Kern Council of Governments

Regional Transportation Monitoring Improvement Plan (RTMIP)

Final Report

January 2008 (Revised January 2016)

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1.0 Introduction

This report presents the findings and recommendations of an effort undertaken by the Kern Council of Governments (Kern COG) and its member agencies to develop a Regional Transportation Monitoring Improvement Plan (RTMIP). The purpose of the RTMIP is to increase consistency, cooperation, and efficiency across transportation data collection and distribution efforts within Kern County. To that end, the RTMIP described here consists of a unified system of traffic data collection and a methodology to maintain and utilize that system for transportation planning purposes. Included as part of the RTMIP is an electronic database of transportation data that will be maintained by Kern COG and made available to its member agencies, as well as a web-based interface for viewing the data.

The first step in developing the RTMIP was to understand the existing transportation data collection activities taking place in the County. Therefore, the process began with the distribution of a survey to Kern COG's member agencies, in addition to other transportation agencies serving Kern County. The survey instrument asked about current transportation data collection efforts by the agencies, as well as perceived needs for improved or additional data collection and management. The survey results are summarized in the first section of this report.

The results of the survey were used to formulate a Needs Assessment for data collection within the County. This Needs Assessment evaluated the availability of various types of transportation data, the uses to which different types of data are put, and the merits of making such data more widely available. The results of the Needs Assessment were recommendations concerning priorities for incorporating various types of transportation data into the RTMIP. The Needs Assessment also included the creation of a set of criteria for establishing locations to be included in an ongoing traffic volume data collection effort, as well as the application of those criteria to identify 1,043 count locations throughout the County. The Needs Assessment is presented in the second section of this report.

Also included in the development of the RTMIP was an assessment of the feasibility and desirability of integrating traffic data collection with the County's Motorist Aid Call Boxes using "smart call boxes." This assessment evaluated the status of the Kern County motorist aid call box system, including existing and potential future capabilities. The assessment was based on a review of existing system capabilities, historical usage patterns, and discussions with Kern Motorist Aid Authority (KMAA) staff. The assessment also included a review of the experiences of other jurisdictions with smart call boxes. The assessment of smart call boxes is presented in the third section of this report.

After review and discussion by Kern COG and the jurisdictions within the County of the Needs Assessment and the call box integration analysis, a draft Action Plan was developed to address the identified priorities related to transportation data collection and distribution. The draft Action Plan was again reviewed, including a revisiting of the traffic data collection program. The resulting Action Plan is presented in the final section of this report.

2.0 Survey of Existing Transportation Data Collection

One of the main goals of the RTMIP is to coordinate, centralize and effectively manage traffic data across Kern County. A vast body of traffic data has been collected since the 1970s, and it has been stored in various formats and media in diverse databases at Kern COG and/or its member jurisdictions. An inventory of traffic count/survey methods and reporting formats currently utilized in Kern County was necessary to assess the County's data collection needs. The inventory was conducted through a written questionnaire sent to each of the Kern COG jurisdictions.

2.1 Methodology

A total of 13 written questionnaires was distributed: one to each of the appropriate staff of all local jurisdictions, as identified by Kern GOG staff; one to the Kern County Department of Roads; and one to Caltrans District 6. The questionnaire consisted of twenty questions intended to elicit information regarding each jurisdiction's traffic count methods and reporting capabilities. A sample of the questionnaire can be found in **Appendix A**. A total of eight questionnaires were completed and returned (response rate of 62.8%).

The following jurisdictions returned completed questionnaires:

- · City Of Bakersfield
- City Of California City
- City Of Ridgecrest
- City Of Shafter
- City Of Taft
- City Of Tehachapi
- City Of Wasco
- Kern County

2.2 Summary of Findings

2.2.1 Types of Data Collected

The first section of the questionnaire dealt with the types of traffic data currently being collected by each jurisdiction. The purpose of this section was to determine what types of data are available within the County, the regularity with which it is collected, and whether it is available in an electronic format.

Figure 2.1 presents a tabulation of the survey responses concerning **Average Daily Link/Segment Volume Counts**. These data are the most common type of traffic volume data collected on a regular basis by the jurisdictions. Key points related to daily link/segment volume counts are as follows:

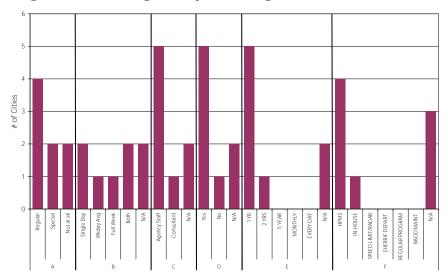


Figure 2.1: Average Daily Link/Segment Volume Counts

Question Key

- (A) Is the data collection done on a regular basis, for special studies, or no collected at all?
- (B) Are the counts, single day, average of 5-day, weekdays or full 7-day weekdays, or both?
- (C) Are the data collected by agency staff, or consultants?
- (D) Are the data maintained in electronic format?
- (E) On average, what is the cycle time between counts?
- (F) Is the data collected to satisfy external reporting needs, which one?

Regularity of Collection. Half of the jurisdictions perform these counts on a regular basis; two of them do not perform them at all (Ridgecrest and Wasco), and another two perform them only for special studies.

Duration. Tehachapi and California City do week-based counts; Bakersfield and Shafter do single-day counts; Taft and Kern County do both week-based and single-day counts.

Staff Employed. The counts are done by in-house staff in five out of the six jurisdictions that do these counts.

Electronic Availability. Tehachapi is the only jurisdiction that does not have its counts in electronic format.

Count Cycle. All jurisdictions except for Taft do these counts annually. Taft does them every two years.

External Reporting Capability. Four out of the six jurisdictions that collect this data have it in HPMS format.

Figure 2.2 presents a tabulation of the survey responses concerning **Peak Hour Segment Volume Counts.** These data are collected by the greatest number of jurisdictions, but they are not collected as regularly as daily volume counts. Key points related to peak hour segment volume counts are as follows:

Regularity of Collection. All but one (Wasco) of the jurisdictions perform these counts, but only two jurisdictions perform them on a regular basis (Shafter and Taft).

Duration. Three jurisdictions conduct single-day counts; California City conducts full-week counts. Taft is the only jurisdiction that conducts both types of counts.

Staff Employed. Half of the jurisdictions have in-house staff conduct the counts.

Electronic Availability. Kern County is the only jurisdiction that does not have these counts in electronic format.

Count Cycle. Three jurisdictions perform these counts annually, and one does so every two years.

External Reporting Capability. Ridgecrest and Shafter have these counts in HPMS format.

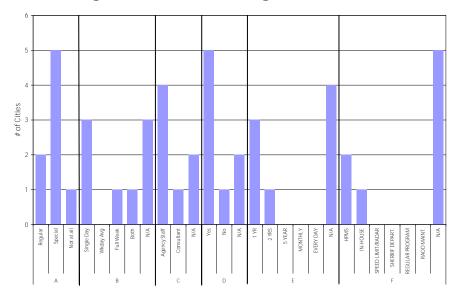


Figure 2.2: Peak Hour Segment Volumes

- (A) Is the data collection done on a regular basis, for special studies, or no collected at all?
- (B) Are the counts, single day, average of 5-day, weekdays or full 7-day weekdays, or both?
- (C) Are the data collected by agency staff, or consultants?
- (D) Are the data maintained in electronic format?
- (E) On average, what is the cycle time between counts?
- (F) Is the data collected to satisfy external reporting needs, which one?

Figure 2.3 presents a tabulation of the survey responses concerning **Peak Hour Intersection Turning Movements Counts**. None of the jurisdictions collect this type of data on a regular basis, and only three jurisdictions report collecting intersection turning movement counts at all. Key points related to peak hour turning movement counts are as follows:

Regularity of Collection. Only Kern County, Bakersfield, and California City conduct these counts and they all do them for special studies only.

Duration. Bakersfield performs these counts for a single day; California City gathers full-week counts.

Staff Employed. Kern County uses consultants to do these counts; the other jurisdictions use in-house staff.

Electronic Availability. Kern County does not have these counts in electronic format. The other two do have them in electronic format.

Count Cycle. Only California City reported doing these counts once a year.

External Reporting Capability. None of the jurisdictions has the counts in an external reporting format.

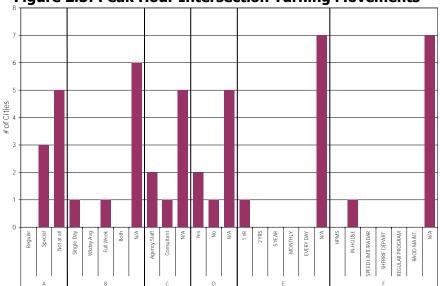


Figure 2.3: Peak Hour Intersection Turning Movements

- (A) Is the data collection done on a regular basis, for special studies, or no collected at all?
- (B) Are the counts, single day, average of 5-day, weekdays or full 7-day weekdays, or both?
- (C) Are the data collected by agency staff, or consultants?
- (D) Are the data maintained in electronic format?
- (E) On average, what is the cycle time between counts?
- (F) Is the data collected to satisfy external reporting needs, which one?

Figure 2.4 presents a tabulation of the survey responses concerning **Vehicle Class Data.** Only one jurisdiction collects this type of data on a regular basis. Key points related to vehicle class counts are as follows:

Regularity of Collection. Only Taft performs these counts on a regular basis. Half of the jurisdictions do them for special studies only.

Duration. Most jurisdictions did not report the duration of their vehicle class counts.

Staff Employed. All the jurisdictions that reported the type of staff use to conduct these counts indicated that they used in-house staff.

Electronic Availability. Three of the five jurisdictions that conduct these counts have them in electronic format.

Count Cycle. Tehachapi conducts these counts every year; California City and Taft conduct them every two years.

External Reporting Capability. Only Ridgecrest and Tehachapi have these counts in HPMS format.

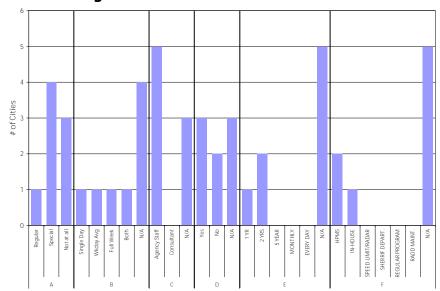


Figure 2.4: Vehicle Classification Data

- (A) Is the data collection done on a regular basis, for special studies, or no collected at all?
- (B) Are the counts, single day, average of 5-day, weekdays or full 7-day weekdays, or both?
- (C) Are the data collected by agency staff, or consultants?
- (D) Are the data maintained in electronic format?
- (E) On average, what is the cycle time between counts?
- (F) Is the data collected to satisfy external reporting needs, which one?

Figure 2.5 presents a tabulation of the survey responses concerning **Speed Survey/Travel Time Data.** The survey found that these data are generally collected only for special studies. Key points related to speed survey data are as follows:

Regularity of Collection. Half of the jurisdictions conduct these surveys only for special studies. Only two of the jurisdictions conduct the surveys on a regular basis.

Duration. Three jurisdictions conduct these surveys for a single day; California City conducts them for a full-week. Taft is the only jurisdiction that conducts both types of surveys.

Staff Employed. Only Shafter uses consultants to conduct these surveys. The rest of the jurisdictions use their own staff.

Electronic Availability. Half of the jurisdictions have the survey results in electronic format.

Count Cycle. Ridgecrest conducts these surveys every year, California City and Taft every two years, and Bakersfield every five years.

External Reporting Capability. Only Ridgecrest keeps the information in HPMS format.

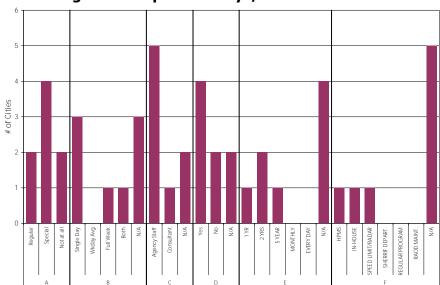


Figure 2.5: Speed Surveys/Travel Time Data

- (A) Is the data collection done on a regular basis, for special studies, or no collected at all?
- (B) Are the counts, single day, average of 5-day, weekdays or full 7-day weekdays, or both?
- (C) Are the data collected by agency staff, or consultants?
- (D) Are the data maintained in electronic format?
- (E) On average, what is the cycle time between counts?
- (F) Is the data collected to satisfy external reporting needs, which one?

None of the jurisdictions reported collecting data concerning **Vehicle Occupancy**.

Figure 2.6 presents a tabulation of the survey responses concerning **Vehicle Delay.** The survey found that these data are collected only for special studies. Key points related to vehicle delay data are as follows:

Regularity of Collection. Half of the jurisdictions have this type of data, but it is collected only for special studies.

Duration. California City has full-week data; the others have single-day data.

Staff Employed. Only Kern County uses consultants to collect this type of data, the other three jurisdictions that have these data use their own staff to collect it.

Electronic Availability. Only Bakersfield and California City have this type of data in electronic format.

Count Cycle. California City collects this type of data every two years and Ridgecrest does so every year.

External Reporting Capability. Only Ridgecrest has the data in HPMS format.

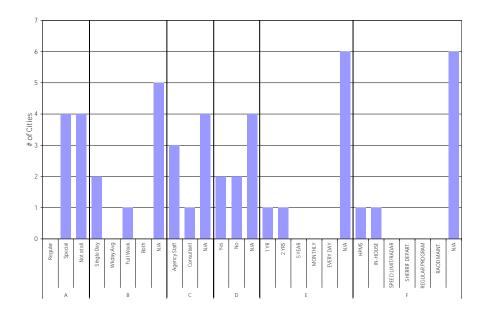


Figure 2.6: Vehicle Delay

- (A) Is the data collection done on a regular basis, for special studies, or no collected at all?
- (B) Are the counts, single day, average of 5-day, weekdays or full 7-day weekdays, or both?
- (C) Are the data collected by agency staff, or consultants?
- (D) Are the data maintained in electronic format?
- (E) On average, what is the cycle time between counts?
- (F) Is the data collected to satisfy external reporting needs, which one?

Figure 2.7 presents a tabulation of the survey responses concerning **Queue Length**. The survey found that most jurisdictions do not collect this type of data, and those that do collect it only for special studies. Key points related to queue length data are as follows:

Regularity of Collection. Only Ridgecrest and California City have this type of data, and it is collected only for special studies.

Duration. Ridgecrest has this type of data in single-day format, and California City has it in full-week format.

Staff Employed. The type of data is collected by in-house staff in all cases.

Electronic Availability. Only California City has this type of data in electronic format.

Count Cycle. California City collects this type of data every two years; Ridgecrest does so every year.

External Reporting Capability. Only Ridgecrest has the data available in HPMS format.

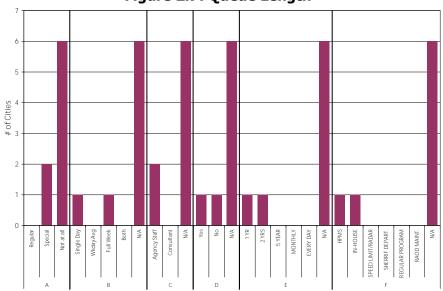


Figure 2.7: Queue Length

- (A) Is the data collection done on a regular basis, for special studies, or no collected at all?
- (B) Are the counts, single day, average of 5-day, weekdays or full 7-day weekdays, or both?
- (C) Are the data collected by agency staff, or consultants?
- (D) Are the data maintained in electronic format?
- (E) On average, what is the cycle time between counts?
- (F) Is the data collected to satisfy external reporting needs, which one?

Figure 2.8 presents a tabulation of the survey responses concerning **Accident Data**. The survey found that most jurisdictions collect this type of data regularly. Key points related to accident data are as follows:

Regularity of Collection. Six of the eight jurisdictions collect accident data on a regular basis.

Duration. Two of the jurisdictions reported having this type of data in full-week format. Most jurisdictions did not indicate a reporting period.

Staff Employed. Only Tehachapi uses consultants to collect this type of data. The rest of the jurisdictions use in-house staff.

Electronic Availability. Only Ridgecrest and Shafter do not have this type of data in electronic format; the rest of the jurisdictions do.

Count Cycle. Bakersfield collects this data daily; Tehachapi collects it monthly; and California City annually.

External Reporting Capability. Only Ridgecrest has this data available in HPMS format.

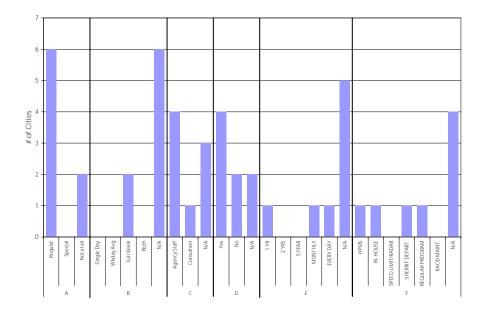


Figure 2.8: Accident Data

- (A) Is the data collection done on a regular basis, for special studies, or no collected at all?
- (B) Are the counts, single day, average of 5-day, weekdays or full 7-day weekdays, or both?
- (C) Are the data collected by agency staff, or consultants?
- (D) Are the data maintained in electronic format?
- (E) On average, what is the cycle time between counts?
- (F) Is the data collected to satisfy external reporting needs, which one?

Figure 2.9 presents a tabulation of the survey responses concerning **Pavement Conditions**. The survey found that most jurisdictions collect this type of data regularly. Key points related to pavement condition data are as follows:

Regularity of Collection. Five of the eight jurisdictions collect this type of data on a regular basis. Ridgecrest and Taft collect it only for special studies.

Staff Employed. Only Wasco uses consultants to collect this type of data. The rest of the jurisdictions use in-house staff.

Electronic Availability. All jurisdictions that have this type of data have it in electronic format.

Count Cycle. All jurisdictions that have this type of data collect it on an annual basis.

External Reporting Capability. Only Ridgecrest keeps this type of data in HPMS format. The rest maintain it in various other formats.

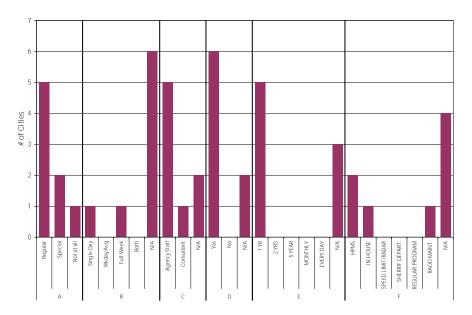


Figure 2.9: Pavement Conditions

- (A) Is the data collection done on a regular basis, for special studies, or no collected at all?
- (B) Are the counts, single day, average of 5-day, weekdays or full 7-day weekdays, or both?
- (C) Are the data collected by agency staff, or consultants?
- (D) Are the data maintained in electronic format?
- (E) On average, what is the cycle time between counts?
- (F) Is the data collected to satisfy external reporting needs, which one?

2.2.2 Data Coverage and Reporting

On average, the Kern COG jurisdictions cover about 33% of their arterials with Daily Traffic Counts that are 3 years old or less. Bakersfield and Kern County have the highest coverage both with 90%. Tehachapi covers only 2%. **Table 1** summarizes the data coverage for each jurisdiction.

Table 2.1

Data Coverage and Reporting

	% of Arterials covered with Counts 3 years old or less			
Jurisdiction	ADT Counts	Peak Hour Volume Counts	Class Counts	
City Of Bakersfield	90%	90%	1%	
City Of California City	50%	25%	25%	
City Of Ridgecrest	10%	10%	0%	
City Of Shafter	20%	20%	0%	
City Of Taft	0%	0%	0%	
City Of Tehachapi	2%	2%	0%	
City Of Wasco	0%	0%	0%	
Kern County Roads Dept.	90%	5%	2%	

On average, the Kern COG jurisdictions cover about 19% of their arterials with Peak Hour Counts that are 3 years old or less. Bakersfield has the highest coverage with 90%. California City has the highest coverage of Class Counts, with 25% of its arterials covered. Only two other jurisdictions have class counts, and their coverage is minimal.

Identification of Count Locations

Six of the jurisdictions identify the location of their collected traffic volume information with the main street name and nearest cross street name. Bakersfield uses a unique Link ID number. California City uses the distance from the nearest intersection.

Publication of Data

Only Bakersfield and Kern County publish a periodic traffic volume map. Bakersfield has its volumes available in GIS format; Kern County publishes its data in table format only.

Availability of Data

Six of the eight jurisdictions make collected data available to the public (only Shafter and Wasco do not have it publicly available). All but one (Wasco) of the jurisdictions has the data available for other jurisdictions upon their request. Only Bakersfield and Kern County have counts available on the Internet. Both Bakersfield and California City have their counts available by e-mail. Five of the eight jurisdictions have the counts available in person at their premises.

2.3 Inventory Methods and Equipment

Count Stations

Only Ridgecrest and Bakersfield have established permanent count stations. Bakersfield indicated the specific locations of their existing permanent stations. Three other jurisdictions indicated the location of their desired permanent count stations. **Table 2.2** describes each of the jurisdiction's existing or desired count station locations.

Table 2.2 Permanent Count Stations (Existing and Desired)

Jurisdiction	Status	Roadway Segment
Bakersfield	Existing	Gosford n/o Westwood Dr. H St. n/o Wilson Rd.
		H St. n/o 14 th St.
		California Ave. e/o King St.
		Columbus St. sw/o Auburn St.
		Calloway n/o Meacham
Shafter	Desired	Lerdo Hwy
		Santa Fe Wy.
		Seventh Standard Rd.
		Shafter Ave.
		Zerker Rd.
		Poplar Ave.
		Beech Ave.
T- 0	Desired	Los Angeles Ave.
Taft	Desired	10 th St. n/o Kern St.
		10 th St. s/o Kern St. Main St.
		4 th St. s/o of Kern St.
		Gardenfield Rd. e/o 119
		Airport Rd. near E. Woodrow
		Center St. e/o 6 th St.
		Cadet Rd. e/o Petroleum Club Rd.
		Church St. n/o Pilgrim Ave.
		Hillard St. s/o Kern St.
California City	Desired	3 miles w/o Baron Blvd. on California City Blvd
		California City Blvd. s/o the city boundary
		Neuralia Rd. at Neuralia Rd. and Lindbergh

Seasonal Variation Control Counts

Only Bakersfield and Kern County perform control counts to adjust for seasonal variations in traffic volumes. California City and Tehachapi do counts to measure long-weekend travel.

Traffic Counting Equipment Availability

Half the jurisdictions have traffic counting equipment. Bakersfield has Jamar pneumatic tube equipment. California City uses Jamar Trax 1 Counters. Shafter uses Numetrics Model Series 90. Kern County uses Jamar/Timemark.

Data Collection Costs

The average annual cost to the jurisdictions to collect traffic data is \$30,000. Most jurisdictions use their general fund to collect routine traffic data. **Table 2.3** summarizes the cost to each jurisdiction.

Table 2.3
Traffic Data Collection Costs and Funding Sources

Jurisdiction	Average Annual Cost	Source of Funding for Routine Data Collection	Source of Funding for Special Data Collection
City Of Bakersfield	\$25,000	General Fund	General Fund
City Of California City	\$60,000	State Funds	State Funds
City Of Ridgecrest	\$10,000	General Fund	Private Sector
City Of Shafter	\$5,000	General Fund	Development Fees
City Of Taft	\$500	Street Dept. Budget	N/A
City Of Tehachapi	\$4,000	General Fund	General Fund
City Of Wasco	N/A	N/A	N/A
Kern County Roads Dept.	\$100,000	Road Fund	Road Fund

2.4 Computer Based/Electronic Data Collection

Signal System

Only Bakersfield and Kern County have a computer-controlled signal system (BITRANS). Neither jurisdiction can capture and store traffic volume data from their systems, but they both have plans to develop the capability do so in the future.

Traffic Management

Only Bakersfield has a traffic management center, and only Tehachapi has a Variable Message Sign system (two movable pieces of equipment).

No other technologies are being used to assist in traffic data collection in the County.

2.5 Traffic Monitoring and Performance Measures

Performance Measure Utilization

California City, Shafter, and Taft utilize performance measures to monitor traffic conditions or trends on a regular basis. All three jurisdictions use Peak Hour V/C ratios, Daily V/C ratios, and Average Speed. California City also uses Level of Service.

Radar Speed Surveys

Bakersfield, Shafter and Kern County perform periodic radar speed surveys for setting speed limits.

Accident Record Reporting

Five of the eight jurisdictions have their local police accident records periodically reported to the State. Shafter reports them every week, and Ridgecrest does so annually.

2.6 Data Needs

Six of the jurisdictions described what their most pressing data needs were. **Table 2.4** contains each of the jurisdictions' responses.

Table 2.4
Kern COG Jurisdictions' Traffic Data Needs

Jurisdiction	Jurisdictions most pressing Data needs
City Of Bakersfield	Volume data
City Of California City	Main road, volume, speed counts
City Of Ridgecrest	N/A
	Pavement conditions, number of lanes, AADT, road
City Of Shafter	classification
City Of Taft	N/A
City Of Tehachapi	Circulation
City Of Wasco	N/A
Kern County Roads	Integrate our counts into the Kern County model more easily

2.7 Conclusions

Jurisdictions in Kern County have varying degrees of traffic data collection capabilities. Therefore, the amount, quantity and quality of traffic data they posses and can produce vary significantly. Also, there are no county-wide traffic data collection standards that they can follow. For the purpose of the RTMIP, traffic data should be available in electronic formats. Only 35-40% of the data is currently available in electronic format. Standardization and digitalization of traffic data are the two most pressing needs in the County.

3.0 Needs Assessment

The results of the surveys of current data collection practices provided a perspective on what level of data collection activities were currently being conducted by the County's local jurisdictions and to what extent this process could be used for a potential countywide traffic monitoring system. The lack of county-wide traffic data collection standards for the jurisdictions to follow was one of the most striking results of the survey. Based on the results of the survey and discussions with agency staff, it became clear that the most immediate data collection need in the County was for a thorough and consistent program to gather and distribute traffic volume data, including vehicle classification data, for a geographically dispersed set of locations throughout the County.

Kern COG and its member agencies emphasized that consistency with and incorporation of historical count locations was important for the count program to be developed. As a result, a traffic count program consisting of 14 control stations and 598 total count locations, was outlined in the Draft Needs Assessment report of February 2007. Based on further discussions with Kern COG and the local jurisdictions, the count program was refined to a system with 22 control stations and 1,043 total count locations. As the basis of this program, a GIS database was created that included approximately 1,600 historical traffic counts collected by Kern County, the City of Bakersfield, and other agencies.

This section describes the development of the Uniform Traffic Count program to meet the needs identified within the County. A later section, the Action Plan, describes in detail the implementation of the program.

3.1 Uniform Traffic Count Program

3.1.1 Need for the Program

Currently, traffic counts are conducted by or on behalf of each of the jurisdictions with the County. Coverage varies widely throughout the County and depends on the resources of each jurisdiction. Many counts are conducted on a one-time basis for special studies, so it is difficult to discern historical patterns. In addition, the data have been collected by different agencies and/or consultants, and are generally not available in a digital format. Kern COG has recently compiled an electronic "count book" of approximately 1,600 count locations throughout the County. For each count location, the count book includes only bidirectional total daily traffic volume. Peak hour, vehicle classification, or other types of data are not available electronically.

A uniform count program will accomplish the following goals:

- Improve coverage throughout the County
- Conserve resources by eliminating redundant count locations
- Facilitate analysis of historical trends

- Provide data on goods movement
- Allow for regional extrapolation through the establishment of control stations
- Create an understanding of seasonal variation

3.1.2 Scope of the Program

Kern County and the local jurisdictions within the County are responsible for collecting traffic data on roadways within their jurisdiction. Caltrans is responsible for collecting traffic data on State highways, and does so on a schedule and under procedures set at the State level. Traffic counts on State highways conducted by the County or a city would require encroachment permits from Caltrans. Therefore, based on discussions with Kern COG staff, it was determined that this Count program should be limited to roadways under local jurisdiction. Nonetheless, it is recommended that efforts be made to make Caltrans traffic count data available in conjunction with data collected under this program.

3.1.3 Development of Count Location Selection Criteria

A set of criteria for proposed, count locations as part of a uniform, on-going count program to accomplish the goals listed above was established. The criteria are summarized in **Table 3.1**. The criteria are intended to achieve coverage throughout the County, satisfy Federal reporting requirements, assist in travel demand model development and refinement, and provide data to assist local agencies, while avoiding redundancy.

Table 3.1. Count Location Selection Criteria

	Criteria	Data Source	Discussion/Example	# Added
1	HPMS Sample Segments	Caltrans	Federal requirement	249
2	Model Screenlines	Kern COG		91
3	County Entry Points	County Limits	"Cordon"	52
4	Community Entry Points	City/Built Area/	"Cordon"; entry points	130
		SOI Limits	includes freeway ramps	
5	Regional Significance	GIS-Roadway Network		12
6	Local Significance	GIS-Roadway Network	Includes high growth areas	39
		Needs Assessment Survey	_	
7	Goods Movements	GIS-Industrial Uses		25

Descriptions of the criteria and the role each plays in the proposed count program are as follows:

HPMS Sample Segments. Traffic volume data on these segments are required as part of the Federal Highway Performance Monitoring System. Counts at these locations are used by Federal agencies to estimate systemwide travel characteristics, such as total vehicle miles traveled.

Model Screenlines. Traffic volume data from these locations are used in the calibration of the Kern COG regional travel demand model. The model is used to forecast future traffic volumes throughout the County. The screenlines are a set of hypothetical lines drawn across the roadway network; the total volume of traffic crossing these lines in the model is compared to the actual volume data.

County Entry Points. County entry point locations occur wherever roadways enter the County from neighboring Counties. Traffic volume data from these locations are useful in assessing growth in traffic volumes generated outside of the Kern COG region, as well as in determining the general source of the growth. They can also be useful in calibrating the travel demand model with regard to external generators.

Community Entry Points. Community entry point locations are intended to create a rough "cordon" around each of the major communities within the County. Because of the greater interconnectedness within the County, it is not feasible to identify every roadway that a vehicle might use to enter a community. The intent of the community entry point locations is to capture the significant entry points. Because of the rapid geographic growth of many of the communities, the "entry points" have often been set at a considerable distance from the existing developed area, so that the points will continue to represent the geographical extents of the community into the future.

Regional Significance. Roadway segments of regional significance were identified as segments that connect two or more areas within the County, but that do not constitute an entry point to a particular community. In practice, this category is limited because most regionally significant roadways also create entry points to one or more communities.

Local Significance. Roadway segments of local significance represent locations that are important to the circulation within one community, but that generally do not play a large role in regional circulation. Together with community entry points, these locations collectively provide coverage of an individual community. Locations of local significance also include areas currently experience a high rate of growth.

Goods Movement. Roadway segments significant for goods movement provide access to industrial and warehousing hubs within the County. Traffic volume data at these locations are useful because they represent activity within an important and growing section of the County's economy.

An additional criterion of **Mountain Locations** was initially developed to represent both entry points to the mountain areas of the County, similar to community entry points, as well as destinations within the mountains. Traffic volume data at these locations are useful because they represent tourist and recreational activity. However, in the processing of implementing the criteria, it was determined that all of the identified mountain locations were included within the other criteria. Therefore, this criterion is not included in the final list of selection criteria.

3.1.4 Identification of Count Locations

Before identifying proposed count locations, the approximately 1,600 count locations in the Kern COG count book were geocoded and incorporated into a GIS database. The geocoding of the "historical" count locations allows them to be used to the greatest extent possible in the proposed count program. Using historical count locations as the basis for the count program will provide the greatest degree of continuity and facilitate analysis of trends over the longest time periods possible.

The criteria listed in Table 3.1 were applied in a sequential process, with all locations satisfying each criterion being identified before moving onto the next criterion. For example, all HPMS sample segments were identified in the first step. After HMPS count locations were identified, model screenline count locations were identified. If an HPMS sample segment was also a model screenline, the previously identified count location for the HPMS segment was also used for the model screenline. It should be emphasized that due to the "additive" nature of the analysis, at each step a substantial portion of the proposed locations that met each criterion was already selected through the previous criteria.

The application of the criteria resulted in a total of 598 proposed count locations. The final column of Table 3.1 shows the number of count locations added to the initial recommendations by the application of each criterion.

The recommended count locations were distributed to Kern COG and the local jurisdictions. Based on feedback from these agencies, additional count locations of particular concern to the jurisdictions were added to the recommended count locations, and some potentially duplicative locations were consolidated. The resulting recommend count program included a total of 1,043 count locations.

3.1.5 Vehicle Classification Count Locations

Vehicle classification counts provided additional data beyond total vehicle counts. These data are useful for identifying locations where traffic operations and/or pavement conditions may be affected by high levels of truck traffic. They are also useful for planning purposes as a measure of changes in industrial and warehousing activity. However, vehicle classification counts are more expensive to conduct than simple vehicle counts, so in the interest of economy, their application should be limited to locations at which the data they provide will be most useful.

The proposed count locations were reviewed to determine appropriate locations for vehicle classification counts. All locations satisfying criteria 1, 2, and 8 (HPMS, model screenline, and goods movement) were designated as locations for conducting vehicle classification counts. Additional locations for classification counts were selected from the remaining count locations to ensure coverage throughout all regions of the County.

Figures 3.1 shows the locations of the proposed count locations and program changes within the County. These figures indicate which locations are proposed for vehicle classification counts. **Appendix B** includes detailed information on each proposed count location in a tabular format.

3.1.6 Control Station Locations

Control station locations are locations whose traffic volume characteristics are taken to be indicative of a larger region within the County. Data will be collected on a more frequent basis at these locations in order to understand day-of-week, seasonal, or holiday traffic patterns. Factors expressing these variation patterns will be derived from the counts at these locations and applied to typical weekday counts at other locations in order to derive traffic volumes at times other than the typical weekday. The draft Needs Assessment included 14 proposed control station locations. Based on discussion with agency staff, these proposed control station locations have been replaced with the existing 6 control stations within the City of Bakersfield and 16 existing control stations elsewhere in the County. **Figure 3.1** shows the locations of these control station locations. Descriptions of the locations are provided in **Table 3.2**.

Table 3.2. Control Station Locations

	Roadway		Cross Street	Community
1	Gosford Road	North of	Westwold Drive	Bakersfield
2	H Street	North of	Wilson Road	Bakersfield
3	H Street	North of	14th Street	Bakersfield
4	California Avenue	East of	King Street	Bakersfield
5	Columbus Street	South of	Auburn Street	Bakersfield
6	Calloway Drive	North of	Meacham	Bakersfield
7	Granite Road	South of	Woody Road	Kern County
8	Lerdo Highway	East of	Lost Hills Road	Kern County
9	Cecil Avenue	West of	Famoso Porterville Highway	Kern County
10	Elizabeth Norris Road	West of	Lake Isabella Blvd.	Kern County
11	Santa Fe Way	South of	S.R. 43	Kern County
12	Panama Road	East of	Fairfax Road	Kern County
13	Frazier Mtn. Park Road	East of	Monteray Trail	Kern County
14	Old River Road.	South of	S.R. 119	Kern County
15	Rosamond Blvd.	West of	Eagle Way	Kern County
16	Highline Road	West of	Tehachapi Willow Springs Road	Kern County
17	Midway Road	East of	S.R. 43	Kern County
18	South Union Avenue	South of	Ming Avenue	Kern County
19	North Chester Avenue	South of	Roberts Lane	Kern County
20	Mt. Vernon Avenue	South of	College Avenue	Kern County
21	Airport Drive	North of	Roberts Lane	Kern County
22	Olive Drive	West of	Fruitvale Avenue	Kern County

Figure 3.1



3.2 Additional Transportation Data

In addition to traffic volume data, the jurisdictions in Kern County collect a variety of other transportation data. The needs assessment survey also asked about these data collection efforts in order to develop an understanding of what programs may be useful to the Kern COG jurisdictions. The following sections summarize the findings and conclusions regarding these additional types of data.

3.2.1 Speed Survey Data

Most of the jurisdictions in the County collect speed data, and most use their own staff to do so. Follow-up discussions revealed that speed data are generally collected for the purposes of establishing speed limits under State law. Since the legislative body of each jurisdiction must make findings to establish speed limits, it is appropriate that the responsibility for collecting the relevant data remain at the local level. Therefore, it is not recommended that speed survey data be incorporated into the RTMIP.

3.2.2 Pavement Conditions

Most of the jurisdictions in the County collect pavement condition data. However, the data are stored in a variety of formats and are not generally readily available for inclusion in the HPMS reporting system. One jurisdiction (Shafter) stated that pavement condition data was one of their most pressing needs. With the ongoing urbanization of the County, traffic volumes are increasing on what were formerly rural roads. In addition, the growth of the warehousing industry in the County will likely result in a continued increase in heavy truck traffic throughout the region. Therefore, pavement condition data will become increasingly important for jurisdictions as they plan their capital improvement budgets.

In addition, reliable, quantitative pavement condition data are best collected by means of specialized equipment. This equipment is expensive and will not typically be cost-effective for small or even medium-sized jurisdictions to own. Therefore, the collection of pavement condition data is a logical effort to centralize through the RTMIP. It is of region-wide importance, and often not easily collected at the local level. Therefore, it is recommended that the RTMIP incorporate a program for the collection of these data.

3.2.3 Accident Data

Accident data are collected throughout the County by local police departments, the County Sheriff, and the California Highway Patrol (CHP). However, the tabulation and reporting of such data vary from jurisdiction to jurisdiction. Most of the jurisdictions in the County report the data on a regular basis, although some do not.

A statewide reporting system for accident data, the Statewide Integrated Traffic Records System (SWITRS), has been established and is maintained by the CHP. In order to ensure the most complete and accurate data at the statewide level, it is important to encourage jurisdictions to report data to SWITRS. Once data have been reported to SWITRS, county-wide data can be extracted and incorporated into Kern COG's GIS system for local use. Therefore, to avoid duplicative reporting requirements, it is recommended that the RTMIP itself not include reporting of accident data, but that Kern COG work with the local jurisdictions to improve reporting of accident data to SWITRS. These data will then ultimately be available for use by Kern COG and its member agencies.

Addendum to Chapter 3 of the Regional Transportation Monitoring Improvement Program (RTMIP)

Annual Bicycle and Pedestrian Count Program Goal

Bicycle and pedestrian evaluation programs measure and evaluate the impact of projects, policies and promotional programs. Typical evaluation programs range from a simple year-over-year comparison of US Census Journey to Work data, to bicycle counts and community surveys. Bicycle counts and community surveys act as methods to evaluate not only the impacts of specific bicycle improvement projects, but can also function as a way to measure progress towards reaching regional goals such as increased bicycle and pedestrian travel for trips. The goal of this program is to provide a consistent, comprehensive data on bicycle and pedestrian activity for analysis of the need/benefit of investment in these modes for consideration by local decision makers.

Bicycle and Pedestrian Count Program Development

A systematic approach is beneficial in developing an efficient and useful pedestrian and bicycle count program. Although it is possible to relatively quickly collect manual counts or to purchase and install automated counting technologies, this course of action may not produce useful, long-term data. Planning a count program typically involves the following steps:

- Specifying the general data collection purpose,
- Identifying data collection resources,
- Selecting count locations and determining the count timeframe, and
- Considering available counting methods.

The following sections present each of these steps, but they are often used iteratively. For example, count managers may reconsider the resources needed for data collection after they realize that they would like to count additional locations. Similarly, managers

may revisit the number of count locations after recognizing that they would like to gather continuous counts over a long time period (which may require purchasing additional counting devices for more locations, or rotating existing devices among locations).

Organizations planning a pedestrian and bicycle count program for the first time should expect that their program will be modified in the future. Although most programs benefit from having some core data that have been collected consistently from start, many programs revisit their stated purposes, reassess resources, consider new or different count locations and time periods, and integrate new counting methods. Successful count programs result from experimenting and refining the approach over time. Like the vehicle traffic count program, this program will be revisited every 5 years as necessary.

Specifying the General Data Collection Purpose

Reasons why transportation agencies and other organizations collect pedestrian and bicycle counts include:

- Measuring changes in pedestrian and bicycle activity relative to baseline levels;
- Documenting changes in activity levels after projects are implemented;
- Informing the general public about pedestrian and bicycle activity and trends;
- Monitoring variations in pedestrian and bicycle activity levels by time of day, day
 of week, or season of the year, and under different weather conditions;
- Identifying variations in activity in different types of locations (e.g., considering land uses and/or facility types) and calculating context-specific expansion factors:
- Assessing local and system wide activity to prioritize locations for new pedestrian and bicycle facilities;
- Quantifying exposure, as part of an analysis of pedestrian or bicycle crash risk at specific locations; and
- Developing models to predict future pedestrian or bicycle volumes at different locations throughout a community.

All of these purposes can be achieved—at least in part—by collecting continuous pedestrian or bicycle volume data over time. The ability to collect counts over an extended period of time is one of the most important benefits of automated pedestrian and bicycle counting technologies.

In turn, the broad availability of non-motorized count data is an important part of ensuring a multimodal (or "complete streets") approach to transportation issues within a community.

Selecting General Count Locations

Resource limitations often prevent counting at every desired location, so particular locations must be chosen based on the primary purposes of the data collection program. A meeting of stakeholders should be arranged. Four approaches, described in more detail below, have been used for determining count locations:

- **Random locations.** Sites are selected randomly. This approach may not capture strategic locations, nor select sites appropriate for automated counting. Selecting randomly from within categories of desired characteristics (*stratified random sampling*) is an alternative.
- **Representative locations.** This approach balances available resources with spatial coverage. Identified sites, in aggregate, are representative of the community as a whole.
- **Targeted locations.** Sites are selected on the basis of being associated with particular projects, facility types, or locations with particular characteristics (e.g., safety concerns).
- **Control locations.** This approach compares sites affected by a project with unaltered sites (*control locations*) to determine how much of the observed change in demand can be attributed to the project.

Random Locations

Count locations can be selected randomly. For example, an agency can assign unique identification numbers to each of its intersections and use a random number generator to select which intersections to count. However, this *simple random sampling* approach may not capture strategic locations for counting. Additionally, random sampling may not identify locations suitable for automated technologies, because numerous site-specific factors ultimately determine suitability for a count location (e.g., opportunities to install equipment and patterns of pedestrian and bicycle movements). Random sampling can also result in selecting locations with very low volumes, which tend to have higher levels of variation over time than higher volume locations. High variability produces more error when estimating long-term (e.g., annual) volumes from short-duration counts.

There are alternatives to simple random sampling. Potential count locations can be stratified into categories according to particular characteristics, such as commuting versus recreational route, land use type, income category, or proximity to attractors (e.g., schools, parks, and transit stops). Analysts consider each category separately and select locations within each category randomly. This process, called *stratified random sampling*, can be used to ensure that there are at least a few count locations with each key characteristic of interest. This strategy has been used to select count locations when developing predictive pedestrian and bicycle volume models and safety performance functions.

Representative Locations

Most communities would like to measure how pedestrian and bicycle activity changes over time in the community as a whole. This objective requires counting at representative sites throughout the community. Representative locations could be identified using a random sampling process. However, it is more common to select

representative sites using a systematic approach guided by a count manager or advisory group.

In order to be representative, count locations should be

- Located in different geographic parts of the community;
- Surrounded by different types of land uses;
- Found on different types of facilities (e.g., multi-use trails, bicycle lanes, sidewalks); and
- Reflective of the range of socioeconomic characteristics in the community as a whole.

Limiting count sites to locations that are convenient, have the highest pedestrian or bicycle volumes,

or are expected to have the greatest increases in walking and bicycling does not produce a representative sample.

A set of representative sites can be used to compare changes in the number of reported pedestrian and bicycle crashes with changes in overall pedestrian and bicycle activity levels throughout the community. This approach allows analysts to track the relative risk of pedestrian or bicycle crashes (per pedestrian crossing, per trail user, per bicyclist, etc.). In other words, representative counts control for exposure across the community as a whole.

Targeted Locations

Specific locations can be targeted for counting, recognizing that the count locations, in aggregate, will not be representative of the community as a whole. These locations are often related to particular projects, particular facility types, or locations with particular characteristics.

For example, some communities choose to count in specific locations with a high number of crashes (i.e., "hot spots"). If the community is interested in identifying the relative risk of one specific roadway segment versus another specific roadway segment, the agency may target counts at these two locations. After using the counts to control for exposure, the agency can determine which locations have the greatest crash risk and evaluate the roadway design and behavioral characteristics that might be making those sites dangerous.

Communities also target counts at locations where specific projects have been or will be implemented, to document changes in walking and bicycling after project completion. For this purpose, it is important to count at locations at or near the project, and to select *control locations* for comparison, described next.

Finally, "pinch points," or locations where pedestrians and bicyclists must converge to cross a barrier (e.g., river crossings, freeway crossings, railroad crossings), are good locations to document large portions of a community's pedestrians and bicyclists. One sampling strategy is to count at a series of pinch points (e.g., all bridges crossing a river

that bisects a community or all pedestrian and bicycle crossings of a freeway loop around the CBD).

Control Locations

To get a true understanding of the effect of a specific project on pedestrian or bicycle activity or safety, it is also necessary to count at similar locations not directly affected by the project (e.g., at a location with the same number of roadway lanes and a similar surrounding neighborhood on the other side of town). These other locations are called *control sites*. Control sites account for broader influences on walking and bicycling (e.g., an increase in gas prices or a community level pedestrian and bicycle promotion program), making it possible to quantify the change in walking and bicycling activity or safety actually due to the project of interest.

Some of the users of a new or improved pedestrian or bicycle facilities may have shifted from nearby parallel routes. Counts can be taken on these streets and corridors to help distinguish between new (or more frequent) non-motorized travel generated by the project and existing non-motorized travelers who have diverted to the new or improved facility.

The following helps minimize the error in the volume estimates, especially if it is not feasible to conduct counts longer than a few hours at a time,:

- Count at times with high activity levels (e.g., summer).
- Count during good weather.
- Eliminate potholes (Potholes are a big danger to bicyclists)
- Eliminate Puncturevines (a.k.a. Goatheads), as they are the biggest enemy to bicycle tires. This might take an organized volunteer effort within the bicycle community.
- Eliminate other miscellaneous road debris

Kern COG staff uses a 2 step process for development of the Bicycle and Pedestrian County Program. The first step was to develop a draft set of maps based on a blending of the above criteria. The second step was to solicit local input from member agencies on the proposed sites. Critical to the development of the count locations is prioritization. Resources are limited so the factors listed above are used to rank the priority of count locations, should funding be limited.

Bicycle and Pedestrian Count Program Methodology

The following criteria was collected on each proposed site based on the count location attributes listed in the preceding section.

Bicycle and Pedestrian Count Location Data Dictionary

Bike Plan Data Dictionary

Criteria	Data Type	Description
Community	Text	Name of Community; Unincorporated Example "County Lamont"
Pinch Points	Integer	1=Yes 0=No
Schools	Integer	1=Yes 0=No
Transit Stops	Integer	1=Yes 0=No
Class 1 Bike	Integer	1=Yes 0=No
Class 2 Bike	Integer	1=Yes 0=No
Class 3 Bike	Integer	1=Yes 0=No
Commuting Route	Integer	1=Yes 0=No Routes used for commuting
Recreational Route	Integer	1=Yes 0=No
Land Use Type	Text	Residential, Commercial, Industrial, Recreational, Other
Income Category	Text	High, Medium, Low
Parks	Integer	1=Yes 0=No
Sidewalks	Integer	1=Yes 0=No
Pedestrian Crashes	Integer	Number of Incidents
Bicycle crashes	Integer	1=Yes 0=No
Bike/Ped Projects	Integer	1=Yes 0=No
Control Locations	Integer	1=Yes 0=No

In addition, the data and local government member agency input was used to develop the following rankings, weighting each factor equally (locations with multiple attributes receive priority).

Proposed Number of Counts/Commitment of Resources for Bike and Ped Program — Resources allocated to the Bike and Ped portion of the regional traffic count program is proposed to be roughly proportional to the trips made by each transportation mode. Bike and pedestrian travel accounts for approximately 10% of the trips made in Kern County. Staff recommends a minimum of 10% of the regional count program funding (\$8,000) to go toward counting bicycle and pedestrian activity. This amount could be increased if the consultant bid results in savings that could then be applied to the bike and ped count program. For that savings to be realized, 100% of vehicle counts would need to be collected annually in rapidly developing areas and a minimum of once every 3 years in slow and no growth areas.

Assuming the same per count cost is proposed as provided in the Phase I Bike & Ped Pilot Study, existing funding could provide 22 bike/ped count locations with annual 24 hour surveys. If a 4 hour peak period count were taken instead, 135 locations could be counted. (The number of locations assumes the pilot study contracted amount of \$354/day or \$14.75/hour would be the same as the bid in the next contract.) The plan has identified 630 potential bike and ped count locations.

In order to increase the number of bike and ped counts, the following strategies are to be applied to the decision of which counts to make.

- 1) Count locations will be prioritized using the GIS analysis maps in the in the Plan with input from member agencies.
- 2) A minimum of half of the bike and ped funding should be used for 24 hour "station" count locations. If counts are inexpensive enough, all 600+ locations should be counted as 24 hour counts.
- 3) A minimum of one station location shall be provided for each jurisdiction (11 locations).
- 4) Staggering count locations every 2-3 years to get as many locations as possible should be used in slow growth areas.
- 5) Limit number of station counts to 12 hour (daylight) and 4 hour counts (peak period) to get as many locations as possible. Counts with limited hours should be focused on the peak period for that location. For example, at a K-12 school the AM peak should be counted.

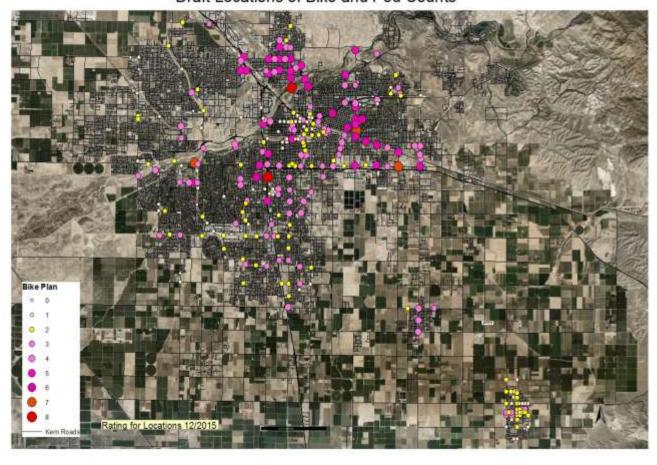
This program is for regular periodic counts 1-3 years apart to provide an important indicator on the success and need of regional bike and ped related infrastructure and programs. This program is not to be used for, one time count locations.

Candidate Bike/Ped Locations – Arvin

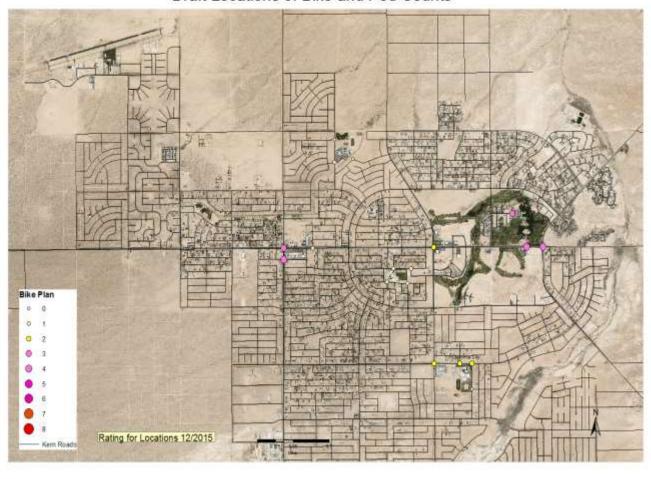


Draft Locations of Bike and Ped Counts

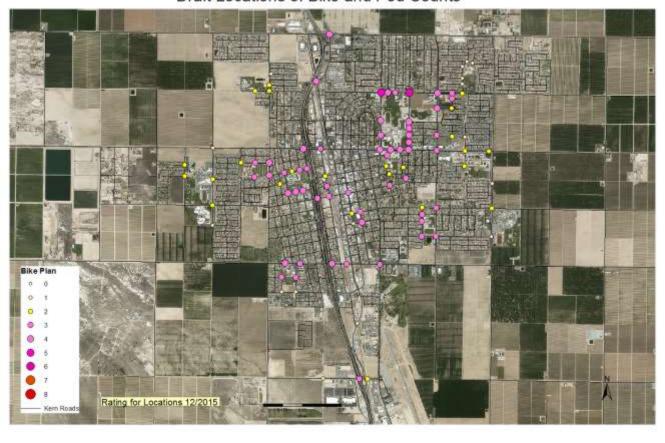
Candidate Bike/Ped Locaions – Bakersfield



Candidate Bike/Ped Locations – California City

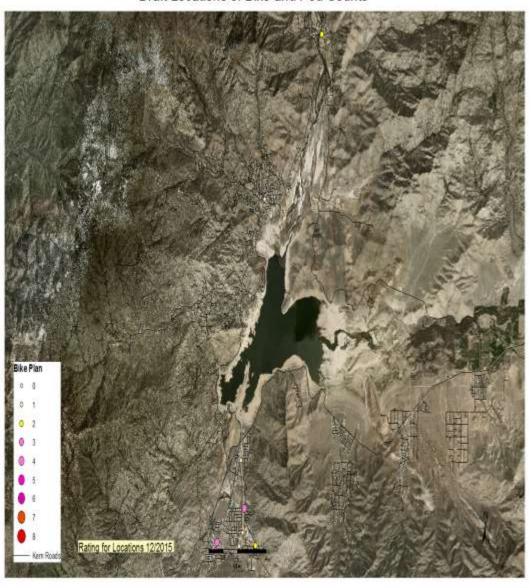


Candidate Bike/Ped Locations – Delano



Candidate Bike/Ped Locations – Lake Isabella Communities

Draft Locations of Bike and Ped Counts



Candidate Bike/Ped Locations – Maricopa

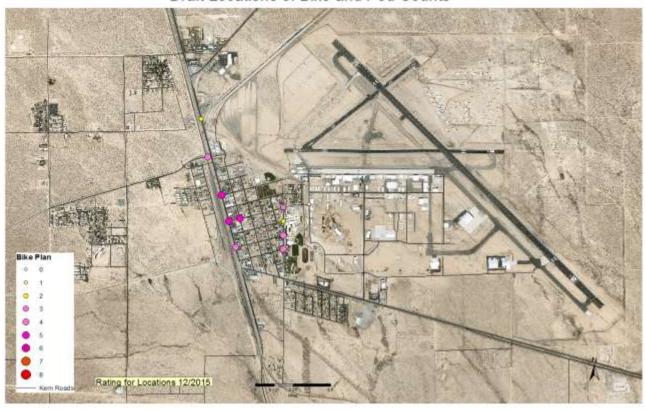


Draft Locations of Bike and Ped Counts

Candidate Bike/Ped Locations – McFarland

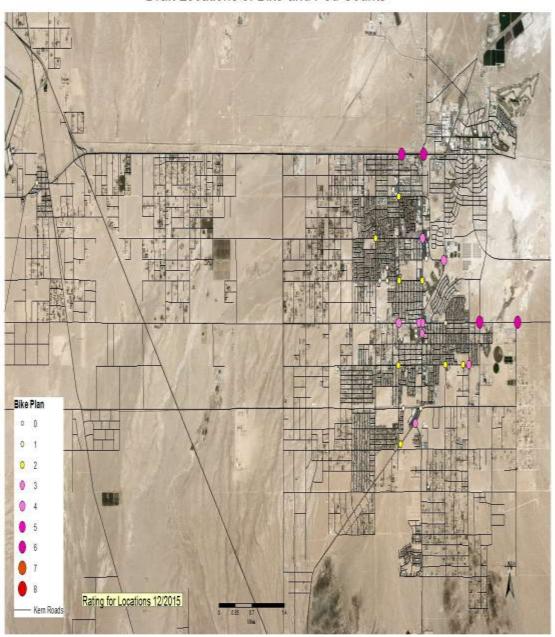


Draft Locations of Bike and Ped Counts



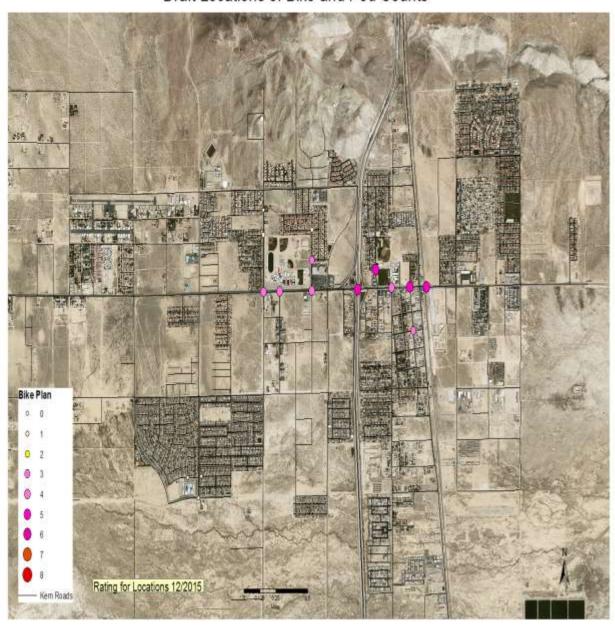
Draft Locations of Bike and Ped Counts

Candidate Bike/Ped Locations – Ridgecrest

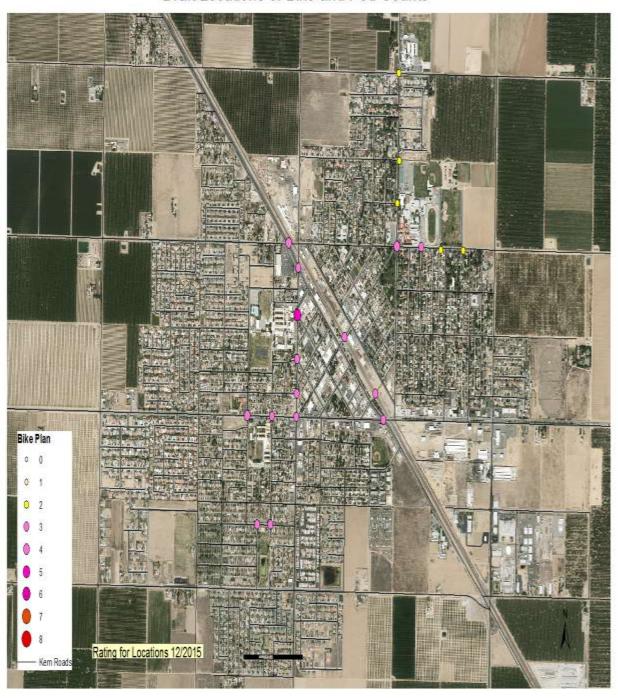


Draft Locations of Bike and Ped Counts

Candidate Bike/Ped Locations – Rosamond



Candidate Bike/Ped Locations – Shafter

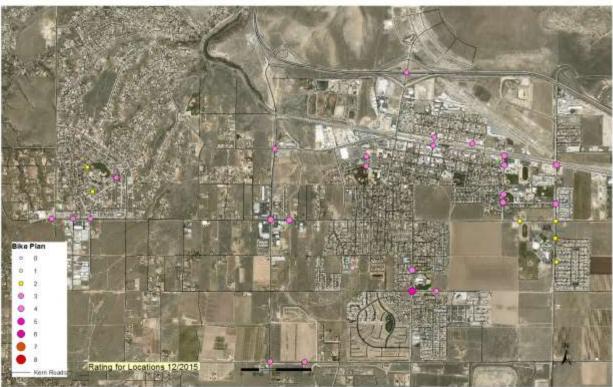


Candidate Bike/Ped Locations – Taft



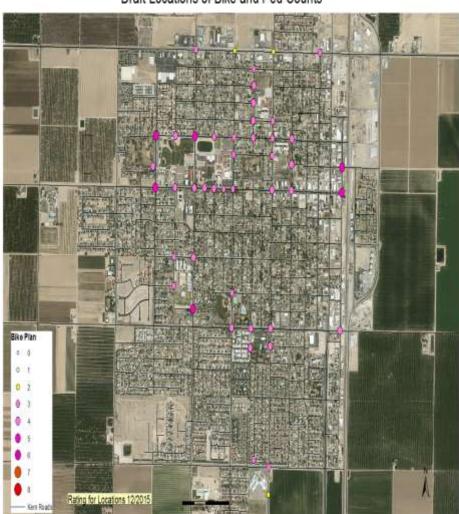
Draft Locations of Bike and Ped Counts

Candidate Bike/Ped Locations – Tehachapi



Draft Locations of Bike and Ped Counts

Candidate Bike/Ped Locations – Wasco



Draft Locations of Bike and Ped Counts

4.0 Call Box/Motorist Aid Integration Assessment

4.1 The Existing Call Box System

The Kern Motorist Aid Authority (KMAA) is a regional public agency created in 1988 pursuant to California Streets and Highway Code to install, operate, and maintain a motorist aid call box system in Kern County. The KMAA is part of a group of statewide agencies that

are also called Service Authority for Freeway Emergencies (SAFE) which are in charge of approximately 16,000 call boxes in California. These call boxes allow motorists to request roadway assistance in both emergency and non-emergency situations. Call boxes are placed in pairs along highways. When a call is made on a call box, it is directly connected to the California Highway Patrol (CHP).

The following provide a summary of the vital statistics on the Kern County call box system:

- Total number of call boxes: 574
- Coverage: 859 miles of freeways and expressways
- Placement and Installation (see Figure 4.1):
 - Installation began in 1991 and was completed in 2000
 - Freeways
 - State Highways
 - o Other— only 12 call boxes are on non-state highway County roads
- Average Countywide call box spacing:
 - Urban areas: one mile, a total of 51 boxes (8.9%)
 - o Rural areas: two miles, a total of 523 boxes (91.1%)
- Hard-wired or wireless: only one call box in the County is hard-wired the rest are all cellular
- Analog or digital: currently all analog, upcoming contract effort will convert the system to fully digital
- Cellular Carrier: AT&T
- Usage statistics/trends 12-month period FY 05/06 (see **Appendix C**):
 - o Total calls—66,533
 - Maintenance calls—61,569
 - Assistance calls—4,964
 - Average calls per month—414
 - Average calls per month, per box—0.72
 - Average calls per day per box—0.03

o [FIGURE 4.1 Available on CD on request]

High month: July—595

Low month: February—256

- Annual maintenance costs: approximately \$200,000 or \$350/site
- Funding source: through \$1 of registration fee from DMV
- Accessibility: the call boxes are currently not equipped with TTY
- Compliance with state minimum guideline of 8' shoulder throughout the system is not known
- The number of 911 calls on the overall emergency system vs. on the call box system: not known
- Freeway Service Patrol (FSP) coverage: there is no FSP program in Kern County
- Availability of #399 Service: none
- Currently there are no other uses of the call box system, including the following:
 - Traffic counts
 - Fog detector
 - o CCTV
 - Remote traffic sensors
 - Smart Call Box

4.2 System Needs

- **Desire for inventory**—It is highly desirable to develop and maintain an integrated inventory data base with coordinate system and individual photo logs that can be used for system evaluation.
- Need or desire for system reduction—Even with the decline in usage, currently there does not appear to be a need or desire for system reduction. Any more than a 2-mile spacing, which may result from a system reduction, will not provide a "system". However, Countywide call volume has declined from 25,000 to about 5,000 per year and any further significant decline may result in Board decision to discontinue maintenance and begin funding other programs such as FSP or enhanced sheriff/emergency response
- **System accessibility**—The initiation of #399 system (cellular phones act as call box directing call to CHP center) will be discussed as part of integration with possible 511 system in upcoming upgrade efforts and TTY.
- **Integration with other uses**—These strategies have been discussed but no action has been taken. Major effort will be required and need for connections to TMC, adding features/devices to poles may alter crash characteristics—traffic counts and fog detection may be most attractive.

4.3 Experiences of Other Jurisdictions

In order to achieve a better understanding of the potential issues and benefits of implementing traffic count system utilizing Smart Call Boxes in Kern County, a review of similar programs in other jurisdictions was conducted. Three such programs were identified, all of them in Southern California. (It is not surprising that California is the leader in such programs because the state has much more comprehensive Call Box programs than other states.) The three Smart Call Box programs that were identified have been implemented in San Diego, San Bernardino, and Riverside Counties.

4.3.1 San Diego County

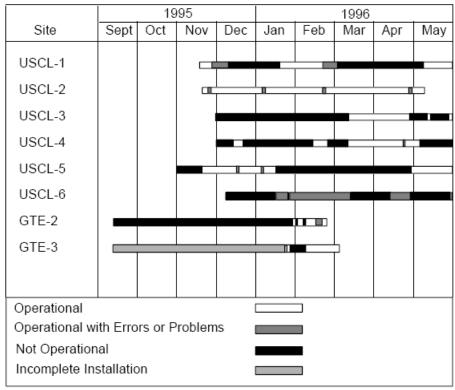
San Diego County began a Field Operational Test (FOT) of a Smart Call Box system in 1992, with implementation and evaluation of the system taking place in 1995-1996. The FOT was carried out by a consortium of Caltrans District 11, the Border Division of the California Highway Patrol (CHP), and the San Diego Service Authority for Freeway Emergencies (SAFE). The FOT was evaluated by San Diego State University (SDSU). Because microprocessor, communication, and solar technologies, as well as ITS protocols, have advanced substantially since 1996, the results of the FOT may be of limited applicability to current circumstances. However, some of the institutional and technical issues are still relevant and instructional.

The traffic census component of the FOT included eight Smart Call Box units developed by two vendor teams. Most of the units employed a standard inductive loop traffic counter external to the call box, using existing induction loops. One vendor's installations involved modification of existing call boxes, while the other vendor's call box units were specially installed.

The Smart Call Box units experienced a variety of technical problems that resulted in very poor reliability. All units except one experienced extended periods of down time. Problems included software problems, disruption of external power supplies, failure of the cellular phone, and failure of the traffic counter. **Figure 4.2** shows the periods during which each unit was operational.

In addition to the clear reliability problems, the Smart Call Box FOT also exposed issues related to system integration. All of the Smart Call Box designs involved integration of external field devices such as traffic counters, weather sensors, or video compression units that were not originally designed to work together. The SDSU evaluation noted that, "Traffic counter manufacturers, in particular, introduce improved products from time to time and naturally want to use the latest version when new systems are developed. 'Upgrades' tended to result in software incompatibilities with equipment that had been compatible with the previous version."

Figure 4.2: Operational Status of San Diego County
Smart Call Box Traffic Census Sites



Source: Smart Call Box Field Operational Test Evaluation Summary Report, San Diego State University, 1997

In addition, each component of a Smart Call Box must be integrated with equipment and/or software at the data collection center. System integration failures were a major problem in the performance of the test systems. The SDSU evaluation observed that, "A standard communications protocol for traffic counters and similar devices that recognizes the requirements of wireless communications systems is highly desirable. Given the tendency for counter equipment to evolve, such a standard may be the only way to ensure that smart call box systems will not need to be reinvented every time a new model of counter is introduced."

The SDSU evaluation of the Smart Call Box FOT concluded that, "Where possible, tests should focus on solving problems as they are perceived by potential users of the technology being developed, and not on the exploitation of a particular type of technology. In this case, this would have implied a focus on developing wireless data collection systems rather than on exploiting existing call box technology." In particular, the evaluation noted that the traffic count devices made very limited use of the underlying call box technology. Given the relatively low cost of cellular modems, it may be more cost effective to develop stand-alone count stations with cellular modems to reduce the system integration issues.

4.3.2 San Bernardino County

In 1997, Riverside and San Bernardino Counties jointly undertook a pilot program involving the installation of Smart Call Boxes in the two counties. Their experiences and results were strikingly different. San Bernardino County's experience is recounted first. There is no written evaluation of the San Bernardino program; this discussion is based on recent conversations with staff of San Bernardino Associated Governments (SANBAG).

San Bernardino County initially installed 20 Smart Call Boxes. The County experienced maintenance problems with the Smart Call Boxes from the start, and began removing them soon after the program began. Currently, there are 15 remaining Smart Call Boxes in the County. The Smart Call Boxes that were installed use analog cellular telephone technology, and almost as soon as they were installed, carriers started converting to digital transmission technology. Thus, they became obsolete almost upon installation. Reliability was also a major problem.

SANBAG staff also complain that, even with the units that work, the data collected are transmitted directly to Caltrans, so that it is not available for local planning purposes. This highlights the importance of establishing institutional arrangements that best serve the needs of all program participants.

4.3.3 Riverside County

Riverside County installed 20 Smart Call Boxes under two pilot programs in 1997 and 1999. Currently, 17 are still in operation. All are installed on the State highway network. According to a 1999 evaluation of the 1997 pilot program conducted by VRPA technologies, the traffic count data are stored on-site at the Smart Call Box and can be retrieved remotely by an incoming call to the Smart Call Box, using proprietary traffic counting and reporting software. The data retrieved from the Smart Call Boxes are analyzed using another proprietary software program that calculates traffic volume characteristics such as peak hour flows, K and D factors, ADT, and AADT. These data are collected and analyzed by a private contractor on behalf of the Riverside County Transportation Commission (RCTC) and are used for Congestion Management Plan (CMP) reporting purposes, as well as being made available to the County and to local agencies.

Riverside County's experience with the Smart Call Boxes has been sufficiently positive that the 2006 CMP describes a proposed significant expansion of the program. Some of the additional locations will be the traditional Smart Call Boxes, while others will be so-called "black boxes" that are stand-alone data collection devices with wireless transmission capabilities, but no associated Call Box.

4.4 Recommendations

- Based on the results of the Call Box Inventory and Evaluation recently conducted by Kern COG, identify locations that are not compliant with State Guidelines (included in Appendix D) or certain undesirable call box type installations. Recommend removal of these call boxes and their "working pairs" or correction of problems. Potentially consider additional installations on certain identified necessary highway locations (system interchanges, steep grades, inclement weather locations, etc.).
- Defer deployment of "Smart Call Boxes" until operational issues can be resolved.
- Consider deployment of the Countywide #399 System and integrate with 511 System and TTY capability.

5.0 Technology and System Integration Options

This section evaluates system integration options related to potential components of the RTMIP. For each option, the feasibility of incorporation into the RTMIP, as well as options for doing so, if appropriate, are considered. Subsequent sections elaborate on and refine the Uniform Traffic Count Program outlined in the previous Needs Assessment report, as well as review possible funding sources for RTMIP components.

5.1 Traffic Count Technology Options

A variety of technological options exist for conducting traffic counts, and innovations continue at a fairly rapid rate as new technologies are developed and existing technologies are improved. The options range from the low-tech methodology of having a person observing a location and recording traffic volumes with a manual counting device to high-tech methodologies involving video or microwave detection of vehicles. In general, the low-tech methodologies require a lower capital investment but higher labor costs, and are more easily adaptable to changing circumstances. The high-tech methodologies require greater capital investments, but lower on-going labor costs, and can be less adaptable to changing circumstances, typically because they are installed at fixed locations and are limited by their initial design parameters.

As noted above, traffic counting technologies continue to evolve. Those that are currently commercially available include the following:

- a. Pneumatic tubes
- b. Magnetic imaging
- c. Inductive loops
- d. Video detection
- e. Microwave detection

The advantages and disadvantages of each of these technologies are discussed below.

a. Pneumatic tubes. Pneumatic tubes represent an established technology that is in widespread use. They consist of a rubber tube, or set of tubes, that is placed across the roadway and that uses pressure changes to detect the number of axle movements. A counter placed by the side of the road records the axle movements and, using algorithms to detect axle spacing, can convert axle counts and axle spacing into vehicle classification counts. They are typically used for temporary (i.e., one week or less) installations.

Pneumatic tubes have several advantages. First, they are very inexpensive, with contractors providing count services for as little as \$50 - \$100 per day per location. Second, they can easily be installed and relocated as necessary. They are a familiar technology, and many suppliers are available.

The main disadvantage of pneumatic tubes is that they may become displaced, especially on high-volume roadways or roadways with many heavy vehicles. Although the algorithms used to convert axle counts to vehicle counts are constantly being improved, they are far from perfect, particularly in congested conditions. However, they are generally adequate for measuring passenger car equivalent flows.

b. Magnetic imaging. Magnetic imaging is an alternative to pneumatic tubes. The technology consists of a giant magnetoresistance (GMR) magnetic sensor that is placed in the travel lane that uses changes in the magnetic field to determine vehicle length. The GMR sensor can either be installed permanently in the pavement or placed on top of the pavement as part of a temporary installation. An associated counter converts vehicle length into vehicle classification counts. They can be used for temporary (i.e., one week or less) or permanent installations.

Relocatable magnetic imaging devices are also relatively inexpensive. They can also easily be installed and relocated as necessary. However, relocatable magnetic imaging devices are in relatively limited use, and few suppliers are available. Like pneumatic tubes, they may become displaced, especially on high-volume roadways or roadways with many heavy vehicles. Because of their limited use, their accuracy has not been as thoroughly evaluated as pneumatic tubes. However, they are likely adequate for measuring passenger car equivalent flows.

Permanently installed magnetic imaging devices are more durable but more expensive, with a typical cost being \$1,000 per lane, plus approximately \$3,000 for a controller cabinet. They must be installed near a power source, or else dedicated power (e.g., solar) must be provided. Optionally, communications infrastructure can also be provided to transmit the data collected to a central location. Otherwise, each location must be visited by a technician on a regular basis to download the data.

c. Inductive Loops. Inductive loops are another established technology that is in widespread use. They consist of a wire loop, or set of loops, that is permanently installed in the pavement of the roadway. An alternating electric current through the loop creates a magnetic field that is disturbed by the presence of a conductive object (e.g., a vehicle). A sensor records the presence of the vehicle and, using algorithms to detect vehicle length and spacing, can convert vehicle length and spacing into vehicle classification counts. As noted above, inductive loops are typically used for permanent installations.

Inductive loops have several advantages. They are an established technology, and their design and maintenance are well understood. Commercially available equipment is available for relatively easy installation. They are far more durable than the technologies intended for temporary installations, although they may still suffer damage on roadways with many heavy vehicles.

The cost of inductive loops is similar to that of permanently installed magnetic imaging devices, with a typical cost being \$1,000 per lane, plus approximately

\$3,000 for a controller cabinet. They also must be installed near a power source, or else dedicated power (e.g., solar) must be provided. Optionally, communications infrastructure can also be provided to transmit the data collected to a central location. Otherwise, each location must be visited by a technician on a regular basis to download the data.

d. Video detection. Video detection uses a video camera and specialized software to detect the presence of vehicles at fixed locations in the road. A video camera is permanently installed on a pole adjacent to the roadway. A single camera can count several lanes simultaneously. Algorithms convert vehicle length and spacing into vehicle classification counts. Video detection is typically used for permanent installations.

Video detection equipment is commercially available. Installation is relatively easy, although site-specific design plans must be generated for each location. Because they are not installed in or on the roadway surface, the video cameras are not damaged by heavy traffic volumes.

The primary disadvantage of video detection compared to inductive loops is cost. The detectors require substantial design and installation effort. The detectors typically incorporate cellular telephone technology for transmitting data. Thus, they require associated communications infrastructure to receive the data at a central location. A complete installation of a video detection station costs approximately \$20,000 to \$25,000. Installation costs can be considerably reduced if a mounting pole (e.g., a luminaire pole) is already available at the desired location.

e. Microwave detection. Microwave detection is a relatively new technology that has recently been adopted by Caltrans. A microwave detector is permanently installed on a pole adjacent to the roadway. A microwave frequency is used to detect the presence of an object in the travel lane. A single detector can count several lanes simultaneously. Algorithms convert vehicle length and spacing into vehicle classification counts. Microwave detection is typically used for permanent installations.

Like video detection, microwave detection equipment is commercially available. Installation is relatively easy, although site-specific design plans must be generated for each location. Because they are not installed in or on the roadway surface, the microwave detectors are not damaged by heavy traffic volumes.

Microwave detection is a new technology, and its maintenance needs are not well understood. The primary disadvantage of microwave detection compared to inductive loops is cost. As with video detection, the detectors require substantial design and installation effort. The detectors typically incorporate cellular telephone technology for transmitting data. Thus, they require associated communications infrastructure to receive the data at a central location. A complete installation of a microwave detection station costs approximately \$20,000 to \$25,000. Installation

costs can be considerably reduced if a mounting pole (e.g., a luminaire pole) is already available at the desired location.

In reviewing and evaluating the traffic count technology options available, it is important to keep in mind that the RTMIP is a *regional* effort covering an area of over 8,000 square miles. The data collected are to be used for regional planning efforts, such as identifying growth rates and developing future traffic forecasts. The Needs Assessment identified a traffic count program with nearly 600 individual count locations and more surely to be added as the region continues to grow.

Based on the large number of count locations, the cost of permanent installations such as inductive loops or microwave detection would be prohibitive. Furthermore, such permanent installations are not appropriate to the needs of the program, which are primarily short-term traffic counts. The short-term nature of the counts does not justify the large capital investment that would be required for these methodologies.

The City of Bakersfield currently uses inductive loops for the six City control stations established as part of its existing traffic count program. These locations are counted continuously, with the data recorded locally. There is no communications with a central location, such as the City's Traffic Operations Center. Instead, a technician visits each location approximately monthly to download the data from the recorders. Kern COG may want to consider a similar procedure for the Master Stations identified in the proposed RTMIP.

Two technologies are best suited for short-term installations: pneumatic tubes and magnetic imaging. As discussed earlier, pneumatic tubes are an established technology available from numerous suppliers. Magnetic imaging is in much less widespread use, and Kern COG's experience with it has been disappointing. A limited number of suppliers results in infrequent and expensive upgrades and maintenance. As the equipment ages, it has become more and more problematic to maintain it.

Taking into consideration the advantages and disadvantages of the available technologies, as well as the needs of the RTMIP traffic count program, it is recommended that Kern COG use pneumatic tube counting technology as the basis for its count program. This technology is inexpensive, flexible, and provided by numerous suppliers. In addition, Kern COG may want to consider using inductive loop technology for master station locations, with or without communications capabilities.

5.2 ITS Strategies and Solutions

Kern COG has undertaken a study to investigate the implementation of Intelligent Transportation Systems (ITS) in Kern County. Kern County is also a participant in the San Joaquin Valley Intelligent Transportation Systems Strategic Deployment Plan (SDP). These studies investigated appropriate ITS technologies for the unique urban/rural mix found in Kern County. The SDP identified the following priority projects in Kern County:

- Smart Call Box System Deployment
- Smart Studs Demo Project
- Incident Management Procedures
- Communication Network, Phase II
- Kern County Regional Communication Links
- RWIS with CCTV System
- Bakersfield TOC Expansion
- GET Fare Equipment Deployment

It is not the purpose of the RTMIP to reexamine the ITS priorities established by the SDP. Rather, the purpose of the current effort is to evaluate means to integrate the ITS strategies with RTMIP activities. The Smart Studs Demo Project and the Roadside Weather Information System (RWIS) are components of a system to detect and alert drivers about hazardous weather conditions. The Incident Management Procedures would comprise a set of interagency agreements concerning use and sharing of resources during major incidents. The GET Fare Equipment Deployment covers the installation of electronic fare collection equipment on transit vehicles. Thus, none of these programs is directly related to the data collection and distribution goals of the RTMIP.

Of the remaining programs, Smart Call Box System Deployment and the communication network programs are discussed below in Section 5.4, "Integration of Permanent Count Locations with Call Boxes." The Bakersfield TOC Expansion is discussed below in Section 5.5, "Integration with Traffic Operations Centers and Traffic Signal Cameras."

5.3 Existing and Future Assets

Kern COG currently has an inventory of magnetic imaging portable traffic analyzers, Nu-Metrics Hi-Star models NC90a and NC97. In the past, these traffic counting devices were lent to member agencies upon request. Currently, the devices have suffered a failure rate of approximately 50 percent, and Kern COG does not have funding to exchange or replace them.

In recent years, Kern COG has contracted with a traffic data collection firm to conduct traffic counts throughout the County. As part of this program, the contracted firm is responsible for providing its own traffic counting equipment. Thus, the capital expense has been transferred to a contractor. Since this program has been in place, the demand by member agencies for the equipment owned by Kern COG has virtually disappeared.

Kern COG is a Metropolitan Planning Organization and a Regional Transportation Planning Agency whose core functions are in policy formulation, data analysis, and regional coordination. Raw traffic data collection is not a core functionality of Kern COG, and it would seem to make little sense for the agency to maintain a substantial capital investment in traffic data collection equipment. This is especially true given that there are numerous

private sector suppliers who are able and willing to provide data collection services at competitive rates.

As described earlier, traffic data collection technologies continue to evolve, both in terms of hardware and software. For the foreseeable future, the technologies employed in the RTMIP count program will involve devices that are physically placed in the roadway, where they are subject to damage from the traffic volumes that they are intended to count. Inevitably, there will be ongoing maintenance and replacement costs associated with such equipment. Given this context, it is recommended that Kern COG no longer seek to maintain its own inventory of traffic counting equipment and instead rely on private sector contractors to provide and operate such equipment. These firms use the equipment on a continuous basis and are in a better position to amortize maintenance and replacement costs, reducing overall costs to the agency.

5.4 Integration of Permanent Count Locations with Call Boxes

Integrating permanent count locations with call boxes can take advantage of the clustering of multiple capabilities at a single field location to reduce program costs. In the case of the RTMIP, the cost of a permanent count location can be substantially reduced and its capabilities can be increased by taking advantage of the infrastructure in place for the call box system. Call box locations can be equipped with traffic detection devices, most likely inductive loops, and utilize the communication capability of the call box to transmit traffic volume data to a central location. In addition, as an ITS communications infrastructure is implemented, data can easily be transmitted throughout the network. Thus, the cost of providing power to the count location is eliminated, and data collection costs are reduced because a technician no longer needs to travel to the field to retrieve the data.

Because of the additional cost associated with a permanent count installation (discussed earlier in Section 5.1), such installations should be limited to only those locations where data collection is needed on a frequent or continuous basis. As the RTMIP is conceived, these would likely be only the Control Station locations. Given a typical cost of \$4,000 to add data collection capabilities to a call box versus a conservative estimate of \$100 per location for a temporary count installation, the same funds could provide either a single permanent installation or 40 years of annual counts.

The existing call boxes in Kern County use an analog cellular signal. This technology is not suitable for data transmission, so data collection efforts could not be integrated with the existing call box system. However, the Kern Motorist Aid Authority is undertaking an effort to replace the entire call box system with one that uses digital technology. As the system is converted to digital, permanent count locations could be integrated with the call box system.

The possibility of integrating Control Station locations with call boxes raised an important question concerning the siting of Control Stations. The existing Control Stations within the County are located off the State highway system. This simplifies temporary data collection

installations by eliminating the need for local agencies to obtain an encroachment permit from Caltrans for data collection activities. However, the call box system is largely (but not entirely) installed on State highways. Therefore, if Control Station Locations were to be integrated with call boxes, new Control Station locations would need to be identified, and continuity with historical data at the existing Control Stations would be lost. Given the reliability issues with "Smart Call Boxes" and the loss of continuity with historical data, After discussion among Kern COG and its member agencies, it was decided to maintain the Control Stations at their current locations.

5.5 Integration with Traffic Operations Centers and Traffic Signal Cameras

The City of Bakersfield maintains a Traffic Operations Center (TOC) whose purpose is to collect, manage, and distribute traffic operations data for the City. Currently, the TOC has hard-wired connections to traffic signals at approximately 220 intersections throughout the City. Of these, approximately 80 intersections have video detection capabilities. The video detection capabilities at these locations could provide the ability for continuous traffic data collection, although this capability is not currently being utilized.

Because of the large proportion of traffic count locations that are located in the City of Bakersfield, the use of data collected directly by existing equipment in the City could reduce the scope of the ongoing traffic count program. However, several steps would need to take place for this to happen:

- a) Video detection would have to be implemented at more locations
- b) Vehicle classification abilities would have to be incorporated into the video detection software
- c) A format and protocol for transferring data from the TOC to the RTMIP count program would have to be established

Expansion of the Bakersfield TOC is included in the ITS Strategic Deployment Plan. As the TOC is expanded, these additional capabilities could be added. In the short term, however, the Bakersfield TOC is likely to focus on other efforts more directly related to its central mission, such as establishing communication with all City signals for monitoring signal status and updating timing, as well as installing cameras to monitor traffic flow and congestion.

The County of Kern currently operates a TOC on a smaller scale, with dial-up connections to approximately 70 traffic signals. As more traffic signals are tied into the system and detection capabilities are strengthened, similar efforts could be undertaken to provide data collection capabilities.

5.6 Opportunities to Combine Data Collection Efforts

The RTMIP has established a plan for on-going traffic count data collection. This section evaluates opportunities for combining other types of data collection efforts with the traffic count program.

a. Speed Survey Data. As discussed in the Needs Assessment, most of the jurisdictions in the County collect speed data, and most use their own staff to do so. Follow-up discussions revealed that speed data are generally collected for the purposes of establishing speed limits under State law. Since the legislative body of each jurisdiction must make findings to establish speed limits, it is appropriate that the responsibility for collecting the relevant data remain at the local level. Therefore, it is not recommended that speed survey data be incorporated into the RTMIP.

However, the pneumatic tube equipment used to provide traffic counts are also capable of producing speed information at the same time. Since the speed information is derived from the same raw data, there is little additional cost to collecting and reporting speed information. The accuracy of this type of speed information is not sufficient for establishing speed limits. It may, however, be of interest in monitoring congestion on particular roads or for route coordination. Therefore, it is recommended that Kern COG discuss with its member agencies whether such data would be useful.

- **b. Pavement Condition Data.** As discussed in the Needs Assessment, pavement condition data is becoming increasingly important for jurisdictions as they plan their capital improvement budgets. Reliable, quantitative pavement condition data are best collected by means of specialized equipment that is expensive and will not typically be cost-effective for small or even medium-sized jurisdictions to own, such as falling weight deflectometers or video or laser pavement profilers that are connected to computerized data collection systems. Therefore, the collection of pavement condition data is a logical effort to centralize through the RTMIP. It is of region-wide importance, and often not easily collected at the local level. Therefore, it is recommended that Kern COG initiate a program for the collection of these data on the model of the traffic count data program.
- **c. Freeway Service Patrol.** There is currently no Freeway Service Patrol (FSP) in the Kern COG region. However, implementation of an FSP is included in the San Joaquin Valley ITS Strategic Deployment Plan. At such time as an FSP is implemented, it would be logical to incorporate its data collection into that of the Call Box system, since FSP calls are often made through the Call Box system.
- **d. Accident Reporting.** Unlike traffic count data, which are collected on a regular basis at recurring locations, accident data must be collected wherever and whenever accidents occur. Therefore, they are a fundamentally different type of data than traffic counts.

Currently, accident data are collected throughout the County by local police departments, the County Sheriff, and the California Highway Patrol (CHP). The data are supposed to be submitted to the statewide reporting system for accident data, the Statewide Integrated Traffic Records System (SWITRS), which has been established and is maintained by the CHP. However, it has been the experience of local jurisdictions that only fatal and injury accidents, which constitute less than one half of all accidents, are reported in SWITRS.

In response to this situation, the City of Bakersfield maintains its own accident database, in addition to SWITRS. City staff comb Bakersfield Police Department accident reports and enter the accident data into the database, including geocoding to the nearest intersection with linear referencing. Approximately 300-400 accidents within the City of Bakersfield are recorded this way each month.

Accident data are highly sensitive because of the potential for litigation. Therefore, agencies are reluctant to share these data with any external organization. Furthermore, to establish a program similar to Bakersfield's on a County-wide basis would require the dedication of at least one full time equivalent position to the task. Therefore, it is not recommend that the RTMIP include such an effort at this time. Rather, it is recommended that Kern COG work with the local jurisdictions to improve reporting of accident data to SWITRS.

In addition, it is recommended that Kern COG work with the CHP and on-going efforts such as that at the University of California at Berkeley to improve geocoding capabilities of SWITRS data.

e. Transit Boardings. The two largest transit providers in the County, Golden Empire Transit (GET) and Kern Regional Transit, currently collect their own data on transit boardings. GET buses are equipped with infra-red devices to count passenger boardings at each stop. However, these devices are generally not used because of malfunctions and lack of accuracy. Therefore, the only data collected on a regular basis by GET are farebox counts by routes, which reveal only total ridership. These data are summarized monthly in an Excel spreadsheet.

Kern Regional Transit ridership data are collected manually by bus drivers. Total ridership is tabulated monthly and summarized in an Excel spreadsheet.

Thus, at this time, location specific data (i.e., boarding locations) are not collected for the major transit systems in Kern County. Only summary ridership data are collected. While these data are useful to the transit agencies, they do not play a major role in the planning efforts of other member agencies. Therefore, integrating these data collection efforts into the RTMIP does not appear to be a priority.

f. Call Box Usage Data. Call box usage data are currently collected by Kern COG in its capacity as the Kern Motorist Aid Authority. Call boxes are assigned unique identifiers, and their locations have already been geocoded. Therefore, call box

usage data could be added to the RTMIP database should Kern COG and its member agencies choose to do so.

6.0 Uniform Traffic Count Program Implementation Plan

A major component of the RTMIP is to establish a Uniform Traffic Count program that will provide useful and accurate data to jurisdictions within the County in an economical fashion. An additional important function of this program is to comply with state and federal reporting requirements, such as those associated with the Highway Performance Monitoring System (HPMS).

6.1 Traffic Count Schedule

The Draft Needs Assessment described a count program with 14 Control Station locations and an additional 584 count locations. Based on discussions with Kern COG and its member agencies, the program was revised to include 22 Control Station locations and an additional 1,021 count locations, for a total of 1,043 count locations. The Draft Needs Assessment also recommended that:

- Count data be collected at each identified location for a 24-hour period once every year on a weekday (Tuesday, Wednesday, or Thursday) while local schools are in session.
- Each location should be counted at approximately the same time each year in order to facilitate analysis of changes over time.
- Control stations should be counted for a 7-day period <u>four times each year</u>. <u>Monthly</u> or 365 day per year (using a permanent counters) control station counts should be considered as resources are available.

The Federal Highway Administration's *Traffic Monitoring Guide* (TMG) suggests that statistical analyses indicates that <u>increasing the length of each count is more important to improving data reliability than increasing the frequency of the counts</u>. The TMG recommends counting each location at least once every six years, with <u>high growth or other special needs locations counted more frequently</u>. In addition, <u>HPMS sample segments must be counted at least once every three years</u>. Some cost savings could also be achieved by counting some locations on a less than annual basis.

Discussion with Kern COGs member agencies revealed that a high value was placed on having annual counts throughout the larger jurisdictions. Therefore, it was decided that the count schedule should remain as originally proposed, one 24-hour period each year for each location. However, to achieve more reliable AADT volumes, discussed below, it was decided that the following element of the count schedule should be modified as follows:

 Control stations should be counted for a 7-day period <u>each month</u> as a resources are available.

6.2 Traffic Count Standardization

Currently, the primary source of traffic counts in Kern County is Kern COG itself, by means of a contract with a traffic count provider. These counts are provided in a format defined by Kern COG, including latitude and longitude data to facilitate integration into a GIS database. The GIS database created as part of this RTMIP imports and plots these count data.

The City of Bakersfield and the County of Kern still conduct some traffic count activities independent of the Kern COG count program. To date, these counts continue to use software that produces reports in a proprietary format that is not readily incorporated into a larger database. It is possible to continue to investigate means of transferring these data into a format that can be imported into GIS. It is recommended that a better solution would be to establish a limited number of standard formats for traffic count reporting and to conduct all future counts using technology and software that can produce reports in those formats.

Traffic volume data for Caltrans facilities exist in two systems, the Freeway Performance Measurement System (PeMS) and the Transportation System Network (TSN). As its name implies, PeMS only collects data on freeways, not other state highways. At this time, there is no PeMS data collection in Kern County. In the future, it may be possible to make use of PeMS data. TSN data are accessible only to Caltrans personnel, but they can be converted to a spreadsheet format. With appropriate interagency procedures in place, it would be possible for Kern COG to obtain TSN data on a regular basis from Caltrans. However, it will require some effort to incorporate those data into a GIS database because of the difficulty in goecoding the count locations. In TSN, count locations are identified by route number, postmile, and type of roadway segment (e.g., mainline or ramp). It will be necessary to develop a linear referencing system to identify locations along extremely long roadway sections, and then to identify the appropriate ramp or mainline segment.

6.3 Traffic Count Reporting Procedures

On an ongoing basis, traffic count data may be collected by any of Kern COG's member agencies, although it is anticipated that the majority of data collection efforts will be conducted under contract to Kern COG itself. As described above for the RTMIP traffic count program to be successful, it will be necessary for all counts to be reported in a format that is compatible with the RTMIP database, including the provision of latitude/longitude coordinates.

All traffic counts should be submitted to Kern COG in the established electronic format. Kern COG should designate one person to receive and process submitted counts. Counts should be processed and added to the database on a monthly basis. Prior to adding individual counts to the database, Kern COG should perform a reasonableness check on the data, including latitude/longitude coordinates.

Traffic count locations are identified in the database by their latitude/longitude coordinates. Therefore, it is critical that all future counts are identified by the latitude/longitude of the counts currently in the database, not by an actual GPS reading taken with the new count. The latitude/longitude coordinates must be specified in decimal form, not degrees/minutes/seconds.

6.4 Performance Monitoring Program Recommended Applications and Procedures

As the traffic data is collected, the information will be used to calculate and develop various performance monitoring relationships and applications. The following describes some key applications and analyses using the collected data as well as typical traffic monitoring and performance measurement methods that may be employed.

- ADT volumes by direction—measures the magnitude of traffic using the roadway segment in 24 hours
- Peak period/hour by direction—shows the magnitude of traffic using the roadway segment in the peak period or hour
- Peaking factors (peak volume/ADT)—shows the sharpness of the peak hours/periods on the roadway segment
- Generalized arterial volumes/capacity (V/C) ratio by direction for ADT or peak hour/periods—shows generalized capacity availability or deficiency
- Vehicle classification data—shows truck volumes and truck percentages in each corridor
- Traffic growth trends and change in travel patterns—by compiling and analyzing the data for several years, traffic growth trends, modal shift and goods movement trend changes and capacity utilization/performance of the system can be established Countywide, by corridor, or by subregion

The RTMIP database includes a module that calculates Average Annual Daily Traffic (AADT) volumes from the raw count data. This module identifies the day of week and the month of each count, and the appropriate control station for each raw count. It then applies appropriate factors based on the control station to calculate an AADT from the raw count. Updated day-of-week and monthly adjustment factors must be entered into the database for each count year.

6.5 System Update Recommendations

The Uniform Traffic Count Program and its monitoring process are intended to be a system which will change over the years based on the County's changing travel patterns and Kern COG and local agency planning needs, requirements and regulations. It is expected that all component of the Uniform Traffic Count Program may be modified in the future based on these changing requirements.

It is recommended that the Uniform Traffic Count Program be evaluated <u>once every two years</u>, and that the count location selection criteria be used to modify the list of count locations. The process to determine potential changes to the count locations or monitoring schedule should be initiated by Kern COG staff sending a change request notice to local jurisdictions. Upon receipt of the notice, local jurisdictions will have an opportunity to recommend additions and/or deletions to the system based on documented and supporting data for the selection criteria.

Upon receipt of the requested changes, Kern COG staff will compile the requests and make recommendations for new count locations to be added, or existing ones to be deleted, to bring the system into compliance with the selection criteria.

In addition, the frequency of counts and the technology used to conduct them should be reviewed as part of the biannual evaluation. In particular, the installation of permanent counting equipment at the master station locations should be considered.

The Control Stations in the count program are located in the City of Bakersfield and unincorporated Kern County. Staff of each of these agencies should provide Kern COG updated day-of-week and monthly adjustment factors for the AADT calculation by March 1 of the following year.

7.0 Funding Sources

Procuring funding for data collection and planning activities is always challenging. Most State and Federal funding sources are intended for capital projects, primarily capacity enhancements of the surface transportation system. A few are intended for transit capital investments or operating activities. There are few funding sources that allow the flexibility to use funds for planning activities. Data collection is mandated by the Federal government as part of the Highway Performance Monitoring System (HPMS), and the HPMS program has recently emphasized the importance of ensuring data quality. However, no funding source exists for the improvement or data collection activities.

The existing Kern COG traffic count program is funded by Regional Surface Transportation Program (RSTP) funds. In addition, Kern COG's member agencies are contributing funds for the program under a Memorandum of Understanding in effect through 2010.

The following potential funding sources were investigated for purposes of this evaluation:

- AB 2766 (Air Quality Vehicle Registration Fee) Funds
- Carl Moyer Memorial Air Quality Standards Attainment Program
- Congestion Mitigation and Air Quality (CMAQ)
- Environmental Enhancement and Mitigation (EEM)
- Federal Statewide Transportation Improvement Program (FSTIP)
- Federal Transportation Improvement Program (FTIP)
- Intelligent Transportation Systems (ITS) Research and Development
- Local Transportation Fund (LTF) of the Transportation Development Act (TDA)
- Motor Vehicle Emission Reduction Program (MVERP)
- Regional Surface Transportation Program (RSTP)
- State Transportation Improvement Program (STIP)
- State Highway Operation and Protection (SHOPP)
- Transportation Enhancement Activities (TEA)

Based on a review of the eligibility criteria for each of the above programs, it appears that the following programs are *potential* funding sources for future projects under the RTMIP:

AB 2766 (Air Quality Vehicle Registration Fee) Funds—Assembly Bill 2766, adopted in 1990, authorizes the Department of Motor Vehicles to collect a registration surcharge of \$4 per vehicle to fund programs that reduce air pollution from motor vehicles and for related planning monitoring, enforcement and technical studies. Forty percent of these funds are returned to Cities and Counties to fund transportation-related projects that reduce air pollution. Projects that are funded with AB2766 funds must meet the criteria and guidelines in the California Air Resources Board's (CARB) *Criteria & Guidelines*, which state:

The primary purpose of the funds is to reduce emissions from the use of motor vehicles. However, state law also recognizes the need to develop clean air plans that identify the strategies for meeting air quality standards. Ambient air monitoring and technical studies needed to implement the California Clean Air Act are other eligible uses of the funds.

...

The allocation of motor vehicle fees for district planning and technical work should be detailed in district budgets and approved by governing boards. These technical activities should not be funded entirely by motor vehicle fees; at most, the funding should be proportionate to the relative contribution of mobile source emissions.

Thus, to the extent that reliable and accessible transportation data are necessary for the development of plans to carry out Clean Air Act activities, it would appear that AB 2766 funds could be used for RTMIP activities.

Congestion Mitigation and Air Quality (CMAQ)—The CMAQ program was created under the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991, continued under the Transportation Equity Act for the 21st Century (TEA-21), and reauthorized by the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). The purpose of the CMAQ program is to fund transportation projects or programs that will contribute to attainment or maintenance of the national ambient air quality standards for ozone, carbon monoxide (CO), and particulate matter (PM).

According to the CMAQ program's Interim Program Guidance (October 31, 2006):

Activities in support of eligible projects also may be appropriate for CMAQ investments. Studies that are part of the project development pipeline (e.g., preliminary engineering) under the National Environmental Policy Act (NEPA) are eligible for CMAQ support, are FTA's Alternatives Analyses. General studies that fall outside specific project development do not qualify for CMAQ funding. Examples of such efforts include major investment studies, commuter preference studies, modal market polls or surveys, transit master plans, and others. These activities are eligible for Federal planning funds.

Thus, to be eligible for CMAQ funding, an RTMIP activity would have to be tied to a specific CMAQ-eligible project, such as regional multi-modal traveler information systems, traffic signal control systems, transit management systems, incident management programs, or transportation demand management programs.

Local Transportation Fund (LTF) of the Transportation Development Act (TDA)–Under the Transportation Development Act (TDA) of 1971, funding is allocated to transit and non-transit related purposes that comply with regional

transportation plans. The TDA provides two funding sources: 1) Local Transportation Fund (LTF), which is derived from a ¼ cent of the general sales tax collected statewide, and 2) State Transit Assistance fund (STA), which is derived from the statewide sales tax on gasoline and diesel fuel. The State Board of Equalization, based on sales tax collected in each county, returns the general sales tax revenues to each county's LTF. According to the TDA regulations, up to 3 percent of annual program revenues can be allocated for the conduct of the transportation planning and programming process.

Thus, to the extent that reliable and accessible transportation data are an important part of Kern COG's planning and programming process, LTF revenues could be used to fund RTMIP activities.

Regional Surface Transportation Program (RSTP)— The Regional Surface Transportation Program (RSTP) was established by California State Statute utilizing Surface Transportation Program Funds apportioned under SAFETEA-LU. Of the Surface Transportation Program funds, 10% are allocated to Transportation Enhancements, 27.5% are retained by the State for its use, and the remaining 62.5% constitutes the RSTP, which is divided among Cities and Counties based on population. Surface transportation planning programs are explicitly identified as an acceptable use of RSTP funds. Thus, to the extent that reliable and accessible transportation data are an important part of Kern COG's planning activities, RSTP revenues can be used to fund RTMIP activities.

8.0 Implementation Matrix

Recommendation	Timeframe	Responsible Agency	Potential Funding Source
Implement Uniform Traffic Count Program			
Establish count frequencies as described in Action Plan	Immediate	Kern COG & member agencies	RSTP/LTF
 Employ pneumatic tube technology 	Immediate	Kern COG	
Counts provided by private sector contractor	Immediate	Kern COG / contractor	RSTP/LTF
 Counts supplemented by local agencies 	Ongoing	Member agencies	Local Agencies
 Establish uniform data reporting format(s) 	Immediate	Kern COG	RSTP/LTF
 Investigate permanent installations at Master Station locations 	Short-term	Kern COG	RSTP/LTF
Develop AADT calculation module	Complete	Kern COG / contractor	
 Biannual review of program 	Ongoing	Kern COG	RSTP/LTF
Data Integration			
Determine whether Master Stations will be co-located with Call boxes; relocate Master Stations if necessary	Complete; Re-evaluate as necessary	Kern COG	
 Implement video detection at traffic signals 	Long-term	Local agencies	AB2766 CMAQ
 Enable vehicle counting abilities at locations with video detection 	Long-term	Local agencies	AB2766 CMAQ
Develop protocol for transfer of video detection count data to RTMIP count program	Long-term	Kern COG and local agencies	RSTP/LTF
Include speed data with vehicle count program	Short-term	Kern COG and local agencies	RSTP/LTF
 Initiate a program for collection of pavement condition data 	Short-term	Kern COG and local agencies	RSTP/LTF; Local agencies

Recommendation	Timeframe	Responsible Agency	Potential Funding Source
Improve reporting of accident data to SWITRS	Short-term	Kern COG and local agencies	RSTP/LTF; Local agencies
 Investigate new approaches for geocoding SWITRS data 	Long-term	Kern COG	RSTP/LTF; PATH
 Do not include speed surveys for establishing speed limits 			
Do not include accident data in RTMIP count program			
Investigate future use of PeMS data	Long-term	Kern COG and Caltrans	PATH
 Investigate linear referencing system for TSN data 	Long-term	Kern COG and Caltrans	PATH

Appendix A [Available on CD on request]

Survey Instrument

Kern Council of Governments Questionnaire Local Jurisdiction Traffic Data Collection & **Performance Monitoring Efforts** (September 2006)



Your agency's name:			
Your name:			
Your responsibility/position: _			
Phone number:	Fax number:	E-mail Address	
Mailing Address:			
=			

Types of Data Collected

- Which of the following items of traffic data does your jurisdiction currently collect or maintain? Please answer the following questions (A through F) about each item of data using the appropriate code shown in brackets:
 - is the data collection done on a regular (routine, on-going) basis [R], for special studies (i.e. (A) traffic impact studies) only [S], or not collected at all [N]
 - are the counts, single day [S] average of 5-day weekdays [W] or full 7-day week [F], or both [B] are the data collected by agency staff [A] or contractor/consultant [C] (B)
 - (C)
 - (D) are the data maintained in electronic format [Y], not [N], or not applicable [N/A]
 - on average, what is the time cycle (period) between counts, in years, months (specify by (E) number)
 - (F) is this data collected to satisfy external reporting requirements such as: highway performance monitoring program [HPMS], congestion management program [CMP], other programs (please indicate by the appropriate acronym)

Questions	(A)	(B)	(C)	(D)	(E)	(F)
Data Collection Method> Type of Data V	regular [R], special study [S], not at all [N]	Single day [S], wkday avg. [W], full wk [F] both [B], [N/A]	agency staff [A] or consulta nt [C], [N/A]	data kept in electronic format? [Y/N], [N/A]	cycle between counts? (Yrs, mo.), or [N/A]	[HPMS] [CMP] other specify
Average daily link/segment volume						
Peak hour segment volumes						
Peak hr intersection turn movement						
Vehicle classification data						
Speed surveys/travel time data						
Vehicle occupancy						
Vehicle delay						
Queue length						
Accidents						
Pavement Conditions						
Other						

2. Approximately what percentage (please estimate) of your <u>arterials</u> do you cover with average daily	
traffic volume counts that are three years old or less? What percentage with peak hour traffic volume counts? What percentage with vehicle classification counts?	
3. How do you identify the location of the traffic volume information you collect? (check all that apply) Main street name and nearest cross street names Link/segment ID number unique to your agency Link/segment number in a regional or state system Geo-reference (i.e., latitude/longitude) Other (please specify)	
7.4. Does your agency publish a periodic traffic volume map (manual or GIS), list, table, or a publication? (Y/N) If yes, please specify the type	Formatted: Bullets and Numbering
8-5. Are your agency's collected traffic volume data available to the public (Y/N), or to other external agencies (Y/N), upon request? Are the counts available on the web, by email, or in person at agency?	Formatted: Bullets and Numbering
Inventory Methods and Equipment	
6. Do you have any established permanent count stations in your agency? (Y/N)	
13-7. Do you perform control counts to adjust for seasonal variations in traffic volumes? (Y/N) Do you perform other counts toward specific seasons or weekend travel? (Y/N) If yes, which season(s) tend to be targeted?	Formatted: Bullets and Numbering
15.8. Does your agency own traffic counting equipment? (Y/N) If yes, what kind?	Formatted: Bullets and Numbering
9. What is the approximate annual cost to the agency for collection of traffic data? What types of funds are used to fund your routine data collection efforts? What types of funds are used to fund your special data collection efforts?	
Computer-Based/Electronic Data Collection	
10. Do you have a central computer-controlled signal system in your jurisdiction? Please identify the manufacturer's/supplier's name or names	

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11.	Is it currently possible for you to capture and store traffic volume data from those systems? (Y/N)
12.	Do you have a traffic management center (TMC)? (Y/N)
13.	Do you have a variable message sign system? (Y/N) If yes, how many permanent locations (installed), how many movable equipment?
14.	Do you have plans to use your traffic signal systems to capture and store data for later use or to develop this capability?
15.	Are you using any other types of electronic/advanced technologies to assist your data collection efforts? (Y/N) If yes, what kind of technology is being used?
Trafi	fic Monitoring and Performance Measures
16.	Does your agency use performance measures to monitor traffic or transit conditions or trends on a regular or periodic basis? (Y/N)
17.	If yes, what type of performance measures do you generate from your data?
	Peak hour volume/capacity ratio Daily volume/capacity ratio Level of service Average Speeds Vehicle delay Transit Other (please specify)
Othe	or Questions
18.	Does your agency perform periodic radar speed surveys for setting speed limits? (Y/N) If yes, how often, and using what methods, or formats?
19.	Are your local police accident records periodically reported to the State and how often?
20.	If Kern COG could focus resources on road infrastructure data collection in your community, what would be your agency's most pressing needs?
Feel	free to make other comments about items not covered above or regarding this survey:

Thank you!

Please return this survey by e-mail to sbg@iteris.com or by fax to (213) 488-9440.

Meyer, Mohaddes Associates 707 Wilshire Boulevard, Suite 4810 Los Angeles, CA 90017 Phone: (213) 488-0345

Appendix B

Recommended Count Locations

Available on http://www.kerncog.org/publications

Data Dictionary

JURIS = Jurisdiction of count location **ROADWAY** = Roadway on which count is located **DIR** = **Direction from cross street CROSS STRE = Cross street of count location** ADT_ID = City of Bakersfield unique ID **LON** = Longitude of count location **LAT** = Latitude of count location **HPMS** = Whether location is on an HPMS segment **ENTRY** = Whether location is a community/county entry point **COMM** = If location is an entry point, community to which it is an entry LOC_SIG = Whether location was selected based on local significance **REG SIG = Whether location was selected based on regional significance** SCREEN = Whether segment containing count location is a model screenline **CONTROL** = Whether location is a proposed control station GM = Whether location was selected based on goods movement activity **CRIT** = Criterion number that resulted in addition of point to list (from Table 3.1) **CLASS** = Whether location is recommended for vehicle classification count **ROUTENO** = Kern County route number **HPMS_ID** = **HMPS** segment **ID**

Illpie	DIRECTION	Location in	ROADIMAY	DID	CROSS STOR	турс	ADT ID	DID	ION LAT	-	Max1 IXtra lie	n1 µoue	ENTRY	CONTRI	LOC_SIG REG_SIG	SCREEN	CONTROL	GM I	CRITERIA	Clace	ROUTE NO	HPMS ID	Location IP	у м	D. LTOTAL VOLUME
ARV	NS	Location_ID 1362	ROADWAY Comanche Point Road	SOUTH OF	CROSS_STRE Herring Road	iirt	AD1_ID	2-WAY	35.14373 -	-118.81254	X X XTA_III	HPMS	X	Arv	LOU_SIG KEG_SIG	ountEN	OUNIKUL	uni	4	CLASS	HOUTE_NO	nrw5_ID	Location_ID 1362	16 01 ·	14 125
ARV	NS	273	Compagnoni Street	BETWEEN	Curnow Road AND SR 119 (Taft Highway)			2-WAY		-119.02557	Х	Х							1	Х		06F327100000	273	16 01	13 863
ARV	NS	2976	Derby Street	NORTH OF	Sycamore Road			2-WAY		-118.82406	Х			Arv	x				6				2976		12 4,503
ARV ARV	EW NS	282 1430	Edison Highway Edison Road	BETWEEN SOUTH OF	SR 184 AND Brundage Lane Edison Highway			2-WAY 2-WAY		-118.90695 -118.87867	1	х		-		Х			1 8	Х	S395X	06F311115000	282 1430		14 2,375 13 3,197
ARV	NS	1428	Edison Road	SOUTH OF	SR 223 (Bear Mountain Boulevard)			2-WAY		-118.87811	1		х	Arv					4	х	33738		1428		13 3,197 12 1,991
ARV	EW	2703	Franklin	BETWEEN	Tejon Highway AND Walnut Drive			2-WAY		-118.82644	х	х							1	х		06Z268100000	2703		12 1,618
ARV	EW	1541	Hermosa Road	EAST OF	Fairfax Road			2-WAY		-118.92953	1		х	Bak					4				1541		14 483
ARV	EW	2523	Herring Road	WEST OF	SR 99			2-WAY	35.1506	-119.005	1			Ker	X				5				2523		12 639
ARV ARV	EW	2087 3634	Herring Road Laval Road	WEST OF	Wheeler Ridge Road Dennis McCarthy Drive			2-WAY 2-WAY	35.15107 34.98392	-118.91937 -118.9498	1			-				X	7	X			2087 3634		13 76 13 7.192
ARV	NS	4224	Malaga Road	SOUTH OF	SR 223 (Bear Mountain Boulevard)			2-WAY		118.860111	x		х	Arv				^	4				4224		13 7,192 12 23
ARV	EW	2918	Millux Road	WEST OF	Blue Loop Lane			2-WAY		-118.83243	x			Arv	x				6				2918		12 10
ARV	EW	1701	Mountain View Road	EAST OF	Fairfax Road			2-WAY	35.28152	-118.9286	1		х	Bak					4				1701		14 1,504
ARV	EW	1708	Muller Road	EAST OF	Fairfax Road			2-WAY		-118.93079	1		Х	Bak					4				1708		14 542
ARV	NS	3211	Rancho Drive	NORTH OF	Herring Road			2-WAY		-118.85079	1		х	Arv					4	х			3211		12 1,964
ARV ARV	EW	3212 356	Sandrini Road Segrue	WEST OF BETWEEN	Wheeler Ridge Road SR 184 AND Habecker Road			2-WAY 2-WAY		-118.92158 -118.91058	X 1	×		Ker	х				5	×		06Z325100000	3212 356		13 301 12 2,318
ARV	EW	1955	Sunset Blvd	EAST OF	SR 184 (Weedpatch Highway)			2-WAY		-118.91201	1	_ ^							8		256G	002325100000	1955		12 2,318 14 2,070
ARV	EW	860	Sycamore Road	EAST OF	Meyer Street			2-WAY		-118.83225	x			Arv	x				6				860	16 01	
ARV	EW	1961	Sycamore Road	WEST OF	Towerline Road			2-WAY		-118.80859	х			Arv	x				6				1961	16 01	14 466
ARV	NS	3208	Tejon Highway	SOUTH OF	Buena Vista Boulevard			2-WAY		-118.82452			Х	Arv					4	Х			3208		12 3,378
ARV	NS	1970	Tejon Highway	SOUTH OF	Di Giorgio Road			2-WAY		-118.82471									8		S407V		1970		14 3,873
ARV ARV	NS NS	1968 1969	Tejon Highway Tejon Highway	NORTH OF	Herring Road SR 223 (Bear Mountain Boulevard)			2-WAY 2-WAY		-118.82354 -118.82424	1	х	Х	Arv					1	X		06Z265100000	1968 1969		12 830 12 4,852
ARV	NS	3209	Tower Line Road	SOUTH OF	Buena Vista Boulevard			2-WAY		-118.80663	x		х	Arv					4			002203100000	3209	16 01 1 15 06 0	
ARV	NS	2990	Tower Line Road	SOUTH OF	SR 223 (Bear Mountain Boulevard)			2-WAY		-118.80623	х							х	7	х			2990		03 582
ARV	NS	370	Vineland Road	BETWEEN	DiGiorgio Road AND Panama Road			2-WAY	35.25923	-118.89631	х	Х							1	х		06Z319100000	370	15 04 2	21 500
ARV	NS	2005	Vineland Road	NORTH OF	Edison Highway			2-WAY		-118.89645	1		х	Bak					4				2005	15 04 2	22 2,728
ARV ARV	NS NS	2026 2027	Wheeler Ridge Road Wheeler Ridge Road	NORTH OF SOUTH OF	Laval Road SR 223 (Bear Mountain Boulevard)			2-WAY 2-WAY		-118.94288 -118.91451			1	1				Х	7 8	х	S387V		2026 2027		12 8,686 13 5,770
BAK	EW	814	18th Street	EAST OF	Chester Avenue		4	2-WAY		-119.01823			1	1					9		33374		814		13 5,770 07 4,929
BAK	EW	812	18th Street	EAST OF	F Street		2	2-WAY		-119.02299									9				812		05 4,559
BAK	EW	813	18th Street	EAST OF	H Street		3	2-WAY	35.37528	-119.02064									9				813	16 01 0	05 5,226
BAK	EW	815	18th Street	EAST OF	L Street		5	2-WAY		-119.01593			1	1					9				815	16 01 0	
BAK	EW	2631 816	18th Street 18th Street	EAST OF	Oak Street O Street		1	2-WAY 2-WAY		-119.03815 -119.01012			1	1					9				2631	16 01 0	
BAK BAK	EW	816 2632	18th Street 18th Street	WEST OF	Q Street Union Avenue		6	2-WAY 2-WAY		-119.01012 -119.00393						×			2	х			816 2632	16 01 0 16 01 °	05 2,804 12 3,068
BAK	EW	817	18TH Street (EAST)	EAST OF	Union Avenue		7	2-WAY		-119.00215	1			1					9				817		05 2,255
BAK	EW	819	19TH Street	WEST OF	C Street		9	2-WAY	35.37626	-119.02753	1								9				819	16 01 0	
BAK	EW	820	19TH Street	EAST OF	F Street		10	2-WAY		-119.02298	1								9				820	16 01 (05 1,979
BAK	EW	2503	19TH Street	WEST OF	Oak Street		8	2-WAY		-119.03931	1								9				2503		06 2,013
BAK BAK	EW	165 823	19TH Street 19TH Street (EAST)	WEST OF EAST OF	O Street Baker Street		11	2-WAY 2-WAY		-119.01096 -118.99299	1	х		-					9			06F254110000	165 823		05 2,228
BAK	EW	823	19TH Street (EAST)	EAST OF	Union Avenue		13	2-WAY		-118.99299									9				823	16 01 °	12 3,289 05 4,730
BAK	EW	825	21st Street	WEST OF	C Street		16	2-WAY		-119.02757									9				825		05 6,747
BAK	EW	826	21st Street	WEST OF	H Street		18	2-WAY		-119.02175									9				826		07 5,383
BAK	EW	827	21st Street	WEST OF	L Street		19	2-WAY		119.016869									9				827		05 5,619
BAK BAK	EW	2509	21st Street 21st Street	WEST OF EAST OF	Oak Street		15	2-WAY 2-WAY		-119.03891 -119.03783									9				2509 2633		07 4,304
BAK	EW	2633 2513	21st Street 21st Street	WEST OF	Oak Street O Street		20	2-WAY 2-WAY		-119.03783		-		-		х			9	x			2633 2513	16 01 0	
BAK	EW	828	21st Street	WEST OF	Union Avenue		20	2-WAY		-119.00373						х			2	х			828	16 01 0 16 01 0	05 3,250
BAK	EW	829	21st Street (EAST)	EAST OF	Union Avenue		22	2-WAY		-119.00209	1								9				829		07 1,827
BAK	EW	4358	23rd Street	WEST OF	Chester Avenue			1-WAY		-119.01918					x				9				4358		05 25,408
BAK	EW	4357	23rd Street	WEST OF	Eye Street			1-WAY		-119.02051					x				9				4357	16 01 0	
BAK	EW	4352 4354	23rd Street 23rd Street	WEST OF EAST OF	F Street F Street			1-WAY		-119.02391 -119.02318		_		-	x				9				4352 4354		05 23,520
BAK BAK	EW	4354	23rd Street	WEST OF	M Street			1-WAY		-119.02318					x x				9				4354		05 23,602 05 24,535
BAK	EW	4362	23rd Street	EAST OF	M Street			1-WAY		-119.01481					×				9				4362		05 25,828
BAK	EW	4372	24th Street	BETWEEN	Bay Street AND Oak Street			2-WAY	35.38106 -1	119.036602					x				9				4372	16 01 0	
BAK	EW	4359	24th Street	WEST OF	Chester Avenue			1-WAY		-119.01919					x				9				4359	16 01 (07 25,566
BAK	EW	4356	24th Street	WEST OF	Eye Street			1-WAY		-119.02043					×				9				4356		07 25,548
BAK BAK	EW	4353 4355	24th Street 24th Street	WEST OF EAST OF	F Street F Street			1-WAY		119.023779 119.023315					x x				9				4353 4355		07 24,486 07 26,187
BAK	EW	4360	24th Street	WEST OF	M Street			1-WAY		-119.01561					×				9				4360	16 01 0	
BAK	EW	4363	24th Street	EAST OF	M Street			1-WAY	35.38108	-119.0149					×				9				4363		27 28,820
BAK	EW	4373	24th Street	BETWEEN	Oak Street AND SR 99			2-WAY		119.040813					x				9				4373		07 45,888
BAK	EW	830	30TH Street	WEST OF	F Street		23	2-WAY		-119.02483			1	1					9				830		07 3,249
BAK BAK	EW EW	832 831	30TH Street 30TH Street	EAST OF BETWEEN	Garces Circle Garces Circle AND F Street		25 24	2-WAY 2-WAY		-119.01789 -119.02285			1	1					9				832 831		07 5,543
BAK	EW	833	30TH Street	EAST OF	Q Street		26	2-WAY		-119.02285	1			1				- 1	2				833	16 01 0 16 01 0	
BAK	EW	834	34th Street	WEST OF	Q Street		27	2-WAY	35.3905	-119.0115									9				834		12 11,655
BAK	EW	835	34th Street	WEST OF	Union Avenue		28	2-WAY	35.39047	-119.00376									2				835	16 01 0	07 11,644
BAK BAK	EW EW	807 808	4th Street 4th Street	EAST OF WEST OF	H Street P Street		29 30	2-WAY 2-WAY		-119.02084 -119.01263			1	1					9				807 808		05 3,702
BAK	EW	808	4th Street	EAST OF	P Street P Street		31	2-WAY 2-WAY		-119.01263			1	1					9				808	16 01 0	07 4,581 05 5,732
BAK	EW	810	4th Street	EAST OF	Union Avenue	t t	418	2-WAY		-119.00246			1	1					9				810		05 5,732
BAK	EW	2637	4th Street	WEST OF	Union Avenue			2-WAY		-119.00403						х			2	х			2637	16 01 0	05 6,004
BAK	EW	325	7th Standard Road	BETWEEN	Airport Drive AND Chester Avenue			2-WAY		119.027441		Х							1	х		06W257130000	325	15 07 0	09 7,445
BAK BAK	EW EW	2103 1179	7th Standard Road 7th Standard Road	EAST OF WEST OF	Coffee Road Pegasus Drive			2-WAY 2-WAY		-119.091183 -119.07394			-	1		х			2	х	S196F		2103	15 06	16 23,077
BAK	EW	1179 2111	7th Standard Road 7th Standard Road	WEST OF EAST OF	Pegasus Drive Quinn Road			2-WAY		-119.07394 -119.07952			1	1				х	7	y	21301		1179 2111		17 20,502 16 18,125
BAK	EW	243	7th Standard Road 7th Standard Road	BETWEEN	Quinn Road AND SR 65			2-WAY		-119.07952				1				^	8	"	S196F	06W257120000	243		09 27,494
BAK	NS	402	A Street	NORTH OF	Brundage Lane		32	2-WAY	35.3545	-119.02944									9				402	15 03 3	
BAK	NS	3678	A Street	NORTH OF	Palm Street		33	2-WAY	35.36224	-119.0294									2				3678	15 03 3	31 3,668
BAK	NS	1186	Adobe Road	NORTH OF				2-WAY		-118.96768	х		х	Bak					4				1186	15 04 2	22 968
BAK BAK	NS NS	250 1188	Airport Drive Airport Drive	NORTH OF	China Grade Loop AND Park Meadows Avenue Roberts Lane			2-WAY 2-WAY		-119.03907 -119.03888		х	1	1			х		9	х		06F290105000	250 1188	15 07 0	
BAK	NS NS	249	Airport Drive	BETWEEN	Roberts Lane Roberts Lane AND Norris Road			2-WAY		-119.03888 -119.03903		×	1	1			^		1	х		06F290102000	1188	15 09 0 15 08	02 20,12° 19 26,422
BAK	NS	248	Airport Drive	BETWEEN	SR 99 AND Roberts Lane	t t		2-WAY		-119.03932		×	1	1					1	x		06F290100000	248	15 07 0	
BAK	NS	3558	AKERS ROAD	SOUTH OF	HOSKINGS AVE			2-WAY		5.28074463									9				3558		
BAK	NS	2240	Akers Road	SOUTH OF	Ming Avenue		39	2-WAY	35.33891	-119.04781									9				2240	15 01 2	
BAK	NS	2237	Akers Road	SOUTH OF	Pacheco Road		36	2-WAY		-119.04781									9				2237	15 01 2	20 7,01
BAK BAK	NS NS	2235 2236	Akers Road Akers Road	SOUTH OF NORTH OF			34 35	2-WAY 2-WAY		-119.04782 -119.04782			1	1					9				2235 2236	15 01 2	
BAK	NS NS	2236	Akers Road Akers Road	SOUTH OF	Planz Road		35	2-WAY 2-WAY		-119.04782 -119.04782			1	1					9				2236	15 01 2 15 01 2	
BAK	NS	2239	Akers Road	SOUTH OF	Wilson Road	t t	38	2-WAY		-119.04782			1	1					9				2239	15 01 2	
BAK	EW	410	Alfred Harrel Hwy	WEST OF	Lake Ming Road		40	2-WAY	35.43003	-118.87032	1	х							1			06W261120000	410	15 02	
BAK	EW	411	Alfred Harrel Hwy	EAST OF	Lake Ming Road		41	2-WAY		-118.86878	1	Х							1			06W261125000	411	15 07	14 1,964
BAK	NS EW	3459 1198	Alfred Harrel Hwy	NORTH OF WEST OF	Panorama Drive Fairfax Road			1-WAY 2-WAY		-118.96727 -118.95241	1		1	1					1 0		S397X		3459 1198	15 07 0	07 1,610
BAK BAK	EW NS	2242	Alfred Harrell Hwy Allen Road	NORTH OF			419	2-WAY 2-WAY		-118.95241		х	1	1				- +	9		337/8	06F274105000		15 07 · 15 02 ·	14 3,994 17 20,881
ANG	14.5	2242	Princil Rudu	INDIKITE UP	Martiness AUGU		+19	Z-VVM I	30.3094	-117.14003	1		1	1	1 1				7			OUF Z / 4 TUDUUU	2242	10 02	20,881

BAK	NS	3528	Allen Road	BETWEEN Noriega Road AND Olive Drive			2-WAY	35.41286	-119.14549			\perp			\perp		9				3528	15 02	
BAK BAK	NS NS	3444 1202	Allen Road Allen Road	NORTH OF SR 119 (Taft Highway) NORTH OF SR 58 (Rosedale Highway)			2-WAY 2-WAY	35.27492 35.38529	-119.146 -119.1455		1		х	Bak			8		S335X		3444 1202	15 09	
K	NS	2241	Allen Road	NORTH OF Stockdale Highway		42	2-WAY	35.35498	-119.14554			x	-				1		2332X	06F274100000	2241	15 02 15 02	18
	NS	2639	Allen Road	SOUTH OF Stockdale Highway			2-WAY	35.35337	-119.14554						х		2	х			2639	15 02	
	NS	254	Alta Vista Drive	BETWEEN Columbus Street AND Panorama Drive			2-WAY	35.40179	-118.99411		1	х					1	х		06F299110000	254	15 02	11
	NS	414	Alta Vista Drive	NORTH OF Quincy Street		43	2-WAY	35.38705	-118.99596								9				414	15 02	11
	NS NS	1212 102	Ashe Road Ashe Road	NORTH OF Bear Mountain Boulevard NORTH OF McCutchen			2-WAY 2-WAY	35.21196 35.282584	-119.07456 -119.074429		1		х	Bak			1			06F279072000	1212 102	15 08	
	NS	2246	Ashe Road	NORTH OF McCutchen SOUTH OF Ming Avenue		46	2-WAY	35.282584	-119.074429			X					9	Х		08F279072000	2246	15 08 15 08	20
	NS	38	Ashe Road	BETWEEN Ming Avenue AND Club View Drive		47	2-WAY	35.33714	-119.07448			x					1			06F279100000	38	15 08	
	NS	2640	Ashe Road	NORTH OF Panama Lane			2-WAY	35.29717	-119.07457						Х		2	х			2640	15 08	
(NS	104	Ashe Road	BETWEEN Southern Pacific Railroad AND District Boulevard			2-WAY	35.31147	-119.07443			к					1			06F279085000	104	15 08	19
(NS	1214	Ashe Road	NORTH OF SR 119 (Taft Highway)			2-WAY	35.27121	-119.07444								8		S351X		1214	15 08	
	NS NS	2247 2244	Ashe Road Ashe Road	SOUTH OF Stockdale Highway SOUTH OF White Lane		420 44	2-WAY 2-WAY	35.35382 35.31771	-119.07362 -119.07445				_				9				2247 2244	15 08	
κ.	NS	2244	Ashe Road	NORTH OF White Lane		45	2-WAY	35.31857	-119.07445								9				2244	15 08 15 08	
K	NS	105	Auburn Street	EAST OF Columbus Street		421	2-WAY	35.398246	-118.952805			к					9			06F309090000	105	15 09	
K	NS	423	Auburn Street	WEST OF Fairfax Road		50	2-WAY	35.39793	-118.93076								9				423	15 09	08
\K	EW	424	Auburn Street	EAST OF Fairfax Road		51	2-WAY	35.39806	-118.92929								9				424	15 09	08
AK	EW	422	Auburn Street	WEST OF Maywood Drive		49	2-WAY	35.397733	-118.948919								9				422	15 08	20
AK AK	NS NS	428 429	BAKER ST Baker Street	SOUTH OF FLOWER SOUTH OF Bernard Street		57	2-WAY 2-WAY	-118.9897068 35.38976	35.38578596 -118.98829				-				9				428 429	15 08	- 07
AK	NS	425	Baker Street	NORTH OF California Avenue		52	2-WAY	35.36917	-118.99564								9				425	15 08	25
AK	NS	106	Baker Street	SOUTH OF Niles Street		48	2-WAY	35.38151	-118.99123			х					1			06F298145000	106	15 08	
AK	NS	426	Baker Street	SOUTH OF Sumner Street		53	2-WAY	35.37642	-118.99305								9				426	15 08	26
BAK	NS	1226	Baldwin Road	SOUTH OF Belle Terrace			2-WAY	35.34488	-119.02895		1						8		11F51		1226	15 06	
IAK IAK	NS NS	430 433	Beale Avenue Beale Avenue	SOUTH OF Chico Street NORTH OF Lincoln Street		58 61	2-WAY 2-WAY	35.36933 35.38702	-118.99223 -118.98587		1		_				9				430 433	15 06	
AK AK	NS NS	107	Beale Avenue Beale Avenue	SOUTH OF Lincoin Street SOUTH OF Monterey Street		55	2-WAY	35.38/02 35.37974	-118.98587 -118.9885			x					9			06F300100000	107	15 06 15 06	24
AK	NS	432	Beale Avenue	NORTH OF Pacific Street		60	2-WAY	35.38396	-118.98697								1	1			432	15 06	
AK	EW	1236	Beardsley Avenue	WEST OF North Chester Avenue			2-WAY	35.40494	-119.0228		1						8		1.10E+35		1236	15 08	18
AK	EW	436	Belle Terrace	EAST OF Chester Avenue		64	2-WAY	35.3467	-119.0182			х			1 1		9			06F251100080	436	15 06	18
AK AK	EW	108 3796	Belle Terrace Belle Terrace	BETWEEN Florito Street AND New Stine Road EAST OF H Street		59 63	2-WAY 2-WAY	35.34689 35.3467	-119.05849 -119.02095			x			+-+		9	-	-	06F310100000 06F251100020	108 3796	15 06	17
AK AK	EW	109	Belle Terrace	BETWEEN P Street AND Union Avenue	1	us	2-WAY	35.3467 35.34671	-119.02095 -119.00955			x			1 1		1	1		06F251100020 06F310125000	109	15 06 15 06	
BAK	EW	2077	Belle Terrace	EAST OF Real Road			2-WAY	35.3467	-119.042						х		2	х			2077	15 06	
BAK	EW	1239	Belle Terrace	WEST OF South Real Road			2-WAY	35.34677	-119.04406								8		S222F		1239	15 06	17
IAK	EW	257	Belle Terrace	BETWEEN Union Avenue AND Madison Street			2-WAY	35.34641	-118.99726			X					1	х		06F310127000	257	15 08	27
IAK	EW	1244	Bena Road	EAST OF Towerline Road	1		2-WAY 2-WAY	35.32683	-118.77005		1	_			\perp	Х	7	х			1244	15 09	
BAK BAK	EW	3364 2261	Berkshire Road Berkshire Road	EAST OF Akers Road EAST OF H Street	1	65	2-WAY 2-WAY	35.28868 35.28861	-119.04746 -119.0198			х			1 1	-	9	1		06F240100000	3364 2261	15 08 15 08	
BAK	EW	110	Berkshire Road	BETWEEN H Street AND Union Avenue		422	2-WAY	35.28862	-119.01249								1			00/240100000	110	15 08	04
BAK	EW	3116	Berkshire Road	BETWEEN SR 99 AND Wible Road			2-WAY	35.28863	-119.03325			к					1	х		06F240090000	3116	15 08	
BAK	EW	1249	Bernard Street	WEST OF Alta Vista Drive			2-WAY	35.39026	-118.99599								8		S210F		1249	15 02	
BAK	EW	440	Bernard Street	EAST OF Mount Vernon Avenue		67	2-WAY	35.39029	-118.96656								2				440	15 02	
BAK BAK	EW	439 1270	Bernard Street Breckenridge Road	EAST OF Union Avenue EAST OF Comanche Drive		66	2-WAY 2-WAY	35.39022 35.37573	-119.00194 -118.83988	x		х	X	Bak			4			06F261105000	439 1270	15 02	
BAK	EW	1267	Breckenridge Road	EAST OF SR 184 (Morning Drive)			2-WAY	35.36166	-118.91343	^			^	Dak			8		S218G		1267	15 06 15 06	30
BAK	EW	2262	Brimhall Road	EAST OF Allen Road		423	2-WAY	35.36895	-119.14477								9				2262	15 08	
BAK	EW	48	Brimhall Road	BETWEEN Allen Road AND Jenkins Road			2-WAY	35.36896	-119.14888			к					1	х		06F271085000	48	15 08	
BAK	EW	1275	Brimhall Road	WEST OF Calloway Drive			2-WAY	35.36888	-119.11183								8		S216F		1275	15 08	19
BAK	EW	3743	Brimhall Road	WEST OF Coffee Road		69	2-WAY	35.36882	-119.093			х					1			06F271100000	3743	15 08	
BAK BAK	EW	2263 1272	Brimhall Road Brimhall Road	EAST OF Jewetta Avenue EAST OF SR 43 (Enos Lane)		68	2-WAY 2-WAY	35.36893 35.36818	-119.12698 -119.2501		1		х	Bak			9				2263 1272	15 08	
BAK	EW	160	Brittan Road	BETWEEN Buck Owens Boulevard AND Arrow Street			2-WAY	35.39589	-119.04093		1		^	Dak			1				160	15 08 15 07	
BAK	EW	278	Brundage Lane	BETWEEN 184 & Edison			2-WAY	-118.90694	35.35436		x			x			1	х		06F248145000	278	15 07	
BAK	EW	1284	Brundage Lane	EAST OF Fairfax Road			2-WAY	35.35429	-118.93074								8		S220F		1284	15 08	
BAK	EW	445	Brundage Lane	WEST OF H Street		71	2-WAY	35.35396	-119.02239								1				445	15 08	21
BAK	EW	444	Brundage Lane	WEST OF Hughes Lane		70	2-WAY	35.35409	-119.0308			х					1			06F248116000	444	15 08	
BAK BAK	EW	449 2642	Brundage Lane Brundage Lane	WEST OF Mount Vernon Avenue EAST OF Mount Vernon Avenue		73	2-WAY 2-WAY	35.35408 35.35408	-118.96794 -118.96667						x		9				449 2642	15 08	
BAK	EW	450	Brundage Lane	BETWEEN Oswell Street AND Mount Vernon Avenue		74	2-WAY	35.35408	-118.95792						- ^ -		9	_ ^			450	15 09 15 08	
BAK	EW	446	Brundage Lane	WEST OF P Street		72	2-WAY	35.35389	-119.01253			к					9			06F248117000	446	15 08	21
BAK	EW	447	Brundage Lane	WEST OF Union Avenue		424	2-WAY	35.35384	-119.00384								2				447	15 08	20
BAK	EW	448	Brundage Lane	East of Union Avenue			2-WAY	-119.0022806	35.35386232	1							9			06F248120000	448	15 08	26
BAK BAK	EW NS	129 2270	Brundage Lane	BETWEEN Union Avenue AND Milham Drive NORTH OF Getty Street		276	2-WAY 2-WAY	35.35388 35.39355	-118.99933 -119.04318			х					1 9	Х		06F248118000	129 2270	15 02	
BAK	NS NS	22/0	Buck Owens Blvd Buck Owens Blvd	NORTH OF Getty Street SOUTH OF Gilmore Avenue		275	2-WAY	35.39355 35.38911	-119.04318 -119.04317								9				22/0	15 07	28
BAK	EW	3626	Buena Vista Blvd.	EAST OF Fairfax Road		210	2-WAY	35.23783	-119.04317		1		Х	Bak			4	1			3626	15 07 15 09	
BAK	EW	1288	Buena Vista Blvd.	EAST OF Highway 184 (Weedpatch Highway)			2-WAY	35.23785	-118.91058		1						8		S252G		1288	15 09	
BAK	NS	2644	Buena Vista Road	NORTH OF Ming Avenue			2-WAY	35.34152	-119.12801						х		2	х			2644	15 01	21
BAK	NS	49	Buena Vista Road	NORTH OF Panama Lane		414	2-WAY	35.3046	-119.12803			X			\perp		1	-		06W269095000	49	15 01	20
BAK BAK	NS NS	3449 3450	Buena Vista Road Buena Vista Road	BETWEEN Panama Lane AND McCutcheon Road NORTH OF SR 119 (Taft Highway)			2-WAY 2-WAY	35.28959 35.27422	-119.1282 -119.12831		1	-	x	Bak	+		9	1			3449 3450	15 01	
BAK	NS NS	3450 2271	Buena Vista Road Buena Vista Road	SOUTH OF Stockdale Highway		77	2-WAY	35.2/422 35.34848	-119.12831 -119.12742			x	^	Marin.	+		9	-		06W269105000	2271	15 01 15 01	
BAK	NS	3365	Buena Vista Road	NORTH OF White Lane		76	2-WAY	35.32545	-119.12796								1				3365	15 01	
BAK	NS	166	Buena Vista Road	BETWEEN White Lane AND Vista Del Christo Court		75	2-WAY	35.31616	-119.12802			х					- 1			06W269100000	166	15 01	21
BAK	EW	180	California Avenue	WEST OF A Street		82	2-WAY	35.36857	-119.02998			X			\perp		1			06F251101100	180	15 04	02
BAK BAK	EW	2996 3367	California Avenue California Avenue	BETWEEN A Street AND H Street EAST OF Chester Avenue		83	2-WAY 2-WAY	35.36853 35.3674	-119.02469 -119.04741		- 1	Х			+		9	-	-	06F251101300	2996 3367	15 04	
BAK	EW	3367 463	California Avenue California Avenue	EAST OF Chester Avenue EAST OF H Street	1	80	2-WAY 2-WAY	35.3674 35.36849	-119.04741 -119.02076			x			1 1		9	1		06F251101500	3367 463	15 04 15 04	02
BAK	EW	467	California Avenue	EAST OF King Street		88	2-WAY	35.36844	-118.99348						1 1		6				467	16 01	
BAK	NS	2272	California Avenue	NORTH OF Mohawk Street		79	2-WAY	35.36141	-119.05985								9				2272	15 04	02
BAK	EW	22	California Avenue	WEST OF P Street		85	2-WAY	35.36846	-119.01219			X					9			06F251101600	22	15 04	02
BAK	EW	2227	California Avenue	EAST OF Real Road	1	81	2-WAY	35.36805	-119.04304			X			\perp		9	-		06F251101000	2227	15 04	
BAK BAK	NS EW	3745 24	California Avenue California Avenue	NORTH OF Stockdale Highway WEST OF Union Avenue		78 86	2-WAY 2-WAY	35.35467 35.36843	-119.06115 -119.00386			X X			1		1 2			06F251100000 06F251101700	3745 24	15 04	
AK AK	EW	24 466	California Avenue California Avenue	EAST OF Wallace Street	1	87	2-WAY	35.36843 35.36843	-119.00386 -119.00136			x			1 1		9	1		06F251101700 06F251102000	466	15 04 15 01	14
AK	EW	77	California Avenue	BETWEEN Williams Street AND Beale Avenue		89	2-WAY	35.36846	-118.98993			x			1 1		9			06F251104000	77	15 01	13
BAK	EW	1313	California Avenue (East)	WEST OF Mount Vernon Avenue			2-WAY	35.36857	-118.9694								8		S216F		1313	15 04	02
IAK .	EW	1314	California Avenue (East)	EAST OF Mount Vernon Avenue			2-WAY	35.36861	-118.96637						Х		2	х			1314	15 07	16
AK	NS	2177	Calloway Drive	SOUTH OF Brimhall Road	1	444	2-WAY	35.36851	-119.11057			х			\perp		9	-		06W253160000	2177	15 01	
IAK IAK	NS NS	2276 2278	Calloway Drive	NORTH OF Brimhall Road NORTH OF Hageman Road		90	2-WAY 2-WAY	35.36908 35.39857	-119.11026 -119.10995			x			+-+		9	-	-	06F277120000	2276	15 01	
IAK IAK	NS NS	1318	Calloway Drive Calloway Drive	NORTH OF Hageman Road NORTH OF Langley Road	1	92	2-WAY	35.39857	-119.10995			n			1 1		8	1	S343X	00F27/120000	2278 1318	15 02 15 02	
IAK	NS	3747	Calloway Drive	NORTH OF Langley Road NORTH OF Meacham Road	1	91	2-WAY	35.39164	-119.10993			х					6			06F277107000	3747	15 02	25
IAK	NS	2279	Calloway Drive	NORTH OF Norris Road		428	2-WAY	35.42025	-119.10997								9			06F277140000	2279	15 01	
IAK	NS	3566	Calloway Drive	SOUTH OF Seventh Standard Road	1		2-WAY	35.43882	-119.10988				Х	Bak			4				3566	15 02	25
BAK	NS	2277	Calloway Drive	NORTH OF SR 58 (Rosedale Highway)		427	2-WAY	35.38455	-119.10991			х					9			06F277105000	2277	15 02	25
AK	NS	3536	Calloway Drive	NORTH OF Stockdale Highway	1	00	2-WAY	35.35385	-119.11501						Х		2	Х			3536	15 06	
AK AK	EW	2280 3369	Camino Media Camino Media	WEST OF Gosford Road EAST OF Old River Road		93 94	2-WAY 2-WAY	35.34435 35.34442	-119.09269 -119.11386			-			+		9	1			2280 3369	15 07	
BAK	EW	2281	Camino Media Campus Park Drive	WEST OF Mountain Vista Drive	1	445	2-WAY	35.34442 35.31794	-119.11386 -119.11919						1 1		9	1			2281	15 07 15 01	
BAK	EW	2282	Campus Park Drive	EAST OF Mountain Vista Drive		446	2-WAY	35.31796	-119.11826								9	1			2282	15 01	20
	EW	2283	Campus Park Drive	EAST OF Old River Road		459	2-WAY	35.31768	-119.10893		1				1 1		9				2283	15 01	

	EW	1322	Casa Loma Drive	EAST OF	Union Avenue		2-WAY	35.33946	-119.00132									S224I		1322	15	
K K	EW	263	Casa Loma Drive	BETWEEN	Union Avenue AND Cottonwood Road		2-WAY	35.33943	-118.99331			Х					1	х	06F247105000	263		06 16
ŀ	EW	114	Chamber Blvd	BETWEEN	Buena Vista Road AND Grand Lakes Avenue		2-WAY	35.331	-119.12651		1						1			114		01 22
+	NS	485	Chester Avenue	NORTH OF NORTH OF	13th Street 21st Street	101	2-WAY	35.3699 35.37859	-119.01882 -119.01879			v .					9		06F294115000 06F294117000	485	15	
+	NS NS	181 489	Chester Avenue Chester Avenue	SOUTH OF	21st Street 34th Street	104	2-WAY	35.37859 35.38954	-119.01879			X					9		06F294117000 06F294119000	181 489	15	
+	NS	70	Chester Avenue	NORTH OF	4th Street	100	2-WAY	35.36108	-119.01888			X X					9		06F294114000	70	15 15	04 01
1	NS	71	Chester Avenue	BETWEEN	Brundage Lane AND Belle Terrace	98	2-WAY	35.34858	-119.01892			X					9		06F294113000	71	15	
	NS	3692	Chester Avenue	SOUTH OF	California Avenue		2-WAY	35.36702	-119.01885							х	2	х		3692		06 30
κ .	NS	72	Chester Avenue	BETWEEN	Columbus Street AND 34th Street	460	2-WAY	35.39519	-119.01871			х					9		06F294120000	72	15	
<	NS	67	Chester Avenue	BETWEEN	Kern River AND Columbus Street	107	2-WAY	35.39863	-119.01869			х					2		06F294125000	67		04 01
К	NS	69	Chester Avenue	NORTH OF	Ming Avenue	97	2-WAY	35.34002	-119.01884			х					9		06F294112000	69	15	
K	NS	68	Chester Avenue	SOUTH OF	Planz Road	95	2-WAY	35.3243	-119.00888			Х					9		06F294105000	68		04 01
K	NS	481	Chester Avenue	NORTH OF	Planz Road	96	2-WAY	35.32534	-119.00956								9			481	15	
K	NS	488	Chester Avenue	BETWEEN	SR 178 (24th Street) AND SR 204 (Golden State Avenue)	105	2-WAY	35.38433	-119.01877			Х					9		06F294118000	488	15	04 01
\K	NS	25	Chester Avenue	BETWEEN	Truxtun Avenue AND 19th Street	102	2-WAY	35.37546	-119.01881			Х					9		06F294116000	25	15	04 01
\K	NS	1340	Chester Avenue	WEST OF	Union Avenue		2-WAY	35.320076	-119.00524			Х				х	2	X	06F294100000	1340		06 17
\K	NS	1337	Chester Avenue (North)	SOUTH OF	James Road		2-WAY	35.44392	-119.02373			Х					1	X	06F294132000	1337	15	
\K	NS	1334	Chester Avenue (North)	SOUTH OF	Roberts Lane	400	2-WAY	35.40765	-119.02101							Х	8	S363A	К	1334	15	
K	NS	2289 2288	Chester Lane Chester Lane	NORTH OF WEST OF	California Avenue Real Road	109	2-WAY 2-WAY	35.3678 35.36514	-119.04776 -119.0439								9			2289 2288	15	
K K	EW	1343	China Grade Loop	EAST OF	Airport Drive	108	2-WAY	35.36514 35.42709	-119.0439								8	\$200		1343		03 31
K	NS	73	China Grade Loop	BETWEEN	Kern River AND Round Mountain Road	111	2-WAY	35.426938	-118.967708			x					1	32001	06F269200000	73	15 15	
ıK	NS	494	China Grade Loop	NORTH OF	Panorama Drive	110	1-WAY	35.41084	-118.97512		1	X					9		06F269215000	494	15	
K	NS	3756	Coffee Road	SOUTH OF	Brimhall Road	113	2-WAY	35.36803	-119.09219			х					1		06F278092000	3756	15	
K	NS	3754	Coffee Road	SOUTH OF	Norris Road	117	2-WAY	35.41934	-119.09223			х					1		06F278110000	3754		08 12
AΚ	NS	283	Coffee Road	BETWEEN	Norris Road AND Seventh Standard Road		2-WAY	35.43212	-119.09221			х	Х	Bak			1	x	06F278150000	283		08 11
\K	NS	3753	Coffee Road	SOUTH OF	Olive Drive	116	2-WAY	35.41203	-119.09222			Х					1		06F278100000	3753	15	08 11
K	NS	1352	Coffee Road	NORTH OF	Snow Road		2-WAY	35.42918	-119.09221								8	S347		1352	15	
K	NS	2185	Coffee Road	NORTH OF	SR 58 (Rosedale Highway)	115	2-WAY	35.3841	-119.09217			Х					9		06F278097000	2185	15	08 12
K	NS	2291	Coffee Road	SOUTH OF	SR 58 (Rosedale Highway)	114	2-WAY	35.3826	-119.09217			Х					9		06F278093000	2291		08 12
K	NS	3755	Coffee Road	SOUTH OF	Westfield Road	112	2-WAY	35.35723	-119.09224			х					1	+	06F278090000	3755	15	
	EW	502	College Avenue	WEST OF	Fairfax Road	118 119	2-WAY	35.38332	-118.93079			\longrightarrow					1 9	+		502	15	
K K	EW	503 1354	College Avenue	EAST OF	Fairfax Road Mount Vernon Avenue	119	2-WAY	35.38333 35.38301	-118.92972 -118.96689			+				х		×		503 1354	15	
K	EW	1354	College Avenue College Avenue	EAST OF	Mount Vernon Avenue Oswell Street		2-WAY	35.38301	-118.96689			+				^	2 8	X S212		1354	15	
iK iK	EW	1355 507	College Avenue Columbus Street	WEST OF	Uswell Street Berkeley Street	123	2-WAY	35.38316 35.39752	-118.94861								1	52121		1355 507		05 27 06 16
K K	EW	2293	Columbus Street	EAST OF	Chester Avenue	120	2-WAY	35.39/52	-119.01802			x				-	1	1 1	06F262100000	2293		06 16 06 16
K	EW	74	Columbus Street	EAST OF	Haley Street	124	2-WAY	35.39753	-118.97599			×				-	9	1 1	06F262115000	74	15	
K.	EW	509	Columbus Street	EAST OF	Mount Vernon Avenue	125	2-WAY	35.39755	-118.96698								1	1 1		509		06 16
\K	NS	511	Columbus Street	SOUTH OF	Oswell Street	127	2-WAY	35.39998	-118.95151								9			511		06 16
\K	EW	505	Columbus Street	WEST OF	San Dimas Street	121	2-WAY	35.39805	-119.00885								2			505	15	
\K	EW	2294	Columbus Street	EAST OF	Union Avenue	122	2-WAY	35.39746	-119.00182								9			2294	15	06 16
K	NS	512	Columbus Street	SOUTH OF	University Avenue	128	2-WAY	35.4046	-118.94982								9			512	15	
K	NS	513	Columbus Street	NORTH OF	University Avenue	129	2-WAY	35.40555	-118.94977								9			513	15	
K	NS	843	Comanche Drive	NORTH OF	Packard Drive		2-WAY	35.21429	-118.84223					Arv X			6			843		07 02
K K	NS	272	Comanche Drive	SOUTH OF SOUTH OF	SR 178		2-WAY 2-WAY	35.39809	-118.85671		1	Х					1	х	06Z261130000	272 1358	15	
	NS	1358	Comanche Drive		SR 223 (Bear Mountain Boulevard)			35.20851	-118.84216				Х	Arv			4					06 30
K K	NS	1359 271	Comanche Drive Comanche Drive	NORTH OF BETWEEN	SR 223 (Bear Mountain Boulevard) SR 58 AND SR 178		2-WAY	35.21012 35.36983	-118.84218 -118.84322		1	x	х	Bak			8	X S403	06Z261130000	1359	15	
K	NS EW	2519	Copus Road	WEST OF	SK 38 AND SK 178		2-WAY	35.39983	-118.84322		- '	^	^	Ker	x		5	_ ^	002261130000	271 2519	15 16	
K K	EW	2519	Copus Road	EAST OF	15		2-WAY	35.095147	-119.05103	Ŷ				Ker	X		5			2520	16	
K	NS	2082	Cottonwood Road	NORTH OF	Casa Loma Driver		2-WAY	35.34078	-118.98546	-				NG.		х	2	x		2082		01 12 07 22
NK.	NS	2083	Cottonwood Road	NORTH OF	Panama Lane		2-WAY	35.29859	-118.98539							х	2	x		2083	15	
AΚ	EW	274	Curnow Road	BETWEEN	Wible Road AND Compagnoni Street		2-WAY	35.25968	-119.03129	х		Х					1	x	06F326100000	274	16	
AΚ	EW	275	David Road	BETWEEN	Wheeler Ridge Road AND Rancho Drive		2-WAY	35.09282	-118.88218	Х		х					1	x	06W254110000	275	15	
K	EW	276	Day Avenue	BETWEEN	Chester Avenue AND Manor Street		2-WAY	35.43523	-119.01662			Х					1	x	06F270100000	276	15	
K	EW	2848	Deacon	BETWEEN	Sterling Road AND Fairfax Road		2-WAY	35.36151	-118.93883		1	Х					1	х	06F249117000	2848	15	07 09
\K	EW	1404	DiGiorgio Road	EAST OF	SR 184		2-WAY	35.25242	-118.91283								8	S2486		1404	15	
K	EW	4187	District Blvd	WEST OF	Ashe Road	131	2-WAY	35.31312	-119.07525			Х					1		06F328090000	4187	15	
\K	EW	2299	District Blvd	WEST OF	Gosford Road	130	2-WAY 2-WAY	35.31319	-119.09288								9			2299	15	
K K	EW	2300 284	District Blvd Downing Avenue	WEST OF BETWEEN	Grissom Street Coffee Road AND Fruitvale Avenue	132	2-WAY	35.31304 35.39056	-119.06218 -119.08082			x					9	×	06F322100000	2300 284	15	
K.	NS	284	Easton Drive - East	NORTH OF	California Avenue	133	2-WAY	35.36811	-119.08082		1	^					9	_ ^	U0F322100000	284	15	
K K	NS	2301	Easton Drive - East Easton Drive - West	NORTH OF	California Avenue	134	2-WAY	35.36613	-119.04461		- '						9			2301	15 15	
K	EW	2084	Edison Highway	EAST OF	Mount Vernon Avenue	104	2-WAY	35.37037	-118.96448							x	2	X		2084	15	
K	EW	1423	Edison Highway	WEST OF	Oswell Street		2-WAY	35.3672	-118.95125								8	S214E	F	1423	15	
\K	NS	4225	Edison Road	NORTH OF	Edison Highway		2-WAY	35.35276	-118.87874		1		х	Bak			4	x		4225	15	
NK.	NS	3231	Edison Road	NORTH OF	Herring Road		2-WAY	35.158243	-118.878087		1		X	Arv			4	x		3231	15	
K	NS	2303	EL Portal	SOUTH OF	Ming Avenue	135	2-WAY	35.33738	-119.085								9			2303	15	
K	NS	2304	EL Rio Drive	NORTH OF	Stockdale Highway	136	2-WAY	35.35476	-119.08275								9			2304		07 21
\K	NS	521	F Street	NORTH OF	17th Street	384	2-WAY	35.37479	-119.02353			Х					9	1 1 -	06F292100000	521	15	05 12
\K	NS	186	F Street	NORTH OF	21st Street	385	2-WAY	35.37861	-119.0235			Х					1		06F292105000	186		05 12
K	NS	78	F Street	BETWEEN SOUTH OF	SR 204 (Golden State Ave) & SR 178 (24th Street)	386	2-WAY	35.38525 35.41976	-119.02347 -118.94671			х					1	+	06F292110000 06F236225000	78	15	
K K	NS NS	528 1452	Fairfax Road Fairfax Road	SOUTH OF	Alfred Harrell Highway Brundage Lane	141	2-WAY	35.41976 35.35388	-118.94671 -118.93203								9 8	S383		528 1452	15 15	
iK iK	NS NS	1452 287	Fairfax Road	BETWEEN	Brundage Lane Buena Vista Blvd & SR 223 (Bear Mountain Blvd)		2-WAY	35.35388 35.22584	-118.93203 -118.9322		1	x					1	X S383	06F236090000	1452 287		
K K	NS	524	Fairfax Road	NORTH OF	College Avenue	137	2-WAY	35.22584	-118.9322		- 1	X				-	1	1 1	06F236210000	524	15	
K.	NS	288	Fairfax Road	BETWEEN	Di Giorgio Road AND Panama Road		2-WAY	35.25935	-118.93213		1	x					1	x	06F236100000	288	15	02 18
ıK	NS	2085	Fairfax Road	SOUTH OF	Edison Highway		2-WAY	35.35894	-118.932							х	2	x		2085	15	
\K	NS	526	Fairfax Road	SOUTH OF	Panorama Drive	139	2-WAY	35.40202	-118.9301								9			526	15	05 26
\K	NS	527	Fairfax Road	NORTH OF	Panorama Drive	140	2-WAY	35.40337	-118.93012								9			527	15	05 26
AΚ	NS	130	Fairfax Road	BETWEEN	SR 178 AND Paladino Drive		2-WAY	35.40525	-118.93075								1 1	\perp		130	15	05 26
K	EW	530	Fairview Road	EAST OF	H Street	143	2-WAY	35.30313	-119.02037								9	1 1		530		07 28
K.	EW	529	Fairview Road	EAST OF	Hughes Lane	142	2-WAY	35.3031	-119.02881								9	1 1		529		07 28
K	EW	531	Fairview Road	EAST OF	Monitor Street	144	2-WAY	35.30314	-119.01153						-		2	+		531		07 28
K K	EW	532 533	Flower Street Flower Street	WEST OF EAST OF	Baker Street Baker Street	145 146	2-WAY 2-WAY	35.38637 35.38605	-118.9901 -118.98874		1						9	+ + + -		532 533		07 21
K K	EW	533	Flower Street	EAST OF	Baker Street Beale Avenue	146	2-WAY	35.38605 35.3853	-118.988/4			+				_	9	+ + + -		534	15	07 21
K	NS	2315	Fruitvale Avenue	NORTH OF	Beate Avenue Hageman Road	147	2-WAY	35.3853 35.40233	-118.98564 -119.07438								1	+ + + -		2315		07 22 09 10
K	NS	1477	Fruitvale Avenue Fruitvale Avenue	SOUTH OF	SR 58 (Rosedale Highway)	.40	2-WAY	35.40233	-119.07438		1						X 7	×		1477	15	09 10
K	NS	2919	General Beale Road	NORTH OF	SR 58		2-WAY	35.29534	-118.75275		1						X 7	x		2919		09 08
K	EW	2316	Gilmore Avenue	WEST OF	Buck Owens Boulevard	149	2-WAY	35.38948	-119.04382								9	1 " 1		2316		09 08
κ .	EW	2317	Gilmore Avenue	EAST OF	Buck Owens Boulevard	150	2-WAY	35.38946	-119.04241		1						9	1 1		2317		07 21
K	EW	4178	Gilmore Avenue	WEST OF	Landco Drive		2-WAY	35.38961	-119.05812		1	х					1	х	06F322107000	4178		07 21
K	NS	2188	Gosford Road	NORTH OF	Camino Media	156	2-WAY	35.3447	-119.09221			х					9	1 1	06F278087000	2188		01 22
K	NS	2319	Gosford Road	SOUTH OF	Ming Avenue	155	2-WAY	35.3391	-119.09219								9	1 1		2319		01 22
K	NS	2656	Gosford Road	NORTH OF	Ming Avenue		2-WAY	35.34109	-119.09219							х	2	х		2656		03 12
K	NS	163	Gosford Road	BETWEEN	North Laureigien Blvd & South Laureigien Blvd	154	2-WAY	35.32978	-119.09216			х					6		06F278083000	163	15	01 22
K	NS	2187	Gosford Road	SOUTH OF	Pacheco Road	151	2-WAY	35.30934	-119.09216			Х					9		06F278060000	2187	15	01 20
K	NS	2657	Gosford Road	NORTH OF	Panama Lane		2-WAY	35.29771	-119.09226							Х	2	х		2657	15	03 12
\K	NS	3912	Gosford Road	SOUTH OF	Panama Lane	429	2-WAY	35.2952	-119.09216			Х					1		06F278055000	3912	15	
NK.	NS	55	Gosford Road	BETWEEN	Southern Pacific Rail Road AND White Lane	152	2-WAY	35.31436	-119.09215			Х					9		06F278080000	55		01 22
	NS	1508	Gosford Road Gosford Road	NORTH OF BETWEEN	SR 223 (Bear Mountain Boulevard) White Lane AND S Laurelglen Boulevard	153	2-WAY 2-WAY	35.21343 35.32158	-119.09233		1		Х	Bak			4	1 1		1508	15	01 21
K K	NS	10							-119.09215			х					1		06F278082000	10		01 22

\K	EW	2320	Granite Falls	WEST OF	Coffee Road	448	2-WAY	35.38683	-119.09309									9				2320		06 03	
NK NK	NS NS	3572 1511	Granite Road Granite Road	NORTH OF NORTH OF	Chester Avenue Extension James Road		2-WAY 2-WAY	35.47212 35.45639	-119.0225 -119.03465			х	Bak Mtn					4				3572 1511		09 10	4
K K	NS NS	4107	Granite Road (South)	SOUTH OF	James Road Famoso Road		2-WAY 2-WAY	35.45639 35.605278	-119.03465 -118.949853				Mtn			х		9				4107		09 02 12 16	
κ .	NS	570	H Street	NORTH OF	14th Street	389	2-WAY	35.37099	-119.02121									6				570		09 02	
	NS	572	H Street	NORTH OF	21st Street	392	2-WAY	35.37858	-119.02118									9				572		01 26	
4	NS	573	H Street	NORTH OF	24th Street	393	2-WAY	35.38245	-119.02115									9				573		01 26	
4	NS	2659	H Street	SOUTH OF	California Avenue	000	2-WAY 2-WAY	35.36772	-119.0212						Х			2	Х			2659		01 26	
	NS NS	569 571	H Street H Street	NORTH OF	Palm Street Truxtun Avenue	388 390	2-WAY 2-WAY	35.36158 35.3738	-119.02126 -119.0212									9				569 571		06 30 01 26	
	NS	568	H Street (SOUTH)	NORTH OF	Belle Terrace	403	2-WAY	35.347	-119.02119									9				568		01 26	
	NS	561	H Street (SOUTH)	SOUTH OF	Fairview Road	396	2-WAY	35.30266	-119.02123									1				561		06 30	
	NS	559	H Street (SOUTH)	SOUTH OF	Hosking Avenue	394	2-WAY	35.28063	-119.02124									9				559		07 09	
	NS	567	H Street (SOUTH)	NORTH OF	Ming Avenue	402	2-WAY	35.33985	-119.02119									2				567		01 26	
	NS NS	562 2332	H Street (SOUTH) H Street (SOUTH)	SOUTH OF	Pacheco Road Panama Lane	397 395	2-WAY 2-WAY	35.30998 35.29533	-119.02122 -119.02124									9				562 2332		09 03	
(NS NS	565	H Street (SOUTH)	NORTH OF	Planz Road	400	2-WAY	35.32534	-119.02124									9				565		09 02 01 28	
K.	NS	563	H Street (SOUTH)	SOUTH OF	White Lane	398	2-WAY	35.31686	-119.02122		х							9			06F293100000	563		01 28	
K	NS	564	H Street (SOUTH)	NORTH OF	White Lane	399	2-WAY	35.31873	-119.02121									9				564		07 09	
K	NS	566	H Street (SOUTH)	NORTH OF	Wilson Road	401	2-WAY	35.33254	-119.0212									6				566	X		
K	EW	2551	Hageman Road	EAST OF	Allen Road		2-WAY	35.39954	-119.144855									8		S208E		2551		08 11	
K K	EW	2322 2190	Hageman Road Hageman Road	WEST OF EAST OF	Calloway Drive Coffee Road	159 158	2-WAY 2-WAY	35.39806 35.40152	-119.11122 -119.0913		X							9			06F273103000 06F273130000	2322 2190	15		+
κ .	EW	2191	Hageman Road	WEST OF	Coffee Road	415	2-WAY	35.40153	-119.09297		x							9			06F273120000	2191		08 11 08 11	+
	EW	2189	Hageman Road	WEST OF	Fruitvale Avenue	157	2-WAY	35.40148	-119.07538		х							9			06F273140000	2189		08 11	. T
K	EW	551	Hageman Road	WEST OF	Jewetta Avenue	160	2-WAY	35.39794	-119.12911		Х							9			06F273102000	551		08 11	
K	EW	28	Hageman Road	BETWEEN	Palisades Circle AND Fruitvale Avenue		2-WAY	35.40159	-119.07027									1				28		08 11	_
K K	EW NS	292 2324	Hageman Road Haggin Oaks Blvd	SOUTH OF	Renfro Road AND Jenkins Road Ming Avenue	161	2-WAY 2-WAY	35.39799 35.33933	-119.15836 -119.10111		х							9	х		06F273085000	292 2324		08 11	+
K	NS NS	553	Haley Street	NORTH OF	Dolores Street	162	2-WAY	35.36955	-118.98376	1 1								9				553		07 21 04 02	
K	NS	556	Haley Street	NORTH OF	Height Street	165	2-WAY	35.3944	-118.97634									9				556		04 02	
K	NS	554	Haley Street	NORTH OF	Monterey Street	163	2-WAY	35.37884	-118.98044									9				554		02 11	
K	NS	555	Haley Street	NORTH OF	Niles Street	164	2-WAY	35.37996	-118.98004									9				555	15	02 11	
(NS	558	Haley Street	NORTH OF	Radcliffe Avenue	167	2-WAY	35.40793	-118.97645						1			9				558		06 24	
	NS EW	557 1529	Haley Street Hall Road	SOUTH OF WEST OF	Vanderbilt Drive SR 184 (Main Street)	166	2-WAY 2-WAY	35.40181 35.2597	-118.97638 -118.91575						1			9		S246F		557 1529		06 24	
(EW	1529 2343	Harris Road	EAST OF	SR 184 (Main Street) Ashe Road	416	2-WAY 2-WAY	35.2597	-118.915/5 -119.07366						1			9		32401		1529 2343		06 30 01 21	
	EW	3393	Harris Road	WEST OF	Ashe Road		2-WAY	35.30322	-119.07562						х			2	х			3393		01 20	
	EW	2342	Harris Road	EAST OF	Gosford Road	168	2-WAY	35.3034	-119.09148									9				2342		01 20	
	EW	3387	Harris Road	WEST OF	Mountain Vista Drive		2-WAY	35.30346	-119.11957									9				3387	15	01 20)
4	EW	3388	Harris Road	BETWEEN	Old River Road AND Gosford Road	400	2-WAY	35.30342	-119.09945						1			9				3388		01 20	
	EW	2344 2663	Harris Road Harris Road	EAST OF WEST OF	Stine Road Wible Road	169 170	2-WAY 2-WAY	35.30322 35.30315	-119.05608 -119.03964					-	1			9				2344 2663		01 22	
:	EW	579	Hosking Avenue	EAST OF	H Street	172	2-WAY	35.28134	-119.02035									1				579		01 22 08 04	
1	EW	3394	Hosking Avenue	BETWEEN	Stine Road AND Wible Road		2-WAY	35.28146	-119.0474									9				3394		08 04	
	EW	294	Hosking Avenue	WEST OF	Union Avenue		2-WAY	35.28136	-119.00518		х				х			1	х		06F239100000	294		08 04	
:	EW	2345	Hosking Avenue	EAST OF	Wible Road	171	2-WAY	35.28139	-119.03804		Х							9			06F239095000	2345		08 13	
:	EW	3451	Houghton Road	WEST OF	Old River Road		2-WAY	35.23795	-119.11613	1		х	Bak					4				3451		10 20	
	NS NS	115 2088	Hughes Lane Hughes Lane	BETWEEN NORTH OF	Brundage Lane AND SR 58 Ming Avenue	178	2-WAY 2-WAY	35.35364 35.33997	-119.02956 -119.03007	1	Х				х			2			06F291115000	115 2088		08 04	
	NS	581	Hughes Lane	NORTH OF	Pacheco Road	174	2-WAY	35.31109	-119.03007	- '					· ^			9	^			581		08 04 08 05	
K	NS	580	Hughes Lane	BETWEEN	Pacheco Road AND Fairview Road	173	2-WAY	35.30377	-119.03009									9				580		08 04	
K	NS	582	Hughes Lane	NORTH OF	Patti Court	175	2-WAY	35.32145	-119.03008									9				582		08 04	
\K	NS	583	Hughes Lane	South of	Wilson Road		2-WAY	-119.0300722	35.33171711									9				583			
\K	NS	584	Hughes Lane	NORTH OF	Wilson Road	177	2-WAY	35.33273	-119.03008									9				584		08 04	
NK NK	NS NS	3150 295	Jenkins Road Jenkins Road	BETWEEN BETWEEN	Appaloosa Avenue AND Brimhall Road Brimhall Road AND Hageman Road		2-WAY 2-WAY	35.36778 35.38146	-119.15441 -119.15441	1 1	х							1			06F321120000	3150 295		08 19	
K.	NS	2352	Jewetta Avenue	NORTH OF	Brimhall Road	179	2-WAY	35.36939	-119.12794									9			00/321120000	2352		08 20 08 11	. †
K	NS	2353	Jewetta Avenue	NORTH OF	Hageman Road	180	2-WAY	35.39827	-119.12783									1				2353		08 11	
K	NS	27	Jewetta Avenue	BETWEEN	Reina Road AND Snow Road		2-WAY	35.4171	-119.12781		х							1	Х		06F275120000	27	15	08 11	
K	NS	3543	Jewetta Avenue	BETWEEN	Stockdale Highway AND Brimhall Road		2-WAY	35.36179	-119.12804									9				3543		08 11	
K K	EW	588 589	Kentucky Street Kentucky Street	WEST OF	Baker Street Haley Street	182 183	2-WAY 2-WAY	35.37901 35.37644	-118.99287 -118.98212	1								9				588 589		06 22	
κ .	EW	2117	Kentucky Street	EAST OF	Mount Vernon Avenue	100	2-WAY	35.37313	-118.96599	1					x			2	×			2117		06 18 06 28	
Κ.	EW	2089	Kern Canyon Road	EAST OF	Morning Drive		2-WAY	35.37629	-118.9125						X			2	X			2089		09 08	
K	NS	156	King Street	BETWEEN	Virginia Avenue AND Potomac Avenue	184	2-WAY	35.36265	-118.99413		х							1			06F298126000	156		06 17	
K	NS	1604	King Street (South)	SOUTH OF	California Avenue		2-WAY	35.36716	-118.99401	1					Х			2	Х			1604	15	07 08	3
K	EW	1610	Kratzmeyer Road	EAST OF	SR 43 (Enos Lane)		2-WAY	35.41989	-119.2486		Х	х	Bak					1	Х		06WM86100000	1610		02 03	
K K	EW	2665	Krebs Road	WEST OF NORTH OF	Fruitvale Avenue 17th Street	188	2-WAY 2-WAY	35.39776 35.375	-119.07523 -119.01643	1					х			9	Х			2665		07 21	
ς .	NS NS	593 594	L Street L Street	NORTH OF	20th Street	188	2-WAY	35.375 35.3776	-119.01643 -119.01642						1			9				593 594		01 14 01 13	
K	NS	591	L Street	NORTH OF	California Avenue	186	2-WAY	35.36948	-119.01646						1			9				591		05 12	
<	NS	592	L Street	SOUTH OF	Truxtun Avenue	187	2-WAY	35.37264	-119.01643									9				592	15	05 12	2
<	NS	2361	Lake Ming Road	NORTH OF	Alfred Harrell Highway	190	2-WAY	35.43048	-118.86933	1								9				2361	15	07 14	4
K K	NS	595 596	Lakeview Avenue Lakeview Avenue	SOUTH OF	3rd Street California Avenue	191 192	2-WAY 2-WAY	35.35865 35.36802	-118.98526 -118.98433						1			9				595 596		06 17	+
Κ .	NS NS	596 4179	Lakeview Avenue Landco Drive	SOUTH OF	California Avenue Gilmore Avenue	192	2-WAY 2-WAY	35.36802 35.38919	-118.98433 -119.05903	1	х				1			1	х		06F281090000	596 4179		06 18 07 28	
	EW	2362	Leonard Avenue	WEST OF	California Avenue	193	2-WAY	35.35881	-119.06136						1			9				2362		10 20	
<	NS	2363	Lilly Drive	NORTH OF	White Lane	194	2-WAY	35.31868	-119.08346	х								9				2363		08 13	
	NS	306	Madison Street	BETWEEN	Brook Street AND Planz Road		2-WAY	35.32312	-118.99424	1	х							1	Х		06F298112000	306	15	06 18	3
K	NS	1642	Madison Street	NORTH OF	Casa Loma Drive		2-WAY	35.34035	-118.99424						Х			2	Х			1642	15	06 17	+
K K	NS NS	116 2365	Madison Street Main Place Plaza	BETWEEN SOUTH OF	Watts Drive AND Planz Road Hageman Road	449	2-WAY 2-WAY	35.32858 35.39739	-118.994304 -119.10549	1				-	1			9				116 2365		06 18	
κ .	EW	309	Manor Steet	BETWEEN	Day Avenue AND Chester Avenue	+0	2-WAY	35.43853	-119.01465		х				1			1	х		06F297125000	309		02 17 07 07	
<	NS	2092	Manor Street	SOUTH OF	Ferguson Avenue		2-WAY	35.41481	-119.01279								х	7	X			2092		07 09	
K	NS	117	Manor Street	BETWEEN	Panorama Drive AND Roberts Lane	195	2-WAY	35.40531	-119.00774		х							2			06F297120000	117	15	07 07	r
	EW	3397	Marella Way		Marella Way	196	2-WAY	35.3644	-119.05606									9				3397	15	08 19)
(NS EW	3484 310	Masterson Street McCutchen Road	BETWEEN BETWEEN	SR 178 AND Paladino Drive Buena Vista Road AND Gosford Road		2-WAY 2-WAY	35.4059 35.28166	-118.87866 -119.11129	1	x				1			9			06F239070000	3484 310		09 08	
1	EW	310 161	McCutchen Road McKee Road	BETWEEN	Buena Vista Road AND Gosford Road Stine Road AND Akers Road		2-WAY 2-WAY	35.28166 35.274215	-119.11129 -119.052553	1	X				1			1	X		06F239070000 06F238090000	310 161		08 05 08 05	
	EW	3398	McKee Road	-	Silne Road AND Akers Road Wible Road	450	2-WAY	35.274215	-119.03289		^				1			9	^		504 £33070000	3398		08 05 85 05	
:	EW	2366	Meacham Road	EAST OF	Calloway Drive	451	2-WAY	35.39073	-119.1092									9				2366		02 25	
	EW	51	Ming Avenue	BETWEEN	Ashe Road AND El Portal Drive	200	2-WAY	35.33587	-119.08025		х							9			06F24709700	51	15	06 02	2
:	EW	16	Ming Avenue	BETWEEN	Ashe Road AND New Stine Road	201	2-WAY	35.33586	-119.06696		х							1			06F247100000	16	15	07 14	1
	EW	3818	Ming Avenue	WEST OF	Castro Lane	206	2-WAY	35.33946	-119.03475		X				1			1			06F247102100	3818		06 04	
r	EW	53 2193	Ming Avenue	BETWEEN WEST OF	Castro Lane AND Hughes Lane Gosford Road	207 198	2-WAY 2-WAY	35.33946 35.33973	-119.03225 -119.09304		X				1			9			06F247102130 06F247093000	53 2193		06 04	
K K	EW	2193 2667	Ming Avenue Ming Avenue	EAST OF	Gosford Road Gosford Road	198	2-WAY 2-WAY	35.33973 35.33973	-119.09304 -119.09159		Х				1			2			001247093000	2193		06 02 06 03	
	EW	15	Ming Avenue	WEST OF	H Street	208	2-WAY	35.33944	-119.02207		х				1			9			06F247102200	15		06 03	
K	EW	41	Ming Avenue	EAST OF	H Street	209	2-WAY	35.33944	-119.02047		х							9			06F247102300	41		06 03	
	EW	2368	Ming Avenue	EAST OF	New Stine Road	202	2-WAY	35.33846	-119.06005									1				2368	15	06 02	2
K	EW	54	Ming Avenue	BETWEEN	Old River Road AND Buena Vista Road	197	2-WAY	35.33981	-119.12038		Х							9			06F247090000	54	15	06 02	2
κ			Ming Avenue	BETWEEN	P Street AND Chester Avenue	210	2-WAY	35.33945 35.3395	-119.01699		X				1			9			06F247102400	52		07 16	
	EW	52	Mina Auspus	EACT OF																					
		52 3916 3	Ming Avenue Ming Avenue	EAST OF BETWEEN	Real Road Stine Road AND Real Road	204 203	2-WAY 2-WAY	35.33954	-119.04291 -119.04682		X							9			06F247102000 06F247102010	3916 3		06 10 06 02	

IAK .	NS	2369 322	Ming Avenue Mohawk Road	EAST OF BETWEEN	Wible Road Krebs Road AND Hageman Road		205	2-WAY 2-WAY	35.33947 35.39946	-119.03848 -119.06543	1	Х					9	х		06F324130000	2369 322	15 0 15 0	
IAK	NS NS	1692	Mohawk Street	SOUTH OF	SR 58 (Rosedale Highway)			2-WAY	35.38227	-119.06546		^				x	7	x		00F324130000	1692		01 14
\K	NS	2371	Mohawk Street	SOUTH OF	Truxtun Avenue		211	2-WAY	35.36469	-119.06525							9				2371	15 0	
K	NS	313	Monica Street	BETWEEN	Breckenridge Road AND Eucalyptus Drive			2-WAY	35.3634	-118.90532	1	х					1	х		06F308100000	313	15 0	
K	NS	314	Monica Street	BETWEEN	Eucalyptus Drive AND Pioneer Drive			2-WAY	35.36709	-118.90531	1	х					1	х		06F308110000	314	15 0	
K	NS	620	Monitor Street	SOUTH OF	Fairview Road		212	2-WAY	35.30283	-119.0119							9				620	15 0	
K.	NS	2373	Monitor Street	SOUTH OF	Pacheco Road		213	2-WAY	35.30991	-119.01189							9				2373	15 0	
\K	NS	2374	Monitor Street	NORTH OF	Pacheco Road		214	2-WAY	35.31107	-119.0119							9				2374	15 0	
\K	NS	3763	Montclair Street	NORTH OF	Marella Way		432	2-WAY	35.36205	-119.05404	1	Х					1			06F286105000	3763	15 0	
AΚ	NS	3402	Montclair Street	NORTH OF	Stockdale Highway		215	2-WAY	35.35481	-119.05459							9				3402	15 0	
AK	EW	630	Monterey Street	WEST OF	Haley Street		218	1-WAY	35.37852	-118.98123		X					9			06F256110000	630	15 0	
AK	NS	3485	Morning Drive	BETWEEN	SR 178 AND Paladino Drive		450	2-WAY 2-WAY	35.40535	-118.91416	- !										3485	15 0	06 30
AK AK	NS NS	2381 2382	Mountain Vista Road Mountain Vista Road	NORTH OF SOUTH OF	White Lane White Lane		453 452	2-WAY	35.32555 35.32495	-119.11867 -119.11867	1						9				2381 2382	15 0	
AK	NS NS	81	Mt. Vernon Avenue	SOUTH OF	Belle Terrace		402	2-WAY	35.34246	-118.96761	-	×					1	×		06F303070000	81	15 0	
AK AK	NS NS	625	Mt. Vernon Avenue	SOUTH OF	Brundage Lane		219	2-WAY	35.34246	-118.96752	- '						9	^		06F303070000	625	15 0	
AK	NS NS	80	Mt. Vernon Avenue	BETWEEN	Brundage Lane AND Belle Terrace		210	2-WAY	35.35098	-118.96755		х					1	x		06F303080000	80	15 0 15 0	
AK	NS	315	Mt. Vernon Avenue	BETWEEN	Brundage Lane AND Bernard Street			2-WAY	35.37176	-118.9675		x					1	x		06F303100000	315	15 0	
AK	NS	626	Mt. Vernon Avenue	SOUTH OF	Columbus Street		220	2-WAY	35.39697	-118.96749		X					9			06F303105000	626		07 29
AK .	NS	627	Mt. Vernon Avenue	NORTH OF	Columbus Street		221	2-WAY	35.39804	-118.9675							9				627	15 0	
AK	NS	1706	Mt. Vernon Avenue	SOUTH OF	Quincy Street			2-WAY	35.379537	-118.967459					х		9				1706	15 1	
AK	NS	628	Mt. Vernon Avenue	NORTH OF	University Avenue		222	2-WAY	35.40593	-118.96756							9				628	15 0	
٩K	NS	14	New Stine Road	BETWEEN	Ming Avenue AND Belle Terrace		225	2-WAY	35.34347	-119.06114		х					2			06F284105000	14	15 0	
\K	NS	82	New Stine Road	BETWEEN	Ming Avenue AND Wilson Road		224	2-WAY	35.33496	-119.0594		х					9			06F284103000	82	15 0	
٩K	NS	2200	New Stine Road	SOUTH OF	Stockdale Highway		226	2-WAY	35.3537	-119.06115		х					9			06F284107000	2200	15 0	
AK	EW	637	Niles Street	EAST OF	Baker Street		229	1-WAY	35.38179	-118.99009							9				637	15 0	
AΚ	EW	638	Niles Street	EAST OF	Beale Avenue		230	1-WAY	35.38112	-118.98728							9				638		02 11
AK	EW	2095	Niles Street	EAST OF	Mount Vernon Avenue			2-WAY	35.3758	-118.96458					x		2	х			2095	15 0	
٩K	EW	636	Niles Street	WEST OF	Tulare Street		228	1-WAY	35.383	-118.99514		х					9			06F257090000	636	15 0	
AK	EW	126	Niles Street	WEST OF	Virginia Street		231	2-WAY	35.37847	-118.97624		х					9			06F257100000	126	15 0	06 18
AK	EW	2230	Noriega Road	WEST OF	Verdugo Lane		462	2-WAY	35.40524	-119.11969							9				2230	15 0	
\K	EW	2231	Noriega Road	EAST OF	Verdugo Lane		463	2-WAY	35.40526	-119.11806							9				2231	15 0	
AK	EW	2096	Norris Road	WEST OF	Fruitvale Avenue			2-WAY	35.4196	-119.075					x		2	X			2096	15 0	
NK.	EW	339	Norris Road	BETWEEN	Fruitvale Avenue AND Knudsen Drive	1	000	2-WAY	35.419638	-119.066145		X			 	1	1	×		06F267100200	339	15 0	
NK.	EW	155 2201	North Half Moon Drive	BETWEEN EAST OF	Pullman Way AND Ashe Road Gosford Road		232	2-WAY	35.32953 35.33373	-119.07937 -119.09167		Х				1	9			06WL26110000	155 2201	15 0	
AK AK	EW NS	2201	North Laurelglen Blvd Oak Street	NORTH OF	Gosford Road Brundage Lane	1	233 235	2-WAY 2-WAY	35.33373 35.35459	-119.09167 -119.03892						1	9			06F289125000	2201	15 0	
AK AK	NS NS	2387	Oak Street	NORTH OF	Brundage Lane California Avenue	1	235	2-WAY	35.35459 35.36906	-119.03892 -119.03866						1	9			JUF 207 23UUU	2387	15 0	
AK AK	NS NS	2388	Oak Street	NORTH OF	Palm Street	1	237	2-WAY	35.36906 35.36171	-119.03866 -119.03884				- 1		1	2				2388	15 0	
AK AK	NS NS	2389	Oak Street	NORTH OF	Truxtun Avenue		238	2-WAY	35.37391	-119.03865							9				2389	15 0 15 0	
AK	NS	2232	Old Farm Road	NORTH OF	Brimhall Road		464	2-WAY	35.36948	-119.13673	1			1		1 1	9				2232	15 0	
AK	NS NS	137	Old River Road	BETWEEN	Campus Park Drive AND White Lane		454	2-WAY	35.31962	-119.10936	'	х					9			06W253145000	137		08 18
AK	NS	2785	Old River Road	BETWEEN	Copus Road AND SR 166 (Maricopa Highway)			2-WAY	35.07174	-119.12968		х	Ker	х			1	X		06W253105000	2785	15 0	02 19
٩K	NS	3407	Old River Road	SOUTH OF	Ming Avenue		239	2-WAY	35.33929	-119.11432							1				3407	15 0	
\K	NS	3949	Old River Road	BETWEEN	Panama Lane AND McCutchen Road			2-WAY	35.28913	-119.10985		х					9	х		06W253130000	3949	15 0	
\K	NS	138	Old River Road	BETWEEN	Panama Lane AND Sherborne Avenue			2-WAY	35.30034	-119.10974		х			x		1	х		06W253135000	138	15 0	
٩K	NS	139	Old River Road	BETWEEN	Sherborne Avenue AND Campus Park Drive			2-WAY	35.3142	-119.10973							1			06W253140000	139	15 0	
\K	NS	1741	Old River Road	SOUTH OF	SR 119 (Taft Highway)			2-WAY	35.266	-119.109688					х		9				1741	15 0	
٩K	NS	327	Old River Road	BETWEEN	SR 119 (Taft Highway) AND McCutcheon Road			2-WAY	35.27463	-119.1099		Х	Ker	х			1	Х		06W253120000	327		02 19
٩K	NS	1740	Old River Road	SOUTH OF	SR 223 (Bear Mountain Boulevard)			2-WAY	35.206	-119.10998							8		S343V		1740	15 0	
AK	NS	3996	Old River Road	NORTH OF	SR 223 (Bear Mountain Boulevard)			2-WAY	35.21161	-119.10988	1		X Bak				4				3996	15 0	
AK	NS	2391	Old River Road	SOUTH OF	Stockdale Highway		240	2-WAY	35.35271	-119.11464		Х					9			06W253150000	2391	15 0	
AK	EW	3552	Olive Drive	BETWEEN	Calloway Drive AND Jewetta Avenue			2-WAY	35.41664	-119.1193							9				3552	15 0	02 04
IAK	EW	2392	Olive Drive	WEST OF	Coffee Road		455	2-WAY	35.41243	-119.09306							9				2392	15 0	02 03
IAK	EW	1747	Olive Drive	WEST OF	Fruitvale Avenue			2-WAY	35.41239	-119.07519					х		2	Х			1747	15 0	
AK	EW	1750	Olive Drive	EAST OF	Knudsen Drive			2-WAY	35.41232	-119.05798		Х									1750	15 0	
AK	EW	1751	Olive Drive	WEST OF	Roberts Lane			2-WAY	35.41238	-119.0505		Х									1751		02 03
AK	EW	1748	Olive Drive (CLS)	EAST OF	Fruitvale Avenue			2-WAY	35.41239	-119.07367		Х			х		1	Х		06F266100200	1748	15 0	
AK	NS	2390	Olympia	SOUTH OF	South Laurelglen Boulevard		433	2-WAY	35.32535	-119.08714							9				2390	15 0	
AK AK	NS	140 651	Oswell Street Oswell Street	NORTH OF SOUTH OF	Brundage Lane		246 241	2-WAY 2-WAY	35.35456 35.35368	-118.9498 -118.94981		Х					9			06F306101000	140	15 0	
AK AK	NS NS	656	Oswell Street	SOUTH OF	Brundage Lane Columbus Street		245	2-WAY	35.40022	-118.95038							9				651 656	15 0	
AK	NS	653	Oswell Street	BETWEEN	Pico Avenue AND Bernard Street		242	2-WAY	35.39136	-118.94975							9				653	15 0 15 0	02 11 02 12
AK	NS NS	654	Oswell Street	SOUTH OF	SR 178		243	2-WAY	35.39488	-118.94978		х					9			06F306105000	654		
AK	NS	174	Oswell Street	BETWEEN	SR 178 AND Auburn Street		244	2-WAY	35.3974	-118.9498		X					1			06F306107000	174	15 0	
AK	NS NS	1755	Oswell Street	NORTH OF	Virginia Avenue		244	2-WAY	35.3974	-118.9498					x		2	х		JU 300107000	1755	15 0. 15 0.	
AK	NS NS	659	P Street	NORTH OF	4th Street		406	2-WAY	35.36127	-119.01185				1	"	1 1	9	- "			659	15 0	
AK	NS	657	P Street	NORTH OF	Belle Terrace		404	2-WAY	35.34715	-119.01186		х		1		1 1	1			06F296110000	657	15 0	
AK	NS	658	P Street	NORTH OF	Brundage Lane		405	2-WAY	35.35435	-119.01189		-					9				658	15 0	
٩K	NS	2399	P Street	SOUTH OF	California Avenue			2-WAY	35.36691	-119.01182					х		2	х			2399	15 0	
AK .	NS	2671	P Street	NORTH OF	Ming Avenue			2-WAY	35.34018	-119.01187					x		2	x			2671	15 0	
AK	EW	141	Pacheco Road	BETWEEN	Gosford Road AND Young Street		434	2-WAY	35.31022	-119.09855		х					9			06F243060000	141	15 0	08 06
٩K	EW	664	Pacheco Road	EAST OF	H Street		251	2-WAY	35.31039	-119.02054							9				664	15 0	09 02
٩K	EW	663	Pacheco Road	EAST OF	Hughes Lane		250	2-WAY	35.3104	-119.02947						T	9				663	15 0	
AΚ	EW	665	Pacheco Road	EAST OF	Monitor Street		252	2-WAY	35.31041	-119.0113							2				665	15 0	
AΚ	EW	2401	Pacheco Road	EAST OF	Stine Road		247	2-WAY	35.31042	-119.05612							9				2401	15 0	
AK	EW	2402	Pacheco Road	EAST OF	Wible Road		249	2-WAY	35.31022	-119.03841					I I		9				2402		07 28
AK AK	EW	2673 331	Pacheco Road	WEST OF BETWEEN	Wible Road			2-WAY 2-WAY	35.31024 35.37624	-119.04118 -119.15755					x	1	2	X		045330000000	2673 331	15 0	
AK AK			Palm Avenue		Westdale Driver AND Jenkins Road			2-WAY 2-WAY			1	X				1	1	X		06F320080000		15 0	
AK AK	EW	340	Palm Avenue (Bakersfield)	BETWEEN EAST OF	Jewetta Avenue AND Calloway Drive	1	255	2-WAY	35.37539 35.34135	-119.11763	1	Х				1	1 0	Х		06F320105000	340 668	15 0	
AK AK	EW	2674	Palm Street	EAST OF	Oak Street		255	2-WAY	35.36139	-119.03824							2				2674	15 0 15 0	
AK	EW	3766	Palm Street	EAST OF	Real Road		253	2-WAY	35.36134	-119.04298		х					1			06F249095000	3766	15 0	
lK	EW	678	Panama Lane				435	2-WAY	35.29628	-119.11793		×		1		1 1	1			06F241081000	678		03 04
ıK.	EW	2793	Panama Lane	EAST OF	Cottonwood Road		1	2-WAY	35.29592	-118.98398		X		1		1 1	1	х		06F241110000	2793		04 28
AK .	EW	135	Panama Lane	BETWEEN	Dennen Street AND H Street		262	2-WAY	35.29587	-119.02198		x					9			06F241095000	135		02 25
\K	EW	1772	Panama Lane	EAST OF	Fairfax Road			2-WAY	35.29598	-118.93031			X Bak				4	х			1772	15 0	
K	EW	46	Panama Lane	BETWEEN	Farmers Canal AND Gosford Road		257	2-WAY	35.29602	-119.07235		х		ĺ			2			06F241083000	46	15 0	
K	EW	2206	Panama Lane	EAST OF	H Street		263	2-WAY	35.29587	-119.02077		х					9			06F241105000	2206	15 0	
K	EW	133	Panama Lane					2-WAY	35.29589	-119.00643					х		2	х			133		03 03
K	EW	1770	Panama Lane	EAST OF	SR 43 (Enos Lane)			2-WAY	35.29618	-119.25074			X Bak				4	х			1770		02 18
\K	EW	2411	Panama Lane		Stine Road		259	2-WAY	35.29596	-119.05601							9				2411	15 0	03 04
K	EW	45	Panama Lane	BETWEEN	Stine Road AND Ashe Road		258	2-WAY	35.29591	-119.06561		х					9			06F241084000	45	15 0	02 18
٩K	EW	3412	Panama Lane		Wible Road			2-WAY	35.2959	-119.03999					х	T	2	х			3412	15 0	03 04
٩K	EW	682	Panama Lane	BETWEEN	Wible Road AND Akers Road		260	2-WAY	35.29591	-119.04468		х					9			06F241087000	682	15 0	03 04
\K	EW	37	Panama Lane	BETWEEN	Wible Road AND Dennen Street		261	2-WAY	35.29598	-119.03621		х					9			06F241090000	37	15 0	03 05
\K	EW	334	Panama Road	BETWEEN		1		2-WAY	35.26741	-118.81985	1	Х					1	х		06F237520000	334	15 0	
AK	EW	1775	Panama Road		Fairfax Road			2-WAY	35.266975	-118.929433			X Bak		х		4	х			1775	15 1	12 16
AK	EW	1776	Panama Road	WEST OF				2-WAY	35.26698	-118.9161						T	8		S244F		1776	15 0	
AK	EW	84	Panorama Drive	BETWEEN	Christmas Tree Lane AND Columbus Street		270	2-WAY	35.4102	-118.94202		х					1			06F264107000	84	15 0	09 02
AK	EW	83	Panorama Drive	BETWEEN	Columbus Street AND Mount Vernon Avenue		268	2-WAY	35.41194	-118.95656		х					1			06F264104000	83	15 0	09 01
AK	EW	677	Panorama Drive	EAST OF	Fairfax Road	1	272	2-WAY	35.40283	-118.92971							9				677	15 0	07 02
		85	Panorama Drive	BETWEEN WEST OF	Fairfax Road AND Christmas Tree Lane Haley Street	1	271 266	2-WAY 2-WAY	35.40505	-118.93749		Х					1			06F264109000	85	15 0	08 27
AK AK	EW	86	Panorama Drive						35.40996	-118.97771		X					1			06F264102000	86		07 02

BAK	EW		672	Panorama Drive		Mount Vernon Avenue	267	2-WAY	35.41281	-118.96809									9	-		672	15 07
BAK	EW		670	Panorama Drive	WEST OF	River Boulevard	265	2-WAY 2-WAY	35.40903	-118.9865									9			670	15 07
BAK BAK	EW NS		674 2413	Panorama Drive Park View Drive	EAST OF SOUTH OF	Wenatchee Avenue White Lane	269 273	2-WAY	35.41232 35.32362	-118.95771 -119.10485									9			674 2413	15 08 : 15 01 :
IAK	NS		2413	Park View Drive	NORTH OF	White Lane White Lane	274	2-WAY	35.32445	-119.1040									9			2413	15 01 .
AK	NS	s	2415	Patton Way	NORTH OF	Hageman Road	437	2-WAY	35.40187	-119.0833			х						9		06WM79110000	2415	15 07
AK	NS		3554	Patton Way	SOUTH OF	Hageman Road	436	2-WAY	35.40091	-119.08329									- 1			3554	15 07
AK	NS		2416	Pin Oak Park Blvd	SOUTH OF	White Lane	277	2-WAY	35.31806	-119.09861									9			2416	15 01 :
BAK	NS EW		2417 336	Pin Oak Park Blvd Pioneer Drive	NORTH OF BETWEEN	White Lane	278	2-WAY 2-WAY	35.31889 35.3689	-119.09825 -118.92015		- 1							9		06F251115000	2417 336	15 01 :
BAK	EW		1803	Pioneer Drive	EAST OF	Brentwood Drive AND SR 184 (Morning Drive) Morning Drive		2-WAY	35.36892	-118.92013			Х				X		2	X	00F251115000	1803	15 06 1 15 02
IAK	EW		335	Pioneer Drive	BETWEEN	Oswell Street AND Brentwood Drive		2-WAY	35.36884	-118.92833			х						1	x	06F251110000	335	15 06
BAK	EW		2419	Planz Road	WEST OF	Akers Road	281	2-WAY	35.32498	-119.04808									9			2419	15 05
IAK	EW		696	Planz Road	WEST OF	H Street	284	2-WAY	35.32492	-119.02213	1								9			696	15 01 :
IAK	EW		697	Planz Road	EAST OF	H Street	285	2-WAY	35.32492	-119.02039									9			697	15 01 :
BAK BAK	EW		695 2418	Planz Road Planz Road	WEST OF	Hughes Lane Stine Road	283 280	2-WAY 2-WAY	35.32494 35.32506	-119.03071 -119.05752									9			695 2418	15 01 :
BAK	EW		698	Planz Road	WEST OF	Union Avenue	286	2-WAY	35.32506	-119.00752									2			698	15 05 15 01 :
IAK	EW		2678	Planz Road	WEST OF	Wible Road	282	2-WAY	35.32495	-119.03943									2			2678	15 05
IAK	EW		699	Planz Road	WEST OF	Coy Avenue	287	2-WAY	35.32492	-119.00155		1							9			699	15 05
BAK	NS		701	Q Street	SOUTH OF	20th Street	408	2-WAY	35.37673	-119.01061	ı								9			701	16 01 :
IAK	NS		702	Q Street	NORTH OF	24th Street	410	2-WAY	35.38123	-119.01059									9			702	16 01 :
IAK IAK	NS NS		703 704	Q Street Q Street	NORTH OF	28th Street 30th Street	411 412	2-WAY 2-WAY	35.38579 35.38697	-119.01055 -119.01055									9			703 704	16 01 : 16 01 :
IAK	NS NS		705	Q Street	NORTH OF	34th Street	412	2-WAY	35.38697	-119.0105									9			705	16 01 :
IAK	NS		700	Q Street	SOUTH OF	Truxtun Avenue	407	2-WAY	35.37273	-119.01064									9			700	16 01 :
BAK	NS		706	Quantico Avenue	NORTH OF	Brundage Lane	288	2-WAY	35.35594	-118.95866		1							9			706	15 07
IAK	NS	S	1821	Quantico Avenue	SOUTH OF	California Avenue		2-WAY	35.36766	-118.95862		1					х		2	х		1821	15 07
IAK IAK	NS		343	Quinn Road	BETWEEN NORTH OF	Saco Road AND Petrol Road	438	2-WAY 2-WAY	35.4463 35.41738	-119.08286	X		X		 				1	Х	06F317100000 06F319100000	343 707	15 07
IAK IAK	NS NS		707 3421	Rancheria Road Real Road	NORTH OF NORTH OF	SR 178 Chester Lane	438 291	2-WAY	35.41738 35.36574	-118.83182 -119.04342		1	Х		-				1 2		U6F319100000	707 3421	15 06 : 15 05
BAK	NS NS		2436	Real Road	NORTH OF	Palm Street	291	2-WAY	35.36186	-119.04342								1	9			3421 2436	15 05
IAK	NS		2435	Real Road	NORTH OF	Stockdale Highway	289	2-WAY	35.35488	-119.04347									9			2435	15 02
IAK	NS		2102	Real Road (SOUTH)	NORTH OF	Ming Avenue	294	2-WAY	35.33996	-119.04339									9			2102	15 05
IAK	NS		2432	Real Road (SOUTH)	SOUTH OF	Reeder Avenue	292	2-WAY	35.32546	-119.04338	1		L.,.		 				9		0/5	2432	15 05
BAK BAK	NS NS		2207 2433	Real Road (SOUTH) Real Road (SOUTH)	SOUTH OF NORTH OF	Stockdale Highway Wilson Road	295 293	2-WAY	35.35389 35.33272	-119.04339 -119.04338	1		Х		 				9		06F28B10B000	2207 2433	15 05
IAK IAK	EW		3555	Reina Road	BETWEEN	Jewetta Avenue AND Allen Road	253	2-WAY	35.41245	-119.04338		1							9			3555	15 05 15 01 :
IAK	NS		2437	Reliance Drive		Panama Lane	296	2-WAY	35.29649	-119.08332		1							9			2437	15 10
BAK	NS		344	Renfro Road		SR 58 (Rosedale Highway) AND Hageman Road		2-WAY	35.39136	-119.16328		1	Х						- 1	х	06WL01120000	344	15 06
BAK	NS		3769	Renfro Road	NORTH OF	Stockdale Highway	439	2-WAY	35.35475	-119.1632			х		I				1		06WL01100000	3769	15 06
BAK BAK	EW NS		2438 2431	Ridge Oak Drive Riverlakes Drive	EAST OF NORTH OF	Old River Road Hageman Road	297 456	2-WAY 2-WAY	35.329776 35.40123	-119.110274 -119.09774		1							9			2438 2431	15 10 :
BAK	EW		346	Roberts Lane	BETWEEN	Airport Drive AND Chester Avenue	430	2-WAY	35.40865	-119.03072			×						1	x	06F265110000	346	15 02 15 06
BAK	EW		4364	Rosedale Hwy	WEST OF	Allen Road		2-WAY	35.38348	-119.14665						x			9			4364	15 01
AK	EW	v	4365	Rosedale Hwy	EAST OF	Allen Road		2-WAY	35.38351	-119.14442						x			9			4365	15 01
IAK	EW		4366	Rosedale Hwy	WEST OF	Calloway Drive		2-WAY	35.3834	-119.11089						x			9			4366	15 01
BAK	EW		4367	Rosedale Hwy	EAST OF	Calloway Drive		2-WAY	35.3834	-119.10931						x			9			4367	15 01
BAK BAK	EW		4368 4369	Rosedale Hwy Rosedale Hwy	WEST OF EAST OF	Fruitvale Avenue Fruitvale Avenue		2-WAY 2-WAY	35.38328 35.38326	-119.07536 -119.07242						x			9			4368 4369	15 01
BAK	EW		1863	Round Mountain Road	EAST OF	China Grade Loop		2-WAY	35.42773	-119.07242		1	х	×	Bak				1	x	06F318100000	1863	15 01 15 07
BAK	NS		2118	Sabodan Street	SOUTH OF	15		2-WAY	35.03031	-118.97591	X							x	7	x		2118	15 06
BAK	NS		359	Saco Road	BETWEEN	Imperial Street AND Seventh Standard Road		2-WAY	35.44932	-119.09694	X		х						- 1	х	06F315100000	359	15 09
BAK	NS		2439	SAN DIMAS ST		34TH			-119.0082345	35.39132813									9			2439	
BAK	NS		1879	Santa Fe Way	SOUTH OF	Seventh Standard Road	000	2-WAY	35.44024	-119.19747				Х	Bak				4			1879	15 06 :
BAK BAK	NS EW		2440 2441	Scarlet Oak Blvd Sillect Avenue	SOUTH OF EAST OF	Ming Avenue Buck Owens Boulevard	299 417	2-WAY 2-WAY	35.3392 35.38612	-119.10614 -119.04273			х						9		06F323100000	2440 2441	15 07
BAK	NS		3557	Sillect Avenue	NORTH OF	Gilmore Avenue	440	2-WAY	35.38981	-119.03743		1	^						1		00F323100000	3557	15 07 1 15 07 1
BAK	EW		361	Snow Road	BETWEEN	Coffee Road AND Allen Road		2-WAY	35.42694	-119.11832			х						- 1	x	06F268090000	361	15 08
BAK	EW		2104	Snow Road	WEST OF	Fruitvale Avenue		2-WAY	35.42699	-119.07776							х		2	x		2104	15 08 :
BAK	EW		145	South Half Moon Drive	BETWEEN	Ashe Road AND Pullman Way	300	2-WAY	35.32249	-119.07961	l		Х						- 1		06WL26100000	145	15 08
BAK BAK	EW		2442 2443	South Laurelglen Blvd South Laurelglen Blvd	WEST OF EAST OF	Gosford Road Gosford Road	301 302	2-WAY 2-WAY	35.32518 35.32519	-119.09262 -119.09153	-								9			2442 2443	15 08 :
BAK	NS		2444	South Laureigien Blvd	SOUTH OF	Wilford Court	303	2-WAY	35.32868	-119.09153		1							9			2443	15 08 15 08
BAK	NS		362	Sparks Street	BETWEEN	Pacheco Road AND Fairview Road	500	2-WAY	35.30696	-118.99425		1	х						1	x	06F298100000	362	15 07
BAK	NS	s	1937	Sterling Road	SOUTH OF	Edison Highway		2-WAY	35.36374	-118.94089		1					x		2	x		1937	15 01
BAK	NS	s	90	Stine Road	BETWEEN	Harris Road AND Panama Lane	304	2-WAY	35.29965	-119.05668			х						2		06F285090000	90	15 06
BAK	NS		3433	Stine Road	BETWEEN	Hosking Avenue AND McKee Road		2-WAY	35.27855	-119.05667									9			3433	15 06
BAK	NS NS		2681 87	Stine Road Stine Road		Ming Avenue Panama Lane AND McKee Road	310 442	2-WAY 2-WAY	35.33998 35.28434	-119.05021 -119.05667									2		06F285070000	2681 87	15 06
IAK IAK	NS NS		1943	Stine Road Stine Road		Panama Lane AND McKee Road SR 223 (Bear Mountain Boulevard)	442	2-WAY	35.28434 35.21209	-119.05667 -119.05694		1	Х	х	Bak				4		UBF 2850 / UUU 0	87 1943	15 06 15 06
BAK	NS NS		88	Stine Road	BETWEEN	Sk 223 (Bear Mountain Boulevard) White Lane AND Harris Road	305	2-WAY	35.21209	-119.05667			х	^	areast.				9		06F285100000	88	15 06
IAK	NS		47	Stine Road	BETWEEN	White Lane AND New Stine Road	307	2-WAY	35.32077	-119.05669			х						9		06F285102000	47	15 06
AK	NS		89	Stine Road	BETWEEN	White Lane AND Pacheco Road	306	2-WAY	35.31505	-119.05667			х						9		06F285101000	89	15 06
IAK	NS NC		3434	Stine Road		Wilson Road	309	2-WAY	35.33278	-119.05536	1								9		04520540205	3434	15 07
IAK IAK	NS EW		91 2447	Stine Road Stockdale Highway	BETWEEN WEST OF	Wilson Road AND Planz Road Allen Road	308 311	2-WAY	35.32768 35.35429	-119.05667 -119.14635	-		X		 				9		06F285103000 06F248095000	91 2447	15 06 15 02
IAK IAK	EW		175	Stockdale Highway	BETWEEN	Allen Road AND Arvin-Edison Canal	311	2-WAY	35.35419	-119.1403							X		9	х	55, 248073000	175	15 02 1
BAK	EW	v	2214	Stockdale Highway	WEST OF	Ashe Road	316	2-WAY	35.35432	-119.07416			х						9		06F248110000	2214	15 02
BAK	EW	V	3772	Stockdale Highway	WEST OF	Buena Vista Road	312	2-WAY	35.34906	-119.1279			Х						2		06F24B100000	3772	15 02
BAK	EW		2450	Stockdale Highway	WEST OF	California Avenue	317	2-WAY	35.35424 35.35422	-119.062	1		Х		 				9		06F248112000	2450	15 02
BAK BAK	EW		3436 2449	Stockdale Highway Stockdale Highway	LAUT OF	California Avenue Coffee Road	318 314	2-WAY 2-WAY	35.35422 35.35437	-119.0604 -119.09325	1		х						1 0		06F24B105000	3436 2449	15 02
BAK	EW		2682	Stockdale Highway		Coffee Road	314	2-WAY	35.35435	-119.09325							x		2	x	554 Z46 103000	2682	15 02 15 02
IAK	EW		738	Stockdale Highway		Don Hart Drive East	313	2-WAY	35.35441	-119.10177			х					1	9	"	06F248104000	738	15 02
AK	EW	v	2213	Stockdale Highway		El Rio Drive	315	2-WAY	35.35435	-119.08377			х						9		06F248107000	2213	15 02
BAK	EW		2524	Stockdale Highway	WEST OF	15		2-WAY	35.35494	-119.33918		1			Ker		X		5			2524	15 02
IAK	EW		2525	Stockdale Highway	EAST OF	1 b	240	2-WAY	35.35486	-119.3315	1				Ker		х		5		04504044405	2525	15 02
IAK IAK	EW		2215 2212	Stockdale Highway Stockdale Highway		Montclair Street Old River Road	319 443	2-WAY 2-WAY	35.3542 35.35308	-119.05403 -119.11546	1		X					- t	9		06F248114000 06F24B103000	2215 2212	15 02 15 02
IAK	EW		2451	Stockdale Highway		Real Road	320	2-WAY	35.35415	-119.04299			×						1		06F24B103000	2451	15 02
IAK	EW	V	1949	Stockdale Highway		SR 43 (Enos Lane)		2-WAY	35.35439	-119.24921												1949	15 02
IAK	EW	V	746	Sumner Street	WEST OF	Baker Street	321	2-WAY	35.37706	-118.99354									9			746	15 01
BAK	EW		747	Sumner Street		Baker Street	322	2-WAY	35.37677	-118.99231									9			747	15 01
BAK	EW		192	Truxtun Avenue	EAST OF	A Street	328	2-WAY	35.37338	-119.02878	1		X		 				1		06F252110300	192	15 08
BAK BAK	EW		756 2685	Truxtun Avenue Truxtun Avenue	EAST OF EAST OF	Chester Avenue Coffee Road	331 323	2-WAY 2-WAY	35.37333 35.36198	-119.01814 -119.09088	1		X X		 				1 1		06F252112000 06F252100000	756 2685	15 08 :
BAK	EW		2685	Truxtun Avenue Truxtun Avenue		Coffee Road Empire Drive	323	2-WAY	35.36198 35.37297	-119.09088	1		X						9		06F252100000 06F252103000	2685	15 08 15 08
IAK	EW		93	Truxtun Avenue	EAST OF	F Street	329	2-WAY	35.37335	-119.02263			x						9		06F252110500	93	15 08
BAK	EW	V	755	Truxtun Avenue	EAST OF	H Street	330	2-WAY	35.37334	-119.02053			х						9		06F252110700	755	15 08
IAK	EW		3874	Truxtun Avenue		Myrtle Street	327	2-WAY	35.37339	-119.03489			х						1		06F252110000	3874	15 08
IAK .	EW		2456	Truxtun Avenue		Oak Street	326	2-WAY	35.37351	-119.03939	1		L		I				9			2456	15 08
BAK BAK	EW		94	Truxtun Avenue		Q Street AND L Street	332	2-WAY	35.37332	-119.01439			X						1		06F252112030	94	15 08
	EW		95 2455	Truxtun Avenue Truxtun Avenue		Union Avenue AND Q Street Westwind Drive	333 325	2-WAY 2-WAY	35.37329 35.37378	-119.0069 -119.04315	1		Х						9		06F252112050	95 2455	15 08 15 08
AK	EW					Beale Avenue	335	2-WAY	35.37324	117.04311								1					10 00

IAK	EW	759	Truxtun Avenue (EAST)	EAST OF Tulare Street		334	2-WAY	35.37332	-118.99681								1		9			759		08 13	4
IAK IAK	NS	3092 99	Union Avenue	BETWEEN Bernard Street AND Columbus Street BETWEEN Bernard Street AND Monterey Street		339 338	2-WAY 2-WAY	35.39697 35.38774	-119.00286 -119.00287			X							9		06F297119000 06F297117000	3092		03 11	-
IAK IAK	NS		Union Avenue			338						Х							9	,	06F297117000	99		02 12	#
IAK IAK	NS	2687	Union Avenue Union Avenue	SOUTH OF California Avenue SOUTH OF Ming Avenue			2-WAY 2-WAY	35.36695 35.33845	-119.00294 -119.00302							Х	x		9	K.		2687		03 11	+
AK AK	NS NS	1993 762	Union Avenue	SOUTH OF Ming Avenue SOUTH OF Monterey Street		337	2-WAY	35.38226	-119.00302			х					^		9		06F297115000	1993 762		08 26 02 12	
uk UK	NS	3641	Union Avenue	NORTH OF SR 223 (Bear Mountain Boulevard)		33/	2-WAY	35.38220	-119.00269				×	Bak					4		00F297115000	3641		02 12 02 12	-
AK	NS	98	Union Avenue	SOUTH OF Planz Road		340	2-WAY	35.32407	-119.00321			х	_ ^	Dak					9		06F297105000	98		02 12	\pm
IAK	NS	1994	Union Avenue (South)	SOUTH OF Belle Terrace			2-WAY	35.34557	-119.00301							×			2	c		1994		03 11	+
IAK	NS	1991	Union Avenue (South)	NORTH OF Panama Lane			2-WAY	35.29726	-119.00306							X				K		1991		06 17	,
IAK .	EW	769	University Avenue	EAST OF Columbus Street		345	2-WAY	35.40509	-118.94919										9			769		06 23	3
IAK	EW	766	University Avenue	EAST OF Haley Street		342	2-WAY	35.40488	-118.97517										9			766		06 24	
IAK	EW	767	University Avenue	EAST OF Mount Vernon Avenue		343	2-WAY	35.40496	-118.96647										9			767		06 23	
IAK	EW	765	University Avenue	EAST OF River Boulevard		341	2-WAY	35.40173	-118.98429		1								9			765		06 23	
IAK	EW	768	University Avenue	EAST OF Wenatchee Avenue		344	2-WAY	35.40502	-118.95786										2			768	15 0	06 23	1
IAK	NS	3781	Verdugo Lane	NORTH OF Hageman Road		457	2-WAY	35.3986	-119.1189			Х							1		06F276120000	3781		08 27	
IAK	NS	377	Verdugo Lane	BETWEEN SR 58 (Rosedale Highway) AND Glenn Street			2-WAY	35.38044	-119.11898		1	Х							1	K	06F276090000	377		08 25	
IAK	EW	772	Virginia Avenue	EAST OF Dr. Martin Luther King Jr. Boulevard		347	2-WAY	35.36122	-118.98464		1								9			772		07 23	
IAK	EW	771	Virginia Avenue	EAST OF King Street		346	2-WAY	35.36118	-118.99352							-			9			771		07 30	
AK AK	EW	2006 147	Virginia Avenue Washington Street	EAST OF Mount Vernon Avenue BETWEEN Feliz Drive AND Brundage Lane			2-WAY	35.36135 35.35288	-118.96641 -118.97641		1				_	Х				K K	06F302090000	2006 147		07 22	
AK AK	NS EW	148	Washington Sireet Watts Drive	BETWEEN Feliz Drive AND Brundage Lane BETWEEN Madison Street AND Cottonwood Road			2-WAY	35.33221	-118.99151		'	X							1	· ·	06F246130000	148		07 15	-
AK	EW	149	Watts Drive	EAST OF Union Avenue		348	2-WAY	35.3322	-119.00174			X							1	`	06F246120000	149		06 24 07 22	
AK	NS	774	Wenatchee Street	SOUTH OF University Avenue		349	2-WAY	35.40456	-118.95868		1								9			774		06 23	
AK	NS	775	Wenatchee Street	NORTH OF University Avenue		350	2-WAY	35.4054	-118.95868		1								9			775		06 23	
IAK	NS	2471	Westwind Drive	NORTH OF Truxtun Avenue		351	2-WAY	35.37442	-119.04254										9			2471		07 21	
IAK	EW	2233	Westwold	WEST OF Gosford Road		467	2-WAY	35.33018	-119.09258		1								9			2233		07 22	
AK	EW	3194	White Lane	BETWEEN Allen Road AND Old River Road		352	2-WAY	35.32516	-119.12609			х							1		06F244090000	3194		06 09	
AK	EW	101	White Lane	BETWEEN Central Branch Kern Island Canal & Cottonwood		366	2-WAY	35.31768	-118.995926			х							1		06F244125000	101		06 09	
AK	EW	31	White Lane	BETWEEN Gosford Road AND Wilson Road		356	2-WAY	35.31822	-119.08286			Х							2		06F244095000	31	15 0	06 09	9
AK	EW	787	White Lane	EAST OF H Street		364	2-WAY	35.31766	-119.02024			Х							9		06F244109000	787		06 09	4
IAK IAK	EW	61	White Lane	BETWEEN H Street AND Hughes Lane		363	2-WAY	35.31766	-119.02281			Х				-	1		9	_	06F244108000	61		06 10	4
	EW	788	White Lane	EAST OF Monitor Street		365	2-WAY	35.31767	-119.01069				-	1		-	1		9		04534400000	788		06 09	
AK AK	EW	3093 32	White Lane	EAST OF Old River Road BETWEEN Old River Road AND Gosford Road		353	2-WAY 2-WAY	35.32521 35.31993	-119.10888 -119.10094			X				-	1		9		06F244093000 06F244094000	3093 32		06 10	
AK AK	EW	32	White Lane White Lane	BETWEEN Old River Road AND Gosford Road BETWEEN Pin Oak Boulevard AND Gosford Road		354 355	2-WAY	35.31993 35.31825	-119.10094 -119.09546			X				+	1		9	_	06F244094000 06F244094500	32		06 09	
IAK IAK	EW	193	White Lane	BETWEEN SR 99 AND Hughes Lane		362	2-WAY	35.31825 35.31767	-119.09546 -119.03095			X		 		-	1		9		06F244094500 06F244107000	193		06 09 06 09	
IAK	EW	4	White Lane	BETWEEN SR 99 AND Wible Road		361	2-WAY	35.31768	-119.03856			X					1		9		06F244107000	4		06 11	ıΤ
AK	EW	2475	White Lane	EAST OF Stine Road		359	2-WAY	35.31802	-119.05583			х							9		06F244105000	2475		06 09	,
AK	EW	5	White Lane	BETWEEN Stine Road AND Wilson Road		357	2-WAY	35.31813	-119.06362			Х							1		06F244100000	5		06 09	
IAK	EW	373	White Lane	WEST OF Union Avenue			2-WAY	35.31768	-119.00409			Х				х				K	06F244110000	373		06 09	
IAK	EW	3438	White Lane	WEST OF Wible Road			2-WAY	35.31769	-119.03964							Х			2	K		3438	15 0	06 10)
IAK	EW	2478	White Oak Drive	EAST OF Old River Road		367	2-WAY	35.33491	-119.11259		1			1		-	1		9			2478	15 0	06 17	
IAK	NS	2481	Wible Road	SOUTH OF Harris Road		369	2-WAY	35.3027	-119.03896		1			.		-	1		9			2481		08 19	_
AK	NS	3620	Wible Road	NORTH OF Ming Avenue		375	2-WAY	35.33983	-119.03895										1			3620		08 19	
AK	NS	798	Wible Road	BETWEEN Ming Avenue AND Wilson Road		374	2-WAY	35.33575	-119.03896			Х			_	_			9		06F289110000	798		08 19	4
AK AK	NS NS	2482 33	Wible Road Wible Road	SOUTH OF Pacheco Road BETWEEN Pacheco Road AND White Lane		370 371	2-WAY 2-WAY	35.3098 35.31428	-119.03895 -119.03896			Х							9		06F289102000	2482 33		08 19	4
AK AK	NS	100	Wible Road	BETWEEN SR 119 (Taft Highway) AND Arvin-Edison Canal		458	2-WAY	35.28283	-119.03896			X							9		06F289102000 06F289090000	100		08 19	
IAK	NS	2034	Wible Road	NORTH OF SR 223 (Bear Mountain Boulevard)		430	2-WAY	35.28283	-119.03922		1		×	Bak					4		001289090000	2034		08 20 08 20	
IAK	NS	34	Wible Road	BETWEEN White Lane AND Wilson Road		372	2-WAY	35.3261	-119.03904			Х		Duk					9		06F289105000	34		08 19	
IAK	NS	2226	Wible Road	SOUTH OF Wilson Road		373	2-WAY	35.33162	-119.03896										9		00/207100000	2226		08 19	
AK	EW	2489	Wilson Road	EAST OF Akers Road		380	2-WAY	35.33227	-119.04719										9			2489		06 25	
IAK	EW	2039	Wilson Road	EAST OF Chester Avenue			2-WAY	35.33219	-119.01213							х			2	K		2039		08 20	
IAK	EW	151	Wilson Road	BETWEEN Edgemont Drive AND New Stine Road		377	2-WAY	35.33169	-119.06082			х							1		06F246100000	151	15 0	06 25	,
IAK	EW	806	Wilson Road	EAST OF H Street		383	2-WAY	35.33218	-119.02062										9			806		06 25	
IAK	EW	805	Wilson Road	EAST OF Hughes Lane		382	2-WAY	35.3322	-119.02943										9			805		06 25	
IAK	EW	2488	Wilson Road	EAST OF New Stine Road		378	2-WAY	35.33224	-119.05756										9			2488		06 25	
IAK	NS	2486	Wilson Road	SOUTH OF Planz Road		376	2-WAY	35.32461	-119.06573										9			2486		06 25	
IAK	EW	2490	Wilson Road	EAST OF Wible Road		381	2-WAY	35.33221	-119.03857										9			2490		06 25	
IAK IOR	EW NS	2630 2120	Wilson Road Borax Road	WEST OF Wible Road SOUTH OF SR 58			2-WAY 2-WAY	35.33222 35.00442	-119.04015 -117.70326							Х		x	7	K		2630 2120		06 25	
OR	NS NS	1258	Borax Road Borax Road	NORTH OF SR 58 (Bakersfield Highway)			2-WAY	35.00442 35.00847	-117.70326 -117.70331		1							X		K		1258		12 03	
OR	NS	1260	Boron Avenue	NORTH OF Twenty Mule Team Road			2-WAY	35.00037	-117.64974		1			-					8	S671		1260		12 03	
OR	EW	1985	Twenty Mule Team Road	WEST OF Boron Avenue			2-WAY	35.00037	-117.652		1								8	S320		1985		12 03 12 03	
OR	EW	4135	Twenty Mule Team Road	EAST OF Boron Avenue			2-WAY	34.99942	-117.64707		1		х	Ker						(4135		12 03	
AL	EW	872	California City Blvd	WEST OF Baron Boulevard			2-WAY	35.12562	-118.0294					NG.					10	`		872		12 03	
CAL	EW	2705	California City Blvd	EAST OF Baron Boulevard			2-WAY	35.12597	-117.9518		1			Cal	х				6		06W267105000	2705		12 03	
CAL	NS	873	California City Blvd	SOUTH OF Redwood Boulevard			2-WAY	35.11596	-117.93487		1		х	Cal					4	K		873		12 03	
AL	EW	3899	California City Blvd	EAST OF SR 14			2-WAY	35.125483	-118.101112				х	Cal					4	K		3899		12 03	
CAL	NS	4130	California City Blvd	SOUTH OF Tamarack Avenue			2-WAY	35.11071	-117.92841		1								10			4130	15 1	12 03	3
AL	NS	877	Neuralia Road	NORTH OF California City Boulevard			2-WAY	35.12657	-117.98564		1			Cal	х				6			877	15 1	12 08	3
AL	NS	4004	Neuralia Road	AT Lindbergh Boulevard			2-WAY	35.14772	-117.98586		1			1		-	1		10			4004	15 1	12 08	3
AL	NS	4129	Neuralia Road	SOUTH OF Philips Road	-		2-WAY	35.19133	-117.9858		1		х	Cal		-	1		4	K		4129		12 08	
AL	EW	2956	North Loop Blvd	WEST OF Conklin Boulevard NORTH OF SR 58		l	2-WAY 2-WAY	35.13325 35.12005	-117.95337 -118.17625	×	1			Cal	^	+	1		6			2956		12 03	
AL AL	NS NS	1828 3887	Randsburg Cutoff Road Randsburg Mojave Road	NORTH OF SR 58 NORTH OF Twenty Mule Team Parkway	_	l	2-WAY 2-WAY	35.12005 35.15589	-118.17625 -117.90552		1		X	Ker Cal	-1	1			3	-1		1828 3887		12 03	
AL AL	EW	3887 2989	Redwood Blvd	WEST OF Hacienda Boulevard			2-WAY	35.15589 35.11134	-117.90552 -117.96151	х	- '			Cal	x	-	1		6			2989		12 03 12 03	
CAL	EW	2957	South Loop Blvd	WEST OF Conklin Boulevard			2-WAY	35.11134	-117.95302	X				Cal	x	1			6			2957		12 03	
CAL	NS	4127	Twenty Mule Team Parkway	NORTH OF Randsburg Mojave Road			2-WAY	35.14642	-117.90543		1		х	Cal						K		4127		12 08	
AL	EW	4128	Twenty Mule Team Parkway	WEST OF San Bernardino County Line			2-WAY	35.245331	-117.63753		1		х	Ker						K		4128		01 08	
DEL	NS	1283	Browning Road	SOUTH OF County Line Road			2-WAY	35.78802	-119.2231			Х	х	Ker					1	K	06Z218200000	1283	15 0	03 04	4
DEL	NS	202	Browning Road	BETWEEN County Line Road AND SR 155 (Garces Highway)			2-WAY	35.77476	-119.22315		1	Х								K	06Z218100000	202		03 04	
DEL	NS	3299	Browning Road	SOUTH OF Pond Road			2-WAY	35.715048	-119.223087				х	Del					4			3299	15 0	03 04	4
EL	NS	1323	Casey Avenue	NORTH OF Cecil Avenue			2-WAY	35.780922	-119.294285	Х			х	Ker		-	1		3			1323		10 21	
EL	EW	903	Cecil Avenue	BETWEEN Browning Road AND Randolph Street			2-WAY	35.77587	-119.22725		ļ			.		1	1				_	903		10 27	
EL	EW	1326 4208	Cecil Avenue	EAST OF Casey Avenue WEST OF Ellington Street		l	2-WAY 2-WAY	35.77581 35.775914	-119.29083 -119.253995		—			Del		-	1		8	S104		1326		10 29	
			Cecil Avenue			l	2-WAY 2-WAY					Х	×			-	-			K .	06Z221090000	4208		10 07	
EL EL	EW	1327 907	Cecil Avenue Cecil Avenue	WEST OF Famoso Porterville Highway BETWEEN Randolph Street AND Glenwood Street			2-WAY 2-WAY	35.77615 35.77587	-119.12893 -119.23996			х	X	Del Del		+	х			K K	06Z221130000	1327 907		09 02	
EL	EW	3881	Cecil Avenue Cecil Avenue	BETWEEN Randolph Street AND Glenwood Street EAST OF SR 43	_	l	2-WAY	35.77566	-119.23996 -119.34065		1		X	Del		1				K	002221130000	3881		10 07	
EL	NS	3881	Corcoran Road	SOUTH OF County Line Road			2-WAY	35.7/500	-119.34065 -119.57904		1		X	Ker		-	1			K		3881		10 28 10 28	
EL	EW	1378	County Line Road	EAST OF Driver Road			2-WAY	35.79049	-119.20224				^	Police		1			8	S100	E	1378		10 28 03 11	
EL	NS	3281	Driver Road	SOUTH OF County Line Road			2-WAY	35.78622	-119.20536		1		Х	Ker		1				K 3100		3281		01 13	
EL	NS	3291	Driver Road	SOUTH OF Pond Road			2-WAY	35.7153	-119.20513		1		×	Del						κ .		3291		01 13	
EL	NS	199	Ellington Street	BETWEEN 9th Avenue AND 11th Avenue			2-WAY	35.7685	-119.25135			Х								K	06Z212105000	199		10 06	
EL	NS	908	Ellington Street	BETWEEN 9th Avenue AND 8th Avenue			2-WAY	35.76627	-119.25086												06Z212102000	908		10 07	
EL	NS	1461	Famoso Porterville Highway	NORTH OF Cecil Avenue			2-WAY	35.77708	-119.12313										8	S341		1461		03 12	
EL	NS	3282	Famoso Porterville Highway	SOUTH OF County Line Road			2-WAY	35.78914	-119.11566		1											3282		11 19	
EL	EW	3235	First Avenue	WEST OF Ellington Street			2-WAY	35.75776	-119.24956		1		х	Del						K		3235	15 1	12 16	6
EL	EW	3216	First Avenue	EAST OF Fremont Street			2-WAY	35.75776	-119.24677		1		х	Del					4	K		3216		10 06	
	NS	913	Freemont Street	SOUTH OF 9th Avenue			2-WAY	35.76646	-119.24956		1			1 1		-	1				06Z213102000	913	15 1	10 06	3
DEL		200	Freemont Street	BETWEEN 9th Avenue AND 11th Avenue			2-WAY	35.76879	-119.2501		1	х		1 1		-	1			K	06Z213105000	200		10 06	
EL	NS			WEST OF Albany Street		i	2-WAY	35.7614	-119.259		1		1	×	x	1	1	×	6	1		1485	15 0	03 11	. 1
EL EL EL	EW EW	1485 298	Garces Hwy Garces Hwy	BETWEEN Corcoran Road AND Wildwood Road			2-WAY	35.76087	-119.52359		1	Х			_	_				K	06Z224080000	298		03 10	

EL EL	NS NS	197 198	Garzoli Avenue Garzoli Avenue	BETWEEN Pond Road AND Schuster Road SOUTH OF Woollomes Avenue		2-WAY 2-WAY	35.7251 35.74328	-119.2407 -119.24383		1	X						1 X		06W268102000 06W268110000	197 198		05	
EL	NS NS	921	Girard Street	NORTH OF 21st Avenue		2-WAY 2-WAY	35.74328 35.7859	-119.24383 -119.2497		1	х	×	Ker				1 X		06W268110000	198 921		03 05	
1	NS	1545	Hiett Avenue	NORTH OF Cecil Avenue		2-WAY	35.77851	-119.26739		1		×	Ker				3			1545		3 10	
	NS	201	Lexington Street	BETWEEN Woollomes Avenue AND SR 155 (Garces Highway)		2-WAY	35.75399	-119.24076			х						1 X		06Z215100000	201		3 12	
I	NS	933	Norwalk Street	BETWEEN County Line Road AND 29th Avenue		2-WAY	35.78626	-119.24095		1		х	Ker				3			933		0 21	
4	EW	1811	Pond Road	WEST OF Famoso Porterville Highway		2-WAY	35.71799	-119.16265		- 1		Х	Del				4			1811		0 20	
4	EW	4024	Pond Road	EAST OF SR 43		2-WAY 2-WAY	35.71778	-119.32484		1		X	Del				4 X			4024		0 29	
	EW	3217 4025	Pond Road Pond Road	WEST OF SR 99 EAST OF SR 99		2-WAY 2-WAY	35.71805 35.71805	-119.23896 -119.23341				X	Del Del				4 X			3217 4025		0 28	
	NS	4222	Quinn Road	SOUTH OF County Line Road		2-WAY	35.785579	-119.080694	Х			×	Ker				3			4222		0 21	
.	NS	936	Randolph Street	BETWEEN County Line Road AND 20th Avenue		2-WAY	35.78517	-119.23202				х	Ker				3			936		0 08	
	EW	3305	Schuster Road	EAST OF SR 43		2-WAY	35.73233	-119.33251	х			х	Del				4			3305	15 10	0 29	
-	NS	3257	Scofield Avenue	SOUTH OF County Line Road		2-WAY	35.78675	-119.40108	Х			х	Ker				3			3257		0 29	
L L	NS	1890 3307	Scofield Road	NORTH OF Kimberlina Road SOUTH OF Pond Road		2-WAY 2-WAY	35.56192 35.714785	-119.40288 -119.258601	X				D.I				8	277Y		1890 3307		0 29	
L L	NS NS	3882	Stradley Avenue Wallace Road	SOUTH OF Pond Road SOUTH OF County Line Road		2-WAY 2-WAY	35.714785 35.785759	-119.258601	X			X	Del Ker				4 X			3882		0 28	
L	EW	3901	Whisler Road	EAST OF Wallace Road		2-WAY	35.6457	-119.15804	×			×	McF				4 X			3901		0 21	
L	EW	2046	Woollomes Avenue	WEST OF Famoso Porterville Highway		2-WAY	35.74703	-119.14841	х			х	Del				4			2046		0 22	
L	EW	203	Woollomes Avenue	BETWEEN SR 99 AND Lexington Street		2-WAY	35.7469	-119.24216			х	х	Del				1 X		06Z226100000	203		3 12	
L	EW	4209	Woollomes Avenue	WEST OF SR-99 Ramps			-119.24438	35.74689				х	Del				4 X			4209		\perp	╄
L L	EW NS	2045 3284	Woollomes Avenue Zachary Avenue	EAST OF Stradley Avenue SOUTH OF County Line Road		2-WAY 2-WAY	35.7469 35.78627	-119.258 -119.18745	х			х	Ker				3	S112E		2045 3284		0 28	
N	NS	1566	Jack Ranch Road	SOUTH OF Couliny bille Road SOUTH OF Tulare Co Line		2-WA1	-118.72202	35.73175				X	Ker				3 X			1566		0 20	
M	EW	311	McKee Road	BETWEEN SR 184 (Main Street) AND Lilly Street		2-WAY	35.27427	-118.91238		1	х		KCI				1 X		06Z328100000	311		04 21	
м	NS	352	San Diego Street	BETWEEN Di Giorgio Road AND Hall Road		2-WAY	35.25642	-118.91883		1	х						1 X		06Z321100000	352		14 21	
В	NS	1386	Cuddy Valley Road	NORTH OF Frazier Mountain Park Road		2-WAY	34.82302	-119.00818									8	S364F		1386	14 0	1 23	╙
В	EW	1474	Frazier Mountain Park Road	WEST OF Lebec Road		2-WAY	34.81788	-118.89125				Х					8 X	S368G		1474		3 19	
B B	EW	1473 1472	Frazier Mountain Park Road Frazier Mountain Park Road	EAST OF Monterey Trail WEST OF Monterey Trail		2-WAY 2-WAY	34.82041 34.82109	-118.94473 -118.94831		1	-	1	+-+			х	9	S368F		1473 1472		09 02	
В	EW	1472	Grapevine Road (East)	EAST OF 15		2-WAY	34.82109	-118.94831		1	-		+ +		-		8	397AX		1514)1 22)7 15	
В	NS	1622	Lebec Road	NORTH OF Frazier Mountain Park Road		2-WAY	34.819764	-118.88487		<u> </u>							8	S393S		1622		2 17	
3	EW	1384	Mil Potrero Highway	NORTH OF Frontier Road		2-WAY	34.84392	-119.08579		1		×	Ker				3			1384	14 0	7 16	
В	EW	1704	Mt. Pinos Way	WEST OF Frazier Mountain Park Road		2-WAY	34.82006	-118.93687		1							8	S366G		1704	14 0	7 15	Ļ
5	EW	1257	Bodfish Canyon Road	EAST OF Lake Isabella Boulevard		2-WAY	35.59545	-118.49009		1			\vdash			1	8	154H		1257		2 28	
5 5	EW NS	1299 1309	Burlando Road Caliente Bodfish Road	EAST OF Lakeview Drive WEST OF Bealville Road		2-WAY 2-WAY	35.70841 35.28823	-118.44891 -118.62937	Х	1			Mtn	х	-	1	6	S495Z		1299 1309		06 03	
5	NS NS	1309	Caliente Bodfish Road Caliente Bodfish Road	SOUTH OF Kern River Canyon Road		2-WAY 2-WAY	35.28823 35.58909	-118.62937 -118.49582		1			-8101				8	S483Y		1309		02 24 03 04	
5	EW	1432	Elizabeth Norris	WEST OF Lake Isabella Boulevard		2-WAY	35.6095	-118.48495		<u> </u>						х				1432		2 17	
5	EW	1443	Erskine Creek Road	EAST OF Lake Isabella Boulevard		2-WAY	35.6165	-118.47621									8	148J		1443		2 18	
5	NS	1573	Jawbone Canyon Road	NORTH OF SR 14		2-WAY	35.30364	-118.00726	Х				Mtn	х			6			1573	15 13	2 08	
s s	NS NS	2934 1589	Kelso Creek Road Kelso Valley Road	SOUTH OF SR 178		2-WAY 2-WAY	35.66699 35.659981	-118.26566 -118.293314	X	-		-	Mtn Mtn	X	-	1	6	-		2934 1589		6 03	
5	NS EW	1589 1594	Kelso Valley Road Kernville Road	SOUTH OF SR 178 WEST OF Sierra Way		2-WAY 2-WAY	35.659981 35.75539	-118.293314 -118.41863	Х.				MILI	х	-	1	8	S146J		1589 1594		01 16 06 03	
5	NS	1617	Lake Isabella Blvd.	SOUTH OF Elizabeth Norris Road		2-WAY	35.60797	-118.48413									8	S485Z		1617		7 15	
5	NS	1618	Lake Isabella Blvd.	NORTH OF Erskine Creek Road		2-WAY	35.619211	-118.476861		1			Mtn	х			6	1		1618		2 17	
S	NS	1914	Sierra Way	NORTH OF Kernville Road		2-WAY	35.75659	-118.41823		1	Х	х	Ker				1 X	S521Z	06W262115000	1914	14 0	2 26	╙
5	NS	1912	Sierra Way	NORTH OF SR 178		2-WAY	35.65889	-118.32279		1			Mtn	х			6			1912		26	
; T	EW	2937	Wofford Blvd	EAST OF Bristlecone Drive EAST OF Meng Road		2-WAY 2-WAY	35.70845 35.65474	-118.44709 -120.17455		-			Mtn	х	-	1	6 v	-		2937		05	
ST ST	EW NS	3247 3248	Annette Road Baker Road	EAST OF Meng Road SOUTH OF County Line Road		2-WAY 2-WAY	35.65474 35.784259	-120.17455 -119.974545	X	-		X	Ker Ker		-	1	3 X	-		3247 3248		16	
ST	EW	3248 1252	Bitterwater Valley Road	East of SLO County Line		2-WAY 2-WAY	-120.07805	-119.974545 35.55933	×	1		X	Ker		1		3			1252		06 17 12 16	
ST	NS	2837	King Road	BETWEEN Twisselman Road AND County Line		2-WAY	35.76215	-119.86768	Х		Х	×	Ker				1 X		06WM93100000	2837		2 17	
ST	NS	1639	Lost Hills Road	SOUTH OF SR 46 (Paso Robles Highway)		2-WAY	35.61546	-119.68988									8	S213Y		1639	15 13	2 17	Ļ
AR	NS	3339	Fresno Street	NORTH OF SR 166 (Maricopa Highway)		2-WAY	35.05873	-119.39767	Х			X	Mar			1	4			3339		6 18	
AR AR	EW	3323 1928	Gardner Field Road Lake Road	WEST OF Lake Station Road EAST OF Gardner Field Road		2-WAY 2-WAY	35.13004 35.12306	-119.37007 -119.35793	Y	1		X	Taf Taf		-	1	4 X	-		3323 1928		04 24	
AR AR	EW	1928 3340	Union Street	WEST OF SR 33 (California Street)		2-WAY 2-WAY	35.12306 35.06218	-119.35793	X			X	Mar				4			1928 3340		02 06	
AR	NS	2023	Western Minerals Road	SOUTH OF Elkhorn Street		2-WAY	35.05456	-119.39494	х			х	Mar				4			2023		9 18	
CF	NS	1281	Browning Road	South of Peterson Road		2-WAY	-119.22306	35.69106				х	McF				4 X			1281		5 05	
CF	NS	204	Browning Road	BETWEEN Sherwood Avenue AND Elmo Highway		2-WAY	35.68135	-119.22312		1	Х						1 X		06G404100000	204		5 05	
OF OF	NS NS	1414 3290	Driver Road Driver Road	NORTH OF Famoso Road SOUTH OF Peterson Road		2-WAY 2-WAY	35.60719 35.70037	-119.20437 -119.20489		1		х	McF	X			6 X			1414 3290		5 07	
OF.	NS	1415	Driver Road	SOUTH OF Peterson Road SOUTH OF Whisler Road		2-WAY	35.64244	-119.20458		1		×	McF				4			1415		11 13 13 04	
CF.	EW	1438	Elmo Highway	EAST OF SR 43		2-WAY	35.6886	-119.32233		1		×	McF				4 X			1438		3 04	
CF.	EW	3294	Elmo Highway	EAST OF SR 99		2-WAY	35.68897	-119.22494		1		х	McF				4 X			3294		5 05	
CF.	EW	3312	Elmo Highway	WEST OF SR 99		2-WAY	35.68895	-119.23292		- 1		Х	McF				4 X			3312	15 0	5 05	Ļ
CF	NS	4150	Famoso Porterville Highway	NORTH OF Famoso Road		2-WAY	35.60888	-119.21004				х	McF				4 X			4150		5 28	
OF OF	NS NS	3286 299	Famoso Porterville Highway Garzoli Avenue	SOUTH OF Peterson Road BETWEEN Elmo Highway AND Pond Road		2-WAY 2-WAY	35.70025 35.70462	-119.22301 -119.24081		1	х	X	McF McF		-	1	4 X	1	06W268101000	3286 299		02 24 05 05	
F	EW	3288	Kimberlina Road	WEST OF SR 99		2-WAY	35.70462	-119.20004		<u> </u>		X	Was		1		4 X		0044230101000	3288		05 05	
CF.	NS	4212	Kyte Avenue	SOUTH OF Peterson Road		2-WAY	35.70057	-119.13375	х			×	McF				4			4212		3 04	
CF	NS	3289	Kyte Avenue	SOUTH OF Whisler Avenue		2-WAY	35.64227	-119.13358	Х			х	McF				4 X			3289	15 0	5 07	Ļ
F	NS	3296	Melcher Road	SOUTH OF Peterson Road		2-WAY	35.70034	-119.27636	X			X	McF			1	4			3296		03 04	
OF OF	NS EW	3300 342	Melcher Road Perkins Avenue	SOUTH OF Pond Road BETWEEN Mount Arbor Street AND Bowman Avenue		2-WAY 2-WAY	35.71475 35.68174	-119.27651 -119.21573	X	-	x	Х	Del		-	1	4 X	-	06G397115000	3300 342		113	
OF.	EW	3201	Peterson Road	EAST OF SR 43		2-WAY	35.70324	-119.21573	X			×	McF				4 X		00037/110000	3201		05 05 05 06	
F	EW	3302	Peterson Road	WEST OF Wallace Road		2-WAY	35.703439	-119.176057	Х			х	McF				4 X			3302		5 06	
CF.	EW	3301	Sherwood Avenue	WEST OF Kyte Road		2-WAY	35.67467	-119.13822	х			Х	McF				4 X			3301	15 03	3 04	╙
F	EW	4026	Sherwood Avenue	EAST OF Mount Arbor Avenue		2-WAY	35.67447	-119.21895		1	Х						1 X		06G395115000	4026	15 0:	3 05	
CF CF	EW	3313 1902	Sherwood Avenue Sherwood Avenue	EAST OF San Juan Street EAST OF SR 43		2-WAY 2-WAY	35.67447 35.674143	-119.22409 -119.323024		-		X X	McF McF		-	1	4 X	-		3313 1902	14 10	0 01	+
OF OF	EW	1902 3314	Sherwood Avenue Sherwood Avenue	EAST OF SR 43 WEST OF SR 99		2-WAY 2-WAY	35.674143 35.67447	-119.323024 -119.22976		1	-	X	McF McF		-		4 X			1902 3314		05 06 05 05	
F	NS	4151	Wallace Road	SOUTH OF Pond Road		2-WAY	35.71482	-119.16939	х	1		×	Del				4 X			4151		11 13	
F	NS	3308	Wallace Road	SOUTH OF Whisler Road		2-WAY	35.64217	-119.16904	Х			х	McF				4 X			3308	15 0:	3 05	
F	EW	3309	Whisler Road	EAST OF SR 99		2-WAY	35.64555	-119.21506		1		х	McF				4 X			3309	15 0	5 06	
F K	EW	3310 1838	Whisler Road Reward Road	WEST OF SR 99 EAST OF SR 58		2-WAY 2-WAY	35.64551 35.3118	-119.22499 -119.7088		1		X	McF Ker		-	1	4 X	-		3310 1838	15 0	5 06	+
K J	NS EW	1838 2938	Reward Road Airport Blvd	EAST OF SR 58 NORTH OF SR 58		2-WAY 2-WAY	35.3118 35.04601	-119.7088 -118.15781	Х	1		×	Kef		-	1	3 X	1		1838 2938		2 26	
IJ	EW	1224	Backus Road	WEST OF SR 14		2-WAY 2-WAY	35.04601	-118.16618		1			Ker	х	1		/ X			1224		2 01	
J	NS	2970	Cameron Road	NORTH OF Rocky Court		2-WAY	35.08757	-118.31713	х				Ker	. х			5			2970		2 01	
IJ	NS	1552	Holt Street	SOUTH OF Oak Creek Road		2-WAY	35.05444	-118.185458		1							8	S551T		1552	15 1:	2 01	Ļ
J	EW	2922	Inyo Street	EAST OF L Street		2-WAY	35.05299	-118.17048		1							7 X			2922	15 13	2 01	Ļ
IJ	NS	1697	Mojave Tropico Road	NORTH OF Backus Road		2-WAY	34.95183	-118.21245				х	Ker			1	3 X			1697		2 01	
))))	NS EW	1695 4145	Mojave Tropico Road Oak Creek Road	NORTH OF Rosamond Boulevard WEST OF Koch Street		2-WAY 2-WAY	34.86473 35.05304	-118.22905 -118.19583	х	1	-	v	Voe.		-	1	8 3 X	541S		1695 4145		8 13	
))))	EW	4145 2924	Oak Creek Road Seven Queen Road	WEST OF Koch Street EAST OF SR 14		2-WAY 2-WAY	35.05304 34.9955	-118.19583 -118.15765	×	1	-	Х	Ker		-		3 X 7 X			4145 2924		2 01	
NC NC	NS	2924	Cerro Noroeste Road	NORTH OF Ventura County Line		2-WAY	34.87571	-119.29193	X	1	Х	×	Ker				 1 X		06W250100200	267		01 07 15	
nc .	EW	1435	Elkhorn Grade Road	WEST OF SR 33		2-WAY	35.0401	-119.42533	Х			х	Ker				3			1435	14 0	7 16	
D	EW	1216	Athel Street	WEST OF US 395		2-WAY	35.681243	-117.847003	х			×	Ker				3			1216		2 08	
D	EW	214	Bowman Road	BETWEEN China Grade Boulevard AND Forest Knoll Street		2-WAY	35.60803	-117.66131		1	Х						1 X		06Z594105000	214	15 0	2 17	
D	EW	1263	Bowman Road	WEST OF Gateway Boulevard		2-WAY	35.60806	-117.65387		1			L			1	8	S152M		1263	15 0	12	Ļ
D D	EW NS	4104 4105	Bowman Road Brown Road	EAST OF US 395 SOUTH OF Bowman Road		2-WAY 2-WAY	35.607772 35.58522	-117.741921 -117.79014		1		×	Rid Ker		-	1	4 X	-		4104 4105		8 20	
,		4105 1279	Brown Road Brown Road	SOUTH OF Bowman Road NORTH OF US 395		2-WAY 2-WAY	35.58522 35.67511	-117.79014 -117.82065	X	1	l —	Х	Kef		-1		8	629Z	1	4105 1279		2 08	
)	NS																						

ID	NS	4113	Brown Road	SOUTH OF	US 395			2-WAY 2-WAY	35.66073	-117.8164	X			X	Ker				- >			4113		12 08
ID ID	EW NS	1304 1348	Butte Avenue China Lake Blvd	EAST OF NORTH OF	Redrock Randsburg Road US 395			2-WAY 2-WAY	35.36816 35.56032	-117.65579 -117.71373	Х	1		X	Ker Rid							1304 1348		12 08
)	NS NS	210	China Lake Blvd (Inner Lane)	BETWEEN	Downs Street AND Upjohn Avenue			2-WAY	35.606456	-117.671283			х	^	KIG						06Z584105000	210		12 08 02 17
	NS	209	China Lake Blvd (Outside Lane)	BETWEEN	Downs Street AND Springer Avenue			2-WAY	35.59421	-117.68975			х								06Z584100000	209	15	
)	NS	956	College Heights Blvd	BETWEEN	Franklin Avenue AND Dolphin Avenue			2-WAY	35.59873	-117.6704					Rid X							956		04 15
)	NS	206	Downs	BETWEEN	Upjohn Avenue AND Ridgecrest Boulevard			2-WAY	35.61671	-117.68785			х					1			06Z582106000	206	15	
)	NS	2713	French	BETWEEN	SR 178 (China Lake Boulevard) AND Drummond Avenue			2-WAY	35.62613	-117.66773			х						-		06Z591100000	2713	14	
D	EW	289	Garlock Road	BETWEEN	Redrock Randsburg Road AND US 395			2-WAY	35.42048	-117.74224	Х		х	х	Ker						06WV30100000	289	15	
D	NS	1494	Gateway Blvd	BETWEEN	CI.03M N/Bowman Rd and SHWY 178			2-WAY	-117.65232	35.61562		Х						1			06Z587100000	1494	13	11 19
D	EW	4101	Joberg Rolad	WEST OF	US 395			2-WAY	35.37887	-117.65089	Х			Х	Ker							4101	15	
D	NS	208	Norma Street	BETWEEN	Church Avenue AND Ridgecrest Boulevard			2-WAY	35.62061	-117.67944			Х					1			06Z583105000	208	14	
ID	NS	978	Richmond Rd	SOUTH OF	Upjohn Avenue			2-WAY	35.614008	-117.648179		1	х					1			06WV35102000	978	14	
ID ID	EW	2940 979	Ridgecrest Blvd	EAST OF BETWEEN	Brady Street			2-WAY	35.62251 35.62249	-117.70364 -117.67469		1	х		Rid X			1			06Z592105000	2940 979	14	
ID ID	EW	1840	Ridgecrest Blvd Ridgecrest Blvd	EAST OF	China Lake Boulevard AND Norma Street Jacks Ranch Road			2-WAY	35.62249	-117.72124		1								148M	062592105000	1840		10 07
ID ID	EW	1892	Searles Station Cutoff	EAST OF	US 395			2-WAY	35.48528	-117.63763	v	'		×	Ker					148M		1892		10 02
ID	EW	215	Springer Avenue	BETWEEN	China Lake Boulevard AND Mahan Street			2-WAY	35.593448	-117.693825	X		х		N.C.						06Z596100000	215	15	
ID	EW	4223	Springer Avenue	EAST OF	Lumill Street			2-WAY	35.59335	-117.63936	Х			х	Ker							4223	15	
D	EW	213	Upjohn	BETWEEN	Sunset Street AND China Lake Boulevard			2-WAY	35.61523	-117.67832			х								06Z593100000	213	14	
OS	NS	1159	100th Street West	SOUTH OF	Rosamond Boulavard			2-WAY	34.86272	-118.30897		- 1		Х	Ker							1159		08 11
OS	NS	1161	15th Street West	NORTH OF	Franklin Avenue			2-WAY	34.865751	-118.158297										557AS		1161	15	
OS	NS	1162	170th Street West	SOUTH OF	Rosamond Boulevard			2-WAY	34.86017	-118.43237	Х			Х	Ker							1162		08 12
IS	NS	1164	20th Street West	SOUTH OF	Rosamond Boulevard			2-WAY	34.863137	-118.16712	Х			х	Ker							1164	15	
OS	NS	1167	25th Street West	NORTH OF	Rosamond Boulevard			2-WAY	34.865075	-118.175963										553S		1167	15	
os os	NS NS	1172 1182	60th Street West 80th Street West	SOUTH OF	Rosamond Boulevard Rosamond Boulevard			2-WAY 2-WAY	34.862246 34.860765	-118.237984 -118.273338		1		X	Ker Ker							1172 1182		08 12
)S	NS NS	246	90th Street West	SOUTH OF	Rosamond Boulevard Rosamond Boulevard			2-WAY	34.85896	-118.273338		1	х	X	Ker						06W264090000	246		08 12 08 12
)S	EW	1185	A Street	WEST OF	10th Street			2-WAY	35.136805	-119.466423			×		NCI						06G377105000	1185	15	
)S	EW	1219	Avenue A	WEST OF	20th Street West			2-WAY	34.820524	-118.16869		1	_ ^	l						S368K		1219		08 11
)S	EW	1223	Backus Road	EAST OF	Tehachapi Willow Springs Road			2-WAY	34.94984	-118.28698		1			Ker X	1 1						1223		06 02
)S	EW	1857	Rosamond Blvd	EAST OF	90th Street West			2-WAY	34.86367	-118.28971		1						х :	-			1857	15	
IS	EW	3894	Rosamond Blvd	WEST OF	Eagle Way			2-WAY	34.86414	-118.17956							Х					3894	15	09 02
)S	EW	1861	Rosamond Blvd	EAST OF	Sierra Highway			2-WAY	34.86436	-118.16224										S356K		1861	15	09 02
ıs	EW	1859	Rosamond Blvd	WEST OF	SR 14			2-WAY	34.86414	-118.17547				×	Ker		_	:				1859	15	
)S	EW	349	Rosamond Blvd	BETWEEN	SR 14 AND Sierra Highway	1		2-WAY	34.86429	-118.16624			Х	х	Ker	+					06W263110000	349		06 02
os os	NS NS	1909 1910	Sierra Hiwy	SOUTH OF NORTH OF	Rosamond Boulevard Rosamond Boulevard			2-WAY 2-WAY	34.863167 34.86606	-118.163126 -118.16319				-	Ker					S557S	1	1909 1910	15	
IA.	NS EW	1910 2561	Sierra Hwy 7th Standard Road	NORTH OF EAST OF	Kosamond Boulevard			2-WAY	34.86606 35.4423	-118.16319 -119.454		1	-	Х	Ker Ker	х						1910 2561		08 27
IA IA	EW	2561	7th Standard Road 7th Standard Road	BETWEEN	SR 43 AND Magnolia Avenue	1		2-WAY	35.4423 35.44191	-119.454 -119.29309		1	х	1	Kei						06W257105000	2561	15	06 10 06 10
IA.	EW	230	Ash Street	BETWEEN	Nickel Street AND Birch Street			2-WAY	35.49621	-119.27351	X		×								06Z648110000	230		06 11
łA.	NS	1237	Beech Avenue	NORTH OF	Seventh Standard Road			2-WAY	35.44533	-119.26116		1						х :				1237	15	
łA.	NS	220	Beech Avenue	BETWEEN	SR 43 AND Lerdo Highway			2-WAY	35.49692	-119.26056		1	х					1)		06Z642100000	220		00 00
IA	NS	4055	Beech Avenue	SOUTH OF	State Avenue			2-WAY	35.5031	-119.26048		1	х					1		:	06Z642105000	4055	15	
IA	EW	1298	Burbank Street	EAST OF	Santa Fe Way			2-WAY	35.47065	-119.22322	Х							х :				1298	15	10 22
IA	NS	1305	Buttonwillow Drive	SOUTH OF	SR 58			2-WAY	35.39705	-119.47415	Х		Х					1			06W251120000	1305	15	10 21
IA	EW	227	Central Avenue	BETWEEN	Lerdo Highway AND Tulare Avenue			2-WAY	35.5034	-119.27385		1	х					1			06Z646100000	227	15	
A	NS	2115	Cherry Avenue	SOUTH OF	Los Angeles Street			2-WAY	35.492	-119.24283	X							х :				2115		08 09
łA łA	NS	1331 216	Cherry Avenue	NORTH OF EAST OF	Seventh Standard Road Beech Avenue			2-WAY	35.44607 35.49978	-119.24345 -119.26016	Х		х	х	Sha						067644105000	1331	15	
IA IA	EW	216	Lerdo Highway Lerdo Highway	BETWEEN	Beech Avenue AND State Route 99			2-WAY	35.49978	-119.20016			X								062644105000	216 226	15	
HA.	EW	2567	Lerdo Highway	WEST OF	1.5			2-WAY	35.499742	-119.540998			^		Ker	x					002044113000	2567	15	
-IA	EW	3250	Lerdo Highway	EAST OF	15			2-WAY	35.500764	-119.521607		1		х	Sha							3250	15	
-IA	EW	223	Lerdo Highway	BETWEEN	Poplar Avenue AND Schnaidt Street			2-WAY	35.49987	-119.29102			х					1)		06Z644098000	223	15	
HA	EW	224	Lerdo Highway	BETWEEN	Schnaidt Street AND SR 43			2-WAY	35.49984	-119.27948			х						-		06Z644100000	224	15	
HA	EW	225	Lerdo Highway	BETWEEN	SR 43 AND Beech Avenue			2-WAY	35.49979	-119.26393			х								06Z644101000	225	15	01 13
HA	EW	3580	Lerdo Highway	WEST OF	SR 99			2-WAY	35.49973	-119.1679				Х	Sha							3580	15	
HA	EW	1632	Lerdo Highway	EAST OF	SR 99 Off Ramp			2-WAY	35.49961	-119.15725										S180E		1632	15	
HA	EW	4065 1643	Los Angeles Avenue	WEST OF NORTH OF	Shafter Avenue Seventh Standard Road			2-WAY	35.49259 35.4445	-119.28167 -119.36813	х		х		Ch-			1			06Z647111000	4065	15	
Ah Ah	NS NS	218	Magnolia Avenue Mannel Avenue	BETWEEN	Lerdo Highway AND Tulare Avenue			2-WAY	35.4445	-119.36813	^	1	х	Х	Sha						06Z641100000	1643 218	15	
HA.	EW	1676	Merced Avenue	EAST OF	Rowlee Road			2-WAY	35.52865	-119.47044	v	'		×	Sha						062641100000	1676	15	
HA.	NS	1813	Poplar Avenue	SOUTH OF	Merced Avenue			2-WAY	35.52527	-119.29573	X			X	Sha							1813	15	
-IA	NS	3228	Poplar Avenue	NORTH OF	Pheasant Run Drive			2-WAY	35.49878	-119.29612		1						1)			3228		01 27
-IA	NS	3263	Poplar Avenue	NORTH OF	Seventh Standard Road			2-WAY	35.446606	-119.296669	Х			х	Sha							3263	15	
łA.	NS	1881	Scaroni Avenue	NORTH OF	Seventh Standard Road			2-WAY	35.44877	-119.31437		1		х	Sha							1881	15	
łA.	NS	217	Schnaidt Street	BETWEEN	Los Angeles Street AND Mark Avenue			2-WAY	35.49944	-119.28718		1	Х						- >	:	06Z636100000	217	15	
łA.	NS	1897	Shafter Avenue	NORTH OF	Orange Street			2-WAY	35.48116	-119.27855										S305Y		1897	15	01 28
łA.	NS	1896	Shafter Avenue	NORTH OF	Seventh Standard Road			2-WAY	35.446777	-119.278914		1	<u> </u>	х	Sha	1						1896	15	
łA.	NS	3229	Shafter Avenue	NORTH OF	Tulare Avenue			2-WAY	35.50813	-119.27821		1	<u> </u>	-		1		1				3229	15	
IA IA	EW NS	222 4111	Tulare Avenue Wildwood Road	NORTH OF	Shafter Avenue AND Beech Avenue McCombs Road			2-WAY 2-WAY	35.50706 35.62139	-119.26959 -119.43775		1	Х	-	Mac						06Z643100000	222 4111	15	
IA IA	NS NS	2116	Zachary Avenue	NORTH OF	McCombs Road Fanucchi Way	1		2-WAY	35.62139 35.44461	-119.437/5 -119.18967	A Y	1	1	Х	Was	+ +		х :			1	2116	15	
łA.	NS NS	3265	Zachary Avenue	SOUTH OF	Lerdo Highway			2-WAY	35.49468	-119.1881		1				+ +		x				3265	15	
łA.	NS	3311	Zachary Avenue	SOUTH OF	Peterson Road			2-WAY	35.69517	-119.18695	Х			х	McF	1 1						3311	15	
łA.	NS	4221	Zerker Road	SOUTH OF	County Line Road			2-WAY	35.785843	-119.151961	Х			×	Ker							4221		02 18
łA	NS	1204	Zerker Road	SOUTH OF	Seventh Standard Road			2-WAY	35.43769	-119.15423			Х	х	Bak						06WM86120000	1204	15	02 18
-IA	NS	2049	Zerker Road	NORTH OF	Seventh Standard Road			2-WAY	35.44884	-119.15415								1				2049	15	01 27
AF	NS	1003	10th Street	NORTH OF	SR 33 (Kern Street)			2-WAY	35.145616	-119.465153								1				1003	16	01 20
AF	NS	1006	10th Street	SOUTH OF	SR 33 (Kern Street)			2-WAY	35.144327	-119.465151		1		-	Taf X	+					1	1006	16	
AF AF	NS NS	1010 3331	4th Street 4th Street	SOUTH OF	Front Street AND Ash Street SR 33 (Kern Street)			2-WAY 2-WAY	35.14367 35.14191	-119.456 -119.45685		1	Х	1				1	,)		06G383110000	1010 3331	16	01 20
AF	NS NS	3331	Airport Road	NORTH OF	SR 33 (Kern Street) Cedar Street	1		2-WAY	35.14191 35.15812	-119.45685 -119.42439		- 1	1	х	Taf	+ +		1			1	3331		
NF.	NS NS	1018	Airport Road	BETWEEN	SR 119 (Taft Highway) AND Ash Street			2-WAY	35.14637	-119.43877		1	х			+ +					06G374110000	1018		01 20 01 20
NF.	EW	1209	Ash Street (Taft)	EAST OF	North Lincoln Street			2-WAY	35.151311	-119.464389		1				1 1				S276D		1209		01 19
A.F	EW	256	Bear Mtn. Blvd	BETWEEN	Hill Road AND I 5			2-WAY	35.2092	-119.18582		1	Х								06WM67115000	256	15	
NF	EW	3332	Cadet Road	EAST OF	Petroleum Club Road			2-WAY	35.10093	-119.39285	Х			×	Taf							3332	16	01 20
F	EW	1021	Center Street	BETWEEN	10th Street AND SR 33			2-WAY	35.14086	-119.45872		1	Х)		06G375100000	1021	16	01 19
F	EW	4153	Center Street	EAST OF	6th Street			2-WAY	35.14123	-119.45984		1						1			1	4153	16	01 20
F	NS	1023	Church Street	BETWEEN	A Street AND Lassen Street			2-WAY	35.14135	-119.47102		1	Х				_	1		:	06G380100000	1023	16	01 20
F	NS	1025	Church Street	NORTH OF	Pilgrim Avenue	1		2-WAY	35.140251	-119.471014		1		-		+		1		.	0/14/05	1025		01 20
F F	NS NC	4052 285	Elk Hills Road Elk Hills Road	SOUTH OF BETWEEN	Buttonwillow Drive SR 119 (Taft Highwa) AND Valley West Road			2-WAY 2-WAY	35.34479 35.198969	-119.46866 -119.445619		1	X	-	Ker	+ -	-				06W251106000 06W251100000	4052 285		01 15
F F	NS EW	285 2759	Elk Hills Road Gardner Field Road	BETWEEN	SR 119 (Taft Highwa) AND Valley West Road SR 119 (Taft Highway) AND Industrial Way			2-WAY	35.198969 35.1369	-119.445619 -119.44347		1 1	X	-	Ker	X					06W251100000 06G376115000	285 2759	15	
UF UF	NS NS	2759 293	Gardner Field Road Harrison Street	NORTH OF	SR 119 (Taft Highway) AND Industrial Way Cedar Street	1		2-WAY 2-WAY	35.1369 35.15546	-119.44347 -119.45632		1	X	1	Taf X	+ +					06G376115000 06G382110000	2759 293	16	04 24
ur VF	NS NS	1029	Harrison Street Hillard Street	SOUTH OF	SR 33 (Kern Street)	1		2-WAY	35.15546 35.14618	-119.45632 -119.47221			^	1	iai X	+ +		1		. 5205V	000302110000	1029	16	
ur UF	NS NS	305	Lierly Ave	BETWEEN	Wood Street AND Oak Street			2-WAY	35.13502	-119.46223	Х	1	Х	1							06G382100000	305		01 20
NF.	NS	1721	Lincoln Street	SOUTH OF	Midway Road			2-WAY	35.17889	-119.46548				х	Taf							1721		01 20
AF.	EW	1033	Main Street	BETWEEN	10th Street AND SR 33			2-WAY	35.13984	-119.45858		1	Х								06G376100000	1033		01 19
AF.	NS	3319	Midoil Road	SOUTH OF	3rd Street			2-WAY	35.17448	-119.53805	Х			х	Ker			:	.)			3319	16	01 20
A.F	EW	1681	Midoil Road	WEST OF	Terrace Drive			2-WAY	35.13766	-119.48297	Х			х	Taf			4	.)			1681		01 20
NF.	EW	1684	Midway Road	WEST OF	SR 119 (Taft Highway)			2-WAY	35.18061	-119.45803							Х	9			1			
	EW	1683	Midway Road	EAST OF	SR 33			2-WAY	35.18022	-119.52447		1	<u> </u>	-								1683	16	
NF.		1720	North Lincoln Street	NORTH OF	Ash Street SR 33			2-WAY 2-WAY	35.15222	-119.46516		1		-					1	S263V	ĺ.	1720	16	01 19
NF NF	NS EW	3336	Petroleum Club Road	EAST OF					35.12631	-119.43378	×			X	Taf							3336		01 20

AF	NS	1002	10th Street	AT	Center Street			2-WAY	35.142884	-119.465132									10				1002	16	01 19	/T
EH	EW	4070	Banducci Road	EAST OF	Longhorn Lane			2-WAY	35.09473	-118.64589	1		х	Ker					3				4070	15	11 17	
EH EH	EW	1229 4071	Banducci Road Banducci Road	WEST OF SOUTH OF	Pellisier Road Sarida Avenue		1	2-WAY 2-WAY	35.09461 35.09431	-118.57871 -118.56948	1		×	Ker					8		292H		1229 4071		11 17 11 17	
EH	NS	1232	Bealville Road	NORTH OF	SR 58 (Bakersfield Highway)			2-WAY	35.26801	-118.6296	X		^	Mtn	x				6	^			1232		11 17	
EH	NS	4072	Bear Valley Road	SOUTH OF	Buttercup Court			2-WAY	35.14692	-118.57674			х	Ker					3				4072		11 17	
EH	EW	1375	Country Club Drive	WEST OF	Woodford Tehachapi Road			2-WAY	35.14872	-118.49619	1								8		278H		1375		11 03	
EH	EW	1387	Cummings Valley Road	WEST OF	Bear Valley Road			2-WAY	35.1309	-118.57741	1		Х	Ker					3	Х			1387		11 17	
EH EH	EW	1388	Cummings Valley Road	EAST OF WEST OF	Bear Valley Road Pelliser Road			2-WAY 2-WAY	35.13098 35.130597	-118.57249 -118.605039	1			W	x				8		282H		1388		11 17	
EH	EW NS	4226 196	Cummings Valley Road	BETWEEN	Pinon Street AND Valley Boulevard			2-WAY	35.130597	-118.605039			х	Ker Teh	×				6	×		06WV03105000	4226 196		11 17	
EH	NS	4076	Curry Deertrail Drive	SOUTH OF	SR 223 (Bear Mountain Boulevard)			2-WAY	35.20867	-118.73021	×		×		_ ^				3			000003103000	4076		03 04	
EH	NS	2927	Dennison Road	NORTH OF	Tehachapi Boulevard			2-WAY	35.13194	-118.432121	1							х	7	х			2927		11 03	
EH	EW	1499	Giraudo Road	WEST OF	Pellisier Road			2-WAY	35.12345	-118.60506	x			Ker	х				6				1499		11 17	
EH	NS	1501	Golden Hills Blvd	NORTH OF	S.H. 202			2-WAY	-118.4859246	35.12494246									8		16H27		1501	15	11 03	,
EH	NS	1503	Golden Star Blvd	NORTH OF	Golden Hills Boulevard			2-WAY	35.13427	-118.48896	х								8		17H03B		1503		11 03	
EH EH	EW	4081	Highline Road	WEST OF EAST OF	Adalante Street			2-WAY 2-WAY	35.10939	-118.49616			X	Teh					4	Х			4081		11 17	
EH	EW	1546 1548	Highline Road Highline Road	WEST OF	Banducci Road Tehachapi Willow Springs Road		1	2-WAY 2-WAY	35.10944 35.109629	-118.51974 -118.39989				Teh					8		S288H		1546 1548		11 17	
EH	EW	4092	Highline Road	EAST OF	Tucker Road		1	2-WAY	35.10947	-118.39989			×	Teh	Х		х		4				4092		12 02 12 01	
EH	NS	1039	Mill Street	SOUTH OF	SR 58			2-WAY	35.1376	-118.45128			×						4	x			1039		11 05	
EH	EW	1733	Oak Creek Road	WEST OF	SR 14			2-WAY	35.05692	-118.18051									8		S308K		1733		11 05	
EH	EW	1731	Oak Creek Road	EAST OF	Tehachapi Willow Springs Road			2-WAY	35.050066	-118.352125	1							Х	7	х			1731		11 05	
EH	NS	1876	Sand Canyon Road	NORTH OF	Tehachapi Boulevard			2-WAY	35.11286	-118.32384	х			Teh	Х				6				1876		12 01	
EH	NS	1932	Stallion Springs Road	SOUTH OF	Comanche Point Road			2-WAY	35.09141	-118.65141	- 1								8		451AT		1932		11 03	
EH EH	EW	1043 4094	Tehachapi Blvd	EAST OF EAST OF	Mountain View Avenue SR 58		1	2-WAY 2-WAY	35.13208 35.12691	-118.45855 -118.40877				Teh Teh	х				6				1043 4094		11 05	
EH	EW	4094	Tehachapi Blvd Tehachapi Blvd	WEST OF	SR 58		1	2-WAY	35.12691	-118.40877			x	Teh					4	X			4094		11 05 11 05	
EH	EW	1966	Tehachapi Blvd	WEST OF	Tehachapi Willow Springs Road			2-WAY	35.1254	-118.39782			_ ^	TC.II					8		S282J		1966		11 05	
EH	NS	4085	Tehachapi Willow Springs	SOUTH OF	Highline Road			2-WAY	35.10354	-118.39678			х	Teh					4	х			4085		12 01	
EH	NS	364	Tehachapi Willow Springs	BETWEEN	Highline Road AND SR 58			2-WAY	35.116175	-118.396614			х х	Ker					1	Х		06W264110000	364		12 01	
EH	NS	4086	Tehachapi Willow Springs	BETWEEN	Oak Creek Road AND Cameron Canyon Road			2-WAY	35.052282	-118.358976								х	7	х			4086	15	12 01	1
EH	NS	1046	Tucker Road	NORTH OF	Highline Road	+		2-WAY	35.110082	-118.467801		_		1	1				8	1	S487V	-	1046		12 01	
EH	EW	2928	Valley Blvd Westwood Blvd	EAST OF EAST OF	Clearview Street Golden Hills Boulevard		1	2-WAY 2-WAY	35.12431 35.12795	-118.44304 -118.4851				Teh	х			-	6	1	17H002		2928		11 17	
EH EH	NS NS	2024	Westwood Blvd Woodford Tehachapi Road	SOUTH OF	SR 202	+		2-WAY	35.12/95 35.12231	-118.4851 -118.49488	1	+		1	1 1		-1-	х	7	х	17/1002	l	2024		11 03 02 04	
EH	NS NS	2041	Woodford Tehachapi Road	NORTH OF	SR 202			2-WAY	35.1256	-118.49488	1			Teh	×				6				2041		02 04	
VAS	EW	1061	5th Street	BETWEEN	Palm Avenue AND Barker Place			2-WAY	35.59699	-119.34198	1		x	1	1 "				1	х		06Z678100000	1061		10 29	
VAS	EW	1175	7th Standard Road	EAST OF	Buttonwillow Drive			2-WAY	35.44236	-119.47033				Ker		х			5				1175	15	10 20)
'AS	NS	260	Annin Avenue	BETWEEN	McCombs Road AND Gromer Avenue			2-WAY	35.61277	-119.33578	х		х						1	×		06Z683105000	260	15	12 15	5
AS	NS	1247	Benner Avenue	SOUTH OF	Pond Road		↓	2-WAY	35.71459	-119.31189	X		X	Del	1 1			-	4				1247		02 05	
/AS	EW NS	3317 232	Broadway	EAST OF BETWEEN	Randall Road 7th Street AND SR 46 (Paso Robles Highway)			2-WAY 2-WAY	35.17959	-119.53934 -119.35812	х	_	X	Ker					3	X		06Z671105000	3317 232		03 26	
VAS VAS	NS NS	232	Central Avenue Central Avenue	BETWEEN	/th Street AND Sk 46 (Paso Robles Highway) Filburn Street AND 7th Street			2-WAY 2-WAY	35.598 35.58738	-119.35812 -119.35817	1		x x						1	X		06Z671105000 06Z671100000	232		12 15 12 15	
VAS	EW	2572	Famoso Road	WEST OF	Famoso Porterville Highway			2-WAY	35.60202	-119.208735			^						8	_ ^	S152E	002071100000	2572		05 28	
VAS	EW	1465	Famoso Road	WEST OF	Granite Road		1	2-WAY	35.6249	-119.00013	1			Mtn	x				6				1465		05 28	
VAS	EW	237	Filburn	BETWEEN	SR 43 AND Griffith Avenue			2-WAY	35.57975	-119.33771			х						1	Х		06Z682100000	237		12 15	
/AS	NS	234	G Street	BETWEEN	6th Street AND Filburn Street			2-WAY	35.58978	-119.33245	х		х						1	Х		06Z676100000	234		12 16	
/AS	EW	3205	Jackson Avenue	WEST OF	SR 43			2-WAY	35.57248	-119.33711	х		Х	Was					4	х			3205		10 21	
VAS	EW	3204	Kimberlina Road	EAST OF	Rowlee Road			2-WAY	35.55767	-119.46984	1		Х	Was					4	Х			3204		12 17	
VAS	EW	3218	Kimberlina Road	WEST OF	SR 43			2-WAY	35.55798	-119.33587		_	Х	Was					4	Х			3218		12 16	
VAS VAS	EW	3315 3261	Lerdo Highway Lerdo Highway	EAST OF WEST OF	Lost Hills Road Scofield Avenue			2-WAY 2-WAY	35.49924 35.500343	-119.68191 -119.408771	1		×	Sha			х		9	×			3315 3261		12 16 12 15	
VAS	NS	3877	Magnolia Avenue	SOUTH OF	Kimberlina Road		1	2-WAY	35.55403	-119.36737	x		X	Was					4	X			3877		10 21	
VAS	NS	3266	Magnolia Avenue	SOUTH OF	Merced Avenue			2-WAY	35.52213	-119.36761	x		X	Sha					4	X			3266		12 15	
VAS	EW	320	McCombs Road	BETWEEN	Annin Avenue AND SR 43			2-WAY	35.61603	-119.3341	x		х						1	х		06Z684100000	320		05 28	
VAS	EW	3219	McCombs Road	EAST OF	Rowlee Road			2-WAY	35.61582	-119.46419	х		Х	Was					4	х			3219		02 03	
VAS	EW	3220	McCombs Road	EAST OF	SR 43			2-WAY	35.61612	-119.32183	х		X	Was					4	Х			3220		02 03	
VAS	EW	3267	Merced Avenue	WEST OF SOUTH OF	SR 43 Kimberlina Road			2-WAY 2-WAY	35.52905 35.55409	-119.30967 -119.34966	X 1	_	X	Sha					4	X			3267		05 28	
VAS VAS	NS NS	4215 4214	Palm Avenue Palm Avenue	NORTH OF	McCombs Road		1	2-WAY	35.55409	-119.34966 -119.349029	1		x	Was					4	X			4215 4214		12 16	
VAS	NS	3268	Palm Avenue	SOUTH OF	Merced Avenue			2-WAY	35.5222	-119.34997	1		x						4	×			3268		12 17 12 16	
VAS	NS	1766	Palm Avenue (Shafter-Wasco)	NORTH OF	Kimberlina Road			2-WAY	35.56072	-119.34959	1								8		S289Y		1766		12 15	
VAS	NS	341	Pegasus Drive	BETWEEN	Norris Road AND Merle Haggard Drive			2-WAY	35.42981	-119.06433			х х	Bak					1	х		06F314100000	341		10 20	
VAS	EW	236	Poso Avenue	BETWEEN	Central Avenue AND Palm Avenue			2-WAY	35.587	-119.35324	1		X						1	Х		06Z681100000	236	15	12 16	į.
VAS	NS	3256	Rowlee Road	SOUTH OF	County Line Road			2-WAY	35.78584	-119.472197	1		Х	Ker					3				3256	15	10 28	
VAS VAS	NS	1864 3270	Rowlee Road	NORTH OF NORTH OF	Lerdo Highway			2-WAY 2-WAY	35.50426 35.442846	-119.47472 -119.200612	1								8		S261Y		1864 3270		10 20	
VAS VAS	NS NS	3270	Santa Fe Way Santa Fe Way	SOUTH OF	Seventh Standard Road SR 43		1	2-WAY 2-WAY	35.442846 35.4901	-119.200612 -119.25832			X	Sha					9	Х			3270		10 20	
VAS VAS	NS NS	1889	Santa Fe Way Scofield Avenue	SOUTH OF	SR 43 Kimberlina Road			2-WAY 2-WAY	35.4901	-119.25832 -119.40292	×		×	Was	1 1		х		4	×			1889		08 26 10 21	
VAS	NS NS	3221	Scofield Avenue	NORTH OF	McCombs Road			2-WAY	35.62164	-119.40231	x		×	Was					4	×			3221		10 21	
/AS	NS	3223	Scofield Avenue	SOUTH OF	Merced Avenue			2-WAY	35.52173	-119.40334	x		X						4	×			3223		10 21	
/AS	EW	2568	Twisselman Road	WEST OF	15			2-WAY	35.7319	-119.743	x			Ker		х			5				2568	15	10 29)
AS	EW	2569	Twisselman Road	EAST OF	15			2-WAY	35.731989	-119.735024	х			Ker		х		1	5				2569	15	10 28	3
'AS 'AS	NS NC	3226 2744	Wasco Avenue	SOUTH OF BETWEEN	Merced Avenue Dece Avenue 2 SP 44 (Dece Debles Healthurs)	-	1 1	2-WAY 2-WAY	35.5246 35.59252	-119.33206 -119.32827	X 1	+	X	Sha	1 1			-	4	X	-	06Z675100000	3226 2744		10 22	
/AS /AS	NS NS	2744 3225	Wasco Avenue Wasco Avenue	NORTH OF	Poso Avenue & SR 46 (Paso Robles Highway) Standard Road	+		2-WAY 2-WAY	35.59252 35.44641	-119.32827 -119.3327	x 1	+	x x	Sha	1 1		-1-	+	1 4	X		002075100000	2744 3225		10 21 10 21	
AS	EW	2028	Whisler Road	EAST OF	SR 43		1 1	2-WAY	35.64506	-119.32666	. 1		x	McF	1 1			1	4	x			2028		10 21	
AS	NS	2037	Wildwood Road	SOUTH OF	Kimberlina Road			2-WAY	35.55416	-119.43871	x		X	Was					4				2037		10 29	
AS	NS	4109	Wildwood Road	SOUTH OF	Merced Avenue			2-WAY	35.521801	-119.439203	x		X	Sha					4				4109	15	10 29	9
AK	NS	1478	Fruitvale Avenue		SR 58 (Rosedale Highway)	supplemental 1	\sqcup	2-WAY	35.38608	-119.07433					\perp		_		8		S351X		1478	15	06 23	4
AL AL	NS NS	1316 4247	California City Blvd Randsburg Mojave Road	NORTH OF NORTH OF	SR 58 Hooker Driver	supplemental 1 supplemental 1	1 1	2-WAY 2-WAY	35.01488 35.137332	-117.9169 -117.928992	1	+	×	×	×			-	6	-	-		1316 4247		12 03	
EL	NS EW	4247	11th Avenue	WEST OF	Albany Street	supplemental 1		2-WAY 2-WAY	35.137332 35.76847	-117.928992 -119.25914	1	+	×	x	×		-1-	+	6	1		l	4247		12 03 10 07	
EL	EW	4279	11th Avenue	EAST OF	Albany Street	supplemental 1	1 1	2-WAY	35.76849	-119.25803	1			×	×			1	6	l .			4279		10 06	
EL	EW	879	11th Avenue	BETWEEN	Albany Street AND High Street	supplemental 1		2-WAY	35.76946	-119.25205	1			×	×				6				879		10 06	
EL	EW	4349	11th Avenue	EAST OF	Fremont Street	supplemental 1		2-WAY	35.76973	-119.24996	1			x	×				6				4349	15	10 08	3
EL	EW	4276	11th Avenue	WEST OF	Hiett Avenue	supplemental 1		2-WAY	35.76861	-119.26818	1			×	×			1	6				4276	15	10 07	r
EL	EW	4277	11th Avenue	EAST OF	Hiett Avenue	supplemental 1		2-WAY	35.76863	-119.26646	1			x	×			-	6	-	ļ	-	4277		10 07	
EL EL	EW	4280 4281	11th Avenue 11th Avenue	WEST OF EAST OF	High Street High Street	supplemental 1 supplemental 1	1	2-WAY 2-WAY	35.77012 35.77023	-119.2477 -119.24699	1			x	×				6	1			4280 4281		10 06	
EL.	EW	4281	11th Avenue 11th Avenue	WEST OF	Jefferson Street	supplemental 1	1 1	2-WAY 2-WAY	35.77049	-119.24699 -119.24491	1			x	×			-	6	l .			4281		10 06 10 06	
EL .	EW	4285	11th Avenue	EAST OF	Jefferson Street	supplemental 1	1 1	2-WAY	35.77062	-119.24418	1			×	×			1	6	l .			4285		10 06	
EL	EW	4286	11th Avenue	WEST OF	Lexington Street	supplemental 1		2-WAY	35.77091	-119.24229	1			×	×				6				4286		10 06	
EL	EW	4282	11th Avenue	WEST OF	Main Street	supplemental 1	1	2-WAY	35.77035	-119.24621	1			×	×				6				4282		10 06	
EL	EW	4283	11th Avenue	EAST OF	Main Street	supplemental 1		2-WAY	35.77043	-119.24563	1			×	×				6				4283		10 06	
EL	EW	4288	11th Avenue	WEST OF	Randolph Street	supplemental 1		2-WAY	35.77185	-119.23236	1			x	×				6				4288	15	10 06	š
EL	EW	880	11th Avenue	BETWEEN	Randolph Street AND High Street	supplemental 1		2-WAY	35.77148	-119.23897	- 1			×	×			1	6				880		10 06	
EL	EW	4253	20th Avenue	WEST OF	Browning Road	supplemental 1		2-WAY	35.78316	-119.22354	1			x	×			-	6	-	ļ	-	4253		10 08	
EL	EW	4248	20th Avenue 20th Avenue	WEST OF EAST OF	Norwalk Street	supplemental 1	1 1	2-WAY 2-WAY	35.78314 35.78314	-119.24134 -119.24049	1			×	×			-	6	-	-		4248 4249		10 08	
EL EL	EW	4249 4250	20th Avenue 20th Avenue	EAST OF EAST OF	Norwalk Street Princeton Street	supplemental 1 supplemental 1		2-WAY 2-WAY	35.78314 35.78315	-119.24049 -119.23605	1		-1	x	×		-	-	6	1			4249 4250		10 08	
EL	EW	4250 4251	20th Avenue 20th Avenue	WEST OF	Princeton Street Randolph Street	supplemental 1		2-WAY 2-WAY	35.78315 35.78316	-119.23605 -119.2323	1			x	×			1	6	1			4250 4251		10 08 10 06	
EL	EW	4252	20th Avenue	EAST OF	Randolph Street	supplemental 1		2-WAY	35.78316	-119.23163	1			×	×				6				4252		10 06	
EL I		4347	21st Avenue	EAST OF	High Street	supplemental 1	1	2-WAY	35.78478	-119.25045	1			×	×			×	6				4347		10 07	
iL iL	EW	4347						2-WAY			1								6				4327			

DEL	EW	4314	9th Avenue	WEST OF	Browning Road	supplemental 1		2-WAY	35.76863	-119.22398	1		x x	6		4314	15	10 07
DEL	EW	4315	9th Avenue	EAST OF	Browning Road	supplemental 1		2-WAY	35.76862	-119.22228	1		x x	6		4315		18 08
L L	EW	4307	9th Avenue	EAST OF	High Street	supplemental 1		2-WAY	35.7676	-119.24634	1		x x	6		4307		10 07
1	EW	4309	9th Avenue	EAST OF	Jefferson Street	supplemental 1		2-WAY	35.76801	-119.24371	1		x x	6		4309		10 06
-1	EW	4310	9th Avenue	WEST OF	Lexington Street	supplemental 1		2-WAY	35.76833	-119.24169	1		x x	6		4310		10 27
-	EW	4311 4308	9th Avenue	EAST OF	Lexington Street Main Street	supplemental 1	-	2-WAY 2-WAY	35.76846 35.76781	-119.24097 -119.24501	1		x x	6		4311 4308		10 27
L	EW	4312	9th Avenue 9th Avenue	WEST OF	Randolph Street	supplemental 1 supplemental 1		2-WAY	35.76863	-119.23235	1		x x	6		4308	15	
L.	EW	4312	9th Avenue	EAST OF	Randolph Street	supplemental 1		2-WAY	35.76862	-119.23157	1		x x	6		4313	15 15	
EL	NS	4291	Albany Street	NORTH OF	11th Avenue	supplemental 1	1	2-WAY	35.76898	-119.25853	1		x x	6		4291	15	
EL.	NS	4292	Albany Street	SOUTH OF	11th Avenue	supplemental 1		2-WAY	35.7678	-119.25851	1		x x	6		4292	15	
EL	NS	890	Albany Street	BETWEEN	20th Avenue AND Cecil Avenue	supplemental 1		2-WAY	35.78005	-119.25858	1		х х	6		890	15	
EL	NS	4263	Albany Street	NORTH OF	Cecil Avenue	supplemental 1		2-WAY	35.77649	-119.2585	1		x x	6		4263	15	
EL	NS	4264	Albany Street	SOUTH OF	Cecil Avenue	supplemental 1		2-WAY	35.77531	-119.25849	1		x x	6		4264	15	
EL	NS	888	Albany Street	BETWEEN	County Line Road AND 20th Avenue	supplemental 1		2-WAY	35.78648	-119.2587	1		x x	х 6		888	15	
EL	NS	4341	Albany Street	NORTH OF	SR 155 (Garces Highway)	supplemental 1		2-WAY	35.76187	-119.25853	1		x x	х 6		4341	15	
EL	NS	4342	Albany Street	SOUTH OF	SR 155 (Garces Highway)	supplemental 1		2-WAY	35.7611	-119.25847	1		x x	х 6		4342	15	03 10
EL	NS	895	Browning Road	NORTH OF	20th Avenue	supplemental 1		2-WAY	35.78413	-119.22312	1	×	x x	х 6		895	15	
EL	NS	4324	Browning Road	NORTH OF	9th Avenue	supplemental 1		2-WAY	35.76919	-119.22321	1		x x	6		4324	15	
EL	NS	4325	Browning Road	WEST OF	9th Avenue	supplemental 1		2-WAY	35.76799	-119.22313	1		x x	6		4325	15	
EL	NS	4275	Browning Road	NORTH OF	Cecil Avenue	supplemental 1		2-WAY	35.77649	-119.22322	1		x x	x 6		4275		03 03
EL EL	EW	4255 4256	Cecil Avenue Cecil Avenue	WEST OF EAST OF	Albany Street Albany Street	supplemental 1 supplemental 1	-	2-WAY 2-WAY	35.77591 35.77589	-119.25895 -119.25795	1 1		х х	6		4255 4256		10 06
EL	EW	4254	Cecil Avenue	EAST OF	Hiett Avenue	supplemental 1		2-WAY	35.77586	-119.26538	1		x x	6		4254	15 15	10 06
EL.	EW	4012	Cecil Avenue	WEST OF	High Street	supplemental 1		2-WAY	35.7759	-119.25005	1		x x	6		4012		
EL	EW	900	Cecil Avenue	BETWEEN	Lexington Street AND Jefferson Street	supplemental 1		2-WAY	35.77587	-119.2442	1		x x	6		900		10 29 10 29
EL	EW	899	Cecil Avenue	WEST OF	Main Street	supplemental 1		2-WAY	35.77587	-119.24765	1		x x	6		899		10 27
EL	EW	4257	Cecil Avenue	EAST OF	Main Street	supplemental 1		2-WAY	35.77589	-119.24645	1		x x	6		4257		10 28
EL	EW	901	Cecil Avenue	BETWEEN	Norwalk Street AND Lexington Street	supplemental 1		2-WAY	35.77587	-119.24181	1		x x	6		901	15	
EL	EW	4258	Cecil Avenue	WEST OF	Randolph Street	supplemental 1		2-WAY	35.77589	-119.23298	1		x x	6		4258		10 27
EL	EW	902	Cecil Avenue	BETWEEN	Randolph Street AND Norwalk Street	supplemental 1		2-WAY	35.77587	-119.2361	1		x x	6		902		10 27
EL	NS	4293	Clinton Street	NORTH OF	11th Avenue	supplemental 1		2-WAY	35.76925	-119.25524	1		x x	6		4293	15	
EL	NS	4294	Clinton Street	SOUTH OF	11th Avenue	supplemental 1		2-WAY	35.76852	-119.25507	1		x x	6		4294	15	
EL	NS	4265	Clinton Street	SOUTH OF	Cecil Avenue	supplemental 1	1	2-WAY	35.77555	-119.25671	1		x x	6		4265	15	
EL	NS	4343	Clinton Street	NORTH OF	SR 155 (Garces Highway)	supplemental 1	1	2-WAY	35.76165	-119.25348	1		x x	x 6		4343	15	
EL	EW	4235	County Line Road	WEST OF	Albany Street	supplemental 1	1	2-WAY	35.790436	-119.260484	1	×	x	x 6	1 1 1	4235	15	
EL EL	EW	4240 4241	County Line Road County Line Road	WEST OF EAST OF	Browning Road Browning Road	supplemental 1 supplemental 1		2-WAY 2-WAY	35.79041 35.79043	-119.2238 -119.22303	1 1	X X	x x	x 6		4240 4241	15	
EL	EW	4241	County Line Road	WEST OF	Girard Street	supplemental 1	-	2-WAY	35.79043	-119.24997	1		×			4241	15	
EL.	EW	4230	County Line Road	EAST OF	High Street	supplemental 1		2-WAY	35.79039	-119.252105	1	X X	×	x 6		4230	15 15	
EL	EW	4238	County Line Road	WEST OF	Norwalk Street	supplemental 1	1	2-WAY	35.79041	-119.24113	1	×	×	х 6		4238	15	
EL	EW	4239	County Line Road	WEST OF	Randolph Street	supplemental 1		2-WAY	35.7904	-119.2327	1	×	×	x 6		4239	15	
EL	NS	4295	Ellington Street	NORTH OF	11th Avenue	supplemental 1		2-WAY	35.76995	-119.25175	1		x x	6		4295		10 07
EL	NS	4296	Ellington Street	SOUTH OF	11th Avenue	supplemental 1		2-WAY	35.76688	-119.2515	1		x x	6		4296		10 06
EL	NS	4266	Ellington Street	SOUTH OF	Cecil Avenue	supplemental 1		2-WAY	35.7755	-119.25302	1		x x	6		4266		17 07
L	NS	4344	Ellington Street	SOUTH OF	SR 155 (Garces Highway)	supplemental 1		2-WAY	35.76109	-119.24968	1		x x	х 6		4344	15	
L	NS	4345	Freemont Street	SOUTH OF	SR 155 (Garces Highway)	supplemental 1		2-WAY	35.76107	-119.2483	1		x x	х 6		4345	15	10 06
EL.	EW	4336	Garces Hwy	EAST OF	Albany Street	supplemental 1		2-WAY	35.76137	-119.25818	1		x x	х 6		4336	15	03 10
L	EW	4337	Garces Hwy	WEST OF	Clinton Street	supplemental 1		2-WAY	35.76138	-119.25375	1		x x	х 6		4337	15	
EL	EW	4338	Garces Hwy	EAST OF	Clinton Street	supplemental 1		2-WAY	35.76138	-119.25309	1		x x	х 6		4338	15	
EL	EW	4339	Garces Hwy	WEST OF	Ellington Street	supplemental 1		2-WAY	35.76138	-119.25006	1		x x	х 6		4339	15	
EL	EW	4334	Garces Hwy	WEST OF	Hiett Avenue	supplemental 1	-	2-WAY 2-WAY	35.76136	-119.26757	1		x x	6		4334	15	
EL	EW	4335	Garces Hwy	EAST OF	Hiett Avenue	supplemental 1	-		35.76137	-119.26699	1		x x	x 6		4335	15	
EL	NS	4348 4243	Girard Street	SOUTH OF	20th Avenue	supplemental 1	-	2-WAY 2-WAY	35.78284 35.78978	-119.24977 -119.24916	1 1		х х	x 6		4348	15	
EL	NS NS	4243	Girard Street Hiett Avenue	NORTH OF	County Line Road 11th Avenue	supplemental 1 supplemental 1		2-WAY	35.78978	-119.24916	1	×	x x			4243 4289		10 08 03 10
EL	NS	4289	Hiett Avenue	SOUTH OF	11th Avenue	supplemental 1		2-WAY	35.76798	-119.26738	1		x x	6		4289	15	
EL	NS	4262	Hiett Avenue	SOUTH OF	Cecil Avenue	supplemental 1		2-WAY	35.77526	-119.26741	1		х х	6		4262	15 15	
EL	NS	4022	Hiett Avenue	SOUTH OF	County Line Road	supplemental 1		2-WAY	35.78923	-119.26764	1		x x	х 6		4022	15	
EL	NS	4340	Hiett Avenue	NORTH OF	SR 155 (Garces Highway)	supplemental 1		2-WAY	35.76166	-119.26732	1		x x	х 6		4340	15	
EL	NS	4297	High Street	NORTH OF	11th Avenue	supplemental 1		2-WAY	35.77069	-119.24738	1		x x	6		4297	15	
EL	NS	4298	High Street	SOUTH OF	11th Avenue	supplemental 1		2-WAY	35.76957	-119.24712	1		x x	6		4298	15	
EL	NS	923	High Street	SOUTH OF	21st Avenue	supplemental 1		2-WAY	35.78275	-119.25081		х	Ker	3	x	923	15	
EL	NS	4316	High Street	NORTH OF	9th Avenue	supplemental 1		2-WAY	35.76798	-119.24674	1		x x	6		4316	15	
EL	NS	4317	High Street	SOUTH OF	9th Avenue	supplemental 1		2-WAY	35.76734	-119.24659	1		x x	6		4317	15	03 12
EL	NS	4267	High Street	NORTH OF	Cecil Avenue	supplemental 1		2-WAY	35.77672	-119.24934	1		x x	6		4267	15	
EL	NS	4268	High Street	SOUTH OF	Cecil Avenue	supplemental 1		2-WAY 2-WAY	35.77522	-119.24842	1		x x	6		4268	15	
EL	NS	4346	High Street	SOUTH OF	Main Street	supplemental 1	-		35.75785	-119.244	1		x x	x 6		4346	15	
EL	NS NS	4301 4302	Jefferson Street	NORTH OF	11th Avenue 11th Avenue	supplemental 1		2-WAY 2-WAY	35.77089 35.77022	-119.24468 -119.24453	1 1		x x	6		4301 4302	15	
EL EL	NS NS	4302	Jefferson Street Jefferson Street	SOUTH OF	11th Avenue Cecil Avenue	supplemental 1 supplemental 1	1	2-WAY	35.77022	-119.24453 -119.2457	1		x x	6		4302 4270		10 08
EL	NS NS	4270	Lexington Street	NORTH OF	11th Avenue	supplemental 1		2-WAY 2-WAY	35.7753 35.77128	-119.2457 -119.24203	1		x x	6	+ + + + + + + + + + + + + + + + + + + +	42/0	_	10 08
EL.	NS	4303	Lexington Street	SOUTH OF	11th Avenue	supplemental 1		2-WAY	35.77069	-119.24203	1		x x	6		4303		10 27
EL	NS	4330	Lexington Street	NORTH OF	6th Avenue	supplemental 1		2-WAY	35.76539	-119.24081	1		x x	6		4330		10 27
EL	NS	4331	Lexington Street	SOUTH OF	6th Avenue	supplemental 1		2-WAY	35.76471	-119.24081	1		x x	6		4331		10 27
EL	NS	4320	Lexington Street	NORTH OF	9th Avenue	supplemental 1		2-WAY	35.7687	-119.24142	1		x x	6		4320		10 27
EL	NS	4321	Lexington Street	SOUTH OF	9th Avenue	supplemental 1		2-WAY	35.76802	-119.24127	1		x x	6		4321		10 27
EL	NS	930	Lexington Street	BETWEEN	Balboa Avenue AND Woollomes Avenue	supplemental 1		2-WAY	35.75222	-119.24075	1		x x	х 6		930		10 27
EL	NS	4271	Lexington Street	SOUTH OF	Cecil Avenue	supplemental 1		2-WAY	35.77555	-119.24301	1		x x	6		4271	15	
EL	NS	4299	Main Street	NORTH OF	11th Avenue	supplemental 1		2-WAY	35.77064	-119.24599	1		x x	6	1 1 1 1 1	4299		10 07
EL EL	NS NS	4300 4318	Main Street Main Street	SOUTH OF NORTH OF	11th Avenue 9th Avenue	supplemental 1 supplemental 1	1	2-WAY 2-WAY	35.76997 35.76807	-119.24585 -119.2544	1		x x	6		4300 4318		10 07
EL	NS NS	4318	Main Street	SOUTH OF	9th Avenue	supplemental 1	1	2-WAY	35.76746	-119.2544	1		x x	6	1 1 1 1	4319		10 07
EL	NS	4269	Main Street	SOUTH OF	Cecil Avenue	supplemental 1	1	2-WAY	35.77552	-119.24713	1		x x	6	1 1 1 1	4269		10 07
L.	NS	934	Norwalk Street	BETWEEN	20th Avenue AND Cecil Avenue	supplemental 1		2-WAY	35.77983	-119.2409	1		x x	6		934		03 12
EL	NS	4272	Norwalk Street	NORTH OF	Cecil Avenue	supplemental 1		2-WAY	35.77626	-119.24088	1		х х	6	1 1 1	4272		10 21
L.	NS	4245	Princeton Street	SOUTH OF	County Line Road	supplemental 1		2-WAY	35.79017	-119.23647		x	x x	х 6		4245		06 27
EL	NS	4305	Randolph Street	NORTH OF	11th Avenue	supplemental 1		2-WAY	35.77232	-119.232	1		x x	6		4305	15	10 08
L	NS	4306	Randolph Street	SOUTH OF	11th Avenue	supplemental 1		2-WAY	35.77124	-119.23199	1		x x	6		4306	15	10 08
L	NS	4332	Randolph Street	NORTH OF	6th Avenue	supplemental 1		2-WAY	35.76535	-119.23198	1		x x	6		4332	15	10 08
ì.	NS	4333	Randolph Street	SOUTH OF	6th Avenue	supplemental 1		2-WAY	35.7647	-119.23199	1		x x	6		4333	15	10 08
L	NS	4322	Randolph Street	NORTH OF	9th Avenue	supplemental 1		2-WAY	35.76909	-119.23205	1		x x	6		4322	15	10 08
ì.	NS	4273	Randolph Street	NORTH OF	Cecil Avenue	supplemental 1	1	2-WAY	35.77672	-119.23202	1		x x	х 6		4273		10 07
EL	NS	4274	Randolph Street	SOUTH OF	Cecil Avenue	supplemental 1		2-WAY	35.77539	-119.23201	1		x x	x 6	1 1 1 1 1	4274		10 27
EL	NS	4260	Timmons Avenue	SOUTH OF	Cecil Avenue	supplemental 1	1	2-WAY	35.77567	-119.27185	1		×	6		4260		10 27
CF CF	EW	4234	Elmo Highway	WEST OF	Garzoli Avenue	supplemental 1		2-WAY	35.68876	-119.24175	1		X X	4	1 1 1 1 1	4234	15	
OF NF	NS EW	4233 1009	Mast Avenue 2nd Street	NORTH OF BETWEEN	Hanawalt Avenue Williams Way AND Bell Avenue	supplemental 1 supplemental 1	1	2-WAY 2-WAY	35.6601 35.14734	-119.23208 -119.44899	1		X X	4		4233 1009		05 05
AF	NS	1009	6th Street	BETWEEN	SR 33 (Kern Street) AND San Emidio Street	supplemental 1	1	2-WAY 2-WAY	35.14734 35.14429	-119.44899 -119.45909	1	×	x x	4		1009	16	
NF NF	NS EW	1014	6th Street Airport Road	EAST OF	SR 33 (Kern Street) AND San Emidio Street SR 119 (Taft Highway)	supplemental 1 supplemental 1		2-WAY	35.14429 35.140798	-119.45909 -119.446795	1 1		x x	6	1 1 1	1014	16	
AF	NS	1017	Atkisson	WEST OF	Bell Avenue	supplemental 1	1	2-WAY	35.140798	-119.446795	1	×		4	1 1 1	1017	16	
AF	EW	2040	Alkisson Wood Street	EAST OF	10th Street	supplemental 1		2-WAY	35.14075 35.13318	-119.46419	1	×	x x	6	+ + + + + + + + + + + + + + + + + + + +	2040	16	01 20 01 20
'AS	EW	4228	4th Street	WEST OF	Birch Avenue	supplemental 1		2-WAY	35.59792	-119.34326	1		x	1		4228		11 05
	EW	1066	7th Street	BETWEEN	Cedar Avenue AND Poplar Avenue	supplemental 1	1	2-WAY	35.59428	-119.34426	1		x	1		1066		10 21
NS.			9th Place	BETWEEN	Broadway Street AND D Street	supplemental 1	1	2-WAY	35.59065	-119.33738	1		x	1	1 1 1	1080	15	12 15
AS AS	EW	1080																

						_									_	_		
WAS	NS	4351	Broadway	SOUTH OF	10th Place	supplemental 1	2-WAY	35.58955	-119.33821	1		x	1		4351	15 10 2	20 1	,292
WAS	NS	4229	Broadway	SOUTH OF	3rd Street	supplemental 1	2-WAY	35.5981	-119.33814	1		x	1		4229	15 11 (J5 1	,934
WAS	NS	4231	D Street	NORTH OF	9th Street	supplemental 1	2-WAY	35.59185	-119.33642	1		x	1		4231	15 12 1	16 2	2,191
WAS	NS	1107	Griffith Avenue	BETWEEN	Sunset Street AND 9th Place	supplemental 1	2-WAY	35.5911	-119.34043	1		X	1		1107	15 10 2	21 2	2,698
WAS	NS	4230	Palm Avenue	SOUTH OF	Sunset Street	supplemental 1	2-WAY	35.59173	-119.3493	1		x	1		4230	15 12 1	15 4	,824

Appendix C [Available on CD on request] Call Box Usage Statistics

Appendix D Statewide Call Box Guidelines

Statewide Call Box Guidelines

A set of motorist aid guidelines were originally developed by California Highway Patrol (CHP) and Caltrans to guide statewide consistency of the call box systems, which are developed and operated on a county-by-county basis. Updated guidelines developed by CHP, Caltrans and the various SAFE agencies from around the state are currently contained in the document titled "CHP/Caltrans Call Box and Motorist Aid Guidelines", dated May 2005.

The guidelines outline the roles and responsibilities of the various agencies involved in providing motorist aid services in California. The guidelines also provide guidance on the physical aspects –spacing and design of call box systems and individual call box sites. Several sections pertinent to this analysis are extracted from the Statewide Guideline and are presented below with some key words underlined.

Site Requirement

 Within spacing requirements, call box locations will be selected to have minimal impact on normal highway operation. A call box will not be located where there is less than an eight (8) foot shoulder. Any exceptions shall be reviewed and approved by the local district at Caltrans.

Call Box Spacing

- Within the guidelines, call box spacing should ensure motorist safety by providing the
 closest feasible spacing to reduce both pedestrian and vehicle exposure time. Closer
 spacing also contributes to congestion relief by providing faster notification and clearing of
 disabled vehicles from the roadway.
- Variation in terrain, available revenue, urban/rural characteristics, and proximity for roadside services are factors in the decision of spacing between call boxes. In order to allow flexibility and still maintain consistency in these installations, the county SAFEs should adhere to the following suggested spacing guidelines:

ADT	SUGGESTED SPACING
Lower than 40,000	3.2 km or more
	(2.00 mi or more)
40,000 to 75,000	1.6 km to 3.2 km
	(1.00 mi to 2.00 mi)
75,000 to 100,000	0.8 km to 1.6 km
	(0.50 mi to 1.00 mi)
Higher than 100,000	0.8 km or less
	(0.50 mi or less)

A reasonable spacing on rural highways with low ADTs may be based on geometric
and economic needs. Other factors may include the cellular coverage area and
isolation. Spacing does not constitute a system of call boxes but rather a service.

These call boxes should only be placed in an area where adequate safe clearance from the roadway is available.

 On Caltrans toll bridges, call boxes should be spaced between 600 to 1,200 feet, depending on whether or not adequate shoulders are provided. Special situations and deviations from this should be discussed with the district liaison.

Call Box Removal, Relocation and Repairs

- There may be factors, including, but not limited to, significant decreases in annual call volume, administrative issues, and operational issues, that warrant the need to remove call boxes on a systemwide basis. The SAFE will develop a systemwide call box removal plan that shall include a list of recommended call box sites to be removed, the resulting spacing between remaining adjacent sites, and justification for removal. If call boxes are being removed as a result of low call box usage, call box usage data for each call box shall also be provided. However, it should be noted that a call box may be removed due to systemwide decrease in call volume. The SAFE shall submit the call box removal plan to the CHP and Caltrans for review and approval. With the exception of removals for construction, a removal that is planned or in existence for more than six months is considered a permanent removal and requires an approved removal plan.
- A SAFE does not need to submit a removal plan to the CHP and Caltrans for the removal of individual call boxes. However, removals greater than 10% of the number of installed call boxes on any one corridor does require a removal plan.
- Should a call box be taken out of service for repair or temporarily removed due to roadway construction, its pair shall be bagged or temporarily removed. Any exceptions shall be reviewed and approved by the local district at Caltrans.
- Along freeways, expressways, and divided conventional highways, call boxes shall be removed from both sides of the roadway to maintain call box pairing.

Appendix E

REQUEST FOR PROPOSAL

Kern Regional Traffic Count Study

Kern Council of Governments 1401 19th Street, Suite 300 Bakersfield, CA 93301 (661) 861-2191

Additional background information on this proposal can be found on the Kern COG website:

www.kerncog.org
refer to tab:
"Working with Kern COG"

REQUEST FOR PROPOSAL

Kern Regional Traffic Count Study

Proposals Due Monday, March 28, 2016

INTRODUCTION AND BACKGROUND

The Kern Council of Governments (Kern COG) requests bids from qualified contractors to conduct a traffic count study of Kern County, California.

Established in 2005, this ongoing study monitors traffic counts for approximately 1000 locations on locally maintained roads in Kern County, California. Developed in response to recommendations for the 2000 Kern COG Model Update Contract, Kern COG has established a long-term regional traffic count monitoring program. The goal of the program is to provide more consistent and frequent traffic counts and vehicle mix information while eliminating duplication of effort in counting programs between the Kern COG member agencies and Caltrans. A comprehensive description and complete list of tasks and products are included in this request for bids.

The study is an annual program that is renewable annually up to 5 years.

See the Required Proposal Form for additional details on the anticipated tasks required for this project.

Since the 1970s Kern COG has performed surveys for the Caltrans Highway Performance Monitoring System (HPMS). The system keeps track of a variety of data on federal, state and local routes including traffic volume, vehicle mix, and posted speeds. In 1995, Kern COG began a traffic counter loan program for its member agencies in support of the annual HPMS survey and other traffic count needs. Kern COG formerly maintained an inventory of 42 traffic counters that were loaned to member agencies for performing quarterly and annual counts as well as special counts.

In 2001 at the Transportation Modeling Committee (TMC), a subcommittee of the TTAC Transportation Modeling Subcommittee, attendees discussed and supported the creation of a regional transportation monitoring program. Representatives on the committee were present for the City of Bakersfield Public Works and Planning Departments and the Kern County Roads Department.

In response to these developments Kern COG has developed a Regional Transportation Monitoring Improvement Plan (RTMIP) for the regional traffic count program. Both the Final Report and the associated Traffic Count Location List (Appendix B) and locations maps are posted on the website http://www.kerncog.org/cms/working-with-kern-cog/request-for-proposals. The most recent effort in that program included the update of the regional traffic count website (<a href="http://kerncog.ms2soft.com/tcds/tsearch.asp?loc=Kerncog&mod="http://kerncog.ms2soft.com/tcds/tsearch.asp?loc=Kerncog&mod="http://kerncog.ms2soft.com/tcds/tsearch.asp?loc=Kerncog&mod="http://kerncog.ms2soft.com/tcds/tsearch.asp?loc=Kerncog&mod="http://kerncog.ms2soft.com/tcds/tsearch.asp?loc=Kerncog&mod="http://kerncog.ms2soft.com/tcds/tsearch.asp?loc=Kerncog&mod="http://kerncog.ms2soft.com/tcds/tsearch.asp?loc=Kerncog&mod="http://kerncog.ms2soft.com/tcds/tsearch.asp?loc=Kerncog&mod="http://kerncog.ms2soft.com/tcds/tsearch.asp?loc=Kerncog&mod="http://kerncog.ms2soft.com/tcds/tsearch.asp?loc=Kerncog&mod="http://kerncog.ms2soft.com/tcds/tsearch.asp?loc=Kerncog&mod="http://kerncog.ms2soft.com/tcds/tsearch.asp?loc=Kerncog."http://kerncog.ms2soft.com/tcds/tsearch.asp?loc=Kerncog.ms2soft.com/tcds/tsearch.asp?loc=Kerncog.ms2soft.com/tcds/tsearch.asp?loc=Kerncog.ms2soft.com/tcds/tsearch.asp?loc=Kerncog.ms2soft.com/tcds/tsearch.asp?loc=Kerncog.ms2soft.com/tcds/tsearch.asp?loc=Kerncog.ms2soft.com/tcds/tsearch.asp?loc=Kerncog.ms2soft.com/tcds/tsearch.asp?loc=Kerncog.ms2soft.com/tcds/tsearch.asp?loc=Kerncog.ms2soft.com/tcds/tsearch.asp?loc=Kerncog.ms2soft.com/tcds/tsearch.asp?loc=Kerncog.ms2soft.com/tcds/tsearch.asp?loc=Kerncog.ms2soft.com/tcds/tsearch.asp?loc=Kerncog.ms2soft.com/tcds/tsearch.asp?loc=Kerncog.ms2soft.com/tcds/tsearch.asp?loc=Kerncog.ms2soft.com/tcds/tsearch.asp?loc=Kerncog.ms2soft.com/tcds/tsearch.asp.location.asp.location.asp.location.asp.location.asp.location.asp.loc

The goal of the program is to provide more consistent and frequent count data and to eliminate duplication of effort in counting programs between the member jurisdictions and Caltrans.

PURPOSE AND OBJECTIVES OF RFP

The proposed program will produce and publish data on the web for the following purposes:

- Calibration of the Kern COG regional transportation model
- Monitor directional splits for calibration of the Kern COG peak hour model
- Predict commodity flow and freight movements
- Monitor speed data for posted speed limit change analysis
- Monitor recurring unsafe speed locations additional speed enforcement activity signalization safety improvement analysis
- Federally mandated Highway Performance Monitoring System
 - Planning, design and construction of federal aid projects
- Apportionment or allocation of federal funds
- Air Quality, Environmental impact analysis

The undertaking of pavement maintenance and research and the supporting of Strategic Highway Research Program (SHRP)

SCOPE OF SERVICES – REQUIRED PROPOSAL FORM:

SHEET 1 OF 2

(Exhibit A- Description of Work): The Contractor shall furnish all labor, tools, traffic data collection equipment, mapping software, distribution media, and incidentals necessary to collect, process and report traffic counts on arterial and collector road segments. By bidding on this contract, the Contractor certifies his/her ability to perform the following: 1) Collect, process and report 24 and 48 hour short count and vehicle classification control traffic count data as described in this Proposal; 2) Meet all schedules and timelines for contract deliverables; 3) Obtain appropriate permits and licenses from various agencies involved; and 4) Furnish GPS coordinates of each count when needed with the accuracy of 1 meter or better and specify the coordinate system used.

For motorized counts, computerized counters will be setup on the day prior to the day of the count and will be picked up the morning after the count to ensure a full 24-hour or 48-hour count (midnight to midnight). Entering (approach) volume counts will be taken at locations where driveway and other turning movements will not adversely affect counts. Counts will be conducted according to the Kern COGs' protocol on Tuesday, Wednesday, and Thursday. All counts must be reported in MS2 or mutually accepted template formats. A traffic count locations list will be provided, and appropriate data from this list is to be entered into the template for each count. A sample of this list(s) and the template(s) are on http://www.kerncog.org/cms/working-with-kern-cog/request-for-proposals. *Performance Bond, Insurance and Disadvantaged Business Enterprise (DBE) Goals are required.

- 1. The undersigned, as bidder, declares that the only persons or parties interested in this proposal as principals are those named herein; that this proposal is made without collusion with any other person, firm or corporation; and the bidder has carefully examined the Notice to Bidders, the proposed form of contract, and the special provisions therein referred to, and proposes and agrees, if this proposal is accepted, that the bidder will contract with the Kern Council of Governments to provide all necessary labor, materials, tools or equipment in the time and manner, and in full payment therefore, and at the prices shown below.
- 2. Kern Council of Governments hereby notifies all bidders that it will affirmatively ensure that in any contract entered into pursuant to this advertisement, minority business enterprises will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award.
- 3. The bid of any contractor who is currently in default with Kern Council of Governments on a contract already awarded may be accepted; however, bidder understands that any costs associated with default will be paid prior to award or deducted from the proceeds of newly awarded contract.
- 4. If the bidder is awarded the contract and refuses to sign the contract presented for signature within the time and manner required, the bidder will be liable to Kern Council of Governments for actual damages resulting to the Department therefrom or 10% of the amount bid, whichever is less. Contractor will be placed on a default status. Default is defined as (1) being within a period of liquidated damages on uncompleted work, or (2) under notice to begin or complete a contract where work has not commenced or was suspended without cause, or (3) where contract is terminated for contractor failing to perform services required by the contract in a satisfactory manner.
- 5. a. After award of contract and execution of the contract, should the contractor fail to commence work within five (5) working days after notification of the starting date, or suspend work for a period of five (5) continuous working days after work has begun, Kern Council of Governments may provide five (5) calendar days written notice, posted at the job site or mailed to the contractor, to timely prosecute and complete the work or the contract may be terminated and liquidated damages of \$500.00 may be assessed for administrative costs for rebidding the work or awarding the work to another contractor.
 - b. In addition, the Contractor shall be liable to Kern Council of Governments for the difference between the Contractor's bid price and the actual cost of performing the work by the second low bidder or by another contractor.

BUSINESS NAME (PRINT OR TYPE)		DATE
BY (MUST BE SIGNED BY AUTHORIZED PERSON)	TITLE	BUSINESS PHONE
BUSINESS ADDRESS (STREET/P.O. BOX, CITY, STATE, ZIP)		FAX NUMBER

ADDRESS WHERE EQUIPMENT M	AY BE INSPECTED (IF APPLICABLE) (STREE	T. CITY. STATE. ZIP)
	== == (,,,,,
STATE CONTRACTOR'S	STATE CONTRACTOR'S LICENSE	FEDERAL I.D NO./SOCIAL
LICENSE BOARD NO.:	BOARD CLASSIFICATION:	SECURITY NO.:

REQUIRED PROPOSAL FORM (Continued)

SHEET 2 OF 2			
TASKS – COUNT TYPE:	COST PER SITE:	NO. OF SITES/ STATION S	TOTAL COST:
 Locate, Setup, Collect, Process, and Report 24-hour Traffic Counts (both directions). [700 Sites/1-8 lanes] 	\$(Per Site)	x 700 Sites	\$
 Locate, Setup, Collect, Process, and Report Vehicle Control Station Counts (7 days, 24 hours, both directions). [5 sites/1-8 lanes]. 	\$7 days/ 24hours per day (4 times/ year- possibly	x 16 Sites (140 days/ year) (16 locations x 7 days x 4 times/ year)	\$
3. Local Cetap, pllect, ocess, a Report 2 pur Vehic Classific on T ffic Count both directions). [300 es/1-8 land]	\$(F \ Site)	x 300 S	\$
4. Loca Setup, Co ect, oces and Repo 48-ho Traffi Counts (by directions). Sites/1	\$_ (I r Site)	x 5 Site	\$
 Locate, Setup, Collect, Frocess, and Report 48-hour Vehicle Classification Traffic Counts. [5 sites] 	\$(Per Site)	x 5 Sites	\$

 6. Segment Ped & Bike Count Including: Pedestrians Bikes Wheel Chairs Motorized Bikes (if possible to identify or will be classified as a standard bike) Other Class Type Easily Identified (upon request in advance) Mid-Block Marked Crosswalk or Illegal street crossing in the 	(Per hour per Site)	x 40 Sites	
 area of the segment count On-Off Bus (upon request if in segment count area) On-Off Train (upon request in advance if in segment area and with authorization to set up camera(s) in platform area) or can be done as a separate count (additional charge) in conjunction with a segment ped & bike count(s) 			
The data will be counted and separated as (1) side of street, (2) travel on sidewalk, (3) travel on street without a bike lane, (4) travel on the street with a bike lane and (5) travel off-street with a designated bike-ped-equestrian path.			
Also, provide optional costs for direction of travel or study at an intersection and video delivery.			
		TOTAL BID	\$

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- (1) THE ABOVE QUANTITIES ARE ESTIMATES ONLY AND ARE GIVEN AS A BASIS FOR COMPARISON OF BIDS. NO GUARANTEE IS MADE OR IMPLIED AS TO THE EXACT QUANTITY THAT WILL BE REQUESTED FOR EACH TYPE OF COUNT.
- (2) IN CASE OF DISCREPANCY BETWEEN THE UNIT PRICE AND THE TOTAL SET FORTH FOR A UNIT BASIS ITEM, THE UNIT PRICE SHALL PREVAIL.
- (3) ANY BID MAY BE REJECTED IF IT IS UNREASONABLE AS TO PRICE.

 UNREASONABLENESS OF PRICE INCLUDES NOT ONLY THE TOTAL PRICE OF THE BID,
 BUT PRICES FOR INDIVIDUAL LINE ITEMS AS WELL.

SUPPLEMENTAL PROVISIONS

Sagment Bod & Pike Count Including

A. Contractor shall contact and coordinate with all local jurisdictions in the placement of Automated Traffic Recorders (ATRs) within each traffic count segment. Contractor shall keep himself/herself fully informed of all existing and future State laws, and county and municipal ordinances and regulations, which in any manner affect those engaged or employed in the work to be performed. Contractor shall identify the ATR device type, year and model prior to collecting any count under this contract. In addition, Contractor shall test all traffic counters to document their error rate, and Contractor shall self-certify all equipment in use to be functional and accurate within 30 days of contract execution and prior to the start of traffic counts. Contractor shall be responsible for the daily inspection of ATR devices for proper operations deployment and correct any deficiencies. No part of the 24-hour traffic counts may contain data collected within any weekend, weekday holiday, or

extended weekend formed by a Federal, State or Local holiday; nor can counts be taken during the 24-hour period before or after said holidays.

B. DETAILED TRAFFIC COUNT SCHEDULE

Within 30 calendar days of contract execution, Contractor shall prepare and submit to the Contract Manager for approval a detailed traffic count schedule in either a spreadsheet using the MS Excel 2013 format or other mutually agreed format. The schedule shall contain the following:

Traffic count dates and exact site locations by street name, from and to location, and jurisdiction for each of the segments.

For each count date for all segments, identify the name and mobile phone number of the designated Field Supervisor in charge of the count crews oversight, and inspection of ATRs.

Contractor shall not modify the detailed traffic count schedule without prior written approval from the Contract Manager.

C. PRELIMINARY ATR EQUIPMENT TESTING

Within 30 calendar days of contract execution, Contractor shall perform the following:

Conduct preliminary testing of all ATRs used on this project prior to the start of conducting traffic counts.

Submit written proof and results of all ATR preliminary equipment testing to the Contract Manager including ATR serial number.

Self-certify all equipment in use for this project to be functional and accurate. Submit self-certification in writing to the Contract Manager.

D. Monthly Progress Reports

Contractor shall submit a monthly progress report due the <u>first working day of each month</u> to the Contract Manager by electronic mail (e-mail) on the status of the contract. The monthly report shall be submitted in the MSWord version 2013 or the MS Excel version 2013 format and contain all of the following items.

- 1) Number and exact location of counts taken and any scheduled locations for which data was not obtained. A new schedule of count dates will be provided for data that was not obtained per the original schedule. The report must include any changes to the contract schedule, which will require approval by the Contract Manager.
- 2) Date and time of equipment setout, daily inspection and pick up of equipment.
- 3) Log sheet identifying field supervisor, date, time and results of inspections and the ATR serial number used.

COORDINATION

Kern COG is solely responsible and will be the sole point of contact for all contractual matters related to this project. The consultant shall take direction only from Kern COG and shall regularly inform Kern COG of project progress, any outstanding issues, and all project related matters.

Participating entities may also offer suggestions and/or recommendations regarding the project or elements of the project. While Kern COG enjoys a close relationship with and has considerable confidence in the capabilities of these other parties, the consultant shall not act on any suggestions, solicited or unsolicited, without obtaining specific direction from Kern COG. otherwise directed, all oral and written communication shall be directed only to Kern COG. Any distribution of project related communication and information will be at the discretion of Kern COG.

The selected consultant will best demonstrate the ability to deliver quality work on schedule and in a cost-effective manner, consistent with the tasks and deliverables in this RFP.

All data, maps and all other materials prepared or collected under this contract will become the property of Kern COG.

<u>SCHEDULE</u>

Activity Date

Request for Proposals Released Last Day to Submit Written Questions Tuesday, March 8, 2016 Deadline for Proposal Submittal Selection Process Final Cost Proposal & Scope Due Kern COG Board Approval Notice to Proceed

Tuesday, February 23, 2016 Monday, March 28, 2016 From March 29 to March 31, 2016 Friday, April 8, 2016 Thursday, April 21, 2016 Friday, July 1, 2016

These dates are subject to change. Schedule updates will be posted on the Kern COG website: www.kerncog.org refer to tab: "Working with Kern COG."

PROPOSAL REQUIREMENTS

A Technical Selection Committee of representatives from Kern COG and Kern County will select the contractor based on the lowest bid, qualifications, references, and the committee's evaluation to ensure the best value for the resources available.

One reproducible, five copies, and one electronic copy of the proposal must be received at Kern Council of Governments Monday, March 28, 2016. Proposals not received by that date and time will not be considered.

Provide contact and email address

Proposers shall provide a contact person and email address to be used in responding to questions and for notification of updated RFP information.

RFP ORGANIZATION

In order to simplify the review process and maximize the degree of comparative analysis, the proposal should be organized in the following manner:

A. Transmittal letter

The transmittal letter should be signed by an official authorized to bind the consultant contractually and will contain a statement to the effect that the proposal is a firm offer for 90 days. The letter accompanying the proposal will also provide the following: name, title, address, and telephone number of individuals with the authority to negotiate and contractually bind the company. The transmittal shall contain a statement of understanding of the RFP.

B. Management Approach

This section should describe the firm's management approach. Designate by name the project manager to be employed who will oversee the project. No substitutions of the identified project manager will be allowed without prior approval of Kern COG Project Manager.

i. Project Budget

Kern COG has budgeted a maximum of \$71,967 (Seventy ONE THOUSAND NINE HUNDRED SIXTY SEVEN DOLLARS) in fiscal year 2016-17 for this study.

C. Insurance Requirements

Without limiting Kern COG's right to obtain indemnification from the consultant or any third parties, the consultant, at its sole expense, shall maintain in full force and affect the following insurance policies throughout the term of the contract:

- 1. Worker's Compensation in the amount required by law.
- Commercial general liability insurance, including contractual liability coverage, covering all of its actions under this contract with limits of not less than \$2,000,000 combined single limit for bodily injury and property damage or \$1,000,000 per person and per occurrence for bodily injury and \$1,000,000 per each occurrence for property damage and \$2,000,000 aggregate.
- Commercial automobile liability coverage with the same limits as the commercial general liability insurance described above, covering all owned, hired, and non-owned automobiles and any

other vehicle or equipment used by Consultant or its agents in performance of this contract.

4. Worker's compensation insurance as required by law.

All policies of insurance mentioned above shall be placed with insurers admitted to do business in California and with current "Best's Key Rating Guide" rating of no less than an A-, VII. The commercial general liability and automobile liability policies shall contain endorsements naming the Kern Council of Governments, its officers, employees, agents and governing body and each member thereof, as additional insureds and providing for a legal defense, if such is requested, for all such additional insureds. In addition, all policies of insurance mentioned above shall not be canceled or reduced until thirty (30) days after Kern COG receives notice of such cancellation or reduction. A signed copy of a certificate or certificates of insurance evidencing each of the coverages and requirements for the policies of insurance mentioned above, and evidencing each of the endorsements described herein, shall be submitted to Kern COG prior to Consultant performing any work under this contract.

In the event the consultant fails to keep in effect at all times insurance coverage as herein provided, Kern COG may, in addition to other remedies it may have, suspend or terminate the contract upon the occurrence of such event.

D. Disadvantaged Business Enterprise (DBE) Certification

It is the policy of Kern COG, the California State Department of Transportation and the U.S. Department of Transportation, that Disadvantaged Business Enterprises (DBEs), as defined in 49 CFR Part 23, shall have the maximum opportunity to participate in the performance of contracts financed in whole or in part with local, state or federal funds.

Consultant shall ensure that DBEs, as defined in 49 CFR Part 23, have the maximum opportunity to participate in the performance of this contract. In this regard, Consultant shall take all necessary and reasonable steps to ensure that DBEs have the maximum opportunity to compete for and to perform subcontracts arising out of this contract. Failure to carry out the requirements of this paragraph shall constitute a breach of contract and may result in termination of this contract or such other remedy Kern COG may deem appropriate.

During the period of this contract, the Consultant shall maintain records of all applicable subcontracts advertised and entered into germane to this contract, documenting the opportunity given to DBEs to participate in this contract, actual DBE participation, and records of materials purchased from DBE suppliers. Such documentation shall show the name and business address of each DBE subcontractor or vendor, and the total dollar amount actually paid each DBE subcontractor or vendor. Upon completion of the contract, a summary of these records shall be prepared

and certified correct by the Consultant, and shall be furnished to Kern COG.

E. Conflicts of Interest

The prospective contractor shall disclose any financial, business, or other relationship with Kern COG, or other entities such as the other MPOs involved in this project, that may have an outcome on the selection.

F. SUMMARY OF QUALIFICATIONS

Proposals shall include a summary of the firm's qualifications, including resumes of assigned staff.

G. Signing of Proposal/Authorization to Negotiate

The proposal shall be signed by an official authorized to bind the proposer and shall contain a statement to the effect that the proposal is a firm offer for a 90-day period. The proposal shall also provide the following: name, title, address, and telephone number of individuals with authority to negotiate and contractually bind the company.

H. Attachments

Attachments to be included at the end of the proposal are as follows (as attached herein):

- Attachment A: Title VI Assurance
- Attachment B: Required Proposal Form

PROPOSAL SUBMITTAL

1. Preparation of Proposal

The proposal shall be formatted in accordance with the requirements specified on <u>Page 5</u> in the Section titled "Proposal Requirements" of this RFP. Proposal forms shall be executed by an authorized signatory as described herein. All proposals shall be prepared by and at the expense of the proposer.

2. Examination of RFP Document

The proposer shall be solely responsible for examining, with appropriate care, the RFP, including Required Proposal Form and any addenda issued during the proposal period. The proposer shall also be responsible for informing itself with respect to any and all conditions, which may in any way affect the amount or nature of the proposal or the performance of the work in the event the proposer is selected. Failure of the proposer to examine and inform itself in this manner shall be at the proposer's own risk and no relief for error or omission shall be given.

3. Submission of Proposal/Period of Acceptance

One reproducible master, five copies, and one electronic copy of all proposals must be delivered to Kern COG no later than 4:00 p.m. PST, Monday, March 28, 2016. Proposals will not be accepted after 4:00 p.m. PST. Postmarks will not be accepted. Proposals should be delivered to:

Ahron Hakimi, Executive Director Kern Council of Governments 1401 19th Street, Suite 300 Bakersfield, CA 93301

All proposals will remain firm for a period of ninety (90) days following the final date for submission. All proposals will become the sole property of Kern COG and a part of its official records without obligation on the part of Kern COG.

This RFP is not to be construed as a contract of commitment on the part of Kern COG. Kern COG reserves the right to reject all proposals, to seek additional information from each proposer, or to issue another RFP, if deemed appropriate.

4. Modification or Withdrawal of Proposals

Any proposal received before the date and time specified above for receipt of proposals may be withdrawn or modified by written request of the proposer. To be considered, however, the modified proposal must be received by the proposal due date and time specified previously.

All verbal modifications to these conditions or provisions are ineffective for proposal evaluation purposes. Only written changes issued by proposers to Kern COG are authorized and binding.

5. Rejection of Proposals

Failure to meet the requirements for the request for proposals will be cause for rejection of the proposal. Kern COG may reject any proposal if it is conditional, incomplete, or contains irregularities or inordinately high cost rates. Kern COG may waive an immaterial deviation in a proposal. Waver of an immaterial deviation shall in no way modify the Request for Proposals document or excuse the proposer from full compliance with the contract requirements if the proposer is awarded the contract.

CONSULTANT SELECTION

The actual award of the contract will be by the Kern COG Transportation Planning and Policy Committee (tentatively set for the Thursday, April 21, 2016 meeting). Proposal opening does not constitute the awarding of a contract. The contract is not in force until it is awarded by Kern COG and executed by the Kern COG designees. A subcommittee of the PSC will evaluate, interview and recommend the selected consultant to the Kern COG Transportation Planning and Policy Committee for approval.

PROPOSER OBJECTIONS

A proposer may object to any of the terms or provisions set forth in the RFP's Scope of Work or to the selection of a particular proposer on the grounds that Kern COG's procedures, the provisions of this RFP, or applicable provisions of federal, state, or local law have been violated or inaccurately or inappropriately applied by submitting Kern COG a written explanation of the basis for the objection. Deadlines for submittal of objections are:

- No later than two weeks prior to the date proposals are due, for objections to RFP provisions; or
- Within three working days after the date on which contract award is authorized or the date the proposer is notified that it was not selected, whichever is later, for objections to proposer selection.

If the proposer does not state any objections, Kern COG will assume that the RFP Scope of Work is acceptable to the proposer and have been fully factored into its response. If the proposer intends to negotiate with Kern COG concerning any part of the Scope of Work the proposer finds objectionable, the proposer must provide specific language in its response that will address or cure its objections.

KERN COG RIGHTS

Kern COG may investigate the qualifications of any proposer under consideration, require confirmation of information furnished by a proposer, and require additional evidence of qualifications to perform the work described in this RFP.

Kern COG reserves the right to:

- Reject any or all of the proposals if it deems such action is in the public interest;
- Issue subsequent Requests for Proposals;
- Cancel the entire Request for Proposal:
- Remedy technical errors in the Request for Proposals process;
- Appoint an evaluation committee to review the proposals and make the selection based upon the written proposal only;
- Seek the assistance of outside technical experts in proposal evaluation;
- Approve or disapprove the use of particular subcontractors;
- Establish a short list of proposers eligible for interviews after review of written proposals;
- Negotiate with some, all, or none of the respondents to the RFP;
- Solicit best and final offers from all or some of the proposers;
- Award a contract to one or more proposers;
- Accept an offer other than the lowest price offer; and
- Waive informalities and irregularities in proposals and the bid process.

This RFP does not commit Kern COG to enter into a contract, nor does it obligate Kern COG to pay for any costs incurred in preparation and submission of proposals or in anticipation of a contract. All proposals will be subject to public disclosure as required by the California Public Records Act.

Kern COG reserves the right to investigate the qualifications of all firms under consideration to confirm any part of the information furnished by a proposer, or to require other evidence of managerial, financial, or other capabilities which are considered necessary for the successful performance of the contract.

RFP QUESTIONS

All questions on the RFP should be submitted in writing via email to:

eflickinger@kerncog.org

Ed Flickinger Project Manager Kern Council of Governments 1401 19th Street, Suite 300 Bakersfield, CA 93301

All questions shall be submitted no later than March 8, 2016. Written Questions submitted by March 8, 2016 will be answered and posted at http://www.kerncog.org refer to tab: "Working with Kern COG."

Attachment A

TITLE VI ASSURANCE

Kern Council of Governments, in accordance with Title VI of the Civil Rights Act of 1964, 78 Stat. 252, 42 U.S.C. 2000d-4 and Title 49, Code of Federal Regulations, department of Transportation, Subtitle A, Office of the Secretary, Part 21 Nondiscrimination in Federally Assisted Programs of the Department of Transportation issued pursuant to such Act, hereby notifies all bidders that it will affirmatively insure that in any contract entered into pursuant to this advertisement, minority businesses enterprises will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or nation origin in consideration of an award.