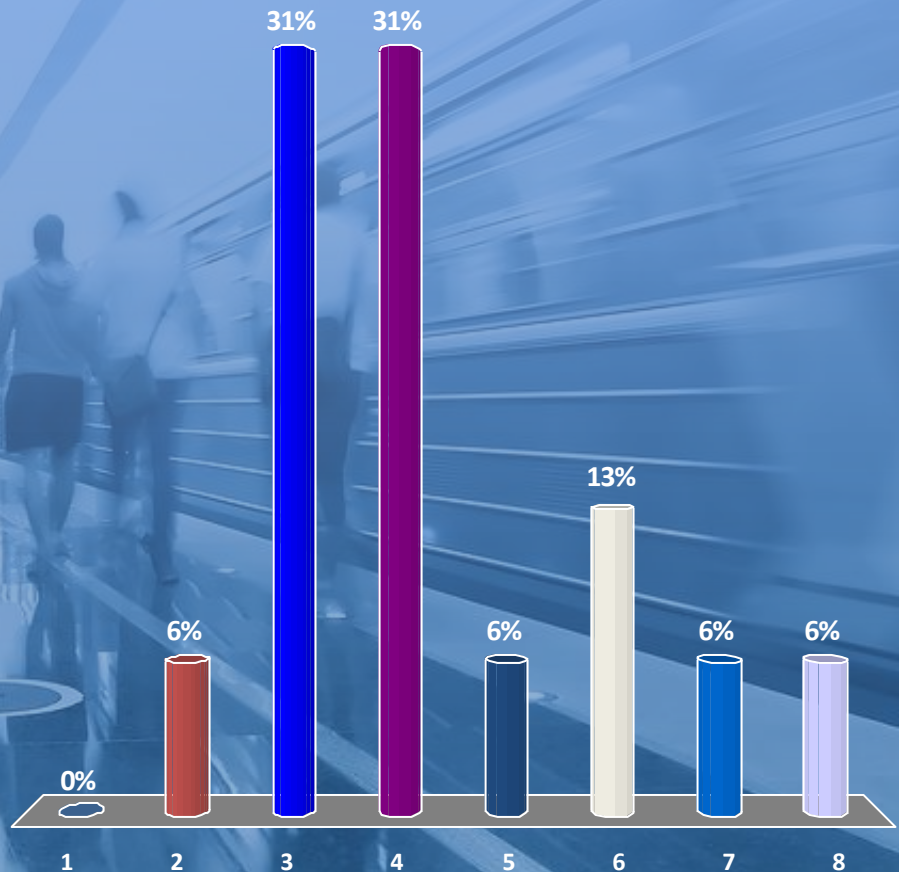
Where do you live?

1. City of Fresno
2. City of Clovis
3. Unincorporated County Area outside of City of Fresno
4. Other Fresno County City on or East of Highway 99
5. Other Fresno County City West of Highway 99
6. Outside of Fresno County



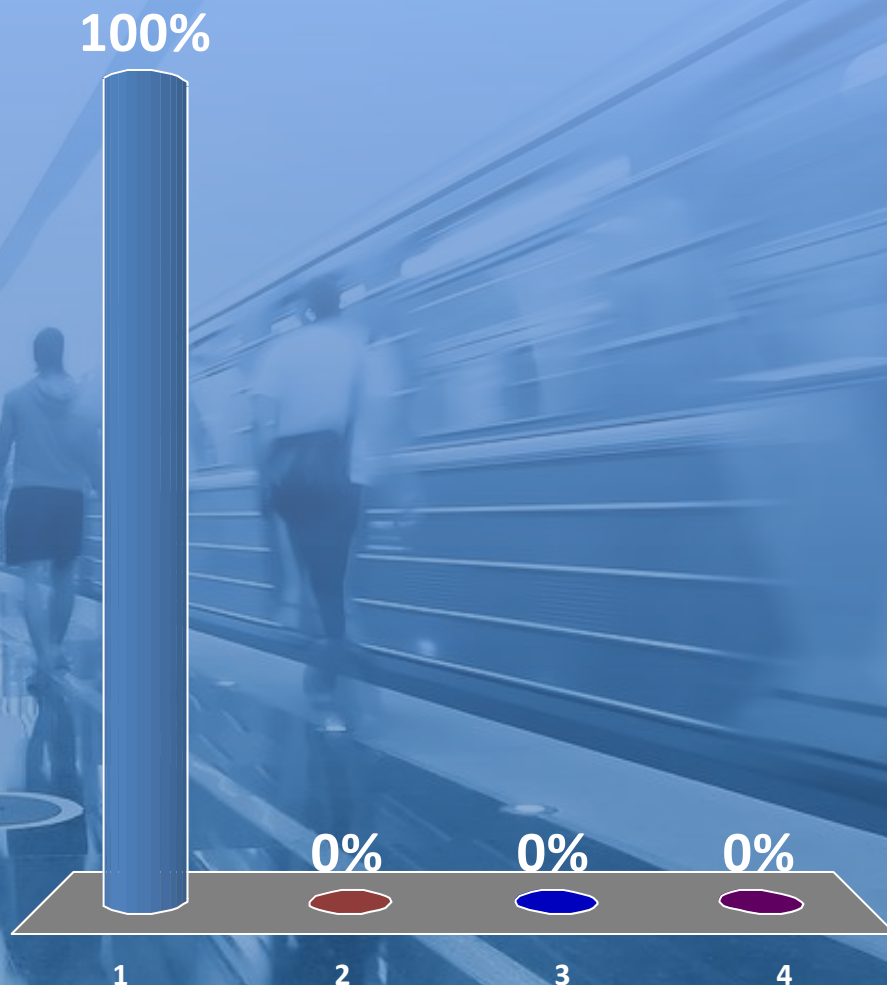
Which of the following subgroups BEST describes you?

1. Elected Official
2. Appointed Official
3. Private Citizen
4. Student
5. Public Agency Staff
6. Community Based Organization/Faith Based Organization
7. Environmental Justice Advocate
8. Other



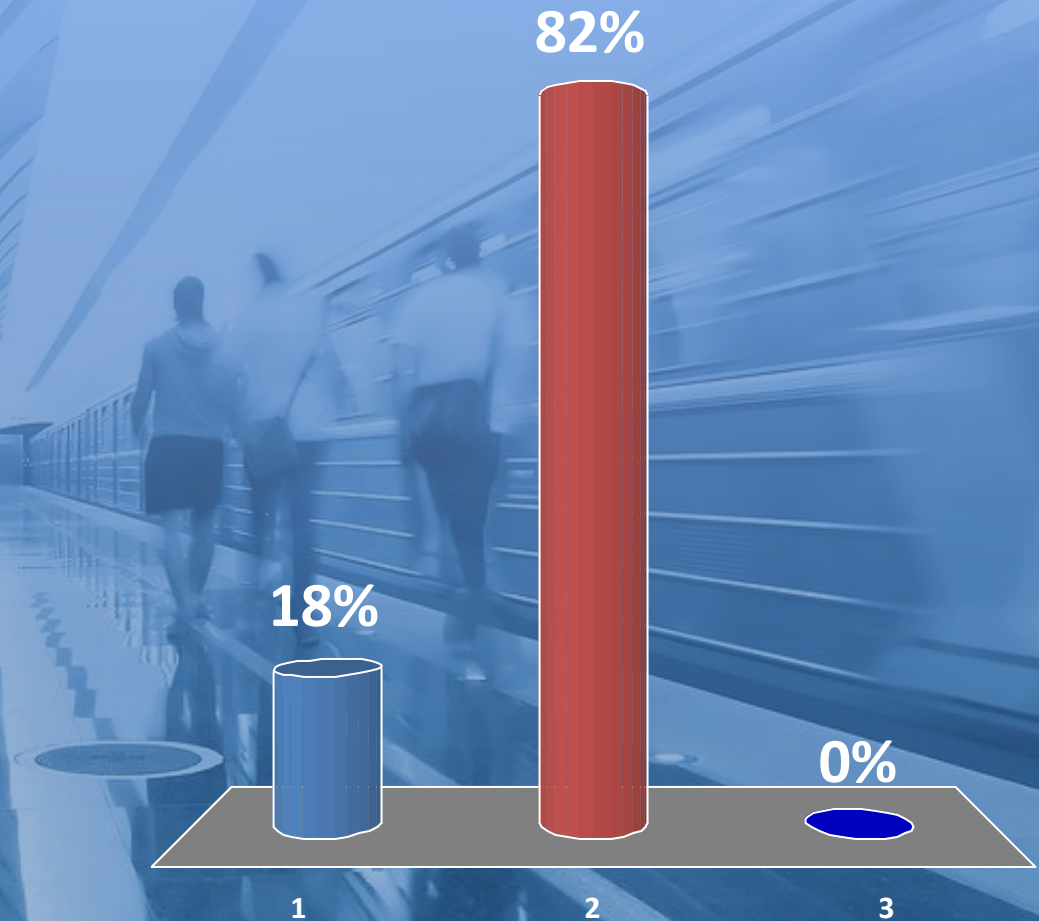
What is your preferred language?

1. English
2. Spanish
3. Southeast Asian dialect
(Hmong, Laotian, etc.)
4. Other



Do you have a disability that either prevents you from getting to or from a bus route, accessing a bus, or understanding how to use the bus system?

1. Yes
2. No
3. Prefer not to answer



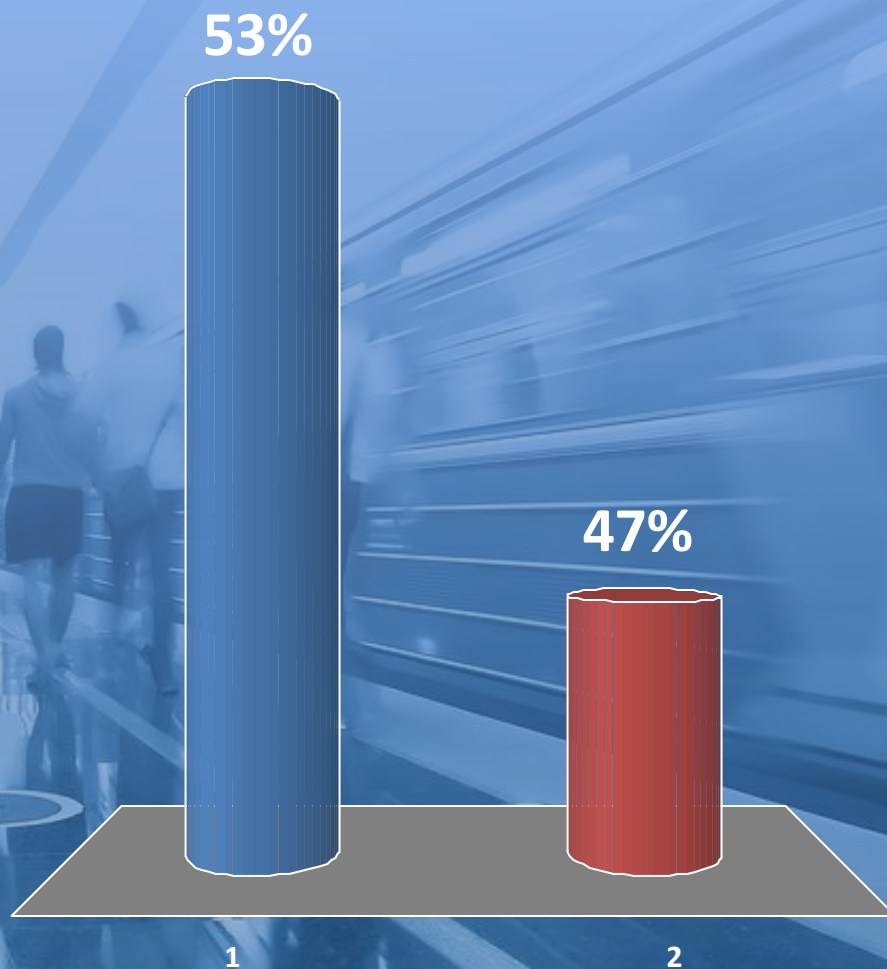
How did you get to this workshop today?

1. Drove a car
2. Rode in a car with family/friends
3. Rode on a motorcycle
4. Took Uber/Lyft
5. Took the bus
6. Rode a bike
7. Walked
8. Other



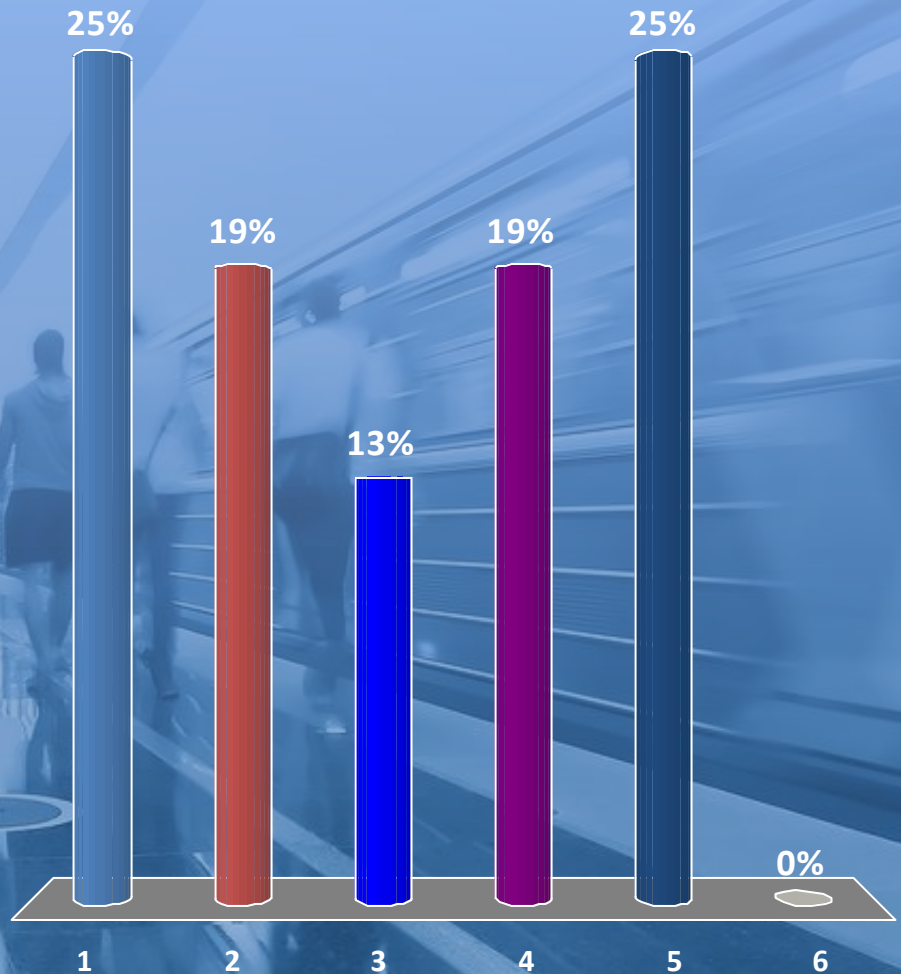
Do you own or have regular access to a vehicle?

1. Yes
2. No



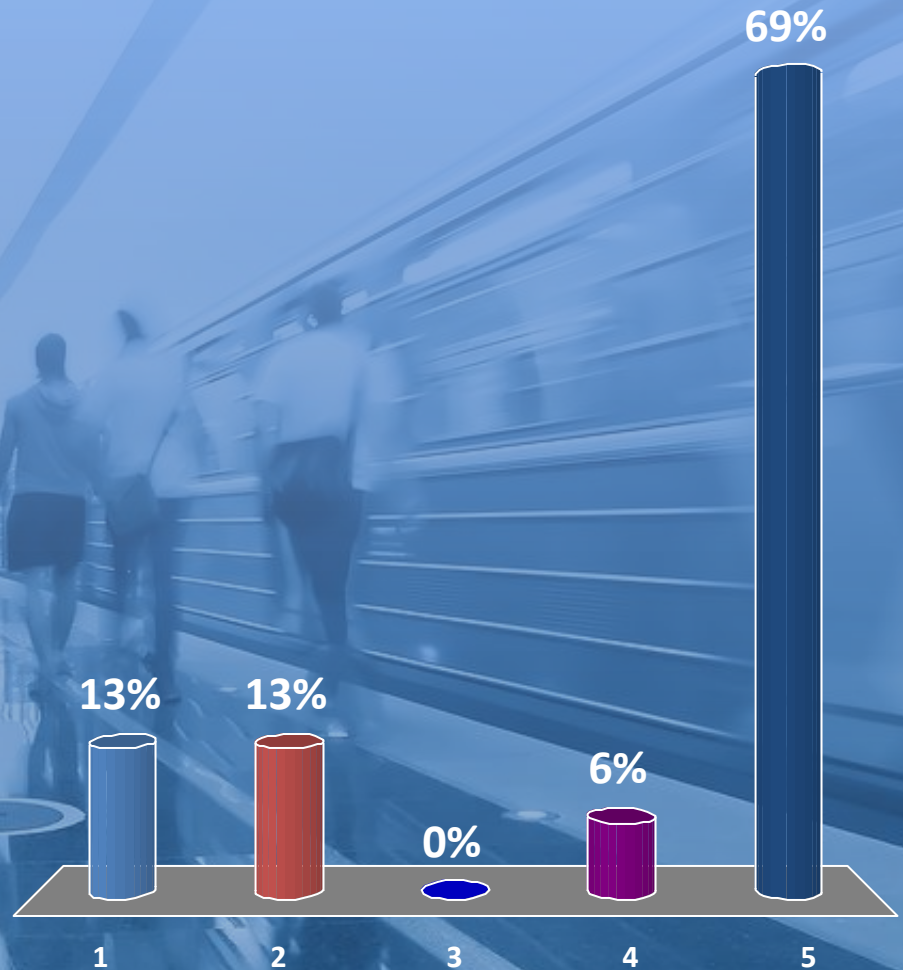
If a motor vehicle is not available, what type of transportation do you use?

1. Bus
2. Bicycle
3. Walk
4. Ask for a ride from friend, neighbor or family member
5. Uber/Lyft
6. Other



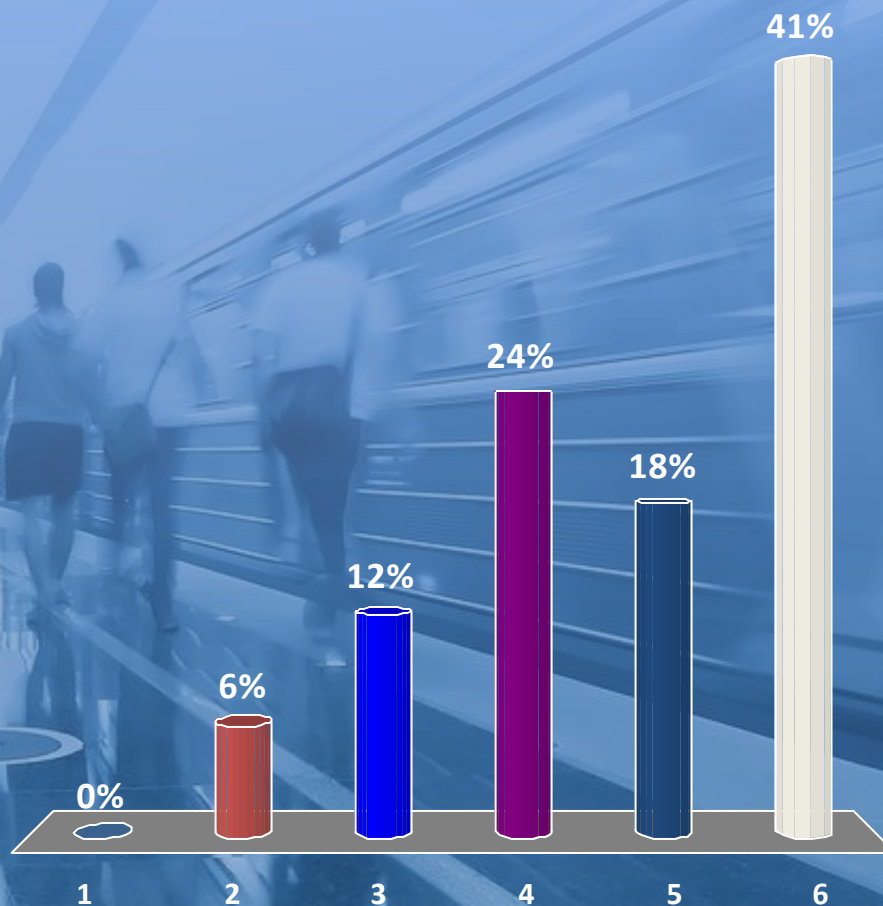
How often do you ride a bus in Fresno County?

1. Four or more days a week
2. Two to three days a week
3. About once every week or two
4. About once a month
5. Rarely/Never



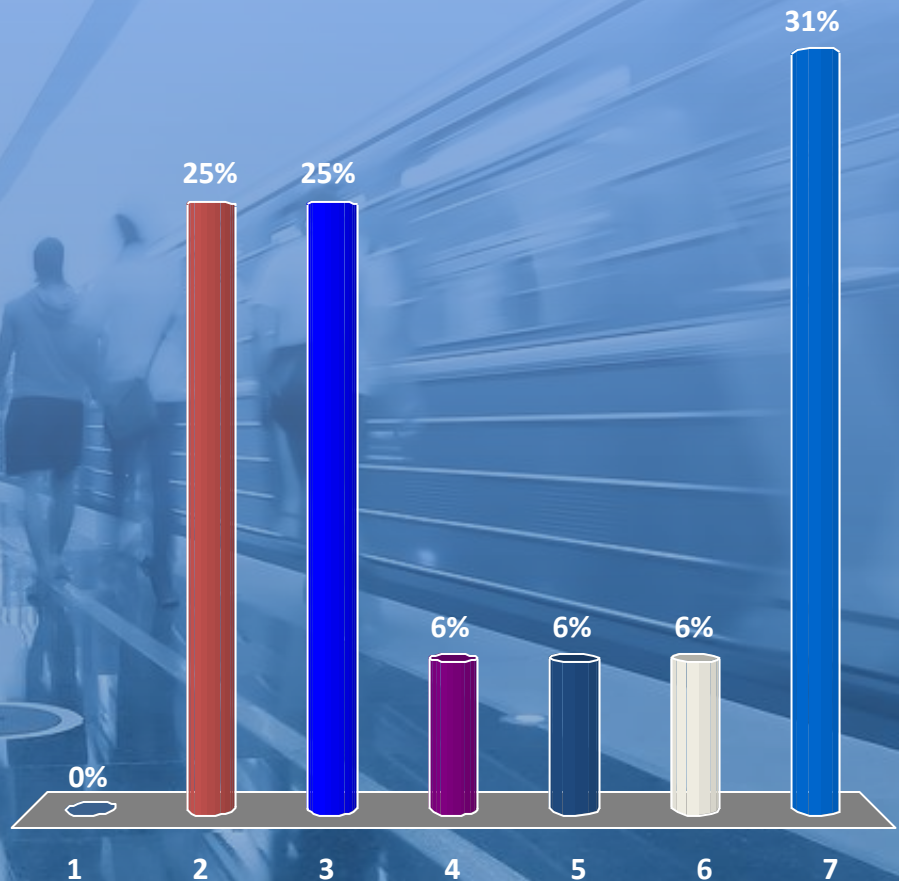
What do you currently ride the bus for (most important trip only)?

1. Trips to and from work
2. Shopping trips
3. Education trips (school, college, job-related classes)
4. Personal business trips (doctor, haircut, etc.)
5. Social and recreational trips (visiting friends/family, entertainment)
6. Do not ride the bus



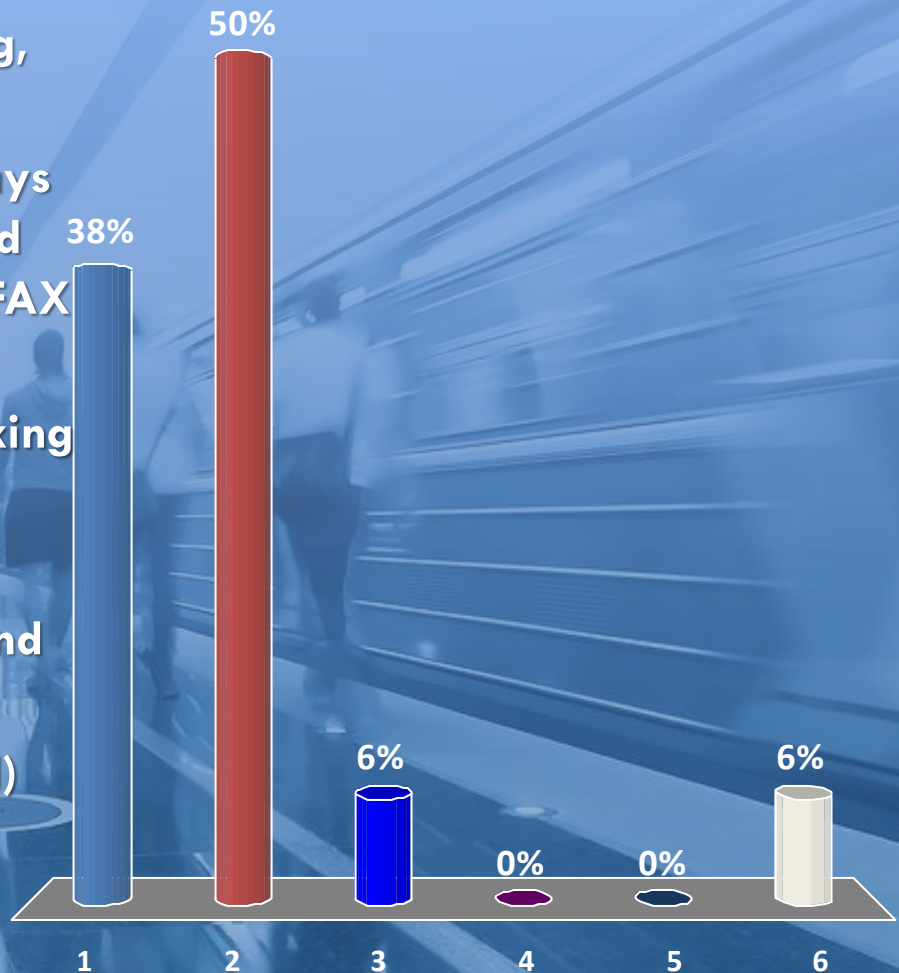
FAX and Clovis Stageline provide service that covers the Fresno-Clovis urban area. *If* Fresno were to obtain more funding, what is the best option for improved service?

1. No additional service is needed
2. More demand responsive paratransit service
3. Real time info on bus arrivals
4. Wi-Fi on buses and at major stops
5. Bikeshare system with bikes at major stops
6. Private or community based Uber/Lyft or taxi services
7. Other (please describe on comment card)



Bus service can be made faster and timely with more space between stops. If this option is pursued, what would help offset this?

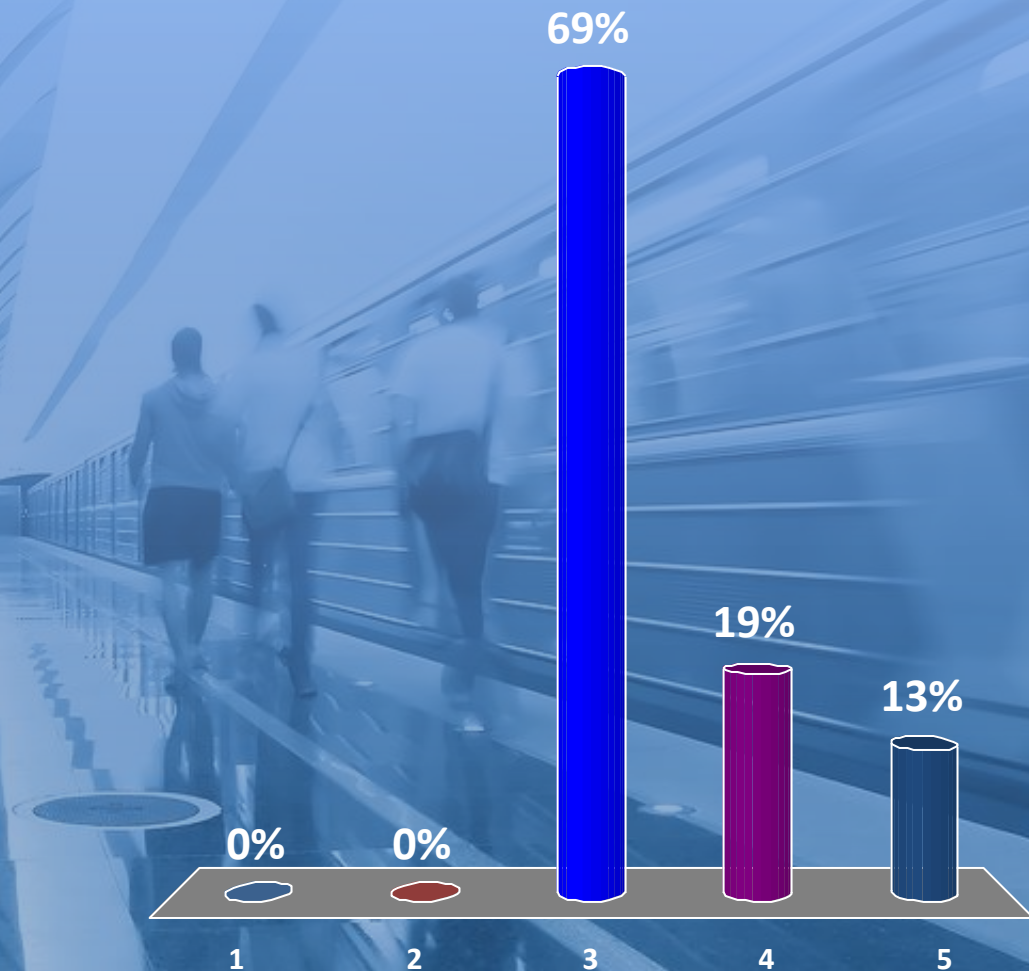
1. **More amenities at stops – shade, seating, etc.**
2. **Ensure that sidewalks and other pathways to stops are well-paved, well-lighted and safe (a Public Works responsibility, not FAX or Clovis Transit)**
3. **Better bike access/more secure bike parking at key bus stops**
4. **Bike share stations at key bus stops**
5. **Nothing more is needed – current demand responsive service is enough**
6. **Other (please describe on comment card)**



Meeting Evaluation

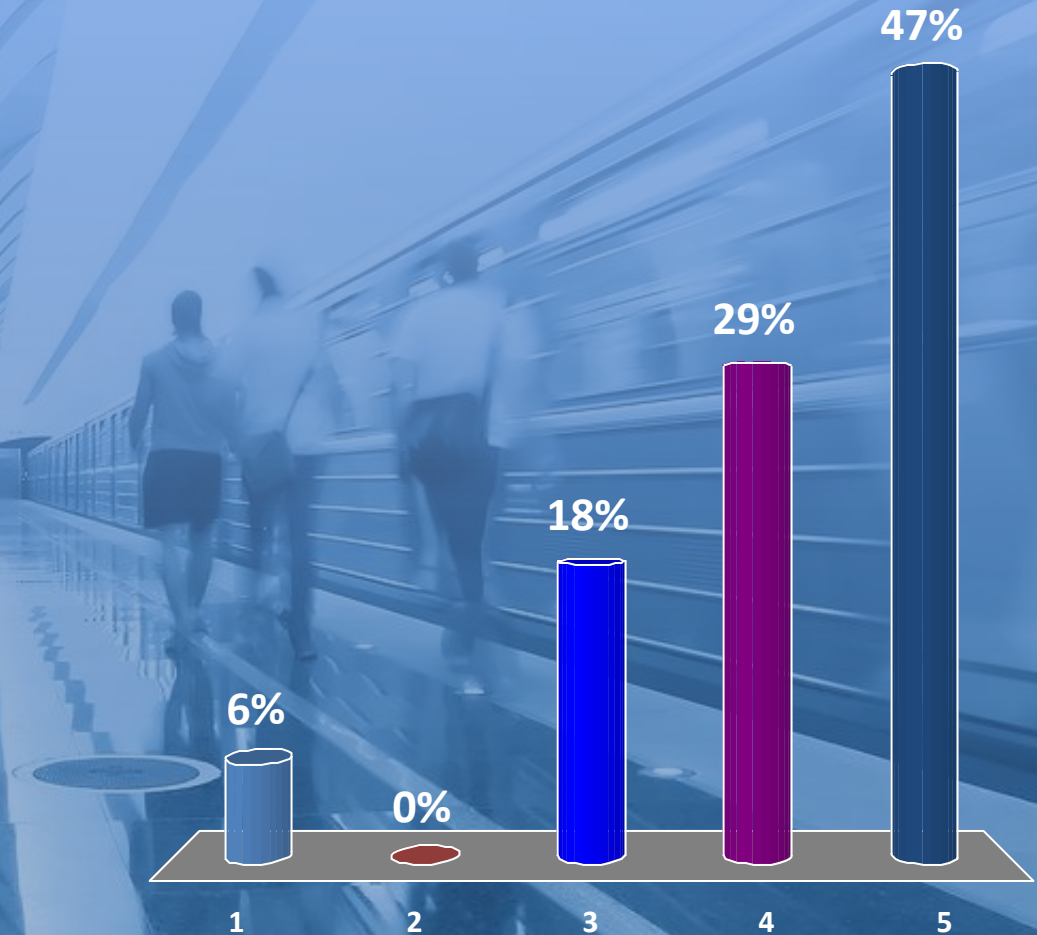
How effective has this meeting been so far to express your opinions?

1. Not at all effective
2. Not very effective
3. Somewhat effective
4. Effective
5. Very effective



How useful were the clickers to provide your opinion?

1. Not at all effective
2. Not very effective
3. Somewhat effective
4. Effective
5. Very effective



How did you learn about today's workshop?

1. Received a flyer
2. Received an email
3. Heard about it on television
4. Radio
5. Newspaper
6. Social Media
7. Internet
8. Saw advertisement on bus
9. Word of mouth
10. Other



Public Workshop Comment Cards

Fresno County Regional Long-Range Transit Plan Public Workshop

November 14, 2017

Name: LOUIS FRANCE

Address: CC

City: Salina State: Zip:

Representing Organization or Agency:

Comments: Comm Fare card

-Pre-book by Wal
Express svc. if
envt riders

Visit www.fresnocog.org/regional-long-range-transit-plan-0
for additional information



Fresno County Regional Long-Range Transit Plan Public Workshop

November 14, 2017

Name: Marial Monson

Address: 3747 E Shields Ave

City: Fresno

State: CA Zip: 93726

Representing Organization or Agency: CRCA, Inc.

Comments: -Weekend service for farmworker communities + evening service.

- Sidewalks + lighting in unincorporated areas through FCOG + County collaborations

- Bike paths in rural areas through collaboration w/ other agencies for funding sources

Visit www.fresnocog.org/regional-long-range-transit-plan-0
for additional information



Fresno Council
of Governments

Fresno County Regional Long-Range Transit Plan Public Workshop

November 14, 2017

Name: Levis Franco
Address: 1864 Mill St.
City: Selma State: CA Zip: 93662
Representing Organization or Agency: City of Selma
Comments:

Add Bus stop that connect
with High Speed Rail.

Visit www.fresnocog.org/regional-long-range-transit-plan-0
for additional information



Fresno Council
of Governments

Fresno County Regional Long-Range Transit Plan Public Workshop

November 14, 2017

Name: Mariah Thompson

Address: 3747 E Shields Ave

City: Fresno

State: CA Zip: 93726

Representing Organization or Agency: CRCA, Inc.

Comments: ① Collaboration between county planning dept + FCOG to integrate fair housing obligations into planning for transportation to help meet AFFH obligations
② Collaboration w/ county to encourage infrastructure development in unincorporated communities for safe active transportation

Visit www.fresnocog.org/regional-long-range-transit-plan-0 for additional information



Fresno Council
of Governments

Fresno County Regional Long-Range Transit Plan Public Workshop

November 14, 2017

Name: RENE' GONZALEZ

Address: 333 O ST

City: SANGER

State: CA Zip: 93657

Representing Organization or Agency: SANGER

Comments:

My interest is in providing transit
from SANGER to AMTRAK & AIR PORT.
CONCUDING WITH THE SCHEDULE OF
AMTRAK & AIR PORT
ALSO TRIPS TO THE NATIONAL FORM,

Visit www.fresnocog.org/regional-long-range-transit-plan-0
for additional information



Fresno Council
of Governments

Fresno County Regional Long-Range Transit Plan Public Workshop

January 30, 2018

Name: Hannah Miller

Address: _____

City: _____

State: _____

Zip: 93730

Representing Organization or Agency: _____

Comments: Expand transit routes to
Clovis Community College

Visit www.fresnocog.org/regional-long-range-transit-plan
for additional information



Fresno Council
of Governments

Fresno County Regional Long-Range Transit Plan Public Workshop

January 30, 2018

Name:

Van Torres

Address:

City:

State:

Zip:

Representing Organization or Agency:

Claris Community College

Comments:

As our college expands programs and our student population increases, Fresno and Claris should provide transit access to Claris Community College.

Visit www.fresnocog.org/regional-long-range-transit-plan
for additional information



Fresno Council
of Governments

Fresno County Regional Long-Range Transit Plan Public Workshop

January 30, 2018

Name: Damen Rapada

Address: N/A

City: Clavis

State: CA Zip: 93612

Representing Organization or Agency: Clavis Community College ASG

Comments: Expand transit routes out to Clavis
Community College.

Visit www.fresnocog.org/regional-long-range-transit-plan
for additional information



Fresno Council
of Governments

Fresno County Regional Long-Range Transit Plan Public Workshop

January 30, 2018

Name: Lorrie Hopper

Address: 10309 N Willow Ave

City: Fresno

State: CA Zip: 93730

Representing Organization or Agency: Clouis Community College

Comments: Bus service to clouis Community
College is needed. We have many students
who live too far from the campus to
walk or ride their bike.

Visit www.fresnocog.org/regional-long-range-transit-plan
for additional information



Fresno Council
of Governments

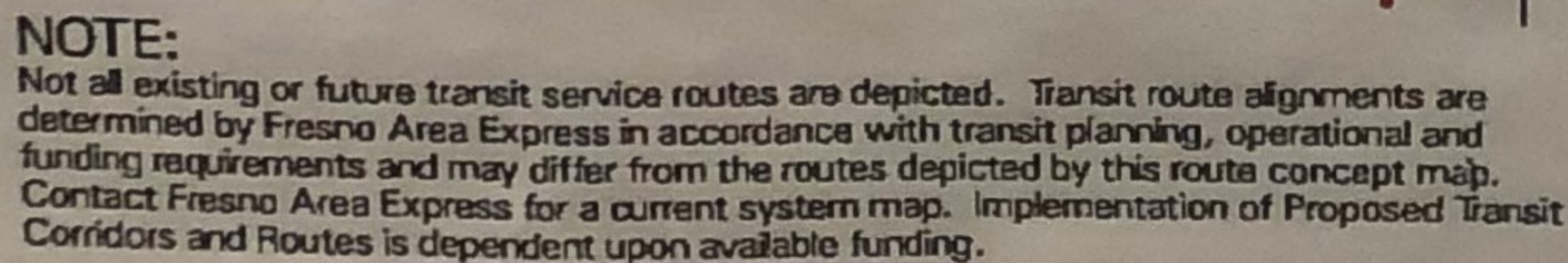
Public Workshop Mapping Exercise Comments







2025 Fresno General Plan Principal Transit Corridor and Route Concept Map



2025 Fresno General Plan Principal Transit Corridor and Route Concept Map

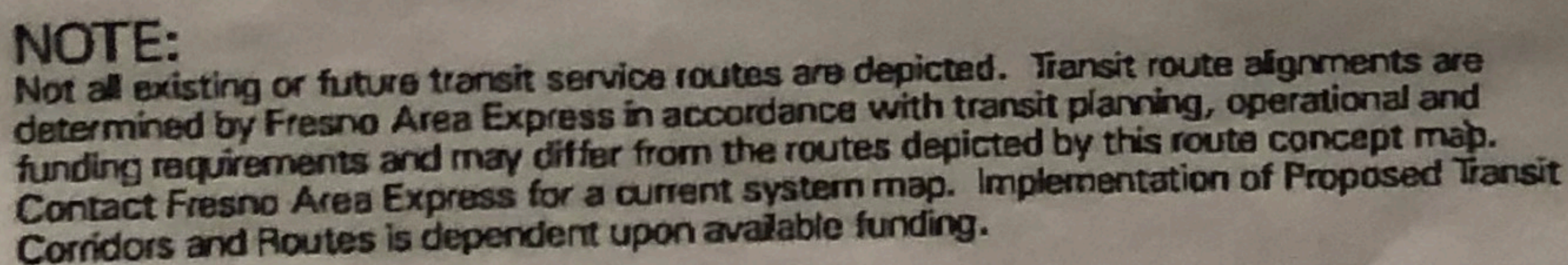
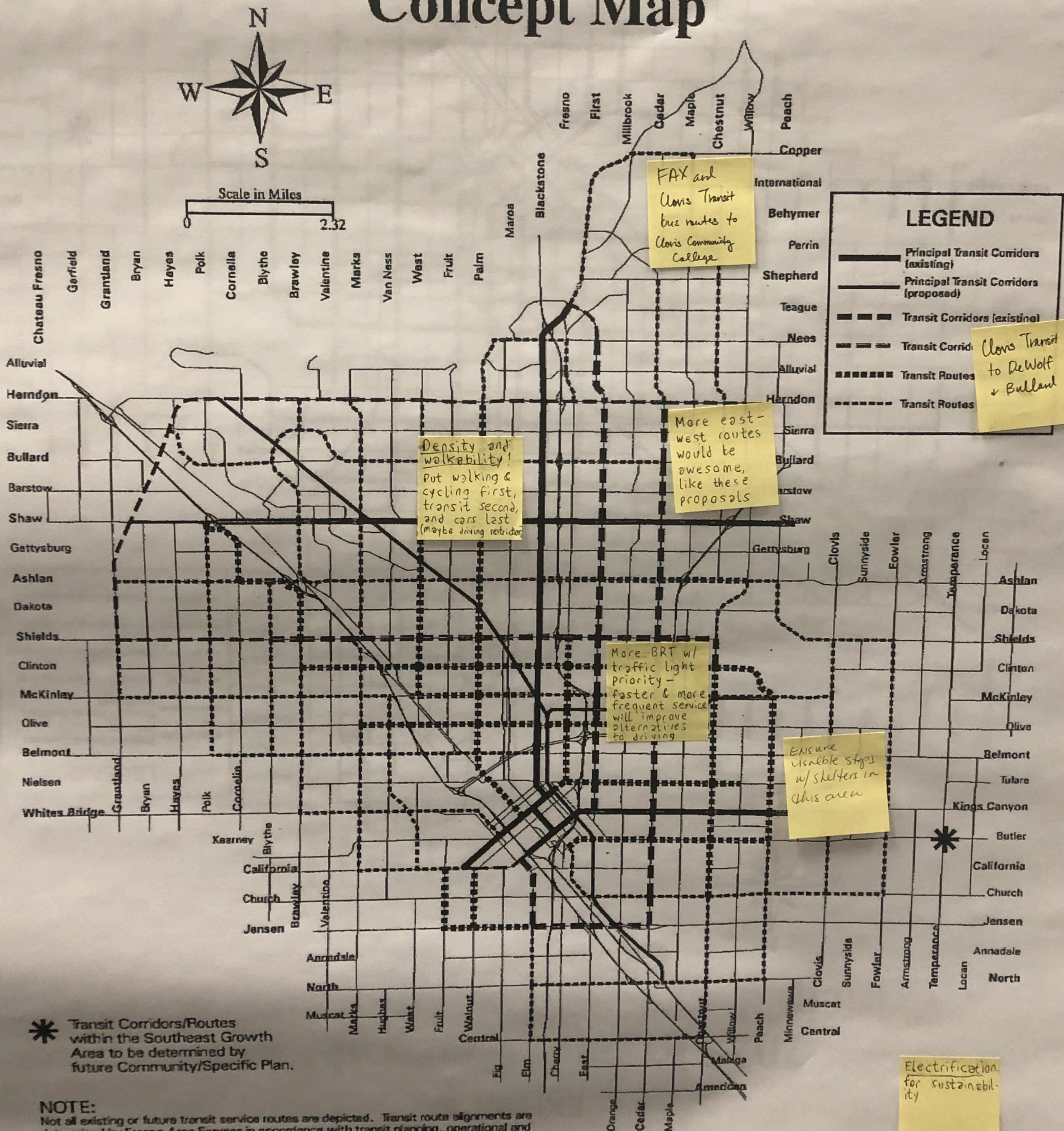


EXHIBIT 8

2025 Fresno General Plan Principal Transit Corridor and Route Concept Map



Public Workshop Survey Instrument and Combined Results

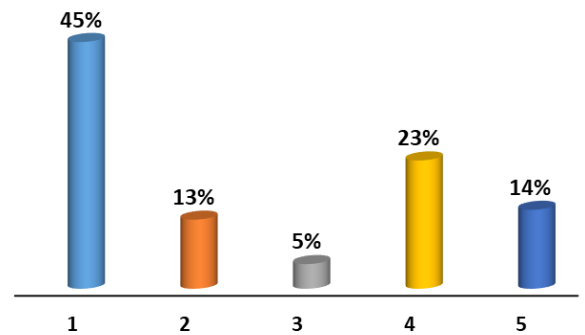
Survey Instrument

The Survey Instruments were available for Fresno County respondents during the public outreach phase of the Fresno County Regional Long-Range Transit Plan (LRTP). The survey questions were designed to determine respondents' opinions on the LRTP. Participants were able to provide input on the survey questions by selecting their preferred answer and submitting their completed survey. The surveys consisted of numerous multiple choice questions. Answers from all surveys completed during the public outreach phase of the LRTP have been totaled and graphically displayed. Numbers in parentheses following each survey question correspond to the total number of responses received for each survey question.

1. Where do you live?

1. Fresno
2. Unincorporated County Area outside of the City of Fresno
3. Clovis
4. Other Fresno County City
5. Outside of Fresno County

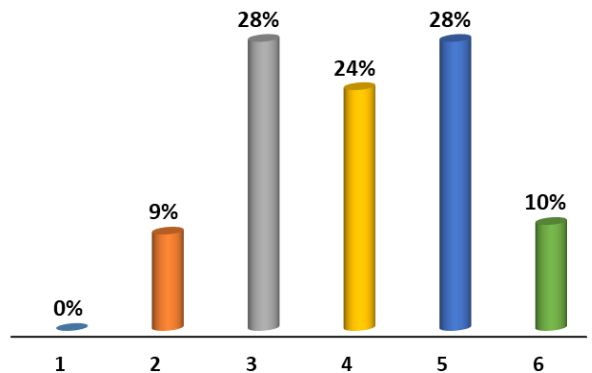
(111 Responses)



2. Where is your age?

1. Less than 16
2. 16-25
3. 26-35
4. 36-50
5. 51-65
6. Greater than 65

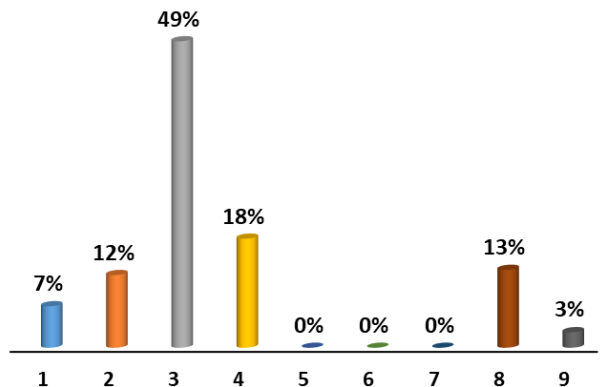
(106 Responses)



3. How are you traveling today? (Check all that apply)

1. FCRTA
2. FAX
3. Driving a car
4. Riding in a car with others
5. Motorcycle
6. Uber/Lyft/Taxi
7. Bike
8. Walking
9. Other

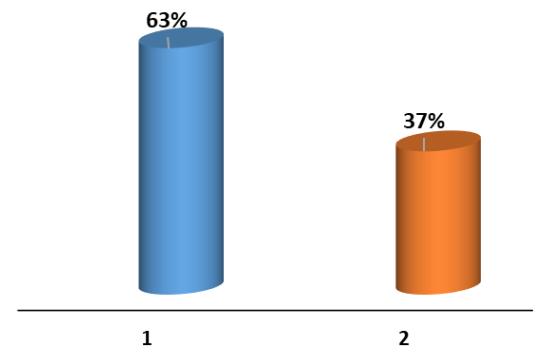
(120 Responses)



4. Do you own or have regular access to a vehicle?

1. Yes
2. No

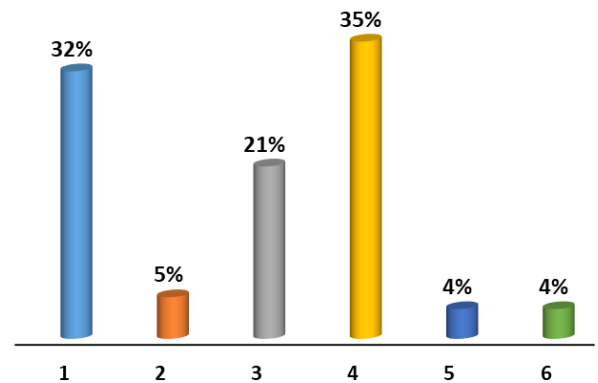
(117 Responses)



5. If a motor vehicle is not available, what type of transportation do you use?

1. Bus
2. Bicycle
3. Walk
4. Ask for a ride from, neighbor, or family member
5. Uber/ Lyft/ Taxi
6. Other

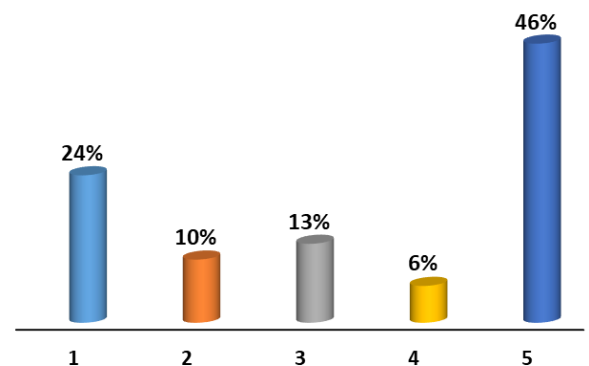
(141 Responses)



6. How often do you ride a bus or van in Fresno County?

1. 4 or more days a week
2. 2 to 3 days a week
3. About once every week or two
4. About once a month
5. Rarely/never

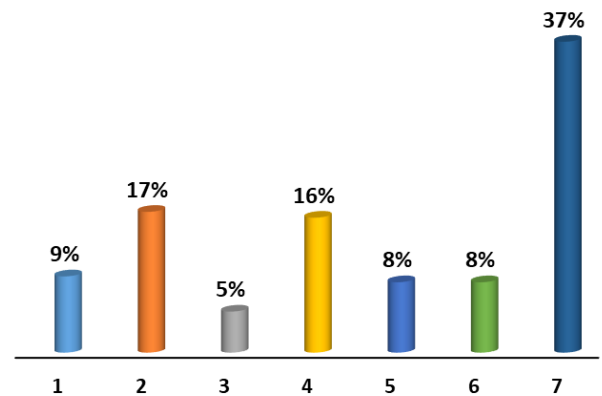
(115 Responses)



7. What do you currently ride the bus/van for (most important trip only)?

1. Trips to/from work
2. Shopping trips
3. Education trips
4. Personal business trips
5. Social and recreation trips
6. I use buses/ vans for all my trips
7. I do not ride the bus

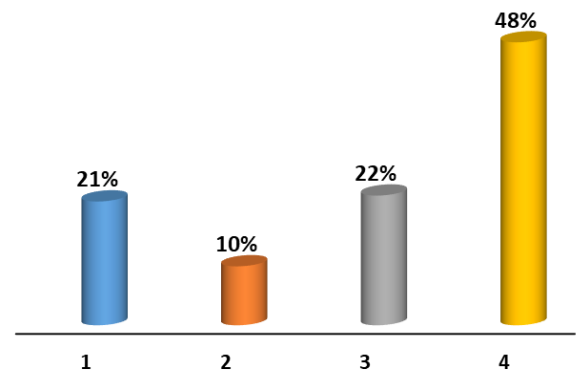
(144 Responses)



8. How many of your important daily trips can you make by walking or biking?

1. Most
2. Some
3. A Few
4. Hardly any

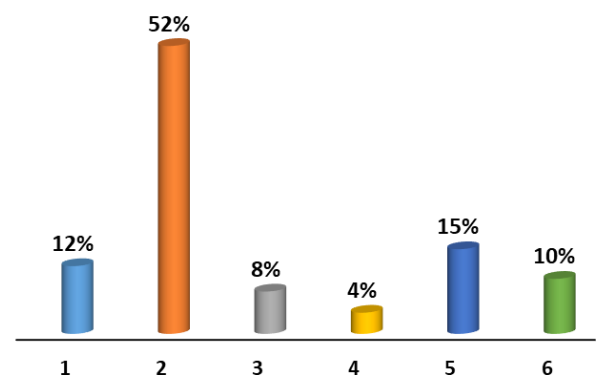
(101 Responses)



9. Some low density areas of Fresno County have limited or no bus service. If Fresno County were to obtain more funding, what is the best option for these areas?

1. No additional service is needed in these areas
2. More demand responsive paratransit service
3. More secure bike parking at bus shelters
4. Bikeshare systems in these areas
5. Private or community based Uber/ Lyft or taxi services
6. Other

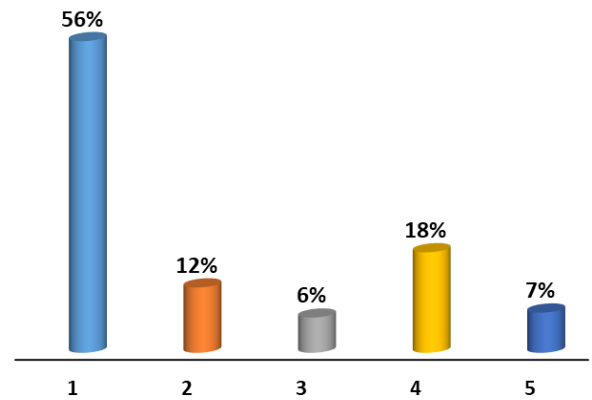
(132 Responses)



10. To make bus trips faster, there are usually only one or two stops in smaller cities. What would help offset this?

1. More demand responsive paratransit service
2. More secure bike parking at bus shelters
3. Bikeshare system in these areas
4. Private or community based Uber/Lyft or taxi services
5. Other

(110 Responses)



Evaluation of the Alternatives Scoring Summary

Fresno County Regional Long-Range Transit Plan Evaluation of the Alternatives Scoring Instrument

#	L RTP Criterion Name	Alternative and Project Number																				
		R-1	R-2	R-3	R-4	R-5	R-6	R-7	R-8	R-9	R-10	R-11	R-12	R-13	C-1	C-2	C-3	C-4	C-5	C-6	B-1	B-2
1	Is consistent with current local plans, policies, & S RTPs (Max: 1 point)	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1
2	Provides improved access to activity centers (Max: 5 points)	3	1	5	1	5	1	5	5	1	1	1	0	0	3	5	1	1	0	5	1	0
3	Project will maintain established productivity standards (Max: 5 points)	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
4	Project provides for or promotes intermodal connectivity (Max. 5 pts.)	1	5	0	0	0	5	0	5	5	1	0	0	0	0	0	5	0	0	0	5	0
5	Project serves a transit dependent population/community (Max: 5 pts)	1	1	5	1	1	1	3	1	1	1	1	0	0	3	5	3	5	5	0	0	0
6	Project enhances interagency transit service coordination (Max: 2 pts.)	0	2	2	2	0	0	0	2	2	2	0	0	0	0	0	0	2	2	0	2	0
7	Project reduces reliance on private automobiles (Max: 2 pts.)	0	2	2	1	2	2	2	2	2	0	0	0	0	2	2	1	1	1	2	0	0
8	Project will enhance part of an existing transit service (Max: 2 pts.)	0	2	2	2	2	2	2	2	0	2	2	2	0	2	0	2	2	0	0	2	0
9	Project reduces vehicle congestion (Max: 2 pts.)	0	1	2	0	2	0	2	2	0	0	0	0	0	0	0	0	0	0	2	1	0
10	Supports SCS growth principles (Max: 4 pts.)	4	1	2	1	1	0	1	1	1	1	1	1	0	1	2	2	1	1	2	1	1
11	Health Priority Index (Max: 2 pts.)	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	Estimated Project Timing (Max: 3 pts.)	0	0	1	1	1	1	1	0	1	1	1	0	1	3	2	3	1	1	3	2	0
13	Leveraging Funding Through Partnerships (Max: 4 pts.)	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
14	Technology to Improve Customer Experience (Max: 4 pts.)	0	2	0	0	0	0	0	0	0	0	4	0	2	0	4	4	4	0	0	4	0
15	Expand Mobility Choice (Max: 4 pts.)	0	0	4	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	4	0	0
Average: 5 Steering Committee Members		23	26	32	20	21	22	24	27	25	26	25	16	18	25	29	30	29	21	26	27	15
Transit Project R-1: Transit Supportive Policies		19	21	29	13	18	16	20	24	17	13	14	7	6	18	26	25	21	14	22	22	9 COG
Transit Project R-2: Fare Policy and Demand Management Strategies		30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30 CT
Transit Project R-3: Expand BRT and Frequent Bus Networks		22	31	30	24	16	23.5	22	16	31	36	37	26	37	27	32.5	32	35	32	29	33	23.5 COUNTY
Transit Project R-4: Strengthen Network Connectivity		18	23	36	18	21	20	28	32	23	29	23	10	16	25	26	34	30	19	22	26	0 FAX
Transit Project R-5: Bus Speed Enhancements		25	26	36	16	18	21	22	32	22	23	21	8	2	24	31	30	29	12	27	22	10 FCRTA
Transit Project R-6: Review Opportunities to Tailor Bus Services to More Efficiently Serve Low Demand Times and Routes																						
Transit Project R-7: Increase Service Frequencies, Improve Reliability and Expand Service to New Growth Areas																						
Transit Project R-8: Integration With Plans for High-Speed Rail Station and Downtown Plans																						
Transit Project R-9: New Transit Hubs Outside of Downtown Fresno																						
Transit Project R-10: First/Last Mile Improvements																						
Transit Project R-11: Technology and Climate Change Initiatives																						
Transit Project R-12: Upgrade Bus Storage and Maintenance Facilities																						
Transit Project R-13: Ambassador Programs																						
Transit Project C-1: Enhance the Fresno County Rural Transit Agency (FCRTA) Inter-City Network																						
Transit Project C-2: Explore Community-Based Transportation Opportunities Taking Advantage of Technology When and Where Appropriate																						
Transit Project C-3: Provide Micro-Transit Services in Low-Demand Areas																						
Transit Project C-4: Develop a Network of Inter-system Transportation Nodes																						
Transit Project C-5: Enhance and Expand Partnerships to Expand Mobility Opportunities																						
Transit Project C-6: Expand the Vanpool Program in Fresno County																						
Transit Project B-1: Create an Online Web Portal to Enhance Mobility Management																						
Transit Project B-2: Pursue Funding for Innovative Transit Projects																						

Appendix B

First/Last Mile:

Sample Scope of Work
and Analysis Results

Contents

- First/Last Mile: Sample Scope of Work and Analysis Results



First/Last Mile Sample Scope of Work and Analysis Results



MEMORANDUM

To: VRPA

From: Nelson\Nygaard

Date: October 24, 2018

Subject: Proposed First/Last Mile Approach and Draft Scope of Services for Fresno County

INTRODUCTION

This memo discusses a strategy to establish a comprehensive first/last mile approach for the County of Fresno as part of the Long-Range Transit Plan (LRTP). The goal of this strategy is to ensure timely assessment of and measurable progress towards improvements for effective first/last mile safety remediation and connectivity for active transportation modes in the county. The purpose of this memo is to provide a sample scope for conducting a first and last mile analysis and an example of some of the analysis results.

First mile and last mile strategies provide important connections to public transportation, among the most cost-efficient and environmentally sustainable travel choices a person can make.

Although a transit (bus and rail) system often makes up the core of a transportation network, the ways and means in which *how* someone accesses that system can determine whether someone chooses to ride transit or not. Even when the physical distance between a person's origin and a transit station is short, the issues of comfort, safety, convenience, and cost all affect that person's travel choices. Efforts to improve any of these characteristics along key routes to transit stations can have a wider influence on a community's quality of life; areas where people are walking, biking, and taking transit are often more vibrant and pleasant than auto-oriented areas. Providing convenient, affordable, and safe options to access transit and other modes reduces traffic congestion and greenhouse gas emissions and supports economic and physical health.

FIRST/LAST MILE IMPLEMENTATION STRATEGY

First/last mile studies should include transit hubs and community activity generators, such as schools, hospitals, areas with high retail activity, etc.

Many of these access issues have been evaluated in Fresno County Active Transportation Plan (January 2018). The strategy described below is intended to be complementary and an extension to that plan with a particular focus on access to transit and first/last mile connectivity. As the County moves forward with implementation of the Active Transportation Plan (ATP), this memo recommends the methodology below be integrated with the other local and County efforts to improve active transportation access and safety throughout the County.

It is also recommended that the County subdivide the County areas into more manageable study areas to conduct these first and last mile implementation analyses. These can be identifiable neighborhoods in the Fresno-Clovis urban area and individual communities in the rural portions of the County. This is practical for several reasons:

- Programmatic funding can be allocated on a yearly basis so that there can be measurable progress, and that progress is not held up by a County-wide first/last mile undertaking.
- The division of the County into smaller study areas allows for more feasible annual programmatic funding, to be allocated to first/last mile studies and project list development, which would be continued over many years.
- The partitioned approach to funding incremental first/last mile studies would allow for rolling deliverables, meaning that first/last mile recommendations can be implemented more quickly and allow for incremental, measurable progress over time.
- This approach is estimated to create about 20 study areas that would be investigated based on priority and availability of funds.

Each area would have a scope of work, similar to the one described in the following section, to identify specific needs and gaps in the active transportation network and will result in a prioritized plan of projects to address these identified issues. It is possible that some areas of the county could benefit by consolidating this needs assessment/project development approach with existing Safe Routes to School programs and other active transportation improvement programs arising from implementation of the countywide Active Transportation Plan. Below is a sample scope of work the County may use for a standalone assessment.

One geographic area examined in the sample of scope of work was fully developed to a costed program of projects intended to improve active transportation access to transit in a small community. The analysis demonstrates a high need for programming of significant financial resources to address shortcomings of key infrastructure elements that support active transportation. Aside from funding incremental studies to identify areas with needs for priority improvements, a plan to begin implementation of those priority improvements should also be included as an element in the financial plan for Fresno COG Long Range Transit Plan.

Sample Request for Proposal and Scope of Services

The purpose of this scope of services is to provide an example of how the County can solicit services to conduct first and last mile analyses to identify strategies that will improve access to transit.

Background

The RFP should include qualifying information about study area, current first/last mile transportation network, existing plans, etc.

First/last mile transportation services might include but are not limited to:

- Bicycle and pedestrian connectivity and safety improvement measures
- Bicycle sharing and rental
- Emerging mobility options (e.g. scooters, car share, community level ride-share)

- Creation of “mobility hubs” in communities that include informational access to all first/last mile solutions, as well as access to bike sharing, electric scooters, car-sharing, community sponsored ride-sharing, vanpools and other complimentary programs intended to improve community mobility.

Scope of Services

Under the direction of assigned staff from Fresno COG, Fresno County, or a local jurisdiction, the consultant will develop a comprehensive strategy for bicycle and pedestrian access to agreed-upon transit activity generators in the study area. The strategy will focus on development and implementation of a first/last mile transportation network that can effectively leverage existing funding sources. Strategy development should adhere to the following tasks.

1. Existing Conditions, Stress Analysis and Location Priority Analysis

This phase is an opportunity to review modern “best practices,” including emerging technologies, in first/last mile mobility. Additionally, the consultant should conduct existing conditions analysis on the study area, including a level of traffic stress analysis that will aid in the prioritization of project locations. Considerations of the stress analysis should include vehicle speed, presence of bicycle or pedestrian facilities, crossing distance, and other factors contributing to a low-stress bicycle and pedestrian network. A location priority analysis will help the consultant identify where they should concentrate their recommendations based on locations with high crash histories, high concentrations of people living, working and playing, and other factors.

Deliverables: Draft and final existing conditions and stress analysis, to include modern best-practices. [Review and approval of phase 1 deliverables will be dependent on study area, client project manager]

2. Outreach

Outreach will be performed [number of outreach events will be dependent on study area size, number of communities] to solicit input from stakeholders. The consultant will develop content for the outreach events intended to determine problematic locations for the community that will guide development of project recommendations.

Deliverables: [Number of outreach events to be determined based on characteristics of study area] public workshop events

3. Develop Project Evaluation Criteria

The consultant will work with County staff to identify evaluation criteria to prioritize the first and last mile strategies. The purpose of evaluation criteria is to select which strategies the County should pursue for funding, study and/or implementation based on project and community goals. The evaluation criteria should receive input from the public through the outreach process.

Potential prioritization evaluation criteria may include:

- Concentrations of people served by project
- Concentrations of bicycle and pedestrian collisions
- Public input and support for project
- Consistency with previously approved plans or projects

- Estimated construction costs of project
- Funding opportunities for project, and/or
- Ease of implementation of project

Deliverables: Table of evaluation criteria

4. Plan Development

Using the output from tasks 1, 2 and 3, the consultant will provide a prioritized list of recommendations to improve bicycle and pedestrian access to activity generators within the study area. In addition to project recommendations, the consultant would review potential funding opportunities and develop a funding strategy to leverage funding from a variety of sources. Funding opportunities should address planning, environmental, design, and construction needs. The concept is to identify specific projects and funding sources that can be moved directly into project implementation and that can be presented in the TIP as specific projects with specific funding sources.

Deliverables: Draft and final list of recommendations, draft and final first/last mile report

5. Estimated Funding Need

It is estimated that each area study would have a budget of \$25,000 to complete the needs study and project identification. To cover the needs of the entire county this would likely require about twenty study areas, or a total of about \$500,000, in the first five to ten years of the plan. The result will be rolling list of brick and mortar projects for potential funding to improve first-last mile connectivity in the county overall.

Example Assessment of Network Stress and Prioritization Strategies

This section presents an example of a network stress analysis and prioritization process as proposed in Scope Item #1. This sample assessment is an example of how to prioritize improvement recommendations in the communities of downtown Fresno, Coalinga, Kerman, and Sanger follows. It's important to note that this assessment and its set of strategies does not include a public outreach process, and therefore should not be taken as complete.

What follows is an illustration of the type of analysis that would be conducted in the existing conditions, stress analysis, and prioritization task. Note that these examples only focus on specific transit facilities, but in a full scope of work, they could also focus on pre-identified generators of active transportation activity. These other activity centers may be specific locations and projects identified in the Active Transportation Plan. This analysis would be used to identify specific focus areas for outreach. That would be followed by in-field assessments of potential improvement locations to determine the level and type of improvements that might be applicable to resolve the identified issues in the network through the analysis and outreach. A sample list of those mitigations and cost estimates (2016 \$\$'s) for each type of mitigation is included.

Nelson\Nygaard has developed a framework for assessing bicycle and pedestrian connectivity to transit for Fresno County. To demonstrate its application, we assessed four pilot sites associated with the Fresno County Rural Transit Agency (FCRTA). Based on capturing a range of street network densities around FCRTA stops, and on substantial origin-destination trip counts derived from Longitudinal Employer-Household Dynamics Origin-Destination Employment Statistics

(LODES) data, the four sites selected are Fresno, Sanger, Coalinga, and Kerman. The sample bicycle and pedestrian network assessment and prioritization strategy goals are two-fold:

- To provide insight into the conditions users encounter in accessing FCRTA transit stops, and
- To identify locations for potential bicycle and pedestrian improvements intended to increase the comfort level of those using non-motorized transportation to access transit.

Network Stress Methodology

Assessment of the bicycle and pedestrian conditions requires an audit of the road conditions, including data collection for marked crosswalks and locations of traffic signals. The audit evaluates the conditions facing bicyclists and pedestrians traveling to and from FRCTA transit locations, including potential network gaps that deter access. Nelson\Nygaard assessed a 2-mile travel shed for bicyclists and a half-mile travel shed for pedestrians, which represent an approximate 12-minute bicycle ride and 10-minute walk, respectively.

A stress typology for bicycle travel uses the following methodology:

Figure 1 Bicycle Network Stress Classification

	Level of Traffic Stress
Roads with Bike Lane/Shared Use Path	
<= 25 MPH	1 (low stress)
26-30 MPH	2 (moderate stress)
31-35 MPH	3 (high stress)
36+ MPH	4 (extreme stress)
Separated path	1
Roads without Bike Lane/Shared Use Path	
< 25 MPH	1
25-30 MPH	2
31-35 MPH	3
36+ MPH	4

A stress typology for pedestrian travel uses the following methodology:

Figure 2 Pedestrian Network Stress Classification

	Presence of Sidewalk	Absence of Sidewalk
Minor Road (< 35 MPH)	Low stress	Medium stress
Major Road (35 MPH =>)	Low stress	High stress

Figure 3 Pedestrian Crossing Stress Classification

	Presence of Marked Crosswalk/Presence of Signal	Presence of Marked Crosswalk/Absence of Signal	Absence of Marked Crosswalk/Presence of Signal	Absence of Marked Crosswalk/Absence of Signal
Minor Road (< 35 MPH)	Low stress	Low stress	Medium stress	Medium stress
Major Road (35 MPH =>)	Low stress	High stress	High stress	High stress

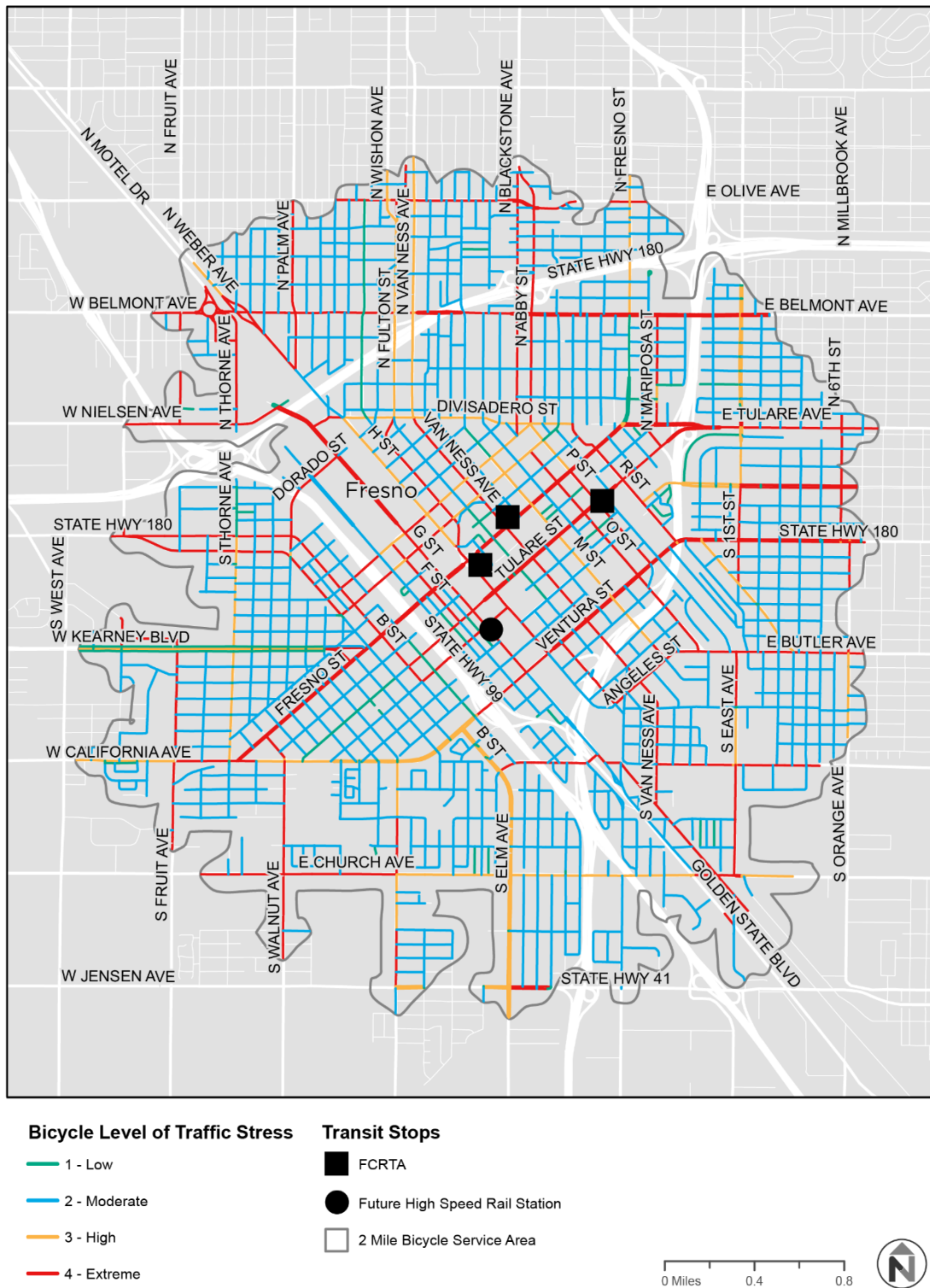
Network Stress Assessment Results

The results of the network stress assessment are shown in the maps below. Across all the pilot study sites, for both bicycling and walking, the major gaps in the network occur on the major roadways. For bicyclists, this equates to a roadway that has high speeds and does not have adequate protection from vehicle traffic. Only “strong and fearless” bicyclists, those who are not deterred by poor or stressful roadway conditions, would feel comfortable traveling along the high stress network. Thus, these links are considered a gap in the network for the vast majority of cyclists, and likely deter the number of people who might consider using a bicycle to get to and from the transit stop.

Similarly, most of the gaps along the pedestrian network occur at major roadway crossings. This is due to a lack of pedestrian facilities, such as marked crosswalks and traffic calming, that provide connectivity across major roads. In some of the study areas, only a small number of traffic signals at crossings of major roads. Street design that reduces vehicle speeds and pedestrian exposure, and increases pedestrian visibility, have a positive impact on pedestrian comfort and enable seamless access to transit facilities. Note that the maps of the bicycle and pedestrian networks are at differing scales with the bicycle network showing approximately four times more land area than the pedestrian analysis.

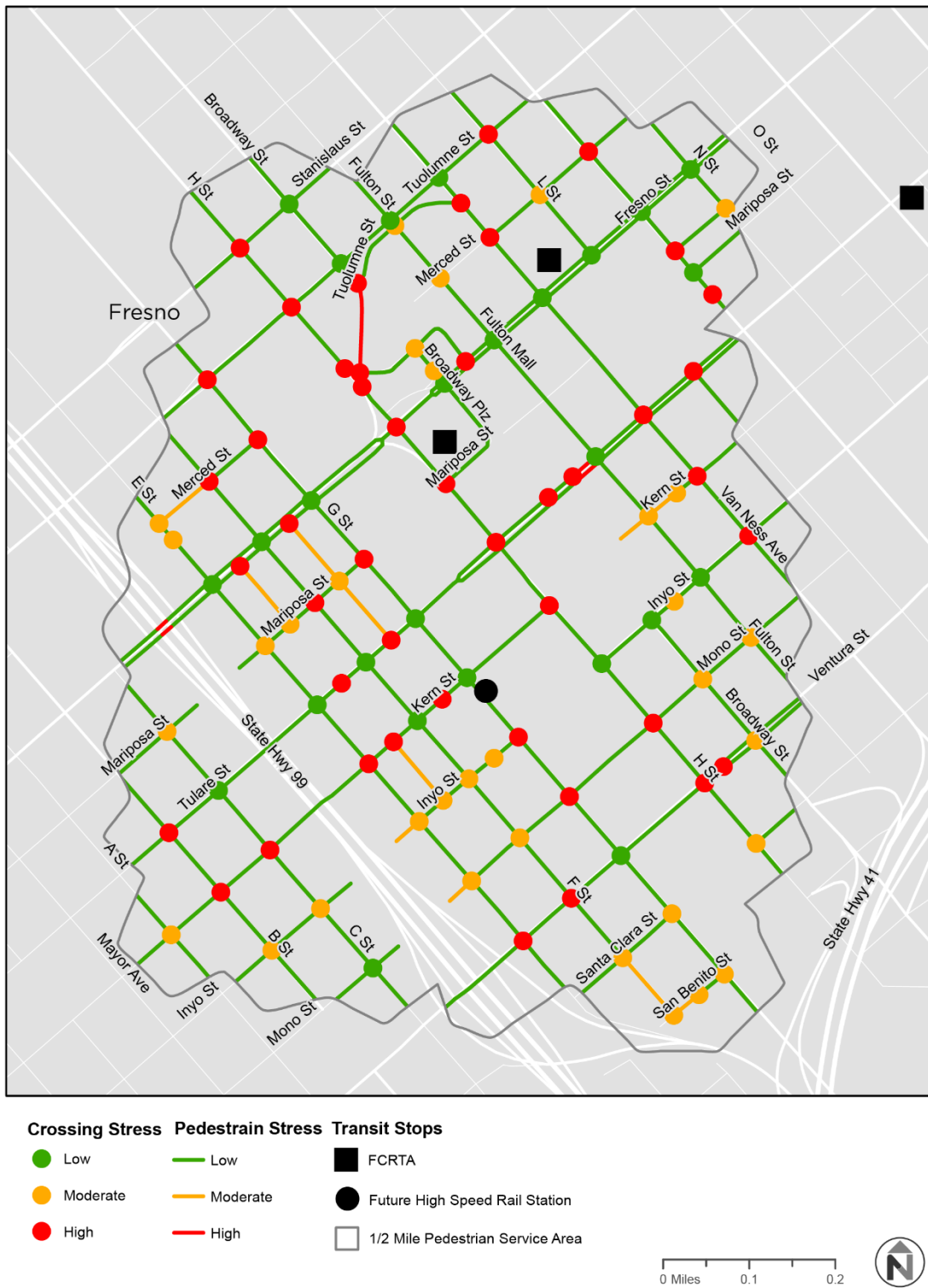
Proposed First/Last Mile Approach and Draft Scope of Services
Fresno COG

Figure 4 Bicycle Level of Traffic Stress, Downtown Fresno



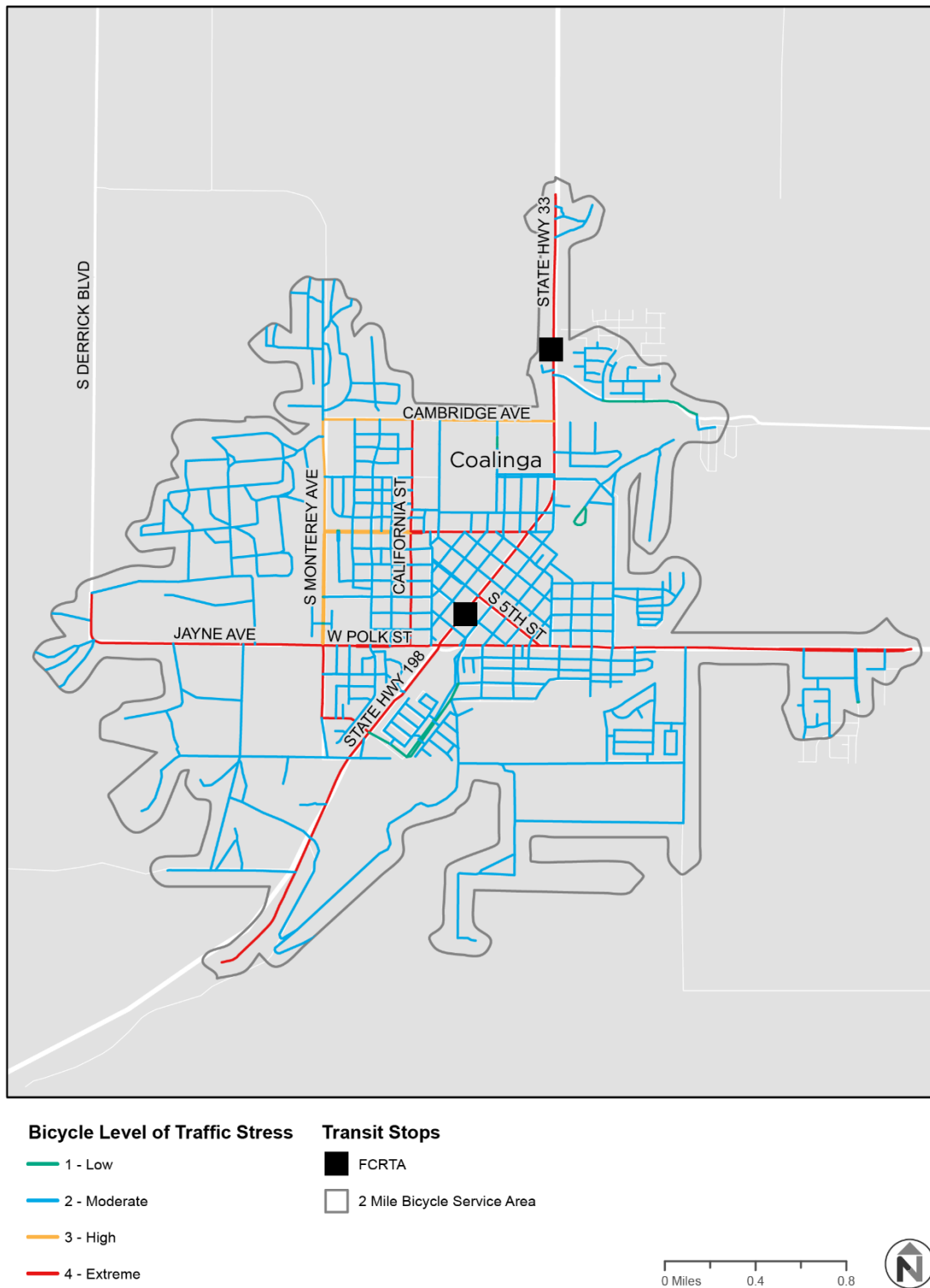
Proposed First/Last Mile Approach and Draft Scope of Services
Fresno COG

Figure 5 Pedestrian Level of Traffic Stress, Downtown Fresno



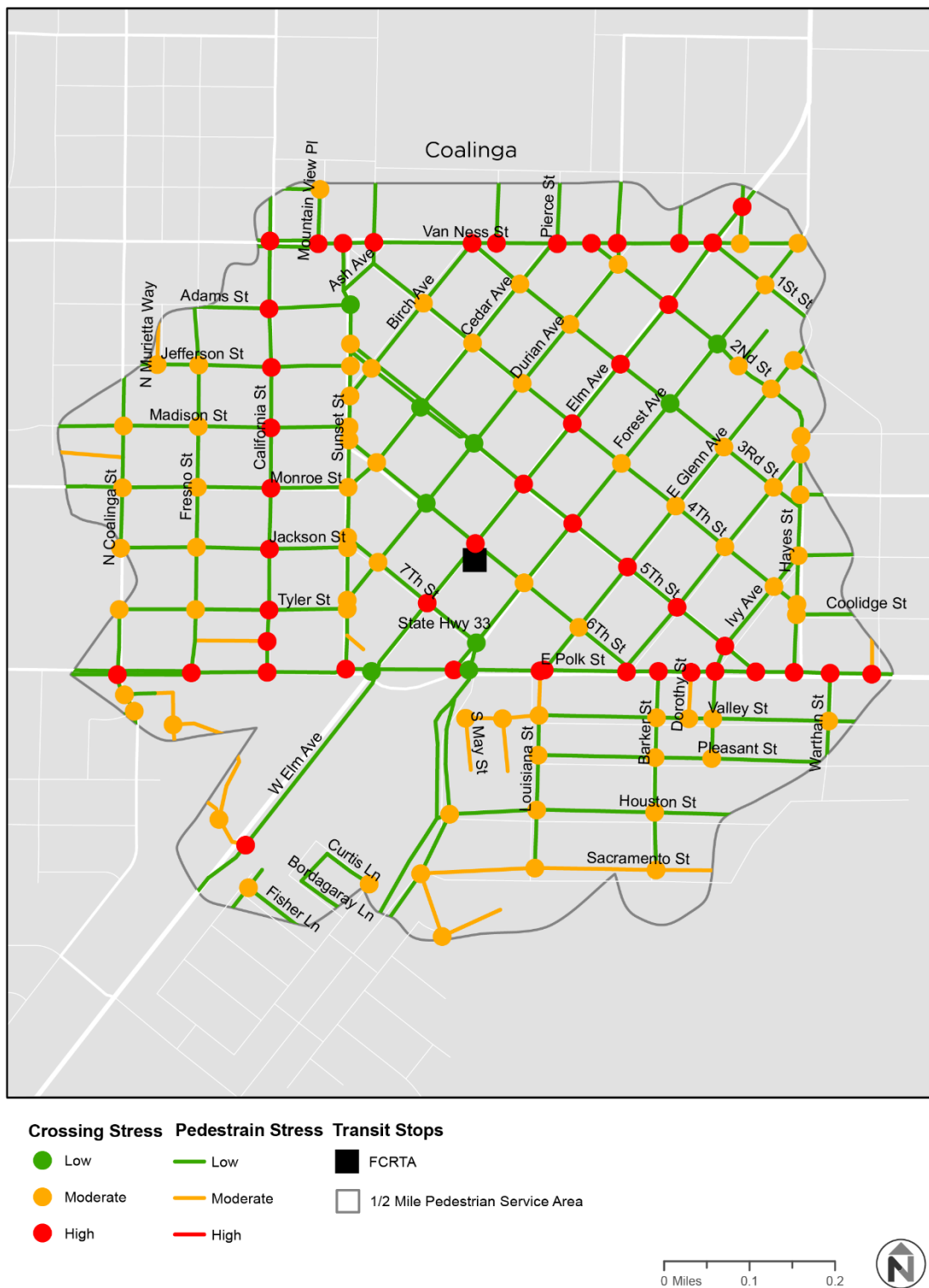
Proposed First/Last Mile Approach and Draft Scope of Services
Fresno COG

Figure 6 Bicycle Level of Traffic Stress, Coalinga



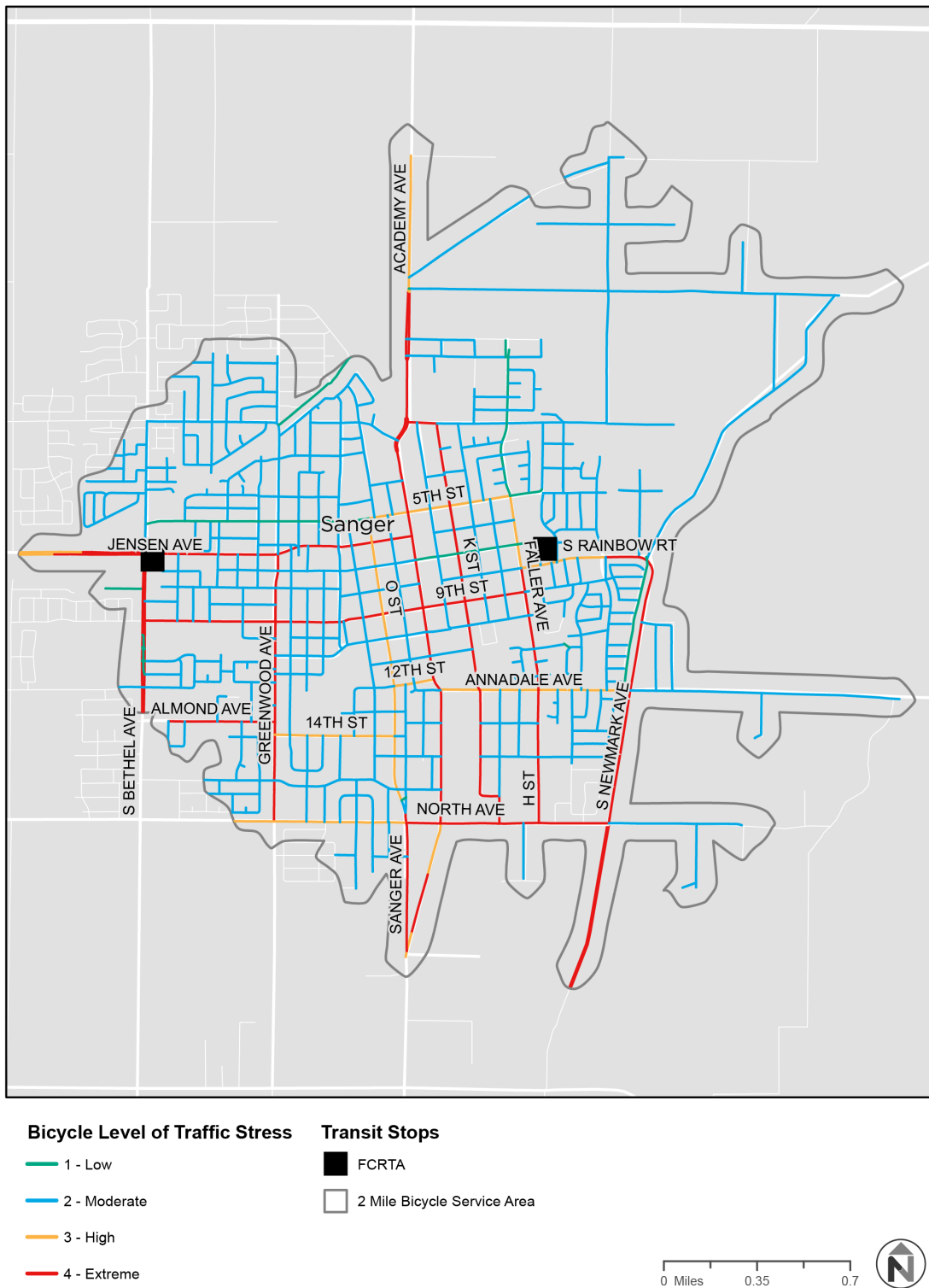
Proposed First/Last Mile Approach and Draft Scope of Services
Fresno COG

Figure 7 Pedestrian Level of Traffic Stress, Coalinga



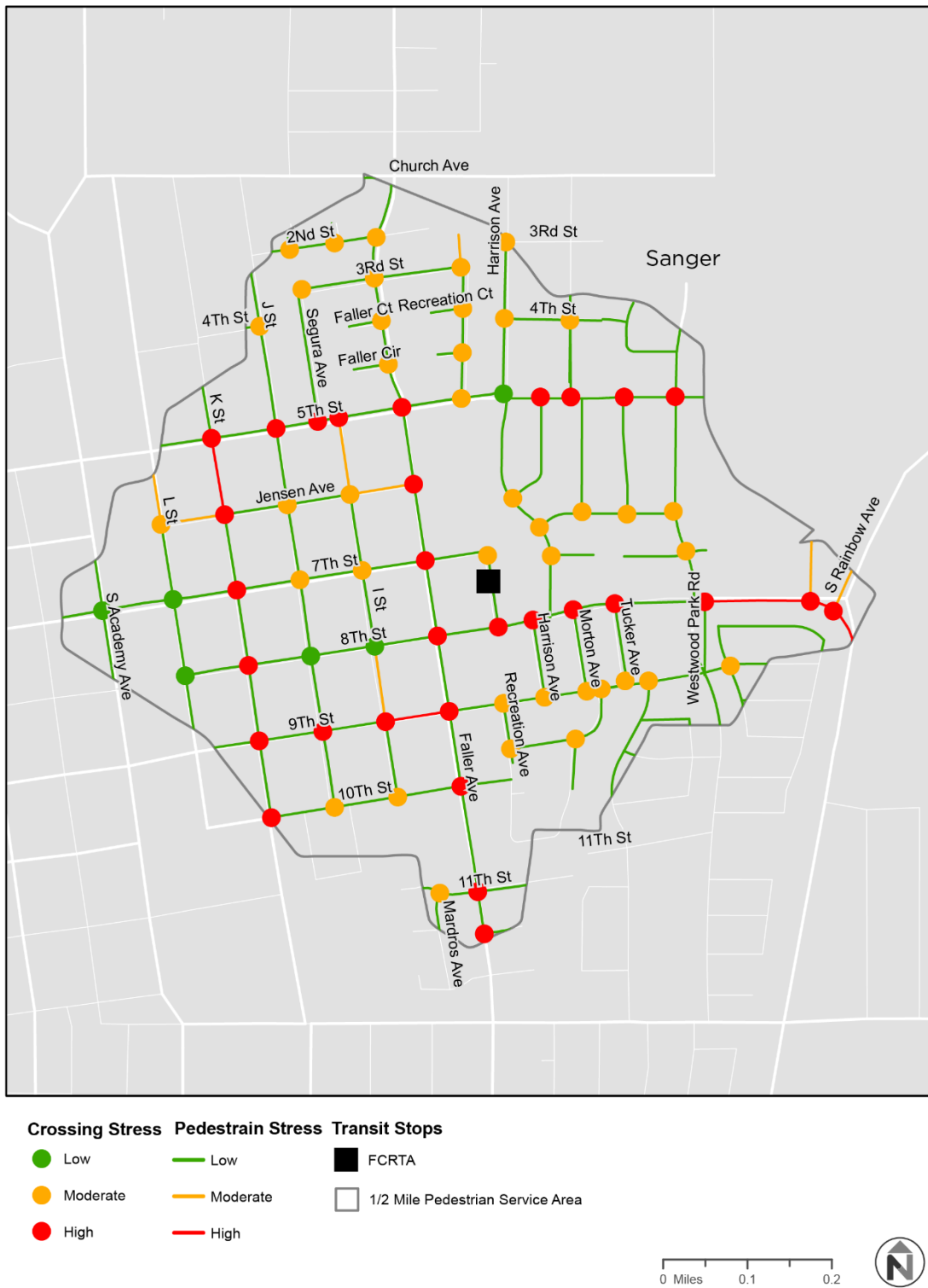
Proposed First/Last Mile Approach and Draft Scope of Services
Fresno COG

Figure 8 Bicycle Level of Traffic Stress, Sanger



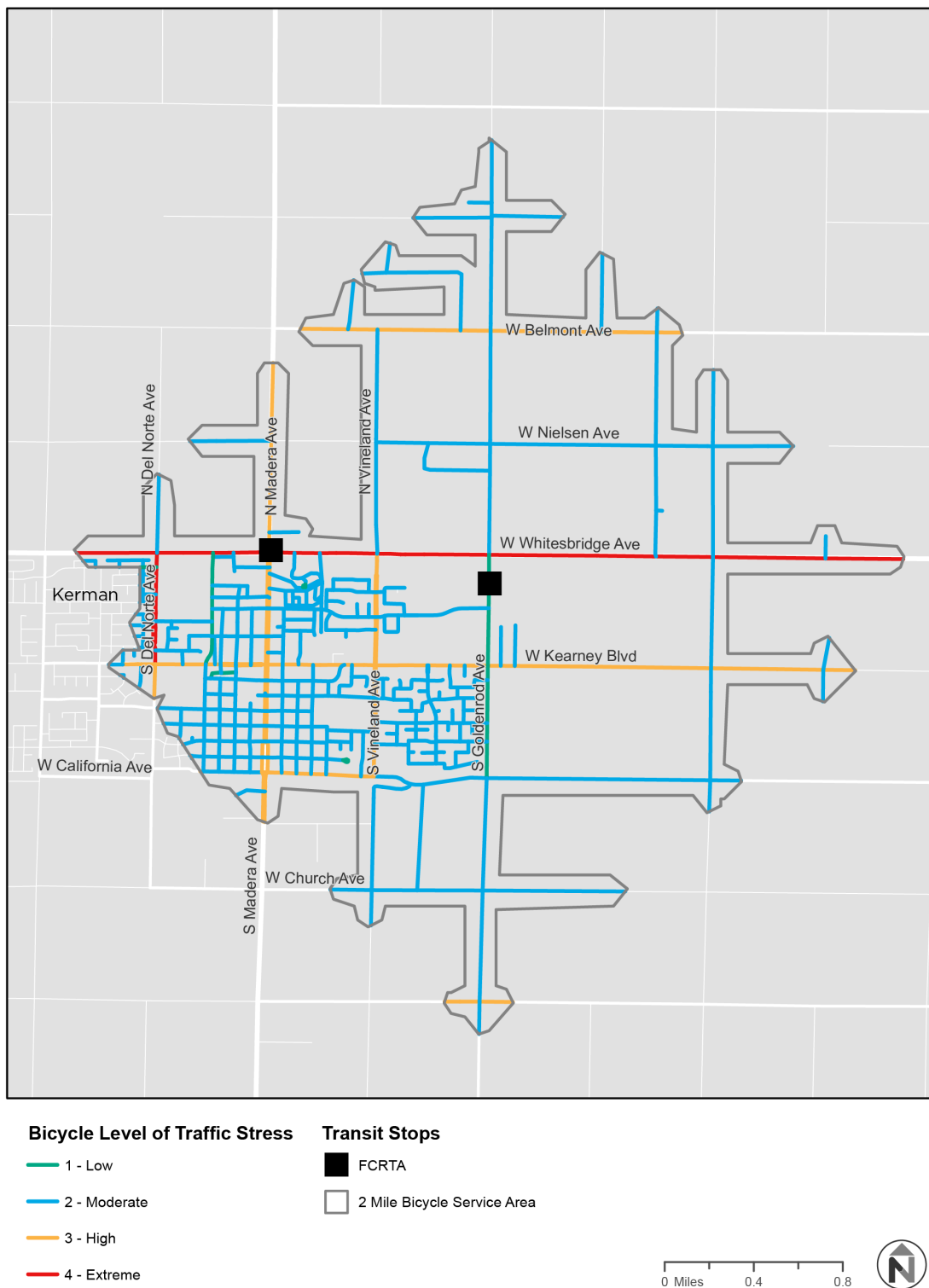
Proposed First/Last Mile Approach and Draft Scope of Services
Fresno COG

Figure 9 Pedestrian Level of Traffic Stress, Sanger



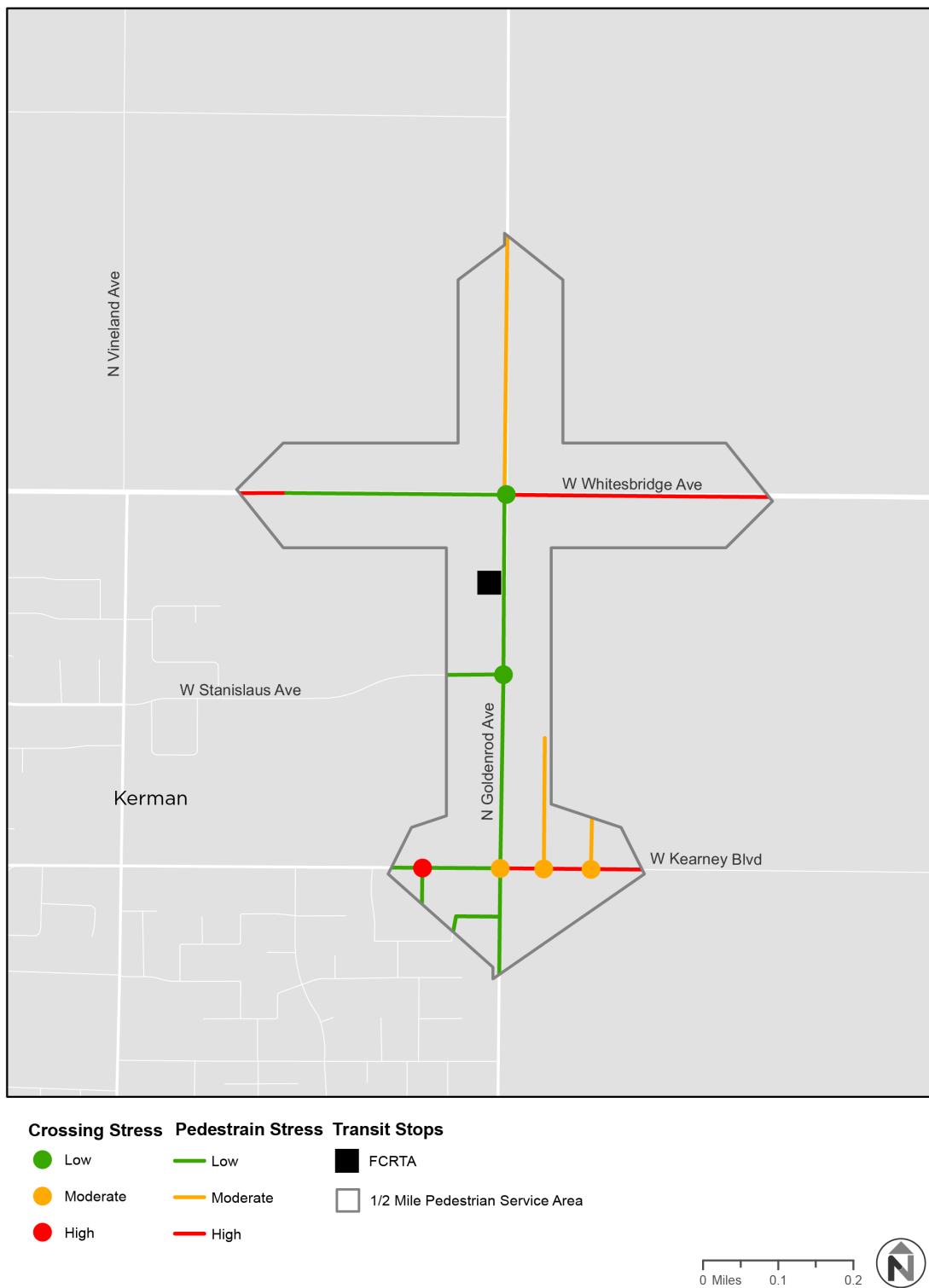
Proposed First/Last Mile Approach and Draft Scope of Services
Fresno COG

Figure 10 Bicycle Level of Traffic Stress, Kerman



Proposed First/Last Mile Approach and Draft Scope of Services
Fresno COG

Figure 11 Pedestrian Level of Traffic Stress, Kerman



Location Priority Analysis Methodology

This is an example of conducting a location priority analysis, as described in Task 1. The analysis should include some level of stakeholder input, but other considerations are also important in prioritizing important locations for improvement projects. This sample needs exercise uses the following data:

- Latent activity and transit demand measured using American Community Survey (ACS) and Longitudinal Employer-Household Dynamics data
 - Population and job densities were determined by Census block group to create a population-employment matrix, wherein Census block groups are assigned a score based on differing concatenations of population and employment density.
 - Census block groups with the highest population and job density indicate the greatest latent demand, and have the highest population-employment matrix score, while census block groups that have low population and job density score lower scores in the population-employment analysis.
- Collision hotspot identification using the California Statewide Integrated Traffic Records System (SWITRS)
 - Bicycle and pedestrian collision data for the years 2015 through 2017 was collected from the SWITRS database, and overlaid with the population-employment matrix.
 - Potential problem spots may be identified based on collision activity; however some high-stress network elements may inhibit bicycle and pedestrian use enough that collision patterns do not capture very low-used network elements.
- Alignment of projects with existing city and county active transportation, safe routes to school, or safety improvement plans

Additional data points for prioritization could include, among others:

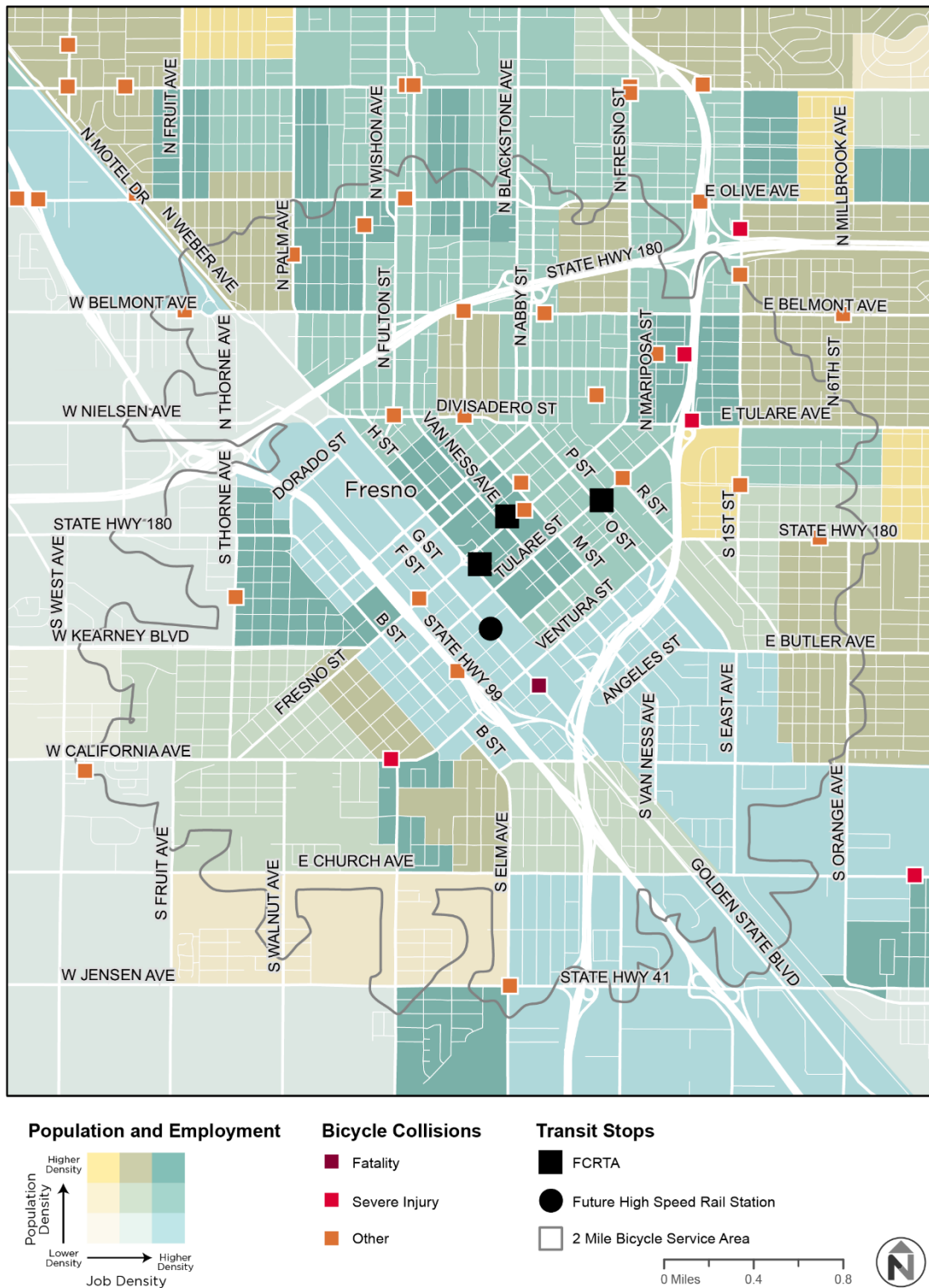
- Ridership per FCRTA transit stop
- Average Daily Traffic, and bicycle and pedestrian counts for network links and intersections
- Average travel speed for network links and through intersections

Location Priority Analysis Results

The results of assessing population and employment density, and collision history in the sample study areas, are illustrated below. These results inform the following section in assembling a list of safety improvement recommendations for one of the sample study areas. These results highlight where to concentrate our recommendations by identifying locations with the highest crash history and concentration of people.

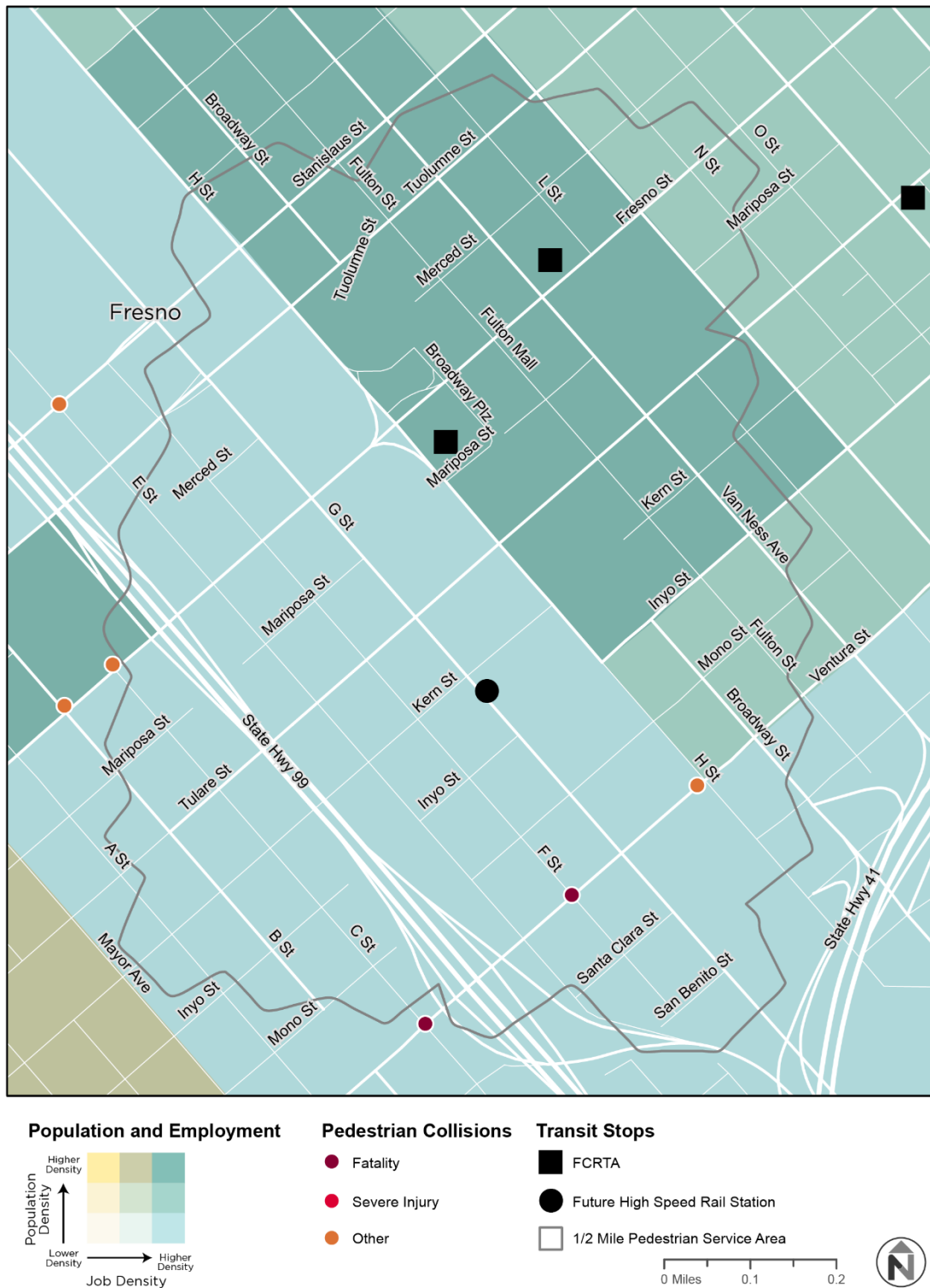
Proposed First/Last Mile Approach and Draft Scope of Services
Fresno COG

Figure 12 Bicycle Location Priority Results, Downtown Fresno



Proposed First/Last Mile Approach and Draft Scope of Services
Fresno COG

Figure 13 Pedestrian Location Priority Results, Downtown Fresno



Proposed First/Last Mile Approach and Draft Scope of Services
Fresno COG

Figure 14 Bicycle Location Priority Results, Coalinga



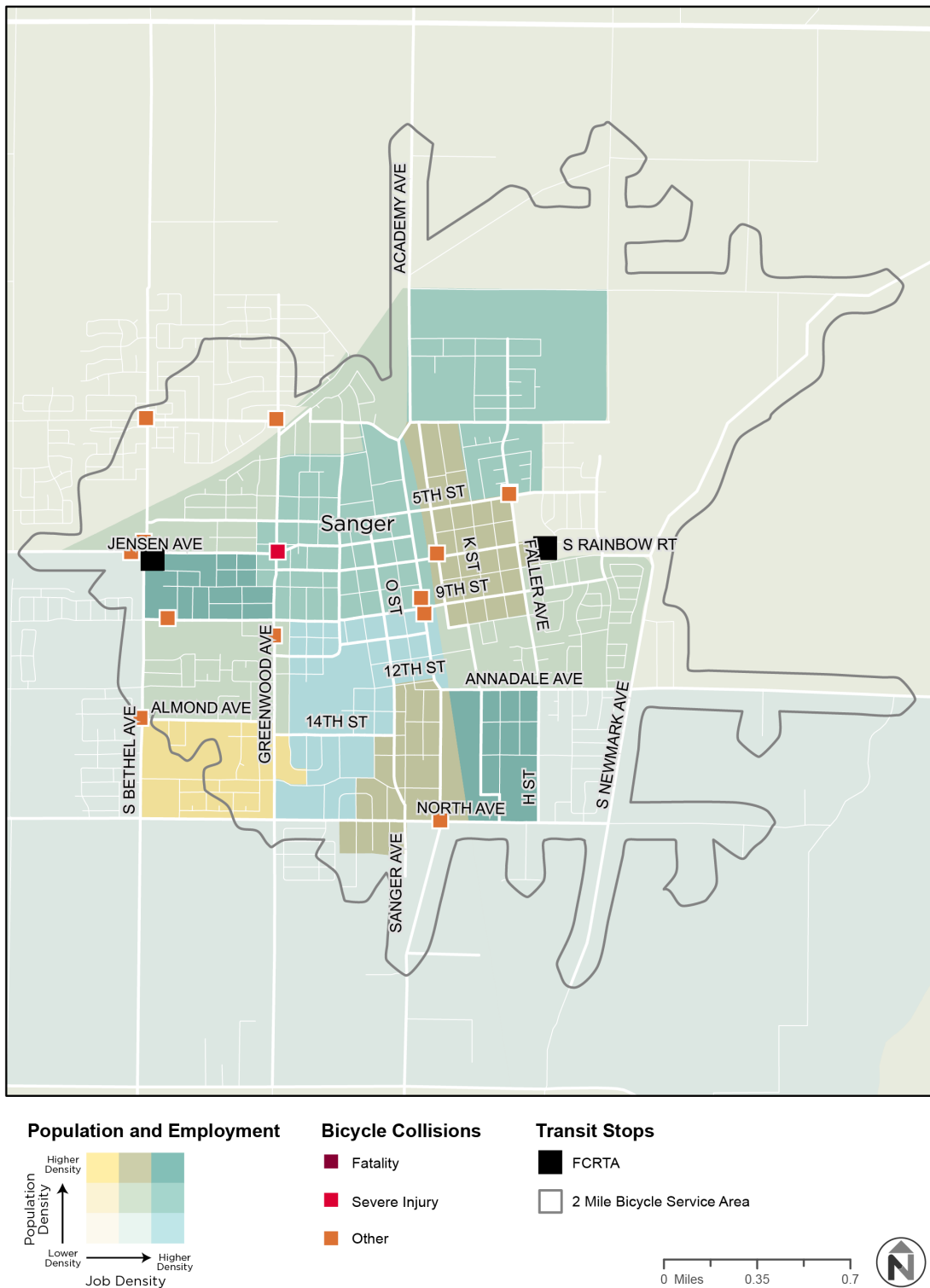
Proposed First/Last Mile Approach and Draft Scope of Services
Fresno COG

Figure 15 Pedestrian Location Priority Results, Coalinga



Proposed First/Last Mile Approach and Draft Scope of Services
Fresno COG

Figure 16 Bicycle Location Priority Results, Sanger



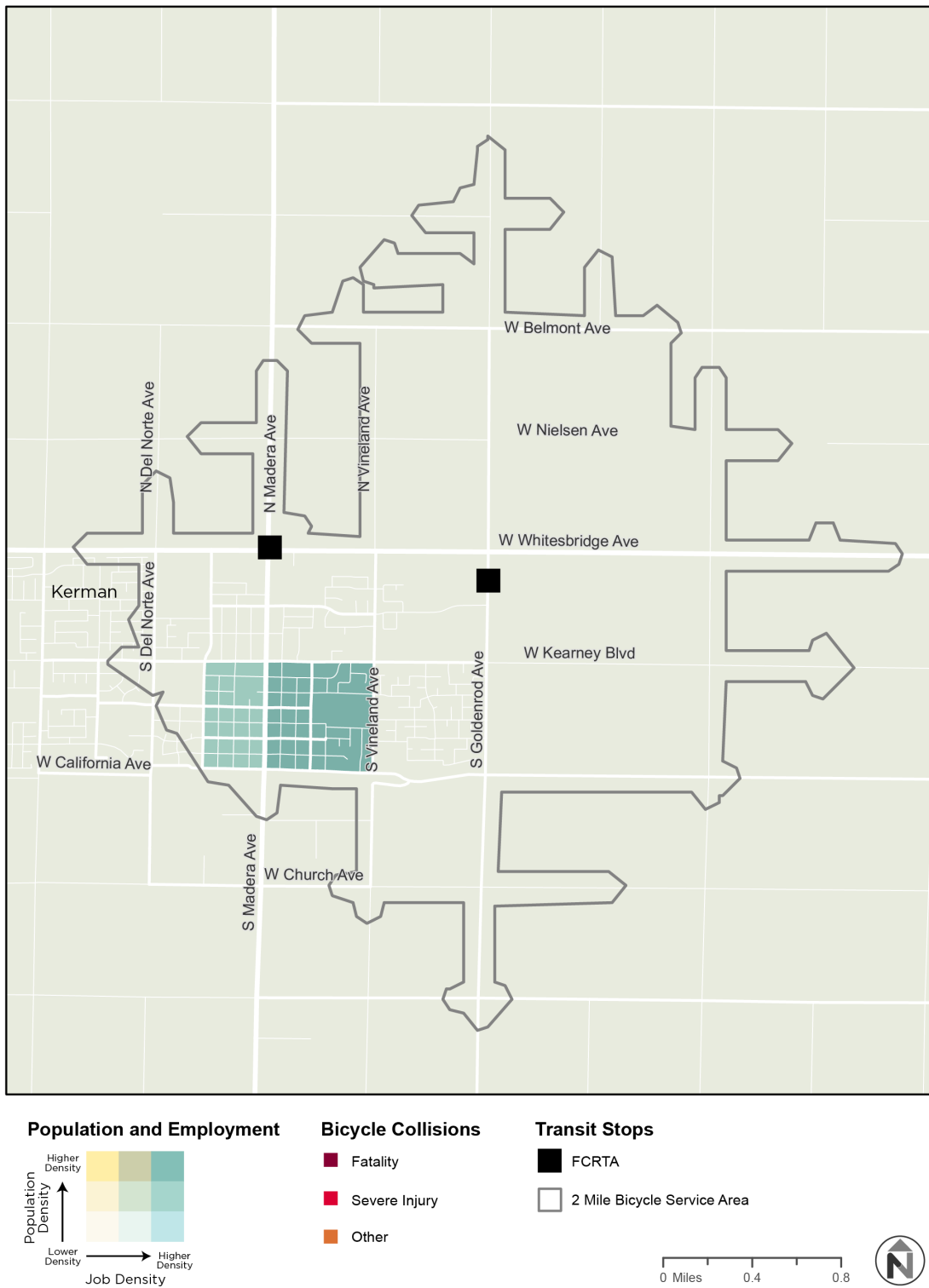
Proposed First/Last Mile Approach and Draft Scope of Services
Fresno COG

Figure 17 Pedestrian Location Priority Results, Sanger



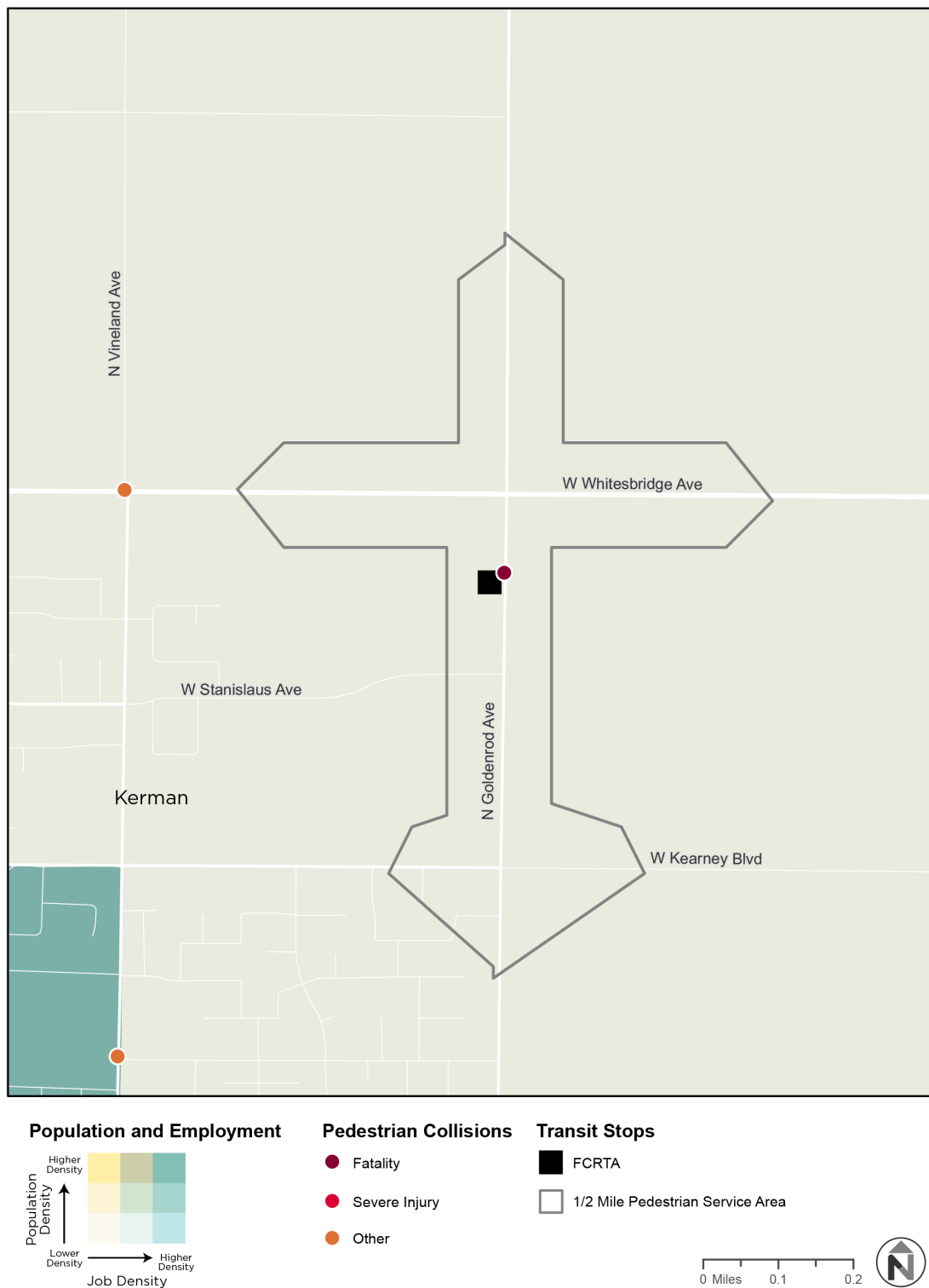
Proposed First/Last Mile Approach and Draft Scope of Services
Fresno COG

Figure 18 Bicycle Location Priority Results, Kerman



Proposed First/Last Mile Approach and Draft Scope of Services
Fresno COG

Figure 19 Pedestrian Location Priority Results, Kerman



Bicycle and Pedestrian Improvement Strategies and Basic Cost Estimates

The following section of this memo provides a table of potential bicycle and pedestrian safety improvements, use-case scenarios, and cost estimates to address the bicycle and pedestrian needs for the location priority areas mapped in the previous section. This section will conclude with a sample project list (Figure 25) from one of the sample study areas. Sanger will be assessed for sample improvements based on higher population and job density and the proximity of collisions to the FCRTA transit stop; sample project recommendations are based on street characteristics and are intended to bridge network gaps that impact bicycle and pedestrian stress of travel on the network.

Bicycle and Pedestrian Improvement Toolkit

The ability to travel comfortably on the high-speed spine network of the pilot study areas is critical in creating a connected network for bicyclists. Streets with high travel speeds and more lanes create a higher stress environment, but implementation of targeted infrastructure improvements based on street characteristics can vastly improve the bicycling experience and attract new bicyclists.

The Fresno County Regional Active Transportation Plan (ATP) was finalized in January of 2018; a cohesive approach to bicycle and pedestrian improvements necessitate aligning first-last mile transit connectivity goals with those established in the ATP.

The table below details several types of bike infrastructure that may be well suited for high-stress bicycle network links in the Fresno County region.

Figure 20 Types of Bike Infrastructure Improvements

Treatment	Details	Benefits
Buffered bike lane	<ul style="list-style-type: none">▪ A conventional bike lane with a designated buffer adjacent to motor vehicle traffic and/or parking lanes.▪ Increases bicyclist separation from vehicle traffic.▪ Used on streets with high motor vehicle speeds, high motor vehicle volumes, or high volumes of truck traffic.▪ Effective buffer width of at least 18" should be used.▪ Color can be used in buffered bike lane at the beginning of each block to provide visual cue to drivers.	<ul style="list-style-type: none">▪ Reduce risk of being 'doored' by parked cars.▪ Contributes to bicyclist sense of safety, with the potential to attract greater variety of bicyclists.
Protected bike lane	<ul style="list-style-type: none">▪ Bikeways providing physical separation from moving vehicles using a variety of barriers such bollards, the parking lane, planters, and curbs.▪ Used along streets with high speed and high volumes of motor vehicles.▪ Protected bike lane may shift closer to travel lane upon minor intersection approach to improve visibility of bicyclists by people driving cars.▪ May wrap protected bike lane behind transit stops to reduce conflict with transit users.	<ul style="list-style-type: none">▪ Can reduce bicyclist injury rate up to 28%.¹▪ Reduces risk of collision associated with overtaking vehicles.▪ Potential to maintain substantial parking opportunities when parking lane is used as the physical separation.

¹ NACTO Urban Bikeway Design Guide, 2014.

Proposed First/Last Mile Approach and Draft Scope of Services
Fresno COG

Treatment	Details	Benefits
Raised bike lane	<ul style="list-style-type: none"> ▪ Bike lane that is vertically separated from motor vehicle traffic. ▪ Can be paired with a parking lane, or other physical barrier, to separate the facility from the travel lane. ▪ Beneficial on high-speed streets that have limited driveways and cross streets. ▪ Require specific transitioning strategies at transit stops to effectively manage bicycle and pedestrian interactions. ▪ Vertical separation should range between 1"-6", however a higher vertical separation is preferable to discourage illegal parking. 	<ul style="list-style-type: none"> ▪ Creates greater sense of safety, attracts bicyclists with a greater range of ability levels. ▪ Prevents people who are driving from entering the bikeway. ▪ When paired with new roadway construction, can be cheaper than construction of a buffered bike lane.

High-quality pedestrian infrastructure near transit stops is essential to support transit ridership and provide mobility options for visitors and residents. Well-designed pedestrian-oriented infrastructure increases the safety, comfort, and enjoyment of the entire transit trip and benefits pedestrians in the area who are not transit riders. Safe pedestrian crossings are essential for transit passengers who may have origins and destinations on either side of the roadway. Streets with more travel lanes and higher posted speeds are often more difficult for people to cross, particularly when there are long block distances between traffic signals. Rural roads are more likely to have higher speeds and longer distances between traffic signals.

Unsignalized intersections can create a challenging crossing situation for pedestrians. Where speed limits are over 40 mph, marked crosswalks at unsignalized intersections should be accompanied by other pedestrian facility enhancements to augment the safety of the crossing. Best practice is to provide pedestrian crossings at unsignalized intersections where there are no signalized crossings within 600 feet. The following tools can increase visibility at non-signalized crossings and notify drivers that a crossing is ahead.

Figure 21 Pedestrian Crossing Treatments

Crossing Treatment	Details	Benefits
Advanced Stop Lines	<ul style="list-style-type: none"> ▪ Stop or yield signs for vehicles, placed 20 to 50 feet ahead of a crosswalk. ▪ Often used for midblock crossings. ▪ Used with "Stop Here for Pedestrians" signage. ▪ Helpful for multilane roadways for visibility of vehicles by crossing pedestrians. ▪ Parking should be prohibited between stop line and crosswalk. ▪ Particularly effective in combination with treatments such as pedestrian hybrid beacons or rectangular rapid flash beacons. 	<ul style="list-style-type: none"> ▪ Warns drivers in advance of potential crossing pedestrians ▪ Increases visibility of pedestrians by drivers ▪ Can reduce conflicts up to 90%²
Pedestrian Safety Islands (aka median islands or raised medians)	<ul style="list-style-type: none"> ▪ Narrow crossing distance in roadway with a raised island. ▪ Recommended for locations where pedestrians must cross three or more lanes of traffic in one direction. ▪ Important in areas where pedestrians access transit ▪ FHWA recommends in curbed sections of multilane roadways in urban and suburban contexts; at locations of mixing of pedestrian and vehicle traffic, with more than 12,000 ADT, and intermediate to high travel speeds. 	<ul style="list-style-type: none"> ▪ Encourages people driving to slow down at pedestrian crossings. ▪ Reduces pedestrian exposure to vehicles on busy streets or at busy intersections; used in

² AASHTO Guide for the Planning, Design, and Operations of Pedestrian Facilities, 2004

Proposed First/Last Mile Approach and Draft Scope of Services
Fresno COG

Crossing Treatment	Details	Benefits
	<ul style="list-style-type: none"> Should be at least 6' wide, but 8'-10' is preferable. Should have cut-through accessible ramp equal to width of crosswalk. Should have a "nose" extending past crosswalk, and curbs and/or bollards to protect waiting people.³ 	<p>conjunction with marked crosswalk.</p> <ul style="list-style-type: none"> Can reduce pedestrian crashes at marked crosswalks by 46%⁴
Curb Extensions	<ul style="list-style-type: none"> Improve safety by narrowing roadway and increasing space for pedestrians and transit-friendly infrastructure. <i>Conventional curb extensions</i> are used at intersections wherever there is on-street parking to increase visibility and reduce crossing distances. <i>Midblock curb extensions</i>, aka pinchpoints or chokers, reduce vehicle speed and the width of the roadway at midblock crossings. They can reduce on-street parking supply and are best on streets that do not have parking shortages. <i>Gateway curb extensions</i> are applied at the mouth of an intersection and mark a transition to a slower-speed street. <i>Chicanes</i>, aka offset curb extensions, alternate from one side of the street to the other and create S-shaped curves. They discourage speeding and can be a better option than speed humps and cushions on roadways where large vehicles travel. Should be accompanied by signs warning of curves ahead. <i>Bus bulbs</i> align bus stops with the parking lane, allowing buses to pick up and drop off passengers without having to merge in and out of traffic. 	<ul style="list-style-type: none"> Shorten the distance required to cross the street, thereby reducing pedestrian exposure to vehicle traffic. Can be used to slow vehicle traffic. Increases visibility of pedestrians by drivers Can reduce 85th percentile speeds by an average of 7%.^{5,6}
Rectangular Rapid Flashing Beacon	<ul style="list-style-type: none"> Alert drivers to a pedestrian crossing. Commonly installed at locations with medium to high traffic volumes at otherwise uncontrolled crossings. Demonstrated success on both low- and high-capacity arterial streets, and are effective on streets that carry between 8,000 and 30,000 vehicles per day. 	<ul style="list-style-type: none"> Can increase yield rates from 74% to 100%.⁷
Pedestrian Hybrid Beacon	<ul style="list-style-type: none"> Also referred to as HAWK signals. Allow pedestrians to alert drivers to pedestrian presence by pushing a button that activates an overhead warning light that notifies oncoming vehicles of pedestrian activity. Located at major arterials with minor street intersections. 	<ul style="list-style-type: none"> Can decrease pedestrian-involved collisions up to 69%.⁸

Figure 22 below captures a range of California-specific cost estimates for bicycle and pedestrian infrastructure improvements.

³ NACTO Urban Street Design Guide, 2013.

⁴ FHWA Safety Countermeasures https://safety.fhwa.dot.gov/provencountermeasures/fhwa_sa_12_011.cfm

⁵ 85th percentile speeds refer to the speed that 85% of vehicles do not exceed, and is used as a starting point for determining actual operating speed and setting speed limits on a roadway.

⁶ Fehr & Peers.

⁷ Federal Highway Administration, "Effects of Yellow Rectangular Rapid-Flashing Beacons on Yielding at Multilane Uncontrolled Crosswalks" (2010). <http://www.fhwa.dot.gov/publications/research/safety/pedbike/10043/10043.pdf>

⁸ Federal Highway Administration, "Safety Effectiveness of the HAWK Pedestrian Crossing Treatment" (2010), <https://www.fhwa.dot.gov/publications/research/safety/10045/index.cfm>.

Proposed First/Last Mile Approach and Draft Scope of Services
Fresno COG

Figure 22 Bike/Ped Infrastructure Cost Estimates

Treatment	Average Cost	Average Low	Average High
Bikeway			
Bicycle Boulevard (per mi)	\$139,512		
Bicycle Lane (per lft)	\$2	\$1	\$106
Separated Bikeway (per mi)	\$2,516,779	\$559,284	\$4,474,273
Signed Bicycle Route (per mi)	\$44,593	\$22,297	\$66,890
Bike Box (ea)	\$3,659		
Two Stage Left Turn Queue (ea)	\$976		
Bike Lane (per mi)	\$136,585		
One-Way Protected Bike Lane (per mi)	\$712,195		
Two-Way Protected Bike Lane (per mi)	\$443,902		
Buffered Bike Lane - 4 Lane Roadway With Painted Median (per mi)	\$166,829		
Buffered Bike Lane - 4 Lane Roadway With Raised Median (per mi)	\$127,805		
Bollard			
Bollard (ea)	\$736	\$502	\$970
Bulb-Out			
Bus Bulb-Out (ea)	\$49,756		
Standard Bulb-Out (ea)	\$41,462	\$10,449	\$20,899
Chicanes			
Landscaped Chicane (ea)	\$11,382		
Chokers			
Choker (ea)	\$29,268		
Crosswalk			
High Visibility Crosswalk (ea)	\$2,411	\$1,112	\$5,559
Ladder Crosswalk (ea)	\$2,696	\$1,100	\$1,100
Other Materials (Brick, Permeable, Scored) (per sq ft)	\$16	\$11	\$16
Striped Crosswalk (ea)	\$485	\$357	\$613
Striped Crosswalk (per sq ft)	\$7		
Advanced Stop/Yield Marking (ea)	\$585		
Midblock Crossing (ea)	\$3,024		
Curb Extension			
Curb Extension (ea)	\$73,171	\$16,953	\$28,406
Low Cost Curb Extension (No Concrete) (ea)	\$1,171		
Curb Extension (ea)	\$19,805		
Curb Ramp			
Curb And Gutter (per lft)	\$36		

Proposed First/Last Mile Approach and Draft Scope of Services
Fresno COG

Treatment	Average Cost	Average Low	Average High
Wheelchair Ramp (ea)	\$2,439		
Curb/Gutter			
Curb Radius Reduction (ea)	\$14,634		
Parking Control - 100' Red Zone (ea)	\$585		
Curb And Gutter (per lft)	\$34		
Diverter			
Diverter (ea)	\$48,780	\$13,062	\$28,736
Partial/Semi Diverter (ea)	\$22,205	\$15,674	\$28,736
Flashing Beacon			
Flashing Beacon (ea)	\$39,086	\$16,722	\$61,449
Rrfb (ea)	\$43,512		
Gateway			
Structure (ea)	\$16,088	\$10,725	\$21,450
Hawk			
Hawk (ea)	\$117,073		
Island			
Median Island (ea)	\$34,840	\$9,476	\$36,789
Median Island (New) (ea)	\$29,268		
Median Island (Retrofit) (ea)	\$9,561		
Median Island - Danish Offset (New) (ea)	\$39,024		
Median Island - Danish Offset (Retrofit) (ea)	\$12,000		
Lighting			
Crosswalk Lighting (Lump Sum)	\$44,004		
In-Pavement Lighting (Lump Sum)	\$12,017	\$10,449	\$13,584
Streetlight (ea)	\$5,521		
Median			
Median Barrier (ea)	\$15,674	\$10,449	\$20,899
Path			
Boardwalk (per lft)	\$660	\$475	\$845
Multi-Use Trail - Paved (per mi)	\$2,601,263	\$529,543	\$2,285,396
Pavement Marking			
Advance Stop/Yield Line (ea)	\$234	\$248	\$557
Striping (per lft)	\$6		
Textured Pavement (per sq ft)	\$7		
Line Guides For Left Turn Calming (ea)	\$1,951		
Sharrow (ea)	\$390		

Proposed First/Last Mile Approach and Draft Scope of Services
Fresno COG

Treatment	Average Cost	Average Low	Average High
Road Diet - 6 To 5 (per mi)	\$177,561		
Road Diet - 5 To 3 (per mi)	\$109,268		
Shared Bus/Bike Marking (ea)	\$156		
Pedestrian/Bike Detection			
Bicycle Detector (ea)	\$1,951	\$1,115	\$2,787
Push Button (ea)	\$1,171	\$558	\$1,334
Raised Crossing			
Raised Crosswalk (ea)	\$9,330	\$4,729	\$13,932
Raised Intersection (ea)	\$439,024	\$33,167	\$101,321
Roundabout/ Traffic Circle			
Roundabout/ Traffic Circle (ea)	\$37,726	\$25,972	\$49,481
Mini Traffic Circle (ea)	\$41,463		
Roundabout (ea)	\$341,463		
Sidewalk			
Asphalt Sidewalk (per lft)	\$16		
Concrete Pavers (per lft)	\$32		
Concrete Sidewalk (per lft)	\$56		
Sidewalk (per lft)	\$45		
Sidewalk Pavers (per lft)	\$70		
Sign			
Regulatory Sign (ea)	\$215		
Trail Sign (ea)	\$1,394	\$557	\$2,230
Speed Feedback Sign (ea)	\$14,634		
Signal			
Pedestrian Signal (ea)	\$74,080	\$55,006	\$77,008
Full Time Left Turn Restriction (ea)	\$976		
Timed Left Turn Restriction (ea)	\$1,171		
Full Time Right Turn Restriction (ea)	\$976		
Timed Right Turn Restriction (ea)	\$1,171		
No Right Turn On Red (ea)	\$488		
Full Time U-Turn Restriction (ea)	\$976		
Scramble Barn Dance (ea)	\$29,268		
Protected Left Turn Conversion (ea)	\$34,146		
Protected Left Turn - New Phasing (ea)	\$58,537		
Protected Right Turn (ea)	\$9,756		
Update Pedestrian Crossing Timing (ea)	\$4,878		
Update Yellow Time (ea)	\$1,951		

Proposed First/Last Mile Approach and Draft Scope of Services
Fresno COG

Treatment	Average Cost	Average Low	Average High
Update All-Red Time (ea)	\$1,951		
Leading Pedestrian Interval (ea)	\$4,878		
New Traffic Signal (ea)	\$273,171		
Extend All-Red Time (ea)	\$1,951		
Protected Left/Right Turn (ea)	\$9,756		
Leading Pedestrian/Bicycle Interval (ea)	\$1,268		
Signal Timing Modification - Exclusive Bike/Ped Phase (ea)	\$1,268		
Signal Timing Modification - Reduced Cycle Length (ea)	\$1,268		
Signal Modification (ea)	\$195		
Traffic Signal Installation (ea)	\$243,902		
Traffic Signal Modification (Lump Sum)	\$121,951		
Speed Bump/Hump/Cushion/Table			
Speed Cushions (ea)	\$5,952		
Speed Hump (ea)	\$3,887		
Speed Table (ea)	\$3,850	\$3,300	\$4,400
Transit Amenities			
Signage (ea)	\$200		
Bench (ea)	\$750		
Shelter (ea)	\$5,000		
Large Shelter (ea)	\$10,000		
Information Case (ea)		\$1,000	\$10,000
Trash and Recycling Receptacles	\$1,250		
Landscaping (per location)		\$2,000	\$10,000
Bike Racks/Bike Parking (per 2 bikes)		\$150	\$300
Bike Locker		\$1,000	\$2,000

Sample Bicycle and Pedestrian Project Recommendations

This section includes a sample list of bicycle and pedestrian improvements to address the level of traffic stress gaps in priority location areas in the City of Sanger, a place which shows high latent demand for walking and biking. Recommendations are shown on Figures 23 and 24 and listed in Figure 25.

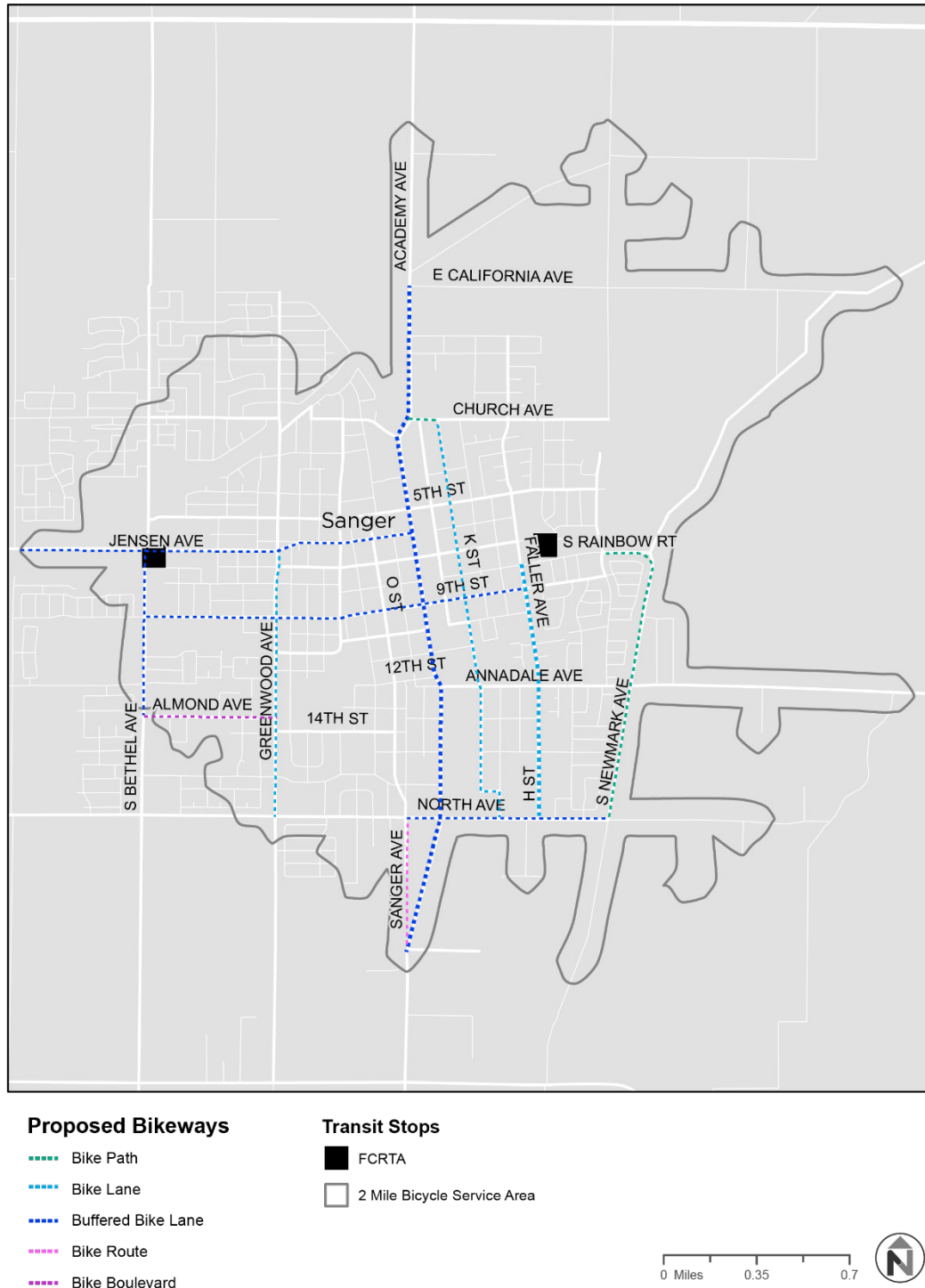
The primary purpose of these recommendations is to make it easier for people to walk and bike to transit. It is important to note that these draft recommendations are only a draft, and the effort did not include the following tasks that we recommend in our Scope, and is therefore incomplete and should not be considered as final:

- Public input (Task 2 Outreach)
- Project Evaluation Criteria (Task 3 Develop Project Evaluation Criteria)

Proposed First/Last Mile Approach and Draft Scope of Services
Fresno COG

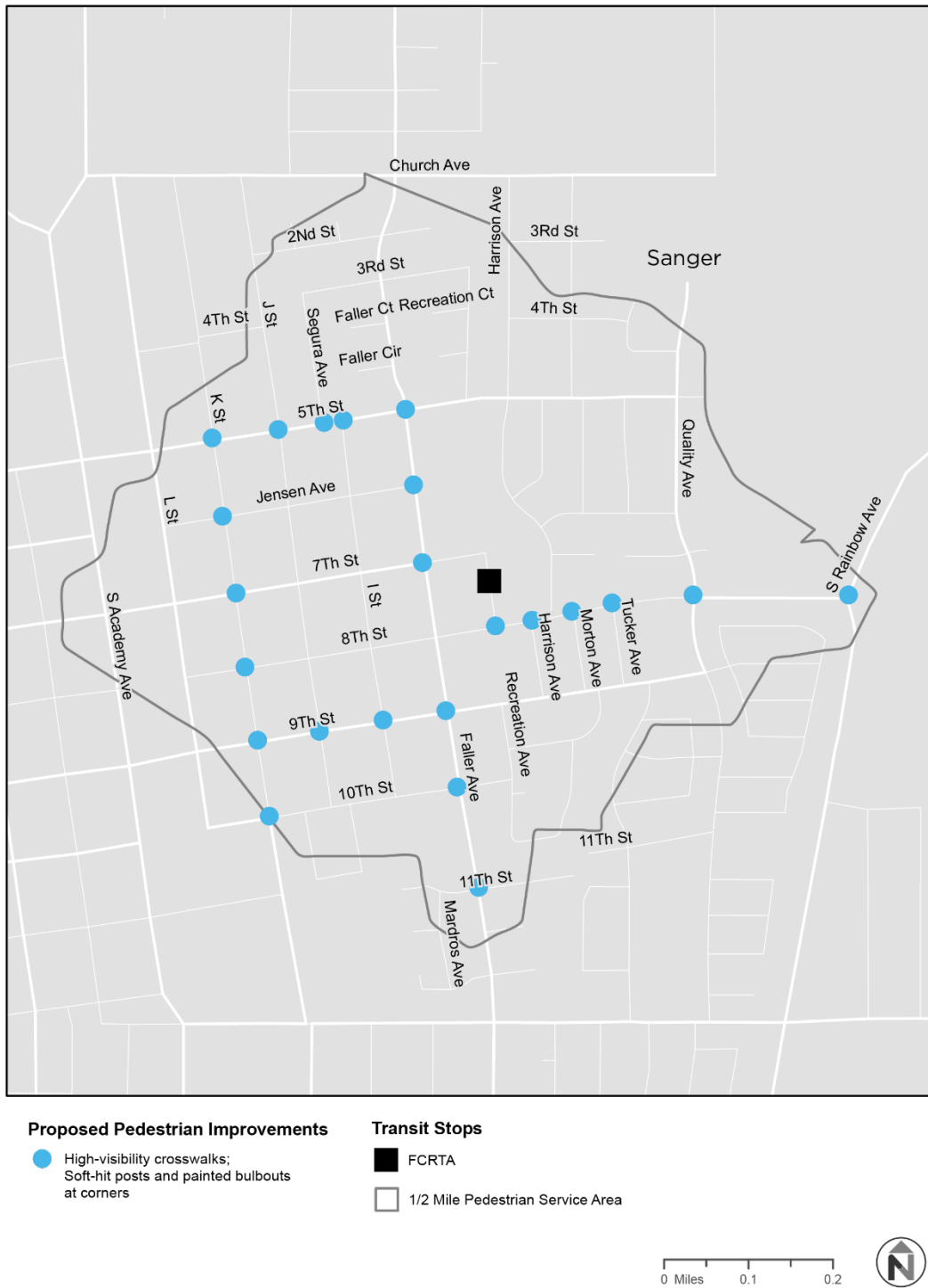
The purpose is to serve as an example of what a first and last mile analysis and plan can produce. Each project includes a description of the improvement and if it is also included in the County Active Transportation Plan.

Figure 23 Draft Bikeway Recommendations, Sanger



Proposed First/Last Mile Approach and Draft Scope of Services
Fresno COG

Figure 24 Draft Pedestrian Recommendations, Sanger



Proposed First/Last Mile Approach and Draft Scope of Services
Fresno COG

Figure 25 Sample Project Recommendation List

Location	Treatment	Description	In County ATP
Bikeway Facilities			
Bethel Ave (Jenson Ave to Almond Ave)	Buffered Bike Lane	5-6' buffered bike lane; mixing zone green paint treatment at intersections, move bike lane to left of right-turn lanes	Y
Greenwood Ave (Jensen Ave to North Ave)	Bike Lane	Stripe edge lines for 2x11' travel lanes, 9' shoulder to include bike lane with occasional parking	Y
Academy Ave (E. California Ave to Muscat Ave)	Buffered Bike Lane	Restripe with 2x11' travel lanes, 5-6' buffered bike lane; mixing zone green paint treatment at intersections, move bike lane to left of right-turn lanes	Y
Faller Ave (8 th St to North Ave)	Bike Lane	Stripe edge lines for 2x11' travel lanes, 9' shoulder to include bike lane with occasional parking	Y
S Rainbow Rd/S Newmark Ave (Quality Ave to North Ave)	Bike Path	Add parallel bike path in adjacent ROW	Y
Church Ave (Academy AVE to K St)	Buffered Bike Lane	Buffered bike lanes	Y
Jensen Ave (Indianola Ave to Academy Ave)	Buffered Bike Lane	Buffered bike lanes	Y
9 th St (Bethel Ave to Faller Ave)	Bike Lane	In 50' sections of roadway, add buffered bike lanes; in 45' sections of roadway, add bike lanes; in 40' sections of roadway, add outer lane limit lines	Y
North Ave (Sanger Ave to Newmark Ave)	Buffered Bike Lane	Buffered bike lanes	Y
Sanger Ave (North Ave to Muscat Ave)	Bike Route	Repave and designate as bicycle route; create bicycle opening in barrier; add planters at Muscat Ave to force vehicles to slow and make right-angle entry to Academy AveBike Path	
K St (Church Ave to Cherry Ave)	Bike Lane	Stripe edge lines for 2x11' travel lanes, 9' shoulder to include bike lane with occasional parking	
J St (Cherry Ave to North Ave)	Bike Lane	Remove parking on east side, add 5' bike lane on both sides of street	
Almond Ave (Bethel Ave to Greenwood Ave)	Bike Boulevard	Bike boulevard treatments	
Pedestrian Facilities			
5 th St & K St	Crossing Treatment	High-visibility crosswalks; soft-hit posts; painted bulbouts at corners	
5 th St & J St	Crossing Treatment	High-visibility crosswalks; soft-hit posts; painted bulbouts at corners	
5 th St & Segura Ave	Crossing Treatment	High-visibility crosswalks; soft-hit posts; painted bulbouts at corners	
5 th St & I St	Crossing Treatment	High-visibility crosswalks; soft-hit posts; painted bulbouts at corners	
5 th St & Faller Ave	Crossing Treatment	High-visibility crosswalks; soft-hit posts; painted bulbouts at corners	
Jensen Ave & K St	Crossing Treatment	High-visibility crosswalks; soft-hit posts; painted bulbouts at corners	
Jensen Ave & Faller Ave	Crossing Treatment	High-visibility crosswalks; soft-hit posts; painted bulbouts at corners	
7 th St & K St	Crossing Treatment	High-visibility crosswalks; soft-hit posts; painted bulbouts at corners	
7 th St & Faller Ave	Crossing Treatment	High-visibility crosswalks; soft-hit posts; painted bulbouts at corners	Y

Proposed First/Last Mile Approach and Draft Scope of Services
Fresno COG

Location	Treatment	Description	In County ATP
8 th St & K St	Crossing Treatment	High-visibility crosswalks; soft-hit posts; painted bulbouts at corners	
8 th St & Recreation Ave	Crossing Treatment	High-visibility crosswalks; soft-hit posts; painted bulbouts at corners	
8 th St & Harrison Ave	Crossing Treatment	High-visibility crosswalks; soft-hit posts; painted bulbouts at corners	
8 th St & Morton Ave	Crossing Treatment	High-visibility crosswalks; soft-hit posts; painted bulbouts at corners	
8 th St & Tucker	Crossing Treatment	High-visibility crosswalks; soft-hit posts; painted bulbouts at corners	
8 th St & Quality Ave	Crossing Treatment	High-visibility crosswalks; soft-hit posts; painted bulbouts at corners	
8 th St & Rainbow Ave	Crossing Treatment	High-visibility crosswalks; soft-hit posts; painted bulbouts at corners	
9 th St & K St	Crossing Treatment	High-visibility crosswalks; soft-hit posts; painted bulbouts at corners	
9 th St & J St	Crossing Treatment	High-visibility crosswalks; soft-hit posts; painted bulbouts at corners	
9 th St & I St	Crossing Treatment	High-visibility crosswalks; soft-hit posts; painted bulbouts at corners	
9 th St & Faller Ave	Crossing Treatment	High-visibility crosswalks; soft-hit posts; painted bulbouts at corners	Y
10 th St & K St	Crossing Treatment	High-visibility crosswalks; soft-hit posts; painted bulbouts at corners	
10 th St & Faller Ave	Crossing Treatment	High-visibility crosswalks; soft-hit posts; painted bulbouts at corners	
11 th Ave & Faller Ave	Crossing Treatment	High-visibility crosswalks; soft-hit posts; painted bulbouts at corners	

Sample Bicycle and Pedestrian Project Cost Estimates

The estimated cost for all the proposed improvements shown in Figure 25 is approximately \$4.5 million. The breakdown of costs by project is in Figure 26. These estimates are conservative and are based on recent unit prices in the State of California. The cost estimates include the following elements:

- Direct costs
- Contingency (25%)
- Engineering/Design (20%)
- Construction/Overhead/Mobilization (15%)
- Project Administration (10%)

These costs are high level estimates and can be refined based on detailed, additional needs for each project, such as asphalt grading and repair, sign replacements, and other miscellaneous adjustments that affect the total cost, but were not considered as part of this exercise.

Proposed First/Last Mile Approach and Draft Scope of Services
Fresno COG

Figure 26 Project List Draft Cost Estimates

Location	Treatment	Description	Estimated Cost
Bikeway Facilities			
Bethel Ave (Jenson Ave to Almond Ave)	Buffered Bike Lane	5-6' buffered bike lane; mixing zone green paint treatment at intersections, move bike lane to left of right-turn lanes	\$20,000
Greenwood Ave (Jensen Ave to North Ave)	Bike Lane	Stripe edge lines for 2x11' travel lanes, 9' shoulder to include bike lane with occasional parking	\$57,100
Academy Ave (E. California Ave to Muscat Ave)	Buffered Bike Lane	Restripe with 2x11' travel lanes, 5-6' buffered bike lane; mixing zone green paint treatment at intersections, move bike lane to left of right-turn lanes	\$280,600
Faller Ave (8th St to North Ave)	Bike Lane	Stripe edge lines for 2x11' travel lanes, 9' shoulder to include bike lane with occasional parking	\$54,800
S Rainbow Rt/S Newmark Ave (Quality Ave to North Ave)	Bike Path	Add parallel bike path in adjacent ROW	\$2,465,100
Church Ave (Academy Ave to K St)	Buffered Bike Lane	Buffered bike lanes	\$12,200
Jensen Ave (Indianola Ave to Academy Ave)	Buffered Bike Lane	Buffered bike lanes	\$166,400
9th St (Bethel Ave to Faller Ave)	Bike Lane	In 50' sections of roadway, add buffered bike lanes; in 45' sections of roadway, add bike lanes; in 40' sections of roadway, add outer lane limit lines	\$120,900
North Ave (Sanger Ave to Newmark Ave)	Buffered Bike Lane	Buffered bike lanes	\$84,300
Sanger Ave (North Ave to Muscat Ave)	Bike Route	Repave and designate as bicycle route; create bicycle opening in barrier; add planters at Muscat Ave to force vehicles to slow and make right-angle entry to Academy AveBike Path	\$18,700
K St (Church Ave to Cherry Ave)	Bike Lane	Stripe edge lines for 2x11' travel lanes, 9' shoulder to include bike lane with occasional parking	\$83,900
J St (Cherry Ave to North Ave)	Bike Lane	Remove parking on east side, add 5' bike lane on both sides of street	\$5,700
Almond Ave (Bethel Ave to Greenwood Ave)	Bike Boulevard	Bike boulevard treatments	\$144,000
Pedestrian Facilities			
5th St & K St	Crossing Treatment	High-visibility crosswalks; soft-hit posts; painted bulbouts at corners	\$45,900
5th St & J St	Crossing Treatment	High-visibility crosswalks; soft-hit posts; painted bulbouts at corners	\$45,900
5th St & Segura Ave	Crossing Treatment	High-visibility crosswalks; soft-hit posts; painted bulbouts at corners	\$45,900
5th St & I St	Crossing Treatment	High-visibility crosswalks; soft-hit posts; painted bulbouts at corners	\$45,900
5th St & Faller Ave	Crossing Treatment	High-visibility crosswalks; soft-hit posts; painted bulbouts at corners	\$45,900
Jensen Ave & K St	Crossing Treatment	High-visibility crosswalks; soft-hit posts; painted bulbouts at corners	\$45,900
Jensen Ave & Faller Ave	Crossing Treatment	High-visibility crosswalks; soft-hit posts; painted bulbouts at corners	\$45,900
7th St & K St	Crossing Treatment	High-visibility crosswalks; soft-hit posts; painted bulbouts at corners	\$45,900
7th St & Faller Ave	Crossing Treatment	High-visibility crosswalks; soft-hit posts; painted bulbouts at corners	\$45,900

Proposed First/Last Mile Approach and Draft Scope of Services
Fresno COG

Location	Treatment	Description	Estimated Cost
8th St & K St	Crossing Treatment	High-visibility crosswalks; soft-hit posts; painted bulbouts at corners	\$45,900
8th St & Recreation Ave	Crossing Treatment	High-visibility crosswalks; soft-hit posts; painted bulbouts at corners	\$45,900
8th St & Harrison Ave	Crossing Treatment	High-visibility crosswalks; soft-hit posts; painted bulbouts at corners	\$45,900
8th St & Morton Ave	Crossing Treatment	High-visibility crosswalks; soft-hit posts; painted bulbouts at corners	\$45,900
8th St & Tucker	Crossing Treatment	High-visibility crosswalks; soft-hit posts; painted bulbouts at corners	\$45,900
8th St & Quality Ave	Crossing Treatment	High-visibility crosswalks; soft-hit posts; painted bulbouts at corners	\$45,900
8th St & Rainbow Ave	Crossing Treatment	High-visibility crosswalks; soft-hit posts; painted bulbouts at corners	\$45,900
9th St & K St	Crossing Treatment	High-visibility crosswalks; soft-hit posts; painted bulbouts at corners	\$45,900
9th St & J St	Crossing Treatment	High-visibility crosswalks; soft-hit posts; painted bulbouts at corners	\$45,900
9th St & I St	Crossing Treatment	High-visibility crosswalks; soft-hit posts; painted bulbouts at corners	\$45,900
9th St & Faller Ave	Crossing Treatment	High-visibility crosswalks; soft-hit posts; painted bulbouts at corners	\$45,900
10th St & K St	Crossing Treatment	High-visibility crosswalks; soft-hit posts; painted bulbouts at corners	\$45,900
10th St & Faller Ave	Crossing Treatment	High-visibility crosswalks; soft-hit posts; painted bulbouts at corners	\$45,900
11th Ave & Faller Ave	Crossing Treatment	High-visibility crosswalks; soft-hit posts; painted bulbouts at corners	\$45,900
TOTAL			\$4,569,400

Long Range Transportation Plan First/Last Mile Projects

Based on a comparison of the gap analysis to recent active transportation plans, cost estimates for both accessibility studies and capital costs are reflected in Figure 27, below. Accessibility study estimates are based on perceived size and complexity of street grids in potential study areas. Capital costs are estimated based on the number of identified gaps in the sample study areas, detailed earlier in the memo, that are not presently identified for improvement in Fresno County and City of Fresno ATP reports. Capital cost estimates were extrapolated based on number of identified gaps and estimated cost of improvement, represented in the Sanger example, detailed in Figure 26.

Project	Description	Estimated Cost
R-10: First/Last Mile Improvements – Transit Accessibility Studies and Project List Development		
FAX Transit Accessibility Study	FAX Accessibility Studies x 4 study areas	\$100,000
Clovis Transit Accessibility Study	Clovis Accessibility Study x 1 study area	\$25,000

Proposed First/Last Mile Approach and Draft Scope of Services
Fresno COG

Project	Description	Estimated Cost
FCRTA Transit Accessibility Study	FCRTA Accessibility Study x 15 study areas*	\$150,000
R-10: First Last Mile Improvements – Transit Accessibility Capital Costs		
FAX Transit	Capital Costs for Transit Accessibility Infrastructure Improvements	\$7,344,000
Clovis Transit	Capital Costs for Transit Accessibility Infrastructure Improvements	\$1,836,000
FCRTA Transit	Capital Costs for Transit Accessibility Infrastructure Improvements	\$14,458,500

* It is recommended that the FCRTA study areas be grouped into three study areas and five rounds of funding for the studies.

Appendix C

Comments and Responses to Comments

Contents

- California Rural Legal Assistance Letter
February 26, 2019
- Fresno COG Response to California Rural
Legal Assistance Letter February 26, 2019
- Caltrans Letter March 1, 2019
- Fresno COG Response to Caltrans Letter
March 1, 2019



California Rural Legal Assistance

Letter February 26, 2019



CALIFORNIA RURAL LEGAL ASSISTANCE, INC.

FIGHTING FOR JUSTICE, CHANGING LIVES

February 26, 2019

Via electronic mail to: kcai@fresnocog.org

Kristine Cai, Planning Director
Fresno Council of Governments
2035 Tulare Street, Suite 201
Fresno, CA 93721

Re: Draft 2019 Long Range Transit Plan Comments

Ms. Cai,

California Rural Legal Assistance, Inc. (CRLA) is a non-profit law firm that has served rural communities throughout California for more than fifty years. CRLA submits these comments on the 2019 Long-Range Transit Plan (LRTP) on behalf of our clients Los Olvidados de West Park (Los Olvidados), a California Registered Neighborhood Association representing the disadvantaged unincorporated community of West Park in Fresno County.

West Park is a small community immediately outside Fresno City's southwest sphere of influence. It is a low-income community primarily comprised of residents of color; it qualifies as an "environmental justice" community under federal and state civil rights law.

We emphasize the severity of the need in environmental justice communities for transit services and active transportation infrastructure to support transit. West Park lacks sidewalks, active transportation infrastructure, lighting, bus stops, public transit, and alternative transit options. These deficiencies have significant implications; a resident was recently hit and killed near the community while biking on a county road that lacked bike paths or other active transportation infrastructure. The area had been identified as a high-need area for bike paths by community residents due to the number of residents that bike from the community into the City of Fresno for work and access to services. Rural areas that are served by public transit do not have adequate infrastructure to allow residents to safely and effectively use the public transit. They lack curbs, gutters, and bus shelters, making it more difficult and less safe for rural residents to use transit than for urban residents.

Addressing the needs of environmental justice communities is mandated by state and federal laws that prohibit recipients of federal and state funding from implementing policies, practices or activities that disproportionately burden these communities, deny them equitable access to services, or uphold pre-existing conditions that are inequitable. We provide comments on the LRTP in an effort to ensure all residents have equal access to the benefits of public transit.

I. The Long-Range Transit Plan Must Identify the Transit Needs of Disadvantaged Rural Communities

CRLA is encouraged by the recognition of the unique transit issues facing Fresno County's rural low-income communities in the Long-Range Transit Plan. The first step in complying with environmental justice obligations and improving services in disadvantaged communities is to meaningfully include environmental justice communities in the planning processes and include their needs in planning documents.

Fresno Council of Governments (FCOG) included public feedback and stakeholder interview responses in the LRTP and as a result many of the transit and transportation needs experienced by West Park and other similar communities are identified in the LRTP.

The following comments and excerpts provided by stakeholders and community members accurately reflect the lived experiences and on-the-ground realities in rural environmental justice communities in Fresno County.

- "...[E]ven when population size or density doesn't support regular transit service, a transit option remains a vital need for many residents." [pg. 3]
- Forty-three percent of surveyed residents stated that their transportation needs were not adequately met. [pg 15]
- Some of the most important needs identified by Fresno County residents to improve transit services were (1) improved sidewalks leading to bus stops; (2) Extension of routes to additional areas of Fresno County; (3) additional or more frequent weekend bus service. [pg 62]
- Communities and stakeholders commented on the need to prioritize planning collaboration between all agencies to address the need for active transportation infrastructure including sidewalks, bike paths, and lighting in unincorporated areas. [pg 64]
- Multiple stakeholders identified in interviews that "[l]ack of 'access to opportunity (e.g. jobs and education) for residents in rural communities' was a concern, and that '[c]ompact development, economic development, infill, and improved local mobility services in rural areas will increase local services and dampen demand and need for transit trips to urban centers.'" [pg 67-68].
- Stakeholder interviews identified that "funding allocation, farebox recovery requirements, and geographic dispersion limit transit options for rural to Fresno/Clovis urban area trips." [pg 67]
- Stakeholder interviews identified that "funding allocations need to be more flexible, multimodal, and equitable to low-income, minority, and rural needs communities." [pg 67]

West Park, like other small rural communities, is particularly affected by the farebox and ridership restrictions on traditional public transit service. The community has historically been unserved by any form of public transit and is a high transit need area. Fresno County Rural Transit Agency (FCRTA) implemented a six-month demo fixed-route transit project in the community in 2017-2018. The overhead cost of the system was too high for the small community to meet the farebox and ridership requirements necessary for its ongoing viability. The demo route was discontinued after six months and the community is currently not served by any form of public transit. The farebox and ridership restrictions make it extremely difficult for a small community to have traditional public transit.

The LRTP should also acknowledge and address the need for transit services in areas that exist on the periphery of existing transit options. The strict service boundaries followed by FCRTA and FAX result in peripheral communities being unserved—unable to maintain their own FCRTA fixed route due to high overhead costs, yet unable to access FAX services. West Park is located a third of a mile from Fresno City limits yet is unable to access City transit services due to lack of bus stops near the city limits. See the attached map for indication of proximity of the community to City limits. West Park is also located close to a veteran's home that has a dedicated transit service, yet cannot access this service because West Park residents are not part of the veteran's housing complex. FCRTA fixed routes do not pass near the community. The proximity to the city puts the community in a prime location for expansion of existing City lines to provide at least one bus stop nearby. Other solutions should be explored such as adding West Park to an existing FCRTA route or through cooperation between FCRTA and FAX. Agencies should cooperate to expand service boundaries or offer flexibility in coverage to fill service gaps without requiring new routes to be developed.

II. The Long-Range Transit Plan Does Not Adequately Address the Needs of Disadvantaged Rural Communities

The LRTP identifies many of the needs of rural disadvantaged communities, yet those needs are not adequately addressed in the policies and projects of the plan. The legal requirement of meaningful involvement and access to services for environmental justice communities is not satisfied by identifying the needs of those communities; policies, practices and activities must be implemented in a manner that reduces inequities and addresses those needs.

A. The Policies in the Plan Do Not Adequately Address Identified Needs in Disadvantaged Rural Communities

The LRTP presents three Alternatives: Ridership, Coverage, Blended. Each contain policies aimed at reaching specific objectives. The Project Steering Committee applied scoring criteria to the Alternatives and determined that all Alternatives and the policies included in them should,

and will, be pursued in the implementation of the LRTP. CRLA assumes that FCOG will not be recommending a single Alternative for implementation, and that a comparison of the merits of each individual Alternative is not currently necessary. If FCOG determines that a single Alternative should be chosen, CRLA requests the opportunity to provide additional comments at that time.

The LRTP's Coverage Alternative and Blended Alternative identify strategies that will benefit rural environmental justice communities in Fresno County, but the Alternatives lack critical strategies and policies to address many of the needs in disadvantaged, rural communities, including needs identified by residents themselves. Additional strategies and policies must be developed and included in the LRTP.

The Coverage Alternative recommends several strategies that will improve access to transit for residents of rural communities such as West Park. Important strategies include (1) exploring community-based transportation opportunities "based on the mobility needed [in the community] and as determined by the local community;" [pg. 79] (2) providing "micro-transit services in low demand areas where traditional fixed-route transit cannot meet minimum performance standards;" [pg. 79] and developing a "network of transportation nodes that provide seamless schedule, transfers, and fare payment integration" to address the "growing need for services between rural and urban areas for medical trips, jobs, school, and social service agency appointments." [pg. 79]

These strategies are critical to increase access to transit, but additional strategies are needed to address other underlying issues raised by underserved communities, stakeholders, and the LRTP itself. The strategies must address the need for collaboration between agencies to improve land use planning in a way that prioritizes sidewalk, bike path, and other infrastructure development, access to services, high-density transit-oriented development, and housing for rural environmental justice communities. This type of collaboration was identified as one of the major goals of the LRTP on pg. 5, as follows:

Goal: Collaborate on land use decisions that facilitate increased ridership, improve air quality, and reduce greenhouse gas emissions.

- ✓ C.1 Objective: Support compact mixed-use development near transit nodes to improve transit ridership and reduce auto vehicle miles traveled.
- ✓ C.2 Objective: Encourage the location of jobs, services, and amenities in both rural and urban areas that minimizes the need for long rural to urban vehicle trips.
- ✓ C.3 Objective: Encourage transit use and reduce driving by supporting the location of jobs near transit and in areas where transit can be viable.

- ✓ C.4 Objective: Limit expansion of fixed route services with frequencies of 60 minutes or less to areas and activities that do meet density and demand thresholds.

Some forms of land use collaboration are addressed in one recommended implementation strategy on page 103 of the LRTP, which states a strategy of

[i]mplement[ing] 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 [a] broad range of household sizes and incomes within key transit corridors and downtowns of Fresno, Clovis and other Fresno County cities.

This strategy will address transit-oriented housing development in urban areas but does not address needs in rural areas for additional housing, transit, and beneficial land uses. It does not require inter-agency collaboration to address needs in rural unincorporated areas for infrastructure development that supports transit and active transportation, or encourage service and job development in rural and unincorporated areas to reduce the need for travel to urban areas. These important goals must be addressed through concrete, measurable strategies, and strategies developed to benefit urban and incorporated areas must address the needs in unincorporated areas as well or have strategies that similarly benefit unincorporated areas.

B. The LRTP Must Ensure Adequate Alternatives to Technology-Based Improvements

The LRTP Alternatives also rely too heavily on technological advancements and web-based services at the risk of excluding communities with low tech literacy and access. Policies in all Alternatives require web-based trip planning services to provide accessible and efficient information to residents and to assist in increasing transit literacy and ridership. Yet many very low-income individuals and farmworkers do not have access to internet service, data plans, or at-home computers. Elderly individuals are likely to have low-levels of internet literacy, lack of computer access and would have difficulty utilizing these services.

Any programs or projects that create web-based applications must also develop alternatives that are accessible, both in terms of ease of access and language accessibility, for all members of the public. Trip planning services could be accessible via telephone and through public technology such as tablets available on public transit buses, to ensure that all individuals can access trip planning services. Modernization of transit services through the utilization of new technology is important but must not occur at the expense of the most marginalized and disadvantaged residents of Fresno County.

C. The LRTP FCRTA Project List Does Not Adequately Address Needs Identified by Rural Community Residents

The LRTP FCRTA and Fresno County Project List are similarly problematic to the Alternatives; they fail to address the needs raised by residents and stakeholders during the public participation process.

Rural residents have emphasized the need for expanded transit options for underserved areas, infrastructure improvements to make transit safer and more accessible, and improved land use through coordination between transit agencies and local government bodies. The highest priority service improvements for rural residents and stakeholders attending the Selma workshop were: (1) additional or more frequent weekend bus service (19%); (2) extension of routes to additional areas of Fresno County, including new activity centers (19%); (3) more bus stop amenities (19%); (4) improved sidewalks leading up to bus stops (15%).

Despite the demonstrated need for projects addressing these needs, the FCRTA project list primarily focuses on green-technology upgrades and upgraded storage and maintenance facilities. This type of investment is critical for reducing overall regional GHG emissions and meeting SB 375 requirements, and FCRTA and the County's aims to reduce GHG emissions are understandable. Yet equitable access to transit services is a requirement of the LRTP and residents indicated that increased access to transit services are their top priority. Only 6% of Fresno County rural residents indicated that green technology investments were a high priority yet projects that focus on GHG reduction strategies and implementation of green technologies total \$125,000,000 in cost over the duration of the LRTP. Projects on the FCRTA list aimed at expanding transit routes or implementing new transit services total \$9,125,000, just 7.3% of the overall project costs. This calculation does not include the West Park route discontinued after a demo period with no plans to restart the route known to CRLA.

FCRTA and FCOG are designating almost fourteen times as much funding for GHG reduction and green technology projects than for rural transit expansion projects, yet 38% of residents listed expansion of transit services as their top priority for transit improvements. No projects on the FCRTA project list are aimed at increasing collaboration between agencies to improve land use in environmental justice communities and address infrastructure deficiencies yet this was another priority identified by residents and stakeholders and known to have a high impact on access to transit services.

The LRTP project list must include projects that address the most pressing needs of communities underserved by transit, as well as environmental justice communities. Additional projects, policies, and strategies must be included in the LRTP that are responsive to the community need for additional services for rural areas.

CRLA appreciates the opportunity to provide comments.

Sincerely,






Mariah C. Thompson
Staff Attorney, Community Equity Initiative
California Rural Legal Assistance, Inc.
3747 E. Shields Ave
Fresno, CA 93726
mthompson@crla.org



Fresno Local Agency Formation Commission CSA No. 39 (Beran Way/Prospect Grove)

Legend

-  District Boundary and SOI
-  City SOI
-  City Limits

Provides Water Service

District Formed: 1991
SOI Adopted: 2/24/1993
SOI Updated: 11/7/2007

Map Date: November 2007
District Area: 80 Acres
Sphere Area: 80 Acres

Fresno COG Response to California Rural Legal Assistance Letter February 26, 2019

March 12, 2019

Mariah C. Thompson,
Staff Attorney
California Rural Legal Assistance, Inc.
3747 E. Shields Ave.
Fresno, CA 93726

Re: Comments on the Fresno County Regional Long-Range Transit Plan Draft

Dear Ms. Thompson,

Fresno COG has received and thanks California Rural Legal Assistance (CRLA), Inc. for its February 26, 2019 letter addressing the draft 2019 Long-Range Transit Plan (LRTP). Respectfully, Fresno COG offers the following responses to the comments raised in the letter.

Comment:

California Rural Legal Assistance, Inc. (CRLA) is a non-profit law firm that has served rural communities throughout California for more than fifty years. CRLA submits these comments on the 2019 Long-Range Transit Plan (LRTP) on behalf of our clients Los Olvidados de West Park (Los Olvidados), a California Registered Neighborhood Association representing the disadvantaged unincorporated community of West Park in Fresno County.

West Park is a small community immediately outside Fresno City's southwest sphere of influence. It is a low-income community primarily comprised of residents of color; it qualifies as an "environmental justice" community under federal and state civil rights law.

We emphasize the severity of the need in environmental justice communities for transit services and active transportation infrastructure to support transit. West Park lacks sidewalks, active transportation infrastructure, lighting, bus stops, public transit, and alternative transit options. These deficiencies have significant implications; a resident was recently hit and killed near the community while biking on a county road that lacked bike paths or other active transportation infrastructure. The area had been identified as a high-need area for bike paths by community residents due to the number of residents that bike from the community into the City of Fresno for work and access to services. Rural areas that are served by public transit do not have adequate infrastructure to allow residents to safely and effectively use the public transit. They lack curbs, gutters, and bus shelters, making it more difficult and less safe for rural residents to use transit than for urban residents.

Addressing the needs of environmental justice communities is mandated by state and federal laws that prohibit recipients of federal and state funding from implementing policies, practices or activities that disproportionately burden these communities, deny them equitable access to services, or uphold pre-existing conditions that are inequitable. We provide comments on the LRTP in an effort to ensure all residents have equal access to the benefits of public transit.

I. The Long-Range Transit Plan Must Identify the Transit Needs of Disadvantaged Rural Communities

CRLA is encouraged by the recognition of the unique transit issues facing Fresno County's rural low-income communities in the Long-Range Transit Plan. The first step in complying with environmental justice obligations and improving services in disadvantaged communities is to meaningfully include environmental justice communities in the planning processes and include their needs in planning documents.

Fresno Council of Governments (FCOG) included public feedback and stakeholder interview responses in the LRTP and as a result many of the transit and transportation needs experienced by West Park and other similar communities are identified in the LRTP.

The following comments and excerpts provided by stakeholders and community members accurately reflect the lived experiences and on-the-ground realities in rural environmental justice communities in Fresno County.

- " ... [E]ven when population size or density doesn't support regular transit service, a transit option remains a vital need for many residents." [pg. 3]
- Forty-three percent of surveyed residents stated that their transportation needs were not adequately met. [pg. 15]
- Some of the most important needs identified by Fresno County residents to improve transit services were (1) improved sidewalks leading to bus stops; (2) Extension of routes to additional areas of Fresno County; (3) additional or more frequent weekend bus service. [pg. 62]
- Communities and stakeholders commented on the need to prioritize planning collaboration between all agencies to address the need for active transportation infrastructure including sidewalks, bike paths, and lighting in unincorporated areas. [pg. 64]
- Multiple stakeholders identified in interviews that "[l]ack of 'access to opportunity (e.g. jobs and education) for residents in rural communities" was a concern, and that "[c]ompact development, economic development, infill, and improved local mobility services in rural areas will increase local services and dampen demand and need for transit trips to urban centers." [pg. 67-68].
- Stakeholder interviews identified that "funding allocation, farebox recovery requirements, and geographic dispersion limit transit options for rural to Fresno/Clovis urban area trips." [pg. 67]
- Stakeholder interviews identified that "funding allocations need to be more flexible, multimodal, and equitable to low-income, minority, and rural needs communities." [pg. 67]

Response: Comments noted. One major purpose of the LRTP – the first comprehensive long-range transit plan for the region – was to identify transit issues and challenges in Fresno's rural areas, which comprise most of Fresno's 6,000 square miles. The comments quoted reflect these issues and challenges.

West Park, like other small rural communities, is particularly affected by the farebox and ridership restrictions on traditional public transit service. The community has historically been unserved by any form of public transit and is a high transit need area. Fresno County Rural Transit Agency (FCRTA) implemented a six-month demo fixed-route transit project in the community in 2017-2018. The overhead cost of the system was too high for the small community to meet the farebox and

ridership requirements necessary for its ongoing viability. The demo route was discontinued after six months and the community is currently not served by any form of public transit. The farebox and ridership restrictions make it extremely difficult for a small community to have traditional public transit.

The LRTP should also acknowledge and address the need for transit services in areas that exist on the periphery of existing transit options. The strict service boundaries followed by FCRTA and FAX result in peripheral communities being unserved-unable to maintain their own FCRTA fixed route due to high overhead costs, yet unable to access FAX services. West Park is located a third of a mile from Fresno City limits yet is unable to access City transit services due to lack of bus stops near the city limits. See the attached map for indication of proximity of the community to City limits. West Park is also located close to a veteran's home that has a dedicated transit service, yet cannot access this service because West Park residents are not part of the veteran's housing complex. FCRTA fixed routes do not pass near the community. The proximity to the city puts the community in a prime location for expansion of existing City lines to provide at least one bus stop nearby. Other solutions should be explored such as adding West Park to an existing FCRTA route or through cooperation between FCRTA and FAX. Agencies should cooperate to expand service boundaries or offer flexibility in coverage to fill service gaps without requiring new routes to be developed.

Response: The commenter is correct: the West Park service was discontinued due to low farebox recovery. For the six-month demonstration period the farebox recovery for West Park was 1.89% and the cost per passenger trip was \$89.55 which makes it unsustainable to continue this service. Further, the low farebox recovery is an indication that the demand by West Park residents for this fixed route service was low, demonstrating that fixed route service may not have been the most effective service for many residents, and that other types of service should be analyzed.

FCRTA is considering other services to include West Park via modification to existing fixed route services such as Westside Transit or Coalinga Transit. FCRTA has several planning grants to study potential new modes, including in disadvantaged communities such as West Park. Future coordination with FAX is also a possibility given the proximity to the City and ongoing development west of Highway 99.

With regard to pedestrian and bicycle infrastructure, this is beyond the purview and responsibility of transit providers. However Fresno County Public Works has indicated that sidewalk improvements to serve transit stops will be identified and completed as funding becomes available. Certain site specific limitations may apply as these improvements will also need to address site drainage and re-occurring maintenance costs.

Comment:

II. The Long-Range Transit Plan Does Not Adequately Address the Needs of Disadvantaged Rural Communities

The LRTP identifies many of the needs of rural disadvantaged communities, yet those needs are not adequately addressed in the policies and projects of the plan. The legal requirement of meaningful involvement and access to services for environmental justice communities is not satisfied by identifying the needs of those communities; policies, practices and activities must be implemented in a manner that reduces inequities and addresses those needs.

A. The Policies in the Plan Do Not Adequately Address Identified Needs in Disadvantaged Rural Communities

The LRTP presents three Alternatives: Ridership, Coverage, Blended. Each contain policies aimed at reaching specific objectives. The Project Steering Committee applied scoring criteria to the Alternatives and determined that all Alternatives and the policies included in them should, and will, be pursued in the implementation of the LRTP. CRLA assumes that FCOG will not be recommending a single Alternative for implementation, and that a comparison of the merits of each individual Alternative is not currently necessary. If FCOG determines that a single Alternative should be chosen, CRLA requests the opportunity to provide additional comments at that time.

Response: The commenter is correct: all three Alternatives and the policies included in them will be pursued in the implementation of the LRTP. Collectively policies, practices and activities that comprise the LRTP are intended to improve transit in rural areas to address rural transit needs.

Comment:

The LRTP's Coverage Alternative and Blended Alternative identify strategies that will benefit rural environmental justice communities in Fresno County, but the Alternatives lack critical strategies and policies to address many of the needs in disadvantaged, rural communities, including needs identified by residents themselves. Additional strategies and policies must be developed and included in the LRTP.

The Coverage Alternative recommends several strategies that will improve access to transit for residents of rural communities such as West Park. Important strategies include (1) exploring community-based transportation opportunities "based on the mobility needed [in the community] and as determined by the local community;" [pg. 79] (2) providing "micro-transit services in low demand areas where traditional fixed-route transit cannot meet minimum performance standards;" [pg. 79] and developing a "network of transportation nodes that provide seamless schedule, transfers, and fare payment integration" to address the "growing need for services between rural and urban areas for medical trips, jobs, school, and social service agency appointments." [pg. 79]

Response: Community-based transportation options "based on the mobility needed [in the community] and as determined by the local community" is a goal identified in the LRTP. The LRTP describes two pioneering efforts along these lines (Huron's Green Raiteros and Cantua Creek's Van y Vienen). The LRTP supports these programs and recommends that their successful practices be duplicated in other rural communities in Fresno County as funding becomes available.

The exploration and implementation of micro-transit pilot projects is also included in the LRTP as a mechanism to provide services in low-demand areas where traditional fixed-route transit services cannot meet minimum performance thresholds. While the first demonstration projects will begin in Fresno County within the next several years, experience from early implementors in other metropolitan areas in California is showing that micro-transit service works best in smaller geographic areas, such as suburban areas near fixed route transit, versus larger rural areas further from fixed route services, and are expensive to operate, costing operators additional dollars above and beyond the limited dollars available for fixed route services. Micro-transit service will be tested in the region, and the results will help inform potential future services and service areas.

Moving toward a "network of transportation nodes that provide seamless schedule, transfers, and fare payment integration" to address the "growing need for services between rural and urban areas

for medical trips, jobs, school, and social service agency appointments” is a goal of the LRTP. Given the region’s vast size and varied geography, this will need to include community-based, social service and private transportation providers, as well as public transit and paratransit.

Comment:

[LRTP] strategies are critical to increase access to transit, but additional strategies are needed to address other underlying issues raised by underserved communities, stakeholders, and the LRTP itself. The strategies must address the need for collaboration between agencies to improve land use planning in a way that prioritizes sidewalk, bike path, and other infrastructure development, access to service, high-density transit oriented development, and housing for rural environmental justice communities. This type of collaboration was identified as one of the major goals of the LRTP on pg.5, as follows:

Goal: Collaborate on land use decisions that facilitate increased ridership, improve air quality, and reduce greenhouse gas emissions.

C.1 Objective: Support compact mixed-use development near transit nodes to improve transit ridership and reduce auto vehicle miles traveled.

C.2 Objective: Encourage the location of jobs, services, and amenities in both rural and urban areas that minimize the need for long rural to urban vehicle trips.

C.3 Objective: Encourage transit use and reduce driving by supporting the location of jobs near transit and in areas where transit can be viable.

C.4 Objective: Limit expansion of fixed route services with frequencies of 60 minutes or less to areas and activities that do meet density and demand thresholds.

Some forms of land use collaboration are addressed in one recommended implementation strategy on page 103 of the LRTP, which states a strategy of:

[i]mplement[ing] 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 [a] broad range of household sizes and incomes within key transit corridors and downtowns of Fresno, Clovis and other Fresno County cities.

This strategy will address transit-oriented housing development in urban areas but does not address needs in rural areas for additional housing, transit, and beneficial land uses. It does not require inter-agency collaboration to address needs in rural unincorporated areas for infrastructure development that supports transit and active transportation, or encourage service and job development in rural and unincorporated areas to reduce the need for travel to urban areas. These important goals must be addressed through concrete, measurable strategies, and strategies developed to benefit urban and incorporated areas must address the needs in unincorporated areas as well or have strategies that similarly benefit unincorporated areas.

Response: This goal and objectives absolutely requires inter agency coordination. The transit operators do not approve land use nor do they implement infrastructure projects. Infrastructure such as sidewalks and curbs are not within the purview of transit agencies; rather these are Public Works issues for the County and/or Cities depending on the location.

There are opportunities to work with the County, Cities, Public Works departments and other responsible entities that oversee infrastructure. The General Plans and community capital improvement programs are more appropriate venues for those recommendations on streets and

road infrastructure policy and implementation.

Moreover, additional strategies and policies can be found in Fresno COG's Regional Active Transportation Plan which encompasses bus, bike, and pedestrian measures for Fresno County. Land use related strategies are addressed within the County and Cities General Plans, as well as Specific Plans, Area Plans and other land use plans.

Fresno COG's TOD program addresses transit oriented development in both urban and rural areas. It encourages transit supportive land use development such as higher density residential and mix-uses near transit corridors and stops. The TOD program provides funding for infrastructure improvements and transit-friendly planning efforts, and offers incentives for local government to waive impact fees for qualifying residential development. In order for the small cities and the unincorporated areas to be able to compete, the TOD program lowered the density requirements for such areas.

Comment:

B. The LRTP Must Ensure Adequate Alternatives to Technology-Based Improvements

The LRTP Alternatives also rely too heavily on technological advancements and web-based services at the risk of excluding communities with low tech literacy and access. Policies in all Alternatives require web-based trip planning services to provide accessible and efficient information to residents and to assist in increasing transit literacy and ridership. Yet many very low-income individuals and farmworkers do not have access to internet service, data plans, or at-home computers. Elderly individuals are likely to have low-levels of internet literacy, lack of computer access and would have difficulty utilizing these services.

Any programs or projects that create web-based applications must also develop alternatives that are accessible, both in terms of ease of access and language accessibility, for all members of the public. Trip planning services could be accessible via telephone and through public technology such as tablets available on public transit buses, to ensure that all individuals can access trip planning services. Modernization of transit services through the utilization of new technology is important but must not occur at the expense of the most marginalized and disadvantaged residents of Fresno County.

Response: This is an important issue. While the web portal is intended to be multilingual and easy to use, the Fresno region's transit operators plan to continue to provide transit information that can be accessed via telephone in both English and Spanish, and transit services that can be paid for in cash. The goal is to provide access to both transit information and services to all users.

Comment:

C. The LRTP FCRTA Project List Does Not Adequately Address Needs Identified by Rural Community Residents

The LRTP FCRTA and Fresno County Project List are similarly problematic to the Alternatives; they fail to address the needs raised by resident and stakeholders during the public participation process.

Rural residents have emphasized the need for expanded transit options for underserved areas, infrastructure improvements to make transit safer and more accessible, and improved land use through coordination between transit agencies and local government bodies. The highest priority service improvements for rural residents and stakeholders attending the Selma workshop were:

(1) additional or more frequent weekend bus service (19%); (2) extension of routes to additional

areas of Fresno County, including new activity centers (19%); (3) more bus stop amenities; (4) improved sidewalks leading up to bus stops (15%).

Despite the demonstrated need for projects addressing these needs, the FCRTA project list primarily focuses on green-technology upgrades and upgraded storage and maintenance facilities. This type of investment is critical for reducing overall regional GHG emission and meeting SB 375 requirements and FCRTA and the County's aims to reduce GHG emission are understandable. Yet equitable access to transit service is a requirement of the LRTP and residents indicated that increased access to transit services are their top priority. Only 6% of Fresno County rural residents indicated that green technology investments were a high priority yet projects that focus on GHG reduction strategies and implementation of green technologies total \$125,000,000 in cost over the duration of the LRTP. Projects on the FCRTA list aimed at expanding transit routes or implements new transit services total \$9,125,000, just 7.3% of the overall project costs. This calculation does not include the West Park route discontinued after a demo period with no plans to restart the route known to CRLA.

FCRTA and FCOG are designating almost fourteen times as much funding for GHG reduction and green technology projects than for rural transit expansion projects, yet 38% of residents listed expansion of transit services as their top priority for transit improvements. No projects on the FCRTA project list are aimed at increasing collaboration between agencies to improve land use in environmental justice communities and address infrastructure deficiencies yet this was another priority identified by residents and stakeholders and known to have a high impact on access to transit services.

Response: In the long run, green investments – particularly electrification and new technology to enhance transit performance – should help reduce the overall cost of operating and maintaining transit vehicles and infrastructure. Over time, the hope is that this will result in not only fewer emissions and better air quality (which will benefit disadvantaged communities from a health perspective) but cost savings, and that these cost savings can be re-invested in new additional services.

Moreover, GHG reductions are state-mandated, and despite their costs, infrastructure investments that reduce GHG emissions must be incorporated into the planning process. The State of California has consistently reiterated and articulated its commitment to GHG reductions over the past 15 years.

The transit agencies are not responsible for land use decisions, but do work with local governments on implementing land use strategies such as transit oriented development.

Comment:

The LRTP project list must include projects that address the most pressing needs of communities underserved by transit, as well as environmental justice communities. Additional projects, policies, and strategies must be included in the LRTP that are responsive to the community needs for additional services for rural use.

Response: As noted in the comments above, there are projects included in the LRTP that will serve rural transit needs. Furthermore, the LRTP is intended to be a living document, and will be amended to include new projects as they are developed and proposed, including projects developed and proposed by rural communities.

Comment:

CRLA appreciates the opportunity to provide comments.

Response: We thank CRLA for these comments, and for its involvement in the LRTP development process. We especially appreciate your efforts to engage community residents in the development of the LRTP. Please feel free to contact Kristine Cai at 559-233-4148 should you have any further questions or comments regarding the LRTP.

Sincerely,

A handwritten signature in blue ink that reads "Tony Boren". The signature is written in a cursive, flowing style.

Tony Boren,

Executive Director

Caltrans Letter

March 1, 2019

DEPARTMENT OF TRANSPORTATION**DISTRICT 6**

1352 WEST OLIVE AVENUE
P.O. BOX 12616
FRESNO, CA 93778-2616
PHONE (559) 445-5421
FAX (559) 445-5875
TTY 711
www.dot.ca.gov



Making Conservation
a California Way of Life.

March 1, 2019

SENT VIA EMAIL

Ms. Kristine Cai
Planning Director
Fresno Council of Governments
2035 Tulare Street, Suite 201
Fresno, CA 93721

Dear Ms. Kristine Cai:

Thank you for the opportunity to review and provide comments on the Fresno Council of Governments (FCOG) – Fresno County Regional Long - Range Transit Plan Draft. This plan is a comprehensive update and provides an analysis of transit and related multimodal investments, transit objectives, existing service preservation and implementation process in the Fresno region through the year 2050. Caltrans has the following comments:

Caltrans recommends providing any modifications to transit connections with the future operation of the California High-Speed Rail station in Fresno.

Bike lockers at transit stops are mentioned on column 51. Caltrans recommends identifying transit hub locations specified for future bike locker locations.

Bike racks and bus shelters are mentioned but there is a lack of information provided on planned improvements. It is recommended to provide locations on a map for future transit stop improvements.

It is recommended to provide existing and forecast ridership information on transit and van pools to accommodate future ridership. This may assist in identifying new strategies and funding opportunities to increase ridership.

FCRTA continues to promote and enhance their transit opportunities for the elderly, disabled, low income, students, and the general public. Caltrans is aware that FCRTA's fares have been unchanged for the past 15 years and is commended for not raising their fares to accommodate riders of the disadvantage communities they serve.

Caltrans encourages FCOG and FCRTA to continue to apply for Rural Transit & Intercity Bus – FTA Section 5311 and 5311(f) funds Active Transportation Planning Grants, Caltrans Sustainable Transportation Planning Grants, and FTA Section 5339(b) Bus and Bus Facilities Discretionary Program funding opportunities which may further assist future efforts in transit planning projects.

FCOG is commended for their public outreach efforts and public engagement activities in reaching out to community members of Fresno County to develop a better comprehensive long-range transit plan for its residents and surrounding areas.

*"Provide a safe, sustainable, integrated and efficient transportation system
to enhance California's economy and livability"*

Ms. Kristine Cai
March 1, 2019
Page 2

Caltrans recommends inclusion of the responsible parties FCOG, VRPA Technologies and accredit the appropriate grant program on the cover title page of the final product.

This project is funded by way of a Caltrans Sustainable Transportation Fiscal Year 2016-2017 grant program, please note that final draft must be completed no later than June 30, 2019 and final request for reimbursements must be submitted to Caltrans by August 31, 2019. Please contact me at (559) 445-5421, if you have any further questions.

Sincerely,



LORENA MENDIBLES, Chief
Planning South Branch

c: Michael Navarro, Chief, Planning North Branch, Caltrans
Jamaica Gentry, Pedro Ramirez, Caltrans
Caleb Brock, HQ, Caltrans

Fresno COG Response to Caltrans Letter March 1, 2019

March 12, 2019

Lorena Mendibles
Department of Transportation
District 6
1352 West Olive Avenue
P.O. BOX 12616
Fresno, CA 93778-2616

Re: Comments on the Fresno County Regional Long-Range Transit Plan Draft

Dear Ms. Mendibles:

Fresno COG has received and thanks Caltrans for the March 1 letter addressing the draft 2019 Long-Range Transit Plan (LRTP). Respectfully, Fresno COG offers the following responses to the comments raised in the letter.

Comment:

Caltrans recommends providing any modifications to transit connections with the future operation of the California High-Speed Rail station in Fresno.

Response: Comment noted. Each of the transit operators covered by the LRTP has projects listed in Table 2 to ensure coordination with High-Speed Rail (HSR) and connectivity with the Fresno station.

Comment:

Bike lockers at transit stops are mentioned on column 51. Caltrans recommends identifying transit hub locations specified for future bike locker locations.

Response: Given the transit-focus and long-range and visionary nature of the LRTP, identifying specific locations for specific types of bicycle parking is beyond the scope of this Plan. Specific locations and projects will be identified in future Regional Transportation Plans (RTPs) as well as individual transit operators' Short-Range Transit Plans (Plans). Chapter 2 of the LRTP included a brief summary of Fresno COG's 2018 Regional Active Transportation Plan (ATP). The Regional ATP identifies 175 new bicycle parking locations in Fresno County. The LRTP developed prototype studies and a process to supplement and augment the countywide ATP with projects focused on enhancing non-motorized access to transit: These are found in Appendix B of the LRTP.

Comment:

Bike racks and bus shelters are mentioned but there is a lack of information provided on planned improvements. It is recommended to provide locations on a map for future transit stop improvements.

City of Clovis
City of Coalinga
City of Firebaugh
City of Fowler
City of Fresno
City of Huron
City of Kerman
City of Kingsburg
City of Mendota
City of Orange Cove
City of Parlier
City of Reedley
City of San Joaquin
City of Sanger
City of Selma
County of Fresno

Response: Again, given the long-range and visionary nature of the LRTP, identifying specific locations for bike racks and bus shelters is beyond the scope of this Plan. Specific locations and projects will be identified in future Regional Transportation Plans (RTPs) as well as individual transit operators' Short-Range Transit Plans (Plans). Several Projects in Table 2 deal with bus stop facilities and shelters.

Comment:

It is recommended to provide existing and forecast ridership information on transit and van pools to accommodate future ridership. This may assist in identifying new strategies and funding opportunities to increase ridership.

Response: The LRTP notes several trends, some conflicting, which are affecting transit ridership: higher auto ownership rates; new technology; micro-transit; Transportation Network Companies; shared vehicles; and new options for accessing transit via walking, biking and new forms of mobility. All of these factors make forecasting transit ridership over the long term difficult because of the number of unknowns to be considered. For example, each of the region's operators is exploring forms of flexibly dispatched micro-transit. Given the limited experience with this type of service forecasting micro-transit ridership is not possible at this time, though pilot programs described in the LRTP will be informative. In the meantime, operators will continue to report ridership trends in their SRTPs, including near-term ridership projections.

Comment:

FCRTA continues to promote and enhance their transit opportunities for the elderly, disabled, low income, students, and the general public. Caltrans is aware that FCRTA's fares have been unchanged for the past 15 years and is commended for not raising their fares to accommodate riders of the disadvantage communities they serve.

Response: Comment noted, and Caltrans' commendation is appreciated.

Comment:

Caltrans encourages FCOG and FCRTA to continue to apply for Rural Transit & Intercity Bus - FTA Section 5311 and 5311(f) funds Active Transportation Planning Grants, Caltrans Sustainable Transportation Planning Grants, and FTA Section 5339(b) Bus and Bus Facilities Discretionary Program funding opportunities which may further assist future efforts in transit planning projects.

Response: Comment noted; Caltrans' continued administration of these diverse funding programs that support transit agencies is appreciated.

Comment:

FCOG is commended for their public outreach efforts and public engagement activities in reaching out to community members of Fresno County to develop a better comprehensive long-range transit plan for its residents and surrounding areas.

Response: Comment noted; Caltrans' commendation is appreciated.

Comment:

Caltrans recommends inclusion of the responsible parties FCOG, VRPA Technologies and accredit the appropriate grant program on the cover title page of the final product.

Response: The inside cover of the final LRTP will note the responsible parties and will accredit the Caltrans Sustainable Transportation grant program which funded the development of the LRTP.

We thank Caltrans for funding the LRTP development process, and your active participation in the plan development process is also much appreciated. Please feel free to contact Kristine Cai at 559-233-4148 should you have any further questions or comments regarding the LRTP.

Sincerely,

A handwritten signature in blue ink, appearing to read "Tony Boren", with a stylized, cursive script.

Tony Boren

Executive Director