

# Kern COG ITS Plan

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TPPC MEETING

MAY 17, 2018

Kimley»Horn



## Agenda

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- Overview of Draft ITS Plan process  
<http://www.kerncog.org/category/docs/its/>
- Draft ITS Plan review
- Next Steps

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# 2018 ITS Plan development

## First Stakeholder meetings (3) – February 2017

- System Inventory
- Vision, Goals, Needs

Assessment of 1997 Plan – September 2017

## Second stakeholder meeting – October 2017

- ITS Strategies
- Architecture discussion

Operational Strategies Report – December 2017

Outreach for Information Flow diagrams with individual stakeholder meetings - January/February 2018

Information Flow diagrams/Functional Requirements – March 2018

Architecture Maintenance Plan – April 2018

Draft ITS Plan – April/May 2018

# Overview of Draft ITS Plan

**ITS Update for the Kern Region**

The Intelligent Transportation Systems (ITS) Plan is a critical component in addressing the transportation needs of the region. Kern COG is developing a well needed update to the 1997 Early Deployment Plan for the Kern Region in consideration of the ITS projects being implemented by our partners, the rapid advances in technology in recent years, and to respond to specific recommendations and requirements needed to bring the MPO into compliance (23 CFR 940) with current ITS program standards set by the Federal Highway Administration (FHWA) for development of architecture and strategic plans as well as the Federal Transit Administration's National ITS Architecture Policy on Transit Projects. The ITS Plan will provide a vision for ITS, outline a program of low, medium and high priority projects, identify a funding strategy, and establish a plan for managing, integrating, operating, and maintaining the ITS elements in the region that are to be implemented over a 20-year horizon.

Please contact Raquel Pacheco or Linda Urata with any questions or comments.

Deliverable 1	Project Plan	December 2016
Deliverable 2	Data Report	May 2017
Deliverable 3	Assessment of 1997 Plan Report	September 2017
Deliverable 4	System Inventory Summary Report	May 2017
Deliverable 5	Vision, Goals, Objectives & User Needs Report	May 2017
Deliverable 6	Strategies Report	November 2017
Deliverable 7	Regional Consolidated Needs Assessment Summary Report and Table 2-1	
Deliverable 8	Regional ITS Operational Roles and Responsibilities Report	December 2017
Deliverable 9	Functional Requirements Report	
Deliverable 10	ITS Diagrams Version 2 (ITS Diagrams Version 1 for comparison)	
Deliverable 11	ITS Architecture Maintenance Plan	
Deliverable 12	Draft - Regional ITS Plan	
	• Appendix A	
	• Appendix B	
	• Appendix C	Comments Due 5:00 PM
	• Appendix D	May 23, 2018

All deliverables are found on <http://www.kerncog.org/category/docs/its/>

# Stakeholder based Plan

Project Vision:

“Through community ITS investment, coordination and data sharing between transportation agencies, travel in Kern is safe and efficient.”

# Operational Roles and Responsibilities

Existing and planned responsibilities

Planned responsibilities tie directly to short term ITS projects

Stakeholder	Transportation Service Area	Roles and Responsibilities
Golden Empire Transit	Public Transportation	<ul style="list-style-type: none"> <li>• Operate fixed-route service</li> <li>• Operate demand response service</li> <li>• Manage and maintain bus fleet. Buses are equipped with AVL</li> <li>• Operate surveillance cameras on-board buses</li> <li>• Provide information to the public via internet and social media</li> <li>• Operate a computer-aided dispatch system for fixed-route and paratransit services</li> <li>• Operate electronic fare payment system</li> <li>• Provide transit information via website, printed materials, kiosks, and a telephone information line</li> <li>• Provide routing information during incidents, construction, weather events, special events, etc. (planned)</li> <li>• Provide/enhance road weather conditions information to travelers (planned)</li> <li>• Provide roadway closure/restriction information (planned)</li> <li>• Provide information on planned special events (planned)</li> <li>• Provide incident information to travelers (planned)</li> </ul>

# Prioritized Project List

Prioritization based on:

- Need for a function
- Logical ordering of projects
- Maturity levels of ITS services throughout the region

Provides guidance not a prescription

Short (0-5 years), Medium (5-10 years), Long term (10+ years)

Not a commitment of funds

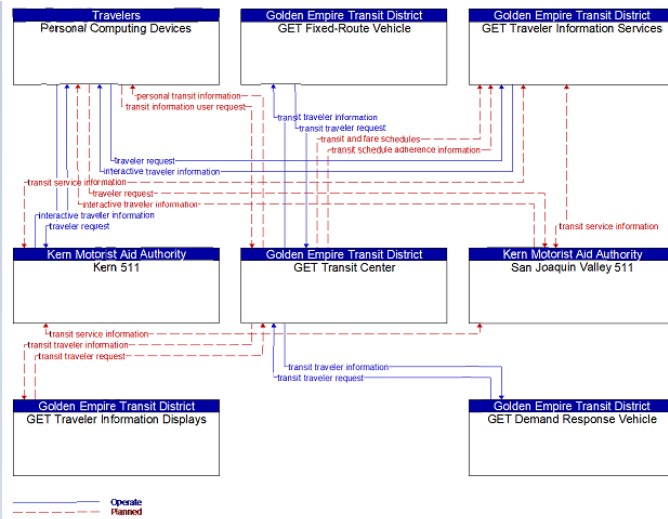


# Project List

Project ID	Project	Project Description	Term	Total	Need	Program Area	Planned Participating Entities	Interdependencies
2	Construction and Maintenance Coordination	This system will be used to share information between all agencies to coordinate any construction and maintenance efforts.	Short Term	113	Coordinate construction and maintenance project schedules within and between agencies	Maintenance and Construction Program	Caltrans Districts City of Arvin City of Bakersfield City of Delano City of McFarland City of Shafter City of Taft City of Tehachapi County of Kern	* The system will depend on willingness of multiple agencies to connect and share data
3	Work Zone Technology	This proposed system will provide the deployment of technology to collect and distribute warning information about potential work zone hazards.	Short Term	102	Warn work crews of errant vehicles	Maintenance and Construction Program	Caltrans Districts City of Arvin City of Bakersfield City of Delano City of McFarland City of Shafter City of Taft City of Tehachapi County of Kern	* The system will depend on the deployment of technologies capable of communicating with a central system or internet to access third party data management system
4	Traffic Signal System (Phase I)	This project will implement signal timing and coordination improvements to help reducing traffic congestion.	Short Term	118	Improve signal timing coordination	Traffic Management Program	Caltrans Districts City of Arvin City of Bakersfield City of Delano City of McFarland City of Shafter City of Taft City of Tehachapi County of Kern	* The system will depend on the jurisdictions having a traffic signal control system
				107	Reduce recurring traffic congestion			
5	Regional Transportation Management Center (TMC) Coordination and Traveler	This project supports the ITS data warehouse project. The links would enable data sharing among the transportation agencies and emergency response to provide up to date information to travelers.	Short Term	129	Provide routing (detour) information to travelers during incident, construction, weather events, special events, etc.	Traveler Information Program	Airports Caltrans Districts City of Arvin City of Bakersfield City of Delano City of McFarland	* The system will depend on a robust traffic signal control system * The system will depend on



# Information Flow Diagrams



- Shows existing and planned information flows
- Helps to determine planned projects
- Identifies integration opportunities
- Sorted by stakeholder

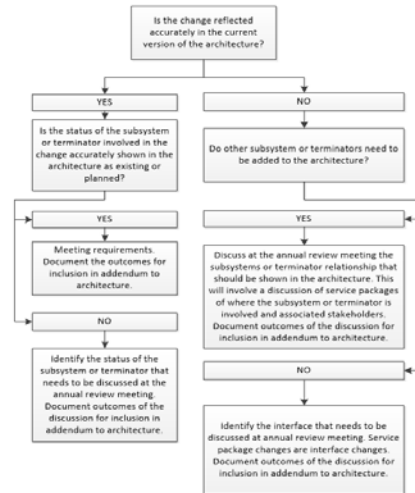
# Architecture Maintenance

## Maintenance

- New stakeholders
- Changes in scope of services
- Changes in other architectures
- Changes due to Project definition or implementation
- Project addition/deletion

## Process

- Submit a change request form to Maintenance Committee
- Maintenance Committee review (TTAC)
- Annual Progress Report



## Next Steps

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- May 23 – comments on the Draft ITS Plan due
- June 6 – expected TTAC recommendation to approve Final ITS Plan
- June 21 – expected Kern COG Board approval of Final ITS Plan
- Use and maintain the Architecture

## Questions?

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<http://www.kerncog.org/category/docs/its/>

Alyssa Phaneuf

[Alyssa.Phaneuf@kimley-horn.com](mailto:Alyssa.Phaneuf@kimley-horn.com)

(213) 261-4047