



INTELLIGENT TRANSPORTATION SYSTEMS (ITS) PLAN FOR THE KERN REGION

DELIVERABLE NO. 1

PROJECT PLAN

DECEMBER 2016



Kern Council of Governments
1401 19th Street, Suite 300
Bakersfield, CA 93301
www.kerncog.org
661-635-2900
Fax 661-324-8215

<http://www.kerncog.org/intelligent-transportation-systems>

TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
1.0 INTRODUCTION	1-1
1.1 PROJECT BACKGROUND	1-1
1.2 ITS PLANNING PROCESS	1-1
1.3 RELATIONSHIP TO 1997 EDP	1-3
1.4 PURPOSE OF PROJECT PLAN	1-4
2.0 PROJECT OUTREACH	2-1
2.1 STAKEHOLDER ENGAGEMENT PLAN	2-1
2.2 STAKEHOLDER ENGAGEMENT METHODS	2-2
3.0 STAKEHOLDER PARTICIPANTS	3-1
3.1 PROJECT TEAM	3-1
3.2 STAKEHOLDER LIST	3-1
3.3 STAKEHOLDER GROUP ORGANIZATION	3-1
3.4 POTENTIAL STAKEHOLDER GROUP COMMITTEES	3-3
3.5 CONSULTANT TEAM.....	3-3
4.0 PROJECT SCHEDULE	4-1
4.1 PROJECT SCHEDULE	4-1
5.0 NEXT STEPS	5-1

TABLES

TABLE 2-1. OUTREACH APPROACH	2-1
TABLE 3-1. ITS PLAN FOR THE KERN REGION STAKEHOLDER LIST	3-2

FIGURES

FIGURE 3-1. PROJECT STAKEHOLDER ORGANIZATION	3-2
FIGURE 4-1. TASK FLOW CHART.....	4-1
FIGURE 4-2. 2018 ITS PLAN FOR THE KERN REGION TIMELINE	4-2

1.0 INTRODUCTION

The Intelligent Transportation Systems (ITS) Plan for the Kern Region is a critical component in addressing the transportation needs of the region. As travel demand on the freeway and arterial system increases, there is an increasing need to improve the system through better management of existing capacity. In recognition of this, the Kern Council of Governments (Kern COG) and the local communities in the region continue to invest in ITS. The ITS Plan will ensure that these investments address the important needs in the region and bring the maximum benefit to travelers. The ITS Plan will include a specific implementation plan that reflects the changes in technology since the 1997 ITS Early Deployment Plan (EDP) was completed.

1.1 PROJECT BACKGROUND

The EDP was developed for the Kern region in 1997, led by Kern COG. The EDP was developed in consultation with local Kern County agencies, and reflected the input and priorities of the local agencies. Subsequently, the San Joaquin Valley ITS Strategic Deployment Plan (SDP) was developed for the eight counties of the San Joaquin Valley: Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, and Tulare. The 1997 EDP and the 2001 SDP documents are consistent with one another with regards to the Kern regions' inputs, needs, and plans.

A comprehensive update of the countywide EDP has not been completed since 1997. In the interim, Kern metropolitan area agencies have made significant investments in the planning, design, and implementation of ITS for the surface transportation and transit networks. There is an expectation, documented in the 1997 EDP and Architecture, that investment in ITS strategies will continue with a focus at the local level. At the same time, it's important that investments be made in reliable technologies that deliver proven benefit in a cost effective manner. Toward this end, Kern COG is leading this countywide ITS Plan to direct ITS investments throughout the county over the next twenty years and beyond.

Concurrently, Kern COG is in the process of updating the Regional Transportation Plan (RTP) for 2018, including the development of an updated project list for implementation using local and federal funding. ITS strategies, particularly those related to operational improvements to the arterial street system, and to enhancing transit service are important elements of the RTP and can provide improvements that lend to the Sustainable Community Strategies (SCS). Updating the ITS Plan will provide timely input to the RTP and the SCS, and will improve consistency among the three planning documents.

1.2 ITS PLANNING PROCESS

The ITS planning process is much like any other transportation planning activity, with the primary difference being the focus on technological solutions. One of the primary areas of emphasis of ITS planning is the extensive involvement and participation by the stakeholders of the region. This is especially important to ensure interagency systems integration, address potential institutional issues early, and to provide the necessary education and awareness of advanced technology transportation solutions.

Using the federal ITS planning process as a guideline, the overall approach to achieving the stated project goals will be performance of the following tasks (the **bolded text** indicates the current task and/or deliverable in process):

Task 1: Project Initiation

Deliverable 1: Project Plan

- **The Project Plan will incorporate the Stakeholder Engagement Plan, the stakeholder governance structure, and the detailed master project schedule.**

Task 2: Data Gathering

Deliverable 2: Data Report

- The Report identifies the ITS elements within the Kern region, existing and planned policies/projects combined with an understanding of the regions users to fully recognize the various opportunities and constraints.

Task 3: Assessment of the 1997 ITS Early Deployment Plan (EDP) and the Kern portion of the 2001 San Joaquin Valley ITS Strategic Deployment Plan (SDP)

Deliverable 3: Report assessing the 1997 EDP and the Kern portion of the 2001 SDP

- The report documents the findings of the assessment of the 1997 EDP and the 2001 SDP with the lessons learned in the interviews with project stakeholders.

Task 4: Update Regional ITS Inventories

Deliverable 4: System Inventory Summary Report

- The report presents a summary of the findings from the Inventory Survey forms from various Stakeholders identifying existing and planned ITS elements within each jurisdiction.

Task 5: Stakeholder Consultation/Identification of ITS Needs, Vision, Goals, and Objectives

Deliverable 5: Vision, Goals, Objectives and Needs Technical Report

- The report will identify an ITS vision for the Kern region, set of goals and objectives, and identify ITS needs after various exercises with Stakeholders.

Task 6: Develop Key Regional ITS Strategies

Deliverable 6: Regional ITS Strategies Report

- The report will refine and present a range of Intelligent Transportation Systems (ITS) components for inclusion in the ITS Plan.

Task 7: Determine Specific Needs, ITS Service Packages and Elements Based on Strategies

Deliverable 7: Regional Consolidated Needs Assessment Summary Technical Report

- The report will translate generic ITS needs into the National ITS Architecture framework. ITS Elements will also be identified as part of the process of identifying and selecting Service Packages for the region.

Task 8: Define Operational Roles and Responsibilities Consistent with Regional Vision, Goals, Objectives, and Strategies

Deliverable 8: Regional ITS Operational Roles and Responsibilities Technical Report

- The report will identify Operational Roles and Responsibilities that are consistent with the Vision Statement and the Goals and Objectives identified and developed in Task 5 and will also be based on the Strategies development in Task 6.

Task 9: Determine the Functional Requirements

Deliverable 9: Functional Requirements Report

- The report will identify Functional Requirements for ITS Architecture for the Kern region based on Federal Highway Administration's (FHWA) guidance.

Task 10: Prepare Regional ITS Architecture

Deliverable 10: Draft and Final Electronic Copy of the Turbo Architecture Database

- The electronic Turbo Architecture database will be developed consistent with Version 7.1 of the National ITS Architecture, FHWA Rule 940.9, and Part V of the Federal Transit Administration (FTA) National ITS Architecture Policy for Transit Projects and provided to Kern COG.

Task 11: Develop an Architecture Maintenance Plan

Deliverable 11: Architecture Maintenance Plan

- The report will develop an Architecture Maintenance Plan that will describe how to use the Architecture. The Report will provide project planning, project programming, project design, and maintenance procedures.

Task 12: Develop Kern Region ITS Plan

Deliverable 12: Kern Region ITS Plan

- The report will take all of the inputs from Tasks 2 through 11 and meld them together into a cohesive and comprehensive ITS Plan Report and Phasing Plan for Kern County.

Task 13: ITS Website for Regional Stakeholders

Deliverable 13: Draft and Final Website

- The Kern COG website ITS webpage will provide background on the project, the deliverables, and links to meeting agendas and material during Draft ITS Plan development. The Final webpage will include the Final ITS Plan.

1.3 RELATIONSHIP TO 1997 EDP

As noted in Section 1.1, the ITS Early Deployment Plan (EDP) was completed for Kern County in 1997. That plan was comprehensive, in terms of both needs assessment and the development of recommendations. For this ITS Plan update, the 1997 EDP will be reviewed and assessed in Task 3. This assessment will provide some insight and guidance in the project process when considering project and program prioritization, which will also be influenced to varying degrees by the changes

in technology since 1997. The assessment will provide a look back at prior ITS planning and implementation efforts and lessons learned from those efforts while moving forward with this most current ITS planning and implementation effort.

1.4 PURPOSE OF PROJECT PLAN

The purpose of the Project Plan is to provide a strategy for project stakeholder outreach, a project stakeholder governance structure, and a detailed master project schedule.

2.0 PROJECT OUTREACH

2.1 STAKEHOLDER ENGAGEMENT PLAN

The purpose of this Stakeholder Engagement Plan is to support the coordination of the collaborative efforts of regional stakeholders in order to develop a comprehensive plan for ITS in the Kern region. The ITS Plan will provide stakeholders with guidance for implementing systems that provide a safe, efficient surface transportation network for all users.

The various levels of involvement by stakeholders is a critical component of achieving this vision. The objectives of outreach and education are to collaborate with core stakeholders, consult and gain input from interested stakeholders, and provide information to the general public. This approach to outreach and education is summarized in the table below.

Table 2-1. Outreach Approach

Stakeholder Groups	Levels of Involvement	Outreach Methods
<u>Agency Stakeholders</u> <ul style="list-style-type: none"> • Interdepartmental groups within Kern COG • Caltrans • Other impacted urban and rural public agencies that own or operate surface transportation facilities or assets (cities, county, transit operators, etc.) • Public agencies in nearby regions • Groups or institutions impacted by or involved in the operation of surface transportation facilities 	<u>Inform and Consult</u> Explain the project and gain input regarding inventories, needs, and any related issues <u>Collaborate</u> Work jointly to share information and reach consensus on key aspects of the project	Kern COG Advisory Committees Workshops Project Website Newsletter Interviews Surveys
General Public	<u>Inform</u> Explain plan and potential impacts on all modes of transportation	Project Team outreach to the General Public is not anticipated as part of this project.

The identification of Agency Stakeholders is well underway. The list will be modified as needed throughout the project. Following guidance included in the Kern COG Public Information Policies and Procedures, outreach to the General Public is not anticipated as part of the ITS Plan. However, the Project Team may provide project information in their general community outreach activities, as it relates to the ITS Plan.

2.2 STAKEHOLDER ENGAGEMENT METHODS

These activities convey the toolset that the Project Team plans to use to accomplish their tasks:

- Compile Stakeholder List.
- Conduct Project Team meetings with key personnel within Kern COG. The meetings will be designed to elicit ideas, background information, and concerns related to this project.
- Develop and distribute survey forms to stakeholders.
- Conduct Project Stakeholder Workshops (4 planned).
- Attend local and regional meetings (as appropriate).
- Distribute, collect, and compile Inventory Surveys.
- Conduct one-on-one contacts (as required).
- Develop project identity and logo.
- Create project introduction flyer. The flyer will be developed early in the project in the form of a “Fact Sheet” to explain the project. Kern COG will post flyer to website.
- Provide material for a Project Web Site, for dissemination of project background information, announcements, meeting materials, and deliverables.
- Send out email alerts (as needed).

3.0 STAKEHOLDER PARTICIPANTS

3.1 PROJECT TEAM

A Project Team has been identified for the ITS Plan for the Kern Region. The make-up of the Project Team was designated by Kern COG executive staff. The Project Team provides project oversight and addresses issues that may arise during the course of the Plan development. The Project Team will work with existing Kern COG committees such as the Transportation Technical Advisory Committee, the Regional Planning Advisory Committee and Public Transit Operators Committee that are composed of representatives of Caltrans, local governments, and local transportation organizations from around the Kern region to provide input during Plan development.

3.2 STAKEHOLDER LIST

Table 3-1. lists 28 key agencies/organizations from around the Kern region in which at least one individual will be identified for engagement in the ITS Plan development process. In some cases, multiple individuals from a single organization may wish to participate in the Plan development process. For instance local governments may identify individuals from public works, police, fire, transit, etc. Input from the Project Team, the identified stakeholders, and others, will be instrumental in developing the ITS Plan that reflects the needs of the Kern region.

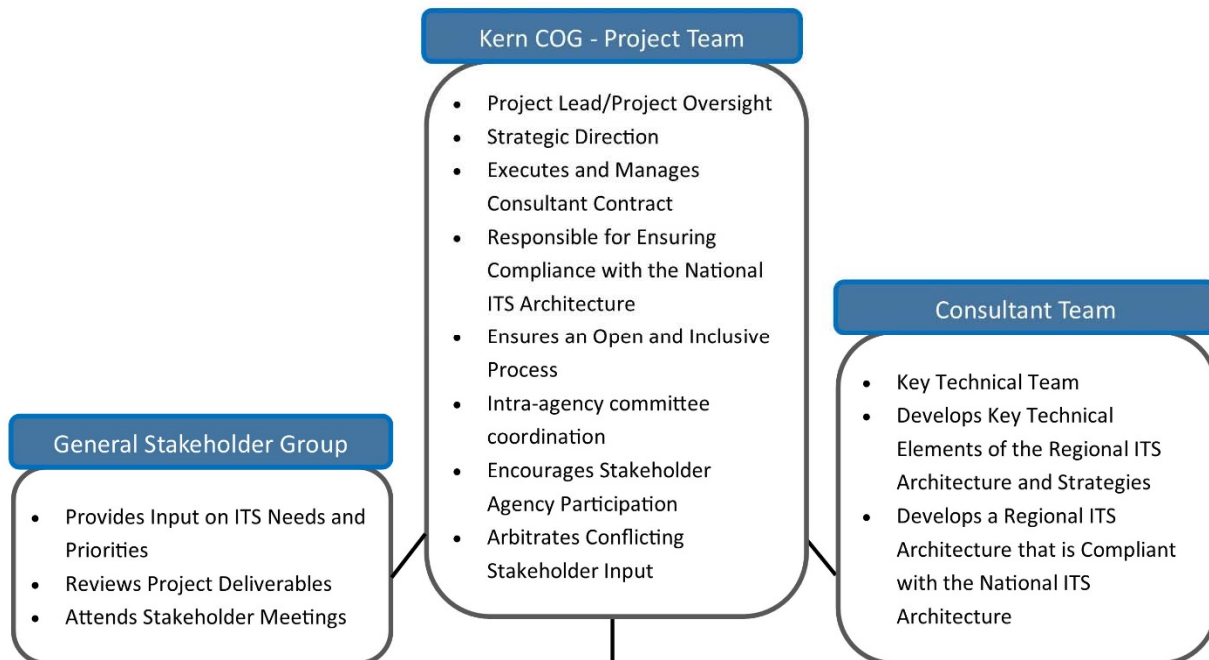
3.3 STAKEHOLDER GROUP ORGANIZATION

Figure 3-1. shows a proposed organization for the overall stakeholder group. Kern COG, as the lead transportation planning and programming agency for the Kern region will act as the project lead. The Project Team will assist with oversight of the administration of the overall ITS Plan development. The Project Team may use the existing Transportation Technical Advisory Committee and Regional Planning Advisory Committee as a sounding board for various deliverables under consideration prior to completion. The Consultant Team will act primarily at the direction of Project Team. The general stakeholder group will provide input to Kern COG in the identification of ITS needs and the development of project priorities.

Table 3-1. ITS Plan for the Kern Region Stakeholder List

Amtrak	City of Taft
Bureau of Land Management	City of Tehachapi
Burlington Northern Santa Fe Railroad	City of Wasco
Caltrans District 6	CommuteKern (Kern COG)
Caltrans District 9	County of Kern
Caltrans Headquarters	Delano Area Rapid Transit
City of Arvin	Federal Highway Administration California Division
City of Bakersfield	Federal Transit Administration Region 9
City of California City	Golden Empire Transit District (GET)
City of Delano	Kern Council of Governments (Kern COG)
City of Maricopa	Kern Motorist Aid Authority (Kern COG)
City of McFarland	Kern Transit
City of Ridgecrest	Tejon Indian Tribe
City of Shafter	Union Pacific Railroad

Figure 3-1. Project Stakeholder Organization



3.4 POTENTIAL STAKEHOLDER GROUP COMMITTEES

Kern COG may want to consider assembling ad hoc committees of the overall stakeholder group, based on areas of technical expertise and/or mode of transportation. For example, there may be some benefit in designating an ad hoc public safety committee to advise Kern COG and the Consultant Team on matters related to implementation of ITS that supports public safety (incident response, emergency management, etc.). These ad hoc committees would be formed at the direction of Kern COG.

3.5 CONSULTANT TEAM

Development of the ITS Plan will require technical expertise from a consultant. The Project Team is preparing a Request for Proposals for consultant services. The Consultant Team will develop key technical elements of the Regional ITS Architecture and Strategies, phasing plan, and write the final ITS Plan.

4.0 PROJECT SCHEDULE

4.1 PROJECT SCHEDULE

The ITS Plan has 13 tasks with milestones and deliverables over a 20 month schedule. **Figure 4-1.** shows a flow chart of the tasks with dates for development of those tasks. **Figure 4-2.** on the following page outlines the most current project timeline (as of 12/14/16).

Figure 4-1. Task Flow Chart

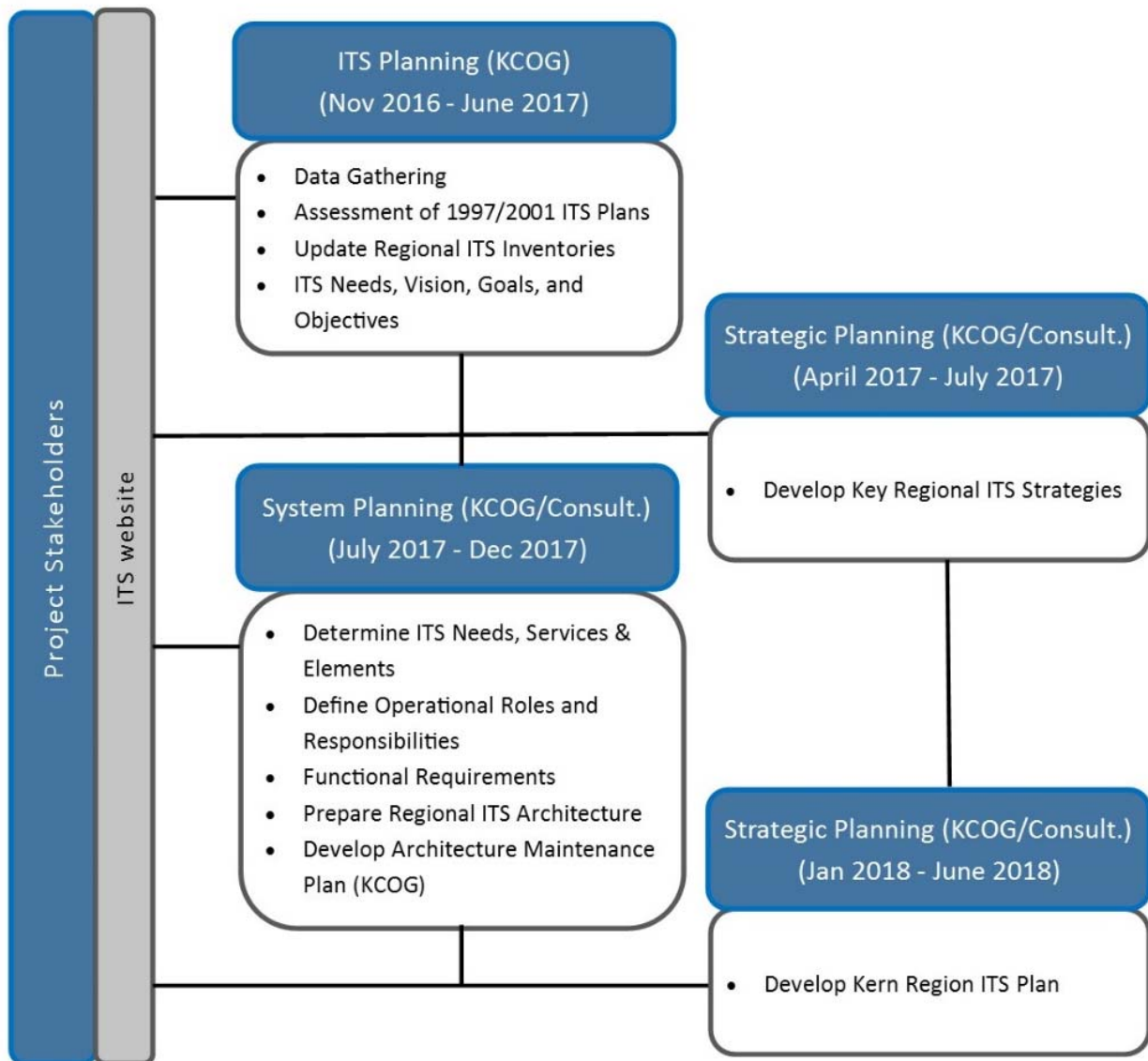


Figure 4-2. 2018 ITS Plan for the Kern Region Timeline (Dated: 12/14/16)

ID	Task Name	Duration	Start	Finish	Deliverable Completed Deliverable Stakeholder Meeting																							
					Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June				
1	2018 ITS Plan for the Kern Region	600 days	11/7/2016	6/29/2018																								
2	Task 1 - Project Initiation (KCOG)	39 days	11/7/2016	12/15/2016																								
3	Final Deliverable #1	32 days	11/14/2016	12/15/2016																								
4	Task 2 - Data Gathering (KCOG)	44 days	12/1/2016	1/13/2017																								
5	Final Deliverable #2	30 days	12/15/2016	1/13/2017																								
6	Task 3 - Assessment of 1997/2001 ITS Plans (KCOG)	86 days	11/7/2016	2/1/2017																								
7	Final Deliverable #3	15 days	1/18/2017	2/1/2017																								
8	Task 4 - Update ITS Inventory (KCOG)	165 days	1/17/2017	6/30/2017																								
9	Draft Deliverable #4	30 days	3/23/2017	4/21/2017																								
10	TTAC/RPAC/TPPC meetings	28 days	4/21/2017	5/18/2017																								
11	Final Deliverable #4	21 days	5/3/2017	5/23/2017																								
12	TTAC/RPAC/TPPC meetings	28 days	5/19/2017	6/15/2017																								
13	Task 5 - ITS Needs, Vision, Goals (KCOG)	165 days	1/17/2017	6/30/2017																								
14	TTAC/RPAC meetings	1 day	2/1/2017	2/1/2017																								
15	SSTAC/Transit Operators meeting	1 day	2/8/2017	2/8/2017																								
16	Tribal meeting	1 day	2/15/2017	2/15/2017																								
17	Emergency/Freight meetings	1 day	2/15/2017	2/15/2017																								
18	Draft Deliverable #5	30 days	3/23/2017	4/21/2017																								
19	TTAC/RPAC/TPPC meetings	28 days	4/21/2017	5/18/2017																								
20	Final Deliverable #5	21 days	5/3/2017	5/23/2017																								
21	TTAC/RPAC/TPPC meetings	28 days	5/19/2017	6/15/2017																								
22	Task 6 - Develop ITS Strategies (KCOG/Consultant)	90 days	4/21/2017	7/19/2017																								
23	Final Deliverable #6	34 days	6/16/2017	7/19/2017																								
24	Task 7 - ITS Service Packages (KCOG/Consultant)	89 days	7/17/2017	10/13/2017																								
25	Final Deliverable #7	29 days	9/15/2017	10/13/2017																								
26	Task 8 - Roles and Responsibilities (KCOG/Consultant)	89 days	7/17/2017	10/13/2017																								
27	Final Deliverable #8	29 days	9/15/2017	10/13/2017																								
28	Task 9 - Functional Requirements (KCOG/Consultant)	116 days	7/17/2017	11/9/2017																								
29	Final Deliverable #9	28 days	10/13/2017	11/9/2017																								
30	Task 10 - Prepare ITS Architecture (KCOG/Consultant)	200 days	10/13/2017	4/30/2018																								
31	Draft Deliverable #10	28 days	2/1/2018	2/28/2018																								
32	Final Deliverable #10	29 days	4/2/2018	4/30/2018																								
33	Task 11 - Architecture Maintenance Plan (KCOG)	84 days	11/9/2017	1/31/2018																								
34	Final Deliverable #11	30 days	1/2/2018	1/31/2018																								
35	Task 12 - Develop ITS Plan (KCOG/Consultant)	221 days	11/13/2017	6/21/2018																								
36	Draft Deliverable #12	29 days	2/23/2018	3/23/2018																								
37	TTAC/RPAC/TPPC meetings	28 days	3/23/2018	4/19/2018																								
38	Final Deliverable #12	28 days	4/20/2018	5/25/2018																								
39	TTAC/RPAC/TPPC meetings	28 days	5/25/2018	6/21/2018																								
40	Task 13 - ITS Website (KCOG)	576 days	12/1/2016	6/29/2018																								

5.0 NEXT STEPS

The next step in the project is to obtain a complete understanding of the existing conditions affecting the Kern region. This includes an appreciation for ongoing planning efforts and their relationships to this study, knowledge of the needs and expectations of the Stakeholders; and a thorough understanding of the physical features that will influence opportunities for enhancing the systems within the Kern region. The Data Report will identify the ITS elements within the Kern region, existing and planned policies/projects combined with an understanding of the region's ITS users to fully recognize the various opportunities and constraints. An assessment of the 1997 EDP will be developed in which stakeholders will be queried about their knowledge and impressions of the successes and challenges of the 1997 EDP. The Project Team will initiate the collection of ITS inventory from ITS stakeholders throughout the Kern region. Towards the conclusion of these steps, the Project Team will perform an ITS needs survey, in which stakeholders will be asked to identify their own ITS needs, and to assist with prioritization of those ITS needs. These tasks will further lead into development of the Regional ITS Architecture and ITS Plan for the Kern Region.