BUTTE COUNTY

2020 REGIONAL TRANSPORTATION PLAN / SUSTAINABLE COMMUNITIES STRATEGY

2020 - 2040

Adopted:
December 10, 2020

Prepared by
Butte County Association of Governments

326 Huss Drive, Suite 150
Chico CA 95928
530-809-4616
www.bcag.org
www.blinetransit.com

BCAG
BUTTE COUNTY ASSOCIATION OF GOVERNMENTS

This document is available online at http://www.bcag.org/Planning/RTP--SCS/index.html.

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Butte Regional Transit

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RESOLUTION NO 2020/2021 #06

A RESOLUTION OF THE BUTTE COUNTY ASSOCIATION OF GOVERNMENTS CERTIFYING THE FINAL SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT FOR THE 2020 REGIONAL TRANSPORTATION PLAN AND SUSTAINABLE COMMUNITIES STRATEGY, ADOPTING A MITIGATION MONITORING AND REPORTING PROGRAM, AND APPROVING THE 2020 REGIONAL TRANSPORTATION PLAN AND SUSTAINABLE COMMUNITIES STRATEGY

WHEREAS, the Butte County Association of Governments (BCAG) is the designated Metropolitan Planning Organization (MPO) comprised of five member agencies: Butte County, the cities of Biggs, Chico, Gridley, Oroville or Paradise; and

WHEREAS, BCAG is the agency responsible for maintaining a continuing, cooperative, and comprehensive transportation planning process which will result in a Regional Transportation Plan and Sustainable Communities Strategy pursuant to 23 U.S.C. 134(a) and (g), 49 U.S.C. §5303(f); 23 C.F.R. §450, and 49 C.F.R. §613; and

WHEREAS, BCAG is the Lead Agency in preparing the Regional Transportation Plan and Sustainable Communities Strategy and is required to comply with the California Environmental Quality Act (CEQA) [Cal. Pub. Res. Code § 21000 et seq.]; and

WHEREAS, pursuant to CEQA Guidelines Section 15002(f), an Environmental Impact Report (EIR) is the public document used by a governmental agency to analyze the significant environmental effects of a proposed project, to identify alternatives, and to disclose possible ways to reduce or avoid the potential environmental damage; and

WHEREAS, CEQA Guidelines Section 15168(a) specifies that a Program EIR (PEIR) be prepared on a series of actions that can be characterized as one large project and are related either: (1) geographically; (2) as logical parts in a chain of contemplated actions; (3) in connection with issuance of rules, regulations, plans, or other general criteria, to govern the conduct of a continuing program; or (4) as individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects which can be mitigated in similar ways; and

WHEREAS, BCAG has determined that a Supplemental EIR (SEIR) is appropriate to assess the environmental impact of the 2020 Regional Transportation Plan (RTP) and Sustainable Communities Strategy (SCS) for the Butte County regional given no major new projects and policies since the 2016 RTP/SCS; and

WHEREAS, the 2020 RTP/SCS is consistent with Section 15163 of the CEQA Guidelines for supplemental EIRs as only minor additions and changes are necessary to make the 2016 RTP/SCS EIR adequate for the project as revised and conditions described in Section 15162 of the CEQA Guidelines do not apply to the 2020 RTP/SCS; and

WHEREAS, the SEIR is a regional planning level analysis which analyzes environmental impacts of the 2020 RTP/SCS on a broad planning level, while presenting as much detailed information about the individual RTP projects that is available at this time; and

WHEREAS, project-specific impacts of the individual RTP project should be analyzed in detail by the implementing agencies as the individual projects are designed, engineered, and considered for approval at a later date; and

WHEREAS, pursuant to CEQA Guidelines Section 15086, BCAG consulted with and requested comments on the Draft SEIR EIR from responsible agencies, trustee agencies with resources affected by the project; and other state, federal, and local agencies which exercise authority over resources which may be affected by the RTP; and

WHEREAS, BCAG circulated a Notice of Preparation (NOP) of an EIR for the proposed project on October 22, 2019, to trustee and responsible agencies, the State Clearinghouse, and the public; and

WHEREAS, a scoping meeting was held on November 7, 2019, at 4:00 PM in the in the BCAG Conference Room in the City of Chico to solicit concerns and issues relative to the RTP; and

WHEREAS, concerns raised in response to the NOP were considered during preparation of the Draft SEIR; and

WHEREAS, BCAG published a public notice of availability (NOA) for the Draft SEIR on October 8, 2020, inviting comments from the general public, agencies, organizations, and other interested parties; and

WHEREAS, the Draft SEIR was available for public review from October 8 through November 22, 2020; and

WHEREAS, pursuant to CEQA Guidelines Section 15088(a), BCAG, as the Lead Agency, must evaluate comments on significant environmental issues received from persons who review the Draft SEIR and must prepare a written response thereto; and

WHEREAS, BCAG received no comment letters, regarding the Draft Program EIR; and

WHEREAS, the Final SEIR document and the Draft SEIR, as amended by the Final SEIR, constitute the Final SEIR; and

WHEREAS, when making the findings pursuant to CEQA Guidelines Section 15091(a)(1), the agency must also adopt a program for reporting on or monitoring the changes which have been either required in the project or made a condition of approval to avoid or substantially lessen significant effects, and which are fully enforceable through permit conditions, agreements, or other measures, as required by CEQA Guidelines Section 15091(d); and

WHEREAS, consistent with the requirements of the CEQA Guidelines, a Mitigation Monitoring and Reporting Program (MMRP) has been prepared to outline the procedures for implementing all mitigation measures identified in the SEIR; and

WHEREAS, according to CEQA Guidelines Section 15093(b), where the decision of the public agency allows the occurrence of significant effects which are identified in the Final SEIR but are not avoided or substantially lessened, the agency must issue a Statement of Overriding Considerations setting forth the specific reasons to support its actions based on the Final SEIR or other information in the record; and

WHEREAS, CEQA Guidelines Section 15093(c) provides that if an agency makes a statement of overriding considerations, the statement should be included in the record of the project approval and should be mentioned in the Notice of Determination.

WHEREAS, The results from the 2019 FTIP and 2020 RTP emissions analysis show that current and future emissions of the ozone precursors ROG and NOx will be no greater than the 2011 and 2017 base year emissions levels. Thus, Butte County, in accordance with the Transportation Conformity Rule requirements applicable to Butte County (§51.464 and §51.436 – 51.440), has satisfied the "no-greater-than-2011" test for the 2008 8-hour federal ozone NAAQS and the "no-greater-than-2017" test for the 2015 8-hour federal ozone NAAQS. **Based on this analysis, the 2020 Regional Transportation Plan (RTP) and 2019 Federal Transportation Improvement Program (FTIP) conforms to the applicable State Implementation Plan (SIP) and all applicable sections of the EPA's Transportation Conformity Rule.**

NOW, THEREFORE, BE IT RESOLVED that:

1. The Butte County Association of Governments finds as follows:

   (a) The Final Supplemental Environmental Impact Report (SEIR) prepared for the 2020 Regional Transportation Plan (RTP) and Sustainable Communities Strategy (SCS) for the Butte County region was completed in compliance with the California Environmental Quality Act; and

   (b) The Final SEIR was presented to BCAG's decision making body, the BCAG Board; and

   (c) The BCAG Board has reviewed and considered information contained in the Final SEIR; and

   (d) The Final SEIR reflects BCAG's independent judgment and analysis; and

   (e) The Final SEIR consists of the Draft SEIR and the Final SEIR, which includes a Mitigation Monitoring and Reporting Program; and

2. Based on and incorporating all of the foregoing recitals and findings supported by substantial evidence in the record and set forth in the "Findings and Statement of Overriding Considerations," attached hereto and incorporated by reference, BCAG hereby certifies the Final SEIR for the 2020 RTP and adopts the Mitigation Monitoring and Reporting Program; and

3. BCAG hereby approves the Butte County 2020 Regional Transportation Plan and Sustainable Communities Strategy and Air Quality Conformity Determination.

BE IT FURTHER RESOLVED, that the BCAG BOARD of Directors finds that the RTP/SCS achieves the regional greenhouse gas targets established by the California Air Resources Board and meets the requirements of SB 375;

BE IT FURTHER RESOLVED that the BCAG Board of Directors authorizes its staff to make any necessary changes to the RTP/SCS document to ensure the timely delivery and approval of the RTP/SCS to the appropriate state and federal agencies;

PASSED AND ADOPTED by the Butte County Association of Governments on the 10th day of December 2020 by the following vote:

AYES:
Connelly, Lucero, Ritter, Lambert, Teeter, Thompson, Jones

NOES:
None

ABSENT:
Reynolds, Crye, Johnson

ABSTAIN:
None

APPROVED: Bill Connelly
BILL CONNELLY, CHAIR
BUTTE COUNTY ASSOCIATION OF GOVERNMENTS

ATTEST:
JON A. CLARK, EXECUTIVE DIRECTOR
BUTTE COUNTY ASSOCIATION OF GOVERNMENTS

ACRONYMS FOR BCAG

ACRONYM	MEANING
AB	Assembly Bill
ACOE	Army Corps of Engineers
AFR	Accident Frequency Ratio
APS	Alternative Planning Strategy
AQMD	Air Quality Management District
ARB	Air Resource Board
AVL	Automatic Vehicle Location
BCAG	Butte County Association of Governments
CALCOG	California Association Council of Governments
CARB	California Air Resource Board
CTP	California Transportation Plan
CEQA	California Environmental Quality Act
CMAQ	Congestion Mitigation & Air Quality
CON	Construction
CTC	California Transportation Commission
CTIPS	California Transportation Improvement Program System
DFG	California Department of Fish and Game
DOT	Department of Transportation
EIR	Environmental Impact Report
EMFAC	Emissions Factors
EPA	Environmental Protection Agency
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
FTIP	Federal Transportation Improvement Program
FY	Fiscal Year
GARVEE	Grant Anticipation Revenue Vehicle Program
GhG	Greenhouse Gas Emissions
GIC	Geographical Information Center
GIS	Geographic Information Systems
GPS	Global Positional Satellite
HCP	Habitat Conservation Plan
IIP	Interregional Improvement Program
IPG	Intermodal Planning Group
ITIP	Interregional Transportation Improvement Program
ITS	Intelligent Transportation Systems
JPA	Joint Powers Agreement
LAFCO	Local Agency Formation Commission
LTF	Local Transportation Fund
MPO	Metropolitan Planning Organization
NAAQS	National Air Quality Standards
NCCP	Natural Community Conservation Plan
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service (Also NOAA Fisheries)

ACRONYM	MEANING
NOAA	National Oceanic and Atmospheric Administration Fisheries (Also NMFS)
OWP	Overall Work Program
PA&ED	Project Appproval & Environmental Document
PDT	Project Development Team
PEER	Permit Engineering Evaluation Report
PL	Federal Planning Funds
PPH	Passengers Per Revenue Hour
PLH	Public Lands Highway
PPM	Planning Programming & Monitoring
PPNO	Project Programming Number
PS&E	Plans, Specifications & Estimates
PSR	Project Study Report
PTMISEA	Public Transportation Modernization Improvemant and Service Enhancement Account
PUC	Public Utilities Code
R/W	Right of Way
RFP	Request for Proposals
RHNA	Regional Housing Needs Allocation
RHNP	Regional Housing Needs Plan
RIP	Regional Improvement Program
RTAC	Regional Target Advisory Committee
RTIP	Regional Transportation Improvement Program
RTP	Regional Transportation Plan
RTPA	Regional Transportation Planning Agency
SACOG	Sacramento Area Council of Governments
SAFETEA-LU	Safe Accountable Flexible Efficient Transportation Equity Act: A Legacy for Users
SCEA	Sustainable Community Environmental Assessment
SCS	Sustainable Community Strategy
SDP	Strategic Deployment Plan
SHOPP	State Highway Operation Protection Program
SSTAC	Social Services Transportation Advisory Council
STA	State Transit Assistance
STIP	State Transportation Improvement Program
TAC	Transportation Advisory Committee
TAOC	Transit Administrative Oversight Committee
TCRP	Transportation Congestion Relief Program
TDA	Transportation Development Act
TE	Transportation Enhancements
TIP	Transportation Improvement Program
TPP	Transit Priority Project
TSGP	Transit Security Grant Program
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
UTN	Unmet Transit Needs
WE	Work Element

BUTTE COUNTY
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INTRODUCTION

2020 Regional Transportation Plan & Sustainable Communities Strategy

The Regional Transportation Plan / Sustainable Communities Strategy (RTP/SCS) specifies the policies, projects, and programs necessary over a 20+ year period to maintain, manage, and improve the region's transportation system. The Butte County 2020 RTP/SCS covers the 20-year period between 2020 and 2040. The RTP/SCS is required to be updated every four years. The RTP/SCS includes an Air Quality Conformity Analysis and Determination, as well as a Program Environmental Impact Report.

RTP/SCS Purpose

The RTP/SCS provides a foundation for transportation decisions by local, regional, and state officials. This foundation is based on a vision of an efficient and environmentally sound multi-modal system. The RTP/SCS also serves as the foundation for the development of the:

- Federal Transportation Improvement Program
- Regional Transportation Improvement Program
- Interregional Transportation Improvement Program for Butte County

2020 RTP/SCS Preparation

The RTP/SCS is prepared by the Butte County Association of Governments (BCAG). BCAG is the federally designated Metropolitan Planning Organization (MPO) and the state designated Regional Transportation Planning Agency for Butte County. BCAG has a 10 member Board of Directors, including each of the five Butte County Supervisors and one council person from each of the five incorporated cities/town; the cities of Biggs, Chico, Gridley, Oroville, and the Town of Paradise. A current list of the Board members can be found here: http://www.bcag.org/Meetings--Agendas/Board-of-Directors/index.html.

BCAG held various RTP/SCS public workshops beginning in 2018 and spanning through 2020 in the cities of Chico, Gridley, Oroville, and the Town of Paradise. In 2020, as a result of COVID-19, much of the outreach was done via zoom after shelter-in-place recommendations by the Department of Public Health were made. Development of the 2020 RTP/SCS was made in consultation with its member jurisdictions, BCAG's advisory committees, local Tribal Governments, interested state and federal agencies, and the public.

Document Structure

The RTP/SCS is divided into four sections with thirteen specific chapters; the Air Quality Demonstration Requirements and the Environmental Impact Report. The four required sections include:

- **1. Policy Element** – Outlining the goals, policies, and objectives of the RTP
- **2. Action Element** – Identifying each mode of transportation with recommended improvements by short range and long range plans
- **3. Financial Element** – Identifying the funding strategy to implement the Action Element, including a set of recommended projects ensuring financial constraint
- **4. Sustainable Communities Strategy** – Addressing SB 375 / Global Greenhouse Gas emissions
- **Air Quality Conformity Analysis and Determination (Appendix 1)**
- **Environmental Impact Report (Separate Attachment)**

Context of 2020 RTP/SCS and Impacts of Paradise Camp Fire on November 8, 2018

On November 8, 2019 the Camp Fire destroyed Butte County's 2nd largest city, the Town of Paradise. Approximately 153,000 acres burned resulting in the tragic loss of 85 fatalities, 13,972 residences, 528 commercial buildings, 4,293 other buildings. It was the most devastating wildfire in modern history.

This disastrous event occurred after the initiation of the development of this 2020 RTP/SCS. BCAG, as the designated Metropolitan Planning Organization (MPO) for the Butte County region, is responsible for developing long term regional growth forecasts and maintaining a regional travel demand model for the Butte County region. Both products assist in the preparation and analysis of regional transportation, housing, land use and air quality plans and the associated environmental documents. The forecasts and models are also used by local agencies in preparing and analyzing transportation and land use plans and projects.

Following the Camp Fire, the estimates of current population, housing, land use, and travel are unknown. In addition, the existing long-term forecasts of these planning elements are likely no longer applicable to the region. As a result, BCAG is preparing the "Post-Camp Fire Regional Population & Transportation Study" to analyze regional population, housing, employment, and traffic data for pre (2017/18), post (2019/20), and future time periods. The study will develop several scenarios for population and travel for the 2025, 2035 and 2045 period(s) based on existing research, empirical data, and existing policies available at the time of study development. In addition, an update of the region's transit and non-motorized transportation plan will be completed with the collected data. The Study will inform the 2024 RTP/SCS and various land use, transportation, and housing plans and projects beyond the "best available" data used in development of the 2020 RTP/SCS.

Planning Process & Consultation

The RTP/SCS is the result of a broad planning process. This process involves many government agencies, as well as private interests and the public. Early consultation workshops were held prior to development of the RTP/SCS document. BCAG first updated its Public Participation Plan prior to development the RTP/SCS. An early consultation outreach effort was made to Caltrans' suggested list of interested agencies, including various state and federal resource agencies, local Tribal Governments, interest groups, and BCAG's advisory committees. All public workshops were noticed in the local newspapers and held at various times during the day in order to give interested people various opportunities to be involved. In addition, the RTP/SCS was developed in consultation with its advisory committees, and presentations were made at the Board of Directors meetings which are open to the public. Appendix 3 documents the efforts made to engage the above listed groups.

All components of the Plan were distributed to the Transportation Advisory Committee (TAC). The TAC includes representatives from each of the cities, the county, and the state, as well as representatives from the public, the air district, and the Native American communities. Various government-to-government participation attempts to the local Rancherias were initiated by BCAG. Documentation of BCAG's public involvement outreach is included as an appendix. BCAG also sent correspondence to the surrounding counties, including Tehama County, Glenn County, and the Sacramento Area Council of Governments (SACOG).

The Interagency Consultation Review (ICR) Group is comprised of BCAG, the Butte County Air Quality Management District, Caltrans, FHWA, FTA, EPA, and the California Air Resources Board. The ICR was contacted via email to agree to the emissions analysis and conformity determination requirements applicable to the RTP/SCS. All pertinent material concerning air quality was reviewed with the ICR group.

Butte County is home to five local Native American Rancherias. These include Berry Creek Rancheria of Maidu Indians of California, Mechoopda India Tribe of the Chico Rancheria, Enterprise Rancheria Estom Yumeka Maidu, Mooretown Rancheria and KonKow Valley Band of Maidu Indians. Each Rancheria is contacted concerning the development of the RTP/SCS. In addition, those Rancherias expressing an interest regarding BCAG's planning and programming activities receives an agenda to the BCAG TAC meetings, which include any RTP/SCS development material. BCAG has also extended several invitations to provide government-to-government at site workshops concerning the RTP, as well as any other transportation related workshops. Currently, two Rancheria representatives have attended the BCAG Transportation Advisory Committee meetings.

BCAG will continue to attempt to engage the resource agencies in BCAG's metropolitan planning process. BCAG has maintained a positive working relationship with all interested agencies and individuals. BCAG maintains and "email interest" distribution list for any individual, agency or private company wishing to be involved on its various

planning, programming and project development activities. The RTP/SCS is intended to be consistent with the California Transportation Plan (CTP) developed by Caltrans.

Sustainable Communities Strategy Requirements

In 2008, Senate Bill 375 (SB 375), also known as the Sustainable Communities and Climate Change Act of 2008, was passed as the mechanism to implement passenger vehicle greenhouse gas reductions outlined in Assembly Bill 32 (AB 32).

Under SB 375, BCAG, as the region's Metropolitan Planning Organization (MPO), has been designated by the state to prepare the area's "Sustainable Communities Strategy" (SCS) as an additional component of the 2020 RTP. The SCS demonstrates the integration of land use, housing, and transportation for the purpose of reducing greenhouse gas (GHG) emissions from passenger vehicles. In addition, SB 375 amends CEQA to provide incentives for residential and residential mixed use projects that help to implement the 2020 RTP/SCS.

The SCS has been prepared by BCAG as an integrated component of the RTP's Action Element, and is included within Chapter 4 – Sustainable Communities Strategy. Specific requirements of SB 375, and the locations in which these have been addressed within the 2020 RTP/SCS, is included as Appendix 7.

Regulatory Requirements

BCAG, as the RTPA, is required by State law to prepare the RTP/SCS and transmit it to the California Transportation Commission (CTC) and the California Department of Transportation (Caltrans) every four years. The RTP/SCS is required to be developed as per State legislation, Government Code Section 65080 et seq. of Chapter 2.5, and Federal legislation, U.S. Code, Title 23, Sections 134 and 135, et seq.

The RTP/SCS is required to contain a Policy, Action, Financial Element, Sustainable Communities Strategy (SCS), and to reference environmental and air quality documents. The RTP/SCS is to be adopted by the BCAG Board of Directors, and then submitted to Caltrans and the CTC. State regulations require the SCS be distributed to the California Air Resources Board for approval, once adopted by the BCAG Board of Directors. Federal regulations issued by the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) also require the development and adoption of an RTP/SCS.

Air Quality Requirements

The purpose of this conformity determination is to ensure that BCAG's plans and programs "conform" to all applicable federal air quality requirements.

The Clean Air Act Section 176I (42 U.S.C. 7506 I) and EPA's transportation conformity regulations (40 CFR 93.104(b) and (c)) require that each new regional transportation plan (RTP) and transportation improvement plan (TIP) be demonstrated to conform to the State

Implementation Plan (SIP) before the RTP and FTIP are approved by the MPO or accepted by the U.S. Department of Transportation (DOT). This ensures that federally supported highway and transit project activities will not cause new air quality violations, worsen existing violations, or delay timely attainment of the relevant national ambient air quality standards (NAAQS). Conformity currently applies under EPA's rules to areas that are designated non-attainment, and those re-designated to attainment after 1990 ("maintenance areas").

The region's last conformity determination and emissions analysis was adopted by the BCAG Board of Directors on September 27th, 2018 as part of the approval for the 2019 FTIP. This action was then approved by the Federal Transit Authority (FTA) and Federal Highways Administration (FHWA) on December 7th, 2018.

This transportation air quality conformity determination and emissions analysis shows that transportation projects programmed in the 2020 Butte County Regional Transportation Plan (RTP) and 2019 Federal Transportation Improvement Program (FTIP) are consistent with the applicable SIP.

Butte County's Air Quality Status

Ozone

Effective July 20, 2012, Butte County was designated marginal nonattainment under EPA's federal 2008 8-hour ozone National Ambient Air Quality Standards (NAAQS).
Effective August 3, 2018, Butte County was designated marginal nonattainment under EPA's federal 2015 8-hour ozone NAAQS.

Because of these designations, transportation projects occurring within Butte County are subject to an air quality conformity determination for the ozone precursors Reactive Organic Gases (ROG) and Oxides of Nitrogen (NOx).

Previously, under EPA's 1-hour ozone rule, Butte County was designated "non-attainment – transitional" (Section 185A) and was not required to develop an attainment SIP with an emissions budget.

Since no emissions budget exists from a prior SIP submittal that has been found adequate by EPA, or was part of an approved SIP, an interim conformity test applies. In order to make a conformity determination under the 2008 federal 8-hour standard, future emissions of ROG and NOx must be no greater than 2011 emissions levels, or the build/no-build test must be passed. Similarly, to make a conformity determination under the 2015 federal 8-hour standard, future emissions of ROG and NOx must be no greater than 2017 emissions levels, or the build/no-build test must be passed.

Carbon Monoxide

As a result of a 1998 SIP revision approved by EPA, Butte County (Chico Urbanized area) was re-designated from non-attainment to attainment with a Maintenance SIP for carbon monoxide (CO). In 2007, the 1998 Maintenance SIP was updated by ARB and approved by

EPA for the second decade of the maintenance period. In the BCAG area, transportation conformity requirements for CO ended June 1, 2018.

Fine Particulate Matter (PM2.5)

As a result of a 2018 SIP revision approved by EPA, Butte County (Chico Urbanized area) was re-designated from non-attainment to attainment with a Maintenance SIP for fine particulate matter (PM2.5) under the EPA 2006 24-hour PM2.5 NAAQS.

As part of EPA's final action, the determination was made that contributions from motor vehicle emissions in the non-attainment area are insignificant. As a result of this finding, BCAG is no longer required to perform regional emissions analyses for either directly emitted PM2.5 or nitrogen oxides as part of future PM2.5 conformity determinations for the 2006 24-hour PM2.5 NAAQS for the Chico area.

The complete Air Quality Conformity Analysis and Determination is included as Appendix 1.

California Environmental Quality Act (CEQA)

BCAG has determined that a supplemental program-level environmental impact report (SEIR) is required for the 2020 RTP/SCS pursuant to the requirements of the California Environmental Quality Act. A program EIR is described as an EIR which may by prepared on a series of actions that can be characterized as one large project and are related either: (1) geographically, (2) as logical parts in the chain of contemplated actions, (3) in connection with issuance of rules, regulations, plans or other general criteria to govern the conduct of a continuing program, or (4) as individual activities carried out under the same authorizing statutory or regulatory authority hand having generally similar ways. A program-level analysis SEIR *will be* prepared in accordance with the Public Resources Code sections relevant to CEQA and the CEQA Guidelines. The SEIR informs the decision-makers, agencies, and the public of the broad environmental effects of the proposed 2020 RTP/SCS project and will be used to evaluate subsequent projects and activities under the 2020 RTP/SCS.

Title VI

Title VI of the Civil Rights Act of 1964 set a standard that authoritatively outlawed discrimination in the conduct of all federal activities. It reads as follows: "No person in the United States shall, on the ground of race, color, or national origin be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance." Although considerable progress has been made during the 1990's, individuals both inside and outside government are troubled by the high and adverse environmental impacts of private or governmental actions that fall disproportionately on populations protected by laws such as the civil rights act. The term "environmental justice" was created by people concerned that everyone within the United States deserves equal protection under the

county's laws. Executive Order 12898 issued in 1994, responded to this concern by organizing and explaining in detail the federal government's commitment to promote environmental justice. Each Federal agency was directed to review its procedures and to make environmental justice part of its mission by identifying and addressing the effects of all programs, policies, and activities on minority and low-income populations.

FHWA and FTA guidance on Environmental Justice (EJ) requires that the Metropolitan Planning Organization (MPO) ensure that traditionally underrepresented groups are engaged in the regional transportation planning process and demonstrate how their influence and feedback impacted development of the RTP/SCS. Further, the guidance also requires an evaluation of the adopted plan to ensure that there is no disparate negative impact borne by low-income or minority communities. FHWA and FTA have embraced the principles of environmental justice as a means toward improving the transportation decision-making process. There are three fundamental principles at the core of EJ:

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

Environmental Justice is applicable at the project level when project sponsors are proposing to build a new project in a local community and federal funds are involved. Unfortunately, neither Title VI nor Executive Order 12898 prescribes the specific methods and process for ensuring environmental justice in transportation planning.

PHYSICAL SETTING

Butte County encompasses approximately 1,665 square miles in north central California (Figure 1-1). The western part of the county is located in the northern Sacramento Valley, while the eastern portion extends into the foothills of the Cascade and Sierra Nevada Mountain Ranges. Elevations range from 50 feet above sea level at Butte Sink along the Sacramento River at the southwest portion of the county, to 7,087 feet above sea level at Humboldt Summit near the county's northeastern border.

Butte County has five incorporated cities which range from small farming communities to regional urban centers. The Cities of Biggs and Gridley are located about five miles apart in the valley area in the southwest portion of the county, while the City of Chico is located further north in the western valley area. The City of Oroville, the County seat, is located along the Feather River in the southern portion of the county, and the Town of Paradise is on a ridge in the foothills near the center of the county (Figure 1-2).

Numerous unincorporated communities also dot Butte County. Feather Falls, Berry Creek, and Brush Creek are in the foothills in the southeastern portion of the county, while Paradise Pines, Magalia, Stirling City, Forest Ranch, Cohasset, and Butte Meadows are in the foothills in the northeastern area. The western portion of the valley includes the communities of Dayton, Durham, Nelson, and Richvale, with Palermo, Honcut, Cherokee and Forbestown further to the east (Figure 1-2).

Butte County is home to five local Native American Rancherias. These include Berry Creek Rancheria of Maidu Indians of California, Mechoopda India Tribe of the Chico Rancheria, Enterprise Rancheria Estom Yumeka Maidu, Mooretown Rancheria and KonKow Valley Band of Maidu Indians. The location of these Rancherias is also included as part of Figure 1-2.

Figure 1-1
Butte County Location Map

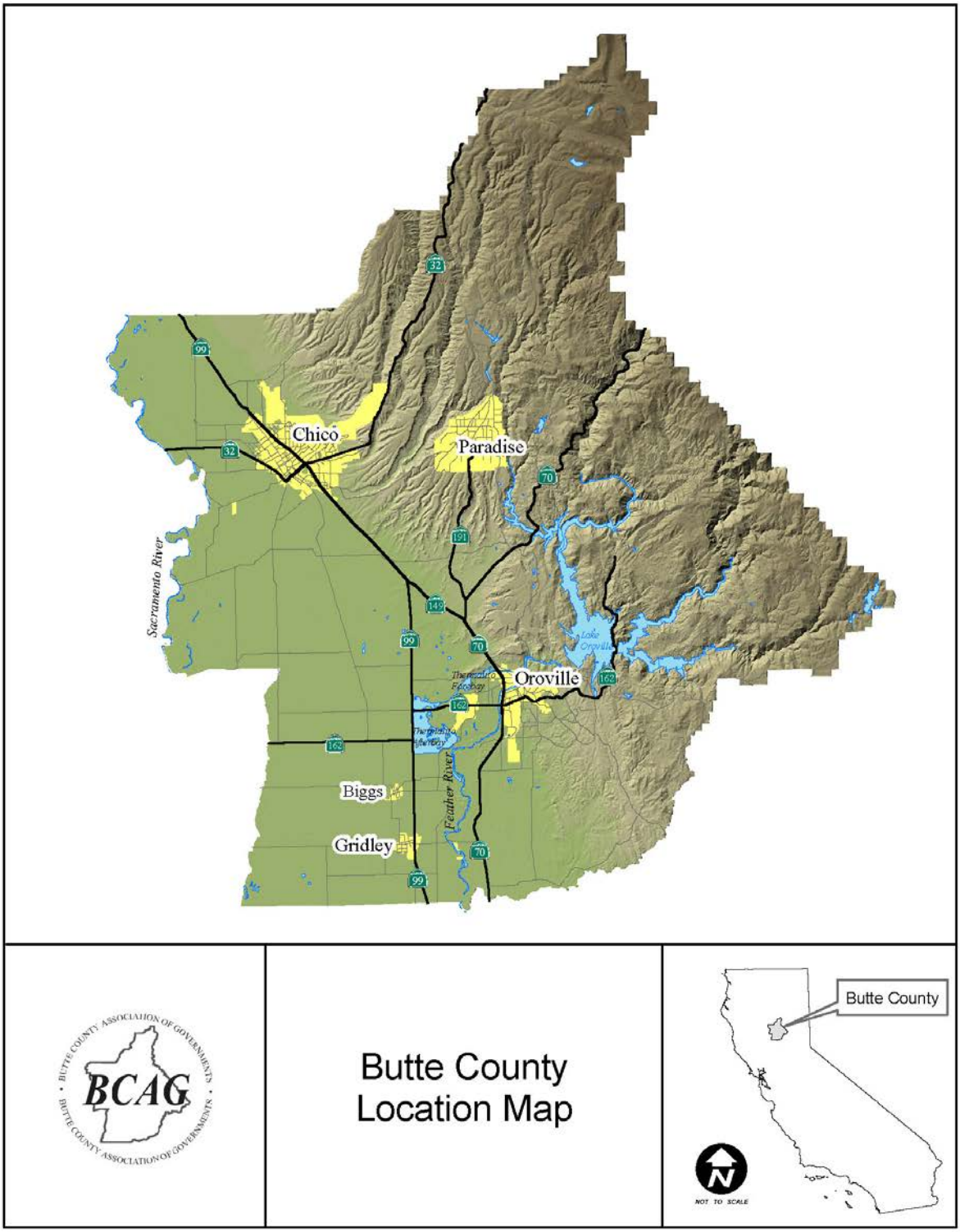
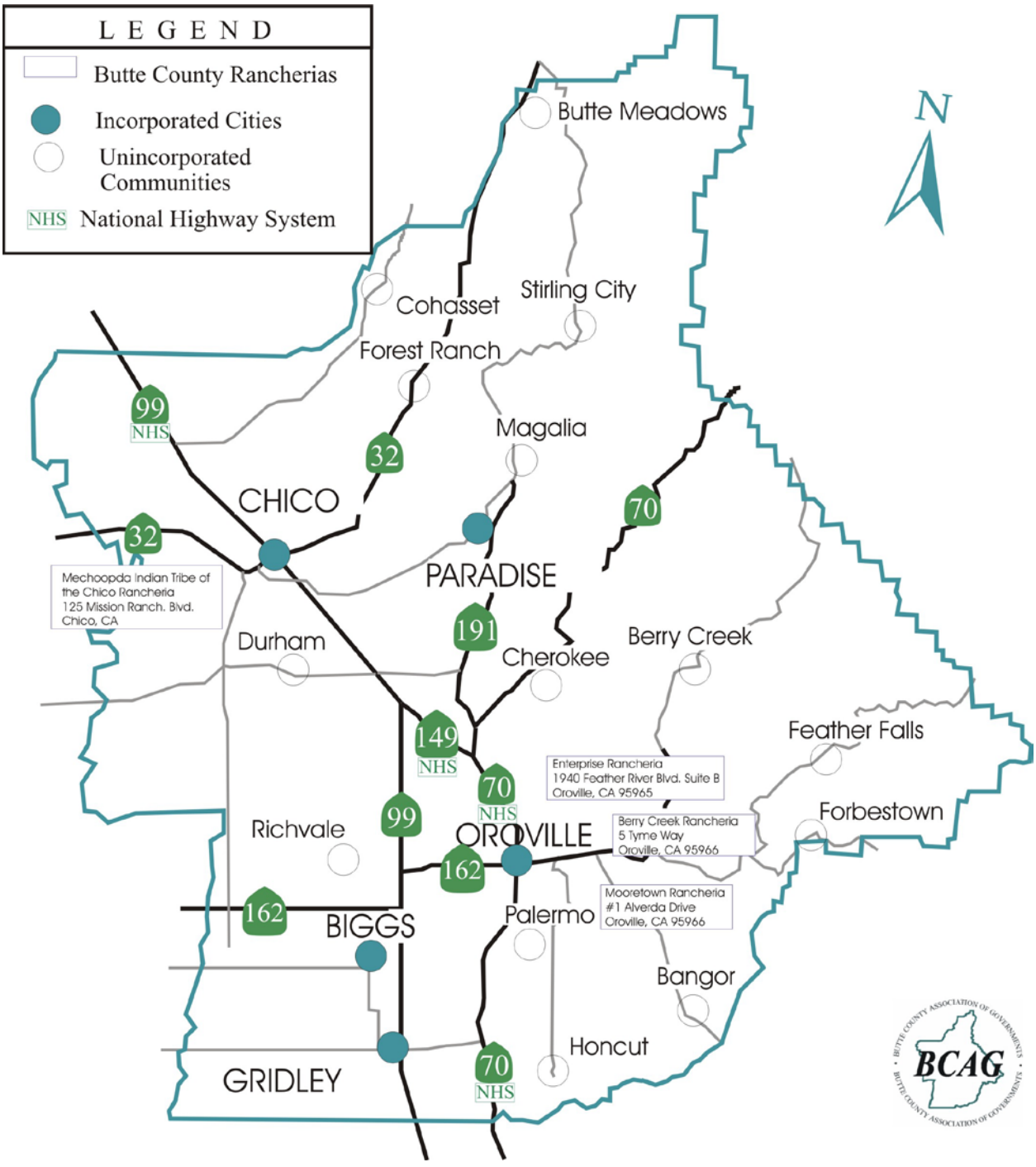


Figure 1-2
Butte County Rancherias
Incorporated Cities & Unincorporated Communities



POLICY ELEMENT

The purpose of the Policy Element is to identify legislative, planning, financial and institutional issues and requirements, as well as any areas of regional consensus. The Policy Element presents guidance to decision-makers of the implications, impacts, opportunities, and foreclosed options that will result from implementation of the RTP. The Policy Element is a resource for providing input and promoting consistency of action among state, regional and local agencies. The policy element is intended to be consistent with the California Transportation Plan (CTP). California statutes state that each RTP shall (Government Code Section 65080 (b)) include a Policy Element that:

1. Describes the transportation issues in the region;
2. Identifies and quantifies regional needs expressed within both short and long-range planning horizons (Government Code Section 65080(b)(1)); and,
3. Maintains internal consistency with the Financial Element and fund estimates.

Senate Bill 391 (SB 391, 2009) required the California Department of Transportation to prepare the California Transportation Plan (CTP), the State's long-range transportation plan by December 2015, to reduce GHG emissions and VMT. The Plan states this system must reduce GHG emissions to 1990 levels from current levels by 2020, and 80 percent below the 1990 levels by 2050 as described by AB 32 and Executive Order S-03-05. The CTP 2040 demonstrated how major metropolitan areas, rural areas, and state agencies can coordinate planning efforts to achieve critical statewide goals. It is important to align and implement the goals, policies, and strategies laid out in the CTP 2040, and to continue coordination and collaboration with Caltrans during the development of the CTP 2050 update that will be adopted in December of 2020. The following policies, objectives and actions work towards aligning the RTP/SCS with the CTP.

1. Policy on Highways, Streets, and Roads

Goal: A safe and efficient regional road system that accommodates the demand for movement of people and goods.

Objective	Policy / Action
1.1 Strive to improve safety and operations of local and state highway system	1.1.1. Fund and implement projects identified on the Tier 1 priority list in the Action Element of the RTP.
	1.1.2. Pursue discretionary state & federal funding such as IIP, SHOPP, HBP, HSIP etc.
1.2 Identify and prioritize improvements to the regional road system.	1.2.1. Prepare and apply evaluation criteria to prioritize regional road projects identified to improve the overall transportation system of the region.

	1.2.2. Evaluation criteria will evaluate how the projects achieve the following objectives: 1) an integrated and balanced road system; 2) improvement in traffic flow and safety; 3) minimize environmental effects; and 4) minimize adverse impacts on agricultural land.
	1.2.3. Use Regional Improvement Program funds to finance the prioritized regional improvements.
	1.2.4 Use BCAG Travel Demand Model performance measures as appropriate to quantify project benefits.

2. Policy on Transit

Goal: Provide an efficient, effective, coordinated regional transit system that increases mobility for urban and rural populations, including those located in disadvantaged areas of the region.

Objective	Policy / Action
2.1. Meet all transit needs that are “reasonable to meet.”	2.1.1. Provide complementary dial-a-ride transit services for the elderly, handicapped, and those residents not served by a fixed route service within the service area.
	2.1.2. Provide adequate fixed route transit system to serve the general public, including those populations who rely most on transit.
	2.1.3. Maintain the locally developed Human Services Coordinated Transportation Plan.
2.2. Increase transit ridership that exceeds annual population growth rate for Butte County.	2.2.1. Expand service as necessary to increase overall ridership.
	2.2.2. Support Intelligent Transportation System (ITS) projects which improve transit operations.
	2.2.3. Work with larger employers (i.e. University) for transit incentive programs.
	2.2.4. Evaluate fixed route system and identify best methods for increasing ridership, as needed.
	2.2.5. Explore “best practices” in other regions to learn from and consider for increased ridership and customer satisfaction for transit.
	2.3.1. Include Social Services Transportation Advisory Council and Coordinated

2.3. Promote citizen participation and education in transit planning and operations.	Transportation Working Group in the regional transit planning process.
	2.3.2. Use the BCAG newsletter and website for transit education and information.
2.4. Maintain a reliable transit system.	2.4.1. Monitor contractor for timely transit operations reporting.
	2.4.2. Conduct Preventative Maintenance Inspections for transit fleet.

3. Policy on Rail

Goal: A rail system that provides safe and reliable service for people and goods.

Objective	Policy / Action
3.1. Maintain and expand passenger service through Butte County.	3.1.1. Monitor the activities of Amtrak to assure passenger rail services in Butte County.
	3.1.2. Encourage the High Speed Rail Authority to consider implementing service connecting Chico to Sacramento
	3.1.3. Pursue state and federal grant funding for rail safety projects.

4. Policy on Goods Movement

Goal: Provide a transportation system that enables safe movement of goods in and through Butte County.

Objective	Policy / Action
4.1. Provide an adequate regional road system for goods movement.	4.1.1. Work with state and federal legislators to lobby for funding to develop continuous four lane highway to Chico on the SR 70/99 Corridor.
	4.1.2. Leverage regional share funds for Caltrans interregional share and State Highway Operations and Protection Program.

5. Policy on Aviation

Goal: A fully functional and integrated air service and airport system complementary to the countywide transportation system.

Objective	Policy / Action
5.1. Maintain daily commercial airline service to the Bay Area.	5.1.1. Support the acquisition of commercial airline service in Butte County.
5.2. Work with local agencies to ensure compatible land uses	5.2.1. Support the Butte County Airport Land Use Commission and local airports in their

around existing airports to reduce noise conflicts.	efforts to ensure compatible land uses around airports.
	5.2.2. Support the local airports in their attempts to acquire the land surrounding the airports.
5.3. Ensure Airport Master Plans are updated and revised as necessary and required.	5.3.1. Support projects that integrate air transport facilities with other modes of transportation.

6. Policy on Non-Motorized Transportation

Goal: A regional transportation system for bicyclists and pedestrians.

Objective	Policy / Action
6.1 Work with local agencies to develop and construct bicycle and pedestrian facilities including access to transit.	6.1.1. Support the construction of bike facilities and access to transit as designated in the local alternative transportation plans.
	6.1.2. Assist local jurisdictions in actively pursuing active transportation related funding.
	6.1.3. Support projects and policies for bicycles on the fixed route transit system (bike racks, etc.).
	6.1.4. Support local efforts in complete streets approach towards achieving active transportation project enhancements.
6.2 Assist local jurisdictions in pursuing grant funding.	6.2.1. Assist as requested in developing local alternative transportation plans.
	6.2.2. Participate in local bicycle advisory committees.

7. Policy on Intelligent Transportation System (ITS)

Goal: Promote the use of ITS technologies in the planning and programming process.

Objective	Policy / Action
7.1 Maintain the North State ITS System Deployment Plan.	7.1.1. Encourage the use of ITS technologies in the project development process. 7.1.2. Encourage the state to provide resources to manage and update ITS planning in the north state.
7.2 Apply Transportation Systems Management (TSM) strategies to projects where appropriate.	7.2.1 Assist local agencies in evaluating the impacts of TSM strategies.

8. Policy on Energy

Goal: Reduce usage of nonrenewable energy resources for transportation purposes.

Objective	Policy / Action
8.1 Increase public transit and carpooling/vanpooling and bicycling/walking.	8.1.1. Increase transit service where feasible.
	8.1.2. Support passage of ordinances that provide for vanpooling and carpooling programs.
	8.1.3 Support passage of ordinances that provide for park and ride lots.

9. Policy on Air Quality

Goal: Achieve air quality standards set by the Environmental Protection Agency (EPA) and the State Air Resources Board.

Objective	Policy / Action
9.1. Coordinate transportation planning with air quality planning at the technical and policy level.	9.1.1. Assist as requested by the Butte County Air Quality Management District in developing the transportation-related portions of the State Implementation Plan for air quality.
	9.1.2. Provide technical assistance to local jurisdictions in developing air quality analysis as needed for projects.
	9.1.3 Support projects which demonstrate an air quality benefit.
9.2. Implement transportation requirements established by Assembly Bill (AB) 32.	9.2.1. Work with state to identify emissions budget for Butte County.
	9.2.2 Develop transportation projects that reduce greenhouse gas emissions.

10. Policy on Land Use Strategies

Goal: Provide economical, long-term solutions to transportation problems by encouraging community designs which encourage walking, transit, and bicycling.

Objective	Policy / Action
10.1. Innovative land use and transportation planning.	10.1.1. Provide technical assistance and make available BCAG Travel Demand Model as a tool to assess road network to identify potential solutions to improve traffic movement.
	10.1.2. Assist as requested in evaluating land use strategies.
10.2. Plan future roads to accommodate land uses at a regional level.	10.2.1. Assist member jurisdictions in taking a regional approach in land use and developing a road network that serves the entire region.

	10.2.2. Encourage all jurisdictions to actively participate in the Regional Transportation Plan Update process.
10.3. Roads that are pedestrian friendly encourage bicycle trips and the use of the mass transportation system.	10.3.1. Assist member jurisdictions in developing and implementing strategies and design criteria that make new commercial and residential developments friendly to pedestrians and bicyclists.
10.4. Preserve productive farmland and land that provides habitat for rare, endangered or threatened species.	10.4.1 Consider impacts on prime farmland and areas that support protected wildlife.
	10.4.2 Encourage participation in Butte Regional Conservation Plan (BRCP).
10.5. Ensure Goals and Policies are consistent at both the regional and local levels.	10.5.1 Assist the cities, town and county during their General Plan updates to ensure that the plans are consistent with the RTP and BRCP.

11. Policy on Transportation Financing

Goal: Develop and support financing strategies that provide for continuous implementation of the Regional Transportation Plan projects and strategies.

Objective	Policy / Action
11.1. Develop and adopt policies that will provide adequate funding resources for all transportation modes and strategies.	11.1.1. Provide technical assistance to local jurisdictions in the development of transportation financing mechanisms.
	11.1.2. Consider cost efficiency / cost benefit ratio in project evaluation criteria.
11.2. Work with Cities and County on development of a regional road network fee program.	11.2.1 Work with cities, town and county to identify potential options for funding transportation system maintenance and improvements on the regional road network.
	11.2.2. Develop funding shortfall needs assessment for state highways, local streets and roads for Butte County.

12. Policy on Outreach and Coordination

Goal: Provide a forum for participation and cooperation in transportation planning and facilitate relationships for transportation issues that transcend jurisdictional boundaries.

Objective	Policy / Action
12.1. Assist jurisdictions in local transportation planning.	12.1.1. Evaluate transportation impacts of land use and development proposals as requested.
	12.1.2. Provide technical assistance in the preparation of transportation financing mechanisms as requested.
	12.1.3. Assist in the preparation of local general plans.
12.2. Promote consistency among all levels of local transportation planning.	12.2.1. Involve the local, state, and federal agencies and elected officials in the transportation planning process.
	12.2.2. Promote consistency between the Regional Transportation Plan and local and state level plans.
12.3. Promote citizen participation and education in transportation planning.	12.3.1. Use the BCAG newsletter for transportation planning education.
	12.3.2. Conduct workshops and information sessions for transportation planning and projects.
	12.3.3 Utilize the internet to facilitate the dissemination of transportation projects and information on the planning process.
	12.3.4 Follow BCAG's Public Participation Plan procedures.

13. Policy on Quality of Travel and Livability

Mobility Goal: The transportation system should provide for convenient travel options for people and goods and maximize its productivity. The system should reduce both the time it takes to travel as well as the total costs of travel.

Reliability Goal: The transportation system should be reliable so that travelers can expect relatively consistent travel times from day-to-day for the same trip by mode(s).

System Preservation and Safety Goal: The public's investment in transportation should be protected by maintaining the transportation system. It is critical to preserve and ensure a safe regional transportation system

Objective	Policy / Action
13.1. Assist in efforts which enhance **mobility** for the region. The system should provide for convenient travel options for people and goods and maximize its productivity. The system should reduce both the time it takes to travel as well as the total costs of travel.	13.1.1. Tailor transportation improvements to better connect people with jobs and other activities such as "Smart Mobility" concepts to increase system efficiencies and strive to reduce GHGs.
	13.1.2. Provide convenient travel choices including transit, driving, ridesharing, walking, and biking.
	13.1.3. Preserve and expand options for regional freight movement.
	13.1.4. Increase the use of transit, ridesharing, walking and biking in major corridors and communities.
	13.1.5 Provide transportation choices to better connect the Butte County region with neighboring counties and tribal nations.
13.2. Assist in efforts which enhance **reliability** for the region. The system should be reliable so travelers can expect relatively consistent travel times from day-to-day for the same trip by mode(s).	13.2.1. Employ new technologies to make travel more reliable and convenient.
	13.2.2. Manage the efficiency of the transportation system to improve traffic flow.
13.3. Assist in **preserving** the transportation system and safety. The public's investment in transportation should be protected by maintaining the system to preserve it and ensure a safe system.	13.3.1. Work towards keeping the region's transportation system in a good state of repair.
	13.3.2. Work towards reducing bottlenecks and increase safety by improving operations.
	13.3.4 Improve emergency preparedness within the regional transportation system.

14. Policy on Sustainability

Goal: Incorporate Sustainable Community Strategies into the regional transportation planning process which works towards social equity, a healthy environment and a prosperous economy.

Objective	Policy / Action
14.1. Work towards a transportation system that is designed to provide an **equitable** level of transportation services for all populations.	14.1.1. Create equitable opportunities for all populations regardless of age, ability, race, ethnicity, or income.
	14.1.2. Ensure access to jobs, services, and recreation for populations with fewer transportation choices.

14.2. Work towards a transportation system that leads to **environmental sustainability** and fosters efficient development patterns that optimizes travel, housing, and employment choices and encourages future growth away from rural areas and closer to existing and planned development.	14.2.1. Develop transportation improvements that respect and enhance the environment.
	14.2.2. Work towards reducing greenhouse gas emissions from vehicles and continue to improve air quality in the region.
	14.2.3. Work towards making the transportation investments made result in healthy and sustainable communities.
14.3. Work towards a **prosperous economy** in making transportation decisions. The transportation system should play a significant role in raising the region's standard of living.	14.3.1. Maximize the economic benefits of transportation investments made.
	14.3.2. Enhance the goods movement system to support economic prosperity.

15. Policy on Emergency Preparedness

Goal: To support and collaborate on proactive emergency planning and projects. Projects that increase emergency readiness and preparedness including upgrading and maintaining roadways, public transit or facilities that support emergency situations.

Objective	Policy / Action
15.1. Work with Cities and County on development of a regional road trunk network that would best serve emergency purposes.	15.1.1 Work with cities, town and county to identify potential options for funding transportation system maintenance and improvements on the regional road network.
	15.1.2. Develop funding shortfall needs assessment for state highways, local streets and roads for Butte County.
15.2. Actively pursue and assist local jurisdiction pursue grant funding that works towards enhancing emergency preparedness.	15.2.1. Pursue federal and state grant funding opportunities and assist local jurisdictions with their own potential grant applications.

16. Policy on Housing

Goal: To support and collaborate on proactive efforts to address housing needs in the region.

Objective	Policy / Action
16.1. Work with Cities and County on efforts to develop in communities where services, amenities and transportation infrastructure already exist.	16.1.1 Work with cities, town and county to identify preferred areas of development which foster increased non-motorized travel
	16.1.2. Encourage infill development to minimize environmental footprint
16.2. Work with Cities and County to develop higher density housing	16.2.1. Work with jurisdictions/developers to encourage complete street design concepts as part of housing projects
	16.2.2. Work with jurisdictions to seek state and federal grant funding to supplement affordable housing development projects to include non-motorized transportation improvement components such as biking, walking and transit access improvements
	16.2.3 Encourage transit-oriented development including more housing and jobs in high frequency transit areas
	16.2.4 Encourage projects that include a balance of homes, jobs, services, amenities and diverse transportation options

ACTION ELEMENT - ANALYSIS

The second major component required in the RTP/SCS is the "Action Element". The Action Element of the RTP/SCS consists of short-term and long-term activities that address regional transportation issues and needs. All transportation modes are addressed.

The Action Element is divided into two sections. The first section includes a discussion of regional issues, mandated transportation services, air quality, forecasting, regionally significant roads, alternatives, social impacts, and RTP/SCS analysis. The concluding section involves a discussion of each mode of transportation.

REGIONAL ISSUES

Transportation Funding

The BCAG region finds itself in a challenging position with the broad impacts associated with the Camp Fire. As a result, a comprehensive post Camp Fire study is necessary and will be completed to serve as the foundation of base data for the 2024 RTP/SCS. The Camp Fire compounded with the COVID 19 economic impacts further complicate the certainty of financial projections. For this reason, the RTP/SCS is a living document that can be amended at any time by the BCAG Board of Directors and is also updated every 4 years. While the timing of the Camp Fire and COVID 19 has complicated the 2020 RTP/SCS, this document soundly documents a balanced, financially constrained long-range plan.

The Camp Fire amplified that existing funding mechanisms are not sufficient to address existing emergency access needs. In addition, BCAG as the owner operator of Butte Regional Transit has a mandate to electrify its transit fleet by (insert year). With the cost of an electric bus approximately double from a traditional clean diesel bus, the Butte Region is further challenged -to meet these capital and infrastructure requirements associated with the electrification of the transit fleet. Projects identified in the RTP/SCS primarily address existing operational and safety issues. The lack of stable revenue stream funding for transportation results in a continued backlog of transportation projects, many which are included in the RTP/SCS as unfunded needs.

BCAG's primary funding for major infrastructure improvement is the State Transportation Improvement Program (STIP). As part of the 2016 STIP cycle the STIP estimate was negative $754 million resulting in BCAG deleting a regional project in 2018. As part of the 2020 STIP, the economy improved and with the passage of California's gas tax SB 1 passed on November 1, 2017, transportation funding stabilized and afforded the ability of the California Transportation Commission to approve the programming of the State Route 70 Corridor from 2 lanes to 4 lanes.

The current federal authorizing transportation bill, the Fixing America's Surface Transportation Act (FAST Act), or Public Law (P.L.) 114-94 signed into law on December

4, 2015 is set to expire on September 30, 2020. The FAST Act is the first federal law in over ten years to provide long-term funding certainty for surface transportation.

State Highway Responsibility

At the local level, funding for a continuous four lane facility to Chico is Butte County's top priority. The focus for the region is the completion of the SR 70 Corridor south of Oroville. BCAG has worked with Caltrans and the CTC to fully fund the corridor from Oroville to Marysville. While the corridor is funded and programmed, the downturn of the economy as a result of COVID 19 and decreased gas tax revenues associated with public health recommendations of shelter in place, BCAG is reserving future STIP programming capacity of the RTP/SCS should revenues in the STIP not materialize.

As a result of SB 45, regional agencies were given control of 75% of the STIP for regional improvements on the state highway system. The remaining 25% of the STIP is provided to Caltrans to address the interregional system. As such, BCAG is responsible for addressing improvements to the state highway system in Butte County.

Local Roads

A backlog of local roadway rehabilitation improvements continues to be a major concern in Butte County. The cities and county will continue to be required to make the most of other resources available such as the Regional Surface Transportation Program, the Transportation Enhancement Activity Program, Congestion Mitigation and Air Quality Program, gas tax revenues, as well as other funds, in order to address the rehabilitation needs of the county for operations and maintenance. The rural areas are also in need of adequate emergency access. The Camp Fire of 2018 and the Oroville Dam crisis of 2017 highlighted the limitations of the local road system.

Transit

The period between the 2008 and 2016 RTPs gas prices were relatively high which resulted with in increased demand for transit. From 2016 to 2020 with a strong economy and lower gas prices, demand for transit dropped. This trend was consistent nationally. In addition, with COVID 19 transit ridership decreased over 70%, also consistent with national levels. The Camp Fire also displaced over 20,000 residents from the Town of Paradise, many of which relocated to Chico and surrounding communities. Due to the various impacts to the region with the Camp Fire, BCAG secured Caltrans planning grant funds to complete the Post Camp Fire Study which will serve as the foundation for the development of the 2024 RTP/SCS.

MANDATED TRANSPORTATION SERVICES

The Americans with Disabilities Act (ADA) is civil rights legislation requiring, among other things, that persons with disabilities have equal access to transportation services. In terms of transit, this means that all fixed route transit services must provide complementary paratransit services for those within a ¾ mile radius of a fixed route stop.

In addition, transit providers must have wheelchair accessible vehicles, provide schedules and other information in accessible formats for people with hearing and sight impairments, allow attendants and companions, and meet specific requirements for comparability of fares.

Paratransit services, such as those mandated by the Americans with Disabilities Act, are significantly more expensive to provide than fixed route transit services. The Act does not provide any funding for these required service improvements. Since the 2016 RTP/SCS BCAG has implemented "premium" service as requested by the public. Paratransit services have expanded to a greater area above and beyond that which is required. All routes are posted online at: http://www.blinetransit.com/Paratransit/Paratransit-Service-Area/index.html. Potential customers have indicated they are willing to pay a little extra for paratransit service, so long as they are able to make their required trips. Details of the expanded service are discussed in the Transit chapter.

During the period of this RTP/SCS, BCAG will continue to work to address transit planning and funding issues relative to meeting ADA requirements. Butte Regional Transit (B-Line) is currently in full compliance with the existing ADA requirements and has previously developed a Human Services Transportation Coordinated Plan for Butte County. BCAG will continue to monitor the regulations as applicable to Butte County. For the purposes of the 2020 RTP/SCS the transit impacts to COVID are assumed temporary.

AIR QUALITY CONFORMITY

With each update and amendment of the RTP/SCS, BCAG is required to demonstrate transportation air quality conformity under the Federal Clean Air Act (section 176(c) (42 U.S.C. 7506 (c))). The purpose of this demonstration is to ensure that BCAG's plans and programs "conform" to all applicable federal air quality requirements and that the projects contained within the RTP do not cause new air quality violations, worsen existing violations, or delay timely attainment of the relevant national ambient air quality standards (NAAQS).

Air Quality Conformity Determination

The results from the 2019 FTIP and 2020 RTP emissions analysis show that current and future emissions of the ozone precursors ROG and NOx will be no greater than the 2011 and 2017 base year emissions levels. Thus, Butte County, in accordance with the Transportation Conformity Rule requirements applicable to Butte County (§51.464 and §51.436 – 51.440), has satisfied the "no-greater-than-2011" test for the 2008 8-hour federal ozone NAAQS and the "no-greater-than-2017" test for the 2015 8-hour federal ozone NAAQS. **Based on this analysis, the 2020 Regional Transportation Plan (RTP) and 2019 Federal Transportation Improvement Program (FTIP) conforms to the applicable State Implementation Plan (SIP) and all applicable sections of the EPA's Transportation Conformity Rule.**

The complete Air Quality Conformity Analysis and Determination is included as Appendix 1. The 2020 RTP has successfully demonstrated conformity for each of the required designations.

REGIONAL MODELING

In each RTP/SCS update cycle, BCAG is required under federal and state regulations to utilize the latest available estimates and assumptions of population, housing, employment, land use, and travel. BCAG utilizes both a regional travel demand forecasting model and regional land use model, in conjunction with regional growth forecasts, to meet these requirements.

Regional Travel Demand Forecasting (TDF) Model

BCAG maintains the regional TDF model to support long-range transportation planning efforts and to provide a mechanism for evaluating the potential effects of future land development and transportation improvement projects. In 2010, the model received extensive updates to support the development of the new sustainable communities strategy required under Senate Bill 375. For development and analysis of the 2020 RTP/SCS, BCAG's TDF model was updated with the latest available data and several new features were added for the purpose of increasing its sensitivity to changes in land use and transportation changes.

Appendix 6-6B includes the complete documentation for the regional TDF model.

Regional Land Use Model

In 2010 BCAG worked with California State University, Chico and the University of California Davis to develop a regional land use allocation model to assist in preparing the 2012 RTP/SCS. The model is rule based, and allocates future residential and employment growth while considering the region's existing land use plans, growth forecasts, and development attractions (e.g. transportation and infrastructure) and discouragements (e.g. resource areas, farmland, and floodplains). Outputs of the model are used to inform the regional travel demand forecasting model.

The 2016 RTP/SCS update of the land use allocation model included the addition of five (5) new job categories, new K-12 school enrollment forecasts, an occupancy adjustment of residential and non-residential land uses, and a process of normalizing the data to state sources.

In preparing the 2020 RTP/SCS, the land use allocation model has been used to generate the base year (2018) and update the preferred land use scenarios developed as part of the 2016 RTP/SCS for the forecast years 2020, 2035, and 2040. The model has been updated to include the latest regional growth forecasts, local general plan information, and planned projects. In addition, the model includes an adjustment to account for the loss and rebuilding of housing units and non-residential structures associated with the Camp Fire.

All future year allocations were developed in coordination with local jurisdictions planning staff and are based on land use information from the areas local land use plans, planned development projects, reasonable assumptions regarding infill and redevelopment, regional growth forecasts, and a review of development attractions (i.e., motorized and non-motorized transportation networks, existing development, service areas, etc.) and discouragements (i.e., resource areas and farmland, public lands, areas exceeding 25% slope, etc.). The general plan and specific plan development activities occurring in the county by the local jurisdictions are reflected in the future year land use assumptions, which are generally representative of the best available information as of January 1st, 2019.

Appendix 6-6A includes the complete documentation for the regional land use allocation model and associated forecasted land uses by analysis year.

REGIONAL ROAD NETWORK

One of the most important components of the overall transportation system in Butte County is the network of roadways that facilitates the movement of people and goods in and through the county.

Appendix 7 identifies specific roadways in Butte County that are of regional significance. Regionally significant roadways include the entire state highway system and all roads designated as either arterial or collector as classified by each local jurisdiction. In addition, roadways which meet one or more of the following criteria have been added and identified as other roads of regional significance:

- Principal roadways connecting Butte County with other regions or counties
- Principal roadways connecting urban areas
- Roadways which provide access to significant recreational, commercial, industrial, or institutional activities
- Roadways which are primary emergency evacuation routes for urban areas

The regionally significant roads in the RTP/SCS are evaluated within the regional traffic model. These roadways are analyzed based on current and future travel demand, and provide a basis to identify potential impacts of growth on the regional transportation system.

REGIONAL PERFORMANCE MEASURES

Performance measures are used to evaluate and analyze the performance and effectiveness of the transportation system, government policies, programs, and strategies presented in the Regional Transportation Plan. Recent legislation such as the Moving Ahead for Progress in the 21st Century Act (MAP-21) and SB 375 have placed greater emphasis on performance-based planning. In addition, federal code 23 CFR 450.324 (f)(4) is a new requirement for MPOs to prepare a System Performance Report with each update of the Regional Transportation Plan (RTP) / Sustainable Communities Strategy (SCS), which evaluates the condition and performance of the transportation system with respect to the performance targets mandated in MAP-21.

Appendix 8 includes the performance report for the 2020 RTP/SCS.

ALTERNATIVES

Transportation improvement alternatives are developed from the data analysis for each project that is ultimately funded. The location of sensitive environmental resources and the requirement to consider projects and strategies that protect and enhance the environment are factored into the analysis.

A requirement to the identification of projects in the RTP/SCS is that they be specifically identified or be consistent with the goals, policies and objectives of their respective jurisdiction's general plan. As part of the project development process, each project is required to undergo its own environmental clearance. Through the environmental process, each project must stand on its own and satisfy applicable requirements for NEPA and/or CEQA, as well as be consistent with adjacent and or overall environmental goals.

BCAG's top "regional" priority is the SR 70 Corridor to bring a continuous four lane facility reaching Chico. The remaining gap to accomplish this is approximately 17 miles between Palermo and Marysville.

In addition, as part of the RTP SEIR process, three alternatives have been considered including:

1. No Project Alternative (2016 RTP/SCS)
2. Financially Constrained Alternative
3. Transit Investment Plus (+)

Title VI & Environmental Justice

The RTP is required to seek out and consider the needs of those traditionally underserved by the existing transportation system, such as low-income and minority households, who may face challenges accessing employment and other services.

BCAG has determined that the transportation and land use changes identified in the RTP do not result in disparate impacts to minority communities and populations or adverse human health or environmental effects as a result of the projects, programs or policies. In addition, BCAG complies with Title VI requirements and Environmental Justice requirements. The EJ determination is determined because the RTP/SCS does not result in a disproportionately high and adverse effect on human health and environment.

On the contrary, much of BCAG's success in the Active Transportation Program was the direct result of low income and minority community involvement in the grant application process. This has resulted in over $40 million in ATP projects. Per capita, Butte County has one of the highest success rates for securing these funds. The SR 99 Corridor Bikeway Project in Chico, the South Oroville Safe Routes to Schools Project are two examples of the region attempting to revitalize and improve access to the community. Outreach to minority communities is conducted as well as occasional facebook live interviews on Radio Mexican con Juan Villagrana which targets the Hispanic communities including all of Butte County.

Appendix 9 discusses the definition and analysis to capture investments made in Title VI and Environmental Justice areas. A map superimposes low income boundaries to be able to see what investments are being done, or not done, in order to make improved and informed planning and programming decisions.

In addition, other socio economic data is considered in this RTP via the BCAG traffic model. The BCAG traffic model incorporates population, housing, and employment growth. BCAG can model the location of transportation improvement projects, bus routes with environmental justice boundaries. This RTP/SCS includes a new Appendix 9 which illustrates the investments made by location. The university mapping project is an effective tool to assist in the programming decision making process by the BCAG Board.

BCAG attempts to engage underserved communities in the RTP/SCS development process by going out to specific neighborhoods and posting outreach material and talking with local residents, social medial live interview in Spanish and opportunities to participate via zoom to avoid traveling. Notices are placed in English, Spanish and Hmong on the entire transit fleet and low income neighborhoods informing the community of the RTP/SCS workshop and availability of translators if needed. BCAG staff is bi-lingual.

ENVIRONMENTAL ISSUES

BCAG recognizes the importance of addressing environmental issues early in the planning process. As a result, BCAG embarked on developing the Sustainable Communities Strategy planning effort as described in Chapter 4.

In addition, each project is required to undergo its own environmental review and clearance process as part of the project development process and prior to the allocation of any right-of-way or construction dollars. A supplemental program level EIR is included with the 2020 RTP/SCS as well.

With regard to air quality, based on the analysis provided in the air quality conformity section of the RTP/SCS, Butte County continues to demonstrate conformity. Non-exempt projects are required to demonstrate conformity twice, once in the RTP/SCS and again once the project is programmed in the FTIP. Each project essentially demonstrates conformity twice, once for the RTP/SCS and once for the FTIP. In addition, once programming occurs, each project is required to comply with NEPA and CEQA as appropriate. This process ensures that the transportation projects moving forward have been adequately analyzed.

SUSTAINABLE COMMUNITIES STRATEGY

Introduction

With each RTP update cycle, BCAG prepares a Sustainable Communities Strategy (SCS) as required under Senate Bill 375 (SB 375). The SCS demonstrates the integration of land use, housing, and transportation for the purpose of reducing greenhouse gas (GHG) emissions from passenger vehicles.

BCAG's 2012 plan was the first to include a SCS under SB 375. The 2012 SCS focused on bringing together the newly developed local general plans, regional habitat conservation planning, and regional blueprint efforts to lay out a future development pattern for the region which balanced housing and employment growth within specified growth areas, protected sensitive habitat and open space, and invested in a multi-modal transportation system.

BCAG's 2016 SCS was a minor update of the 2012 SCS. The focus of the 2016 RTP/SCS was to expand on the efforts of the 2012 plan by integrating the new Long-Range Transit and Non-Motorized Plan and incorporate the latest regional growth forecasts. This approach included an update of the preferred "balanced" land use scenario.

A similar approach has been taken by BCAG with the development of 2020 SCS, as with the 2016 plan. The 2020 RTP/SCS includes an update of the preferred "balanced" land use scenario, which considers the latest regional growth forecasts, recent regional trends in development and housing, and known impacts of the Camp Fire. This approach recognizes the lower than anticipated housing and population growth and minimal changes made to local land use plans over the past four years, with continued focus on the primary land use strategies developed in 2012.

This chapter discusses the update of the SCS and illustrates the changes made from the 2016 plan. The chapter is divided into four sections. The first section covers the planning efforts which provide the foundation for this update of the SCS. The second section describes the growth and land use forecasts which make up the SCS as well as some of the analysis and tools which were used to generate them. The third section discusses the regional transportation investments associated with the SCS and the final section describes the public outreach and local partnerships which help shape the development of the SCS.

Background Information

In September 2008, SB 375, also known as the Sustainable Communities and Climate Protection Act of 2008, was enacted by the state of California. SB 375 prompts regions to reduce greenhouse gas (GHG) emissions from passenger vehicles through the coordinated planning of long-range transportation plans. The legislation requires all Metropolitan Planning Organizations (MPO) in California to develop a Sustainable Communities Strategy, which meets regional passenger vehicle GHG emissions targets, as an additional element of their regional transportation plans.

As described in SB 375, the SCS is an integrated transportation and land use plan which is intended to meet the regional GHG target for the years 2020 and 2035 while also accommodating the region's forecasted growth. If the SCS is unable to meet the regional GHG target within the required state and federal constraints for RTP development, then an Alternative Planning Strategy (APS) must be prepared. The APS would identify how GHG targets would be achieved through alternative development patterns, infrastructure, or additional transportation measures or policies.

In 2010, the California Air Resources Board (ARB) set GHG targets for the BCAG region from on-road light-duty trucks and passenger vehicles as a 1% increase from 2005 emissions levels by 2020 and a 1% increase from 2005 emissions levels by 2035. In 2018, ARB updated the BCAG targets as a 6% decrease from 2005 emissions levels by 2020 and 7% decrease from 2005 emissions levels by 2035. These targets apply to the BCAG region for passenger vehicle emissions, and not to individual cities or sub-regions. The metric used for reporting will be GHG emissions per capita.

The 2020 RTP/SCS demonstrates the ability to meet these targets, shown in Table 4-1. The determination that BCAG will meet the CARB GHG reduction target is based upon the results of computer modeling. Appendix 6-6 describes the models and methodology used in preparing the estimates.

Table 4-1

RTP/SCS per Capita CO_2 Emission Reductions for Passenger Vehicles from 2005

Target Year	ARB Target (2018)	BCAG RTP/SCS
2020	6% reduction	14% reduction
2035	7% reduction	8% reduction

The SCS has been prepared as a component of the RTP. Specific requirements of SB 375, and the locations in which these requirements have been addressed within the 2020 RTP/SCS are identified in Appendix 6-1.

Foundational Sustainable Planning Efforts

Although the SCS is a recent requirement, BCAG has past and present efforts which incorporate sustainable planning principles and provide a foundation for the development of the SCS.

BCAG Regional Blueprint Planning

In 2006, due to increasing growth pressures in the Butte County region over the previous decade, BCAG initiated the Blueprint Planning Program to establish a multi-faceted planning process to help provide for a more informed land use and transportation decision-making process, and provide an improved environmental permitting process for future transportation and land use projects. These planning efforts were coordinated through the BCAG Planning Directors Group (PDG), which is comprised of planning directors and staff from all the BCAG member jurisdictions, as well as the Local Agency Formation Commission (LAFCO).

The BCAG Blueprint Program resulted in the establishment of Regional Guiding Principles, an Ecological Baseline Assessment Report, Landcover Mapping, Biological Constraints Analysis, and Butte County Meadowfoam Evaluation. The program also integrated updates of the region's local general plans both with each other and with the Butte Regional Conservation Plan (BRCP) and Regional Transportation Plan (RTP). Lastly, this effort initiated the development of the Butte Regional Conservation Plan.

As of 2020, five of the region's six local jurisdictions (Biggs, Chico, Gridley, Oroville, and Butte County) have completed general plan updates within the past 10 years which include planning horizons that extend to 2030 or beyond. The only remaining jurisdiction, Town of Paradise, has initiated a complete updated of their general plan following the Camp Fire. The areas general plans provide the foundation for the region's SCS.

Butte Regional Conservation Plan

Habitat conservation efforts began in the region in 2007 when BCAG commenced development of the Butte Regional Conservation Plan (BRCP). The BRCP is a joint Habitat Conservation Plan/Natural Communities Conservation Plan (HCP/NCCP) and, once completed, will allow for appropriate and compatible growth and development in the Butte County region while ensuring the preservation and protection of aquatic and terrestrial resources and providing

habitat for threatened and endangered species through conservation partnerships with local agencies.

The BRCP's conservation strategy outlines a regional approach for the conservation of natural resources while allowing for development under county and city general plans and the RTP/SCS. Urban Permit Areas (UPAs) developed under the BRCP, define the locations where impacts of future urban development are expected to be incurred based on the region's local general plans and the RTP/SCS

2012 Metropolitan Transportation Plan (MTP) and Sustainable Communities Strategy

BCAG's 2012 MTP was the first to include a Sustainable Communities Strategy and link smart growth planning principles to the transportation system. As previously mentioned in this chapter, the focus of the 2012 SCS was to bring together the recently developed local general plans, the regional blueprint, and habitat conservation planning efforts into a land use strategy which balanced the region's future housing and employment growth in a manner which met the regional greenhouse gas targets while protecting sensitive habitat and open space. This effort relied on increased coordination between local jurisdiction planning staff, BCAG staff, and stakeholders. The plan identified a "potential" Transit Priority Project (TPP) area but lacked a long-range transit plan that could identify specific improvements and routing in the region.

Transit & Non-Motorized Plan

One significant take away from developing the 2012 SCS was the need for a long-range plan identifying future improvement for alternative modes of transportation (i.e., bike, walk, and transit). In 2012, BCAG initiated the development of a long-range transit and non-motorized plan for the Butte County region with the securing of funds through the California Strategic Growth Councils – Sustainable Communities Planning Grant program. Completed in 2015, the plan focuses on improving the transportation network for people who walk, bike, or take transit in Butte County by recommending short-term and long-term changes which are within the projected financial constraints of the region. The plan includes a preferred transit route network and identifies high priority projects to facilitate bicycling and improved pedestrian access to major transit facilities.

Butte Plug-in Electric Vehicle (PEV) Readiness Plan

In 2018 BCAG completed the *Butte Plug-in Electric Vehicle Readiness Plan,* which was developed in cooperation with BCAG member jurisdictions, the Butte Air Quality Management District, and key stakeholders from throughout the region. The purpose of the plan is to ensure BCAG and its member jurisdictions are

prepared to address the increasing use of PEVs within the region. The plan contains information on existing PEV use in the region, recommendations for member jurisdictions to improve building codes, permitting and inspection processes, and zoning, parking and signage for PEVs.

The plan also contains a regional siting plan that identifies priority locations for public PEV charging station installation throughout the region. The document and key chapters and sections can be found on the BCAG website under the planning tab. BCAG expects to continue to utilize the regional siting plan and other key findings and recommendations in the plan to further integrate, improve and increase PEV use in the region.

Growth and Land Use Forecasts

BCAG prepares a regional growth forecast and land use pattern to accommodate the estimated increases in population, employment, and housing. The RTP/SCS identifies areas within the region sufficient to house all of the forecasted population of the region, including all economic segments of the population over the course of the RTP/SCS planning period.

Camp Fire

In November 2018, the Camp Fire destroyed an approximately 15,000 housing units and 500 non-residential structures in the Town of Paradise and surrounding unincorporated communities of Magalia and Concow. Roughly 95% of the Town of Paradise and Concow were lost, including approximately 50% of Magalia. The Camp Fire is the deadliest and most destructive wildfire in California history.

The Camp Fire has had an immediate and significant impact on the population, housing, and employment of the region. BCAG has attempted to account for the short and long-term effects of the Camp Fire based on information available at the time of preparing the forecasts and associated modeling for the 2020 RTP/SCS. However, the Town of Paradise and surrounding impacted communities are still in the earlier stages of recovery planning and solid long-term assumptions are not currently present.

To gain a better understanding of the impacts to transportation and land use in the region, BCAG has undertaken the preparation of a Regional Population and Transportation Study. The Study will look at pre and post Camp Fire data, prepare several scenarios for mid and long-term growth in the region and update the regional transit plan. The Study is expected to be completed in late 2021 and will be utilized in the development of BCAG's 2024 RTP/SCS. In addition, the results of the Study will be available to local and regional agencies who need data to update plans and programs.

For the purpose of developing the SCS, BCAG has accounted for the loss of housing units and jobs associated with the Camp Fire, in addition to the displacement of the population to surrounding communities and outside the area, to the best of our ability. The SCS assumes a rebuild rate of ~85% of the burn area over the course of the 2020 RTP. It is important to note the rebuilding of housing units and non-residential structures (which correlate to jobs/employment), are not included as "new", rather they are recognized as re-built.

Regional Growth Forecasts

The population, housing, and employment forecasts for the RTP/SCS are based on the "medium scenario" contained in the Butte County Long-Term Regional Growth Forecasts 2018-2040, developed by BCAG in 2019. It represents the most realistic growth scenario for the region, based on available information. The forecasts were prepared as an update to those included in the 2016 SCS and reflect the changes in estimates and projections developed by the State of California for the Butte County region and includes adjustments for the Camp Fire. The update was developed in consultation with the local governments and the Butte County Local Agency Formation Commission. A summary of the forecasts is included in Table 4-2 and a complete copy of the updated regional forecasts has been included in Appendix 6-2.

Table 4-2

RTP/SCS Regional Growth Forecasts

Year	Employees	Population	Housing Units
2018	82,900	227,896	99,353
2020	83,452	228,694	86,929
2030	84,733	248,313	105,916
2040	92,188	265,964	115,235

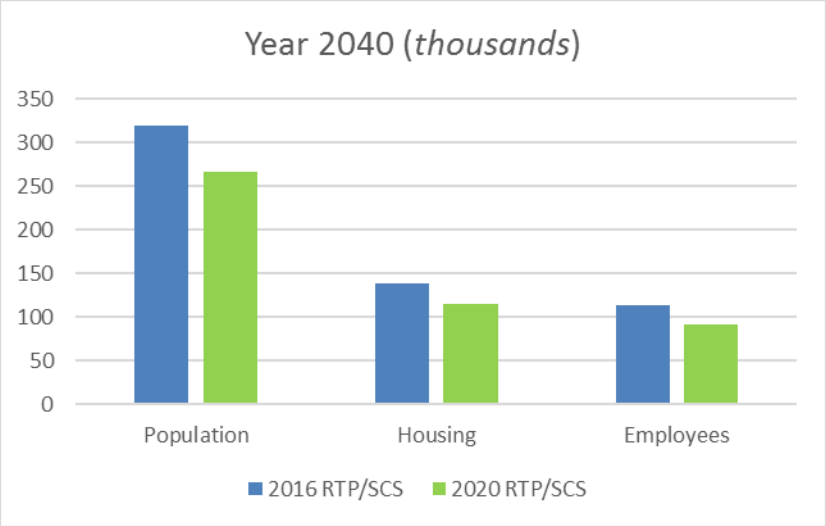
Source: BCAG, 2019.

The 2040 growth forecast indicates that the population in the BCAG region is expected to grow by ~38,000 people, an increase of 17%, between 2018 and 2040. As shown in Figure 4-1, this growth is significantly less than that included in the 2016 SCS which estimated ~97,000 additional people, an increase or 44%, over a 26-year period from 2014-2040. The updated forecasts show the need to accommodate approximately 16,000 new housing units, an increase of 16%, and 9,280 new employees, an increase of 11%, between 2018 and 2040, as shown in Figure 4-1. This growth is also less than the 41,000 new housing units and 34,000 new employees included in the 2012 plan. As population and housing increases have been steadily increasing in the past several years, employment has seen much greater increases in recent years[1]. Employment is expected to return to its

[1] BCAG Sustainable Communities Strategy Progress Report, September 2019.

long-term historical average by year 2030, based on a jobs-to-housing ratio of 0.80[2]

Figure 4-1



Land Use Forecasts

The land use forecasts, and the process for allocating growth within the region, are affected by federal and state requirements related to the regional transportation plans and the Clean Air Act. In general, federal and state laws require BCAG to develop a forecasted land use pattern, based upon the best available information, in order to, among other things, design specific transportation improvements to serve that land use, and to perform travel modeling to determine the performance of the transportation system and determine whether the plan, including its land use and transportation components, meets federal air quality requirements. Beginning with BCAG's 2012 plan, this process was affected by SB 375, and specifically its requirements to include an SCS, to calculate the greenhouse gas emissions resulting from passenger vehicles, and enable the California Environmental Quality Act streamlining benefits for projects that are consistent with the SCS.

In preparing the land use forecasts for the 2012 SCS, BCAG developed three distinct land use scenarios for the purpose of illustrating the travel effects of different development patterns on the regional transportation system and the associated greenhouse gas emissions resulting from these patterns. In addition, the scenarios allowed BCAG to test the performance of the enhanced regional travel demand model to ensure it was responding appropriately to changes in land use. Appendix 6-3 includes a complete description of each scenario and the associated analysis.

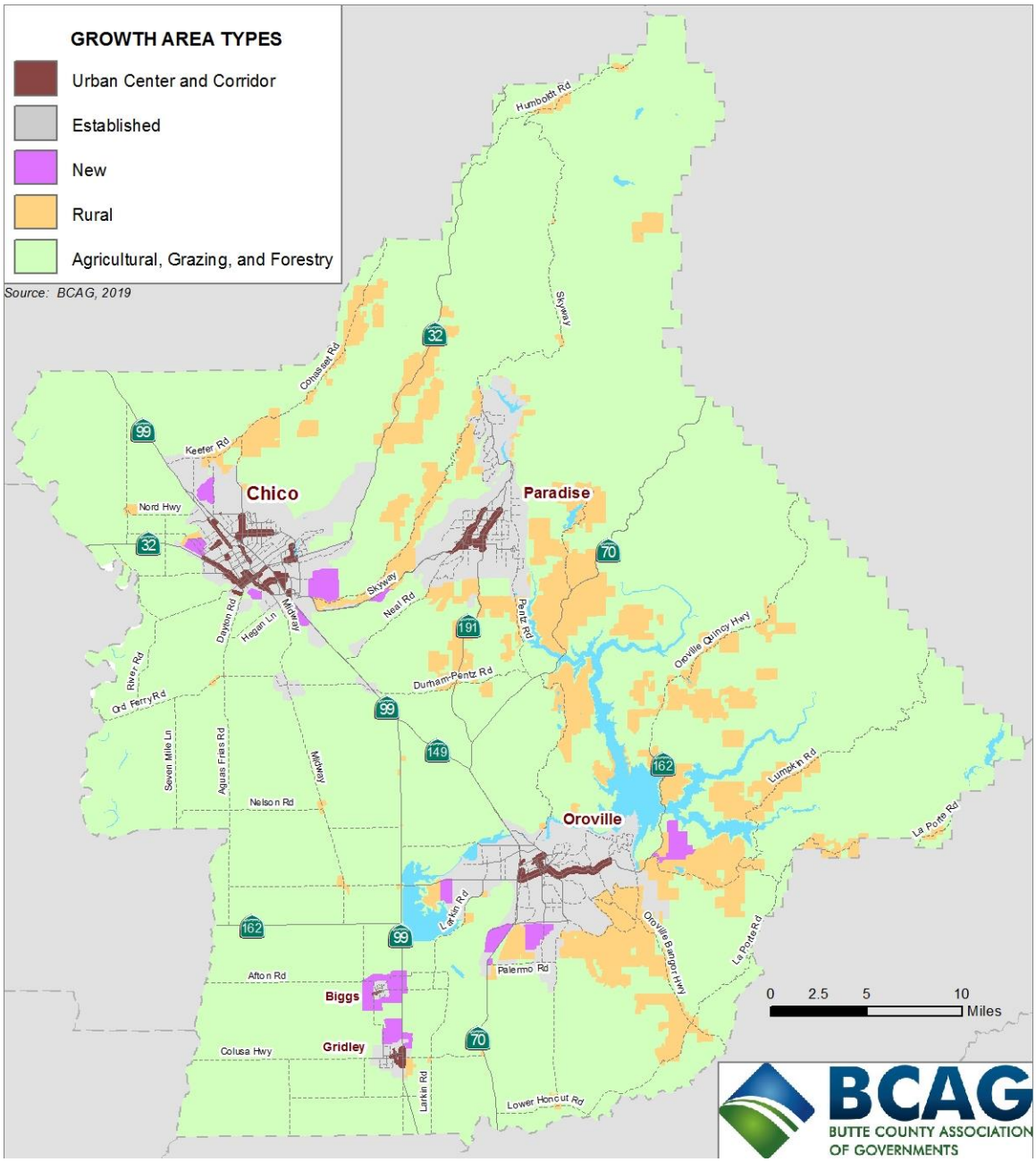
[2] BCAG Provisional Long-Term Regional Growth Forecasts 2018 – 2040, September 2019.

The 2016 SCS included an update of the 2012 SCS land use forecasts preferred "balanced" scenario. The forecast was updated with the latest local general plan and project information. The latest growth forecasts for population, housing, and employment were then applied.

The result of the updated land use forecast for the 2020 SCS is similar to what was included for the 2016 plan, in that the overall land use pattern is unchanged. However, the amount of growth being distributed within that pattern is less than what was included in the 2016 plan, this reflects the latest growth forecasts which were discussed in the previous section. As with the 2016 SCS update, the forecast has been updated with latest local general plan information and project information. Modifications have been made to the jobs-to-housing ratio as well as the housing mix to reflect historical averages and recent trends. Lastly, adjustments have been made to account for the losses and associated recovery related to the Camp Fire.

The following subsections describe the updated land use forecasts as they relate to specific growth area types, housing types, transit priority project areas, the jobs-housing balance, resource areas and farmland, and the regional housing needs process. Comparisons to the 2016 plan are also included to illustrate changes made between the plans.

Figure 4-2


GROWTH AREA TYPES
Urban Center and Corridor
Established
New
Rural
Agricultural, Grazing, and Forestry
Source: BCAG, 2019
Chico
Paradise
Oroville
Biggs
Gridley
Humboldt Rd
Cohasset Rd
Skyway
Keefer Rd
Nord Hwy
Dayton Rd
Hegan Ln
Midway
Neal Rd
Pentz Rd
Oroville Quincy Hwy
Durham-Pentz Rd
River Rd
Ord Ferry Rd
Seven Mile Ln
Aguas Frias Rd
Nelson Rd
Lumpkin Rd
La Porte Rd
Larkin Rd
Oroville Bangor Hwy
Palermo Rd
Afton Rd
Colusa Hwy
Lower Honcut Rd
0 2.5 5 10
Miles
BCAG
BUTTE COUNTY ASSOCIATION OF GOVERNMENTS

Development by Growth Area

For the 2012 SCS, BCAG developed a framework for describing the RTP/SCS that is made up of Growth Area Types. The Growth Area Types are an adaption to a similar framework developed by the Sacramento Area Council of Governments (SACOG), BCAGs closest neighboring Metropolitan Planning Organization (MPO). Local land use plans (e.g., adopted and proposed general plans, specific plans, master plans, corridor plans, etc.) were divided into one of five Growth Area Types based on the location of the plans. This framework has been carried over to the 2018 SCS, unchanged. Figure 4-2 provides an illustration of the Growth Area Types.

Included below is brief description of each Growth Area Type followed by a summary of land uses allocated within each, based on an update of the preferred "balanced" land use scenario. The forecasted allocations are consistent with growth assumptions (e.g., location, density, and intensity of use) utilized in existing general plans or other local adopted plans, however, it does not utilize all available capacity in those plans.

Urban Center and Corridor Areas consist of higher density and mixed land uses with access to frequent transit service. These areas typically have existing or planned infrastructure for non-motorized transportation modes which are more supportive of walking and bicycling. Future growth within these areas consists of compact infill developments on underutilized lands, or redevelopment of existing developed lands. Local plans identify these areas as opportunity sites, downtowns, central business districts, or mixed-use corridors.

Established Areas generally consist of the remaining existing urban development footprint surrounding the Urban Center and Corridor Areas. Locations disconnected from Urban and Corridor Centers may be residential-only, employment-only, or a mix of these uses with urban densities. These areas consist of a range of urban development densities with most locations having access to transit through the urban fixed route system or commuter service. Future growth within these areas typically utilize locations of currently planned developments or vacant infill parcels. Local plans generally seek to maintain the existing character of these areas.

New Areas are typically connected to the outer edge of an Established Area. These areas currently consist of vacant land adjacent to existing development and represent areas of future urban expansion. Future growth within these areas will most often consist of urban densities of residential and employment uses with a few select areas being residential only. Local plans identify these areas as special planning or specific plan areas, master plans, and planned development or planned growth areas. Currently, fixed route transit service is nonexistent in these areas. However, fixed route transit service would likely be provided to areas which are directly adjacent to current urban routing as part

of build-out. Quality pedestrian and bicycle infrastructure are typically required to be incorporated under the local jurisdictions' plans.

Rural Areas consist of areas outside existing and planned urban areas with development at low residential densities. These areas are predominantly residential and may contain a small commercial component. The densities at which these areas are developed do not reasonably allow for pedestrian or bicycle infrastructure and transit service is limited or nonexistent. Automobile travel is typically the transportation option.

Agricultural, Grazing, and Forestry Areas represent the remaining areas of the region not being planned for development at urban densities. These areas support agricultural, grazing, forestry, mining, recreational, and resource conservation type uses. Locations within these areas may be protected from future urban development under federal, state, and local plans or programs such as the Chico area "greenline", Williamson Act contracts, or conservation easements. Employment and residential uses are typically allowed within portions of this area but are most often secondary to agricultural, forestry, or other rural uses.

The updated land use forecasts for housing indicates most new housing, approximately 55%, will be allocated to the Established growth area, followed by the New growth area at approximately 30%, and the Urban Center and Corridor areas at 6%. Table 4-3 summarizes the housing in the RTP/SCS by Growth Area Type.

Table 4-3

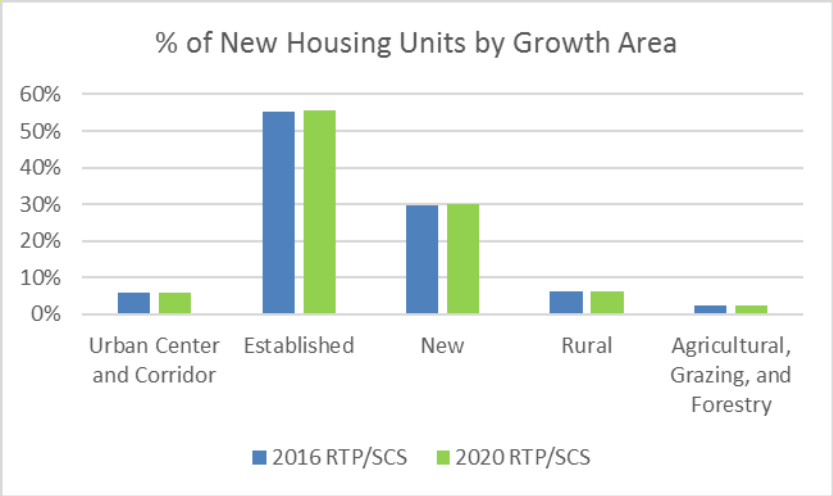
Summary of Housing Units Forecasted in RTP/SCS

Growth Area Type	2018 Existing Housing Units	Camp Fire Net Housing*	New Housing Units**	Total 2040 Forecasted Housing Units
Urban Center and Corridor Areas	8,642	-192	1,060	9,510
Established Areas	75,966	-1,803	9,985	84,148
New Areas	437	0	5,398	5,835
Rural Areas	7,877	-121	1,155	8,911
Agricultural, Grazing, and Forestry Areas	6,431	-11	411	6,831
Region Total	**99,353**	**-2,127**	**18,009**	**115,235**

*Camp Fire Net Housing assumes ~%85 rebuild of the estimated 14,490 units destroyed
**New Housing Units excludes Camp Fire rebuild units

The percentage of new housing units being allocated to each growth area is unchanged in comparison to the 2016 SCS. Figure 4-3 below, illustrates the comparison of the two plans new housing unit allocations by growth area.

Figure 4-3



In line with the update land use housing forecasts, the employment forecasts indicate that most new jobs, approximately 60%, will be allocated to the Established growth area. However, the Urban Center and Corridor growth areas will see the second largest growth of employees with a 26% share. This is reflective of the existing infill opportunities available in these areas, which are primarily retail and office uses with secondary housing uses. Table 4-4 summarizes the employment in the RTP/SCS by Growth Area Type.

Table 4-4

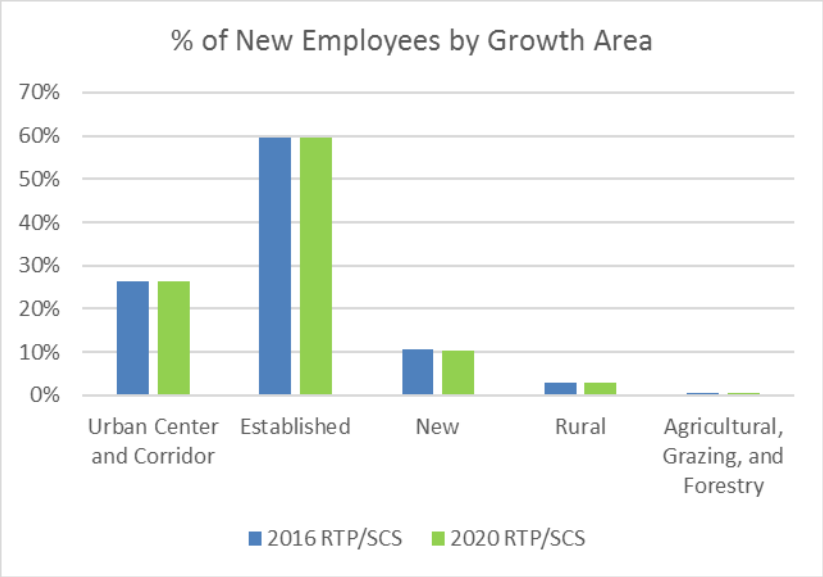
Summary of Employment Forecasted in RTP/SCS by Growth Area

Growth Area Type	2018 Existing Employees	Camp Fire Net Employment*	New Employees**	Total 2040 Forecasted Employees
Urban Center and Corridor Areas	31,823	-433	2,629	34,019
Established Areas	45,763	-258	5,961	51,466
New Areas	1,329	0	1,045	2,374
Rural Areas	2,218	0	290	2,508
Agricultural, Grazing, and Forestry Areas	1,768	0	53	1,821
Region Total	**82,900**	**-691**	**9,979**	**92,188**

*Camp Fire Net Employment assumes ~%85 recovery of the estimated 3,500 employment loss.
**New Employees excludes Camp Fire recovery employment

The percentage of new employment being allocated to each growth area is unchanged in comparison to the 2016 SCS. Figure 4-4 below, illustrates the comparison of the two plans new employee allocations by growth area.

Figure 4-4



Housing

Providing a variety of housing types, including apartments, townhouses, condominiums, and single-family homes, creates opportunities for the variety of people living in the region. For the purpose of preparing the forecasted development pattern of the SCS, BCAG has categorized housing into one of two categories:

- Single Family units are detached homes built at densities ranging anywhere from 13 units per acre in the urban areas to 1 unit per 160 acres in timber and agricultural areas.

- Multi-Family units are attached or detached homes built at densities ranging from 13 to 50 units per acre. Multi-family homes generally consist of duplexes, triplexes, lofts, apartments, condominiums, townhouses, row houses, etc.

A demographic study prepared by the Sacramento Area Council of Governments, "Changing Demographics and Demand for Housing Types, January 2011", indicates the evolving demographics and preferences held by specific demographic groups, or generational cohorts are driving a change in the housing stock. The study finds that on the demand side, the aging of the baby boom generation and the preferences of Generation Y (those born between 1978 and 1994) will have the greatest effect. These groups are expected to produce greater demand for apartments and small housing units (i.e. multi-family housing) into the future.

As with the two previous plans, the 2020 RTP/SCS estimates that there will be an increased demand for multi-family housing. Regionally, 32% of the new housing in the forecasted development pattern is multi-family and 68% is single family. This demonstrates a moderate shift in the housing mix from the current estimate of 26% multi-family and 74% single family.

By year 2040, it is estimated that 27% of housing will be multi-family and 73% single family. Minimal shifts are expected within each Growth Area, except for the New areas. The New Growth areas are expected to develop with a greater rate of multi-family housing (30%), a rate higher than the regional average.

Table 4-5
Summary of Housing Unit Mix by Growth Area

	2018 Housing Mix		2040 Housing Mix	
Growth Area Type	Single Family	Multi-Family	Single Family	Multi-Family
Urban Center and Corridor Areas	41%	59%	40%	60%
Established Areas	73%	27%	72%	28%
New Areas	100%	0%	70%	30%
Rural Areas	100%	0%	100%	0%
Agricultural, Grazing, & Forestry Areas	97%	3%	98%	2%
Region Total	**74%**	**26%**	**73%**	**27%**

Jobs Housing Balance

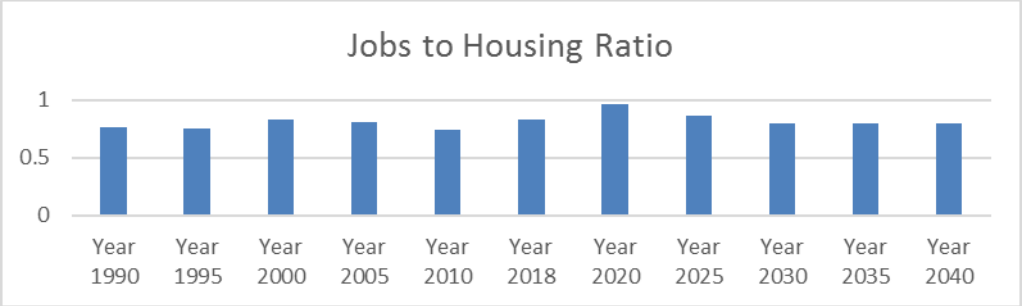
At the regional level, a jobs-housing balance can be discussed as a point in which the areas jobs and households are balanced so that neither jobs nor housing must be imported or exported. An imbalance in a region's jobs-housing ratio can increase travel by causing workers to commute out of their residence area (in areas with few jobs) or workers commuting into a region (in areas with more jobs).

Traditionally, the Butte County region has been an area in which housing has been greater than employment, with residents commuting out of the area to find employment. With the last downturn in the economy this "imbalance" in housing and jobs had increased, peaking with a year 2011 jobs (non-farm) per housing unit of 0.72. In 2018, a rebound in the economy shows the areas ratio at 0.83 jobs (non-farm) per housing unit.

The 2020 RTP/SCS includes a forecasted decrease in the existing 2018 ratio of jobs to housing, as included in the Butte County Long-Term Regional Growth Forecasts 2018-2040. The long-term forecasts estimate that the region will return to historic levels of 0.80 jobs per housing unit by the year 2030 and continue this

trend into 2040. Figure 4-5 illustrates the historical, current, and forecasted jobs to housing ratios for the Butte County region.

Figure 4-5



Accommodating the Regional Housing Need Allocation

BCAG is required by state law to complete a Regional Housing Needs Plan (RHNP) to determine the region's housing needs in four income categories - very low, low, moderate, and above moderate. This process occurs before each housing element cycle. (Note: SB 375 changed the update cycle from a four to eight-year period).

Prior to 2010, the RHNP was completed separately from the RTP. SB 375 now links the RHNP and RTP processes to better integrate housing, land use, and transportation planning. Integrating both processes helps ensure that the state's housing goals are met.

In August 2019, BCAG released the 6th cycle Draft RHNP Methodology, which covers the 7 ½ year period from December 31, 2021 to June 15, 2030. The Final RHNP was approved by the BCAG Board on December 10th, 2020 (Appendix 6-4). The RHNP distributes the state determination of the Regional Housing Needs Allocation, as provided by the California Department of Housing and Community Development (HCD). The HCD determination includes a total of 15,506 housing units, with 8,803 of these being rebuilds from the Camp Fire. 3,365 (21.7%) units are considered low or very low income.

The SCS land use pattern accommodates the projected housing growth included in the Butte County Long-Term Regional Growth Forecasts (Appendix 6-2). The projected housing growth over the period of this plan is 18,009 new units and 12,363 Camp Fire rebuild units, well beyond the 6,703 new units and 8,803 rebuilds required in the RHNP. Combined (new and rebuild), 23% of the units are included in the projected SCS land use pattern as multi-family and meet the HCD density requirements for low and very income housing.

Transit Priority Project Area

As established by SB 375, a Transit Priority Project (TPP) area is defined as a location within one-half mile of a major transit stop or an existing or planned high-quality transit corridor included in the RTP/SCS. A high-quality transit corridor is defined by the State as a corridor with fixed route bus service intervals no longer than 15 minutes during peak commute hours. Certain projects within a TPP area are eligible for CEQA streamlining benefits.

The RTP/SCS has identified three (3) Transit Priority Project Areas within the Chico service area (Figure 4-6) based on the current Butte County Transit and Non-Motorized Plan (see Chapter 8 – Non-Motorized Transportation). The three TPP areas are described below.

- Area "A" - covers the Downtown Chico Transit Center and the area surrounding B-Line Route 15S, as described in the Butte County Transit and Non-Motorized Plan (TNMP). The new route is included in the TNMP short term plan for this corridor.

- Area "B" – expands on area "A" and combines B-Line Routes 15S and 15N to form the Route "1" transit corridor. The new combined route is included in the TNMP mid-term plan for this corridor.

- Area "C" – further expands on areas "A" and "B" with the addition of two new transit corridors along East Avenue and Warner Street, pending increased development (or redevelopment) within the existing built-up areas. The new expanded corridors are included in the TNMP long-term plan.

New development within the Chico TPP areas consist mainly of infill and redevelopment opportunities. Mixed use, higher density, development, creating both employment and housing, is the primary allocation of new growth within the Chico TPP areas. Table 4-6 provides a summary of housing and employment forecasted to occur within the Chico TPP areas.

Figure 4-6

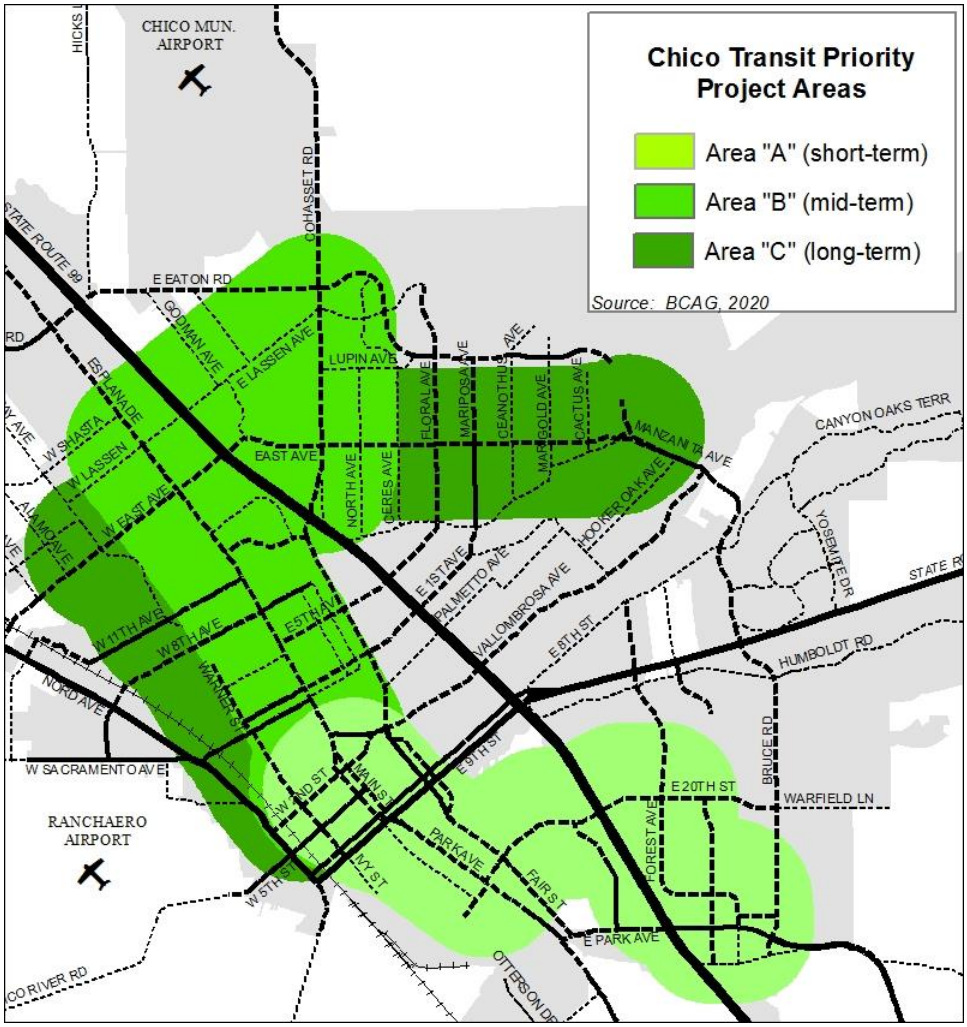


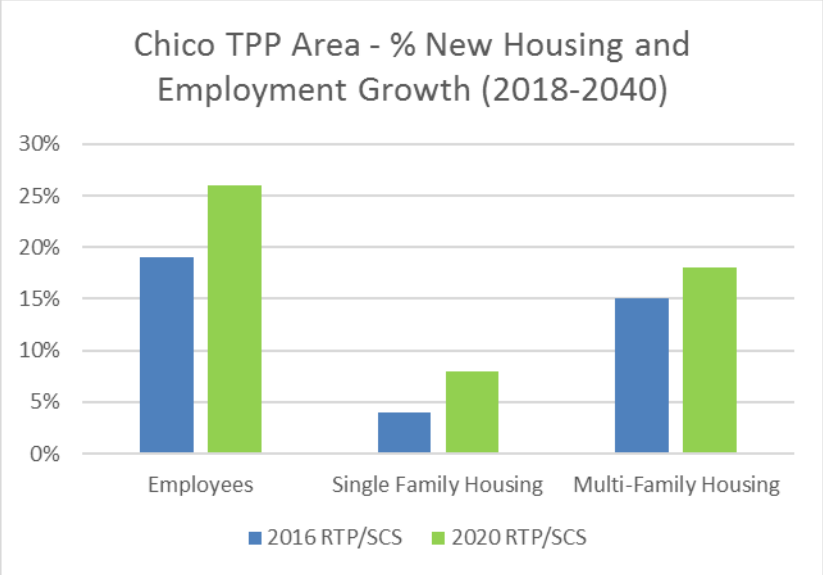
Table 4-6

Summary of RTP/SCS New Employment and Housing within Chico TPP Areas

Location	2018 - 2040 New Employees	2018 - 2040 New Housing	
		Single Family	Multi-Family
Within Chico TPP Areas	26%	8%	18%
Outside Chico TPP Areas	74%	92%	82%
Region Total	100%	100%	100%

The percentage of new single and multi-family housing units being allocated to the new Chico TPP Areas has increase in comparison to the 2016 SCS. In addition, the percentage of new employees has increased from 19% in the 2016 plan to 26% in the 2020 SCS. These changes are due to the increased share of regional housing allocated to the Chico area. Figure 4-7 below, illustrates the comparison of the Chico TPP Area included in the 2016 plan and the 2020 SCS in terms of new housing and employment.

Figure 4-7



Resource Areas and Farmlands Considerations

In developing the RTP/SCS land use forecast and transportation system, BCAG considered the region's latest information regarding resource areas and farmland, as required by Senate Bill 375. Appendix 6-5 includes a complete description of the datasets considered and the estimated impacts to farmlands, recreation and open space, habitat and natural resources, and flood control lands.

Regional Modeling

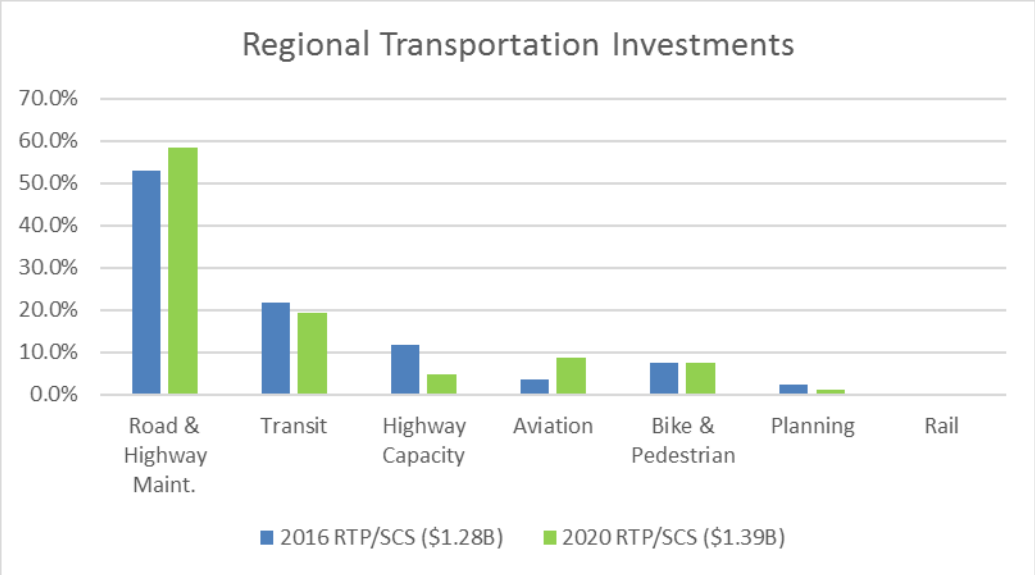
In preparing the regional growth forecasts and land use patterns for the SCS, BCAG utilized modeling tools developed with grant funding, obtained in 2010, from the California Strategic Growth Council (SGC) and Caltrans. These tools have allowed BCAG to look at land use on a micro level and determine their relation to the transportation system. Various updates and improvements were made to the models for the 2020 SCS. Details regarding the tools and BCAG's transportation forecasting for the RTP/SCS are available in Appendix 6-6.

Regional Transportation Investment and the SCS

The SCS is based upon a financially constrained regional transportation system which services the transportation needs of the region by investing in highways, local streets and roads, transit, aviation, rail, and non-motorized transportation (bike and pedestrian). Each of these areas of investment are described in detail in Chapters 6 through 11. This forecasted transportation system, when combined with the land use forecasts in the RTP/SCS, contributes to meeting the region's greenhouse gas reduction targets.

Included in Figure 4-8 is a summary of the regional transportation investments included in the 2016 RTP/SCS and the 2020 RTP/SCS. In comparison, the greatest decreases from the 2016 RTP/SCS to the 2020 RTP/SCS have been in Highway Capacity and Transit. Highway Capacity investments have decreased from 12% of the 2016 RTP/SCS investments to 4.8% of the 2020 RTP/SCS. This is reflective of the overall reduction of State Transportation Improvement Program (STIP) funds and the completion of SR 70 Segment #1 widening. Transit has also decreased from 21.7% in the 2016 RTP/SCS to 19.2% in the current plan. This is reflective of decreased overall ridership associated with lower planned population totals as well as impacts from the Camp Fire. The greatest increases in funding percentages are within the Roadway & Highway Maintenance and Aviation categories. Roadway & Highway Maintenance funds have increased from 53% of the 2016 RTP/SCS investments to 58% of the 2020 RTP/SCS, mainly due to the introduction of Senate Bill 1 funding. Aviation increased from 3.5% of the 2016 RTP/SCS investments to 8.7% of the 2020 RTP/SCS with the awarding of Federal Aviation Administration grant funds to the region. Bike & Pedestrian, Planning, and Rail funds have been mostly unchanged.

Figure 4-8



SCS Planning Partners and Public Outreach

In 2010, BCAG partnered with the cities of Biggs, Chico, Gridley, Oroville, the Town of Paradise, County of Butte and the Local Agency Formation Commission to develop the forecasted development pattern for the 2012 SCS. This partnership included the exchange of planning assumptions, review and comments regarding the information to be considered, and the development of land use scenarios. This partnership has continued with the 2020 SCS update. These partners were active in the review of the revised growth forecasts, new 6th cycle Regional Housing Needs Plan, and provided the latest available land use information.

Additional public and stakeholder participation in the development of the SCS and forecasted development pattern were implemented through the BCAG Public Participation Plan (PPP). The BCAG PPP was amended by the BCAG Board of Directors in March 2010 to implement the required outreach efforts contained in SB 375 and reaffirmed by the Board in 2015 and again in April 2019. The PPP provides direction for public involvement activities conducted by BCAG and contains the procedures and strategies used by BCAG. A complete summary of BCAG's SCS public involvement efforts are contained in Appendix 6-7.

Implementation Actions for the Sustainable Communities Strategy

BCAG has prepared a list of key implementation actions which support the land use and transportation strategies included in the 2020 RTP/SCS and contribute to the passenger vehicle greenhouse gas reductions included in the plan. These actions will be reviewed by the California Air Resources Board (ARB) as part of the evaluation and approval of 2020 RTP/SCS. In addition, BCAG will review and adjust these actions with each new update cycle of the RTP/SCS. Table 4-7 includes the 14 key actions.

Table 4-7

2020 RTP/SCS Implementation Actions

Implementation Actions	SCS Strategy	
	Land Use	**Transportation**
	Manage growth in a manner which allows the region to meet passenger vehicle greenhouse gas reduction targets while preserving farmland and natural resources, providing opportunities for affordable housing, by increasing mixed use development and development in areas with existing infrastructure, increasing housing and jobs near transit, and providing local housing for the local workforce.	Serve the transportation needs of the region in a manner which allows the region to meet passenger vehicle greenhouse gas reduction targets through improved and expanded transit, pedestrian and bicycle facilities, and enhanced linkages between travel modes, while maintaining the existing road network and minimizing the addition of general-purpose road lanes.
Manage the California Department of Housing and Community Development - Regional Early Action Planning (REAP) grant funds for the purpose of providing financial and technical assistance to member agancies land use planning efforts which are focused on increasing housing production in the region that is consistent the the 2020 RTP/SCS.	✓	
Develop a Regional Housing Needs Plan which is consistent with the 2020 RTP/SCS and in a manner which better positions member agencies to accelerate infill and affordable housing development.	✓	
Prepare a Post Camp Fire Regional Population and Transportation Study to address the immediate need for updated population, housing, employment, and travel information for the Butte County region, along with estimates of future travel, land use, and housing associated with the redistribution of population.	✓	✓
Develop guidelines for implementation of SB 743 in Butte County for the purpose of assisting member agencies and CEQA lead agencies in transitioning to vehicle miles traveled (VMT) as the preferred transportation analysis metric required under SB 743.	✓	✓
Develop a Regional General Permit (RGP) and In-Lieu Fee instrument for the purpose of streamlining future development projects included in the 2020 Regional Transportation Plan (RTP) & Sustainable Communities Strategy (SCS) which supports Senate Bill (SB) 1 – The Road Repair and Accountability Act of 2017.	✓	✓
Coordinate the update of planning tools (i.e., regional planning datasets, land use allocation model, and travel demand model) and provide to member agencies for the purpose informing and updating local land use and transportation plans.	✓	✓
Provide technical assistance to applicants of Affordable Housing and Sustainable Communities (AHSC) program funds for the purpose of constructing affordable housing and supportive multi-modal transportation projects which are consistent with the land use and transportation strategies included in the 2020 RTP/SCS.	✓	✓
Coordinate local approvals, final permitting, and begin implementation of the Butte Regional Conservation Plan.	✓	✓
Develop a vision plan for extending daily passenger rail service from Sacramento to Oroville and Marysville, including identification of the necessary improvements to rail depot stations in Oroville and Marysville.		✓
Analyze routing and timing plans, operating and capital costs, fare structure, park and ride opportunities in disadvantaged communities, number and type of buses required, and develop a marketing plan for providing commuter bus service between the cities of Chico and Sacramento.		✓
Update the Regional Long-Range Transit and Non-motorized as a component of the Post-Camp Fire Study for the purpose of maximizing future transit usage following the Camp Fire.		✓
Secure and administer regional Low Carbon Transit Operations Program (LCTOP) funds for the purpose of provide operating and capital assistance to Butte Regional Transit to reduce greenhouse gas emission and improve mobility, with a priority on serving disadvantaged communities.		✓
Pursue funds through the Transit and Intercity Rail Capital Program (TIRCP) for the purpose of expanding and improving transit and rail service in the region and creating connections to the high-speed rail system.		✓
Prepare the Butte Regional Transit Routing Study to examine the current fixed route system to identify improvements to routing headways, bus stop locations and other changes that will make fixed route service more attractive to non-users. The goal of the study will be to increase ridership and reduce greenhouse gas emissions. The study will be coordinated with member agencies, social service agencies, non-profit organizations, and the public.		✓

ACTION ELEMENT – CONCLUSIONS

The Action Element identifies all transportation projects within the horizon of the RTP/SCS and are financially constrained. This Action Element implements the Policy Element with the anticipated financial resources identified in the Financial Element and conform to the State Implementation Plan (SIP) for air quality. In addition, this RTP/SCS attempts to identify which projects can't be completed due to a lack of funding for transportation.

LINKAGES

This portion of the Action Element identifies (links) the specific projects currently funded in the Regional Transportation Improvement Program (RTIP) and Federal Transportation Improvement Program (FTIP). The RTP/SCS is used as the foundation for the programming of the FTIP and RTIP. The RTIP and the FTIP identify the majority of the transportation projects programmed or planned through the state and federal process. The projects contained in this section are detailed enough in order to prepare an appropriate regional emissions analysis required to evaluate and demonstrate air quality conformity.

Where state highway projects are identified, BCAG consulted Caltrans District 3 to ensure consistency and linkage between the RTP/SCS, RTIP and Caltrans' ITIP and SHOPP. This ensures consistency as well with the objectives contained in the State California Transportation Plan prepared by Caltrans.

ACTION ELEMENT OVERVIEW

Long Range Plan

BCAG's long-range vision is to continue to address the existing safety and operational concerns on the state highway system and local road system. At the time of the preparation of the 2020 RTP/SCS, the long-range plan is to continue with the delivery of the projects programmed in the FTIP and STIP while completing the development of the Post Camp Fire Study. The 2016 RTP/SCS called for the incremental development of improving the SR 70 Corridor. As a result of increased fatalities, the CTC programmed STIP and SHOPP funds to complete the entire corridor. The following section identifies projects that are currently underway in the STIP. In addition, BCAG recognizes the significance role non-motorized transportation functions in developing a balanced system. In 2013, BCAG completed a Transit and Non-Motorized Transportation Plan to evaluate the existing systems, recommend short term improvements and develop long-term recommendations. In doing so, the fixed route system has been revised based on the results of a comprehensive planning study which emphasized community participation to improve system operations. The TNMTP is also being update as part of the Post Camp Fire Study.

Local roadway needs have also been included and are identified. Because this Plan is financially constrained, those projects that did not fall within the anticipated funding projections have been identified as “un-funded needs” in the Financial Element.

The **Transit** component of the Plan identifies in detail the current Butte Regional Transit system as well as discussion of planned improvements. Since the last RTP/SCS was prepared the Camp Fire and COVID 19 impacts has impacted the system. The Post Camp Fire will identify recommendations for transit route changes to increase performance and customer needs.

The **Aviation** component of the Plan was developed with the assistance of Caltrans Division of Aeronautics and the City of Chico and Oroville Airport Managers. Updated Airport Master Plan Records have been included.

Butte County’s **rail system and goods movement** are also included with discussion of previously studied systems.

A detailed discussion of **non-motorized travel options** is included with appropriate plans for needed improvements.

Butte County is landlocked in that there are **no navigable waters**. As such, this RTP/SCS does not address nor include maritime transportation.

During the 2004/2005 fiscal year, BCAG received a grant from Caltrans to assist in the development of an **ITS plan** for the three counties including Butte, Glenn and Colusa. This plan has been completed and is still current. Caltrans HQ has informed BCAG of their intent to incorporate the North State ITS plan for Butte, Glenn and Colusa Counties and incorporate it into their statewide ITS efforts. During the 2016/17 fiscal year Caltrans began developing a new North Region ITS Master Plan to cover the north state with a new ITS plan. This project is still in progress and its work products will be reflected in the next RTP/SCS.

<u>Previous Plan Accomplishments</u>

Since the 2016 RTP/SCS, BCAG with the assistance of Caltrans District 03 and the support of the California Transportation Commission have advanced the programming of the SR 70 Corridor of projects. The SR 70 “Segment 1” Project from Ophir Rd to Palermo Road was also completed. Segment 2 Project from Palermo Rd to Cox Lane is currently under construction and scheduled for completion in 2021. Caltrans is also underway in the environmental process for Segment 3 which represent the portion from E. Gridley Rd. to the Butte / Yuba County line. Completion of Segment 3 is anticipated for 2024.

In addition, the Butte region has secured over $42 million for bicycle and pedestrian projects in the Active Transportation Program through the California Transportation Commission for Cycles 1-4.

Since the 2016 RTP/SCS, the Butte region also experienced the Camp Fire of 2018 and the Oroville Dam Crisis.

Implementation

A function of the RTP/SCS is to lay out the framework for developing the Regional Transportation Improvement Program (RTIP) for the State Transportation Improvement Program (STIP) cycle and the Federal Transportation Improvement Program (FTIP). This will facilitate discussions and future partnerships in programming jointly funded projects with Caltrans.

The projects identified for STIP and FTIP are consistent with the financial projections identified in the Financial Element of the and with the adopted fund estimate by the California Transportation Commission for the STIP.

Air Quality

The results from the 2019 FTIP and 2020 RTP emissions analysis show that current and future emissions of the ozone precursors ROG and NOx will be no greater than the 2011 and 2017 base year emissions levels. Thus, Butte County, in accordance with the Transportation Conformity Rule requirements applicable to Butte County (§51.464 and §51.436 – 51.440), has satisfied the “no-greater-than-2011” test for the 2008 8-hour federal ozone NAAQS and the “no-greater-than-2017” test for the 2015 8-hour federal ozone NAAQS. Based on this analysis, the 2020 Regional Transportation Plan (RTP) and 2019 Federal Transportation Improvement Program (FTIP) conforms to the applicable State Implementation Plan (SIP) and all applicable sections of the EPA’s Transportation Conformity Rule. More on air quality and Butte County’s designations is discussed as part of the regional emissions analysis. Six months after the RTP/SCS is adopted, BCAG will revisit the FTIP to ensure consistency between the “plan” and the “program”. The 2021 FTIP is scheduled for adoption by the BCAG Board in February 2021. The air quality demonstration in the 2021 FTIP will be consistent with the 2020 RTP/SCS.

Land Use

All projects in the Butte County RTP/SCS are derived from or are consistent with the goals, policies and objectives of each of the respective jurisdictions’ general plans. As such, projects may have already been included as part of the respective agency’s environmental documentation. Furthermore, as part of the project development process, each project is required to undergo its own environmental clearance. Throughout the environmental process, each project must stand on its own and satisfy applicable requirements for NEPA and/or CEQA, as well as be consistent with adjacent and or overall environmental goals.

BCAG's blueprint planning efforts previously discussed provide the biological data to city and county general plan updates to ensure that this information is considered as part of the general plan update process. These efforts are also ensuring that the various general plan updates are consistent with one another and integrated with the 2020 RTP/SCS, 2020 Regional Housing Needs Plan, and the development of the Butte Regional Conservation Plan. These planning efforts are being coordinated with numerous stakeholder groups throughout the region through an open and transparent public process.

Regarding land use around the airports in Butte County, the Butte County Development Services Department is responsible for preparing the Airport Land Use Compatibility Plan. The Aviation component of the RTP/SCS will address this subject in more detail.

Environmental Issues

BCAG has prepared a Supplemental Environmental Impact Report (SEIR) for the 2020 RTP/SCS. In addition, environmental review and mitigation for each project will be studied when a project is programmed. The road projects proposed in the RTP/SCS are located on existing facilities. As such, the environmental impacts are expected to be minimized.

Corridor Preservation

SR 70 north of its junction with SR 149 has been designated as a scenic highway. This official designation ensures additional compliance for development along the corridor. SR 70 is a gateway to the Sierras with spectacular natural beauty and relatively low traffic volumes.

New Technologies

As part of the 2004/05 fiscal year, BCAG was the lead agency in developing a multi-county ITS Strategic Deployment Plan. The ITS plan included Butte, Glenn and Colusa counties. BCAG promotes the use of ITS to reduce congestion, improve safety, and enhance mode choice as practical solutions. Caltrans is currently developing the North State ITS project. The 2024 RTP/SCS will include the work products from this effort.

As part of previous FTIP programming cycles, BCAG programmed ITS "types" of project utilizing Congestion Mitigation and Air Quality (CMAQ) funds for a transit bus card reader system. As part of the 2009 FTIP, BCAG purchased and equipped the entire transit fleet with smart card technology as well as AVL/GPS. Where feasible and practical, the local jurisdictions in Butte County are receptive to incorporating ITS into future projects. In 2016/17 BCAG developed a mobile app for both Android and Apple platforms for a smartphone app called "Doublemap" which provides interactive transit route schedule and location. A person will be able to use their smart phone to find out where they are, where is the nearest bus route and how to get there. In addition, BCAG is currently utilizing Google translator on its website to assist non English-speaking

transit users obtain pertinent information. During the 2020/21 fiscal year, BCAG began development of a mobile app for transit fare transactions.

To make planning and programming material instantly available, BCAG maintains three websites: www.bcag.org, BlineTransit.com, and ButteHCP.com. These websites have proven very useful in making information available to the public and other interested parties. All significant work products are posted as they are developed to give the public the opportunity to be engaged in the regional transportation planning process. Information available includes current BCAG plans, Overall Work Program and Budget, RTP/SCS and FTIP documents and amendments, newsletters, draft material for public review, transit schedules and maps, census demographics, board agendas and minutes, and a general calendar of events.

BCAG also uses social media such as Facebook and twitter to distribute information. In addition, quarterly newsletters are distributed to BCAG's email distribution list.

As a result of COVID and social distancing recommendations by the Department of Public Health, BCAG has made all public meetings available through zoom. Meetings are recorded and hosted online for future reference.

Evaluation

As part of the comprehensive regional traffic model update, BCAG incorporated performance measures to provide tools to evaluate the RTP/SCS. With the aid of the GIS mapping tool developed by Chico State University, BCAG can quickly determine the location in relation to lower income neighborhoods, transit routes and other evaluation criteria. In addition, as part of the development of the SEIR for the RTP/SCS, BCAG evaluated three alternatives.

All work products are developed in consultation with the BCAG Transportation Advisory Committee and BCAG Board of Directors and in accordance with the adopted Public Participation Plan for BCAG.

ACTION ELEMENT CONCLUSIONS – PROJECTS PROGRAMMED, PLANNED & UNCONSTRAINED

Background

The RTP/SCS is a financially constrained document. The specific projects identified are those which are programmed and planned. Projects which are beyond the financial projections and included as unconstrained and provided for information purposes only.

Programmed projects are either exempt from transportation conformity or have been specifically included as non-exempt which could indicate the project is a capacity increasing projects such as the SR 70 Corridor or if an old, outdated single lane bridge is replaced with a current 2 lane bridge.

Planned projects are those projects which are beyond the FTIP or RTIP period and within the financial projections of the RTP/SCS. The FTIP and RTIP periods are 4 and 5 year programming cycles respectively.

Unconstrained projects that are included indicate the project is important to the region, however, due to realistic funding projections, the project cannot be included in the analysis of the RTP/SCS including the Supplemental EIR. Inclusion of an unconstrained project into the RTP/SCS would require an amendment.

The following tables included are a portion of the complete project table. This RTP/SCS has changed the format of the projects to be included in one place regardless of mode or fund source. The complete XL table is posted online at: http://www.bcag.org/Planning/RTP--SCS/index.html. The electronic posting of the table will enable the public or other interested agencies to query the data as needed. In addition, should amendments be necessary, BCAG will update and post the updated project data online.

This chapter is organized in the following manner to differentiate between short range strategies/actions and long-range strategies/actions:

Financially Constrained Projects

- **Programmed Projects** - This list represents the **short-term** investments for projects programmed in the FTIP and or RTIP. The 2019 FTIP covers fiscal years 2018/19, 19/20, 20/21 and 21/22. The 2021 FTIP is scheduled to be adopted by the BCAG Board on February 25, 2020 and approved by FHWA in April of 2021 covers the fiscal years 2020/21 through 2023/24. The 2020 RTIP period covers the five fiscal years from 2020/21 through 2024/25.

- **Planned Projects** – This list represents the **long-term** investments for projects that are not yet programmed but are included as financially constrained and are

included as an exempt project for transportation conformity or have been included as non-exempt.

Unconstrained Projects – This table of projects are included for information purposes

The 2020 RTP contains 250 projects at the time of adoption. Mapping is not included in the document, however, the projects are mapped and posted online at: https://gicwebsrv.csuchico.edu/webmaps/bcag_projects/prod/

This mapping effort was completed by Chico State University. The projects are defined in the approximate location utilizing latitude and longitude coordinates. The GIS tool enables BCAG to superimpose census data such as Environmental Justice boundaries including low income and minority communities. BCAG is then able add other spatial data including transit routes for analysis.

Purpose and Need for State Highway Improvements

The purpose of the proposed projects is to improve the safety and operations of the state highways in Butte County for people and goods movement. State highway improvements are needed to promote the economic vitality of the region in a safe and efficient manner. These projects are included in the required emissions analysis demonstration as required. Projects were developed in consultation with Caltrans and are consistent with the California Interregional Transportation Improvement Program (ITIP). Major state highway investment includes the completion of the State Route 70 Corridor in Butte County. These projects are needed for the safe transportation of people and goods.

Purpose and Need for Local Street and Road Improvements

The basic purpose for local street and road improvements is to improve safety, provide for operational improvements, and maintain the structural integrity of the roadway. These projects are needed for the safe transportation of people and goods.
These local roadway improvements are needed due to a severe backlog on long overdue roadway maintenance. As a result of insufficient funding projected in STIP funds, local street and road improvements are identified in the financial element as an "unfunded need".

Projects included in the 2020 RTP/SCS

Financially Constrained – Programmed (Short – Term)

The 2020 RTP/SCS has included $587,974,000 for the short-term period. Due to the volume of data, Appendix 10-1 identifies the specific projects. All projects are mapped with various data layer options to view. The G.I.S. map is available at: https://gicwebsrv.csuchico.edu/webmaps/bcag_projects/prod/

Identifying the projects as an appendix will facilitate the RTP/SCS amendment process if necessary. BCAG will keep an archive of the project spreadsheets. In addition, the tables are color coded to differentiate between the following categories:

BIKE AND PEDESTRIAN
CAPACITY INCREASING
MAINTENANCE, OPERATIONS, AND SAFETY
TRANSIT AND PASSENGER RAIL

Below is an example image of the project tables contained in the appendices.

FINANCIALLY CONSTRAINED - PROGRAMMED - SHORT TERM

#	Implementing Agency	Programmed	Planned	Project Type	Title	Project Description	Project ID	Fund Source	Fund Total Estimate (1,000s)	STATUS Programmed Planned Project Development, Unconstrained	Y Coordinate	X Coordinate	TARGET FISCAL YEAR	Cost Estimate - All components (1,000s)
		FTIP	RTP											
1	BCAG	FTIP	RTP	Transit	Butte Regional Transit - Capital and Operating Assistance	Federal Transit Administration Program Sections 5307 & 5311 programs to support transit services provided by Butte Regional Transit. (Fixed Route and Paratransit)	20200000200	Federal Transit Administration Funds & Transportation Development Act Funds	$ 27.3 million	Programmed	39.70500	-121.62174	Ongoing	27,300
2	BCAG & Work Training Center	FTIP	RTP	Transit	Paratransit Assistance Program	Non Infrastructure Projects in Butte County for the Help Central Mobility Management Program for Butte 211 call center and for Butte Regional Transit for supplemental ADA paratransit operations. (Paratransit Only)	20200000182	Federal Transit Administration	$ 0.6 million	Programmed	39.70460	-121.62213	Ongoing	600
20	Biggs	FTIP	RTP	Bicycle & Pedestrian	Biggs Safe Routes to School Project - Second Street	Construct new pedestrian/bike facilities to close gaps. Extend the class 2 bike lanes and install ADA compliant curb ramps	20200000217	Congestion Mitigation and Air Quality Program	$ 0.172 million	Programmed	39.41669	-121.70701	2021	172
21	Biggs	FTIP	RTP	Bicycle & Pedestrian	Safe Routes to Schools Program	Construct new pedbike facilities along 2nd & E Streets.	20200000198	Congestion Mitigation and Air Quality Program, Local Agency Funds & Future ATP	$ 1.5 million	Programmed	39.41684	-121.70758	2024	1,500
22	Butte County	FTIP	RTP	Bicycle & Pedestrian	Aubry Lane & Monte Vista Safe Routes to Schools Sep Closure Project	Curb, gutter, sidewalk, and crossing enhancements along Aubrey Ln. and Monte Vista Ave. on Aubry from Las Plumas to Monte Vista and along Monte Vista from Aubry Ln to Lincoln Blvd.	20200000199	Congestion Mitigation and Air Quality Program, Local Agency Funds & Future ATP	$3.15 million	Programmed	39.47677	-121.62584	2024	3,150
23	Butte County	FTIP	RTP	Bicycle & Pedestrian	Butte County Safe Routes Resource Center	Non Infrastructure Project: Butte County Safe Routes Program	BC-BIKEATP-2020-1	Active Transportation Program & Local Agency funds	$ 1.14 million	Programmed	39.52244	-121.56234	2022	1,140
24	Butte County	FTIP	RTP	Bicycle & Pedestrian	Monte Vista & Lower Wyandotte Class II Bike Project	Construct Class II bike facilities along Monte Vista Av and Lincoln Blvd to Lower Wyandotte Rd in locations that do not have existing curb, gutter and sidewalks, along with class II bike facilities along Lower Wyandotte Rd from Las Plumas Ave/Oro Bangor Hwy to Monte Vista Ave. From Lincoln Blvd, along Monte Vista to Lower Wyandotte and up Lower Wyandotte from Monte Vista to Las Plumas.	20200000196	Congestion Mitigation and Air Quality Program	$ 0.76 million	Programmed	39.47677	-121.63083	2026	760
26	Butte County	FTIP	RTP	Bicycle & Pedestrian	Palermo/South Oroville SRTS Project, Phase 3	Design Curb, gutter, sidewalk, and crossing enhancements along Lincoln Blvd., Palermo Rd., and Baldwin Ave. in locations that do not have existing curb, gutter, and sidewalks. From Hewitt Ave from Palermo Rd up to Baldwin Ave. Along Bullwa Ave. from Hewitt to Lincoln Blvd. Down Lincoln Blvd. from Baldwin Ave to Palermo Rd. Also on Palermo Rd from Lincoln to Palermo Middle School.	20200000218	Congestion Mitigation and Air Quality Program, Local Agency Funds & Future Active Transportation Program Funds Not Yet Secured	$ 2.36 million	Programmed	39.43618	-121.56140	2026	2,360
27	Butte County	FTIP	RTP	Maintenance, Operations, and Safety	Local Highway Bridge Program (HBP Grouped)	Cherokee Road at Thermalito Canal, 0.4 mile northeast of Table Mountain Blvd. Scope is to address cracks with a Methacrylate Deck treatment. Bridge No. 12C0066	20203000056-2019-10	Caltrans Local Highway Bridge Program & Local Agency funds	$ 144 million	Planned	39.52999	-121.56659	2021	144
28	Butte County	FTIP	RTP	Maintenance, Operations, and Safety	Local Highway Bridge Program (HBP Grouped)	Midway, At Western Canal, 0.2mile north of Nelson Shippee Rd. Scope is to address cracks with a Methacrylate Deck treatment. Bridge No. 12C0049	20203000056-2019-11	Caltrans Local Highway Bridge Program & Local Agency funds	$ .097 million	Planned	39.54004	-121.76948	2021	97

Financially Constrained – Planned (Long – Term)

The 2020 RTP/SCS has included $344,315,000 for the long-term period. Do to the volume of data, Appendix 10-2 identifies the specific projects. All projects are mapped with various data layer options to view. The G.I.S. map is available at: https://gicwebsrv.csuchico.edu/webmaps/bcag_projects/prod/

Unconstrained

The 2020 RTP/SCS has included $436,484,000 in unconstrained projects. The specific projects have been communicated to BCAG by the local agencies as needs that do not have a dedicated funding source. Appendix 10-3 identifies the specific projects. All projects are mapped with various data layer options to view. The G.I.S. map is available at: https://gicwebsrv.csuchico.edu/webmaps/bcag_projects/prod/

2020 RTP/SCS Project Summary

Total Programmed (Short Term)	$587,974,000
Total Planned (Long Term)	$344,315,000
Total Unconstrained	$436,484,000
Total All	$1,368,773,000

Criteria and Methodology Used to Prioritize Projects

Each fund source has its own criteria for project eligibility. Each federal performance measure has its own objectives. Performance Measure 1 – Safety aims to identify projects which reduce fatalities and injuries. The criteria is defined within each fund source requirements within the program. Funding is typically highly competitive between projects and jurisdictions at the state and federal level. Various programs may work towards the same performance measure, such as ATP, CMAQ, STIP, SHOPP may be addressing a safety concern and still be within the parameters of the program. Projects are typically not prioritized except for the regional STIP or the RTIP program. In this case, the priority is determined by the BCAG Board of Directors. BCAG works within its advisory committee process to identify competitive projects with the implementing agency to pursue grant funding as its method to prioritizing projects.

Performance Measure 2 (Pavement and Bridge Condition) are typically maintenance projects. BCAG relies on its local jurisdictions to utilize their own Pavement Management System to vet through the process and prioritize projects for funding.

Performance Measure 3 (Freight, Congestion and Reliability) are typically transit and CMAQ projects which aim to reduce congestion. BCAG relies on its annual Unmet Transit Needs Process, its Transit specific planning documents to prioritize projects. For CMAQ, BCAG issues a call for projects and evaluates each project application

against specific criteria to prioritize projects if needed. For CMAQ, projects are reviewed with the BCAG Transportation Advisory Committee and selected by the BCAG Board of Directors.

In each of the three performance measures, projects are ultimately selected by the agency responsible for the management of the program. For funding controlled by BCAG, applicants are required to complete an application process which includes specific criteria which works towards meeting a performance measure.

Performance Measure Summary & Project Type Summary

Summary queries have been developed and included as appendices:

Appendix 10-4
Performance Measure Safety – Fatalities and Injuries. This appendix identifies the specific projects totaling $514,120,000 in investments towards projects which work towards addressing safety concerns.

Appendix 10-5
Performance Measure 2: Pavement and Bridge Condition Management – Infrastructure Condition. This appendix identifies the specific projects totaling $247,424,000 in investments towards projects which work towards addressing rehabilitation needs such as pavement and bridge conditions.

Appendix 10-6
Performance Measure 3: Freight Movement, Congestion, and Reliability. This appendix identifies the specific projects totaling $308,561,000 in investments towards projects which work towards addressing congestion, freight movement and system reliability.

Projects Summarized and Sorted by Agency

The following appendices have been summarized and sorted by agency:

Appendix 10-7 – BCAG Summary of Projects
Appendix 10-8 – Biggs Summary of Projects
Appendix 10-9 – Butte County Summary of Projects
Appendix 10-10 – Caltrans District 03 Summary of Projects
Appendix 10-11 – Chico Summary of Projects
Appendix 10-12 – Gridley Summary of Projects
Appendix 10-13 – Oroville Summary of Projects
Appendix 10-14 – Town of Paradise Summary of Projects

The electronic XL file is posted and available to enable the public to generate any query with the available datasets. Chico State University

TRANSIT

Background

BCAG has been the owner/operator for Butte Regional Transit (B-Line), a fully consolidated transit system, since 2005. This was the result of a coordinated study which evaluated the feasibility of establishing countywide consolidated transit services and determined it was more cost efficient to administer and operate public transit services within the cities and county under one consolidated system, while at the same time providing the opportunity to improve the overall quality of the service.

B-Line provides fixed route and paratransit services to the cities of Chico, Oroville, Gridley, Biggs, the Town of Paradise, and the unincorporated communities of Butte County. Butte County is a rural and urban county that has recently experienced unprecedented natural disasters including the Camp Fire (November 2018), which was the deadliest and most destructive wildfire in the nation in the last 100 years, and the Oroville Dam main and emergency spillway crisis (February 2017). The county is in process of rebuilding, and the proposed project will serve many displaced residents from the Town of Paradise that are now living in Federal Emergency Management Agency (FEMA) trailers.

Following the Camp Fire, the estimates of current population, housing, land use, and travel are unknown. In addition, the existing long-term forecasts of these planning elements are likely no longer applicable to the region. The Post-Camp Fire Regional Population & Transportation Study will analyze regional population, housing, employment, and traffic data for pre, post, and future time periods. The study will develop several scenarios for population and travel for the 2025, 2035, and 2045 time period(s) based on existing research, empirical data, and existing policies available at the time of study development. In addition, an update of the 2015 Transit & Non-Motorized Plan will be completed with the collected data. The Study will inform the 2024 RTP/SCS and various land use, transportation, and housing plans and projects beyond the “best available” data used in development of this 2020 RTP/SCS.

Purpose and Need

The purpose of the transit service in Butte County is to provide transportation services to the citizens of Butte County and comply with the statutes of the Transportation Development Act and the Americans with Disabilities Act. The transit system in Butte County is a critical component to the region’s overall transportation network. The system serves commuters, low income families, disabled individuals, students, as well as the elderly.

The transit system improves air quality by providing an alternative to the single occupant vehicle, improves congestion on local roads and highways, and provides for an alternative mode of travel. The B-Line fleet is a combination of Compressed Natural Gas (CNG) and diesel vehicles. BCAG is in the process of converting its fleet to 100 percent electric by 2040 and has secured funds to purchase its first electric buses through Caltrans' Low Carbon Transit Operations Program (LCTOP) and Federal Transit Administration's Buses and Bus Facilities Program. This effort is aligned with Governor Newsom's Executive Order N-19-19 to continue California's climate change mitigation efforts.

In April 2015, BCAG completed an extensive planning effort to develop a new Transit and Non-Motorized Transportation Plan (TNMTP) for the region. The purpose of the project was to enhance transit, bike and pedestrian modes included in the 2016 RTP/SCS. The Plan also identified short-term changes and enhancements, as well as long-term improvements needed based on projected growth in Butte County. The complete TNMTP plan is posted at: http://www.bcag.org/Planning/Transit--Non-Motorized-Transportation-Plan/index.html.

The data contained in this chapter is largely derived from the 2015 TNMP for information purposes only. The TNMP update will be completed in 2021.

TRANSIT PERFORMANCE

Prior to the Camp Fire, B-Line's annual revenue hours and ridership were relatively stable, particularly in Chico, Paradise, and Oroville. The Camp Fire had a major impact on the system with reduction of service to the Paradise area due to the migration of nearly 30,000 residents from the Ridge.

Another major disruption to transit ridership nationwide occurred in March 2020 due to the Coronavirus (COVID-19). This resulted in overall depressed passenger ridership, fares, and service hours. Fixed route service remained the same for the most part, except for Student Shuttle routes (8 & 9) that were reduced due to Chico State's cancellation of on-campus classes. Also, because of reduced driver availability due to COVID quarantines, service on other routes was temporarily reduced.

Unlike fixed route hours that only saw a relatively small reduction in revenue hours, Paratransit service hours were basically cut in half. That's because while the fixed routes operate on a set schedule regardless of passenger numbers, Paratransit hours are strictly based on ridership reservations. Overall Paratransit ridership during the 4th quarter was down over 72%. This is in line with the nationwide transit usage dropping by 75% in 2020.

In response to the significant changes to B-Line ridership and service from the Camp Fire and COVID-19, BCAG will prepare the B-Line Routing Study to develop short, mid- and long-term recommendations for providing a more

sustainable and innovative regional transit system. The Study will address the shift in population, ridership, and identify routes that are needed to serve displaced residents. This Study will use the TNMP update as a base for developing recommendations.

Maintaining consistent on-time performance continues to be a challenge for several B-Line routes. Over the past few years revisions to the schedule have been in Chico to allow more layover time at the Transit Center and in effect helped the system to run closer to the schedule times. On-time performance is still an issue on the local Oroville service. With a smaller population spread over a large area, trying to cover as much area as possible to serve this population has been problematic. In 2019, a project was completed to sync the farebox with the onboard GPS, which allows for tracking passenger boardings. This data will be used to reconfigure routes to make them more efficient.

B-Line recently released its mobile ticketing application (app) to purchase tickets and passes using a smartphone, on the B-Line bus system. The app has the potential to improve system reliability as it is expected to take passengers less than four seconds to board the bus as opposed to the existing 10-15 seconds with current boarding methods.

B-LINE FIXED ROUTE SERVICES

The following section focuses on fixed-route service; paratransit services are discussed later in this chapter. BCAG maintains a specific “B-Line” webpage at http://www.blinetransit.com/ where comprehensive public transit information is current including detailed bus route information.

Figure 7-1 Butte Regional Transit (B-Line) website

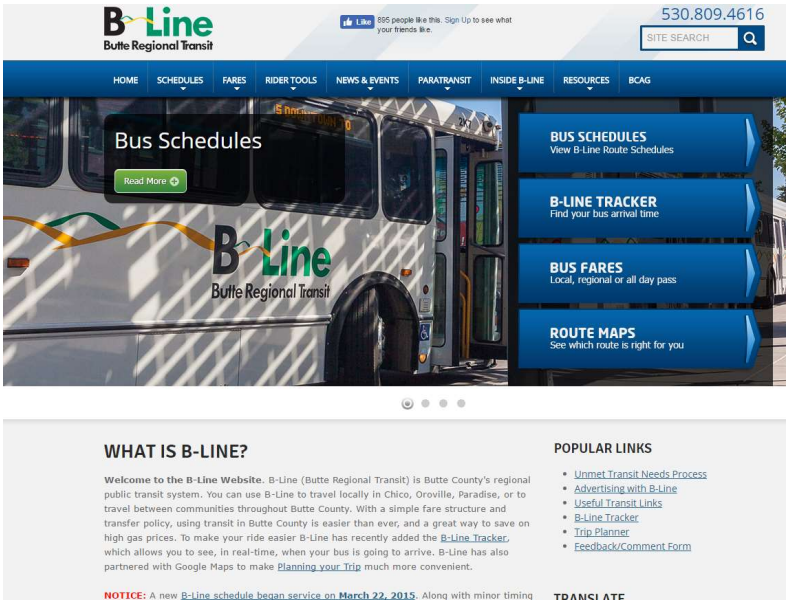
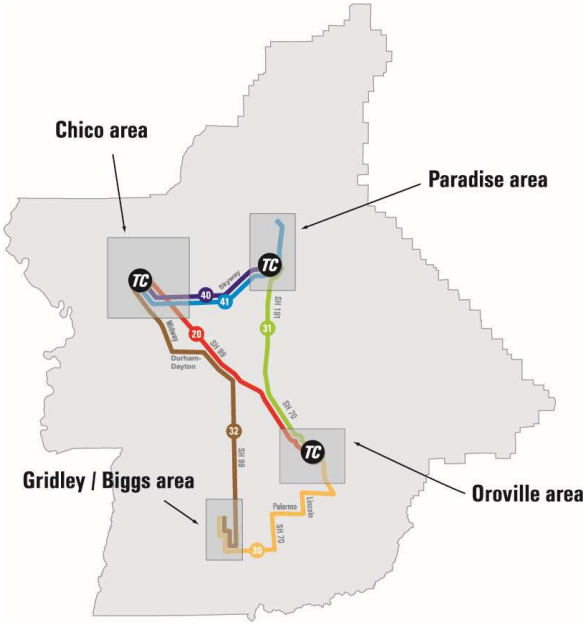
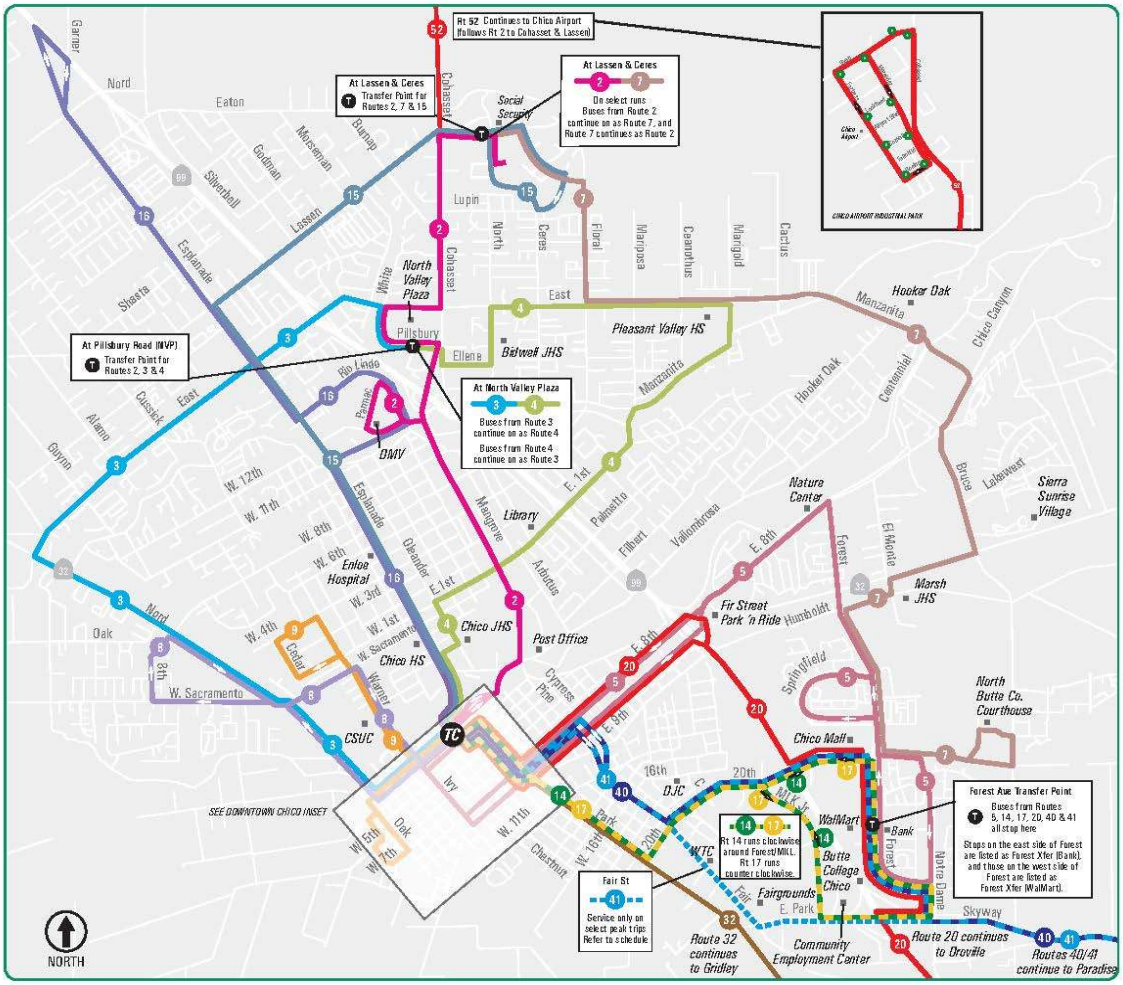
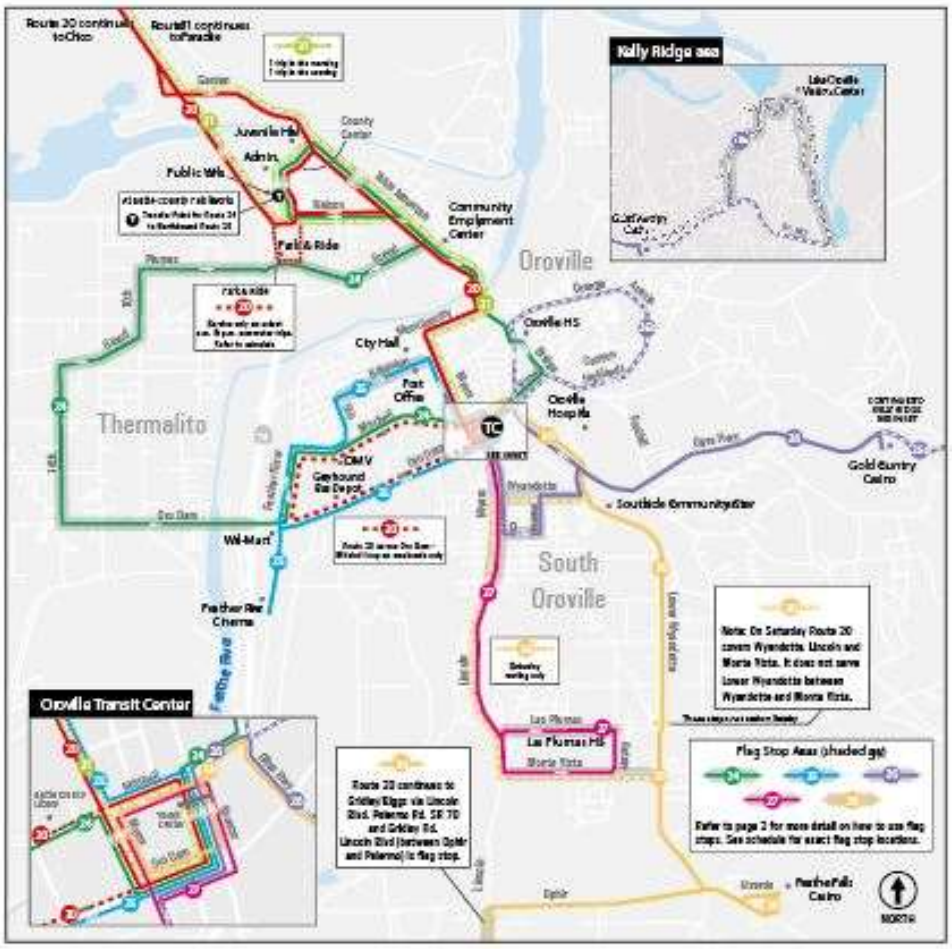


Figure 7-2 B-Line Routes

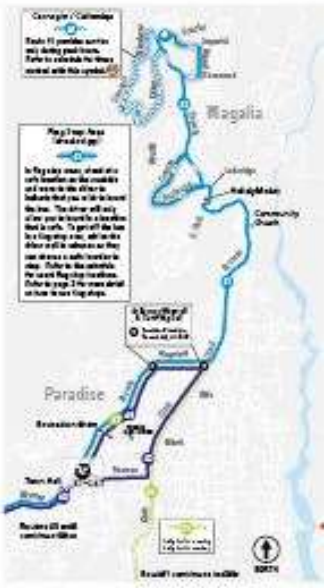






Gridley/Biggs

Paradise



Route Descriptions

B-Line operates primarily two types of services: urban (Chico area) and rural (within other Butte County cities or intercity, between other major cities and population centers of Butte County). Some routes operate Monday through Friday only, and others operate all seven days. Routes 8 and 9 (aka the Student Shuttle) operate on different schedules depending on whether California State University, Chico, is in session.

B-Line does not operate on New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving, and Christmas. The following figures provide an overview of B-Line services, with each figure showing a specific type of route. Note that in some cases, service start and/or end times have been rounded slightly to make the service span easier to read at a glance.

Figure 7-3 Summary of B-Line Routes within Chico

Name	Major Stops/Timepoints	Service Span (Rounded)	Headway (Frequency)
2 Mangrove	Chico Transit Center, 5th & Mangrove, Parmac & Rio Lindo, North Valley Plaza and Ceres & Lassen	Mon-Fri 6:15am - 8:30pm Sat 8:15am - 7pm	Peak 30 min Midday 60 min Saturday 60 min
3 Nord/East	Chico Transit Center, West 8th Avenue & Nord, East & Nord, East & Esplanade and North Valley Plaza	Mon-Fri 6:20am - 9pm Sat 8:50am - 7pm	Peak 30 min Midday 60 min Saturday 60 min
4 First/East	Chico Transit Center, Chico Junior HS, First & Longfellow, Pleasant Valley HS and North Valley Plaza	Mon-Fri 6:15am - 9pm Sat 8:50am - 7pm	Peak 30 min Midday 60 min Saturday 60 min
5 East 8th Street	Chico Transit Center, 9th Street & Pine, 8th Street and Highway 32, 8th Street and Olive, Forest Avenue Xfer (Bank)	Mon-Fri 6:15am - 8:30pm Sat 8:15am - 7pm	60 min
7 Bruce/Manzanita	Forest Avenue Xfer (Bank), Marsh Junior HS, North Co. Courthouse, Pleasant Valley HS, Ceres & Lassen. Note: Route 7 does NOT serve the Chico Transit Center	Mon-Fri 6:45am - 5:30pm	60 min

Name	Major Stops/Timepoints	Service Span (Rounded)	Headway (Frequency)
8 Nord	Student Shuttle through-routed with Route 9: connects CSU-Chico with student neighborhoods northwest of campus and the Chico Transit Center. Operates only when CSU-Chico is in session	Mon-Thu 7:30am - 9:30pm Fri 7:30am - 4pm	60 min[1]
9 Warner/Oak	Student Shuttle through-routed with Route 8: connects CSU-Chico with student neighborhoods north and south of the campus and the Chico Transit Center. Operates only when CSU-Chico is in session	Mon-Thu 7:30am - 10pm Fri 7:30am - 4pm	60 min
9C Cedar Loop	Limited service; only operates when Route 9 is not running	Fri (while school is in session) 5:10pm - 8:30pm Mon-Fri (CSU breaks) 7:50am - 8:30pm Sat (year-round) 8:30am - 6:30pm	Friday PM 60-120 min Mon-Fri (CSU breaks) 80 min Saturday 120 min
14 Park/Forest/MLK	Chico Transit Center, 20th and Park, Forest Xfer (WM), E. Park & MLK	Mon-Fri 6:24am – 9:45pm Sat 7:50am – 6:45pm	Peak 20 min Midday 60 min Evening 60 min Saturday 60 min
15 Esplanade/ Lassen	Chico Transit Center, Esplanade & 5th Ave, Esplanade & East, Lassen & Cohasset, Ceres & Lassen	Mon-Fri 6:15am – 9:34 pm Sat 7:50am – 6:34pm	Peak 20 min Midday 30 min Evening 60 min Saturday 60 min
16 Esplanade/SR 99	Chico Transit Center, Esplanade & 5th, Rio Lindo & Parmac, East & Esplanade and Esplanade & SR 99	Mon-Fri 7am - 7pm Sat 8am - 6pm	60 min
17 Park/MLK/Forest	Chico Transit Center, 20th and Park, E. Park & MLK, Forest Xfer (Bank)	Mon-Fri 7:30am – 6:05 pm Sat 8:30am – 6:05pm	60 min

[1] Due to COVID-19 and Chico State in-person classes being suspended, until further notice the Student Shuttle Routes (8 and 9) will move from half hour headways to hourly service. The revised schedules can be found on the B-Line website here: http://www.blinetransit.com/documents/Student%20Shuttle%20COVID-19%20Fall%202020.pdf

Name	Major Stops/Timepoints	Service Span (Rounded)	Headway (Frequency)
52 Chico Airport Express	Chico Transit Center, Mangrove & 5th, North Valley Plaza, Airport (5th Sun)	Mon-Fri 6:30am – 5:40 pm	Peak 60 min

Figure 7-4 Summary of B-Line Routes within Oroville

Name	Major Stops/Timepoints	Service Span (Rounded)	Headway (Frequency)
Oroville			
24 Thermalito	Oroville Transit Center (Mitchell & Spencer), 14th & Grand and Public Works/Administration. Through-routed with Route 27	Mon-Fri 6:30am - 7:30pm	60 min
25 Oro Dam	Oroville Transit Center (Mitchell & Spencer) and Feather River Cinemas. Through-routed with Route 26	Mon-Fri 6:10am - 6:50pm	60 min
26 Olive Hwy/Kelly Ridge	Oroville Transit Center (Mitchell & Spencer), D Street & Meyers, Gold Country Casino, Kelly Ridge & Royal Oaks, Oroville Hospital and Orange & Acacia. Through-routed with Route 25	Mon-Fri 6:30am - 6:20pm	60 min
27 South Oroville	Oroville Transit Center (Mitchell & Spencer), Las Plumas High School and Meyers & D Street. Through-routed with Route 24	Mon-Fri 7:10am - 6:50pm	60 min

Figure 7-5 Summary of Intercity B-Line Routes

Name	Major Stops/Timepoints	Service Span (Rounded)	Headway (Frequency)
20 Chico - Oroville	Chico Transit Center, Fir Street Park and Ride, Forest Avenue Transfer (WalMart & Bank), Butte County Administration and Oroville Transit Center (Mitchell & Spencer)	Mon-Fri 5:50am - 8pm Sat-Sun 7:50am - 6pm	Peak 60 min Midday 120 min Weekend 120 min
30 Oroville - Biggs	Oroville Transit Center (Mitchell & Spencer), Lincoln & Palermo (Palermo), Heritage Oaks Mall (Gridley) and 6th and B Streets in Biggs	Mon-Fri 7:45am - 5pm Sat 8:45am - 5pm	Weekday 240 min Saturday 120 min

Name	Major Stops/Timepoints	Service Span (Rounded)	Headway (Frequency)
31 Paradise - Oroville	Almond & Birch (Paradise), Clark & Wagstaff (Paradise), Clark & Pearson (Paradise), County Public Works (Oroville) and the Oroville Transit Center (Mitchell & Spencer)	Mon-Fri 6:45am - 7:30am (Paradise-Oroville); 5pm - 6pm (Oroville-Paradise)	1 morning/ 1 evening trip (Note: this route has been suspended due to Camp Fire)
32 Gridley - Chico	City Hall - 6th & C Street (Biggs), Spruce & SR 99 (Gridley), Midway & Durham Dayton Hwy (Durham), and the Chico Transit Center.	Mon-Fri 6:40am - 7:40am (Gridley-Chico); 5:20pm - 6:20pm (Chico-Gridley)	1 morning/ 1 evening trip
40 Paradise - Chico	Chico Transit Center, Forest Avenue Transfer @ WalMart (Chico), Almond & Birch (Paradise) and Skyway & Wagstaff (Paradise)	Mon-Fri 6:50am - 7:20pm Sat 9:50am - 6pm	M-F 2 morning / 2 afternoon round trips Sat 3 trips
41 Magalia - Chico	Skyway & Colter (Paradise Pines), Lakeridge @ Holiday Market (now a SavMor) (Magalia), Skyway & Wagstaff (Paradise), Almond & Birch (Paradise), Forest Avenue Transfer (WalMart & Bank) (Chico) and the Chico Transit Center	Mon-Fri 5:30am - 6:45pm	M-F approx. 120 min
	Saturday service operates between Skyway & Wagstaff, Skyway & Colter, and back, offering transfers to/from Route 40	Sat 9:45am – 6pm	Three round trip routes in AM, midday, and PM

Fixed Route Fleet & Facilities

Transit Centers & Transfer Points

B-Line operates and serves three transit centers that offer timed transfer points. The Chico Transit Center is located on West 2nd Street between Salem Street and Normal Avenue in downtown Chico, and bus boarding areas are located on all three blocks. The facility, which opened in 2008, features shelters, restrooms, and a staffed ticket office. Chico Transit Center is served by most local and intercity B-Line routes, including Routes 2, 3, 4, 5, 8, 9/9C, 14, 15, 16, 17, 20, 32, 40, and 41.

An additional timed transfer point in Chico, referred to as the Forest Avenue Transfer Point or "Forest Avenue Xfer," is located on both sides of Forest Avenue at Baney and Parkway Village. Buses on Routes 5, 7, 14, 17, 20, 40, and 41 all serve the Forest Avenue Transfer Point.

In 2011, the Oroville Transit Center opened for service, and includes sawtooth bus turn-outs, a permanent shelter with restrooms, several benches, and wide sidewalks. Located on Spencer Avenue just north of Oro Dam Boulevard, the Oroville Transit Center is served by Routes 20, 24, 25, 26, 27, 30, and 31.

The Paradise Transit Center is located at Almond and Cedar Streets in Paradise, and is served by Routes 31, 40, and 41. The Paradise transit center is a bus shelter only.

Fleet & Facilities

B-Line's fleet consists of 33 standard buses, with two of these vehicles powered by Compressed Natural Gas (CNG). All B-Line vehicles are fully equipped with low-floor ramps and include a wheelchair securement area with space for two wheelchairs. Additionally, all fixed-route buses are equipped with front-mounted bicycle racks. See Figure 7-6.

Figure 7-6 B-Line Fixed Route Fleet (as of October 2020)

Make	Model	Vehicle Year	Fuel Type	Capacity	Age (Years)	Count
Orion	Orion VII N.G.	2008	CNG	43	12	2
Gillig	Low Floor	2011	Diesel	44	9	6
Gillig	BRT	2014	Diesel	44	6	6
Gillig	BRT	2017	Diesel	44	3	13
Gillig	BRT	2020	Diesel	44	0	6
					Total	33

Per the California Air Resources Board (CARB) Innovative Clean Transit (ICT) regulation, BCAG is developing its Zero-Emission Battery Electric Bus Rollout Plan to update its fleet replacement schedule to phase in electric buses. The ICT regulation requires all public transit agencies to gradually transition their bus fleet to zero-emission technologies. As of October 2020, BCAG has funding for three electric buses, charging equipment, and underground upgrades to its facility.

BCAG constructed the Butte Regional Transit Operations & Maintenance Facility in April 2016 to support the expanding fleet and conversion to 100 percent electric buses. The $35 million facility includes over 51,000 square feet of new buildings and office space that serve for daily maintenance, operations, fueling, bus wash and administration. The building that was used prior for these functions was remodeled and now provides a board room, conference rooms and

additional office space. The project was funded through federal, state, and local sources.

While the facility is new, additional power is needed to support electric buses and charging equipment. BCAG will work with a consultant to design and construct facility upgrades to support on-site charging equipment for the roll-out of electric buses.

Dispatching duties are performed and vehicles are stored and maintained at BROC. BCAG contracts with Transdev for management, operation and maintenance of the B-Line system.

Fares

B-Line has different fixed route fares based on the type of service; with local routes priced slightly less than regional routes. The current fares were last changed in September 2019. The current fare structure is available on the B-Line web site: http://www.blinetransit.com/Rider-Tools/Fares/

B-Line currently has a transfer policy which ensures that riders who need more than one bus to reach their destination may complete a continuous one-way trip without paying an additional fare. Local transfers are valid for one hour from the time issued, and regional transfers are valid for two hours.

B-Line has special fare agreements with Chico State University, Butte College, and the City of Chico for City employees. Chico State students, faculty, and staff ride B-Line for free as part of a program funded by the Associated Students and the University. Additionally, Butte College students are allowed to purchase 30-Day Passes at the youth pass price (usually reserved for those who are between the ages of 6 and 18 years old). Finally, City of Chico and downtown business employees are eligible for an employee transit pass, which allows for free bus trips to and from the downtown Chico area through a program funded by the City of Chico.

Standard tickets and passes may be purchased at a few locations in Butte County, including the Chico Transit Center, the BCAG Administrative Office, the Butte County Public Works Department in Oroville, Oroville City Hall, and the Town of Paradise Finance Office. Bulk ticket sales may be made at the BCAG Office or by mail. In addition, in 2020 B-Line introduced a new purchase option, the B-Line Mobile Pass, which allows for purchase of tickets/pass right on your smartphone.

The following sections are presented for information purposes only from the 2015 TNMP. This information is currently being updated and will be complete by 2021.

Figure 7-7 B-Line Fixed Route Fare Structure (as of Sept. 1, 2019)

Fare Type	Local Service	Regional Service
CASH		
Regular	$1.75	$2.40
Discount*	$0.85	$1.20
Youth (6-18)	$1.25	$1.75
Child (under 6)	2 free	2 free
2-RIDE PASS		
Regular	$3.50	$4.80
Discount*	$1.70	$2.40
Youth (6-18)	$2.50	$3.50
10-RIDE PASS		
Regular	$15.75	$21.60
Discount*	$7.85	$10.80
Youth (6-18)	$11.25	$15.75
30-DAY PASS		
Regular	$43.50	$57.50
Discount*	$21.50	$30.00
Youth (6-18)	$31.25	$40.00
All-Day Pass		
For $5.00 an All-Day Pass allows unlimited access to the entire system for one day		

Special School Holiday Service

Like many other transit agencies that provide service to areas with a large university or college, B-Line adjusts its fixed route operating schedule when CSU is not in service. In particular, Routes 8 (Nord) and 9 (Oak/Warner/Cedar) operate only during the CSU school year when Spring and Fall semester classes are in session; these routes do not run when there are no classes, such as during Spring Break, Thanksgiving Week, and other campus holidays like Labor Day, Veterans Day, and Cesar Chavez Day. To provide service in the general vicinity of CSU when school is not in session, however, Route 9C (Cedar Loop) – which normally provides limited service on Saturdays and Friday evenings – operates throughout the day. Nevertheless, there is an opportunity to explore expanding flexible scheduling in the vicinity of CSU and other local schools.

There are numerous precedents for flexible scheduling due to school schedules and numerous transit systems across the county that serve major college

campuses also alter their services to account for the rise and fall of ridership depending on the school calendar. In a major metropolitan area like Seattle, King County Metro has a separate “When No University of Washington (UW)” schedule. When UW is not in session, designated trips on 13 bus routes that serve the vicinity of the campus are not run (canceled). More akin to B-Line, in Eugene, Oregon, several Lane Transit District (LTD) bus routes experience schedule or routing changes when area schools are out on holiday or on seasonal breaks. In contrast to B-Line, LTD service accounts for breaks not only at the University of Oregon and Lane Community College, but also at local high schools. Other universities, including the University of California Santa Cruz, University of North Texas, and Purdue also significantly modify their schedules when school is not in session.

B-LINE PARATRANSIT

B-Line Paratransit is a door-to-door service for qualified individuals traveling within the greater Butte County B-Line service area in Chico, Oroville, and Paradise. Paratransit service in Gridley is provided by the Gridley Golden Feather Flyer service. B-Line Paratransit provides two types of services:

1. ADA service for individuals who cannot use the fixed route system and hold Americans with Disabilities Act (ADA) certification.
2. Dial-a-Ride service for use by seniors 70 years of age or older.

Service is offered from 5:50am to 10pm on weekdays, 7am to 10pm on Saturdays, and from 7:50am to 6pm on Sundays. While B-Line Paratransit service is available to all destinations within a ¾ mile buffer of any B-Line fixed route, supplemental service to areas of up to three miles outside the ADA boundaries is available at an additional cost; however, in order for service to be provided to supplemental areas there must be a direct, easily accessible route from the core service area to the proposed destination. Trips provided outside the core service area are non-ADA and are provided when there is sufficient time and space available.

Reservations may be made from one to seven days in advance, and are taken from 7AM to 5PM seven days a week, excluding holidays. Nevertheless, B-Line Paratransit accommodates a limited number of same-day requests based on available capacity.

Eligibility

New Paratransit riders need to be registered and certified as eligible by B-Line before using the service. Applications may be downloaded online or prospective riders may ask for applications to be sent to them directly.

The ADA Paratransit application requires healthcare verification. The ADA Paratransit application asks very detailed questions about a rider’s disability

and/or health status, including the nature of their disability, what needs they may have in terms of mobility equipment, and how close they are to fixed route transit.

All eligible riders are only certified to use B-Line Paratransit or Dial-A-Ride for a certain period of time, at which point riders must renew their eligibility status.

Fleet & Facilities

The current B-Line Paratransit fleet consists of 24 vehicles. Full fleet information is shown in Figure 7-15 below.

Figure 7-15 B-Line Paratransit Fleet (as of October 2020)

Make	Model	Vehicle Year	Fuel Type	Capacity	Age in Years	Count
Ford	E450	2010	Unleaded	18	10	4
Ford	E450	2013	Unleaded	18	7	14
Ford	E450	2018	Unleaded	18	2	6
					Total	24

As with the fixed route fleet, B-Line Paratransit vehicles are stored and maintained at the Butte Regional Operations Center in Chico.

Fares

The current fare structure is available on the B-Line web site: http://www.blinetransit.com/Rider-Tools/Fares/

Paratransit Fares (as of Sept 1, 2019)	One Way
ADA Eligible	$3.50
Dial-a-Ride	$3.50
Companions	$3.50
Same Day Requests, *if available*	$5.25
Personal Care Attendant	Free
Children under age 6	Free
Supplemental Zone 1	$8.75
Supplemental Zone 2	$10.75
Supplemental Zone 3	$12.75

SYSTEMWIDE PERFORMANCE

This section explains performance trends for B-Line's fixed route services between FY 2015/16 and FY 2019/20. New performance trends will be presented in the updated Transit and Non-Motorized Plan.

Fixed Route Five-Year Performance Data/Indicators

Below is a summary of key findings related to B-Line fixed route service ridership, productivity, and performance over the past five fiscal years using various service and cost performance indicators. Figure 7- displays five performance metrics for all, urban, and rural B-Line services from FY 2015/16 through FY 2019/20. Note that, in practice, the "rural" designation is applied to all routes that operate outside of Chico, but some of these routes also operate within Chico (e.g., Route 20).

Figure 7-17 B-Line Performance Metrics, FY 2015/16 – FY 2019/20

	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	% Chg FY 16 -FY 20
OPERATING COST						
Total	$6,197,313	$6,257,199	$6,324,145	$6,208,248	$7,011,481	13.14%
Urban	$3,749,113	$3,578,991	$3,579,351	$3,583,907	$4,214,656	12.42%
Rural	$2,448,200	$2,678,208	$2,744,794	$2,624,341	$2,796,825	14.24%
FARE REVENUE						
Total	$1,380,440	$1,265,451	$1,241,356	$1,211,744	$1,067,423	-22.68%
Urban	$837,408	$760,310	$753,764	$750,702	$663,549	-20.76%
Rural	$543,032	$505,141	$487,592	$461,042	$403,874	-25.63%
VEHICLE SERVICE HOURS						
Total	69,867	70,684	71,367	67,780	65,594	-6.12%
Urban	44,611	44,918	44,570	44,347	43,491	-2.51%
Rural	25,256	25,766	26,797	23,433	22,103	-12.48%
VEHICLE SERVICE MILES						
Total	1,019,387	1,030,670	1,047,634	971,728	943,763	-7.42%
Urban	431,566	433,038	430,392	428,824	425,369	-1.44%
Rural	587,821	597,632	617,242	542,904	518,394	-11.81%
PASSENGERS						
Total	1,251,147	1,142,563	1,079,218	949,871	732,102	-41.49%
Urban	901,774	820,729	765,210	700,179	555,442	-38.41%
Rural	349,373	321,834	314,008	249,692	176,660	-49.44%

Sources/Notes:

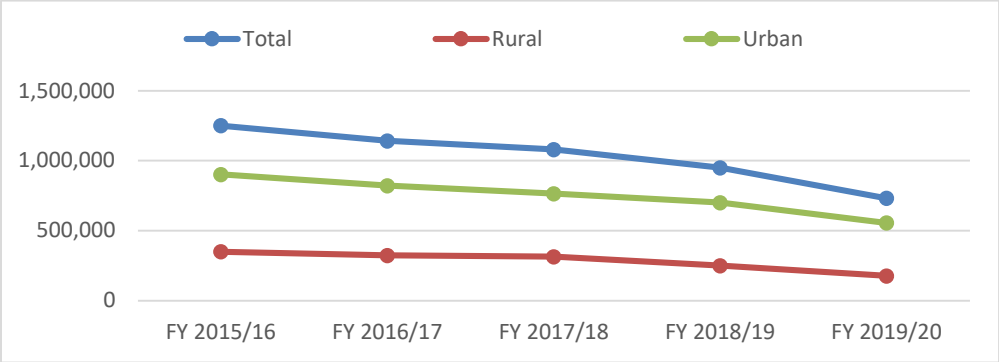
Operating Cost and Fare Revenue from BCAG Financial Statements per fiscal year.

Hours, Miles, and Passengers are from the Transdev Management Reports.

Ridership

B-Line Ridership has been in steady decline over the past five years, with a marked difference made by the Camp Fire and as a result of the COVID-19 pandemic halfway through the 2019/20 Fiscal Year.

Figure 7-18 B-Line Ridership, FY 2015/16 – FY 2019/20



Total ridership in the five-year review period fell by just over 41%. This follows the nationwide trend of declining transit ridership, and is heavily impacted by the Camp Fire and COVID-19 pandemic. Before the pandemic, there is a decline in urban ridership through FY 2018/19 that is in line with what was seen previously, while the rural ridership starts to see a sharp decline in FY 2018/19 with the loss of about 75,000 riders, and that number is again lost in FY 2019/20.

B-Line Performance Indicators

Several indicators are used to evaluate a transit system's productivity and efficiency. A summary of seven indicators over the five-year review period are presented in Figure 7-19.

Figure 7-19 B-Line Performance Indicators, FY 2015/16 – FY 2019/20

	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	% Chg FY 16 -FY 20
OPERATING COST PER HOUR						
Total	$88.70	$88.52	$88.61	$91.59	$106.89	20.51%
Urban	$84.04	$79.68	$80.31	$80.82	$96.91	15.31%
Rural	$96.94	$103.94	$102.43	$111.99	$126.54	30.54%
OPERATING COST PER PASSENGER						
Total	$4.95	$5.48	$5.86	$6.54	$9.58	93.35%
Urban	$4.16	$4.36	$4.68	$5.12	$7.59	82.51%
Rural	$7.01	$8.32	$8.74	$10.51	$15.83	125.93%
OPERATING COST PER MILE						
Total	$6.08	$6.07	$6.04	$6.39	$7.43	22.20%
Urban	$8.69	$8.26	$8.32	$8.36	$9.91	14.06%

	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	% Chg FY 16 -FY 20
Rural	$4.16	$4.48	$4.45	$4.83	$5.40	29.54%
PASSENGERS PER HOUR						
Total	17.9	16.2	15.1	14.0	11.2	-37.67%
Urban	20.2	18.3	17.2	15.8	12.8	-36.82%
Rural	13.8	12.5	11.7	10.7	8.0	-42.22%
PASSENGERS PER MILE						
Total	1.2	1.1	1.0	1.0	0.8	-36.80%
Urban	2.1	1.9	1.8	1.6	1.3	-37.51%
Rural	0.6	0.5	0.5	0.5	0.3	-42.66%
AVERAGE FARE PER PASSENGER						
Total	$1.10	$1.11	$1.15	$1.28	$1.46	32.15%
Urban	$0.93	$0.93	$0.99	$1.07	$1.19	28.65%
Rural	$1.55	$1.57	$1.55	$1.85	$2.29	47.09%
FAREBOX RECOVERY RATIO						
Total	22.27%	20.22%	19.63%	19.52%	15.22%	-31.65%
Urban	22.34%	21.24%	21.06%	20.95%	15.74%	-29.51%
Rural	22.18%	18.86%	17.76%	17.57%	14.44%	-34.90%

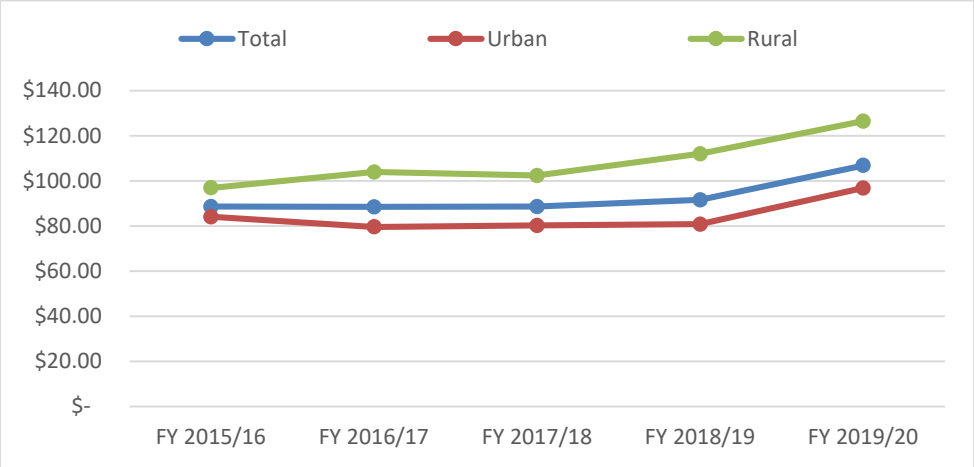
Sources/Notes:

FY

Operating Cost per Hour

Overall, hourly costs for all fixed route services increased 20.51% over the five-year period (from $88.70 in FY 2015/16 to $106.89 in FY 2019/20). Over the first three years of the review period, hourly costs remained relatively steady, with marginal fluctuations. However, in FY 2018/19 there is an increase of just under $10 in rural service costs, and $3 in total hourly costs, which reflects a contract change with the service provider and service adjustments as a result of the Camp Fire (see Figure 7-20). We can expect operating costs to continue to rise in a similar fashion until the hourly contractor rate stabilizes in conjunction with rising minimum wage laws in 2022.

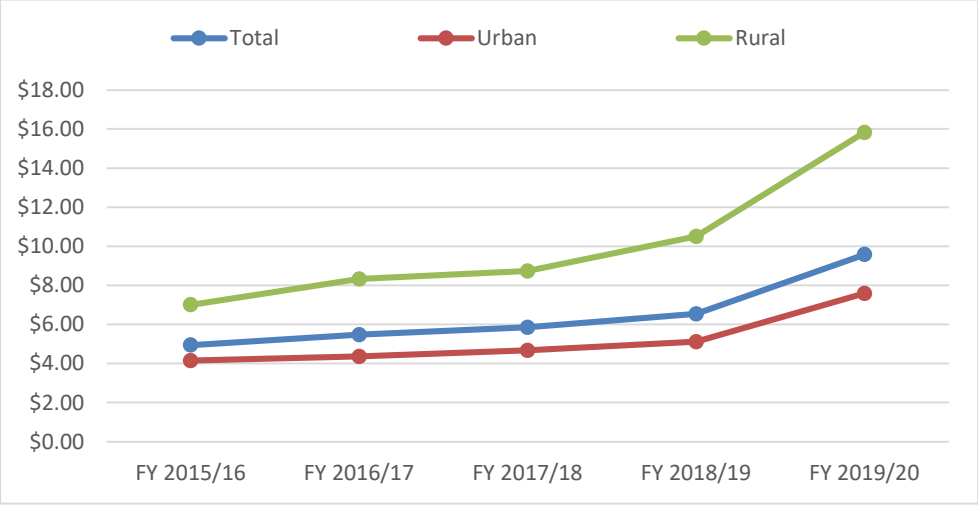
Figure 7-20 Operating Cost per Hour



Operating Cost per Passenger

Because B-Line rural services attract fewer passengers than the urban routes, rural costs per passenger are higher overall. In a pattern that closely mimics the ridership charts, you can see that operating costs per passenger is adversely affected by the sharp decline in ridership that we've seen in the past two fiscal years. Unless ridership numbers improve, there will continue to be a yearly increase in the cost per passenger.

Figure 7-21 Operating Cost per Passenger

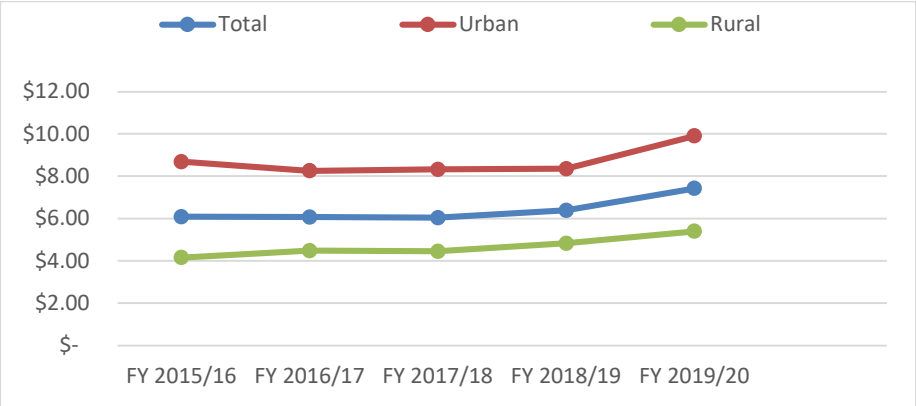


Operating Cost per Mile

Operating cost per mile remained relatively stable for the first three years of the review period, with the uptick in costs coming after a contract renewal in the

2018/19 Fiscal Year. With the rising costs of fuel and labor, a gradual increase like this is only to be expected (see Figure 7-22).

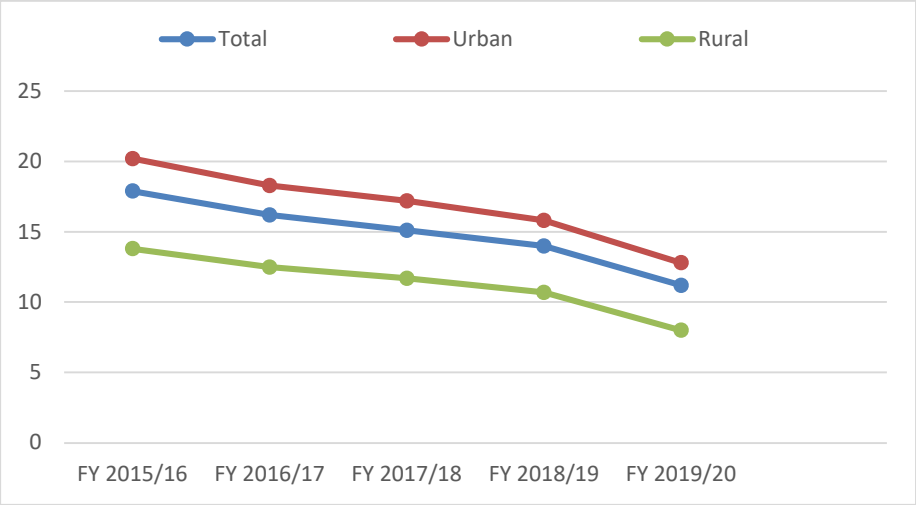
Figure 7-22 Operating Cost per Mile



Passengers per Hour

Ridership has seen a total decrease of 37.67% over the past five years. Rural ridership has fallen slightly faster than urban, but both numbers continue to decline as more people move out of the area or choose other transit options (see Figure 7-23). These numbers closely reflect the farebox recovery ratio for the past five-year period, as well.

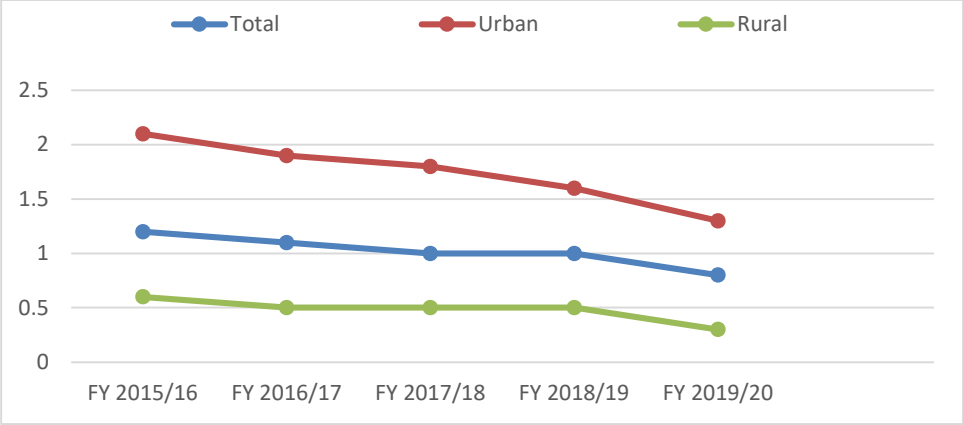
Figure 7-23 Passengers per Hour



Passengers per Mile

Over the course of the five-year review period, the number of passengers per revenue mile started off with a steady slight decline for the first three years, followed by a steeper decline in urban ridership starting in FY 2018/19. Overall, total ridership went down from 1.2 passengers per revenue mile in FY 2015/16 to 0.8 passengers per revenue mile in FY 2019/20. This follows the same downward decline evidenced in the rest of this report.

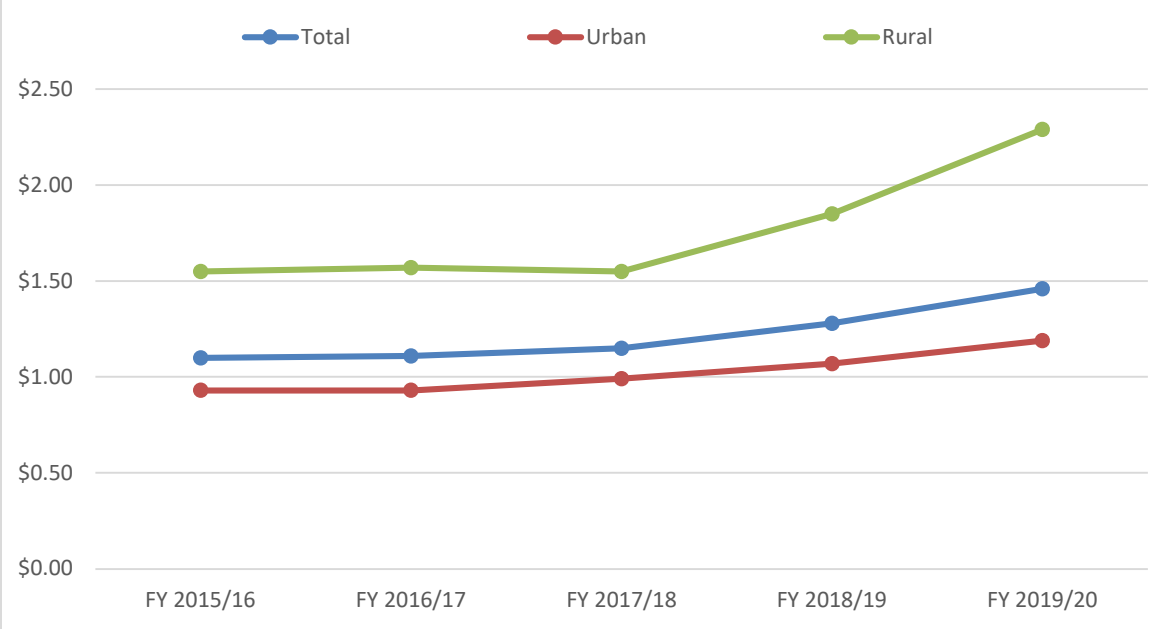
Figure 7-24 Passengers per Mile



Average Fare per Passenger

Average fare revenue per passenger for B-Line fixed route services has been on a steady rise for the past five years, in an attempt to compensate for the decline in ridership. There was a fare increase planned in FY 2018/19 that took effect at the start of FY 2019/20, which was the first increase since FY 2013/14. Because of this, and an increased effort by staff to make sure that proper fare was being paid by each passenger, average fare per passenger did increase significantly in this review period (see Figure 7-25).

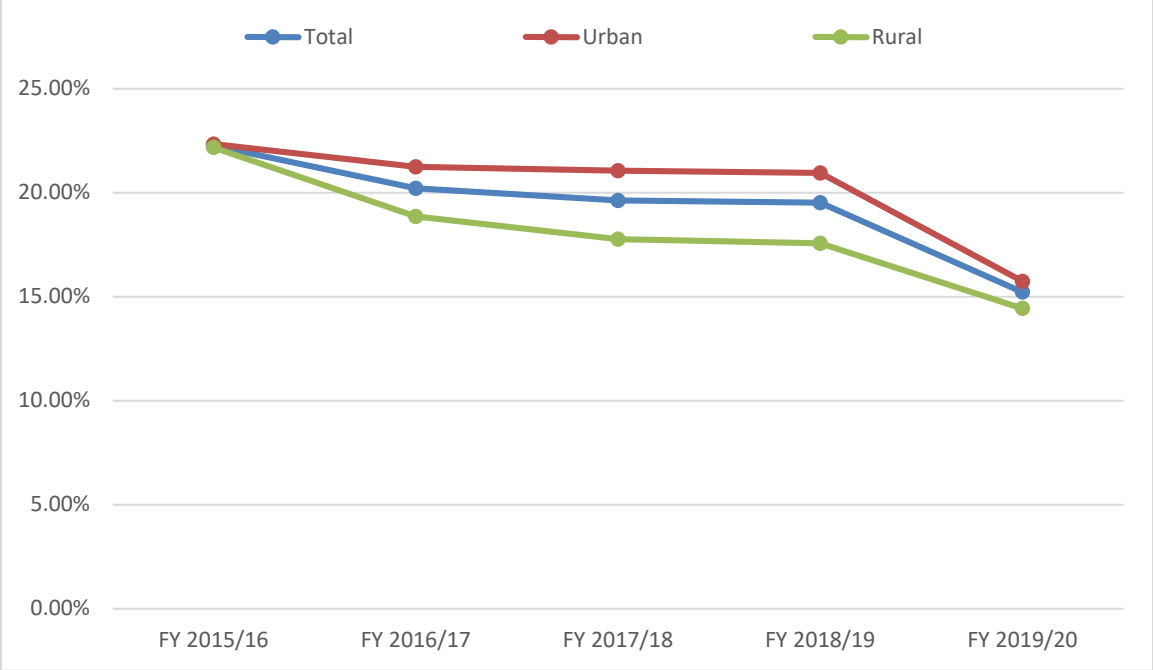
Figure 7-25 Average Fare per Passenger



Farebox Recovery Ratio

B-Line's farebox recovery ratio exceeded the 20% urban and 10% rural TDA requirements for the first four years of the five-year review period. This ratio, however, is showing a decrease along the same lines as ridership. The sudden drop in the farebox recovery ratio for FY 2019/20 can be attributed to the sharp decline in ridership due to the COVID-19 pandemic and statewide shelter in place order that went into effect in March 2020. Also effecting the drop in FY 2019/20 is the seven-week free fare period that B-Line was able to enact during April and May 2020 because of the passing of the CARES Act, which provided additional funding for transit related to farebox losses.

Figure 7-26 Farebox Recovery Ratio



MID-TERM PLAN (2017 – 2027)

As previously mentioned, BCAG is in the process of updating the Transit and Non-Motorized Plan to develop new short, mid, and long-term recommendations to improving B-Line service. The information presented below is from the 2015 TNMP.

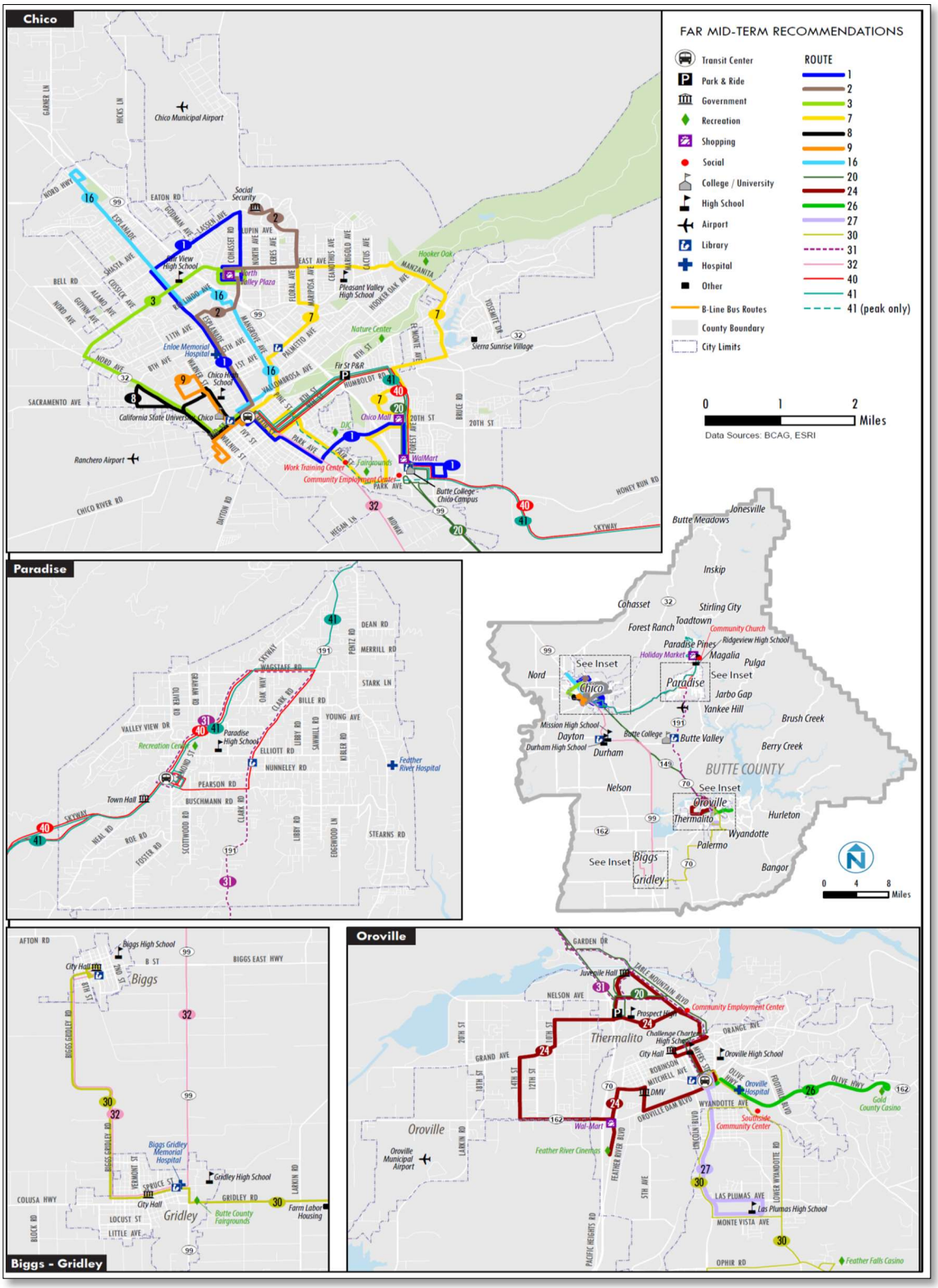
In the mid-term, B-Line would largely build on the short-term investments in transit service and amenities. In Chico, this would consist of combining Routes 15N and 15S to form the “Route 1” “BRT-lite” transit corridor, and regionally, service changes would largely work to ensure that BCAG is running the right type of services and making key infrastructure investments to support longer distance travel.

Service Changes in the Mid-Term

B-Line service changes in the mid-term are largely driven by major initiatives, described below. As seen in Figure 7-27, B-Line service in the mid-term is very similar to the short-term plan, having used the short-term changes as a foundation for enhanced service in key locations. The most significant change is the consolidation of Routes 15N and 15S into a through-routed Route 1, bringing the idea of a true transit corridor to fruition.
The mid-term recommendations for Oroville and Paradise service are much more general, and include:

- Consider additional hours and services on weekends.
- Consider additional cost sharing and/or service partnerships with regional casinos, if not implemented in the short-term timeframe.

Figure 7-27 Mid-Term Service Plan Recommendations



Resource Allocation in the Mid-Term

In the mid-term, during peak service (i.e., when CSUC is in session) B-Line will still require a total of **25 peak buses** (one fewer than today and the same as in the short-term) and approximately **254 revenue hours** on a school service weekday. This total is slightly less than current revenue hours, which are approximately 257 revenue hours, and also slightly less than short-term levels (see Figure 7-28) due primarily to speed efficiencies and reduced stops in the new Route 1 corridor.

Figure 7-28 Mid-Term Annual Resource Allocation

Route Number	Route Name	Annual Revenue Hours*			Difference 2016 - 2027	% Difference
		2013 (Scheduled)	2016 (Proposed)	2027 (Proposed)		
Chico Local						
1 "Short"	DTC to Mall	0	0	4,590	4,590	100%
1 "Long"	NVP to Mall via DTC	0	0	13,956	13,956	100%
2	Esplanade/Ceres	4,400	5,927	5,927	0	0%
3	Nord/East	4,419	4,525	4,525	0	0%
4	First/East	5.094	0	0	0	0%
5	East 8th Street	5,224	0	0	0	0%
7	Manzanita Loop CW	0	4,142	4,142	0	0%
7	Manzanita Loop CCW	1,849	4,142	4,142	0	0%
8	Nord	1,359	1359	1359	0	0%
9 / 9c	Oak/Warner/Cedar	2,460	2,460	2,460	0	0%
15N	NVP/Lassen Express	8,160	8,477	0	(8,477)	-100%
15S	Park & Mall Loop	8,160	11,344	0	(11,344)	-100%
16	Esplanade/Mangrove	3,402	3,453	3,453	0	0%
Subtotal		**44,527**	**45,829**	**44,544**	**(1,275)**	**-3%**
Oroville Local						
24	Thermalito Loop CW	1,836	2,805	2,805	0	0%
25	Oro Dam	1,046	0	0	0	0%
26-27	Hospital/Casino & S Oroville	2,945	3,060	3,060	0	0%
Subtotal		**5,825**	**5,865**	**5,865**	**0**	**0%**
Intercity						
20	Chico - Oroville	7,360	7,360	7,360	0	0%
30	Oroville - Biggs	1,642	1,642	1,642	0	0%
31	Oroville - Paradise	472	472	472	0	0%
32	Chico - Gridley	510	510	510	0	0%

Route Number	Route Name	Annual Revenue Hours*			Difference 2016 - 2027	% Difference
		2013 (Scheduled)	2016 (Proposed)	2027 (Proposed)		
40 / 40x	Chico - Paradise	5,233	5,233	5,233	0	0%
41	Chico - Magalia	4,012	4,012	4,012	0	0%
46	Feather River Hospital	389	0	0	0	0%
Subtotal		**19,573**	**19,092**	**19,092**	**0**	**0%**
Grand Total		***69,927***	***70,785***	***69,510***	***(1,275)***	***-2%***

* Includes 13% assumed layover rate for 2016 and 2027 data. Totals do not include Route 90 (Jesus Center) services.

Major Transit Initiatives

Route 1 "Transit-Emphasis Corridor"

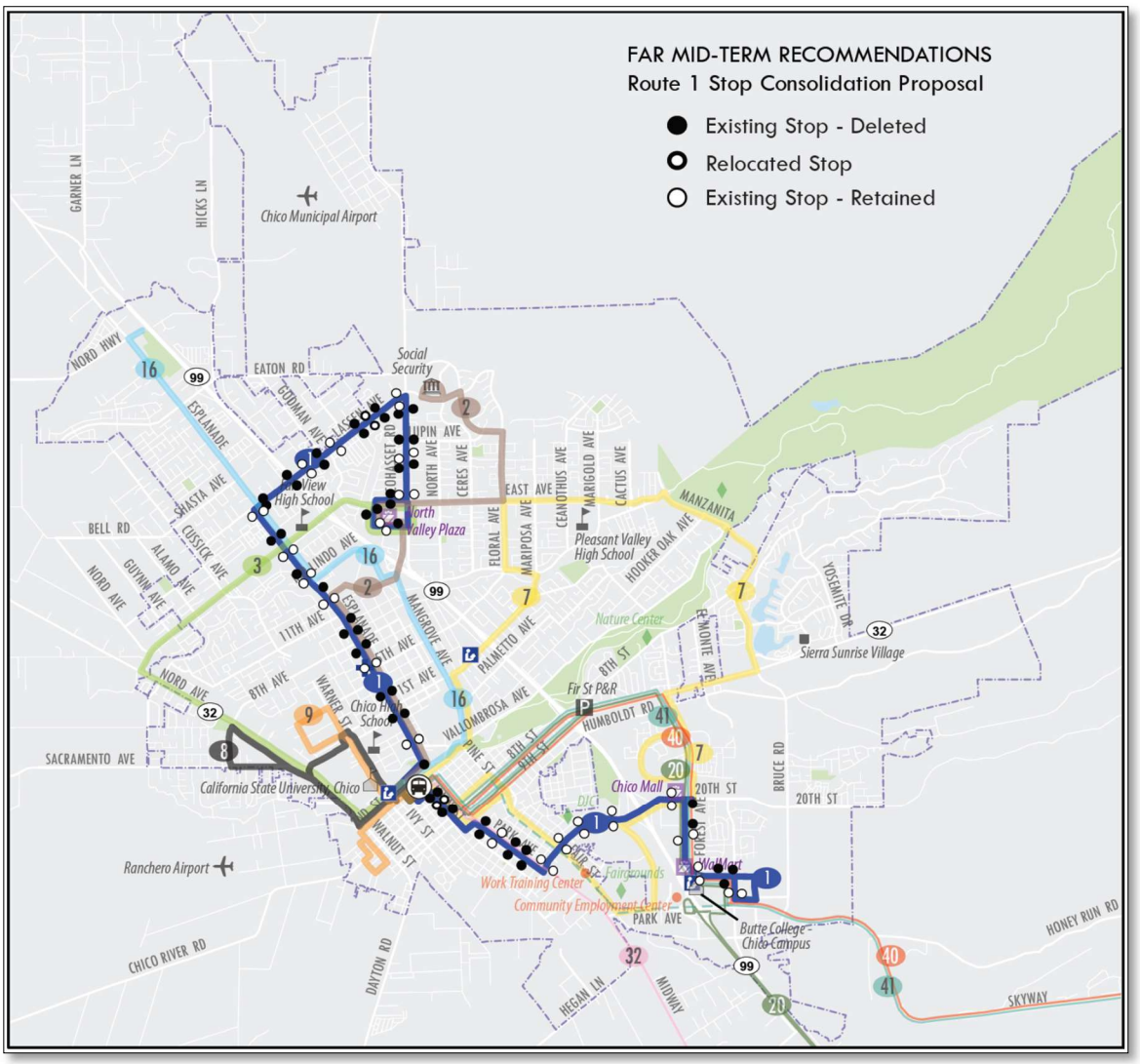
Successful "transit-emphasis corridors" or "transit-priority corridors" are arterials that are served by fast, frequent, and very "identifiable" transit service(s).

- In the short-term, Route 15S will become known as a "transit-emphasis corridor" due to its 15-minute frequency during the peak period and convenient service to and between major popular destinations.
- In the near mid-term, Routes 15N and 15S would be through-routed and rebranded as "Route 1." Proposed mid-term frequencies would remain as they are in the short-term plan; on weekdays, service on the south end of the route (i.e., between the downtown transit center and the Mall area) would consist of two alternating runs – 1 'short' and 1 'long.' 1 'short' would operate between the Mall area and the downtown transit center every 15 minutes in the peak, and 1 'long' (between the Mall and North Valley Plaza via downtown) would operate every 30 minutes all day.
- In the far mid-term, the next major transit improvement(s) to be funded would be those that increase average operating speeds and improve service reliability. The ultimate goal is to determine how much the average speed needs to be increased to reduce the peak pullout requirement for Route 1 by one (1) bus. Reducing the bus requirement on this route could save as much as $300,000/year in operating costs. It is possible to determine the Net Present Value of a 10-year cost savings in operating funds and use that to determine how much might be invested in capital projects to achieve the increased speeds. Potential capital program speed improvement projects could include:
  - Transit signal priority
  - Wider/targeted stop spacing
  - Off-board fare payment

Any of these improvements would reinforce the strength of the transit corridor, helping to solidify it in riders' minds as the "backbone" of B-Line's Chico

operations. Figure 7-29 below shows a recommended approach to reduce bus stops along Route 1 in the far mid-term.

Figure 7-29 Potential B-Line Route 1 Stop Spacing



Finally, another strategy to cement the importance of this corridor would be to implement special bus stop and vehicle branding. For illustration only, a sample mockup of a Route 1 “BRT lite” bus is provided as a concept to show how it could be distinguished from the other routes (see Figure 7-30 below).

Figure 7-30 B-Line Route 1 Bus: Sample Branding Concept

Expanded Park & Ride Strategy

B-Line currently serves two Caltrans park & rides in Butte County – Fir Street Park & Ride in Chico, and Oroville Park & Ride, located at Highway 70 and Grand Avenue. Park & rides are a convenient and very visible access point to transit service for commuters who have access to an automobile but do not wish to commute via car. In the mid-term, there are several opportunities to increase the role of park & rides as multimodal hubs within Butte County. This will be explored in more detail as part of the Chico to Sacramento Inter-City Transit Strategic Plan.

Chico: Fir Street “Park & Bike or Ride”

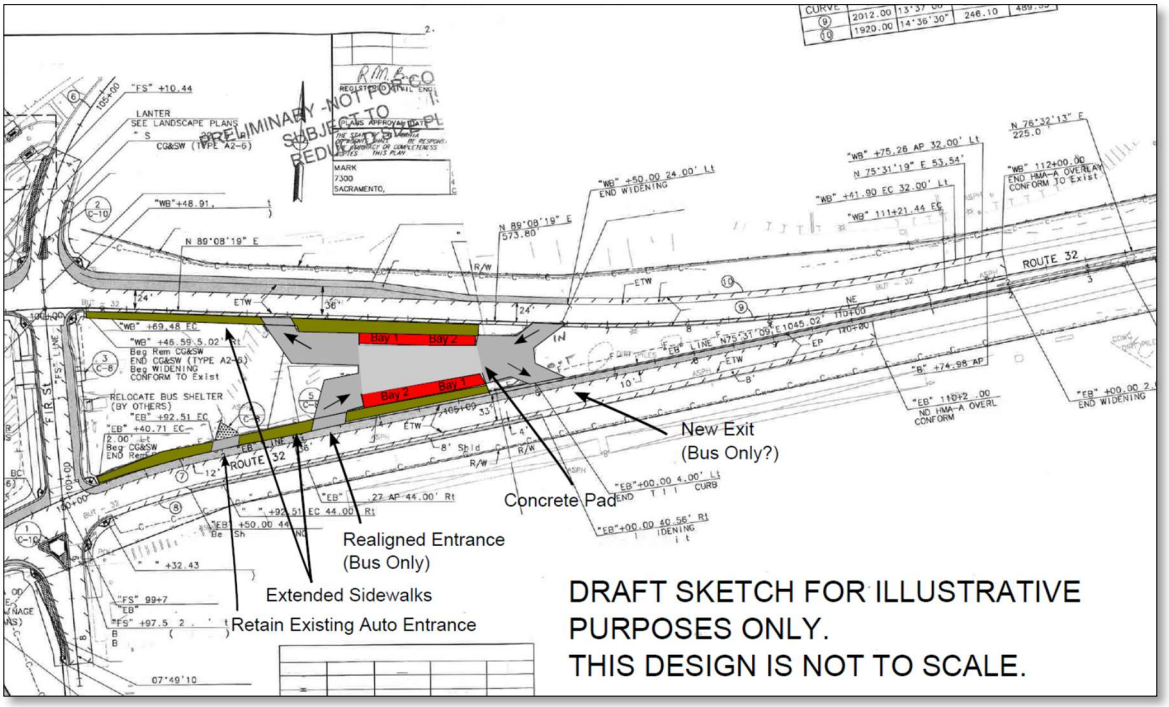
Currently, only Routes 5 and 20 serve the Fir Street Park & Ride, which is owned and maintained by Caltrans. The current location of the Fir Street Park & Ride bus stop makes expanding services at the park & ride difficult. However, with a few targeted changes to the design of the east parking lot, the Fir Street Park & Ride could be converted to a key resource for both the city of Chico and B-Line; perhaps it could even morph into an “eastside” multimodal station with a transit facility, park & ride lot, bike facilities and better pedestrian crossings on SR 32. BCAG is working with Caltrans to secure funding to expand this location to accommodate expanded service and additional vehicles.

In 2017, the City of Chico constructed the SR 32 Multi-Modal project. While improvements to transit, bike and ped were made, the City ensured they did not construct any obstacles inconsistent with the potential mid-term improvements identified.

In the far mid-term, the east lot at the park & ride could be rebuilt following the "sketch" proposal below (Figure 7-8). Streamlining the stops to allow for easy entry from the inner lanes of SR 32 permits the following:

  - Rerouting Route 20 off of Highway 99 to follow Routes 40/41 up Forest Ave and down SR 32 into downtown Chico at all times
  - Allowing Routes 40/41 to also serve the park & ride at all times
- Additionally, due to its proximity to Lower Bidwell Park (particularly the multi-use path entrance off of 8th Street adjacent to the park & ride), the Fir Street Park & Ride could be marketed as a regional entry point for the park for hikers and bicyclists, underscoring the benefits of enabling Routes 20, 40, and 41 to serve the park & ride.
- Given the very wide right of way, an opportunity exists to provide a multiuse path connecting Fir St. and Forest Ave. or Bruce St. along the north side of SR 32.

Figure 7-31 Fir Street Park & Ride Relocation/Expansion



Regional Park & Rides

Park & rides can also serve as hubs for different types of service; in addition to being served by fixed routes, they can also function as vanpool start points. In the mid- to long-term, there are several opportunities for additional park & rides throughout Butte County that will be explored in more detail in the Chico to

Sacramento Inter-City Transit Strategic Plan, which is expected to be completed by FY 2022/23.

- **Oroville.** The current park & ride lot adjacent to Highway 70 has a total of 30 parking spaces. If there were demand for additional parking spaces in this area, BCAG could explore a shared parking agreement with Home Depot at Nelson Avenue & 3rd Street to provide additional capacity. If this option were pursued, Route 20 would need to be slightly modified to serve this lot.
- **Paradise**. There is an opportunity to pair a park & ride lot with a new transit center in Paradise, which will help simplify transit routing in the area, in addition to attracting potential new riders. The new facility could be located on Black Olive Drive, north of Birth Street and adjacent to Paradise Community Park. The small gravel parking lot just north of the park could be repurposed to serve BCAG customers.
- **Gridley**. Route 32 will remain in service (albeit with a small bus/paratransit vehicle) in the short-term timeframe, serving Gridley and Biggs via Durham. In the mid-term timeframe and if applicable given employment demographics, it may make more sense to implement vanpools between these locations (see below). Regardless of the service type, BCAG could work with Gridley to install a park & ride using shared parking spaces at the Butte County Fairgrounds. This park & ride lot could support either fixed route or vanpool services, or a combination of both.

Downtown Chico Transit Center

In the mid-term, and possibly in conjunction with the City's upcoming Downtown Access Plan planning processes, BCAG should work with the City to establish a new transfer location in downtown designed to expedite transit services (by reducing the amount of circling to reach the location) and to make connections between routes more intuitive.

Ultimately, the objective of a new downtown transit center in Chico would be to elevate the visibility of transit, and improve the experience of being a transit user in Chico. It would allow for better-timed connections among routes, offer a comfortable passenger facility, allow B-Line service to be streamlined, and promote development and activity in downtown Chico. When transit centers have been developed in central urban locations adjacent to key activity centers and shopping areas, they have provided a steady stream of patrons to local businesses while people wait for buses and transfer between buses. In theory, a new transit center should:

- Have space to accommodate the next 20 years of growth.
- Have adequate boarding/alighting space, layover space and circulation space to ensure smooth operations.
- Provide safe and convenient access for pedestrians and bicyclists.

- Provide a pleasant atmosphere for passengers.
- Meet the needs of bus drivers (including driver amenities such as a restrooms and break room).
- Provide an operations outpost for the transit agency, allowing B-Line riders to collect information about the service and talk with a customer service representative.

Implementing Vanpool Service

Vanpool programs are cost effective means for providing commute transportation to employment sites. In Butte County, the most practical implementation of a vanpool service would be as a replacement for Route 31 (Paradise – Oroville) in the short- to mid-term timeframe. BCAG may also consider implementing vanpool service along Route 32 (Biggs – Gridley – Chico) in the mid-term timeframe. In the late mid-term timeframe, BCAG may also consider introducing vanpool services in Magalia and other flag-stop service areas.

Typically, vanpool programs may be managed by local or regional transit agencies, which provide vehicles, fuel, maintenance and full insurance coverage but charge a fare that is divided among the passengers. However, private options are available as well, with national operators such as VRide and Enterprise able to facilitate small (i.e., one vehicle) vanpool operations if appropriate. Additionally, some employers subsidize vanpool fares as an employee benefit or when addressing congestion or parking problems. For both public and private operations, the vanpool must identify a driver, who typically does not pay part of the fare. Ridematching services can also help facilitate and promote vanpooling; these services can be operated by public, private, or nonprofit organizations. Regardless of whether a vanpool program is operated in-house or by a contractor, a small administrative staff is needed to manage vanpool records, service issues, etc.

In practice, vanpools offer a higher degree of flexibility than fixed route services. For example, the precise route and schedule of the service are developed by participants themselves, with the service able to pick up vanpool participants at their residences and drop them off at their workplaces. Additionally, vanpools may be organized in such a way as to originate at and/or serve other park & ride lots.

LONG-TERM SERVICE PLAN (TO 2040)

In the long-term service plan, BCAG would continue to build on the foundations of the short- and mid-term service plans. Service changes would largely be dependent on urbanization and development throughout Chico and the region; in particular, service expansion, such as new coverage routes, would be reliant on new pockets of development on Chico and Oroville's outskirts as well as new roadway connections. New transit-priority corridors could also be added within

Chico (and potentially Oroville) pending increased development (or redevelopment) within existing built-up areas.

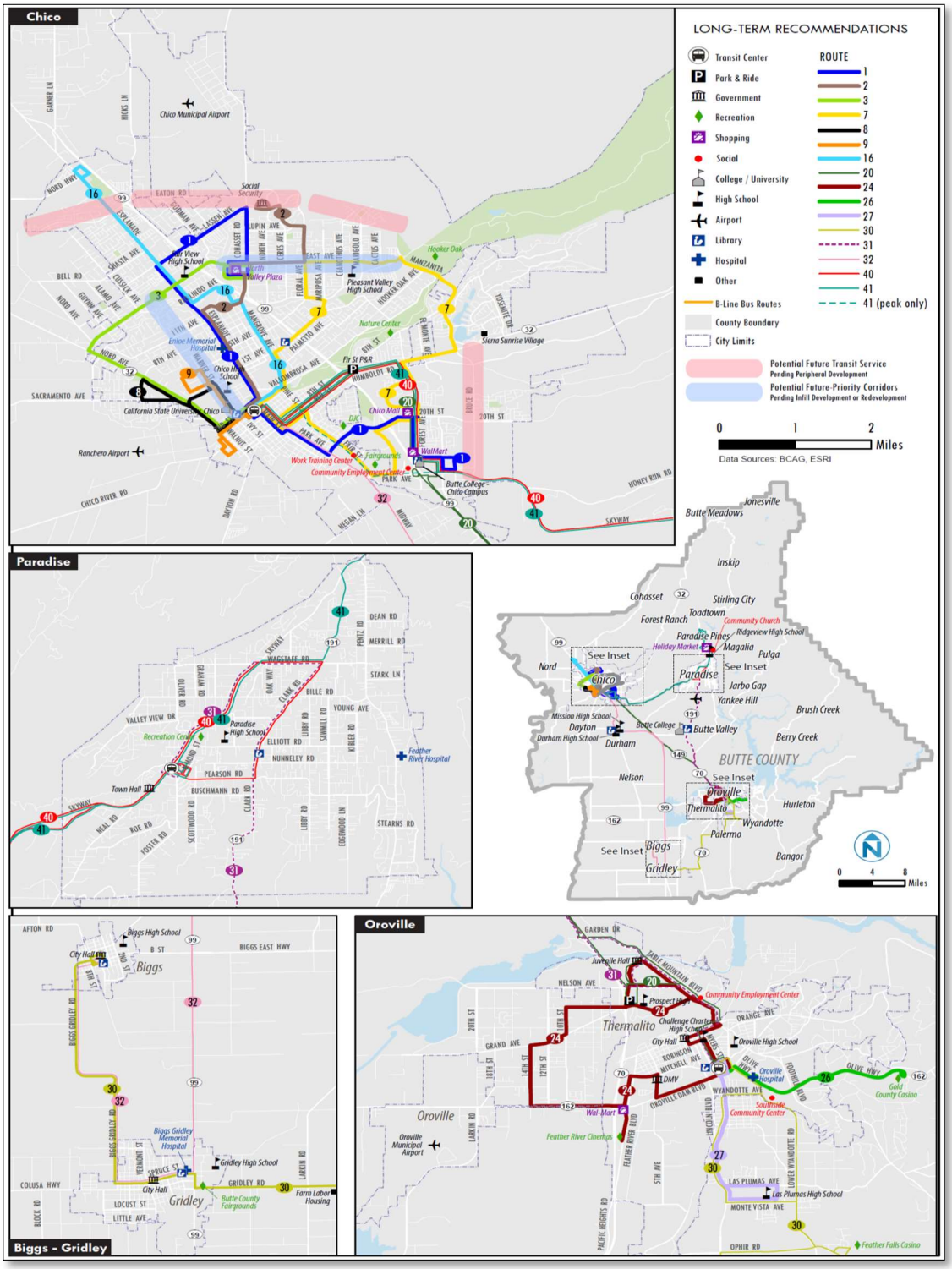
Major Transit Initiatives

Much of the long-term service plan is speculative as it is highly dependent on future development throughout Butte County.

Major long-term transit initiatives include the following elements:

- **Additional coverage routes.** Pending development on the edges of Chico, particularly along the Eaton Corridor and Bruce Road near Chico Mall, BCAG could expand transit services to include additional coverage routes serving these areas. Ideally, any coverage routes would take advantage of new roadways connecting development areas with each other as well as older areas of Chico.
- **Additional transit-priority corridors.** Again, subject to increased infill development and/or redevelopment in existing built-up areas, BCAG could expand the "transit-priority corridor" concept in Chico, designating such arterials such as East Avenue and Warner Street as high-quality transit corridors. (Note: a Warner Street transit corridor is dependent on the completion of the street extension between West 7th Avenue and West 11th Avenue.)
- **Transit Village development at North Valley Plaza.** In the long-term, BCAG could work with the City of Chico and other major stakeholders to spearhead higher-density, transit-oriented development at North Valley Plaza. (Refer to the "Community Design Standards in Support of Service Design Standards" on page 6-14 for additional guidance.)
- **Potential regional transit consolidation.** In the long-term timeframe, BCAG may wish to further increase coordination, or pursue service consolidation, with other intra- and inter-regional transit providers, including Butte College, Glenn Ride, and Yuba-Sutter Transit. One option could be to form a regional Joint Powers Agreement (JPA) to oversee all regional transit operations.

Figure 7-33 Long-Term Service Plan: Potential New Coverage Routes and Transit-Priority Corridors



CONCLUSION

Proposed changes to B-Line services in the short-term time horizon are focused on streamlining services and providing greater efficiencies. The recommendations for mid- (2020 through 2027), and long-term (to 2040) time horizons include investments to speed transit and to serve portions of Butte County, primarily in Chico, where transit investments will be appropriate given anticipated development.

Due to major disruptions to service and ridership, including the Camp Fire and COVID-19, BCAG is working on multiple studies to develop sustainable transit solutions in Butte County, including the Post Camp Fire Regional Population & Transportation Study, the Chico to Sacramento Inter-City Transit Strategic Plan, and the B-Line Routing Study. These Plans will provide recommendations on making B-Line more resilient, innovative, and provide a more efficient transit service.

As explained in the 2015 Transit & Non-Motorized Plan that is currently being updated, several of B-Line's existing routes perform well and were not modified in the service recommendations. Others can better meet performance standards and address demand. The BCAG Travel Demand Model forecasts an increase in daily ridership, using a FY 2012 base year, with ridership growth at 2% by FY 2015, assuming short-term improvements (does not assume anything other than route changes). By FY 2020, ridership growth within the near mid-term timeframe is calculated to be 7%, with growth doubling to 14% by FY 2027. Assuming the changes made in the mid-term scenario are carried forward to the longer term, even without some potential expansion routes, ridership is calculated to be 24% greater in 2035 than it is today.

Even with modest changes to the system and essentially status quo operating levels, Butte County's jurisdictions will enjoy some reductions in VMT, along with related reductions in GHG emissions, although the impacts to GHG are small: reductions in emissions overall are estimated to range from about 0.25% to 0.27% of existing emissions.

When major investments are made in transit capital projects or service operations, transit has the potential to displace the additional emissions caused by traffic congestion. In other words, as more passengers choose transit and private auto travel declines, cars and trucks will consume less fuel from idling in traffic. Under certain VMT growth scenarios, especially in urban areas already facing substantial congestion, these reductions may be significant. To the extent that B-Line service enhancements may get drivers off the road, traffic volumes may decrease, and congestion would in turn be reduced; however, given recommended investments in transit which are limited due to available funding, no major levels of displacement are projected in Butte County over the 20-year horizon of this planning effort.

Implementation of the transit service plan will require investment in several new capital projects, some of which are optional. These include improvements to the

North Valley Plaza transfer center and the implementation of Route 1 “BRT lite” improvements. A recommended capital investment for Caltrans includes improvements to the Fir Street “Park & Bike or Ride” in Chico as well as the development of additional park & rides throughout Butte County in Oroville, Paradise, and Gridley. Finally, a new Downtown Chico Transit Center is recommended.

SOCIAL SERVICE TRANSPORTATION

Butte County boasts a network of social service agencies providing specialized transportation to their clients. Most agencies assisting with client transportation needs provide transit tickets, mileage reimbursement, or a combination of mechanisms. Several agencies, however, have their own vehicles and staff providing curb-to-curb or door-to-door Paratransit service. Ridership is limited to program clients based on the individual agency’s criteria. The largest in-house social service transportation system in Butte County is the Work Training Center (WTC) which operates 24 vehicles transporting clients throughout Butte County. Vehicle capacities vary from 8 to 18 passengers. Service for WTC is funded by the Far Northern Regional Center.

COORDINATED PUBLIC TRANSIT-HUMAN SERVICES TRANSPORTATION PLAN

During the 2007/08 fiscal year, BCAG developed a Coordinated Public Transit-Human Services Transportation Plan in response to the coordinated planning requirements of SAFETEA-LU. The Coordinated Plan developed recommendations for use of new and continuing funding in Butte County under FTA:

- New Freedom Program (Section 5317)
- Job Access & Reverse Commute [JARC] (Section 5310 formally 5316)
- Seniors and Persons with Disabilities capital funds (Section 5310)
- Intercity Bus Program (Section 5311(f))

SAFETEA-LU required this locally developed plan to establish a “unified comprehensive strategy for public transportation service delivery” through a coordinated planning process to address unmet needs of target populations. Funds available under the new FAST Act programs are matched by local human service resources and other funding to leverage more transportation for targeted persons.

The Coordinated Plan identifies the transportation needs of individuals with disabilities, older adults, and people with low incomes, provides strategies for meeting those local needs and prioritizes transportation services for funding and implementation. Projects selected for funding must be derived from the locally developed coordinated public transit – human services transportation plan that minimally includes the following elements at a level consistent with available resources and the complexity of the local institutional environment:

- Assessment of available services identifying current providers (public, private, non-profit);
- Assessment of needs for individuals with disabilities, older adults and people with low incomes;
- Strategies and/or activities to address the identified gaps and achieve efficiencies in service delivery;
- Relative priorities for implementation based on resources, time, and feasibility for implementing specific strategies / activities identified.

Figure 7-34 Butte County Coordination Plan
Target Population Transportation Needs, Resources & Possible Responses

Target Population	Special Transportation Needs and Concerns	Transportation Modes	Potential Transit or Transportation Projects/ Solutions
Seniors, Able-Bodied	- Lack of knowledge about resources - Concern about safety and security - Awareness that time when driving might be limited	- Fixed-route transit - Point deviation and deviated FR - Senior DAR - Special purpose shuttles: recreation, nutrition, shopping	- Single point of information - Educational initiatives, including experience with bus riding before it is needed - Buddy programs; assistance in "trying" transit - Transit fairs, transit seniors-ride-free days or common pass
Seniors, Frail and Persons Chronically Ill	- Assistance to and through the door - Assistance with making trip arrangements - On-time performance and reliability critical to frail users - Assistance in trip planning needed - Need for shelters - Need for "hand-off" for very frail	- ADA Paratransit - Emergency and non-emergency medical transportation - Escort/Companion - Volunteer drivers - Special purpose shuttles - Mileage reimbursement service	- Escorted transportation options - Door-through-door assistance; outside-the-vehicle assistance - Increased role for volunteers - Technology that provides feedback both to consumer and to dispatch; procedures to identify frailest users when traveling - Individualized trip planning and trip scheduling assistance - Expanded mileage reimbursement program - Driver sensitivity training - Appropriately placed bus shelters

Persons with Disabilities	- Service quality and reliability - Driver sensitivity and appropriate passenger handling procedure - Concerns about wheelchair capacity on vehicles/ pass-bys - Need for shelters - Sometimes door-through-door or issues of "hand-off"	- Fixed-route transit - ADA Paratransit - Emergency and non-emergency medical transportation - Special purpose shuttles - Escort/Companion	- Single point of information; information as universal design solution - Continuing attention to service performance; importance of time-sensitive service applications - Driver education and attention to procedures about stranded or pass-by passengers with disabilities - Aggressive program of bus shelters - Vehicles, capital replacement
Persons of Low-income and Homeless Persons	- Easy access to trip planning information - Fare subsidies (bus tokens or passes) that can be provided in a medium that is not cash - Breaking down the culture of poverty that uses transportation as the difficulty for not moving about the community - Difficulties of mothers with multiple children - Need to bring along shopping carts - Difficulties with transfers within and between systems; long trips	- Fixed-route transit - Point deviation and deviated FR - Special purpose shuttles (work, training, special education, Headstart, recreation) - Van pools, ride sharing, car sharing	- Creative fare options available to human services agencies - Increased quantity of bus passes available - Universal pass for services across county - Bus passes available to those searching for jobs or in job training programs; cost-effective - Special shuttles oriented to this population's predictable travel patterns - Education about transit to case managers, workers with this population - Feedback to transit planners on demand; continued work to improve transit service levels (coverage, frequency, span of hours) - Training of staff to train consumers - Vanpool assistance, ride-sharing connections

Figure 7-34 Target Population Transportation Needs, Resources & Possible Responses - Continued

Persons with Sensory Impairments	- Difficulty in accessing visual or auditory information - Possible door-to-door for visually impaired - Driver sensitivity	- Fixed route transit - ADA Paratransit - Demand response - Volunteers/ mileage reimbursement	- Single point of information; information in accessible formats - Guides (personal assistance) through information - Driver training critical to respond to needs
Persons with Behavioral Disabilities	- Medications make individuals sun-sensitive and waiting in the sun is not an option. - Medications cause thirstiness; long hour waits can lead to dehydration. - Mental illnesses can make it frightening to be in public spaces. - Impaired judgment and memory	- Fixed route transit - ADA Paratransit - Special purpose shuttles - Escort/Companion	- Possibly special shuttles oriented to these known predictable travel needs - Driver training projects to provide skills at managing/ recognizing behaviors of clients - Aggressive program of bus shelters - "Hand-off" can be critical for confused riders, passing them off to a responsible party - Important that driver understand rider conditions

Figure 7-35 Butte County Coordination Plan Recommended Goals, Objectives and Suggested Strategies

VISION: TO IMPROVE MOBILITY FOR BUTTE COUNTY SENIORS, PERSONS WITH DISABILITIES AND PERSONS OF LOW INCOME THROUGH COORDINATED PROJECTS AND PARTNERSHIPS

GOAL 1.0: FACILITATING LEADERSHIP AND INFRASTRUCTURE	
1.1 Establish a regional Mobility Manager/CTSA capability to provide leadership on coordination around specialized transportation needs in Butte County.	1.1.1 Identify ***lead agency*** for regional Mobility Manager/CTSA.
	1.1.2 Define ***roles and responsibilities*** of the Regional Mobility Manager/CTSA for the near-term and the longer term.
	1.1.3 Establish a ***strategic oversight committee*** inviting highest level agency representation with BCAG with large human service agencies funding transportation services that could include: County Depts. of Public Social Services, Behavioral Health and Public Health as well as non-profits First Five, Far Northern Regional Center, North Valley Catholic Social Services.
	1.1.4 Establish ***mechanisms to promote coordination*** including elements such as updating annually the resource inventory, establishing coordination working groups and periodic newsletters.
	1.1.5 Continue to ***expand the planning partners base*** and grow membership in the Regional Mobility Manager/CTSA structure; establish ongoing mechanisms for communication via email, surface mail and other strategies, using this feedback as one tool for updating the annual inventory.

Figure 7-35 Butte County Coordination Plan Recommended Goals, Objectives and Suggested Strategies - Continued

1.1 Establish a regional Mobility Manager/ CTSA capability to provide leadership on coordination around specialized transportation needs in Butte County.	1.1.6 ***Promote the visibility*** *of the Regional Mobility Manager*/CTSA and its function as a resource to its planning partners, utilizing all possible methods of communication.
1.2 Establish the Regional Mobility Manager's role in "growing" and strengthening projects responsive to the coordination vision, its goals and objectives.	1.2.1 Work at the agency and project levels to ***promote and identify potential coordination projects,*** assisting planning partners in designing effective projects and pursuing funding.
	1.2.2 Establish a ***technical assistance capability*** for the Regional Mobility Manager/CTSA to provide support to human services transportation agencies related to service efficiency, effectiveness and safety.
1.3 Promote agency-level mobility managers within agencies and within social service systems through the Call for Projects and through outreach by the Regional Mobility Manager/CTSA.	1.3.1 Identify, promote and ***develop agency-level mobility managers*** as internal transportation advocates and information resources.
	1.3.2 ***Establish formalized relationships*** between the Regional Mobility Manager/CTSA and the agency-level mobility managers to ensure collaboration.
	1.3.3 Identify ***specific action areas and activities*** by which the Regional Mobility Manager/CTSA and the agency level mobility managers can work together to promote the coordination of Visions and Goals.
1.4 Develop visibility around specialized transportation issues and needs, encouraging high-level political and agency leadership.	1.4.1 ***Conduct a biennial summit*** to include highest leadership levels within the county, and all stakeholder partners to promote coordination successes, collaborative activities, and to address outstanding policy issues in specialized transportation.
	1.4.2 Promote the ***inventory database as a coordination tool,*** possibly in concert with 211/ 511 processes, encouraging participation and use at all levels and utilizing both web-based and paper products.
1.5 Address physical infrastructure needs that assist pedestrians and thereby aid transit.	1.5.1 Work with local jurisdictions to ***improve pedestrian access*** to bus stops, including sidewalks and curb cuts.
	1.5.2 Continue and expand as feasible, existing programs of placement of ***bus stop amenities***, including bus benches and bus shelters, focusing on highest use areas, transfer locations and terminus or other areas with long waits between vehicle runs.

Figure 7-35 Butte County Coordination Plan Recommended Goals, Objectives and Suggested Strategies - Continued

GOAL 2.0 BUILDING SERVICES	
2.1 Promote the QUANTITY of public transit, paratransit and specialized transportation services provided.	2.1.1 Review policies for pass and ***bus ticket purchase and pass distribution*** and develop voucher program strategies to increase the availability of fares subsidized for the lowest income individuals.
	2.1.2 ***Expand availability of public transit services*** into later evening and earlier morning timeframes; increase Saturday and Sunday services; increase service frequencies on highest use routes with attention to inter-community routes.
	2.1.3 Pursue ***pilots for "same-day, immediate needs"*** for those specialized transit users who required some limited same-day service capability.
	2.1.4 Continue ***dialog with secondary and post-secondary education systems*** to identify potential coordinated transportation projects, potentially for support services and possibly for direct service delivery.
2.2 Promote the QUALITY of public transit, paratransit and specialized transportation services provided.	2.2.1 ***Strengthen service provision capabilities*** of human services transportation providers through projects that promote coordinated driver training opportunities, technology solutions, communication improvements, coordinated maintenance and vehicle back-up capabilities, pooled insurance opportunities and other such strategies.
	2.2.2 ***Pilot trip brokering and vehicle resource sharing*** capabilities, through CTSA leadership, to increase the ability of existing transportation resources to provide more trips.
	2.2.3 Develop ***volunteer-based, coordinated projects*** that can address some special needs.
	2.2.4 Promote ***coordinated systems solutions to special needs*** groups such as, dialysis patients, youth from outlying communities, low-income workers traveling to/from third-shift jobs, incarcerated homeless, among others.
	2.2.5 ***Support fleet improvements*** including replacement of capital with lift-equipped and newer equipment.

Figure 7-35 Butte County Coordination Plan Recommended Goals, Objectives and Suggested Strategies - Continued

GOAL 2.0 BUILDING SERVICES, continued	
2.3 Develop strategies for improving transportation solutions to outlying, low-density areas of the county.	2.3.1 ***Promote pilot solutions*** to address the following corridors or areas of travel and others that may be identified through collective data gathering: o Gold Country Casino in Kelly Ridge o Oroville to Palermo o Between Oroville and Yuba/ Sutter o Thermalito to Gridley, Thermalito to Oroville And: o Berry Creek and Buckeye o Concow, Deadwood, Yankee Hill o Areas around Lake Oroville, including Feather Falls o Palermo o Kelly Ridge
	2.3.2 ***Collect data to document*** such isolated trip needs, at the case manager level, to better report the type, quantity and timing of trip needs from specific geographic areas.
	2.3.3 Collect data to document and therefore possibly address the ***mobility needs of "hidden populations"*** including agricultural workers and others.
2.4 Promote coordinated responses for those support services that will strengthen and enhance community transportation services.	2.4.1 Explore ***support service opportunities*** such as for shared vehicle maintenance, joint procurement of parts and fuel, and vehicle back-up, among other options.
	2.4.2 Explore ***coordinated insurance options***, including insurance pools and volunteer driver insurance to assist small agencies.
	2.4.3 Develop procedures to ***improve the accuracy of reporting*** of human services transportation trips to ensure full "credit" for trips provided by this sector.

Figure 7-35 Butte County Coordination Plan Recommended Goals, Objectives and Suggested Strategies - Continued

GOAL 3.0 ENHANCING INFORMATION PORTALS	
3.1 Develop information portal tools for wide distribution of information.	3.1.1 Invite through the Calls for Projects strategies that establish, promote, enhance and ***extend transit and specialized transit information portals.***
	3.1.2. ***Build upon existing B-Line information pieces and create additional information tools*** oriented to direct human service agency staff, aiding them in accessing specialized transportation services on behalf of their consumers.
	3.1.3 ***Improve methods of information distribution*** by working through the SSTAC, survey database and other strategies to get transit information into more consumer and agency personnel hands.
	3.1.4 Ensure that the regional Mobility Manager/CTSA's ***information tools are maintained and kept current*** with service changes, establishing standardized mechanisms by which public operators and Measure A providers advise the Mobility Manager(s) of anticipated service changes.
	3.1.5 ***Integrate available and planned transportation information resources*** with attention to 211/ 511 opportunities in relation to the information needs of the target populations and their caseworkers, working through existing, regionally-oriented information systems.
3.2 Actively promote travel training, mobility training and bus buddy opportunities to a wide range of audiences, including consumers and their agency representatives.	3.2.1 Invite through the Calls for Projects ***mobility training strategies*** that establish, promote, encourage and implement any travel training experience that encourages users and prospective users to ride public transit. Programs may be geared toward any subgroup of the target population and focus on building consumers' skills and agency personnel transit knowledge.
	3.2.2 Hold ***periodic transit workshops***, distributed geographically across the county, to keep human services personnel current with available transportation resources and information tools, and apprise them of upcoming changes to the public transit network.
3.3 Evaluate and report on transportation pilots, to identify successes and less-than-successful initiatives and modify plans accordingly.	3.3.1 Identify, promote and train human service organizations in ***standardized reporting*** that accurately counts transportation services provided.
	3.3.2 ***Establish performance goals***, as set by participating agencies, against which to measure performance, report on these and adapt service plans where actual performance indicates adjustment is needed.

CONSOLIDATED TRANSPORTATION SERVICE AGENCY (CTSA)

Butte County was designated the Consolidated Transportation Service Agency (CTSA) for Butte County in 1981. However, since the consolidation of B-Line in 2005, BCAG has assumed the role and responsibilities as the CTSA for practical purposes.

OTHER TRANSPORTATION OPTIONS

Glenn County operates the *Glenn Ride* service to Chico, thus opening the public transit options between Butte and Glenn County. This service runs everyday except Sunday, with seven round trips weekdays (operating between 6:20 a.m. – 7:00 p.m.) and three trips on Saturday (from 9:20 a.m. to 6:00 p.m.). Plumas County Transit offers one round trip every Wednesday from Quincy, arriving in Chico at 10:20 a.m. and departing at 3:00 p.m. Private firms also provide transportation services within the region. Greyhound Lines provides service along the SR 99/70 corridor, with several stops within Butte County. Other private transportation services operating in Butte County include limousines, airport shuttles, taxi service, pedi-cabs, and non-emergency medical transport.

TRANSIT NEEDS ASSESSMENT

As the administrator of Transportation Development Act (TDA) funds for Butte County, BCAG is charged with performing the annual Unmet Transit Needs (UTN) process which includes the development of the Transit Needs Assessment.

In Butte County, the UTN process entails a comprehensive public outreach program and series of open house style meetings throughout the county, culminating with a public hearing before the BCAG Board of Directors to obtain testimony on perceived unmet transit needs that may be reasonable to meet. The purpose of this process is to ensure that all unmet transit needs that are reasonable to meet are met before funds are expended for non-transit uses, such as streets and roads.

Once the testimony is obtained, it is analyzed to determine if there are any transit needs that meet the adopted definitions of “Unmet Transit Need” and “Reasonable to Meet”. This analysis report, called the Transit Needs Assessment, is reviewed by the Social Services Transportation Advisory Council (SSTAC), which provides a recommendation for Unmet Transit Needs Findings to the BCAG Board of Directors. If the Board determines there are unmet transit needs that are reasonable to meet, the affected jurisdiction must satisfy those needs before any TDA funds may be expended for non-transit purposes.

Workshops are typically held during the months of October through November in Chico, Oroville, Paradise and Gridley to obtain comments. These meetings, along with a public hearing, are promoted in local newspapers, on the buses, on the internet, and through the social service agencies. If individuals are unable to attend a meeting, they are encouraged to submit their comments by phone, email, or comment card. Comment cards are available on all transit vehicles. All comments received, whether in person or by another method, receive equal consideration when being analyzed.

Staff then holds a meeting of the BCAG Social Services Transportation Advisory Council to review the assessment and formulate a recommendation to the Board.

Based on the testimony and analysis with the adopted definitions of unmet transit needs and reasonable to meet, the BCAG Board of Directors is **required** to make one of three findings:

1. There are no unmet transit needs
2. There are no unmet transit needs that are reasonable to meet
3. There are unmet transit needs, including needs that are reasonable to meet

If there are transit needs that are reasonable to meet, these must be funded before Transportation Development Act funds can be used for non-transit purposes, such as streets and roads.

Unmet Transit Needs

Unmet transit needs are those trips required, but currently not provided and not scheduled to be provided within Butte County, for individuals dependent on public transit to maintain a minimum standard of living.

Reasonable to Meet

Reasonable to Meet shall include all of the following factors:

1) Cost Effectiveness: The cost to provide the service will meet the minimum farebox recovery ratio.
2) Economy: The project can be implemented at reasonable cost.
3) Community Acceptance: Support exists as indicated through the public hearing process.
4) Operational Feasibility: The service must be safe to operate.

TRANSIT PLANNING

The Transit and Bicycle & Pedestrian chapters of this 2020 RTP/SCS is the direct work product from a comprehensive Transit and Non-Motorized Transportation Plan completed in 2015. In addition, in 2015, BCAG completed the Chico to Sacramento Commuter Transit Feasibility Study to take a market based approach to see if commuter transit would support itself. While the data looks promising, BCAG is currently researching sustained funding opportunities and grants to implement a demonstration project. Other planning efforts include the completion of a Regional PEV Readiness and Feasibility Plan. In 2017 BCAG began the environmental component to look at the future construction of a new transit center in the Town of Paradise. Due to Paradise Camp Fire, this project has been put on hold. Discussions with the Town of Paradise have recently been held to re-evaluate the proposed location to fit in better alignment with the Town's rebuilding efforts.

In the 2007/08 fiscal year, BCAG developed a comprehensive Bus Stop Improvement Plan. During the 2008/09 fiscal year, BCAG pursued the concept of using an advertising company to install and maintain bus shelters. In the spring of 2010, BCAG entered into contract with Stott Advertising Agency. To date, this public/private partnership has resulted in the construction and installation of 50 new bus shelters and maintenance of all bus shelters for the region. The need for bus shelters was repeatedly one of the highest ranking needs expressed by passengers.

During the 2012/13 fiscal year, BCAG entered into a partnership with HelpCentral.org, a regional Human Services and Transportation clearinghouse website, in order to develop a "One Stop Shop" for information on coordinated Human Services and Transportation services within Butte County. The project is designed to provide all residents and visitors to Butte County simple and easy access to information regarding relevant human services available within the County, transportation options for both fixed route and paratransit and trip planning opportunities.

The project involves utilizing the current HelpCentral.org website, updating all of the Human Services contact information, updating all of the transportation services contact and scheduling information, then integrating this into the B-Line website in order to provide B-Line customers direct access. The transit services section will include schedules and trip planning capabilities, as well as links to paratransit eligibility certification.

A secondary aspect of this project was the installation of a 211 phone/website program in order to provide access to those within the Region that do not have internet access; specifically seniors and the disabled.

Since the 2016 RTP/SCS, BCAG continues to work with the cities, town, county and the public to address issues facing transit service within Butte County. Between the period of the 2016 RTP/SCS and 2020, ridership was at a slight decline consistent with national trends. Compounded with COVID in 2020, with increased declines at approximately 70% has proven to be one of the most challenging times for transit. Moving forward, BCAG as the owner/operator for Butte Regional Transit is taking the necessary proactive steps to plan accordingly given the new landscape in Butte County post Camp Fire with the development of the study.

ADA PARATRANSIT PROGRAM

The Americans with Disabilities Act (ADA), which passed in 1990, is federal civil rights legislation requiring persons with disabilities to be provided with equal access to all of the facilities and opportunities available to non-disabled persons. The Act's implications for transit operators are dramatic. Specific sections of the Act deal with everything from lift design and facility accessibility to employment. Perhaps the most far-reaching part of the Act for transit operators is the Comparable Paratransit Service provision. Under this provision, fixed route transit operators are held responsible for providing a level of paratransit service for those who cannot utilize fixed route transit. This paratransit service must be equal in most respects to the fixed route service they provide regardless of the accessibility of the fixed route service. The transit operator need not operate the comparable service directly, but must ensure that such service is fully available and is marketed to the disabled population as defined by the Act.
The Act allows transit operators five years to develop and implement paratransit service that complies with the intent and letter of the Act. Specific milestones must be met within the five-year development period. In order to monitor the progress of transit operators in complying with the Act, transit operators are required to produce a Complementary Paratransit Service Plan, which outlines the efforts and progress made. Operators are also required to update this plan annually until full compliance is achieved.

BCAG is in full compliance with the ADA for providing complementary paratransit service.

ACTION ELEMENT – NON-MOTORIZED TRANSPORTATION

BACKGROUND

The two primary types of non-motorized transportation used in Butte County are bicycling and pedestrian travel.

Bicycling has become an increasingly popular method of travel throughout the region. Many individuals are attracted to the energy savings, environmental benefits, and health advantages, while others who are not able to drive due to age or finances use bicycles as a primary means of transportation. The valley areas of the county are particularly attractive to bicyclists and pedestrians due to the flat terrain.

Pedestrian travel is commonly used for very short trips and for students traveling to school. In addition, the health benefits of walking have made this a popular form of exercise for all ages. In urban areas, pedestrian facilities most often consist of sidewalks and shared bicycle/pedestrian paths.

Another aspect of the pedestrian system in rural areas is hiking. Butte County has much to offer in scenery, diversity of climatic zones, and wildlife. Large portions of land are not accessible by car or off-road vehicles due to the rugged terrain. However, a network of trails and pathways have provided access to the abundant natural resources. These trails have added to the quality of life within the region by providing recreational, physical, and educational opportunities.

Local land use and transportation planning within the region has been sensitive to the attributes necessary to promote and encourage bicycling and walking. Each urban area within the region boasts at least one non-motorized transportation facility. Mixed land use developments, which include commercial, office, school, and residential areas, have also been used to make bicycling and walking more attractive as a method of travel. Jurisdictions generally require sidewalks be installed for new developments. In addition, jurisdictions have required developers to construct, or contribute toward the construction of bicycle and pedestrian paths.

PURPOSE AND NEED

The purpose of identifying non-motorized transportation is to identify early in the planning process potential new routes and projects to capitalize on grant funding opportunities. The greater the use of bicycling and walking as an alternative to single occupant vehicles, the fewer vehicle emissions produced and cars on the road.

BIKEWAYS

Depending on the location, overall planning and development of non-motorized facilities may be the responsibility of local, state, or federal government. Local governments are responsible for the planning and development of bikeways within their incorporated limits. Caltrans is responsible for the development and maintenance of bikeways along state highways or where established bikeways are interrupted by highway construction. The federal government is responsible for funding bikeways on federal lands, such as national forests, or along interstate highways if their provision will enhance safety. Chapter 1000 of the *Highway Design Manual* (Caltrans, 2012) covers Bicycle Transportation Design. Section 1000.4 defines three classes of bikeways as follows:

Bikeways are categorized by three different designations:

Class I Bike Path	Provides a completely separated facility designed for the exclusive use of bicycles and pedestrians with minimal crossflows by motorists. Caltrans standards call for Class I bikeways to have 8 feet (2.4 meters) of pavement with 2 foot (0.6 meters) graded shoulders on either side, for a total right-of-way of 12 feet (3.6 meters). These bikeways must also be at least 5 feet (1.5 meters) from the edge of a paved roadway. They are almost always located in an exclusive right-of-way.
Class II Bike Lane	Provides a restricted right-of-way designated for the exclusive or semi-exclusive use of bicycles with through travel by motor vehicles or pedestrians prohibited, but with vehicle parking and crossflows by pedestrians and motorists permitted. Caltrans standards generally require a 4 foot (1.2 meters) bike lane with a 6-inch (150-mm) white stripe separating the roadway from the bike lane. Bike lanes are areas within paved streets that are identified with striping, stencils, and signs for preferential (semi-exclusive) bicycle use.
Class III Bike Route	Provides a right-of-way designated by signs or permanent markings and shared with pedestrians and motorists. Roadways designated as Class III bike routes should have sufficient width to accommodate motorists, bicyclists, and pedestrians. Other than a street sign, there are no special markings required for a Class III bike route. Bike routes are on-street routes intended to provide continuity to the bikeway system.

Goals & Objectives for Bicycle and Pedestrian Planning

In addition to goals for transit, three primary goals were established for non-motorized transportation.

Goal 1: Provide options so people will choose and be able to walk and bicycle as a way to travel, to be healthy and for recreation. Objectives include the following:

- Recognize the value of walking and bicycling in Butte County's cities and between communities.
- Advocate for healthy, sustainable, and efficient communities
- Develop services and invest in improvements that overcome the obstacles – physical, social and institutional – allowing them to walk and bike.

Goal 2: Focus on urban infrastructure improvements that contribute to interconnectivity and safety for people who choose to walk or bike. Objectives should ensure local planning and development policies pursue strategies that will support safe and effective travel by bike or walking:

- Improve bicycle facilities on primary commuter routes to major employment locations in Butte County.
- Encourage installation of sidewalks along the street at all major commercial developments and in higher density residential neighborhoods.
- Link noncontiguous sidewalk segments/close gaps.
- Provide the option for bike and pedestrian access to surrounding neighborhood destinations for all new developments.

Goal 3: Facilitate regional links allowing for origin-to-destination access to bicycle and pedestrian facilities. Some basic objectives include the following:

- Assist local jurisdictions to seek funding to connect local bike and pedestrian projects to regional trails and bikeways.
- Develop projects, programs, and policies to encourage people to make multimodal trips that link walking, bicycling and transit.
- Develop facilities (e.g., bike lockers, freeway crossings, intermodal centers) that make it easy for people to choose non-motorized modes for longer distance travel.

BICYCLE & PEDESTRIAN PRACTICES & POLICIES

In 2014, the California Active Transportation Program (ATP) consolidated and replaced the Bicycle Transportation Account. Jurisdictions in Butte County do not currently need an active transportation plan to be eligible for ATP grants. However, jurisdictions in Butte County will eventually need to adopt an active transportation plan" to remain eligible for ATP grants. Figure 8-1 summarizes ATP requirements for active transportation plans.

Figure 8-1 Active Transportation Plan Requirements

Description
The estimated number of existing bicycle trips and pedestrian trips in the plan area, both in absolute numbers and as a percentage of all trips, and the estimated increase in the number of bicycle trips and pedestrian trips resulting from implementation of the plan.
The number and location of collisions, serious injuries, and fatalities suffered by bicyclists and pedestrians in the plan area, both in absolute numbers and as

a percentage of all collisions and injuries, and a goal for collision, serious injury, and fatality reduction after implementation of the plan.
A map and description of existing and proposed land use and settlement patterns which must include, but not be limited to, locations of residential neighborhoods, schools, shopping centers, public buildings, major employment centers, and other destinations.
A map and description of existing and proposed bicycle transportation facilities
A map and description of existing and proposed end-of-trip bicycle parking facilities.
A description of existing and proposed policies related to bicycle parking in public locations, private parking garages and parking lots and in new commercial and residential developments.
A map and description of existing and proposed bicycle transport and parking facilities for connections with and use of other transportation modes. These must include, but not be limited to, parking facilities at transit stops, rail and transit terminals, ferry docks and landings, park and ride lots, and provisions for transporting bicyclists and bicycles on transit or rail vehicles or ferry vessels.
A map and description of existing and proposed pedestrian facilities at major transit hubs. These must include, but are not limited to, rail and transit terminals, and ferry docks and landings.
A description of proposed signage providing wayfinding along bicycle and pedestrian networks to designated destinations.
A description of the policies and procedures for maintaining existing and proposed bicycle and pedestrian facilities, including, but not limited to, the maintenance of smooth pavement, freedom from encroaching vegetation, maintenance of traffic control devices including striping and other pavement markings, and lighting.
A description of bicycle and pedestrian safety, education, and encouragement programs conducted in the area included within the plan, efforts by the law enforcement agency having primary traffic law enforcement responsibility in the area to enforce provisions of the law impacting bicycle and pedestrian safety, and the resulting effect on accidents involving bicyclists and pedestrians.
A description of the extent of community involvement in development of the plan, including disadvantaged and underserved communities.
A description of how the active transportation plan has been coordinated with neighboring jurisdictions and is consistent with other local or regional transportation, air quality, or energy conservation plans, including, but not limited to, general plans and a Sustainable Community Strategy in a Regional Transportation Plan.
A description of the projects and programs proposed in the plan and a listing of their priorities for implementation, including the methodology for project prioritization and a proposed timeline for implementation.
A description of past expenditures for bicycle and pedestrian facilities and

programs, and future financial needs for projects and programs that improve safety and convenience for bicyclists and pedestrians in the plan area. Include anticipated revenue sources and potential grant funding for bicycle and pedestrian uses.
A description of steps necessary to implement the plan and the reporting process that will be used to keep the adopting agency and community informed of the progress being made in implementing the plan.
A resolution showing adoption of the plan by the city, county or district. If the active transportation plan was prepared by a county transportation commission, regional transportation planning agency, MPO, school district or transit district, the plan should indicate the support via resolution of the city(s) or county(s) in which the proposed facilities would be located.

Recommendations are further identified in BCAG's Transit and Non-Motorized Transportation Plan and posted online at: http://www.bcag.org/Planning/Transit--Non-Motorized-Transportation-Plan/index.html.

EXISTING LEVELS OF WALKING AND BICYCLING

The American Community Survey (ACS) is one of the only sources of data regarding existing levels of walking and bicycling within Butte County. The 2014-2018 ACS provides sample data about means of transportation to work. Figure 8-2 shows commuting mode share for Butte County and its jurisdictions according to the 2014-2018 ACS. Figure 8-3 shows the number of commuters by mode. These figures are for work trips only and do not include trips made for recreational or other utilitarian purposes. Non-work trips, such as shopping or errands, are more likely to be made by walking or bicycling. Therefore, it is reasonable to believe that actual levels of bicycling within Butte County are higher than those presented for each jurisdiction. ACS data does not distinguish between intra-jurisdiction and inter-jurisdiction trips; however, it is likely that the bicycle and walking mode shares are higher among individuals who live and work in the same jurisdiction. Existing Levels of Walking and Bicycling – Educational commutes by walking/biking are not considered work trips by the ACS, and this should be noted as a large percentage of students walk and bike to CSUC and schools.

Figure 8-2 Commuter Mode Share %, 2014-2018

Jurisdiction	Bicycle	Walk	Car, Truck, or Van	Public Transit	Worked at Home/ Other
Butte County (Total)	2.5	3.3	86	1.2	7
Biggs	0	0	94.2	0.8	5
Chico	4.8	5	83.3	1.2	5.7
Gridley	0	3.1	89.6	0	7.3
Oroville	0.2	1.9	89.1	2.2	6.6
Paradise	0.3	1.7	87.4	1.7	9

(2018 American Community Survey 5-Year Estimates)

Based on the 2014-2018 ACS data, approximately six percent of Butte County residents' bicycle or walk as their primary means of transportation to work. The walking or bicycling mode shares in Chico are above the county average while those in Gridley, Paradise, Oroville, and Biggs are all below the average. Figure 8-3 shows the number of commuters by mode.

Figure 8-3 Number of Commuters by Mode, 2014-2018

Jurisdiction	Bicycle	Walk	Car, Truck, or Van	Public Transit	Worked at Home/ Other
Butte County (Total)	2,300	3,036	79,129	1,104	6,441
Biggs	0	0	811	7	43
Chico	2,106	2,193	36,540	526	2,500
Gridley	0	71	2,059	0	168
Oroville	11	105	4,923	122	365
Paradise	29	165	8,494	165	875

(2018 American Community Survey 5-Year Estimates)

Based on the 2014-2018 ACS data, over 5,300 commuters' bicycle or walk as their primary means of transportation to work, representing over 10,600 trips per working day. Each commuter makes two trips each day: one trip from home to work and one trip from work to home.

EXISTING AND PLANNED WALKING AND BICYCLING INFRASTRUCTURE

Figure 8-5, Figure 8-6, and Figure 8-7 show the existing and proposed bikeways in the various jurisdictions within Butte County.

City of Biggs

In June of 2011, the City of Biggs updated their Bicycle Transportation Plan. The City of Biggs plans bikeways within its sphere of influence. The City is responsible for the development of bikeways within its incorporated limits, while the county is responsible for the remainder of the urban area.

Existing

The City of Biggs has two bike paths: one along Rio Bonito Road east of 2nd Street and another at the City's northeastern limits with a connection to 2nd Street. Bike lanes exist on E Street/Rio Bonito Road between 8th Street and 2nd Street, 6th Street between B Street and E Street, and 8th Street between B Street and E Street. Biggs has bike routes on 2nd Street, 5th Street, C Street, Aleut Street, and Trent Street.

Proposed

Proposed bicycle facilities in the City of Biggs include a bike path following the Hamilton Slough between Biggs Gridley Road and B Street, and a regional bike path beginning south of B Street and following the railroad tracks south towards Gridley. Bike lanes are proposed on B Street and 6th Street. Additional bike routes are proposed on 5th Street and C Street.

City of Chico

The City of Chico has the most extensive bikeway system within Butte County. The Chico City Council has maintained a strong commitment to bicycle transportation. The City Council's goal of becoming the most Bicycle Friendly City, as determined by Bicycling Magazine. In the 2017 League of American Bicyclists "Where We Ride" report, Chico was ranked 12th overall for 'bike-share', the percentage of people who commute by bike. In 2019, the City of Chico was ranked in the top 15% of over 500 US cities in their Places for Bikes city ratings. The League of American Bicyclist awarded the City of Chico a Gold Level Award for 2016 to 2020. In addition, local land use and transportation planning within the region have been sensitive to the attributes necessary to promote and encourage bicycling and walking. BCAG has developed a comprehensive bike map for the urbanized area of Chico. The map has been distributed to the University, each bike shop, and posted online at BCAG's website: http://www.bcag.org/Transit/Bicycle-Resources/Bike-Maps/index.html

In the 2008/09 fiscal year, the City of Chico began the SR 99 Corridor Bikeway Project. The project is a combination Class 1 and 2 facilities, generally along the east side of SR 99 frontage routes and drainage easements from Eaton Rd on the north to Southgate Ave on the south. The City of Chico was recently awarded Cycle 2, 3 & 4 ATP grant funds for projects along the SR 99 Bikeway Corridor. Figure 8-4 identifies the specific projects.

Existing

Class I Bike Paths

The City of Chico has an extensive network of Class I bike paths. Bicycle paths are present alongside or parallel to several major arterial streets including Nord Avenue, Cohasset Road, State Route 99, Park Avenue and Midway, and Bruce Road. The City also has several bike paths that follow waterways or abandoned railroad. For example, Bidwell Park features several bike paths which serve as connections between other facilities north and south of the park.

Class II Bike Lanes

East Avenue, Nord Avenue, Warner Street, Manzanita Avenue, Easton Road, 20th Street, Notre Dame Boulevard, Forest Avenue, and Skyway Road are all corridors featuring Class II bike lanes along at least a portion of their route. Bike lanes are not available on all roadways; some simply feature a wide shoulder.

Class III Bike Routes

Several major arterials and collectors within Chico have been designated as Class III bike routes, with the majority concentrated in downtown and just north of downtown in the vicinity of CSU Chico. Bike routes also exist throughout the residential neighborhood immediately northwest of Bidwell Park, along Lassen Avenue, and along a portion of Dr. Martin Luther King Junior Parkway.

Proposed

The City of Chico has identified numerous improvements to its network of bicycle infrastructure. Components of the proposed network include:

- Construction of bike paths on Humboldt Road between Marsh Junior High School and the City's eastern limits, along the railroad right-of-way between the 9th Street/Walnut Street intersection in downtown and the City's southern limits, following the abandoned railroad spur from Estes Road east to Skyway Road, following the Sacramento River tributary between State Route 32 and Cohasset Road, along the future Eaton Road between its existing terminus and Nord Avenue, and continuing along the Amtrak tracks between Lindo Avenue and the Sacramento River Tributary.
- Construction of bike lanes along sections of several roadways, including Sacramento Avenue, Nord Avenue, Chico River Road, Eaton Road, Cussick Avenue, Bruce Road, and Honey Run Road.

- Designation of bike routes on numerous city streets, focusing especially on downtown Chico and the neighborhoods to the north of CSU Chico.

In addition, BCAG assisted the City of Oroville develop a Nord Avenue Corridor Study with many bike, pedestrian and access to transit improvements. The project work effort is posted at: http://www.bcag.org/Planning/Nord-Ave-Corridor-Plan/index.html.

City of Gridley

The City of Gridley adopted their Bicycle Plan in 2008. The City received a Community Based Transportation Grant from Caltrans to develop their bicycle plan. The completion of the plan enabled the City to pursue State funding for projects identified in the plan. The City of Gridley intends to update their plan to comply with new ATP plan requirements.

Existing

The City of Gridley does not currently have any bike paths. Bike lanes exist on Spruce Street between Biggs Gridley Road and State Route 99, on Gridley Road between Vermont Street and Washington Street, on Hazel Street between Virginia Street and the street's eastern terminus, and along the entire length of Washington Street. Gridley has not designated any streets as bike routes.

Proposed

The City of Gridley has proposed to add bike lanes to several north-south and east-west streets within its roadway grid. Additionally, the regional bike path between Biggs and Gridley will be accessible in Gridley near the Washington Street/Spruce Street intersection.

City of Oroville

In 2008, the City of Oroville began a comprehensive update to their Bicycle Transportation Plan. The City of Oroville has also included an extensive system of bikeways and trails in the Oroville General Plan. Currently, there are two Class I bike paths and one Class II bike lane within the City of Oroville, with the Bikeway Master Plan identifying several bikeways for future construction. In addition, a 41-mile bicycle trail loops around the Feather River.

Existing

Within the City of Oroville, there is one bike path which connects Riverbend Park and State Route 70 along the banks of the Feather River. Bike lanes are present on sections of Grand Avenue, Orange Avenue, and Foothill Boulevard. The City of Oroville has not designated any streets as bike routes.

Proposed

Oroville's network of proposed bicycle facilities calls for bike lanes on several of the city's long north-south and east-west corridors. Bike paths are proposed following the Feather River, parallel to Lincoln Boulevard, and following the paths of two high-tension power line easements to the east of downtown. The network proposal designates two corridors in downtown Oroville as bike routes. There is also a major effort by the City for comprehensive bicycle, pedestrian and transit access improvements along the State Route 162 corridor through the City of Oroville. Comprehensive details are available in the City's SR 162 Corridor Study. This project work effort is posted at: http://www.bcag.org/Planning/SR-162-Corridor-Study/index.html.

Town of Paradise

In 2007 the Town of Paradise adopted their Master Bicycle Plan to serve as the planning guide for future bikeway and pedestrian facility development. In this plan, the Town established a bikeway system to serve the entire community. The backbone of the Paradise bikeway system is the Paradise Memorial Trailway, an abandoned railroad right-of-way through town converted to pedestrian and bikeway usage. Due to the Camp Fire on November 8, 2018 it should be noted that the Town's immediate priority is to address the safety and operational concerns on their local roadway system. However, the Town remains steadfast in completing the ATP projects funded through the CTC.

Existing

The Paradise Memorial Trailway is the Town of Paradise's major bike path and currently connects the Neal Road/Skyway Road intersection with the Pentz Road/Skyway Road intersection. The trail parallels Skyway Road for its length. A short bike lane exists on Pearson Road between Recreation Drive and Clark Road. A bike path was recently completed for a portion of Pearson Rd in 2016.

Proposed

The Town of Paradise's current plan calls for the addition of bike lanes along several roadway corridors including Pentz Road, Wagstaff Road, Bille Road, Sawmill Road, Pearson Road, and Neal Road. Bike routes have been proposed on Pentz Road south of Pearson Road, Clark Road, and segments of Wagstaff Road and Nunnelley Road. A bike path that would connect Chico and Paradise has been proposed adjacent to Skyway Road.

Unincorporated Butte County

Butte County adopted their Bicycle Transportation Plan in 2012. The Bicycle Plan Update for the unincorporated areas is the County vision for making bicycling an integral part of the transportation system in Butte County unincorporated areas. The plan recommends projects, programs, and policies to

encourage use of this practical, non-polluting, healthy and affordable mode of transportation.

The unincorporated areas of Butte County are included with emphasis on regional connectivity to the communities of Biggs, Chico, Gridley, Oroville and the Town of Paradise, as well as gap closures.

Existing

From Chico, the Chico-Durham Bike Path continues south along Midway to Jones Avenue in Durham. Additionally, several multi-use trails serve the area north and west of Oroville, continuing north along State Route 149 to the Butte College campus on Clark Road.

Proposed

An extensive network of bike paths, bike lanes, bike routes, and multi-use trails is proposed for the unincorporated areas of Butte County. Bike paths are proposed between Chico and Paradise along Skyway Road, and between Biggs and Gridley along the railroad right-of-way. Bike lanes are proposed on several state highways and county roadways. Bike routes are proposed on segments of Humboldt Road, Skyway Road, Pentz Road, and Jones Avenue. South Oroville is a priority area for the county in which several grant funds have been approved recently including HSIP, CMAQ and ATP funding near the congregation of local schools.

ATP Approved Projects

The following represent recently approved ATP projects from Cycle 1 through 4. Many of these projects utilized CMAQ funds for the preliminary engineering component.

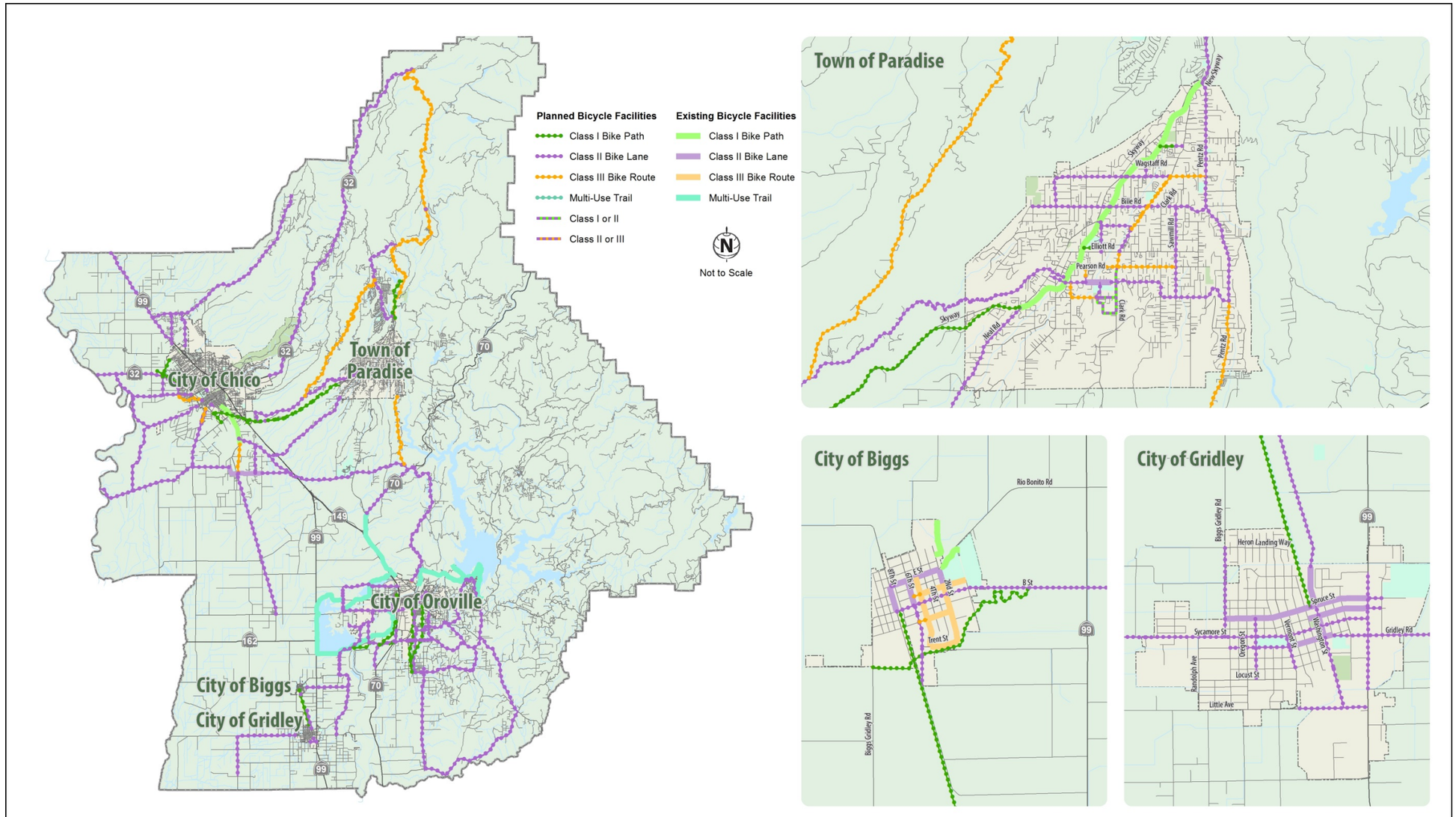
Figure 8-4 – Active Transportation Program Projects – Cycles 1-4

Cycle	Source	Agency	Title	ATP Funds	Total Cost
1	Statewide	Paradise	Pearson Rd Safe Routes to Schools Connectivity Project	**$1,388,000**	$1,388,000
1	Small Urban & Rural	Paradise	Maxwell Dr. Safe Routes to Schools Project	**$968,000**	$968,0000
1	Small Urban & Rural	Biggs	Safe Routes to Schools Sidewalk Improvements	**$860,000**	$860,000
2	Statewide	Paradise	Almond St Multi-Modal Improvements	**$3,429,000**	$3,905,000
2	Statewide	Paradise	Memorial Trailway Class 1 Enhancements	**$1,356,000**	$1,391,000
2	Small Urban & Rural	Biggs	B Street & 2nd St Safe Routes to Schools Project	**$809,000**	$819,000
2	Small Urban & Rural	Chico	State Route 99 Bikeway Project – Phase 4	**$800,000**	$1,786,000
2	Small Urban & Rural	Paradise	Ponderosa Elementary Safe Routes to Schools Project	**$1,504,000**	$1,736,000
2	Small Urban & Rural	Paradise	Downtown Equal Mobility Project	**$539,000**	$553,000
2	Statewide	Butte County	South Oroville Safe Routes to Schools Project	**$1,516,000**	$1,716,000
3	Statewide	Chico	Esplanade Corridor Safety and Accessibility Improvements	**$7,241,000**	$7,661,000
3	Statewide	Oroville	Oroville SR 162 Ped/Bike/Disabled Mobility & Safety Imprv.	**$3,451,000**	$3,951,000
3A	Small Urban & Rural	Paradise	ATP Gap Closure Complex	**$3,787,000**	$4,995,000
4	Statewide	Butte County	Butte County Safe Routes Resource Center and 5 Community Projects	**$985,000**	$1,140,000
4	Statewide	Chico	Little Chico Creek Pedestrian/Bicycle Bridge Connection at Community Park	**$1,497,000**	$2,142,000
4	Small Urban & Rural	Chico	Bikeway 99 Phase 5 - 20th Street Pedestrian/Bicycle Overcrossing	**$12,356,000**	$15,464,000
			Summary	**$42,486,000**	**$59,187,000**

Awards for the Active Transportation Program for Cycles 1 – 4

Small Urban & Rural Pot of Funds: $21,623,000
Statewide Pot of Funds: $20,863,000
Total Butte Region ATP Funds: $42,486,000

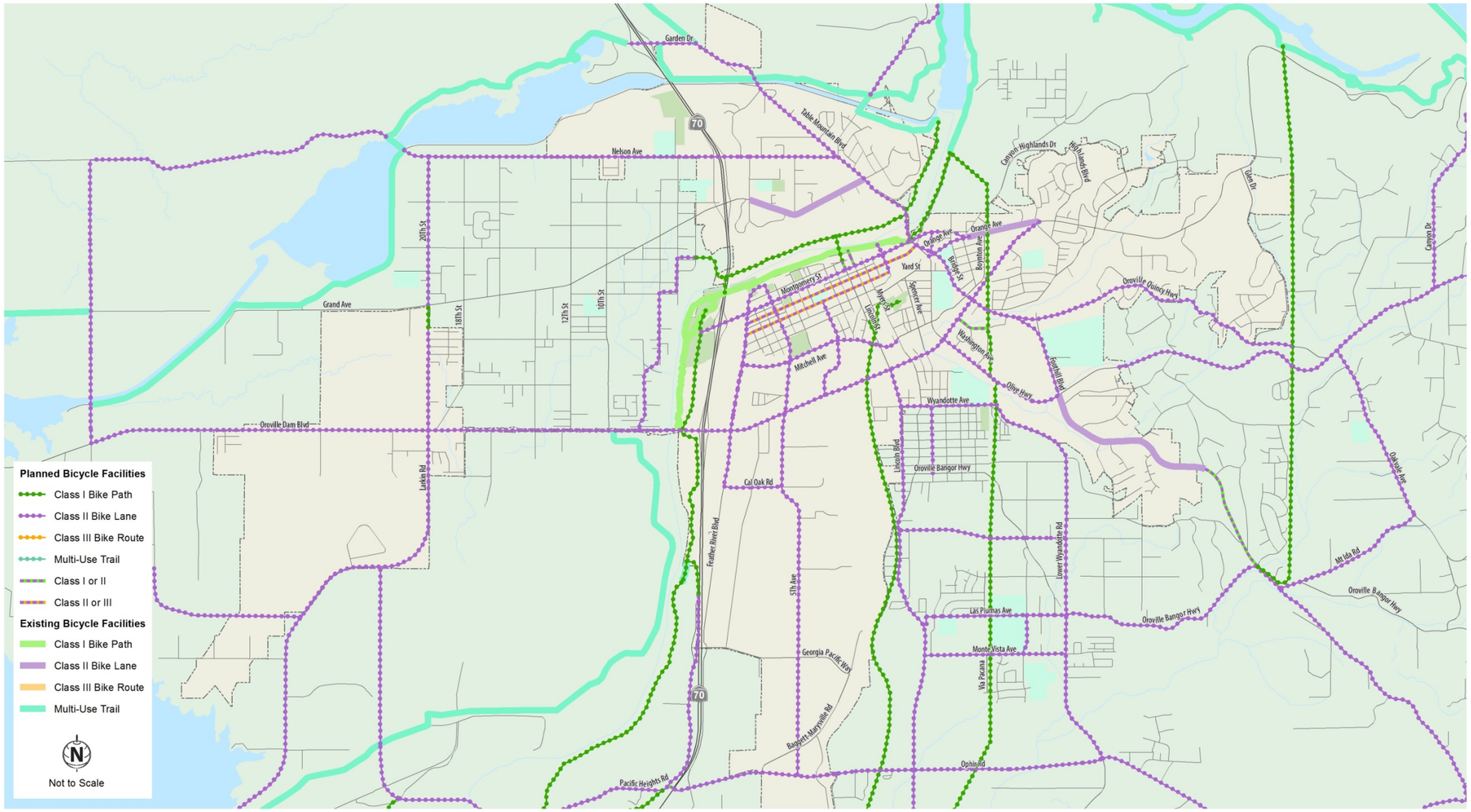
Figure 8-5 Existing and Proposed Bicycle Facilities – Countywide, Biggs, Gridley and Paradise



FEHR PEERS

PLANNED BICYCLE FACILTIES

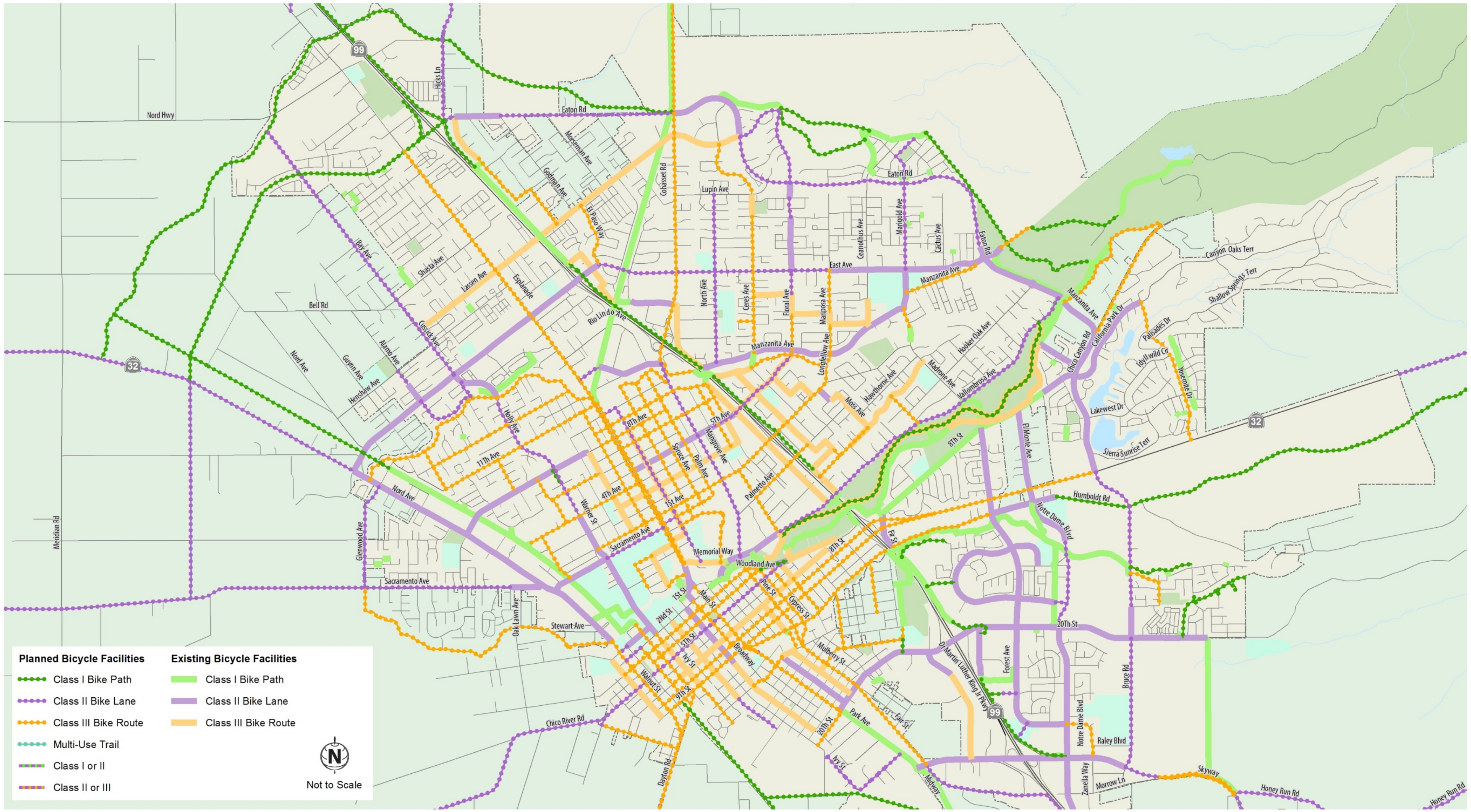
Figure 8-6 Existing and Proposed Bicycle Facilities – Oroville



FEHR PEERS

CITY OF OROVILLE
PLANNED BICYCLE FACILTIES

Figure 8-7 Existing and Proposed Bicycle Facilities – Chico



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CITY OF CHICO
PLANNED BICYCLE FACILTIES

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COLLISION ANALYSIS

Five years of California Highway Patrol (CHP) Statewide Integrated Traffic Records System (SWITRS) data for injury or fatality collisions involving pedestrians or bicyclists was reviewed to identity collision locations and trends in Butte County. The SWITRS data was accessed using the Transportation Injury Mapping System (TIMS), a service available from the Safe Transportation Research and Education Center (SafeTREC) at the University of California, Berkeley. Figure 8-8 Summarizes the accident data for the region.

Figure 8-2 shows that the Butte County's total walk and bicycle mode share is approximately six percent. However, pedestrian-vehicle and bicyclist-vehicle collisions account for 19 percent of all injury collisions and 29 percent of all fatal collisions in Butte County. Because pedestrians and bicyclists are particularly vulnerable in collisions with vehicles, infrastructure and programs aimed at reducing pedestrian or bicyclist injuries or fatalities could have a significant effect on reducing the County's overall numbers of traffic-related injuries and fatalities.

Collision locations are mapped in Figure 8-9, Figure 8-10, and Figure 8-11. The mapped figures however relate to the previous Non-Motorized Transportation Plan and are being updated with the Post Camp Fire Study. The areas of concern remain valid.

Figure 8-8 Summary of Butte County Injury and Fatal Collisions, 2012-2018

Year	Total Collisions			Pedestrian-Vehicle Collisions			Bicyclist-Vehicle Collisions		
	Injury	Fatal	Total	Injury	Fatal	Total	Injury	Fatal	Total
2012	98	23	888	12	3	48	6	4	90
2013	88	19	872	11	5	68	7	3	84
2014	97	22	878	11	0	53	3	1	70
2015	97	31	878	9	9	54	16	0	75
2016	98	32	1029	16	12	70	4	1	76
2017	114	33	1022	12	6	71	5	4	62
2018	158	36	1010	14	6	51	14	3	72
Totals	750	196	6577	85	41	415	55	16	529

Figure 8-9 Pedestrian and Bicycle Collisions (2007-2011) – Countywide, Paradise, Biggs, and Gridley

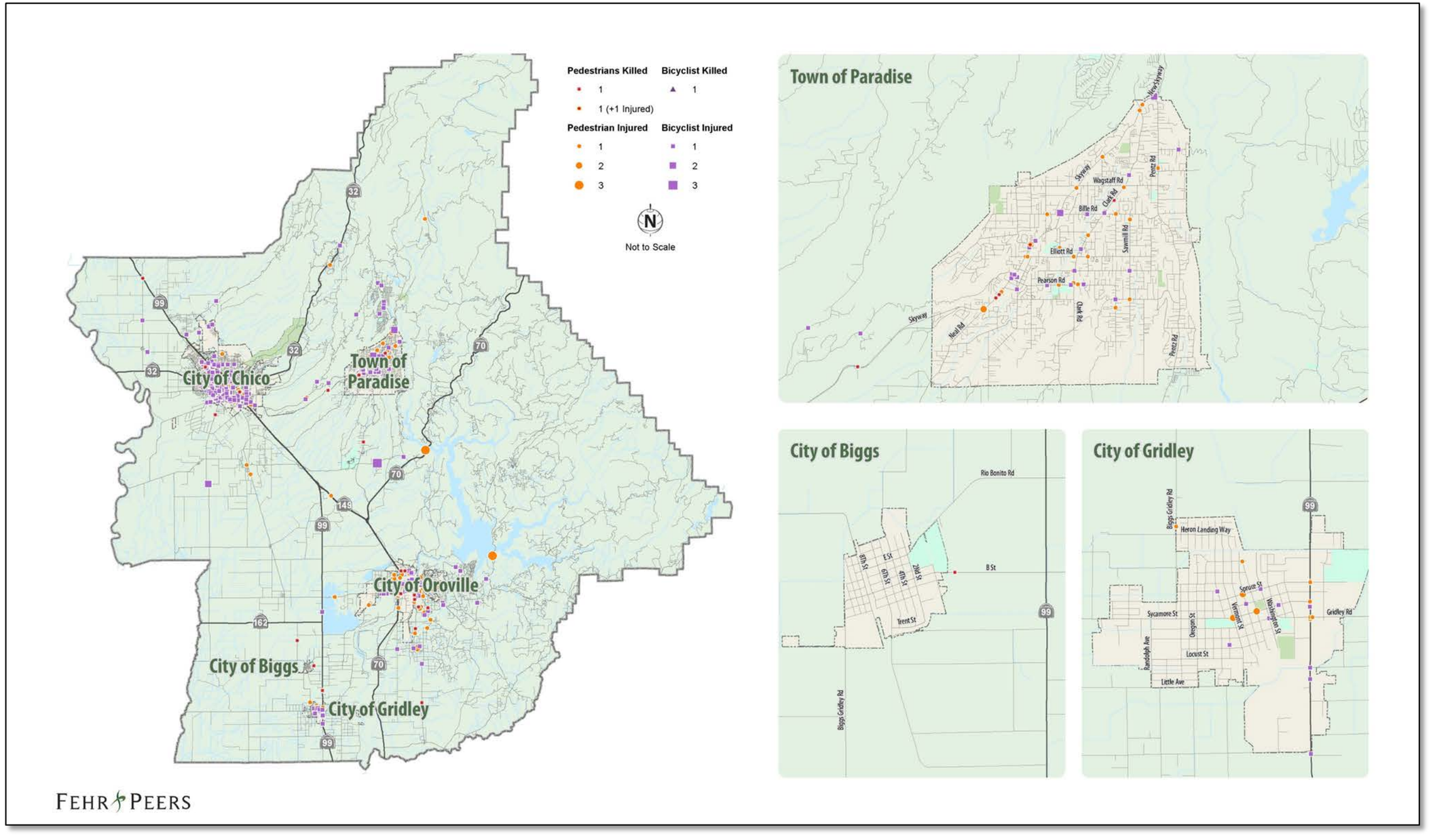

Figure 8-10 Pedestrian and Bicycle Collisions (2007-2011) – Oroville

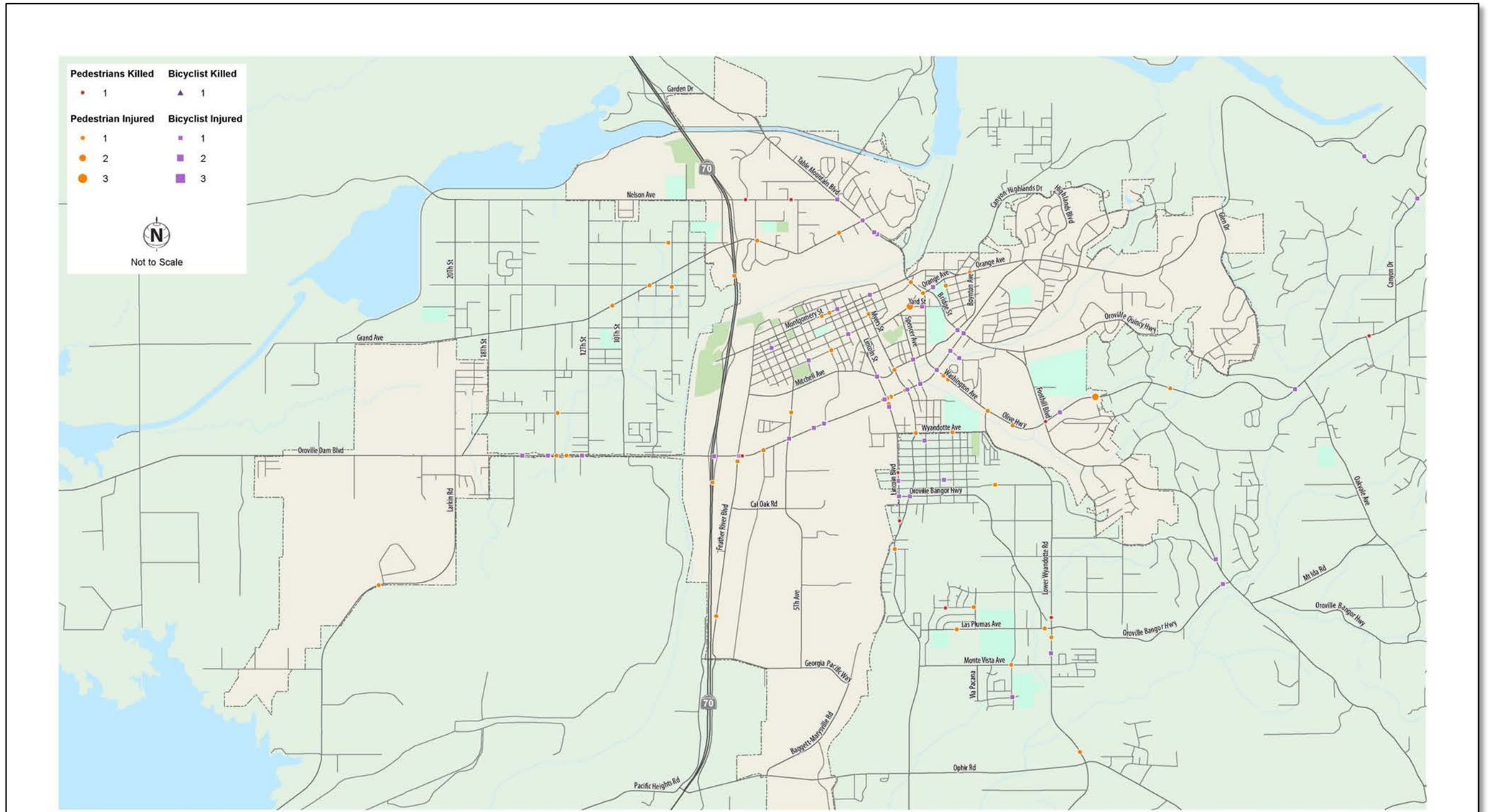

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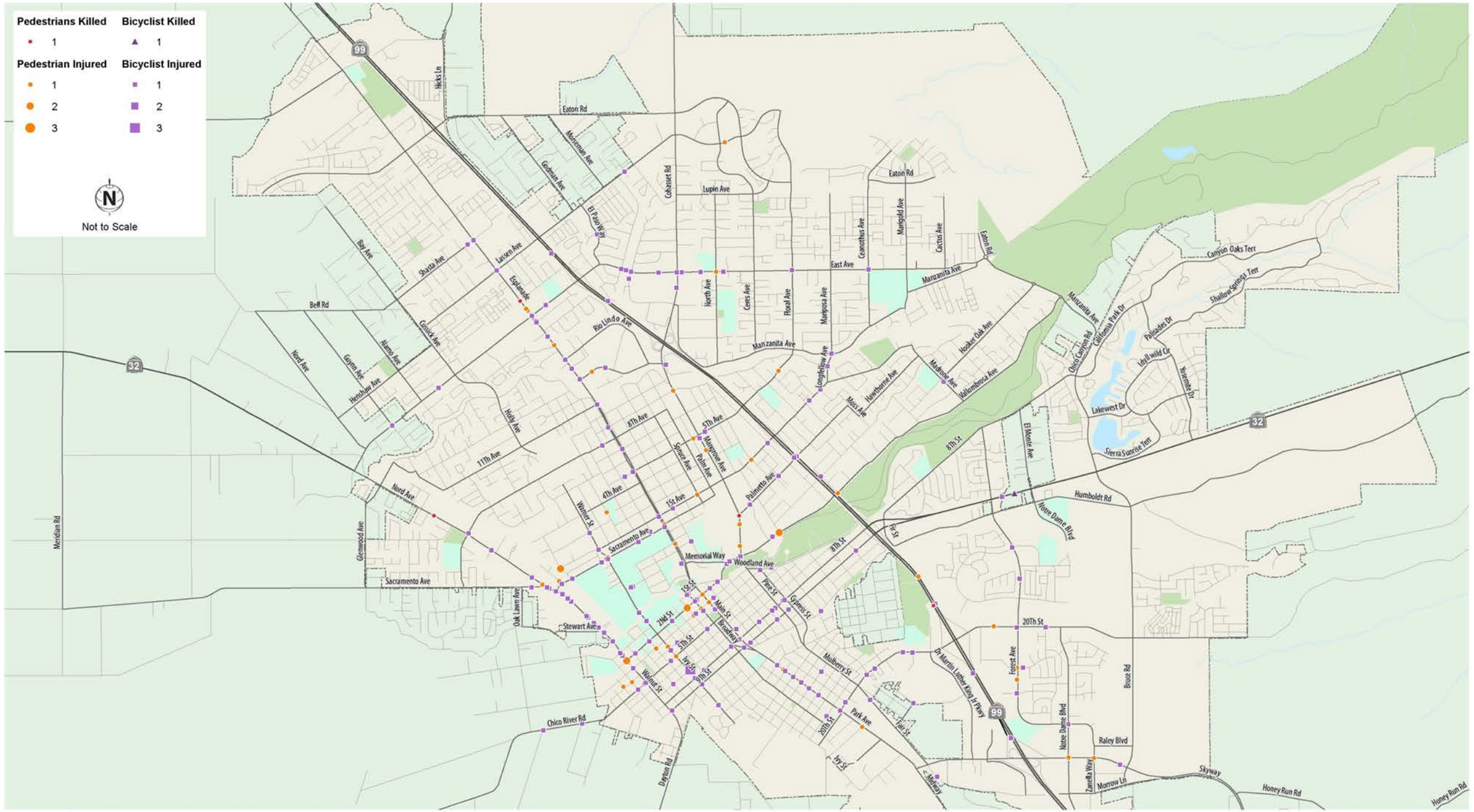
Figure 8-11 Pedestrian and Bicycle Collisions (2007-2011) – Chico



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IMPROVING TRANSIT ACCESS

Improving walking and bicycling access to transit centers, stops, and routes can increase transit ridership. One strategy for improving walking and bicycling access to transit facilities is to enhance infrastructure that serves “first mile” (access from home to transit) and “last mile” (access from transit to work, school etc.) walking and bicycling trips. The greatest opportunity for improving transit access is in areas that have high housing, population, and job density, areas with a diverse mix of land use, areas with dense roadway networks, and areas near transit stops with high ridership. Enhancing infrastructure in these areas is most likely to increase transit ridership by improving walking and bicycling access.

To identify areas of greatest opportunity for improving transit access, a transit access score was calculated for every B-Line stop in Butte County. The transit access score for a stop is based on the average regional suitability score within a quarter mile of the stop (which accounts for housing, population, and job density, diversity of land use, and roadway network density and the stop’s number of weekday bus boardings and alightings. The transit access score evenly weights the average regional suitability score and weekday bus boardings and alightings.

The TNMTP posted online at http://www.bcag.org/Planning/Transit--Non-Motorized-Transportation-Plan/index.html show the transit access score for each stop. The transit access score identifies for which stops investments in walking and bicycling infrastructure are most likely to improve transit access. Comparisons can be made between stops both on a regional scale (for example, comparing stops in Chico to stops in Oroville) or on a local scale (for example, comparing stops within Oroville to each other).

Biggs

All of Biggs’ transit stops are on B Street. Although Biggs’ stops have a low transit access score compared to other stops in the region, investments in bicycling and pedestrian infrastructure on or connecting to B Street are most likely to improve transit access in Biggs.

Chico

Several clusters of stops in Chico have a high transit access score: Downtown Chico, the area near the Sacramento Avenue/Nord Avenue intersection, and the area near the State Route 99/Cohasset Road interchange. These stop clusters are amongst the highest scoring in the region.

Gridley

In Gridley, the stops on Spruce Street near Downtown Gridley have a moderately high transit access score. The areas near the Spruce Street/Biggs Gridley Road intersection and State Route 99/Spruce Street intersection have a relatively low transit access score. However, relative to transit access in the community, these two locations are good candidates for bicycle and pedestrian improvements.

Oroville

Two areas in Oroville have a high transit access score: north Oroville near the Nelson Avenue/County Center Drive intersection and the area near the Oroville Dam Boulevard/Washington Avenue intersection.

CONCLUSION

A sustainable transportation strategy offers a specific role for walking and bicycling in support of public transit and provides an unparalleled option for mitigating GHG emissions. As many cities and some smaller towns have shown in recent years with the introduction of road diets, complete streets, and bicycle sharing programs, prioritizing a safe pedestrian and quality bicycle infrastructure affords healthier communities, more transit friendly communities and an overall better quality of life.

Bicycling and walking are good transportation options in Butte County for local trips, but safety, appropriate amenities, and access issues have not been fully addressed. For regional trips, the bike infrastructure is fairly limited. Much of the county's street network is still very much planned around maximizing access for automobile trips, and many major streets outside of city and town centers lack sidewalks. Although much of the local bike infrastructure has been planned in the county's largest cities, little of it has been developed. As land uses change, more and more residents will seek access to non-motorized modes. Tools to increase the mode share of biking and walking in Butte County, as well as improving pedestrian access to transit, must be developed as part of a long-term sustainability strategy and play a key role in addressing policies for GHG emissions reductions. An in depth review for transit and non-motorized transportation in Butte County is posted at: http://www.bcag.org/Planning/Transit--Non-Motorized-Transportation-Plan/index.html. As previously stated, the Transit-Non Motorized Transportation Plan is being updated and included as part of the Post Camp Fire Study.

ACTION ELEMENT – INTELLIGENT TRANSPORTATION SYSTEMS (ITS)

Background

In 2003, BCAG initiated the development of an ITS Regional Architecture and Strategic Deployment Plan (SDP) conforming to the requirements of 23 CFR Parts 655 and 940 for Butte, Glenn and Colusa counties.

BCAG took the lead in developing a multi-county ITS-SDP in partnership with Glenn County, Colusa County, Caltrans and FHWA, with the assistance of a consultant to serve as the ITS Coordinator. Butte, Glenn and Colusa Counties, as well as Caltrans and FHWA, did not have the resources to develop the required regional ITS-SDP individually. All aspects of the ITS development have been posted at www.iteris.com/northvalleyits.

ITS involves the application of electronics, computers, and technology to more efficiently manage transportation systems and assets. The main purpose of an ITS architecture is to ensure that the involved transportation agencies plan, develop, and deploy their systems in a coordinated and consistent manner. Other equally important purposes are to eliminate duplication of efforts, to stretch funding dollars, and to ensure that ITS deployed in the North Valley is coordinated with ITS in adjacent regions within California.

A minimal amount of ITS is already in place in the three county region but more is planned over the horizon of the RTP/SCS. This project conducted an inventory of the systems already in place, as well as those planned for the future. Additionally, the transportation system needs for the three county region and North Valley Stakeholders were collected and used to formulate ITS architecture and integration recommendations.

The ITS Plan shows in detail how various systems (transportation and emergency agencies, such as fire and police) and agencies connect and interconnect, both within three counties and with external entities. This Plan also assists in developing agency roles and responsibilities, systems functional requirements, a list of required interagency agreements, and project sequencing.

It is expected that within the horizon of the RTP/SCS, ITS strategies will become commonplace in project development together with increased application efficiencies of developing technologies. BCAG will make every effort to seek out and apply these technologies that will make sense and provide an overall cost efficiency to the increased development of our local transportation needs.

Purpose and Need

The purpose is to maintain and develop the required regional architecture compliance and implementation of a *North Valley ITS Strategic Deployment Plan - SDP*. The project benefits are expected to be a more expeditious and consistent integration of ITS into the state and regional transportation planning and programming process in the North Valley area.

The project goals are: a) a more cohesive approach to ITS implementation in the three North Valley counties leading to multi-region support to the statewide ITS framework; b) implementation of ITS technologies in the multi-region, including improvements in data collection, distribution, system operation, and other areas; and c) better integrated development and implementation of state and regional transportation plans, projects and services.

BCAG recognizes the significant role of ITS in the transportation planning and programming process. As such, as the regional architecture is developed and potential projects or project components are identified, the RTP/SCS will be included to ensure consistency between the Architecture and the long range plan.

Northern California Super-Region ITS Master Plan Development

During the 2016/17 Caltrans will be taking the lead in developing the Northern California Super-Region ITS Master Plan. The Regional Intelligent Transportation System (ITS) Master Plan (Plan) is a roadmap for integration of ITS strategies into the North State Super Region's (Super Region) transportation system over the next ten (10) years. A map of the Super Region can be viewed at www.superregion.org. The Regional ITS Master Plan will be developed through a cooperative effort by the California Department of Transportation (Caltrans), the Federal Highway Administration (FHWA), and the Super Region's transportation planning and operating agencies in the following counties: Butte County, Colusa County, Del Norte County, Glenn County, Humboldt County, Lake County, Lassen County, Mendocino County, Modoc County, Nevada County, Plumas County, Shasta County, Sierra County, Siskiyou County, Tehama County, and Trinity County.

The Plan addresses ITS subsystems, as well as those planned for development over the next ten (10) years and provides a framework that includes the entire transportation network down to individual transportation projects. Each ITS project can be viewed as an element of the overall ITS network that will be implemented over time. The expectation is to achieve a shared vision of how each agency's systems will work together in the future, sharing information and resources to provide a safer, more efficient, and more effective transportation system for travelers utilizing the transportation system network.

The Regional ITS Master Plan is viewed as a living document that will require regular updates by Caltrans staff to ensure that it maintains accurate representation of the Region's ITS elements. The key is to plan for technology deployment in a cooperative environment among stakeholders in a sensible manner to promote the efficiency of project deployment and stakeholder resources. Based on the vision for the Regional

ITS Master Plan and the specific needs of Caltrans Districts and our partners, this effort will identify all applicable ITS concepts that could be applied to each corridor based on their unique characteristics. It will also identify quantitative and qualitative performance criteria for the strategies consistent with FHWA's guidance on regional ITS architecture plans.

The Plan will cover services across a broad range of ITS, including:

- Traffic management,
- Incident management,
- Emergency service,
- Transit management,
- Traveler information,
- Archived data management,
- Maintenance and construction operations,
- Commercial vehicle operations, and
- Autonomous and Semi-autonomous vehicles

The Regional ITS Master Plan is an important tool that will be used by:

- Transportation agencies to recognize and plan for transportation integration opportunities, not only in Caltrans Districts, but the whole Region with applicability on a statewide basis.
- Caltrans to better reflect integration opportunities and operational needs into the transportation planning process, and
- Other organizations (private sector) and individuals that use the transportation system in the Region.

The Plan provides a framework that includes the entire transportation network down to individual transportation projects. Each ITS project can be viewed as an element of the overall ITS network that will be implemented over time. By identifying problems as well as prioritized needs of the transportation network, a workgroup of Caltrans staff, Metropolitan Planning Organizations (MPO) and Regional Transportation Planning Agencies (RTPA) will establish a set of goals and measurable objectives for the Regional ITS Master Plan. These goals and objectives will then help us define a clear and concise vision which in turn will help to shape the Regional ITS Master Plan through consensus building.

Based on the vision for the Regional ITS Master Plan and the specific needs of Caltrans Districts and our partners, this effort will identify all applicable ITS concepts that could be applied to each corridor based on their unique characteristics. It will also identify quantitative and qualitative performance criteria for the strategies. This would be consistent with FHWA's guidance on regional ITS architecture plans. Caltrans is the lead agency and the work to develop the new plan is underway and will be incorporated into the 2024 RTP/SCS.

Transportation Systems Management (TSM)

The phrase Transportation Systems Management (TSM) is often used interchangeably with Transportation Control Measures (TCMs) and Travel Demand Management (TDM) to describe a series of techniques designed to maximize the efficiency of the existing transportation system by reducing dependence on single occupant vehicles. The common goal of TSM, TCMs, and TDM are to reduce traffic congestion, improve air quality, and reduce or eliminate the need for new and expensive transportation infrastructure. Techniques are generally low-cost measures to reduce travel demand or improve the utilization of existing transportation facilities.

The differences between the three concepts are subtle. Each contains alternative transportation measures, such as carpooling, transit, bicycle, walking, vanpooling, compressed workweeks, and telecommuting. Transportation Systems Management (TSM) places emphasis on reducing traffic congestion by increasing the person-trip capacity of existing transportation systems. As such, TSM techniques also include restriping roadways for channelization, ramp metering, and establishment of freeway auxiliary lanes. Travel Demand Management (TDM) emphasizes reducing the demand for single occupant vehicle travel through techniques such as teleconferencing and advanced communication technology. Transportation Control Measures (TCMs) focus on reducing air pollution through techniques such as alternative fuel vehicles.

Since 1981, the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) have required that Transportation Systems Management (TSM) be part of the regional transportation planning and programming process. Specifically, the Regional Transportation Plan must have a TSM element that describes how the region intends to deal with the movement of people and goods by improving the efficiency and effectiveness of the total transportation system.

Purpose and Need

The purpose of identifying TSM Strategies is to document techniques for the local jurisdictions to consider in efforts to encourage TSM strategies as part of the project implementation process. Documentation of TSM strategies is necessary in order to assist in reducing congestion, improving traffic flow, and providing alternatives to traditionally designed projects.

TSM and TDM Strategies

Traffic Flow Improvements

As traffic on highways and primary arterials increases, so will congestion and air quality problems. Traffic flow improvements, such as ramp metering, changeable message signs, and closed-circuit traffic surveillance, may be considered for use to maximize the

capacity of existing roadways. All of these techniques are currently in use in major urban areas of California.

Ramp metering is a technique that spaces the entrance of vehicles onto the freeway. Cars are stopped on the on-ramp by a traffic light, which then allows one vehicle to enter the freeway each cycle. This technique makes merging smoother and reduces traffic backups due to platoons of cars trying to merge onto the freeway at the same time.

Changeable message signs advise drivers of traffic problems ahead. This technique allows motorists to anticipate traffic slowdowns and weather conditions, leading to fewer accidents, or to take alternative routes. Changeable message signs have been used for many years on Interstate 80 to advise travelers of road conditions and closures to prevent travelers from being caught unprepared for snowy weather over the summit of the Sierra.

Roadway restriping, channelization, elimination of on-street parking, and computerized signalization are techniques currently used to improve the flow of traffic without new road construction as well. Roadway restriping seeks to increase the number of lanes by reducing lane width, thus increasing traffic capacity. Channelization, which is often done in conjunction with restriping, adds turn lanes to busy roadways to eliminate traffic backups behind cars trying to make turns. Elimination of on-street parking is done to add lanes, and thus capacity, to heavily traveled roadways. In addition, traffic backups caused by vehicles entering or exiting on-street parking spaces is eliminated. Computerized signalization seeks to coordinate signal timing to smooth traffic flow. A local example of such traffic flow characterization would be the Esplanade in Chico.

Transit

Public transit service is the most widely used TSM measure in Butte County serving residents who depend upon transit for commuting to work, school, shopping, medical, and leisure. The Transit chapter provides a comprehensive overview of transit in Butte County. ITS types of projects include real time bus arrival utilizing Double Map Transit App. Each transit bus is equipped with AVL/GPS technology. In the 2016/17 fiscal year, BCAG developed a mobile app (Double Map) for smartphones to provide bus route location based on where the user is located and provide directions to find it.

Ridesharing

The purpose of Ridesharing is to encourage the use of alternative transportation modes for traveling to work, school, personal trips, and recreation. The benefits of ridesharing are reduced single occupancy travel and improved air quality. Rideshare promotes all forms of alternative transportation including carpooling, vanpooling, transit, biking, and walking. Butte County residents can enter their commute information in a regional database to try to find carpooling partners.

Transit Incentive Programs

Under agreement with CSU, Chico's Associated Students, Butte Regional Transit (B-Line) provides free transit trips to the students, faculty, and staff of CSU, Chico. The University has a contract rate of $265,000 based on estimated annual ridership at 325,000 trips. This program has been successful and facilitates the trip making process.

Student Shuttle

During the academic year, B-Line has continued the operations of a Student Shuttle for students, faculty, and staff of CSU, Chico. The Shuttle has two routes that connect the university with the largest student housing areas.

Pedestrian and Bikeway Facilities

By making these methods safer and more convenient, pedestrian and bikeway facilities make bicycling and walking more attractive as alternatives to the automobile. Most schools and many shopping areas and employers provide racks for bicycle parking. A complete description of existing and future pedestrian and bikeway facilities within Butte County is included in Chapter 7.

Park and Ride Lots

The purpose of park-and-ride lots is to provide a central meeting place adjacent to major travel routes where commuters can congregate and form carpools or catch buses for the remainder of the commute trip. Caltrans presently operates two park-and-ride lots in Butte County, with a total of 154 paved spaces available. The largest lot, located at the intersection of SR 99 and SR 32 in Chico, has 124 parking spaces. A B-Line bus stop located on Fir Street serves these riders. During the 2016/17 fiscal year, the City of Chico reconfigured and reconstructed the operations at SR 99 and SR 32. Improvements include signal synchronization, increased bike and ped improvements and increased parking spaces for commuters. The other park-and-ride lot is located at the intersection of Nelson Avenue and SR 70 in Oroville and has 30 spaces.

The City of Oroville developed an additional park-and-ride facility with Proposition 116 funds. The new Oroville facility at the corner of Montgomery and Oak Streets has space for 34 vehicles. In addition, the Town of Paradise opened a park-and-ride lot on the Skyway in August 1999. Funded mainly with Proposition 116 funds, the lot has space for 36 vehicles.

Telecommuting, Compressed Work Weeks and Flexible Work Hours

Telecommuting, compressed workweeks and flexible hours are employment-based techniques to reduce the number of work trips per week, or to transfer trips to reduce peak hour congestion. Telecommuting, or alternative work locations, allows workers to perform job duties at home or other locations, communicating with the main work center by modem, fax, or telephone as necessary. This alternative is especially attractive for workers in rural areas or those commuting long distances, and studies have shown telecommuters are up to 20% more productive.

Compressed workweeks increase the number of hours worked each day to squeeze a regular workweek into fewer workdays. A typical schedule could be four 10-hour workdays each week (4/10 schedule), or eight 9-hour days and one 8-hour day in two weeks (9/80 schedule).

Flexible hours do not reduce the number of work trips per week, but seek to reduce traffic congestion by shifting some trips out of the peak period. Employers using flexible hours may allow workers to vary time of arrival and departure daily, or may require workers to choose a specific schedule to meet the needs of the employer and employee. Many employers throughout the county use flexible hours.

The impacts associated with COVID 19 and shelter in place recommendations has brought a significant change in work patterns including telecommuting or remote working. With advanced video conferencing equipment available, office files stored in the cloud electronically many employers now see telecommuting as a valuable alternative to commuting to the office for those employees able to do so. At the BCAG offices and other city and county offices, employees were able to work from home if able to do so.

Teleconferencing

Teleconferencing is generally defined as meetings held by telephone or via video hookup to replace the need for traveling to meet in person. COVID 19 amplified the use of video to conduct meetings. BCAG utilizes “Zoom”, the California utilizes WebX, Caltrans utilizes other platforms as well.

Both Butte College and CSU, Chico provide telecourses. Telecourses provided by Butte College are generally prerecorded, then broadcast at specific times on the local cable station. Students only meet at the college a few times each semester for introductory information and to take tests. Telecourses provided by CSU, Chico are broadcast live on closed circuit television to satellite locations throughout the North Valley. Many of the classes held at the local schools, Chico State and Butte College are currently held via zoom. While not ideal for long periods of time for younger kids, video conferencing does provide a viable option in which over time may be more common after the COVID 19 Pandemic.

Alternative Fuels

Alternative fuels are used to power motor vehicles while reducing the impacts to air quality. Some of the more common alternative fuels currently in use include methanol, propane, compressed natural gas, and electricity.

Butte Regional Transit has compressed natural gas (CNG) fueling stations in Chico, Oroville, and at the Butte County offices. Currently there are 30 CNG fueled vehicles using these stations.

BCAG will be constructing the electric infrastructure necessary to charge an electric bus in the next few years. In addition, the B-Line facility has electric charging stations for vehicles. Governor Newsom's Executive Order N-79-20, https://www.gov.ca.gov/wp-content/uploads/2020/09/9.23.20-EO-N-79-20-text.pdf will prohibit the sale of gas vehicles (fossil fueled combustion engine) in California by 2035.

Mixed Land Use

Land use strategies commonly used in the last forty years place single family residential uses, shopping areas, low-income housing, schools, and employment centers each in separate areas, often enclosed and distant from each other. As a result, individuals must use cars to get to the places they need to go. With mixed land use techniques, houses, shops, schools, and employers are integrated. Examples of mixed land use include apartments located over shops, shopping areas, and professional offices integrated into residential neighborhoods, and affordable "granny units" in single family residential areas. The placement origins and destinations of travel closer together allows for much more feasible alternative transportation.

Mixed land use is evident in many of the jurisdictions. The downtown areas of Chico, Gridley, Oroville, and Biggs, which include shopping and employment, are surrounded by residential areas, which include both single and multiple family housing. Meriam Park in Chico is a good example of high density mixed use development.

RTP/SCS Planned Improvements

TSM projects are not required in Butte County; however, BCAG encourages the jurisdictions to consider TSM strategies as part of the project implementation process.

In addition, BCAG will continue to participate in the development of the Northern California Super-Region ITS Master Plan being developed by Caltrans.

ACTION ELEMENT – AVIATION

BACKGROUND

Aviation facilities in Butte County include both public and private airports and helipads serving commercial, recreational, medical, law enforcement, fire and agricultural needs. There are two publicly owned public-use airports, Chico Municipal Airport (CIC) and Oroville Municipal Airport; two privately owned public-use airports, Paradise Skypark Airport and Ranchero Airport, three privately owned airports, Butte Creek Hog Ranch Airport, Jones Airport, and Richvale Airport, one publicly owned seaplane landing site on Lake Oroville, two privately owned private-use heliports at Enloe Hospital and Oroville Hospital; and one publicly owned private-use airport for the Butte County Sheriff's Department. In addition, there are several agricultural and private-use airports in the county. These varieties of aviation facilities are located throughout Butte County.

The 2003 economic study done by Caltrans Division of Aeronautics (Division) found that aviation, although a small specialized component of transportation generated 9% of the California's gross domestic product (GDP) and employment base. A follow up forecasting study completed in February 2014, looked at the role airports can play in an environmentally and economically sustainable multimodal transportation system. These two studies provide communities with examples and tools that communities they can use to help integrate their airports into their comprehensive planning activities. Both studies and appendices are available on the Division's web site at:
http://www.dot.ca.gov/hq/planning/aeronaut/documents/2003EconomicStudy.pdf
http://www.dot.ca.gov/hq/planning/aeronaut/documents/planning/CaltransAirportForecastingStudy.pdf
http://www.dot.ca.gov/hq/planning/aeronaut/documents/planning/CaltransAirportForecastingStudy_Appendices.pdf

AIRPORT LAND USE COMPATIBILITY PLANNING

Counties with public use airports are required to establish an Airport Land Use Commission to conduct airport land use compatibility planning. Their purpose is to protect public health, safety and welfare through the development of Airport Land Use Compatibility Plans (ALUCP). Counties have several options to choose from to satisfy this ALUC requirement. Butte County chose to retain this function, and prepared the ALUCP for its airports. Statutes governing ALUCs are set forth in Division 9, Part 1, Chapter 4, Article 3.5, Sections 21670-21679.5 of the California Public Utilities Code (PUC). The 2000 ALUCP for Butte County includes Chico Municipal, Oroville Municipal, Paradise Skypark, and Ranchaero. The County will be starting a revision of the current ALUCP starting in early 2016, and should be completed in approximately 2 years. The process will follow guidance found in the Division of Aeronautics October 2011 California Airport Land Use Planning Handbook available on the Caltrans website at:
http://www.dot.ca.gov/hq/planning/aeronaut/documents/alucp/AirportLandUsePlanningHandbook.pdf

REGIONAL OVERVIEW

Chico Municipal Airport, Chico CA

The Chico Municipal Airport (CIC) is the largest and busiest airport serving Butte County. Occupying approximately 2.3 square miles on the northern edge of the City of Chico, the airport handled approximately 34,000 operations for the 12-month period ending December 31, 2019, and is home to 90 based aircraft. The airport is located north of the City of Chico along Cohasset Road. Its functional class is Primary Non-Hub Regional-Business/Corporate. It serves a variety of aeronautic uses including commercial, business/corporate, military, agricultural, and general aviation. The 1,475-acre airport facility has two runways; the primary runway 13L/31R is 6,724 feet long by 150 feet wide and is used for air carrier, agriculture, medical, aerial firefighting, cargo, and military operations. The primary runway, 13L/31R, incorporates the use of high intensity lighting GPS/VOR/ILS and Precision Approach Path Indicators (PAPI) in conjunction with other navigational aids to assist pilots. The Runway Protection Zones for runway 13L/31R are 1,000 feet by 2,500 feet and 2,500 feet long.

The secondary runway, 13R/31L is the general aviation runway. It is located some 700 feet center to center distance west of the instrument runway. This runway is 3,005 feet long and 60 feet wide. The Runway Protection Zone for this runway is 250 feet by 450 feet and 1,000 feet long. This runway consists of an overlay over an asphalt concrete mat that was constructed during World War II by the U.S. Army Air Corps. There are 103 T-hangars, 5 custom private and 4 large conventional hangars, with an additional estimated 40 transient spaces in the apron area.

CIC was dedicated in 1935 and is a modern integrated air facility. CIC is capable of accommodating air carriers, air taxi, charter, military, and general aviation planes. The airport has one full service Fixed Base Operator (FBO) to provide such services as refueling, plane servicing, air charter, maintenance and flight training. The air traffic control (ATC) tower is open from 7 a.m. until 7 p.m. seven days a week. The tower and all other navigational aids are maintained and operated by the Federal Aviation Administration (FAA). The tower is staffed by Serco Inc. personnel. All communication runs through the tower or UNICOM, which is operated by the FBO Northgate Aviation.

Oroville Municipal Airport, Oroville CA

Oroville Municipal Airport is a general aviation airport with a functional class of Regional and is owned by the City of Oroville. This 877 acre facility is located some 2.5 miles west of the remainder of the city along State Route 162. Although the city's sphere of influence extends a mile west of the airport, only the airport property and some private land to the north and west are currently within the city boundary. The surrounding unincorporated area includes the community of Thermalito situated northeast of the airport. To the southwest and southeast lie state-owned water project and wildlife refuge lands. An airport has existed on the present site since 1936 when the City of Oroville acquired the original 188 acres. During World War II, the U.S. Army took temporary

control of the airport. The Army made various improvements, including establishing the basic runway configuration, which remains today. Since reverting control back to the city in 1947, the city has acquired additional land and has made numerous improvements to the facility.

There are 40,000 operations for the 12-month period ending December 31, 2019. Itinerant aviation traffic accounted for 20,000 of the 40,000. And, there were 1,500 business related and/or air taxi operations during that time. Full service Jet A fuel is available from the FBO, Table Mountain Aviation. There are two asphalt runways. The primary runway 02/20 is, 6,020 feet long by 100 feet wide. Runway 13/30 is 3,540 feet long by 100 feet wide, with a parallel taxiway parallel running the length of each runway. The Runway Protection Zones for runway 01/19 are 500 feet by 1,010 feet, by 1,700 feet beginning 200 feet from runway end. There are 72 T-hangars, 67 tie downs, and 30 transient spaces. There are currently 70 based aircraft at the airport, including 64 single-engine, 2 multi-engine planes, 1 helicopters, and 2 ultra-light aircraft.

The two primary points of ground access to the Oroville Municipal Airport are via SR 162 and Larkin Road. SR 162 connects the airport with SR 70 and the City of Oroville to the east and to SR 99 to the west, while Larkin Road connects the airport to Gridley and Live Oak to the south. Several improvements have been made on State Route 162 to improve capacity between SR 70 and the airport. These improvements include reconstruction of the Feather River Bridge and adding a continuous left turn lane.

Paradise Skypark Airport, Paradise CA

Paradise Skypark Airport situated 3 miles south of the Paradise town center serves an important role in Butte County. This special-use privately owned, the airport offers general aviation access to the community of Paradise along State Route 191 and also functions as a weather alternate when the larger airports located in lower elevations are fogged in. Because this is a private airport prior permission is required before use. Paradise is situated approximately 1,300 feet above sea level. Positioned along a narrow ridge south of town, the airport occupies 35 acres of property. Due to its geographic location, the airport is both physically and operationally constrained. However, this airport is an important regional base for skydiving activities.

Runway 17/35 is 3,017 feet long by 60 feet wide, and was rebuilt in 1999 with parking spaces for 50 aircraft. A parallel taxiway runs the length of the runway. 5 T-hangars and 1 conventional hangar, and 67, tie downs are also provided. A total of 45 aircraft are based at Paradise Airpark, including 44 single-engine and 1 multi-engine planes

Total operations for the year ending in March 1991 were 12,000. Annual operations have remained constant. Ground access to the Paradise Skypark Airport is via SR 191 (Clark Road). This section of SR 191 is expected to operate at an acceptable level of service for the next twenty years. No public transit service is currently provided at the airport, but several taxi services are available.

Ranchaero Airport, Chico CA

Ranchaero Airport is a 23.5-acre facility located on the west side of Chico. A privately owned special-use general aviation airport, Ranchaero has one asphalt runway 14/32 is 2,156 feet long by 30 feet wide. This airport serves a combination of recreational, flight training, agricultural, and limited business functions. Because this is a privately owned airport prior permission is required for use. The runway has a full length parallel taxiway. There are 19 T-hangars and one conventional hangar, with 22 tie downs. A total of 30 aircraft are based at Ranchaero Airport, including 30 single engine aircraft and 4 helicopters. Annual aircraft operations are estimated at 5,000 and are projected to remain constant. Ground access to Ranchaero Airport is via Oak Park Avenue and Santa Clara Avenue. Traffic on these roads is limited to very light local residential traffic, as well as those traveling to the airport itself.

Lake Oroville Seaplane Landing Site (SLA)

Lake Oroville provides a seaplane-landing site over 1,460 acres in the center of the main body of the lake. Caltrans Division of Aeronautics revoked its permit December 26, 2012. Pilots may continue to use the SLA without a state permit, but must adhere to federal and any other associated guidelines. There is no runway per se, but a landing area on the water spanning 9,000 feet long by 9,000 feet wide. There are no airport facilities, such as hangars, nor are there any based aircraft. Operations are estimated at 3 to 4 per year. The Division will continue to work with the California State Parks as requested to enhance the safety of the SLA.

Butte County Sheriff's Office, Oroville CA

The Butte County Sheriff's Office has a parking lot heliport located at its jail complex on County Center Drive in Oroville. The landing pad measures 70 feet by 70 feet, and perimeter lighting is planned. While the Sheriff's Office owns one helicopter and leases another for the busy summer months, these crafts are based at the Oroville Municipal Airport. Use of the heliport is restricted to authorized law enforcement agencies.

Enloe Hospital heliport, Chico CA

Enloe Hospital has a rooftop heliport at its acute care medical facility located at W. 5th Avenue and the Esplanade in Chico. The landing pad measures 75 feet wide by 66 feet long, and perimeter lighting is provided. There is one helicopter based at the facility, which is used for emergency medical transportation to and from outlying areas. Operations average approximately 1,100 per year.

Oroville Hospital heliport, Oroville CA

Oroville Hospital has a heliport located in a parking lot at its acute care medical facility on Olive Highway in Oroville. The landing pad measures 48 feet in diameter, and

perimeter lighting is provided. There are no based aircraft. The heliport is used for emergency medical transportation to and from outlying areas. Operations average 35 to 50 per year.

FORECASTS AND TRENDS

Air Passenger

Commercial air service at CIC ended in December 2014. High air fares for flights serving CIC coupled with low fares, a greater choice of flights, and easy access to Sacramento International Airport, frequent delays in/out of CIC all contributed to the service loss. CIC would like to see the return of schedule passenger service to the area. To that end, the City of Chico received a U.S Department of Transportation (DOT) Small Community Air Service Development Program (SCASDP) Grant. This grant is intended to assist CIC's efforts to reinitiate scheduled passenger service. The impacts of COVID 19 will most likely delay the effort, but interest is high. CIC is used extensively for the business and general aviation serving the Chico and Central Sacramento Valley areas.

Air Cargo

CIC provides a full complement of cargo service to the north state area. Air cargo service is currently limited to small single and twin-engine aircraft operated by West Air and Redding Aero Enterprises. These operators generally carry the freight to major hubs. The expansion of air cargo operation out of the CIC is difficult to forecast. The major air cargo operators such as UPS, Federal Express, and Amazon, will not establish hub operations in an area that does not have major air cargo demands such as San Francisco or Los Angeles. Typical cargo aircraft serving CIC are small such as: Cessna 208s and Cessna 402s. These cargo aircraft operate from the existing aircraft parking apron on the east side of the aircraft parking apron.

With the close proximity of CIC to the other airports in Butte County, it is no surprise that very little air cargo is transported to Oroville Municipal Airport and Skypark Airports. Understandably, air cargo would travel to Chico then be transported by ground to its destination. The *Paradise Post* (newspaper) does have a weekly scheduled shipment throughout the year. The Paradise Skypark Airport does however, serve an important role to air cargo not only in Butte County, but the Northern Central Valley as well. When the valley floor is fogged in, air cargo is transported via the Paradise Skypark Airport. Other northern California options include Grass Valley and Auburn. Air Cargo forecasts for these two smaller airports are expected to be minimal due to the proximity to CMA. They can, however, handle a significant increase in capacity should the unlikely need arise.

General Aviation

The August 2003 Chico Airport Master Plan includes forecasts for commercial air service as well as other general aviation, military, and government uses. Since the airport lost its commercial service the commercial services and trends discussions in the master plan are no longer applicable, but other sections of the document still apply. The airport is in the process of updating its airport lay out plan (ALP) to reflect these changes. The ALP must be approved by the FAA. The ALP reflects the ultimate build out of the airport and designates the types of facilities that could be built at the airport. these facilities will impact future uses of the airport. Current facilities accommodate for business enterprise, repair service, small package or courier service, agricultural activities, medical emergency, search and rescue, pilot training and recreational and tourism activities.

Oroville Municipal Airport is also beginning the process of updating its ALP. The airport will not update the July 1990 master plan because much of the information in the plan is still applicable. The revised ALP will reflect possible new uses for the airport.

Ranchaero, being the smallest airport in the western portion of the City of Chico is ideal for agricultural uses, pilot training, and recreational uses. As identified in Table 10-2 above, CMA is used extensively during the fire season and by the military and coast guard. The CDF operates a fire attack base from the northern portion of the aircraft parking area. Aero Union Company operates from the same area to maintain and rehabilitate aircraft used by CDF.

CAPACITY ANALYSIS

CIC is the largest and busiest airport in Butte County. When originally developed by the military during World War II, the facility was several miles from the edge of the city. Over the past 50 years, urban expansion has extended toward the airport. Land use surrounding the airport will continue to be an issue. Industrial uses are planned adjacent to both the east and west sides of the airport. The Airport Master Plan proposes extending CIC's primary runway, Runway 13L-31R currently 6,724 feet long to 8,600 feet to be able to adequately service turbo jet aircraft in the future, such as the Boeing 737, Airbus A320, Boeing 717, McDonnell Douglas DC-9 and MD-80. Though currently not an issue at this time, it is prudent to consider the protection and reservation of the needed land to the north to allow for the runway extension in the future as well as allowing the Runway Protection Zone moved to the north the same distance.

Other capacity considerations identified in the Chico Airport Master Plan propose widening and extending Runway 13R-31L to be used by CDF operations and commercial service when the main runway is closed for maintenance, reconstruction, or due to an accident. Additional capacity considerations are included in the Chico Airport Master Plan, Chapter 3.

The Oroville Municipal Airport, on the other hand, is situated next to a golf course on the west, grazing land on the south and north, and a protected wildlife refuge to the east. Due to the relative lower number of operations of this airport, there are no immediate capacity issues at this time.

The Paradise Skypark Airport is restricted by its physical geographical location, on a ridge. This airport currently does not face any immediate capacity issues and can handle double its current operations according to its airport manager.

The smaller Ranchaero Airport is restricted by its surrounding agricultural orchards and the residential development. Operations are projected to remain somewhat constant. For the future, no significant issues are anticipated. The City of Chico's urban development boundary and the Butte County "green line" both preclude extension of urban uses into the agricultural lands west of the city.

AVIATION ACTION PLAN – Planned Improvements

Aeronautics Capital Improvement Plan

The Capital Improvement Plan (CIP) is a 10-year planning document, published by Caltrans every odd year. The CIP encompasses capital improvement and planning projects in California's publicly owned airports. To be eligible for a State-funded Airport Improvement Program (AIP) matching grant or Acquisition and Development (A&D) grant, an airport project must be listed in the most current CIP. The last CIP was completed in July 2019 for 2019-2028. The following projects are programmed for the Chico Municipal and Oroville Municipal Airports.

Chico Municipal Airport

Project Name	Project Type	Program Year	FAA Grant Amount	State Grant	Local Match	Totals
Crack Seal Kettle	AIP	2019	76,500	3,825	4,675	85,000
Reconstruct Taxiway A Phase 2 - Construction	AIP	2019	2,402,100	120,105	146,795	2,669,000
Reconstruct Taxiway A Phase 3 - Construction	AIP	2019	5,247,900	262,395	320,705	5,831,000
Reconstruct Aircraft Parking Apron Phase 4	AIP	2020	5,246,100	262,305	320,595	5,829,000
Design - Reconstruct Runway 13L-31R	AIP	2020	999,000	49,950	61,050	1,110,000
Construct: Reconstruct 13L-31R	AIP	2021	11,632,500	581,625	710,875	12,925,000
Terminal Area Development Plan	AIP	2022	207,000	10,350	12,650	230,000
Crack Repair and Seal Cracks	AIP	2022	827,100	41,355	50,545	919,000
RWY 13R-31L & Apron A1a and A3a Rehabilitation	AIP	2024	641,700	32,085	39,215	713,000
Environmental Studies	AIP	2024	117,000	5,850	7,150	130,000
Security Development - Design/Construct	AIP	2025	439,200	21,960	26,840	488,000
North Hangars & Apron A1	AIP	2025	2,430,900	121,545	148,555	2,701,000
Apron A3b & A4a and Taxiway H Rehabilitation	AIP	2025	185,400	9,270	11,330	206,000
Design Terminal Expansion	AIP	2026	742,500	37,125	45,375	825,000
Environmental Studies	AIP	2026	162,000	8,100	9,900	180,000
Design Automobile Parking Lot Expansion	AIP	2026	140,400	7,020	8,580	156,000
Apron 2 Rehabilitation	AIP	2026	105,300	5,265	6,435	117,000
T-Hangar Taxilanes TL 1-8	AIP	2026	1,026,000	51,300	62,700	1,140,000
Terminal Expansion Construction	AIP	2027	10,710,000	535,500	654,500	11,900,000
Construct Automobile Parking Lot Expansion	AIP	2027	1,221,300	61,065	74,635	1,357,000
Design Runway 13R/31L Extension	AIP	2028	743,400	37,170	45,430	826,000
Chico Municipal Airport Totals			**45,303,300**	**2,265,165**	**2,768,535**	**50,337,000**

Oroville Municipal Airport

Oroville Municipal Airport	Project Type	Program Year	FAA Grant Amount	State Grant	Local Match	Totals
Design:Crack Seal Runway, Taxiway and Apron	AIP	2019	152,100	7,605	9,295	169,000
Construct: Crack Seal Runway, Taxiway & Apron	AIP	2020	1,274,400	63,720	77,880	1,416,000
Design-Develop New T-Hangar Taxilane Site (Collector TW &THangar)	AIP	2021	78,300	3,915	4,785	87,000
Design: Upgrade Golf Course Taxiway,Crack Seal	AIP	2021	116,100	5,805	7,095	129,000
Airport Layout Plan Narrative including ALP Updated Plans	AIP	2022	171,000	8,550	10,450	190,000
Construct: Develop New Tee Hangar Taxilane Site	AIP	2022	882,000	44,100	53,900	980,000
Construct: Upgrade Golf Course Taxiway	AIP	2023	546,300	27,315	33,385	607,000
Design : construct New Above Ground Fuel Farm Facility South	AIP	2023	88,200	4,410	5,390	98,000
Construct New Aboveground Fuel Farm Facility	AIP	2024	584,100	29,205	35,695	649,000
Crack Seal R/W, T/W & Apron	AIP	2025	711,000	35,550	43,450	790,000
Design for New Storage Hangar for FBO Facility	AIP	2025	184,500	9,225	11,275	205,000
Construct Two 14-unit Tee Hangar Buildings	AIP	2026	2,311,200	115,560	141,240	2,568,000
Construct NE Storage Hangar for FBO Facility	AIP	2027	2,124,000	106,200	129,800	2,360,000
Oroville Municipal Aiport Totals			**9,223,200**	**461,160**	**563,640**	**10,248,000**

Source: https://dot.ca.gov/-/media/dot-media/programs/aeronautics/documents/2019-cip-a11y.pdf
https://dot.ca.gov/programs/aeronautics

CONCLUSION

BCAG will continue work with Caltrans and local airport managers to help secure funding for the local airports and to assist the City of Chico work towards bringing back passenger service.

Figure 10-1 Airport Master Records

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

AIRPORT MASTER RECORD

PRINT DATE: 09/17/2020
AFD EFF 09/10/2020
FORM APPROVED OMB 2120-0015

> 1 ASSOC CITY:	CHICO	4 STATE: CA	LOC ID: CIC	FAA SITE NR: 01395.*A
> 2 AIRPORT NAME:	CHICO MUNI		5 COUNTY: BUTTE, CA	
3 CBD TO AIRPORT (NM): 4 N		6 REGION/ADO: AWP /SFO	7 SECT AERO CHT: SAN FRANCISCO	

GENERAL

10 OWNERSHIP:	PUBLIC
> 11 OWNER:	CITY OF CHICO
> 12 ADDRESS:	PO BOX 3420 CHICO, CA 95927
> 13 PHONE NR:	530-896-7200
> 14 MANAGER:	SHERRY MILLER
> 15 ADDRESS:	150 AIRPARK BLVD., SUITE 110 CHICO, CA 95973
> 16 PHONE NR:	530-896-7216

> 17 ATTENDANCE SCHEDULE:

MONTHS	DAYS	HOURS
ALL	ALL	0700-1900

18 AIRPORT USE:	PUBLIC
19 ARPT LAT:	39-47-43.4N ESTIMATED
20 ARPT LONG:	121-51-30.3W
21 ARPT ELEV:	240.2 SURVEYED
22 ACREAGE:	1,475
> 23 RIGHT TRAFFIC:	13R 13L
> 24 NON-COMM LANDING:	NO
25 NPIAS/FED AGREEMENTS:	NGPRY
> 26 FAR 139 INDEX:	III A U 05/1973

SERVICES

> 70 FUEL:	100LL A
> 71 AIRFRAME RPRS:	MAJOR
> 72 PWR PLANT RPRS:	MAJOR
> 73 BOTTLE OXYGEN:	HIGH
> 74 BULK OXYGEN:	
75 TSNT STORAGE:	TIE
76 OTHER SERVICES:	AFRT,AGRI,AVNCS, CHTR,INSTR,RNTL, SALES

FACILITIES

> 80 ARPT BCN:	CG
> 81 ARPT LGT SKED:	SEE RMK
BCN LGT SKED:	SS-SR
> 82 UNICOM:	122.950
> 83 WIND INDICATOR:	YES-L
84 SEGMENTED CIRCLE:	YES
85 CONTROL TWR:	YES
86 FSS:	RANCHO MURIETA
87 FSS ON ARPT:	NO
88 FSS PHONE NR:	
89 TOLL FREE NR:	1-800-WX-BRIEF

BASED AIRCRAFT

90 SINGLE ENG:	75
91 MULTI ENG:	10
92 JET:	2
93 HELICOPTERS:	3
TOTAL:	90
94 GLIDERS:	0
95 MILITARY:	0
96 ULTRA-LIGHT:	0

OPERATIONS

100 AIR CARRIER:	21
102 AIR TAXI:	6,719
103 G A LOCAL:	6,170
104 G A ITNRNT:	19,546
105 MILITARY:	1,544
TOTAL:	34,000

OPERATIONS FOR 12 MONTHS ENDING 05/31/2019

RUNWAY DATA

	H1	13R/31L	13L/31R
> 30 RUNWAY IDENT:			
> 31 LENGTH:	64	3,000	6,724
> 32 WIDTH:	64	60	150
> 33 SURF TYPE-COND:	CONC-G	ASPH-F	ASPH-G
> 34 SURF TREATMENT:			GRVD
35 GROSS WT: S	35.0	12.5	63.0
36 (IN THSDS) D			100.0
37 2D			170.0
38 2D/2DS			
> 39 PCN:	////	////	20/F/B/X/T

LIGHTING/APCH AIDS

> 40 EDGE INTENSITY:			HIGH
> 42 RWY MARK TYPE-COND:	-	BSC- F / BSC- F	PIR- G / PIR- G
> 43 VGSI:		/	P4L / V4L
44 THR CROSSING HGT:		/	52 / 54
45 VISUAL GLIDE ANGLE:		/	3.00 / 3.00
> 46 CNTRLN-TDZ:	-	N - N / N - N	N - N / N - N
> 47 RVR-RVV:	-	- N / - N	- N / - N
> 48 REIL:		N / N	N / Y
> 49 APCH LIGHTS:		/	MALSR /

OBSTRUCTION DATA

50 FAR 77 CATEGORY:		A(V) / A(V)	PIR / C
> 51 DISPLACED THR:		/	/
> 52 CTLG OBSTN:		/	/
> 53 OBSTN MARKED/LGTD:		/	/
> 54 HGT ABOVE RWY END:		/	/
> 55 DIST FROM RWY END:	0	0 / 0	0 / 0
> 56 CNTRLN OFFSET:		/	/
57 OBSTN CLNC SLOPE:		50:1 / 50:1	50:1 / 50:1
58 CLOSE-IN OBSTN:	N	N / N	N / N

DECLARED DISTANCES

> 60 TAKE OFF RUN AVBL (TORA):	/	3,000 / 3,000	6,724 / 6,724
> 61 TAKE OFF DIST AVBL (TODA):	/	3,000 / 3,000	6,724 / 6,724
> 62 ACLT STOP DIST AVBL (ASDA):	/	3,000 / 3,000	6,724 / 6,724
> 63 LNDG DIST AVBL (LDA):	/	3,000 / 3,000	6,724 / 6,724

(>) ARPT MGR PLEASE ADVISE FSS IN ITEM 86 WHEN CHANGES OCCUR TO ITEMS PRECEDED BY >

> 110 REMARKS:

A 026 PPR FOR SKEDD ACR SER INVOLVING ACFT WITH MORE THAN 9 PAX SEATS AND UNSKEDD ACR SER INVOLVING ACFT WITH MORE THAN 30 PAX SEATS. WITHOUT PPR, ARFF SERS MAY NOT BE AVBL. FOR PPR CTC AMGR, 530-896-7216.
A 070 FOR FUEL AFT HRS CALL (530) 588-4888
A 081 WHEN ATCT CLSD ACTVT HIRL RY 13L/31R, VASI RY 31R, MALSR & PAPI RY 13L - 121.0.
A 110-001 FOR JET/HVY ACFT OPER EAST OF FLD TPA 1500 FT AGL; FOR LGT ACFT OPER WEST & EAST OF FLD TPA 1000 FT AGL.
A 110-002 BIRDS ON AND IN VCNTY OF ARPT.
A 110-003 TWY Z CLSD.
A 110-005 FUEL AVBL 0730-1900. FOR AFTER HRS FUEL CALL 530-588-4888.

111 INSPECTOR: (S) 112 LAST INSP: 09/18/2019 113 LAST INFO REQ:

FAA FORM 5010-1 (06/2003) SUPERSEDES PREVIOUS EDITION

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

AIRPORT MASTER RECORD

PRINT DATE: 11/06/2012
AFD EFF 09/20/2012
Form Approved OMB 2120-0015

>1 ASSOC CITY: OROVILLE
>2 AIRPORT NAME: OROVILLE MUNI
3 CBD TO AIRPORT (NM): 03 SW
4 STATE: CA
6 REGION/ADO: AWP/SFO
LOC ID: OVE
5 COUNTY: BUTTE CA
7 SECT AERO CHT: SAN FRANCISCO
FAA SITE NR: 01998.*A

GENERAL

10 OWNERSHIP: PU
>11 OWNER: CITY OF OROVILLE
>12 ADDRESS: 1735 MONTGOMERY ST
OROVILLE, CA 95965
>13 PHONE NR: 530-538-2420
>14 MANAGER: RICK WALLS
>15 ADDRESS: 1735 MONTGOMERY ST.
OROVILLE, CA 95965
>16 PHONE NR: 530-538-2507
>17 ATTENDANCE SCHEDULE:
UNATNDD

18 AIRPORT USE: PUBLIC
19 ARPT LAT: 39-29-16.1000N ESTIMATED
20 ARPT LONG: 121-37-19.2000W
21 ARPT ELEV: 194.0 SURVEYED
22 ACREAGE: 920
>23 RIGHT TRAFFIC:
>24 NON-COMM LANDING: NO
25 NPIAS/FED AGREEMENTS: NGPRY
>26 FAR 139 INDEX:

SERVICES

>70 FUEL: 100LL A
>71 AIRFRAME RPRS: NONE
>72 PWR PLANT RPRS: NONE
>73 BOTTLE OXYGEN: NONE
>74 BULK OXYGEN: NONE
75 TSNT STORAGE: TIE
76 OTHER SERVICES:

FACILITIES

>80 ARPT BCN: CG
>81 ARPT LGT SKED: SEE RMK
>82 UNICOM: 122.800
>83 WIND INDICATOR: YES-L
84 SEGMENTED CIRCLE: YES
85 CONTROL TWR: NONE
86 FSS: RANCHO MURIETA
87 FSS ON ARPT: NO
88 FSS PHONE NR:
89 TOLL FREE NR: 1-800-WX-BRIEF

BASED AIRCRAFT

90 SINGLE ENG:	61
91 MULTI ENG:	0
92 JET:	1
TOTAL:	62
93 HELICOPTERS:	2
94 GLIDERS:	0
95 MILITARY:	0
96 ULTRA-LIGHT:	4

OPERATIONS

100 AIR CARRIER:	0
102 AIR TAXI:	1,500
103 G A LOCAL:	14,500
104 G A ITNRNT:	20,000
105 MILITARY:	0
TOTAL:	36,000
OPERATIONS FOR 12 MONTHS ENDING	12/31/2011

RUNWAY DATA

>30 RUNWAY IDENT:		01/19	12/30		
>31 LENGTH:		6,020	3,540		
>32 WIDTH:		100	100		
>33 SURF TYPE-COND:		ASPH-G	ASPH-G		
>34 SURF TREATMENT:					
35 GROSS WT:	SW	60.0	25.0		
36 (IN THSDS)	DW	80.0			
37	DTW				
38	DDTW				
>39 PCN:					
LIGHTING/APCH AIDS					
>40 EDGE INTENSITY:		HIGH	HIGH		
>42 RWY MARK TYPE-COND:		BSC - G / BSC - G	BSC - G / BSC - G	- / -	- / -
>43 VGSI:		/ P2L	V2L / V2L	/	/
44 THR CROSSING HGT:		/ 41	32 / 32	/	/
45 VISUAL GLIDE ANGLE:		/ 3.00	3.00 / 3.00	/	/
>46 CNTRLN-TDZ:		N - N / N - N	N - N / N - N	- / -	- / -
>47 RVR-RVV:		- N / - N	- N / - N	- / -	- / -
>48 REIL:		N / N	N / N	/	/
>49 APCH LIGHTS:		/	/	/	/
OBSTRUCTION DATA					
50 FAR 77 CATEGORY:		C / B(V)	B(V) / B(V)	/	/
>51 DISPLACED THR:		/	/	/	/
>52 CTLG OBSTN:		/	/ TREES	/	/
>53 OBSTN MARKED/LGTD:		/	/	/	/
>54 HGT ABOVE RWY END:		/	/ 20	/	/
>55 DIST FROM RWY END:		/	/ 600	/	/
>56 CNTRLN OFFSET:		/	/ 200L	/	/
57 OBSTN CLNC SLOPE:		50:1 / 50:1	50:1 / 20:1	/	/
58 CLOSE-IN OBSTN:		N / N	N / N	/	/
DECLARED DISTANCES					
>60 TAKE OFF RUN AVBL (TORA):		/	/	/	/
>61 TAKE OFF DIST AVBL (TODA):		/	/	/	/
>62 ACLT STOP DIST AVBL (ASDA):		/	/	/	/
>63 LNDG DIST AVBL (LDA):		/	/	/	/

(>) ARPT MGR PLEASE ADVISE FSS IN ITEM 86 WHEN CHANGES OCCUR TO ITEMS PRECEDED BY >

>110 REMARKS:

A 081 RWY APT ACTVT HIRL RY 01/19 & RY 12/30 - CTAF. PAPI RY 19, VASI RY 12 & RY 30 OPER CONT.
A 110-1 TWY FROM RY 01/19 TO GOLF COURSE/RESTAURANT TIEDOWNS 20 FT WIDE WITH NO SHOULDERS.
A 110-2 FIREFIGHTING ACFT INVOF ARPT MAY-OCT.
A 110-3 FOR ARPT INFO MON-FRI CTC (530) 538-2490.
A 110-4 GLIDERS 7 NM RADIUS 5,000 FT AND BELOW 1600-2200Z WEEKENDS.

111 INSPECTOR: (S) 112 LAST INSP: 06/22/2012 113 LAST INFO REQ:

FAA Form 5010-1 (5-91) SUPERSEDES PREVIOUS EDITION

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

AIRPORT MASTER RECORD

PRINT DATE: 11/06/2012
AFD EFF 09/20/2012
Form Approved OMB 2120-0015

>1 ASSOC CITY:	PARADISE	4 STATE: CA	LOC ID: CA92	FAA SITE NR: 02026.5*A	
>2 AIRPORT NAME:	PARADISE SKYPARK		5 COUNTY: BUTTE CA		
3 CBD TO AIRPORT (NM):	03 S	6 REGION/ADO: AWP/SFO	7 SECT AERO CHT: SAN FRANCISCO		

GENERAL

10 OWNERSHIP:	PRIVATE
>11 OWNER:	JOHN H. FRANKLIN+
>12 ADDRESS:	217 FLUME ST SUITE 200
	CHICO, CA 95928
>13 PHONE NR:	530-343-9600
>14 MANAGER:	JAIME HUTSELL
>15 ADDRESS:	217 FLUME ST SUITE 200
	CHICO, CA 95928
>16 PHONE NR:	530-343-9600
>17 ATTENDANCE SCHEDULE:	
	UNATTND

SERVICES

>70 FUEL:	100LL

BASED AIRCRAFT

90 SINGLE ENG:	44
91 MULTI ENG:	1
92 JET:	0
TOTAL:	45
93 HELICOPTERS:	0
94 GLIDERS:	0
95 MILITARY:	0
96 ULTRA-LIGHT:	0

FACILITIES

		>80 ARPT BCN:	
		>81 ARPT LGT SKED:	SEE RMK
		>82 UNICOM:	122.800
18 AIRPORT USE:	PRIVATE	>83 WIND INDICATOR:	YES-L
19 ARPT LAT:	39-42-38.0000N ESTIMATED	84 SEGMENTED CIRCLE:	YES
20 ARPT LONG:	121-36-59.4000W	85 CONTROL TWR:	NONE
21 ARPT ELEV:	1300.0 ESTIMATED	86 FSS:	RANCHO MURIETA
22 ACREAGE:	35	87 FSS ON ARPT:	NO
>23 RIGHT TRAFFIC:	17	88 FSS PHONE NR:	
>24 NON-COMM LANDING:		89 TOLL FREE NR:	1-800-WX-BRIEF

RUNWAY DATA

>30 RUNWAY IDENT:	**17/35**			
>31 LENGTH:	3,017			
>32 WIDTH:	60			
>33 SURF TYPE-COND:	ASPH-G			

LIGHTING/APCH AIDS

>40 EDGE INTENSITY:	LOW			
>42 RWY MARK TYPE-COND:	NSTD - G / BSC - G	- / -	- / -	- / -

OBSTRUCTION DATA

50 FAR 77 CATEGORY:	A(V) / A(V)	/	/	/
>51 DISPLACED THR:	427 /	/	/	/
>52 CTLG OBSTN:	TREE /	/	/	/
>53 OBSTN MARKED/LGTD:	/	/	/	/
>54 HGT ABOVE RWY END:	115 /	/	/	/
>55 DIST FROM RWY END:	1,200 /	/	/	/

(>) ARPT MGR PLEASE ADVISE FSS IN ITEM 86 WHEN CHANGES OCCUR TO ITEMS PRECEDED BY >

>110 REMARKS:

A 057	RWY 17 APCH RATIO14:1 BASED ON DSPLCD THLD.
A 058	RWY 17 17/35 HANGARS 125 FT WEST OF RY CNTRLN AND 150 FT EAST OF RY CNTRLN.
A 070	FOR FUEL CALL (530) 343-9600 IN ADVANCE.
A 081	RWY APT ACTVT LIRL RY 17/35 DUSK-DAWN ONLY - CTAF. TRIL RY 35 DUSK-DAWN.
A 110	THIS AIRPORT HAS BEEN SURVEYED BY THE NATIONAL GEODETIC SURVEY.
A 110-3	STEEP DOWNGRADE EAST; WEST; & SOUTH OF RWY.
A 110-4	LAND RY 35; TKOF RY17. NIGHT LDG RY 35 3017 FT LGTD. RY 17 NIGHT LDGS NOT AUTH. DUE TO MOUNTAINOUS TERRAIN WITH TREES APROX. 450-700 YDS FROM RY END.

111 INSPECTOR: (S) 112 LAST INSP: 04/22/2006 113 LAST INFO REQ: 01/17/2012

FAA Form 5010-2 (5-91) SUPERSEDES PREVIOUS EDITION

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

AIRPORT MASTER RECORD

PRINT DATE: 11/06/2012
AFD EFF 09/20/2012
Form Approved OMB 2120-0015

>1 ASSOC CITY:	CHICO	4 STATE: CA	LOC ID: CL56	FAA SITE NR: 01396.1*A	
>2 AIRPORT NAME:	RANCHAERO		5 COUNTY: BUTTE CA		
3 CBD TO AIRPORT (NM): 01 W		6 REGION/ADO: AWP/SFO	7 SECT AERO CHT: SAN FRANCISCO		

GENERAL

10 OWNERSHIP:	PRIVATE
>11 OWNER:	RANCHAERO INC
>12 ADDRESS:	2599 OAK PARK AVE
	CHICO, CA 95928
>13 PHONE NR:	530-342-5242
>14 MANAGER:	GARY GRIGGS
>15 ADDRESS:	2599 OAK PARK AVE
	CHICO, CA 95928
>16 PHONE NR:	530-342-5242
>17 ATTENDANCE SCHEDULE:	
ALL ALL	0900-1700

SERVICES

>70 FUEL: 100LL

BASED AIRCRAFT

90 SINGLE ENG:	30
91 MULTI ENG:	0
92 JET:	0
TOTAL:	30
93 HELICOPTERS:	4
94 GLIDERS:	0
95 MILITARY:	0
96 ULTRA-LIGHT:	0

FACILITIES

>80 ARPT BCN:	
>81 ARPT LGT SKED:	
>82 UNICOM:	
>83 WIND INDICATOR:	NO
84 SEGMENTED CIRCLE:	YES
85 CONTROL TWR:	NONE
86 FSS:	RANCHO MURIETA
87 FSS ON ARPT:	NO
88 FSS PHONE NR:	
89 TOLL FREE NR:	1-800-WX-BRIEF
18 AIRPORT USE:	PRIVATE
19 ARPT LAT:	39-43-10.2765N ESTIMATED
20 ARPT LONG:	121-52-13.7835W
21 ARPT ELEV:	173.0 ESTIMATED
22 ACREAGE:	23
>23 RIGHT TRAFFIC:	14
>24 NON-COMM LANDING:	NO

RUNWAY DATA

>30 RUNWAY IDENT:	**14/32**			
>31 LENGTH:	2,156			
>32 WIDTH:	30			
>33 SURF TYPE-COND:	ASPH-P			

LIGHTING/APCH AIDS

>40 EDGE INTENSITY:				
>42 RWY MARK TYPE-COND:	BSC - G / BSC - G	- / -	- / -	- / -

OBSTRUCTION DATA

50 FAR 77 CATEGORY:	A(V) / A(V)	/	/	/
>51 DISPLACED THR:	300 / 200	/	/	/
>52 CTLG OBSTN:	TREES / TREES	/	/	/
>53 OBSTN MARKED/LGTD:	/	/	/	/
>54 HGT ABOVE RWY END:	10 / 20	/	/	/
>55 DIST FROM RWY END:	200 / 230	/	/	/

(>) ARPT MGR PLEASE ADVISE FSS IN ITEM 86 WHEN CHANGES OCCUR TO ITEMS PRECEDED BY >

>110 REMARKS:

A 033 RWY 14/32 SMALL CRACKS IN PAVEMENT SFC.
A 035 RWY 14/32 GROSS WEIGHT STRENGTH ESTIMATED PRVDD BY AMGR 12000 LBS.
A 057 RWY 14 RWY 14 APCH RATIO 13:1 TO DSPLCD THLD OVER +40 FT TREES 535 FT FM DSPLCD THLD 120 FT L.
A 057 RWY 32 RWY 32 APPROACH RATIO 21:1 TO DISPLACED THRESHOLD OVER +20 FT TREES, 230 FT FROM EOR, BOTH SIDES OF CENTERLINE
A 058 RWY 14 RWY 14 +15 FT ROAD 100 FT FM; +35 FT TREES 135 FT FM; +10 FT TREES 160 FT FM RY END.
A 058 RWY 32 RWY 32 ORCHARD WITH +20 FT TREES LEFT & RIGHT 34 FT FM RY END.
A 084 TRAFFIC PATTERN INDICATORS ONLY.

111 INSPECTOR: (S) 112 LAST INSP: 11/04/2005 113 LAST INFO REQ: 02/14/2012

FAA Form 5010-2 (5-91) SUPERSEDES PREVIOUS EDITION

ACTION ELEMENT – RAIL

Background

Historically, rail service in Butte County has been almost exclusively used to transport goods (see Chapter 12). In 1995, BCAG completed the Northern Sacramento Valley Intercity Passenger Rail study to examine the feasibility of additional passenger rail service to the region. While the study concluded that passenger rail service for the region was not yet feasible, it did provide beneficial information concerning future passenger rail service data.

Existing Rail Service

The Coast Starlight, which runs between Seattle and Los Angeles, is currently the only direct passenger rail service in Butte County (Figure 11-1). Two trains, one each northbound and southbound, stop in Chico daily. The northbound train arrives at approximately 1:55 a.m. and the southbound at 3:50 a.m. Reservations are required for travel on the Coast Starlight.

Feeder bus connections for intercity rail service are available more widely in the Butte County region. The following table summarizes the bus service for Amtrak thru Butte County. The Amtrak station is at W. 5th and Orange Streets. Parking is free. Subsequent bus connections from these routes allow travel to Reno, Yosemite, Las Vegas, Monterey, and throughout the Los Angeles, San Diego, and San Francisco Bay urban areas. Advanced reservations are required on the San Joaquin rail and bus service but are not required on the Capitol Corridor rail service. Additional information on Amtrak and the Coast Starlight can be found at www.amtrak.com. The following represents the current Amtrack bus schedule and can be found at:

https://amtraksanjoaquins.com/thruway-bus-2/route-3/

San Joaquin Connecting Train Number (Southbound)	-	710	-	712	716	-	718
Thruway Number	3710	3810	3812	3712	3816	3716	3718
Days of Operation	Daily	Daily	Daily	Daily	Daily	Daily	Daily
Redding, CA - Transit Center (map)	-	-	-	6:05A	-	10:05A	-
Red Bluff, CA - Transit Center (map)	-	-	-	6:40A	-	10:40A	-
Chico, CA - Amtrak Station (map)	-	-	-	7:45A	11:45A	11:45A	3:35P

San Joaquin Connecting Train Number (Southbound)	-	710	-	712	716	-	718
Thruway Number	3710	3810	3812	3712	3816	3716	3718
Days of Operation	Daily	Daily	Daily	Daily	Daily	Daily	Daily
Oroville, CA - Park-N-Ride (map)	-	-	-	8:10A	-	12:10P	4:00P
Marysville, CA - Government Center (map)	-	-	-	8:45A	12:45P	12:45P	4:35P
Davis, CA - Amtrak Station (map)	-	6:35A	9:05A	-	1:10P	1:10P	-
Sacramento, CA - Amtrak Station (Arrival)	-	7:00A	9:40A	Z9:50A	1:45P	C1:50P	C5:50P
Sacramento, CA - Amtrak Station (Leaving)	N7:15A	7:15A	9:50A	10:05A	1:55P	N2:05P	6:05P
Elk Grove, CA Harbor Point & Renwick Avenue (map)	7:30A	-	-	10:20A	-	2:20P	6:20P
Lodi, CA - Amtrak Station (map)	-	-	-	-	2:35P	-	-
Stockton, CA - ACE Station (map)	-	8:05A	10:55A	-	3:00P	-	7:00P
Stockton, CA - Amtrak Station (map)	C8:15A	C8:15A	C11:05A	C11:05A	C3:10P	C3:10P	C7:10P

San Joaquin Connecting Train Number (Southbound)

San Joaquin Connecting Train Number (Northbound)	711	-	713	-	715	-	717
Thruway Number	3711	3811	3713	3813	3715	3815	3819
Days of Operation	Daily	Daily	Daily	Daily	Daily	Daily	Daily
Redding, CA - Transit Center (map)	-	-	D5:35P	-	D9:35P	-	-
Red Bluff, CA - Transit Center (map)	-	-	D5:05P	-	D9:05P	-	-
Chico, CA - Amtrak Station (map)	D11:55A	-	D4:10P	-	D8:10P	-	-
Oroville, CA - Park-N-Ride (map)	D11:25A	D3:40P	-	-	D7:40P	-	-
Marysville, CA - Government Center (map)	D10:50A	-	D3:05P	-	D7:05P	-	-
Davis, CA - Amtrak Station (map)	-	D10:20A	-	D2:35P	-	D6:35P	D10:40P
Sacramento, CA - Amtrak Station (Leaving)	10:00A	10:00A	9:40A	2:15P	6:00P	6:00P	10:10P
Sacramento, CA - Amtrak Station (Arrival)	9:50A	9:50A	9:50A	2:00P	6:15P	6:15P	10:20P
State Capitol - 10th & N st. (map)	9:35A	-	1:50P	-	5:50P	-	10:00P
Elk Grove, CA Harbor Point & Renwick Avenue (map)	-	-	D1:35P	-	D5:35P	-	D9:45P
Lodi, CA - Amtrak Station (map)	-	9:10A	-	D1:20P	-	D5:20P	-
Stockton, CA - Amtrak (map)	-	-	-	D12:55P	-	D4:55P	8:55P
Stockton, CA - ACE Station (map)	8:45A	8:45A	12:45P	12:45P	4:45P	4:45P	8:45P
San Joaquin Connecting Train Number (Southbound)							

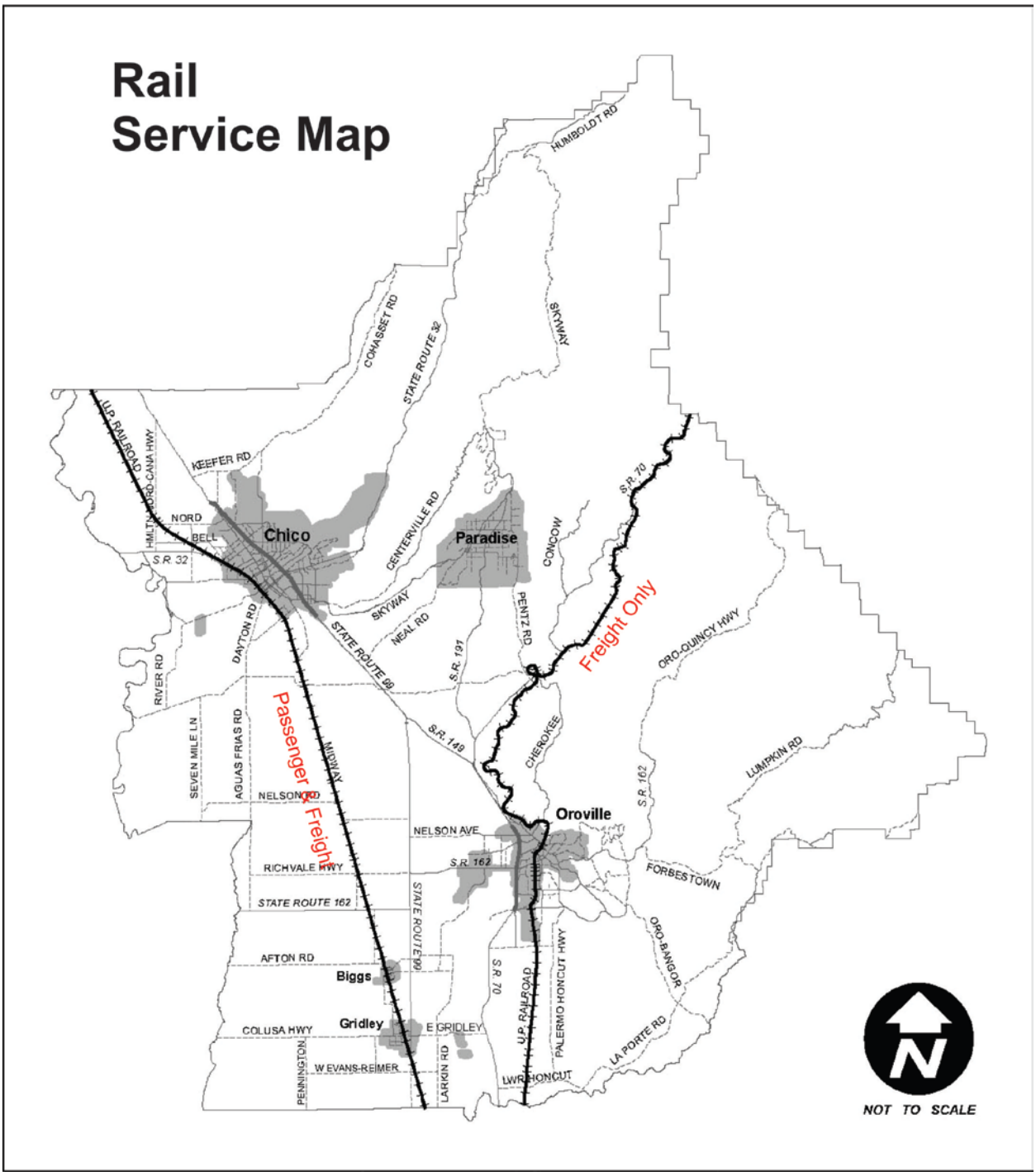
Rail Service Needs and Assessment

Intercity Rail

There are several factors that intensify the consideration of intercity rail for the Northern Sacramento Valley. First, increasing populations throughout the North Valley are taxing existing transportation systems. Second, the existing transportation systems for intercity travel are almost exclusively motorized travel for individual travelers, including carpools or buses. Third, existing intercity transportation corridors are congested, thus making intercity travel more difficult and have negative impacts on goods movement. Fourth, state and federal clean air regulations make it more and more difficult to increase roadway capacity. With the above factors making vehicular travel more difficult, alternatives must be explored.

Rail is an attractive method of travel to many. Aside from being cleaner, it is more relaxing than driving rural highways, contending with farm equipment common in the

Figure 11-1
Rail Service Map



valley, slow-moving trucks & recreational vehicles, and the dangers of fog and inclement weather.

The Coast Starlight is unsuitable to meet the needs of local passengers due to its infrequent and inconvenient night schedule, advanced requirement for reservations, and capacity constraints. The Coast Starlight's use of the Union Pacific tracks through Butte County demonstrates that the existing tracks can handle additional use such as passenger rail service. The key issue is whether or not sufficient ridership for intercity rail in the Northern Sacramento Valley could support the costs of the service.

During the 1994/95 fiscal year, BCAG studied the feasibility of extending intercity passenger rail service to the northern Sacramento Valley counties. ICF Kaiser of Oakland, California prepared the study, in cooperation with the counties of Sacramento, Sutter, Yuba, Butte, Placer, Tehama, and Shasta. BCAG served as the lead agency for development and coordination of the study.

The Northern Sacramento Valley Intercity Passenger Rail Study, as it was called, included two phases. The purpose of Phase I was to identify a base level rail service that could be implemented to provide intercity service, and to identify the potential ridership levels for this service. Based on the ridership forecasts, it was determined that intercity rail passenger service could not be supported currently or within the next ten-year horizon by the seven counties along the corridor. The primary reason was due to the lack of ridership necessary to recover the state required 55% operational costs through the farebox. As a result, BCAG postponed development of Phase II, which would have examined station locations, needed track improvements, financing, and institutional arrangements. While the Rail Study did not justify the need for intercity rail service now, BCAG staff will continue to participate in the rail planning process and monitor intercity rail service developments.

California State Rail Plan

The California State Rail Plan 2007/08 – 2017/18 prepared by Caltrans identifies potential new intercity rails services. The Sacramento to Redding corridor is one of three new routes that Caltrans is proposing in the state rail plan. Operation of intercity rail service from Sacramento to Redding would extend State-supported intercity rail service to a fast growing Northern California area not presently served by the State-supported intercity passenger rail network.

Connecting buses to the *San Joaquin* and *Capitol Corridor* trains currently serve the northern Sacramento Valley. Buses connect to four of the *San Joaquins* in Stockton, and one in Sacramento, and travel north through Sacramento, Marysville, Chico, and Redding. Five *Capitol Corridor* trains in Sacramento also have a bus connection to Redding. Additionally, the single daily round trip of the Seattle-Los Angeles *Coast Starlight* connects Redding and Chico with Sacramento, the Bay Area, and Los Angeles.

Caltrans' ten-year operating plan includes one daily round trip between Sacramento and Redding in 2015-16. This rail service would be supplemented by bus service that would

run over the same route as the train, but at other times of the day. Caltrans believes this extension is a good candidate for rail service because:

- Amtrak currently operates the *Coast Starlight* on this route, with existing stations at Sacramento, Chico, and Redding.
- The demographics of the route are positive: the northern Sacramento Valley has a rapidly growing population; Redding represents the urban hub for the northern part of the State; and California State University, Chico is a focus of activity and population.

While Caltrans planned the study in 2005, it was deferred due to the UP's decision not to consider operation of new passenger trains at the time.

North Valley Rail Vision

The *North Valley Rail Vision* is a planning concept being developed by the Butte County Association of Governments (BCAG) to establish daily passenger rail service to northern California, in addition to other complementary transportation services.

In cooperation with Caltrans and the San Joaquin Joint Powers Agency (SJJPA), BCAG would like to develop the *North Valley Rail Vision* through a series of studies to identify strategies and needed improvements for connecting Butte County to the state's passenger rail services, including high speed rail.

Implementation of the *North Valley Rail Vision* would happen through the following studies:

1) **BCAG Strategic Partnerships Transit Grant** – In 2020, BCAG has secured grant funding for $243,457 under the Caltrans Strategic Partnerships Transit Program to study merging the daily Amtrak San Joaquin's thruway bus service with a proposed Chico to Sacramento daily commuter bus service. This study will look at the viability of merging these two services to provide daily commuter bus service between Chico and Sacramento, while also serving the San Joaquin thruway bus service. This study will also identify needed park-and-ride improvements and stops between Chico and Sacramento, with amenities including electric charging and connections with regional and local bike and pedestrian facilities. This study is anticipated to be completed in FY 2022/23;

2) **Extension of San Joaquin Passenger Rail Service to Oroville** – BCAG will work with the SJJPA to study the feasibility of extending the San Joaquin's daily passenger rail service from Natomas to Marysville and Oroville. This study would also look at needed rail depot improvements including electric charging and parking with connection to regional transit and commuter bus service for rail stations in Oroville and Marysville. This would be a future study undertaken by

BCAG after completion of the San Joaquin Thruway & Chico-to-Sacramento Commuter Bus study.

Development of the studies for *North Valley Rail Vision* will also be coordinated with the BCAG Transportation Advisory Committee, the BCAG Planning Directors Group and the sixteen counties comprising the North State Super Region, including the cities of Marysville/Yuba City and Yuba County.

The extension of daily passenger rail and associated services outlined in the *North Valley Rail Vision* improves geographic equity by providing connectivity not only to Butte County but the sixteen counties that comprise the *North State Super Region* (combined total population of 1,058,395), to future passenger rail, high speed rail and commuter bus services.

With Butte County and the City of Oroville serving as a northern terminus for the future extension of the San Joaquin passenger rail service, north state residents have improved access for commuting and travel to Sacramento, the Bay Area, the San Joaquin Valley and Reno. This connectivity also integrates the disadvantaged communities within the cities of Chico, Oroville and Maysville/Yuba City to other urban centers in the state.

Benefits of the North Valley Rail Vision

- Reduced GHGs
- Increased Multi-Modal Connectivity for Northstate Counties
- Reduced VMT and Expanded Ridership
- Improved Public Health
- Benefits Disadvantaged Communities in Butte & Yuba Counties
- Improves Safety for Evacuation Corridors

This effort would be longer term in which specific grant funds to study the viability would be necessary.

Grade Crossings

Another important issue concerning rail transportation in Butte County is the issue of grade crossing safety and convenience. Two cities that have problems with existing grade crossings are Gridley and Chico. Both Gridley and Chico straddle the Union Pacific railroad tracks and have at-grade crossings in several locations within their cities. Neither city has over or under-crossings. As a result of the passing trains, there are times of the day that these communities experience traffic problems where automobile traffic and emergency service vehicles are unable to access various parts of the city. Even longer delays are experienced when trains must make a stop in these cities. As a result, both the cities of Gridley and Chico have expressed a need to

improve some of the intersections by constructing over or under-crossings to remedy this problem.

Currently, both Gridley and Chico are exploring a funding program administered by the Public Utilities Commission and Caltrans for grade crossing projects. The City of Chico has identified a project for West 8th Avenue, which also intersects State Route 32, while the City of Gridley has identified an over-crossing for Little Street in Gridley.

RAIL ACTION PLAN – Planned Improvements

The following "planned improvements" have been identified in terms of goals and objectives for both the short-term and long-term rail improvements. Because no specific projects can be identified at this time, the following are identified to document Butte County's advocacy for rail improvements.

Short Range

1. Seek funding through the Public Utilities Commission's grade Crossing Program to partially fund construction of new grade crossing improvements in the cities of Gridley and Chico.

2. Provide rail-highway crossings and protective devices at various locations to minimize rail highway conflicts.

3. Continue to support intercity rail service through the Northern Sacramento Valley, as ridership and funding allows. (*BCAG, Jurisdictions, Caltrans, Amtrak)*

4. Encourage the expansion of service on the Coast Starlight route to include a daytime stop at Chico. (*BCAG, Jurisdictions, Caltrans, Amtrak*)

5. Monitor the High Speed Rail Commission's development of High Speed Rail System in California as it relates to Butte County.

6. Continue communication with Caltrans and the San Joaquin Joint Powers Authority

Long Range

1. Continue to work toward implementing intercity passenger rail service through the Northern Sacramento Valley, or alternatives. *(BCAG, Jurisdictions, Caltrans*)

2. Provide ongoing operations and maintenance of the Coast Starlight route through Butte County. (*Caltrans, Amtrak*)

3. Continue to seek funding for construction of grade separation projects.

4. Continue monitoring other California rail activity.

ACTION ELEMENT – GOODS MOVEMENT

Background

Goods movement covers all transportation methods by which freight, commodities, and information are transported into and out of Butte County. The most common methods to transport freight and commodities are rail, truck, air, bus, and pipelines, while information can be transported using fiber optic cable, cellular towers, telephone wire, radio waves, electrical wires, and other technology. Goods movement is critical to the continued economic health of the area by allowing local producers to transport their goods to market, as well as bringing needed raw materials and finished products into the area for the use of local businesses and individuals.

In August of 2013, BCAG completed a State Route 70 Economic Transportation Study. The purpose of this report was to provide a preliminary assessment of the potential for improvements to State Route (SR) 70 to foster economic development. The report reviewed the existing socio-economic conditions in Butte and Yuba Counties in order to assess the potential for economic development resulting from improvements to the segment of SR 70 between Marysville and Oroville. The assessment relied on an analysis of commuting and employment data, a review of plans and previous studies, and interviews with local businesses. Key findings include:

- SR 70 is used extensively by commuters to and from Oroville. More than 1,500 Oroville area workers (12% of local employees) live south of the city and use SR 70 for their commute. One major manufacturer in Oroville reports the need to recruit specialized machinists from as far south as Sacramento. An even larger number of Oroville residents (at least 1,800 residents, or 15% of the labor force) commute south to jobs using SR 70.

- Oroville's economy is more dependent on highway transportation for goods movement than the economies of Chico or Butte County as a whole. The Oroville area has a relatively high concentration of manufacturing jobs, and many businesses in this sector rely on SR 70 for inbound truck shipments of supplies, outbound shipments of finished products, or both. Many of Oroville's manufacturing companies are linked to the region's agricultural activity, including businesses engaged in food processing, metal products fabrication, and production of packaging. One business, Pacific Coast Producers, generates approximately 400 truck trips per day during the peach canning season, nearly all of them using SR 70. The strength of Oroville's manufacturing sector is evident in the recent growth in local manufacturing jobs (10% increase) as compared to a large drop statewide (27% decline).

- Another key driver of Oroville's economy, the recreation and entertainment sector, is also highly dependent on highway transportation and SR 70 in particular. The Lake Oroville State Recreation Area is one of the busiest state park facilities and draws hundreds of thousands of visitors annually, many of them arriving via SR 70. These visitors help to support retail and services in

Oroville. The two casinos in the Oroville area draw heavily from population centers to the south, with approximately 30% of casino revenue coming from patrons using SR 70.

- Several businesses report that current travel conditions on SR 70 can negatively affect their business operations. Traffic incidents on SR 70 that delay shipment of fresh produce can raise costs for food processors, making them less competitive. Similarly, highway delays can negatively affect manufactures that rely on SR 70 for inbound shipments of raw materials, such as steel, and outbound shipments of finished products. Because of the need for Oroville area businesses to remain competitive domestically and even globally, significant deterioration of travel conditions on SR 70 could hinder the expansion of some existing businesses and limit the potential for new businesses to locate in the Oroville area.

The above listed reasons along with safety, assisted in securing the necessary funding to widen the SR 70 Corridor where the facility was two lanes to 4 lanes. SR 70 is a two-lane rural highway from Oroville to Marysville. The entire 31-mile section is programmed to be widened to 4 lanes. Construction is expected to be completed within the next six years.

The State Route 70 has been highlighted as a major constraint for goods movement since 1988 and is now coming to fruition.

Goods Transport

Rail Transport

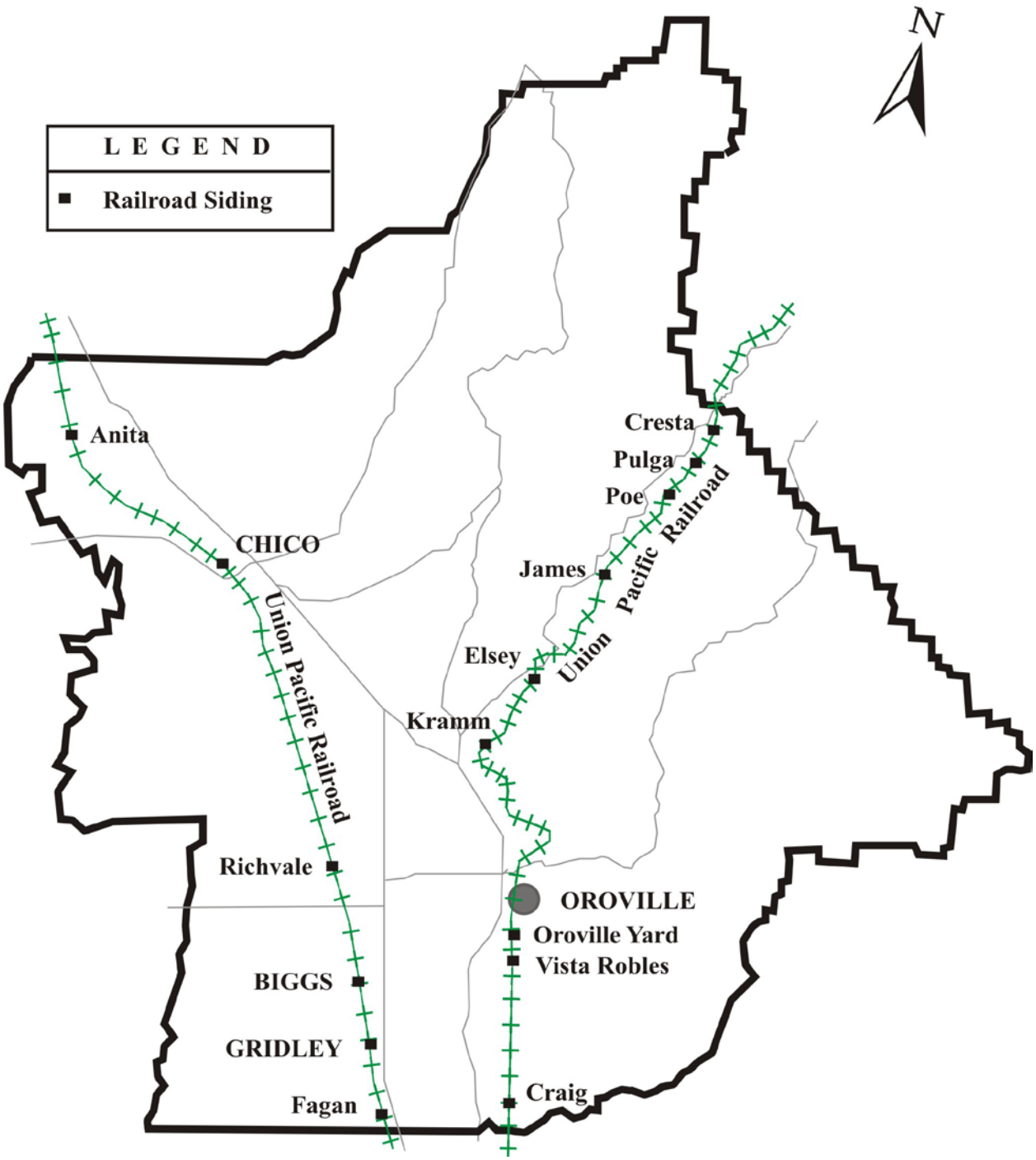
Butte County is served by the Union Pacific Railroad. Union Pacific maintains a total of 100.4 miles of mainline track through Butte County, with two mainlines; one in the western portion of Butte County, and one in the eastern portion of the County.

The western mainline extends through the county from the Sutter County line to the Tehama County line, and comprises 45.6 miles of mainline track within the county (Figure 12-1). Sidings are located in Fagan (near the Butte-Sutter County border), Gridley, Biggs, Richvale, Chico, and Anita (northwest of Chico). On an average day, approximately 18 to 24 trains move through Butte County on this segment of the Union Pacific tracks.

The eastern mainline of the Union Pacific Railroad extends through the county from the Yuba County line to the Plumas County line via Oroville for a total of 54.8 miles. North of Oroville, the rail line follows the Feather River (Figure 12-1). The Union Pacific tracks in the Feather River Canyon have a rich history, having been built as part of the first transcontinental railroad by the Central Pacific Railroad Company that began building east from California to meet Union Pacific, which was building west. When the two railroads met at Promontory Point, Utah in 1869, the transcontinental railroad was completed.

There are a number of sidings and spur tracks within Butte County. Some are used by various manufacturers, some are used as passing sidings, and others have been abandoned. The Craig siding and Adelaide spur, both south of Oroville, serve several lumber mills, while several sidings within the Oroville area are currently in use by various manufacturers. The Kramm and Elsey sidings just north of Oroville are both passing sidings with some limited use for commercial enterprise, and the James and Pulga are passing sidings in the Feather River Canyon. More recently, a siding has been added in Chico at the Chico Bean Growers facility. On an average day, approximately 24 to 50 trains move through Butte County on the Union Pacific tracks. Most of the cargo shipped by rail includes bulky items such as grains, rice, vehicles, lumber, and fuel.

Figure 12-1
Freight Rail Map



While transport by rail is generally less expensive than air or truck transport, rail is limited by speed and the location of fixed rail track. Rail transport provides the option of specialized rail cars such as flatbeds, refrigerated box cars, fuel tankers, and piggyback cars. These specialized rail cars allow rail transport to move a large variety of goods, giving it an advantage over other modes of transportation.

Air Transport

Air transport is the fastest way to move goods. However, because of the higher cost per pound, air transport is most practical for small, lightweight items such as mail, business documents, medical supplies & services, and small packages of higher value.

Chico Municipal Airport is the primary airport for air cargo service in Butte County, and also serves the needs of Glenn, Tehama, and Plumas Counties. Paradise Skypark is also used on occasion by commercial cargo carriers as a reliever airport when the Chico Airport is fogged in.

The Chico Airport Master Plan reports air cargo through the airport. CIC moved outbound 178,174 pounds of cargo for calendar year 2019. That would equal only 89 tons for the year or 0.04 tons daily.

Table 12-1 documents the outbound cargo in tons:

Table 12-1
Chico Municipal Airport – Outbound Air Cargo

Year	Annual	Daily
2000	980	3.77
2010	246	0.95
2020	163	0.63

The following Table 12-2 describes the cargo aircraft departures by the same year groups.

Table 12-2
Chico Municipal Airport – Air Cargo Aircraft Departures

Year	Cargo Aircraft Departures									
	Cessna 208		Twin Cessna 402		Piper Cherokee PA 32		Beech 99		TOTAL	
	Annual	Daily	Annual	Daily	Annual	Daily	Annual	Daily	Annual	Daily
1998	700	3	240	1	380	1.5	390	1.5	1,710	7.0
2000	700	3	240	1	380	1.5	500	2	1,820	7.5
2010	1,200	5	800	3	620	2.5	720	3	3,340	13.5
2019*	350	2	240	1	0	0	0	0	590	3

Source: Chico Airport Master Plan Table 2-7. 2019 Data Source, City of Chico

Truck Transport

Truck transport is the primary method of transporting goods into and through the Butte region. Agricultural operations and grocery stores are just two examples of commercial operations depending almost entirely on truck transportation.

The designated truck route through Butte County encompasses State Route 70 from the southern border of Butte County then traversing northwest onto SR 149 and back onto SR 99 to provide for a south to north and vice versa truck route. Because there is no continuous four-lane freeway/expressway system in Butte County to safely accommodate the movement of goods by trucks, safety continues to be a major issue with truck travel. SR 32, 70, and 99 are commonly used to transport freight to and from the urban centers of Butte County. In addition, Chico, Oroville, and Paradise each have designated truck routes within their jurisdictions.

To address the inadequate regional truck infrastructure on the State Highway System, the SR 70 Corridor has been BCAG's top regional priority since 1991. As part of the 2020 State Transportation Improvement Program (STIP), funding to widen SR 70 to 4 lanes has been secured. The entire corridor between Marysville and Oroville is or will be under construction over the next 5 years. These improvements will make it safer for the efficient and safe travel of people and goods.

Rural two lane highways in the region are subject to significant safety concerns. Corridor projects aim to improve the operations and safety for the traveling public to and through the region. Northern California is rich in agriculture products serving the state and exporting goods throughout the world. As a rural agriculture region, head-on collisions are a major concern for the transporting of goods and the safe transport of the public. In addition, the area is an economically depressed region with struggles to attract new business in the absence of adequate, minimum highway infrastructure. As a rural agriculture region, the corridor is subject to higher fatality rates above the state average. The region also experiences high seasonal truck traffic during crop harvesting periods.

Along with SR 99, SR 70 is one of the primary north-south transportation corridors for the eastern Sacramento Valley. SR 70 traverses Sutter, Yuba, and Butte Counties, totaling approximately 81 miles. The route begins 14 miles north of the City of Sacramento, at the junction of SR 99 and SR 70 in Sutter County. It continues north, bisecting the City of Marysville in Yuba County, the City of Oroville in Butte County, and then continues northeast through the Lake Oroville State Recreation Area and Lassen National Forest in Butte County, ultimately terminating at the junction of US 395 in Plumas County.

SR 70 carries substantial recreational traffic through Yuba and Butte Counties, and is a parallel easterly alternative route to SR 99 for most trip purposes. SR 70 accommodates regional, interregional, recreational, and commercial truck traffic, in addition to serving local traffic within Marysville, Oroville, and adjacent unincorporated communities. SR 70 plays an important role in goods movement, particularly for the first mile/last mile of

transporting local agricultural products to market and to processing plants in the region. SR 70 also carries supports the local manufacturing economy by providing access to the Sacramento and Oakland ports. SR 70 is a California Highway Freight Network Tier 3 facility as designated by the California Freight Mobility Plan. In addition, SR 70 serves as an emergency alternative route for Interstate 80 (I-80) across the Sierra Nevada Mountains when I-80 is closed or impaired due to weather conditions or other significant incidents.

Pipelines

When most people think of goods transportation, vehicles such as trucks, trains, and airplanes usually come to mind. However, pipelines also play a critical role in transporting water, natural gas, and petroleum supplies through Butte County.

Water

Various agencies and municipalities within Butte County manage water pipelines. There are nine major suppliers of water, with more than 100 other small water suppliers with less than 200 customers each. The major suppliers of water, along with the miles of pipelines they manage, are shown in Table 12-3.

Table 12-3
Major Water Suppliers in Butte County

Water Company	Miles of Pipeline
City of Biggs	15
California Water Service	373
Durham Irrigation District	11
City of Gridley	18
South Feather Water & Power	160
Paradise Irrigation District	180
Thermalito Irrigation District	69
Del Oro Water Company	30
Lime Saddle Community Service District	6
TOTAL MILES	**680**

Petroleum

Pipelines are the cheapest, safest, and most efficient method of moving large quantities of petroleum products from the refinery to the marketplace. There is a network of petroleum pipelines through northern California. Chico is the northern terminus for the

Northern California Petroleum Product Pipeline, shown in Figure 12-2. An 8" diameter pipeline has a capacity of 35,000 barrels of fuel per hour. The pipeline generally follows the right-of-way of the Union Pacific Railroad tracks from Martinez through the eastern portion of the Sacramento Valley to Chico. The pipeline is generally located underground, except for a few locations where the pipeline crosses creeks and rivers. In Butte County, the only location where the pipeline is exposed to the surface is at Butte Creek just south of Durham.

At the terminus of the pipeline in Chico is a large tank farm used to store the petroleum until it is ready to be transferred to tanker trucks to fuel stations in northern California and southern Oregon. The tank farm has a storage capacity of 500,000 barrels, and 120 to 140 tanker trucks are loaded with petroleum products daily.

Natural Gas

There are numerous natural gas pipelines throughout Butte County which supply the region with this vital energy source. These local natural gas pipelines are classified as transmission or distribution lines. There are currently 109.43 miles of transmission lines and 735.3 miles of distribution lines in Butte County (Figure 12-3). Natural gas pipelines maintained by Pacific Gas & Electric currently serve Oroville, Chico, and Paradise. These local pipelines tie into a statewide natural gas pipeline system.

Goods Movement Assessment

Trucking

Butte County is California's largest metropolitan area not connected to the state's 4 lane continuous highway system. Two-lane rural highways are the venue for most of the goods moved in an out of the region. On these rural highways, trucks share the road with automobiles, farm equipment, school buses, delivery vehicles, etc. The lack of a continuous 4 lane facility results in an increased strain on the system as the population of the county moves toward urban densities. Because the rural roadways must serve a wide spectrum of transportation needs, capacity is reduced, and trucking operations impeded. The lack of a continuous 4 lane facility is an issue for economic development to the region since most goods are transported by truck.

Figure 12-2
Petroleum Pipelines

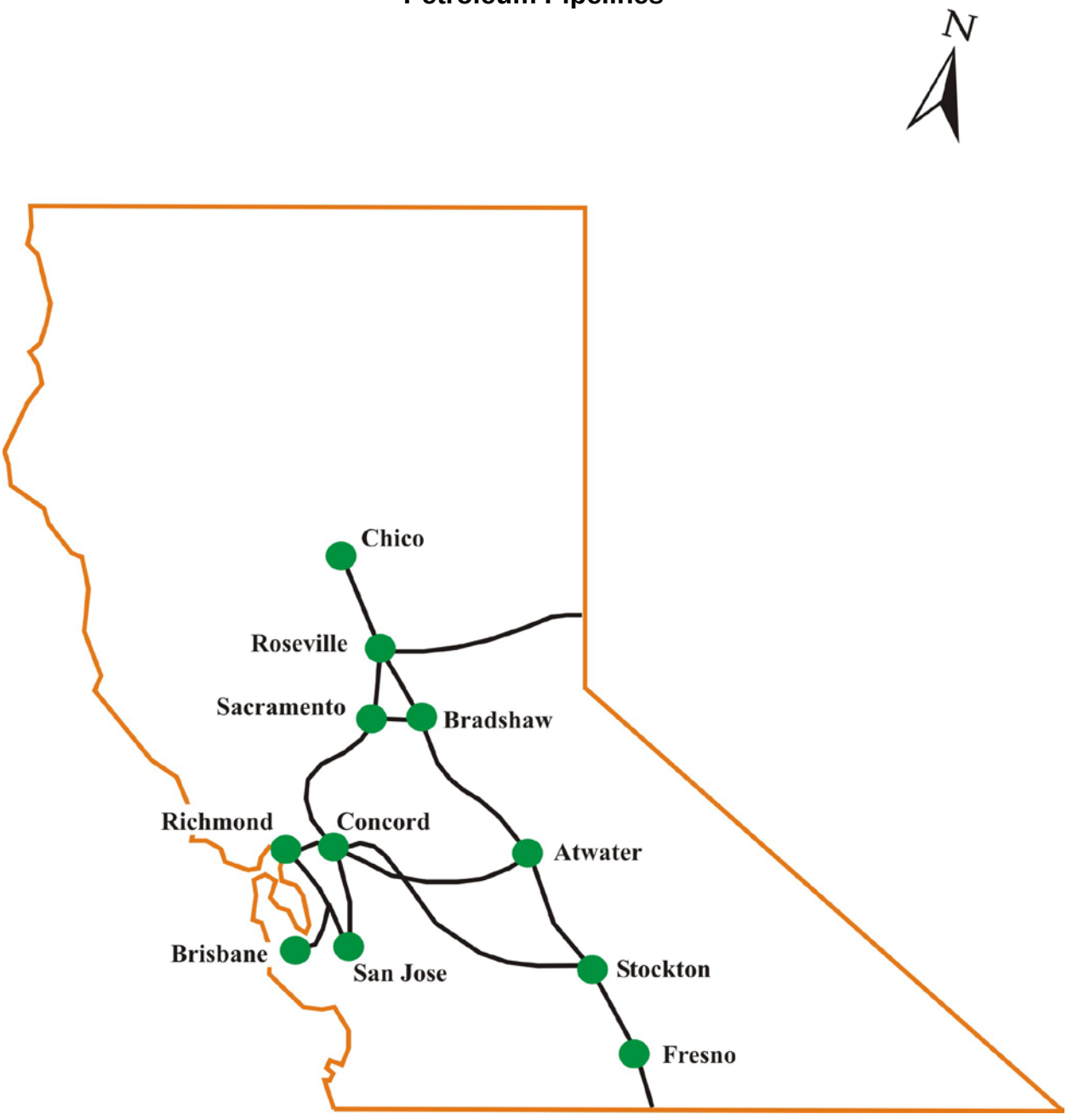
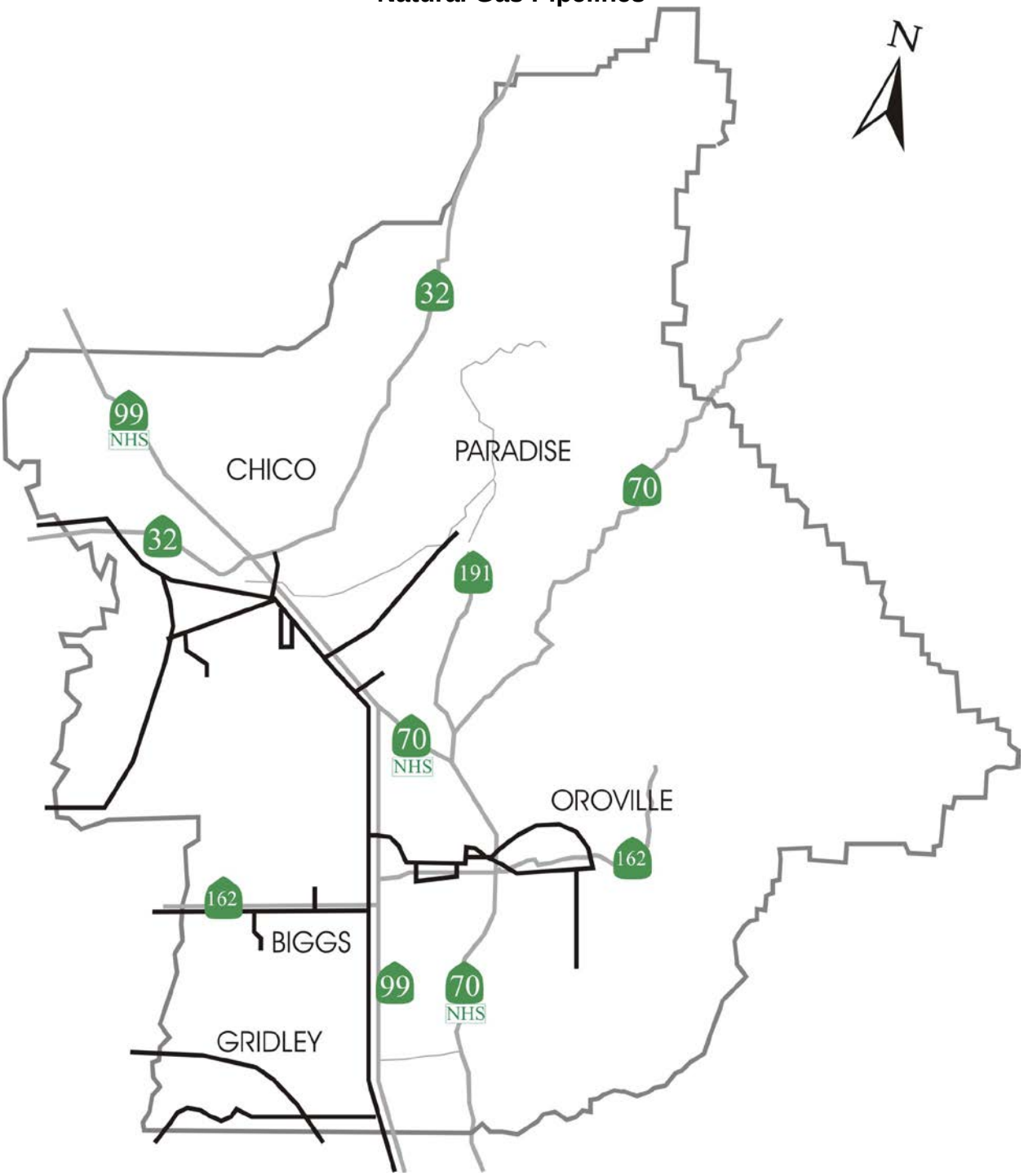


Figure 12-3
Natural Gas Pipelines



Transportation of Hazardous Waste

Butte County Public Works oversees waste management in Butte County. Hazardous waste is reported in the "CalRecycle 303 Household Hazardous Waste Collection Information" Report. The last three reports include:

Fiscal Year	Tons
2017/18	456,575
2018/19	417,878
2019/20	722,764
3 Year Average	532,405

Motor Oil is also compiled and reported. These include:

Fiscal Year	Tons
2017/18	12,123
2018/19	13,301
2019/20	52,038
3 Year Average	25,820

The significant increases in reporting period 2019-2020 were attributed to a large population being required to be off work from COVID-19 and using this time to clean out their barns/shops/garages.

Rail – Motor Vehicle Conflicts

The Union Pacific railroad corridors bisect three urban areas within Butte County. Union Pacific runs through Oroville, while the former Southern Pacific (now Union Pacific) rail tracks run through Gridley and Chico. Railroads and train operations bring with them both advantages and disadvantages to the communities they serve. Each of the three communities is faced with increased conflicts between the train operations and other transportation methods, such as automobiles and pedestrians, due to increased travel demands resulting from urban expansion. The conflict between rail and community uses has become most acute along the railroad tracks adjacent to the California State University, Chico campus due to the large student population and extensive housing developments being located on the opposite side of the tracks from the university campus.

To eliminate train conflicts between the railroad, roadways, and the community, grade separations are normally built. However, the significant expense and environmental impacts of these major construction projects complicate the use of this alternative.

GOODS MOVEMENT ACTION PLAN – Planned Improvements

As part of the Highways and Local Roads Chapter, the specific list of projects on Butte County's State Highways are improvements to the efficient and safe transport of goods. Of significance is the completion of the SR 70 Corridor of projects including SR 70 Passing Lane – Segment 2 and Segment 3 project. This will complete the widening from a rural 2 lane highway to 4 lanes from the Butte/Yuba County line to Palermo Rd. It should be noted that the SR 70 Corridor between Marysville to the Yuba/Butte County line is also fully funded and is under way in some form either environmental, design or construction. Thus, the immediate action for BCAG is to continue to work with Caltrans, Yuba County, the City of Marysville, Sacramento Area Council of Governments, California Transportation Commission and the California State Transportation Agency to ensure no delays are encountered. This section of highway has also experienced the highest fatality rate in California.

Short Range

1. Provide rail-highway crossings and protective devices at various locations to minimize rail-highway conflicts. (*Butte County, Caltrans, FHWA, Rail Industry*)

2. Work towards completing construction of a continuous four-lane expressway/freeway on a new alignment between Chico and Sacramento. *(BCAG, Jurisdictions, Caltrans*)

3. Act as a resource to local jurisdictions for interrelationship of industrial land use and transportation planning. (*BCAG*)

4. Identify obstacles that prevent or impede goods movement. (*BCAG, Jurisdictions, Rail Industry)*

5. Encourage industry to maximize use of rail and air for the transportation of goods. (*BCAG, Jurisdictions*)

6. Study the need for grade separation projects where indicated. (*BCAG, Jurisdictions, Caltrans, Rail Industry)*

7. Support the development of grade separations of railroad tracks where necessary. (*BCAG, Jurisdictions, Caltrans, Rail Industry*)

8. Support the designation of hazardous waste routes by federal and state regulators. (*BCAG, Caltrans, Jurisdictions*)

Long Range

1. Continue to implement the actions outlined in the short-range action plan.

FINANCIAL ELEMENT

Background

The Financial Element identifies the current and anticipated revenue sources and financing techniques available to fund the planned transportation investments described in the Action Element. The intent of the Financial Element is to define realistic transportation financial constraints and opportunities with current available data. Discussion will center on three main topics: current funding revenues, transportation expenditures, and potential funding sources for the future.

The purpose of the Financial Element is to:

- Identify financial forecasts for funding through BCAG
- Estimate the costs and revenues to implement the projects identified in the Action Element
- Identify funding shortfalls
- List the candidate projects if funding becomes available

Financial Assumptions

This section describes anticipated revenues over the next 20 years. The cost estimates for implementing the projects identified in the RTP/SCS reflect "year of expenditure dollars" and consider account inflation rates. Also discussed is the potential for other revenue sources. To determine the level of available funding for each project mode and type, several assumptions were made. Assumptions regarding available funds are moderate and clearly identified. There are three primary funding sources for implementing the projects and programs included. These include federal, state, and local funds.

BCAG used current and past Regional Transportation Improvement Program and the Federal Transportation Improvement Program (documents) funding levels as a reference and to be consistent with the five-year STIP Fund Estimate adopted by the CTC for the 2020 cycle. Thus, it was assumed that state, federal, and local funding programs and levels would remain constant at current funding levels over the 20-year horizon.

All projects identified in the 2020 RTP/SCS are within the financial projections through the horizon of the plan. All projects are consistent with the Goals, Policies and Objectives identified in the Policy Element of the RTP/SCS.

Current Funding Sources and Projected Revenues and Expenditures

FEDERAL

Federal funds are used for all modes, including highways and transit projects. These funds normally require a non-federal match of between 11.47 – 20% for road projects, and up to 50% match for transit projects. However, in certain instances such as safety projects, they may not require a dollar match to fulfill its match obligation. In these cases,

the federal Toll Road Credit Program may be used to fulfill the local match requirement. BCAG utilizes this program to alleviate the local match burden to the local agencies. The federal HBP, CMAQ or earmark programs typically utilize toll credits to fulfill the match requirements.

Fixing America's Surface Transportation Act (FAST Act), or Public Law (P.L.) 114-94. The FAST Act was signed into law on December 4, 2015 and will expire on September 30, 2020 is the most recent federal transportation legislation. The FAST Act was the first federal law in over ten previous years to provide long-term funding certainty for surface transportation, after multiple extensions of the Moving Ahead for Progress in the 21st Century Act (MAP-21) which began on October 1, 2012 and originally was set to expire on September 31, 2014. The FAST Act built on the initiatives established in MAP-21, the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), the Transportation Equity Act for the 21st Century (TEA-21), and the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA). As of October 2020, reauthorization has not been approved by Congress. Continuing resolutions will likely remain in place until after the Presidential elections.

Table 13-1
Federal Funding Sources

Fund Source	Abbreviation	Primary Mode
Regional Surface Transportation Program	RSTP	Streets (Local)
Congestion Mitigation/Air Quality	CMAQ	Air Quality
Active Transportation Program	ATP	Bicycle & Pedestrian
Federal Transit Administration Section 5307	FTA 5307	Urban transit
Federal Transit Administration Section 5311	FTA 5311	Rural transit
Federal Transit Administration Section 5309	FTA 5309	Discretionary transit
Federal Transit Administration Section 5310	FTA 5310	Discretionary transit
Highway Bridge Program	HBP	Bridges (Local)
Highway Safety Improvement Program	HSIP	Streets (Local)
Federal Airport Aviation Administration	FAA	Aviation

Surface Transportation Program (STP): This funding pot guarantees counties 110% of their allocation under the old Federal Aid Urban/Federal Aid Secondary (FAU/FAS) program. These funds may be spent on streets and roads projects; however, jurisdictions may also use the funds for bikeway, pedestrian, transit, safety, ridesharing, traffic management, parking, environmental enhancements, and transportation control measure projects.

Counties with urbanized areas less than 200,000 are considered "rural" counties (such as Butte). As such, BCAG is eligible to exchange these federal dollars for state dollars to Caltrans. This process is known as "Regional STP Exchange". The advantage to this fund exchange is that federal monies have more stringent requirements, including a 20% local match, while state monies do not require any local match. In total, Butte County can expect to receive approximately $65 million in RSTP Exchange funds during the 24-year period of the Plan.

RSTP funds are apportioned back to each of the cities, town and county, generally for road maintenance. All RSTP funds exchanged for state only funds will be spent on any eligible use as allowed under Article XIX of the State Constitution.

Assuming constant-funding levels over the horizon of this plan, total-funding revenues expected through STP exchange amounts to roughly $2.7 million per year. This money is expected to be allocated mainly to local streets and roads projects primarily for road rehabilitation needs.

Congestion Mitigation and Air Quality Program (CMAQ): The purpose of the CMAQ program is to fund transportation related projects to help improve the region's air quality. The BCAG Board of Directors programs projects by approving or amending the Federal Transportation Improvement Program (FTIP). Projects are subject to "Timely Use of Funds" provisions identified in Assembly Bill 1012, Chaptered in 1999. CMAQ funds are made available for programming at the discretion of the BCAG Board of Directors based on programming capacity availability. Based on current estimates provided by Caltrans as part of the development of the 2021 FTIP, BCAG may expect to receive approximately $1.9 million per year or roughly $40 million through 2040.

All CMAQ funds received will be programmed throughout the nonattainment areas in Butte County. All projects must demonstrate a reduction in emissions for the respective non-attainment pollutant. Caltrans maintains a CMAQ website at: http://www.dot.ca.gov/hq/transprog/federal/cmaq/Official_CMAQ_Web_Page.htm.

Highway Bridge Program (HBP): This funding provides for construction and maintenance of bridges. Depending on the size and scope of the project, the range of HBP funds is typically between $500,000 and $1,000,000, but may be more depending on the project. Based on feedback from the public works directors on which bridge projects are planned, Butte County can expect to receive approximately $60 million over the horizon of the RTP/SCS. These funds are not apportioned. Local cities and county

are required to prepare grant application packages to Caltrans for funding consideration. The County is the typical applicant with a very successful track record. The bridge program does not project out funding or projects beyond 10 years.

A list of specific HBP candidate projects has been included in the Action element of the RTP/SCS. Caltrans and FHWA ultimately decide whether or not a project is approved for HBP funding. Caltrans typically amends the HBP statewide list twice a year.

Highway Safety Improvement Program (HSIP): This program provides funds to correct safety problems on roadways in the Federal-aid system, as well as rural minor collectors and local roads. Projects are nominated for funding by local jurisdictions and selected by Caltrans. These funds are spent on local streets and roads. These are competitive grants in which a target of funds cannot be determined. However, the region has a received an HSIP grant every couple of years. Currently within the timeframe of the FTIP, BCAG will be receiving $9.6 million.

Federal Transit Administration

The federal government provides financial assistance to transit operators throughout the country through the Federal Transit Act. There are various sections of the law under which funding is allocated based on purpose, type of transit service, and size of the community. There are three specific programs which Butte County typically receives grants from, they include:

Section 5307: Under this section, funds are provided on a formula basis for capital and operating expenses for small urban transit systems. BCAG currently receives funding from this program to support the urban area of Chico transit service on Butte Regional Transit, also known as B-Line. In fiscal year 2019/20, BCAG will be receiving approximately $2.4 million to fund transit capital and operations. BCAG can expect to receive approximately $52 million over the period of the RTP/SCS. Funding in the early years have received an increase due to the federal CARES Act which augmented 5307 apportionments. This is not expected to be an ongoing revenue source.

Section 5311: Under this section, funds are provided to non-urbanized transit systems. Funds are provided on a formula basis for capital and operating expenses. BCAG is the designated recipient of these funds as the operator of B-Line serving the non-urbanized areas of Butte County. During the horizon of the RTP/SCS, it is anticipated that Butte County can expect to receive approximately $15 million for operating and capital expenses. Within the 5311 program, BCAG is now participating in the 5311(f) subset program for intercity transit subsidies. Because this program is grant driven and not by apportionment, the regional estimate for the timeframe of the RTP/SCS is $6 million.

Section 5310: This program provides discretionary grants to private, non-profit organizations for capital expenses in transporting the elderly and disabled. Social service transportation providers in Butte County, such as the Work Training Center, regularly

apply for and receive Section 5310 grants to purchase accessible vehicles. BCAG will also be applying for these funds for paratransit vehicles. While Caltrans administers the program, the approval is made by the California Transportation Commission. Projects for 5310 funds are required to be included in a Coordinated Human Services Transportation Plan. The estimate for the 20-year horizon of the plan is approximately $6 million.

Federal Aviation Administration

The Airport Improvement Program (AIP), administered by the Federal Aviation Administration (FAA), provides grants to public agencies and in some cases, to private owners and entities for the planning and development of public-use airports that are included in the National Plan of Integrated Airport Systems (NPIAS). The NPIAS identifies nearly 3,400 existing and proposed airports nationwide that are significant to national air transportation and thus eligible to receive federal grants. An AIP grant constitutes 90 percent of a project cost. The FAA requires that the local sponsor receiving the grant provide a 10 percent match. Depending on sponsor eligibility (including participation in the CIP) and available funds, the State may contribute up to 5 percent of the federal grant amount to the local sponsor to assist in meeting their 10 percent requirement.

Chico and Oroville Municipal Airport are the primary public use airports in Butte County. Between these airports, Caltrans's CIP has identified $60.5 million in aviation projects within the timeframe of the RTP/SCS. Specific projects can be found in the Aviation Chapter of the RTP/SCS.

STATE

State funds are generated by license fees, truck fees, sales and fuel taxes, and other state apportioned funds.

Table 13-2
State Funding Sources

Fund Source	Abbreviation	Primary Mode
Interregional Improvement Program/STIP	IIP	State Highways – SR 70 Corridor
Regional Improvement Program/STIP	RIP	State Highways - Regional
State Highways Operations and Protection Program	SHOPP	State Highways – Safety/Rehab
TDA: Local Transportation Fund	LTF	Transit first, streets, bike and ped projects (Local)
TDA: State Transit Assistance Fund	STA	Transit (100%)
State Fuel Tax	Fuel Tax	Streets (Local)
State Fuel Tax RMRA (SB 1)	RMRA	Streets (Local)

State Transportation Improvement Program (STIP)

The STIP identifies all major transportation improvements for state highways and other programs by county. SB 45 consolidated several transportation funding programs into essentially two programs that make the STIP, a local discretionary pot (Regional Improvement Program-RIP) and the state discretionary pot (Interregional Improvement Program-IIP). The 2020 RTP/SCS is consistent with the STIP, ITIP & RTIP.

Regional Improvement Program (RIP): The regional improvement program funds are made available to the regional transportation planning agencies (BCAG), and make up 75% of the STIP. Regions have the discretion to select and program transportation improvement projects on state highways, local roads, and for transit, bike lanes, etc. within the region. Projects for RIP funding are identified in the Regional Transportation Improvement Program (RTIP document). The California Transportation Commission is required to adopt the entire regional program or reject it in its entirety.

The STIP projections prepared are based on the 2020 STIP Fund Estimate. BCAG has taken a conservative approach to identify what is realistic for the region. Over the next 20 years, Butte County can expect to have a programming capacity of approximately $24 million. This is a stark contrast to the 2016 RTP which estimated revenues for the region closer to $81 million. The funds for the RIP program have been declining and may continue to decline as California's priorities now work towards meeting Governor Newsom's Executive Order N-19-19 and California's Investment Strategies to address climate change. The emphasis moving forward is alternative transportation, high speed rail, clean vehicles and air quality. While the priorities are well intended and needed, the reality is gas tax revenues will continue to decline. Fortunately, the SR 70 Corridor of projects in which the STIP and the SHOPP are the primary fund sources is fully programmed and for the most part, under way in the project delivery process.

The specific list of financially constrained projects for RIP funds include the SR 70 Passing Lane Project Segment 1, 2 and 3. No other projects are identified at this time due to the magnitude of cost for the project and the limited RIP funds available. Should a cost increase be necessary for unforeseen circumstances, BCAG may be required to utilize unprogrammed RIP programming capacity. It is anticipated that by the time of preparation of the 2024 RTP/SCS, it will be known if existing revenues programmed are sufficient at which point a confident decision can be made by the BCAG Board to identify a new RIP/STIP project for the region.

Interregional Improvement Program (IIP): Caltrans has the discretion for programming "interregional" funds which constitute 25% of the STIP. Projects will focus on SR 70 Corridor in Butte County. These projects will primarily address safety as well as people and goods movement from region to region.

The specific list of projects are the same SR 70 projects discussed above. Caltrans has programmed $13.2 million for the completion of these projects. The combination of RIP and IIP funds represent approximately 30 percent of the total cost of the projects. The remaining costs are being funded by the SHOPP Program due to fatalities along the corridor and the severity of safety concerns.

State Highway Operations and Protection Program (SHOPP)

Biennially, Caltrans is required to prepare a State Highway Operations and Protection Program for expenditure of transportation funds for major capital improvements that are necessary to preserve and protect the state highway system. Projects included in the program are limited to capital improvements relative to maintenance, safety, and rehabilitation of state highways and bridges that do not add new traffic lanes to the system. Caltrans is required to review a draft of the proposed SHOPP program with the RTPAs prior to submitting the SHOPP to the California Transportation Commission for adoption. Projects can also include bridge replacement and seismic retrofitting. The current estimate for the SHOPP over the 20-year period is $189 million.

BCAG used the current adopted SHOPP and Caltrans' 2010 year SHOPP plan to forecast what Butte County can expect to receive over the next 20 years. Beyond the 10-Year SHOPP, BCAG has developed a "lump sum" category. The adopted SHOPP can be found at:
http://www.dot.ca.gov/hq/transprog/shopp.htm.

Transportation Development Act (TDA)

Passed in 1971, this legislation provides a regular, guaranteed source of funds for local transit. These funds are administered by the Regional Transportation Planning Agency (RTPA) and apportioned to jurisdictions on a per-capita basis. There are two funding programs provided under TDA:

Local Transportation Fund (LTF): ¼% of the sales tax is returned to the county in which it was generated for use in local transit. Under strict provisions of how the funds may be allocated and spent, the RTPA annually allocates these funds to jurisdictions for transit. The law also permits local agencies to use LTF on local streets and roads, provided that all unmet transit needs that are found reasonable to meet are funded. Each year, BCAG performs the annual unmet transit needs process with extensive public outreach. The ¼% share split to returned to the originating county has not ever been changed nor updated since its inception in 1971.

For fiscal year 19/20, Butte County's apportion is expect ed to received $9.1 million in LTF funds. Projecting over the 20 year period, the total funding estimated to be available for LTF is $183 million. Transit is now funded off the top and apportioned back to the cities and count.

LTF funds are apportioned back to the cities and county to fulfill their transit obligations. In some cases, local street and road improvements such as road maintenance or bike projects are also funded with LTF as allowed by TDA Statute once transit obligations have been fulfilled.

State Transit Assistance (STA): In the annual state budget process, additional transit funding may be made available. Under Section 99313, funding is apportioned to jurisdictions on a per capita basis, while Section 99314 funding is apportioned to transit operators based on farebox revenues.

Senate Bill 1 infused funding dedicated to transit utilizing the STA apportionment process to transit agencies. The for the Butte Region, STA apportionments doubled to approximately $2 million per year. Pre-SB 1, apportionments were closer to $1 million per year. The 2020 RTP/SCS is projecting out $2 million per year for a total of $40 million. While funds have decreased in 2020 as a result of COVID-19, this anomaly is not expected to remain constant as California returns to normal life. The annual apportionments are assumed to remain constant with no significant increases. STA funding is specifically for transit purposes.

B-Line Fare Revenues: Current B-Line farebox revenues estimates for the 19/20 fiscal year are $1.3 million. Over the next 20 years the total estimate is $26 million. These revenues are lower than the 2016 RTP/SCS. As the economy improves and gas prices remain relatively low, transit ridership usually takes a dip. BCAG however is working to improve the transit experience utilizing various methods to attract new ridership.

LOCAL

Traffic Mitigation/Impact Fees

This category includes the various types of local assessments on new development projects which, as a result of their construction, are expected to generate additional traffic. Criteria and location of impact areas are set by the local jurisdictions. Most jurisdictions employ some type of traffic or transportation impact fee. Fees may be assessed area-wide, only in target sections of the jurisdiction, on a project-by-project basis as dictated by project impacts, or a combination of these. Several impact fee programs are currently in effect in Butte County, including those covering the Chico Urban Area, the Thermalito area, and the West side of Paradise.

General Funds

Local jurisdictions may choose to use general fund moneys to help finance transportation projects or services, including airport operations, or as local matching funds for transportation grants. Because of the impacts of the recession and Proposition 13 on local government general fund budgets, this is neither a popular nor commonly used option.

State Fuel Tax & SB 1

The state fuel tax to local cities and county is derived from the State Controllers Report for Local Streets and Roads. The annual apportionment figure was projected out to the year 2035. These funds are typically used for road maintenance. The specific fund source sections include 2105, 2106, 2107 and 2107.5. The respective figures are included in the following Summary of Revenues by Agency tables. As a total, the local agencies are projected to receive $250 million over the period of the Plan.

Senate Bill (SB) 1, Chapter 5, Statutes of 2017, created the Road Maintenance and Rehabilitation Program (RMRP) to address deferred maintenance on the State Highway System and the local street and road system, and the Road Maintenance and Rehabilitation Account (RMRA) for the deposit of various funds for the program. A percentage of this new RMRA funding is apportioned by formula to eligible cities and counties pursuant to Streets and Highways Code section 2032(h) for basic road maintenance, rehabilitation, and critical safety projects on the local streets and roads system.

Cities and counties receiving RMRA funds must comply with all relevant federal and state laws, regulations, policies, and procedures. Expenditure authority for RMRA funding is governed by Article XIX of the California Constitution; Revenue and Taxation Code, Division 2, Part 5, Chapter 6, section 11051; and Streets and Highways Code, Chapter 2, Division 3, section 2030 (b). Program requirements include Streets and Highways Code sections 2034, 2036, 2037, and 2038. Local agencies are projected to receive approximately $175 million over the next 20 years.

Maintaining the Transportation System in Butte County

The following table identifies the functional classification of the federal aid system in Butte County by total miles. Typically, gas tax revenue is used to operate and maintain the system. The following financial tables are revenues for which the local agency can use to operate and maintain the freeways, highway and transit system within the region. BCAG will refine its GIS system over the next couple of years to better capture the federal aid system and transportation investments made on it.

Based on the following table, the average cost to maintain a road off the state highway system is $1.1 million. Butte County has 182.32 of state highways miles to maintain according to the 2006 California Public Road Data reported for the Highway Performance Monitoring System. Therefore, the cost to maintain the system could be as high as $200 million. At the local level, BCAG surveyed the local Cities and County to develop an average cost per mile of $200,000. The total cost to maintain the rest of the system is estimated at $395 million for a total of $595 million. The funding for the transit element identified in Chapter 7 as FTA fund are restricted to be used for operations and capital. Transit would be supported by FTA and the TDA funds identified.

Table 13-3
Functional Classification for Federal Aid System

Rural Functional Classification	Miles		Urban Functional Classification	Miles	Total ALL
Interstate	0.00		Interstate	0	
Other Principal Arterial	55.03		Other Fwys & Expressways	12.04	
Minor Arterial	84.00		Other Principal Arterial	53.94	
Major Collector	166.64		Minor Arterial	85.88	
Minor Collector	125.70		Collector	155.04	
Local	961.43		Local	456.04	
Total Rural Miles	1392.80		Total Urban	762.94	2155.74

Table 13-4
Highway Performance Monitoring System
Butte County Maintained Miles

Agency	Rural	Urban	Total	Estimated Cost to Maintain (thousands)
Biggs	10.9	0	10.9	$1,817
Chico	4.53	194.68	199.21	$33,202
Gridley	8.98	17.47	26.45	$4,408
Oroville	2.28	72.92	75.2	$12,533
Paradise	2.59	95.73	98.32	$16,387
Bureau of Indian Affairs	8	0	8	$1,333
County Unincorporated	1,023.66	329.67	1353.33	$225,555
State Highway	129.84	52.48	182.32	$167,127
State Park Service	53.78	0	53.78	$8,963
US Forest Service	148.24	0	148.24	$24,707
Totals	1392.79	762.95	2,155.74	$496,032

Table 13-5
Revenues by Agency Summary

SOURCE	BCAG		
	Group 1	Group 2	TOTALS
	10	10	
	2020 - 2030	2030-2040	
STIP - Regional Improvement Program (RIP)	13,770	10,000	23,770
Caltrans IIP	13,220	0	13,220
Caltrans SHOPP	189,793	0	189,793
CMAQ - Streets & Roads	9,698	9,698	19,395
CMAQ - Non Motorized	9,698	9,698	19,395
ATP		39,270	39,270
TDA - LTF	5,500	5,500	11,000
Totals	**241,678**	**74,165**	**315,843**

SOURCE	BUTTE REGIONAL TRANSIT		
	Group 1	Group 2	TOTALS
	10	10	
	2020 - 2030	2030-2040	
TDA - LTF	$40,000	40,000	$80,000
TDA - STA	$20,000	20,000	$40,000
Transit Fare Revenue (B-Line only)	13,000	13,000	$26,000
FTA Sec. 5307 - BCAG/B-Line	27,555	24,555	$52,109
FTA Sec. 5311 BCAG/B-Line	7,375	7,375	$14,750
FTA Sec. 5310 Various Non Profit Agencies	3,000	3,000	$6,000
FTA 5311(f)	3,000	3,000	$6,000
Totals	**$113,930**	**$110,930**	**$224,859**

Table 13-5 - Continued

SOURCE	BIGGS		
	Group 1	Group 2	TOTALS
	10	10	
	2020 - 2030	2030-2040	
State Fuel Tax	585	585	1,169
SB 1 RMRA	348	348	696
TDA - LTF	456	456	912
RSTP "State Exchange	187	187	374
CMAQ	160		160
HBP - Highway Bridge Program			0
HSIP - Highway Safety Improvement Program			0
Active Transportation Program (ATP)	809	0	809
TOTALS	**2,545**	**1,576**	**4,121**

SOURCE	CHICO		
	Group 1	Group 2	TOTALS
	10	10	
	2020 - 2030	2030-2040	
State Fuel Tax	25,442	25,442	50,884
SB 1 RMRA	18,775	18,775	37,550
TDA - LTF	27,179	27,179	54,358
State Aeronautics Program			-
Local Funds	6,385	14,552	20,937
RSTP "State Exchange	12,788	12,788	25,576
CMAQ			-
HBP - Highway Bridge Program	12,545		12,545
HSIP - Highway Safety Improvement Program*	7,400		7,400
Active Transportation Program (ATP)	21,894		21,894
FAA	50,337		50,337
TOTALS	**182,745**	**98,736**	**281,481**

Table 13-5 - Continued

SOURCE	GRIDLEY		
	Group 1	Group 2	TOTALS
	10	10	
	2020 - 2030	2030-2040	
State Fuel Tax	2,013	2,013	4,025
SB 1 RMRA	1,238	1,238	2,477
TDA - LTF	1,577	1,577	3,154
Local Funds			0
RSTP "State Exchange	837	837	1,674
CMAQ			0
Active Transportation Program (ATP)			0
TOTALS	**5,665**	**5,665**	**11,330**

SOURCE	OROVILLE		
	Group 1	Group 2	TOTALS
	10	10	
	2020 - 2030	2030-2040	
State Fuel Tax	4,692	4,692	9,384
SB 1 RMRA	3,539	3,539	7,078
TDA - LTF	4,789	4,789	9,578
State Aeronautics Program	154		154
Local Funds	434	504	938
RSTP "State Exchange	2,455	2,455	4,909
CMAQ	540		540
Active Transportation Program (ATP)	3,451	0	3,451
FAA	10,248		10,248
TOTALS	30,302	15,979	46,281

Table 13-5 – Continued

SOURCE	PARADISE		
	Group 1	Group 2	TOTALS
	10	10	
	2020 - 2030	2030-2040	
State Fuel Tax	7,930	7,930	15,860
SB 1 RMRA	4,720	4,720	9,440
TDA - LTF	1,141	1,141	2,282
Local Funds			0
RSTP "State Exchange	1,512	1,512	3,023
CMAQ	350		350
HSIP - Highway Safety Improvement Program*	1,232		1,232
Active Transportation Program (ATP)	10,615		10,615
TOTALS	27,500	15,303	42,802

SOURCE	BUTTE COUNTY		
	Group 1	Group 2	TOTALS
	10	10	
	2020 - 2030	2030-2040	
State Fuel Tax	84,572	84,572	169,143
SB 1 RMRA	58,881	58,881	117,762
TDA - LTF	16,663	16,663	33,326
Local Funds	8,100		8,100
RSTP "State Exchange	9,611	9,611	19,222
CMAQ	350		350
HBP - Highway Bridge Program *	48,006		48,006
HSIP - Highway Safety Improvement Program*	1,000		1,000
Active Transportation Program (ATP)	2,501		2,501
TOTALS	**229,684**	**169,727**	**399,411**

Table 13-5 – Continued

2020 RTP/SCS FUNDING SOURCES	TOTALS		
	Group 1	Group 2	TOTALS
	10	10	
	2020 - 2030	2030-2040	
STIP - Regional Improvement Program (RIP)	13,770	10,000	23,770
Caltrans IIP	13,220	0	13,220
Caltrans SHOPP	189,793	0	189,793
Active Transportation Program (ATP)		39,270	39,270
State Fuel Tax	125,233	125,233	250,467
SB 1 RMRA	87,502	87,502	175,004
TDA - LTF	97,305	97,305	194,610
TDA - STA	20,000	20,000	40,000
Transit Fare Revenue (B-Line only)	13,000	13,000	26,000
State Aeronautics Program	60,585	0	60,585
Local Funds	14,919	15,056	29,975
RSTP "State Exchange	27,389	27,389	54,778
CMAQ	20,795	19,395	40,190
FTA Sec. 5307 - BCAG/B-Line	27,555	24,555	52,109
FTA Sec. 5311 BCAG/B-Line	7,375	7,375	14,750
FTA Sec. 5310 Various Non Profit Agencies	3,000	3,000	6,000
FTA 5311(f)	3,000	3,000	6,000
HBP - Highway Bridge Program	60,551	0	60,551
HSIP - Highway Safety Improvement Program	9,632	0	9,632
Active Transportation Program (ATP)	39,270	0	39,270
FAA	60,585	0	60,585
TOTALS	**894,479**	**492,081**	**1,386,560**

Fiscal Constraint

The funding identified demonstrate and reflect the RTP/SCS is a fiscally constrained plan with reasonably anticipated revenues to fund the costs identified for the specific projects identified.

Table 13-6
Unfunded Regional Projects Summary

#	Implementing Agency	Project Type	Title	Project Descriptioin	Project ID	Fund Total Estimate (1,000s)	STATUS Programmed Planned Project Development Unconstrained	Cost Estimate - All components (1,000s)
106	Chico	Bicycle & Pedestrian	Chico - Paradise Bikeway Project	Construct new combination Class 1 & 2 as appropriate from existing Class 1 bike path at the intersection of Honey Run and the Skyway to Paradise Memorial Path at the intersection of Skyway and Neal Rd in the Town of Paradise.	CH-BIKE-LOCAL-2020-9	$20 million	Unconstrained	20,000
139	Chico	Capacity Increasing	W Eaton Rd	From SR 32 to Catherin Ct. Construct new alignment. 2 lane expressway and brdige - RR crossing	Nexus 604	$53.7 million	Unconstrained	53,700
140	Chico	Capacity Increasing	W Eaton Rd	Catherine Ct to Esplanade. New road connection	Nexus 605	$6.2 million	Unconstrained	6,200
145	Chico	Capacity Increasing	Fair Street / Park Avenue Connection	From Fair St to Park Ave. Extend E. 23rd St. /Silver Dollar Pkwy thru "wedge" to connect to Commerce Ct. Connection	Nexus 611	$.970 million	Unconstrained	970
146	Chico	Capacity Increasing	Holly Avenue / Warner Avenue Connection	From Capshaw Ct. to Fuchsia Way. Construct new 2 lane connector	Nexus 612	$ 2.580 million	Unconstrained	2,580
147	Chico	Capacity Increasing	Ivy Street	From Hazel St to Meyers St. Construct new 2 lane connector	Nexus 613	$7.13 million	Unconstrained	71,300
148	Chico	Capacity Increasing	Yosemite Drive	From SR 32 to Humboldt Rd. Construct new 2 lane connection	Nexus 614	$5.820 million	Unconstrained	5,820

Table 13-6
Unfunded Regional Projects Summary - Continued

#	Implementing Agency	Project Type	Title	Project Descriptioin	Project ID	Fund Total Estimate (1,000s)	STATUS Programmed Planned Project Development Unconstrained	Cost Estimate - All components (1,000s)
150	Chico	Capacity Increasing	Silver Dollar Way Extension	From MLK Parkway to Fair St. Connect exist road stubs	Nexus 616	$2.76 million	Unconstrained	2,760
163	Chico	Maintenance, Operations, and Safety	Manzanita/ Madrone	Roundabout (within existing ROW)	Nexus 630	$.404 million	Unconstrained	404
168	Chico	Capacity Increasing	West Park Extension	Extension from Midway to Otterson Dr (Bridge at creek)	Nexus 635	$9.39 million	Unconstrained	9,390
170	Chico	Maintenance, Operations, and Safety	Eaton Rd/ Ceanothus Ave	1-Lane Roundabout	Nexus 637	$1.16 million	Unconstrained	1,160
171	Chico	Maintenance, Operations, and Safety	Cohasset Rd Widening	Widen Roadway to include left turn lanes and flatten curves between and including Airpark Blvd, and Two Oaks Drive	Nexus 638	$3.7 million	Unconstrained	3,700
176	Chico	Capacity Increasing	SR 99 Auxiliary Lanes	E. 1st to Cohasset Rd. Construct auxiliary lanes to the outside	Nexus 703	$40 million	Unconstrained	40,000
245	Paradise	Capacity Increasing	Upper Clark Widening	Widen Clark Rd from Wagstaff Rd to Skyway to facilitate emergency evacuation	PAR-CAPACITY-LOCAL-2020-5	Unfunded	Unconstrained	15,000

Table 13-6
Unfunded Regional Projects Summary - Continued

#	Implementing Agency	Project Type	Title	Project Descriptioin	Project ID	Fund Total Estimate (1,000s)	STATUS Programmed Planned Project Development Unconstrained	Cost Estimate - All components (1,000s)
179	Chico	Bicycle & Pedestrian	SR 32 (Nord Avenue) Improvements	From W. Lindo Ave to W. 1st Street. Corridor Improvements (traffic flow improvements, bike lanes, ped crossings) per specific plan	Nexus 708	$15 million	Unconstrained	15,000
180	Chico	Maintenance, Operations, and Safety	SR 32 (W. 8th St) at UPRR	Overpass, highway over railroad with reinforced earth retaining walls.	Nexus 709	$25 million	Unconstrained	25,000
183	Chico	Maintenance, Operations, and Safety	SR 99 / 20th Street Interchange and 20th Street Corridor	From West of MLK to East of Forest Ave. Reconfigure / reconstruct ramps to increase capacity. Includes roadway improvements / roundabouts on East 20th Street from west of MLK to east of Forest.	Nexus 713	$19 million	Unconstrained	19,000
184	Chico	Maintenance, Operations, and Safety	SR 99 at Garner, Esplanade and Hicks complex	Intersection improvements and/or I/Cs, connector road from Hicks to SR 99, improvements on SR 99, Esplanade, Hicks, and Garner	Nexus 716	$2 million	Unconstrained	2,000

186	Chico	Capacity Increasing	SR 99 at Southgate Complex (Interchange and connector roads)	I/C and connector roads (Player, Fair Street, Midway Connection, Notre Dame, Speedway, West Southgate, East Southgate, Midway. Unfunded estimate for construction.	Nexus 717-1	$40 million	Unconstrained	40,000

Table 13-6
Unfunded Regional Projects Summary - Continued

#	Implementing Agency	Project Type	Title	Project Descriptioin	Project ID	Fund Total Estimate (1,000s)	STATUS Programmed Planned Project Development Unconstrained	Cost Estimate - All components (1,000s)
223	Paradise	Bicycle & Pedestrian	Pentz Road Trailway Phase II Project	Pentz Road between Pearson Rd and Bille Road (1.63 miles), Pentz Road between Wagstaff Road and Skyway (1.56 miles). Scope of the project is to construct a grade separated, Class I, bike-ped facility along the west side of Pentz Road within the project limits. This project will tie into funded improvements between Bille Road and Wagstaff Road, scheduled for completion summer 2019. (PE Programmed in FTIP)	202000 00219	$ 9.97 million	Unconstrained	9,970
240	Paradise	Capacity Increasing	Neal Road Widening - Emergency Evacuation Route	Widen Neal Road to facilitate emergency evacuation. Provides a critical alternative to SR 191 and Skyway	PAR-CAPACITY-LOCAL-2020-1	Unfunded	Unconstrained	20,000
241	Paradise	Capacity Increasing	Upper Skyway Widening	Widen Skyway to facilitate emergency evacuation	PAR-CAPACITY-LOCAL-2020-2	Unfunded	Unconstrained	30,000
243	Paradise	Capacity Increasing	Roe Road Extension to SR 191	Extend Roe Road to SR 191 to facilitate emergency evacuations	PAR-CAPACITY-LOCAL-2020-3	Unfunded	Unconstrained	5,000
244	Paradise	Capacity Increasing	Pentz Road Widening	Widen Pentz from Town limits to Town limits to facilitate emergency evacuation	PAR-CAPACITY-LOCAL-2020-	Unfunded	Unconstrained	25,000

					4			
						TOTAL UNFUNDED		423,954

In sum, nearly $424 million has been identified as needed improvement without a dedicated fund source. These projects are included for information only.

OTHER FUNDING SOURCES

The following are examples of some methods of enhancing the revenues available for transportation.

Resource and Farmland Transportation Incentive Fund

Senate Bill 375 sites language (SCG) in Section 658080(b)(4)(C) indicating that "*The metropolitan planning organization or county transportation agency, whichever entity is appropriate, shall consider financial incentives for cities and counties that have resource areas or farmland, as defined in Section 65080.01, for the purposes of, for example, transportation investments for the preservation and safety of the city street or county road system and farm to market and interconnectivity transportation needs.*

The metropolitan planning organization or county transportation agency, whichever entity is appropriate, shall also consider financial assistance for counties to address countywide service responsibilities in counties that contribute towards the greenhouse gas emission reduction targets by implementing policies for growth to occur within their cities."

While the above language indicates the MPO shall consider financial incentives, SB 375 does not identify a new source of funding to establish a financial incentive for those agencies that have policies in place to direct growth specifically to cities. Should a new source of funding occur and should local agencies have specific policies to direct growth in the cities, thus protecting resource areas or farmlands, the MTP should be amended to identify the criteria and mechanism for the incentive.

Regional Impact Fee

Growth and development pressures continue in Butte County. Planning an efficient and affordable transportation system to alleviate existing traffic congestion and support future development within the region will need a new revenue source. Leveraging regional funds for other state and federal funds such as the STIP has increasingly become more important.

Could regional development impact fees be used to finance regional facilities? Such a system could integrate infrastructure provision and tax policy to create equity both across jurisdictions and between the different levels of government.

There are examples of regional impact fees in California and Nevada. The cities of the Coachella Valley (Palm Springs, Cathedral City, Rancho Mirage, Palm Desert, Indian Wells, La Quinta, Indio and Coachella) and Riverside County have collected impact fees on new development since 1986 to protect endangered wildlife. The fee is $600 per acre. The Coachella Valley has also collected regional impact fees for transportation since 1988. This Transportation Uniform Mitigation Fee is tied to a ½ cent sales tax approved by voters. That proposition included a "return to source" concept, where the TUMF fees are to be split between the cities (35%), the region (40%), and regional transit (25%). Funding is revoked for cities in the region that do not require regional impact fees.

In Placer, Solano, Stanislaus, San Joaquin, and Yuba Counties, the county and some or all of the cities have instituted joint county facilities fees. The cities collect the fees and pass them on to the county, where they are used for new construction and expansion of regional facilities, including regional transportation, habitat preserves, and county facilities such as jails. The Regional Transportation Commission of Washoe County (Reno, Nevada) has the authority for regional transportation impact fees. Regional impact fees outside of Reno are about 15% higher than those inside the city. Inside Reno, regional transportation impact fees range from $500/1,000 square feet for manufacturing, to $3,700/1,000 square feet for large box retail.

Sales Tax Increase

The State legislature has given local jurisdictions the ability to increase the retail transaction use tax, or sales tax, up to 1 percent, which can be earmarked for specific purposes. A majority vote is required on such an increase. A number of California counties, including Sacramento, San Francisco, Contra Costa, Santa Clara, Santa Cruz, Mendocino, and Lake Counties have voted to increase the sales tax by ½ percent to finance specific transportation improvements. In Sacramento County, this ½ percent sales tax is expected to raise $920 million over 20 years. In 2007, 19 counties in California have special transportation taxes. These counties are referred to as "Self-Help" Counties.

Fuel Tax Increase

With the passage of SB 1, it is unlikely the voters of California would approve another fuel tax increase. With overall revenues declining, the CTC is looking at alternative fund source methods to replace the fuel tax. As electric vehicles become more frequent in numbers and new vehicles become more efficient, the fuel tax revenues will continue to decline.

Traffic Mitigation Fees

Currently used in several areas of Butte County, traffic mitigation fees can be a means to fund roadway, transit, bicycle, and other improvements through assessment of trip-end fees on new development. A capital improvement program is developed based on needs established for future development. A per-trip fee is then calculated based on the total trip generation of new development.

Chico and Butte County use a similar system to fund transportation improvement needs in the Chico Urban Area. A fee is charged to each housing unit based on the land use density capacity at buildout divided into the transportation improvements required at buildout. This Street Facilities Fund then finances the improvements, as they are needed.

Air Quality Mitigation Fees

Similar to traffic mitigation fees, air quality mitigation fees are assessed on new residential and commercial construction based on the amount of pollutants expected to be generated. The Tahoe Regional Planning Agency (TRPA) currently combines traffic and air quality mitigation fees based chiefly on the number of trips expected to be generated by a development, using one method to mitigate both the congestion and air quality degradation that may be expected as a result of additional vehicle trips. These fees are then claimed by jurisdictions for transit and roadway capital improvement programs.

Motor Vehicle Fee

The State currently charges a fee on those who own and operate vehicles in the State of California, for registration and for licensing. Two special programs have been authorized to assess special fees on the motor vehicle tax; $1 is assessed to fund freeway call box systems and up to $4 is assessed for air quality programs. Counties are not currently authorized to impose a vehicle registration fee; enabling legislation would have to be enacted by the State legislature to allow such a program.

Parking Fee/Tax

A parking fee is charged for vehicles to park in a particular space, and can be effectively used for on-or-off street parking. The fee could be linked with the transportation-system impact of persons using those parking spaces. A parking tax is a levy on the use of off-street commercial or employer provided parking spaces. The tax is typically collected as a percentage of the total parking charge paid by the motorist and forwarded to the agency (e.g. city) by the parking lot owner or operator.

Counties are not presently authorized to levy parking taxes; however, cities in California may implement a tax under their individual charters. In order for a county to levy a

parking tax, state-enabling legislation would have to be passed. A 2/3 voter approval is then needed before such a tax could be implemented in a jurisdiction to be used specifically for transportation improvements.

In general, a parking fee would not provide as much revenue as parking taxes due to the need to directly link costs and benefits. A fee may not require a public vote but would need to be adopted by each of the city and town councils where it is implemented. The fee or tax, while raising additional funds, has secondary benefits for transportation systems. The imposition or increase of parking charges creates a disincentive to the use of single occupancy vehicle by increasing the cost of driving versus other forms of transportation. As a result, public transportation becomes a more attractive substitute for driving.

Joint Development

Joint development describes an improvement that results from the cooperative efforts of a private company and public agency. Examples of joint development include the private development of a public facility, cooperative financing of public facilities, transfer of development rights, and density bonuses. The legal basis for joint development depends on the circumstances of the agreement. In general, however, the authority to require dedication of land or exactions as a condition of development derives from the agency's police power to protect public interests.

Peak Hour Congestion Pricing

This is a fee charged to those using transportation facilities during the peak period. As a user charge, it is neither a tax nor a toll, and therefore not subject to state or federal tax restrictions.

Congestion pricing, while raising additional funds, has secondary benefits for transportation systems. The imposition of such charges creates a disincentive to the use of transportation systems during peak periods through increased cost. This provides financial motivation for transportation system users to spread their use to non-peak hours. As a result, systems demand is more evenly distributed, thus creating greater efficiency of use.

Bond Measures

Cities and counties may issue general obligation bonds payable through increased property taxes by a 2/3 majority vote of the general electorate. These bonds may be used to fund government services, such as transportation improvements.