Modeling Parameters[1]	2005 (if available)	2008 (base year)	2020		2035		2040		Data Source(s)
			With Project[2]	Without Project[3]	With Project	Without Project	With Project	Without Project	
DEMOGRAPHICS									
Total population	762,000	816,000	1,010,800	1,010,800	1,321,000	1,321,000	1,444,100	1,444,100	
Group quarters population	33,700	35,800	44,300	44,300	57,800	57,800	63,200	63,200	
Total employment (employees)	286,432	297,016	365,700	365,700	460,674	460,674	501,710	501,710	
Average unemployment rate (%)	8.4%	9.8%							California DOF
Total number of households	260,700		319,200	319,200	417,200	417,200	456,100	456,100	
Persons per household	2.92		3.17	3.17	3.17	3.17	3.17	3.17	
Auto ownership per household									
Median household income									
LAND USE [4]									
Total acres within MPO	5,227,647	5,227,647	5,227,647	5,227,647	5,227,647	5,227,647	5,227,647	5,227,647	
Total resource area acres (CA GC Section 65080.01)									
Total farmland acres (CA GC Section 65080.01) (2010 Base Year)		784,485			783,763	783,352	783,572	783,121	FMMP 2010 Data/GIS Analysis
Developed acres (Growth Only)			18,030	20,200	45,720	53,130	58,020	66,100	GIS Uplan Data
Commercial developed acres (Growth Only)			3,820	4,110	11,190	11,450	14,920	14,130	GIS Uplan Data
Residential developed acres (Growth Only)			14,210	16,090	34,530	41,680	43,100	51,970	GIS Uplan Data
Total housing units			319,200	319,200	417,200	417,200	456,100	456,100	
Housing vacancy rate									
Total single-family detached housing units			224,290	235,210	279,200	316,300	298,170	348,420	
Total small-lot single family detached housing units (x,xxx sq. ft. lots and smaller)									
Total conventional-lot single family detached units (between x,xxx and x,xxx sq. ft. lots)									
Total large-lot single family detached units (x,xxx sq ft. lots and larger)									
Total single-family attached housing units			64,240	58,970	89,260	69,360	101,290	73,420	
Total multi-family housing units			30,680	25,020	48,740	31,640	56,650	34,260	
Total mobile home units & other									
Total infill housing units (Growth Only)					21,750	1,020	33,040	1,080	
Total mixed use buildings									
Total households within 1/4 mile of transit stations and stops									
Total households within 1/2 mile of transit stations and stops									
Total employment within 1/4 mile of transit stations and stops									
Total employment within 1/2 mile of transit stations and stops									
TRANSPORTATION SYSTEM									
Freeway general purpose lanes – mixed flow lane miles		7,350.72	7,917.39	7,991.27	9,572.96	9,641.55	9,578.51	9,869.48	
Highway (lane miles)		1,249.81	1,329.46	1,379.43	1,477.24	1,481.89	1,477.24	1,703.52	
Expressway (lane miles)		192.82	206.39	206.34	224.50	224.55	224.50	224.55	
HOV (lane miles)									
Arterial (lane miles)		5,109.27	5,552.20	5,571.65	6,799.91	6,863.00	6,808.58	6,861.10	
Collector (lane miles)		711.82	733.17	729.34	961.80	960.73	958.68	961.74	
Local (lane miles)									
Freeway-Freeway (lane miles)		87.00	96.17	104.51	109.51	111.38	109.51	118.57	

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Modeling Parameters[1]	2005 (if available)	2008 (base year)	2020		2035		2040		Data Source(s)
			With Project[2]	Without Project[3]	With Project	Without Project	With Project	Without Project	
Local, express bus, and neighborhood shuttle operation miles									
Bus rapid transit bus operation miles									
Passenger rail operation miles									
Transit total daily vehicle service hours									
Bicycle and pedestrian trail/lane miles									
Vanpool (total riders per weekday)									
TRIP DATA [5]									
Number of trips by trip purpose		2,229,378	2,805,261	2,817,220	3,619,414	3,644,694	3,898,355	3,953,510	
Home-based work		345,558	417,258	421,532	533,987	540,945	570,455	583,595	
Home-based other		1,194,913	1,470,857	1,477,545	1,903,017	1,920,216	2,044,373	2,081,828	
Non-home-based work		166,754	220,728	220,638	285,240	284,919	310,699	311,049	
Non-home-based other		522,153	696,418	697,505	897,170	898,614	972,828	977,037	
MODE SHARE									
Vehicle Mode Share (Peak Period)									
SOV (% of trips)									
HOV (% of trips)									
Transit (% of trips)									
Non-motorized (% of trips)									
Vehicle Mode Share (Whole Day)									
SOV (% of trips)		41.69%	41.31%	41.47%	41.08%	41.36%	40.95%	41.30%	
HOV (% of trips)		49.64%	49.84%	50.06%	50.08%	50.39%	50.01%	50.54%	
Transit (% of trips)		0.73%	0.83%	0.63%	0.88%	0.56%	0.92%	0.52%	
Non-motorized (% of trips)		7.94%	8.01%	7.85%	7.96%	7.69%	8.13%	7.64%	
Average weekday trip length (miles)									
SOV									
HOV									
Transit									
Walk									
Bike									
Average weekday travel time (minutes)									
SOV		15.19	14.91	15.91	14.79	14.09	15.28	14.48	
HOV		13.79	14.11	17.1	14.03	13.41	14.54	13.57	
Transit		33.93	34.04	34.91	33.75	33.32	33.56	33.33	
Walk									
Bike									
TRAVEL MEASURES									
Total VMT per weekday for passenger vehicles (ARB vehicle classes of LDA, LDT1, LDT2 and MDV) (miles)		15,856,655	20,124,898	20,340,554	26,150,101	26,758,917	28,089,165	29,477,282	
Total II (Internal) VMT per weekday for passenger vehicles (miles)		10,671,654	13,195,827	13,382,856	17,010,530	17,528,075	18,625,796	19,381,787	
Total IX/XI VMTper weekday for passenger vehicles (miles)		1,867,266	2,129,291	2,157,942	2,441,973	2,531,756	2,579,958	2,774,360	
Total XX VMT per weekday for passenger vehicles (miles)		3,317,736	4,799,780	4,799,756	6,697,598	6,699,085	6,883,410	7,321,135	
Congested Peak Hour VMT on freeways (Lane Miles, V/C ratios >0.75)									
Congested Peak VMT on all other roadways (Lane Miles, V/C ratios >0.75)									

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Modeling Parameters[1]	2005 (if available)	2008 (base year)	2020		2035		2040		Data Source(s)
			With Project[2]	Without Project[3]	With Project	Without Project	With Project	Without Project	
CO2 EMISSIONS[6]									
Total CO2 emissions per weekday for passenger vehicles (ARB vehicle classes LDA, LDT1, LDT2, and MDV) (tons)		7,730.65	9,799.13	9,927.85	12,699.04	12,973.00	13,606.74	14,203.72	
Total II (Internal) CO2 emissions per weekday for passenger vehicles (tons)		5,202.79	6,425.26	6,531.93	8,260.67	8,497.79	9,022.56	9,339.18	
Total IX / XI trip CO2 emissions per weekday for passenger vehicles (tons)		910.35	1,036.79	1,053.25	1,185.87	1,227.42	1,249.76	1,336.83	
Total XX trip CO2 emissions per weekday for passenger vehicles (tons)		1,617.51	2,337.09	2,342.67	3,252.49	3,247.78	3,334.41	3,527.71	
INVESTMENT (Billions)									
Total RTP Expenditure (Year XXXX $)		$7,474,000,000	$2,629,590,000	$2,358,490,000	$9,260,730,000	$5,326,482,000	$11,433,000,000	$0	2007 RTP As Amended
Highway capacity expansion (S)		$1,700,000,000	$587,002,780	$1,803,196,000	$2,067,270,660	$3,723,482,000	$2,552,186,000	$0	2011 RTP As Amended
Other road capacity expansion ($)		$2,800,000,000	$415,975,470	$498,180,000	$1,464,957,090	$1,311,000,000	$1,808,589,000	$0	Administrative Draft RTP
Roadway maintenance ($)		$1,550,000,000	$545,560,000	$589,000,000	$1,921,320,000	$1,550,000,000	$2,372,000,000	$0	
BRT projects ($)		$0	$4,140,000	$0	$14,580,000	$0	$18,000,000	$0	
Transit capacity expansion ($)		$700,000,000	$554,300,000	$42,864,000	$1,952,100,000	$112,800,000	$2,410,000,000	$0	
Transit operations ($)		$709,000,000	$424,925,000	$269,420,000	$1,496,475,000	$709,000,000	$1,847,500,000	$0	
Bike and pedestrian projects ($)		$15,000,000	$97,686,750	$14,250,000	$344,027,250	$37,500,000	$424,725,000	$0	
TRANSPORTATION USER COSTS									
Vehicle operating costs (Year XXXX $ per mile)	11.34	15.34	17.78	14.55	18.85	11.35	18.85	10.29	
Gasoline price (Year XXXX $ per gallon)	2.52	N/A	7.76	7.76	16.17	16.17	N/A	N/A	
Average transit fare (Year XXXX $)		$1	$1	$1	$1	$1	$1	$1	
Parking cost (Year XXXX $)		Varies	No Change	No Change	No Change	No Change	No Change	No Change	

[1] When reporting $ units, indicate whether they are current dollars, YOE (year of exchange), or other.

[2] This scenario includes modeling of all planned and programmed projects in RTP/SCS for respective calendar year.

[3] This scenario should reflect the MPO's Business as Usual scenario, which for most is what would happen under the MPO's previously adopted RTP for the respective calendar year.

[4] In cases where "TOTAL" land use data is reflective of "GROWTH ONLY", please indicate those instances within the table.

[5] Please include any other trip type that may be applicable to your region.

[6] Please provide ARB staff with the EMFAC Input and Output files associated with these outputs.

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2014 Regional Transportation Plan Update
Maintain, Fix and Finish What We Have

Kern Council of Governments

April 2014

WHY IS TRANSPORTATION IMPORTANT?

Kern Council
of Governments

2014 Regional Transportation Plan (RTP)

- 20+ year long-range plan of projects for the region
- Earliest stage of transportation planning process

McKee & H Street


Tehachapi Pass

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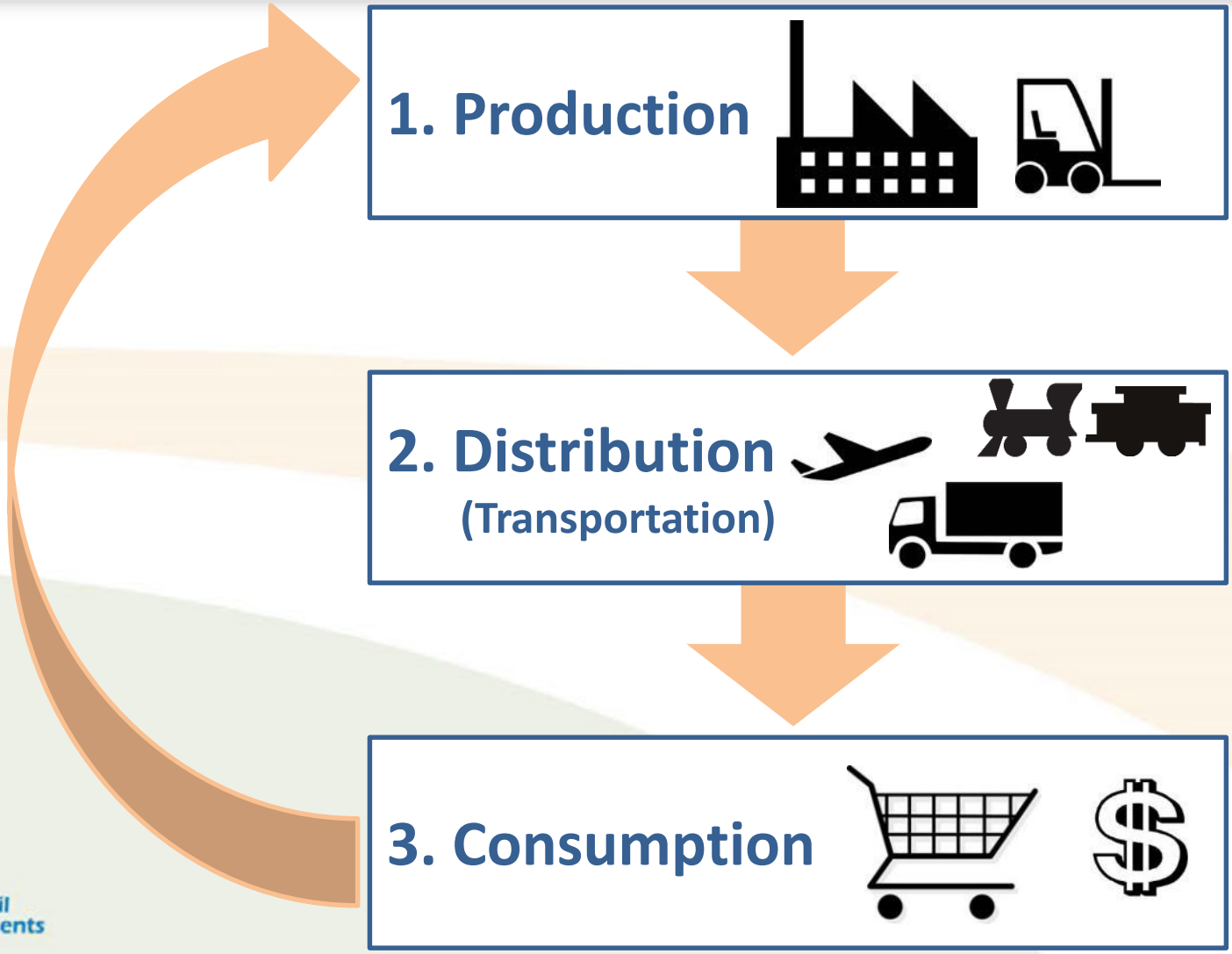
The Components of an Economy



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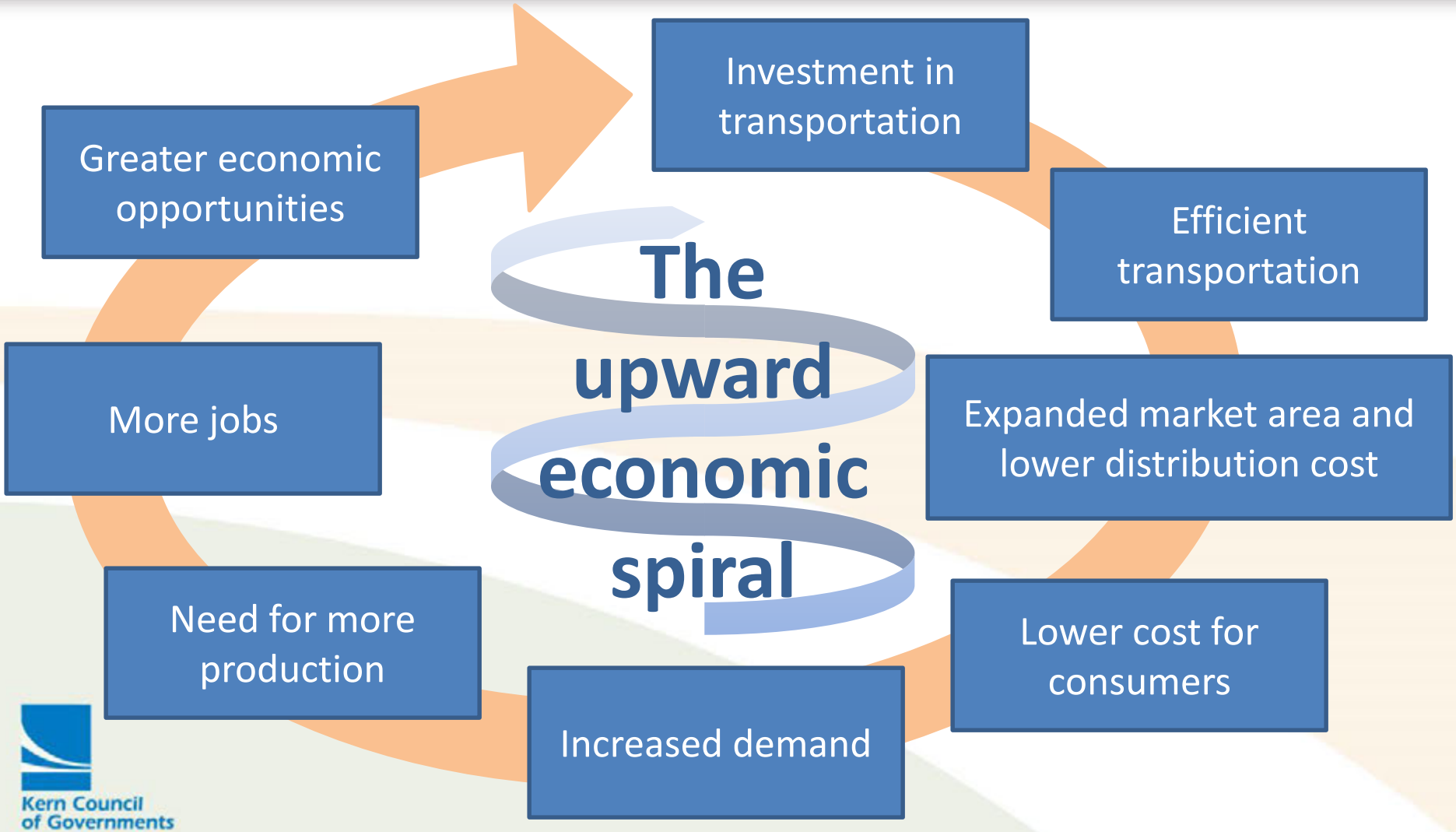
How Transportation Drives the Economy



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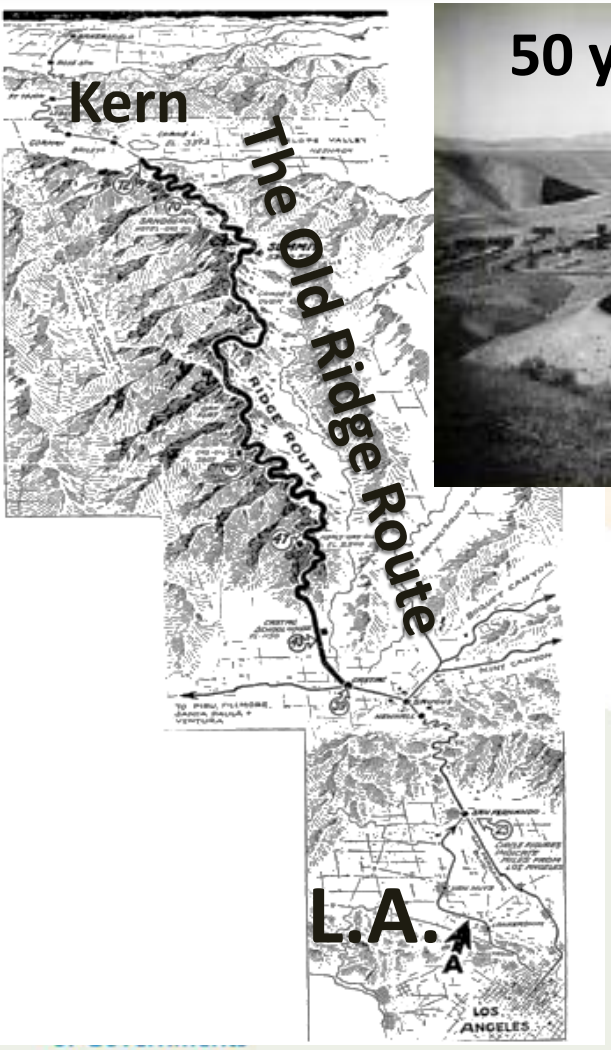
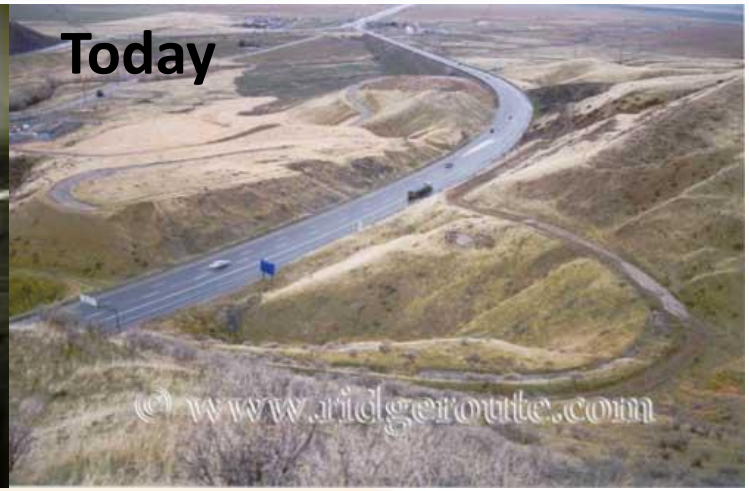
Transportation Investment Benefits



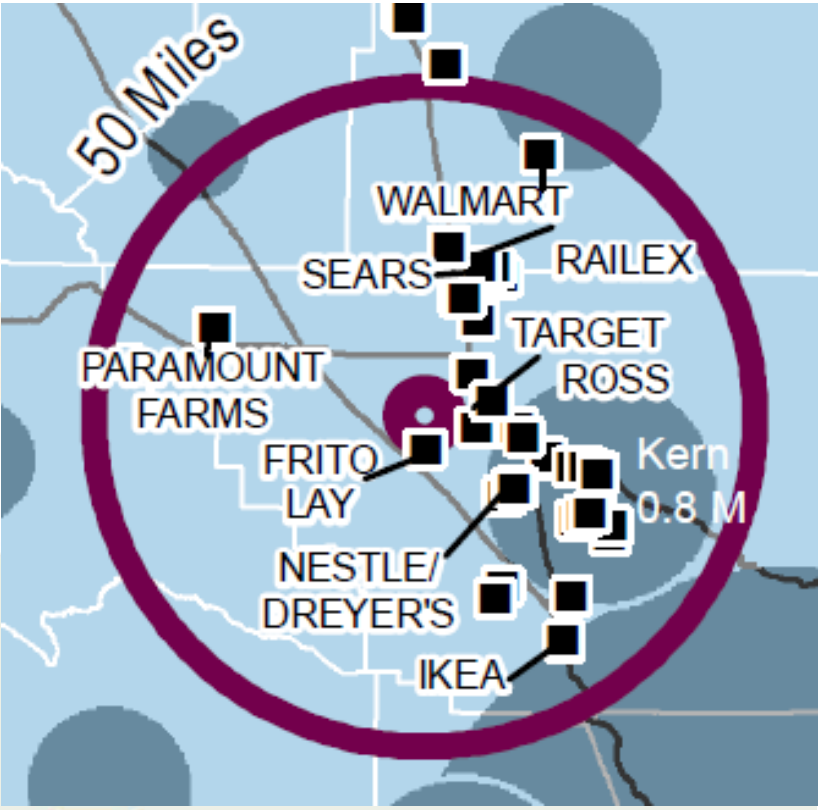


One example:

- Kern County's 8-lane freeway to Southern California connects us with 22 million consumers

Kern Logistics Industry Cluster

Geographic Center of Population



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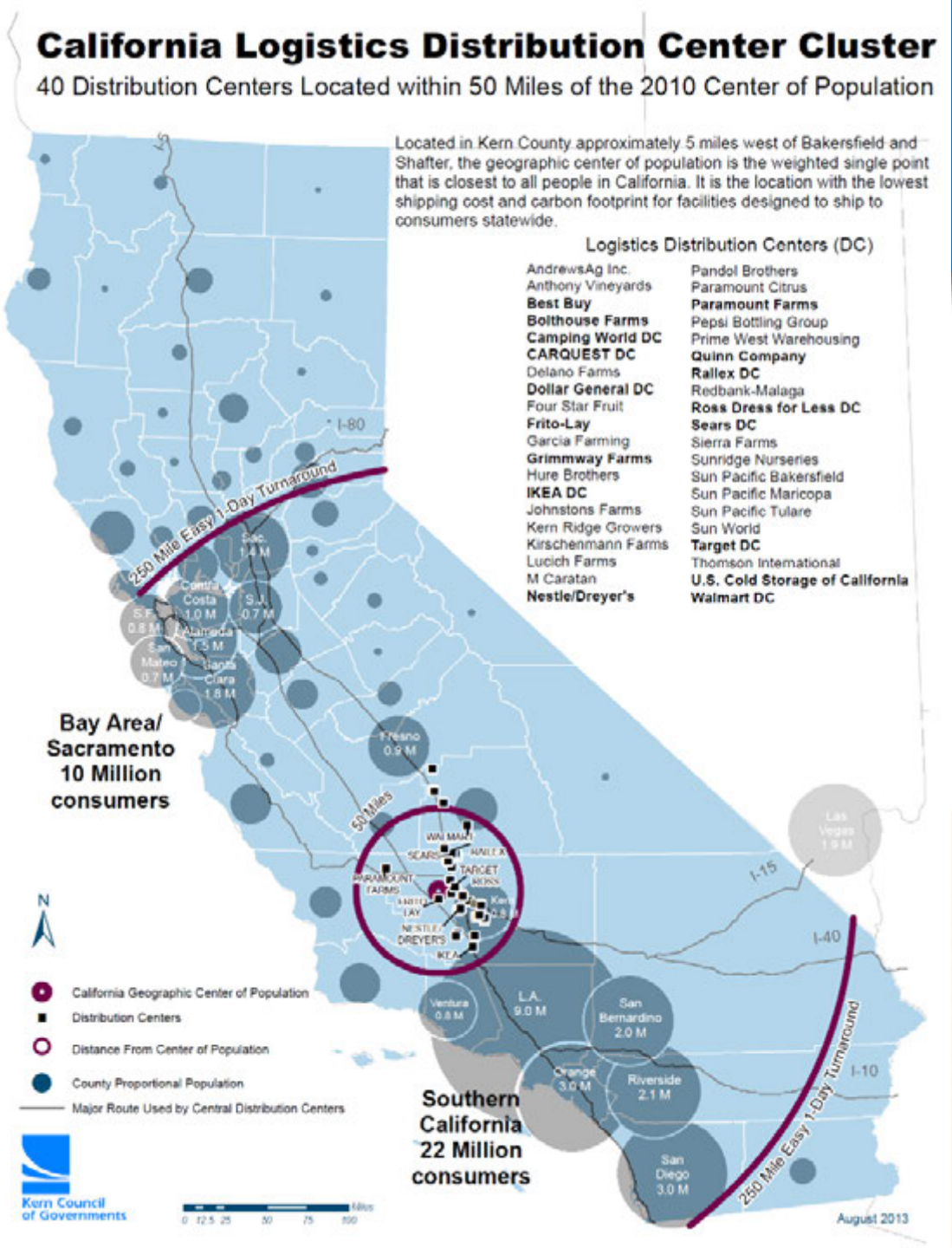
California Logistics Distribution Center Cluster

40 Distribution Centers Located within 50 Miles of the 2010 Center of Population

Located in Kern County approximately 5 miles west of Bakersfield and Shafter, the geographic center of population is the weighted single point that is closest to all people in California. It is the location with the lowest shipping cost and carbon footprint for facilities designed to ship to consumers statewide.

Logistics Distribution Centers (DC)

AndrewsAg Inc.	Pandol Brothers
Anthony Vineyards	Paramount Citrus
Best Buy	**Paramount Farms**
Bolthouse Farms	Pepsi Bottling Group
Camping World DC	Prime West Warehousing
CARQUEST DC	**Quinn Company**
Delano Farms	**Rallex DC**
Dollar General DC	Redbank-Malaga
Four Star Fruit	**Ross Dress for Less DC**
Frito-Lay	**Sears DC**
Garcia Farming	Sierra Farms
Grimmway Farms	Sunridge Nurseries
Hure Brothers	Sun Pacific Bakersfield
IKEA DC	Sun Pacific Maricopa
Johnstons Farms	Sun Pacific Tulare
Kern Ridge Growers	Sun World
Kirschenmann Farms	**Target DC**
Lucich Farms	Thomson International
M Caratan	**U.S. Cold Storage of California**
Nestle/Dreyer's	**Walmart DC**



Goods Movement Priority

Delano Railex – Intermodal Rail Shipping Facility

Truck and Rail Shipping Facilities Near Shafter and Bakersfield

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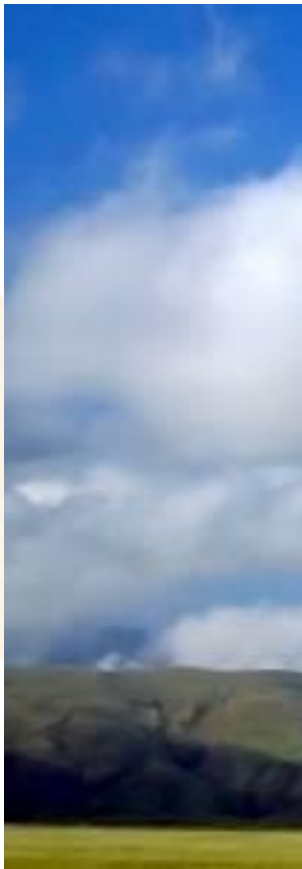
Growth and Air Emissions

- Significant portion of air emissions are from transportation.
- RTP must meet federal air standards or projects could be delayed.
- Kern must accommodate future growth out to 2040.
- RTP focuses on meeting federal and state requirements.



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WHAT'S PROPOSED FOR THE PLAN?

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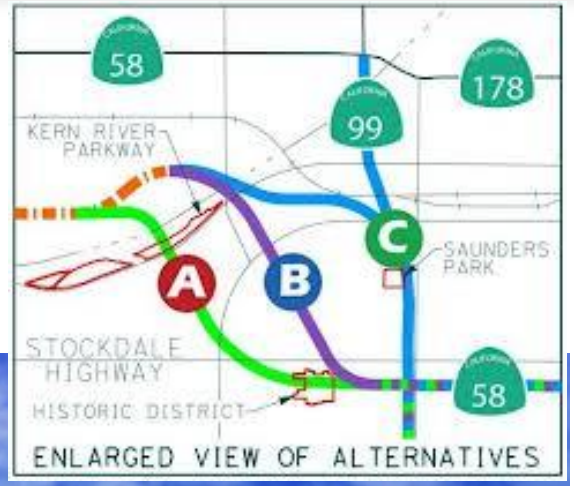
of Governments

Outreach Process 8,000+ Participants: Maintain, Fix, and Finish What We Have



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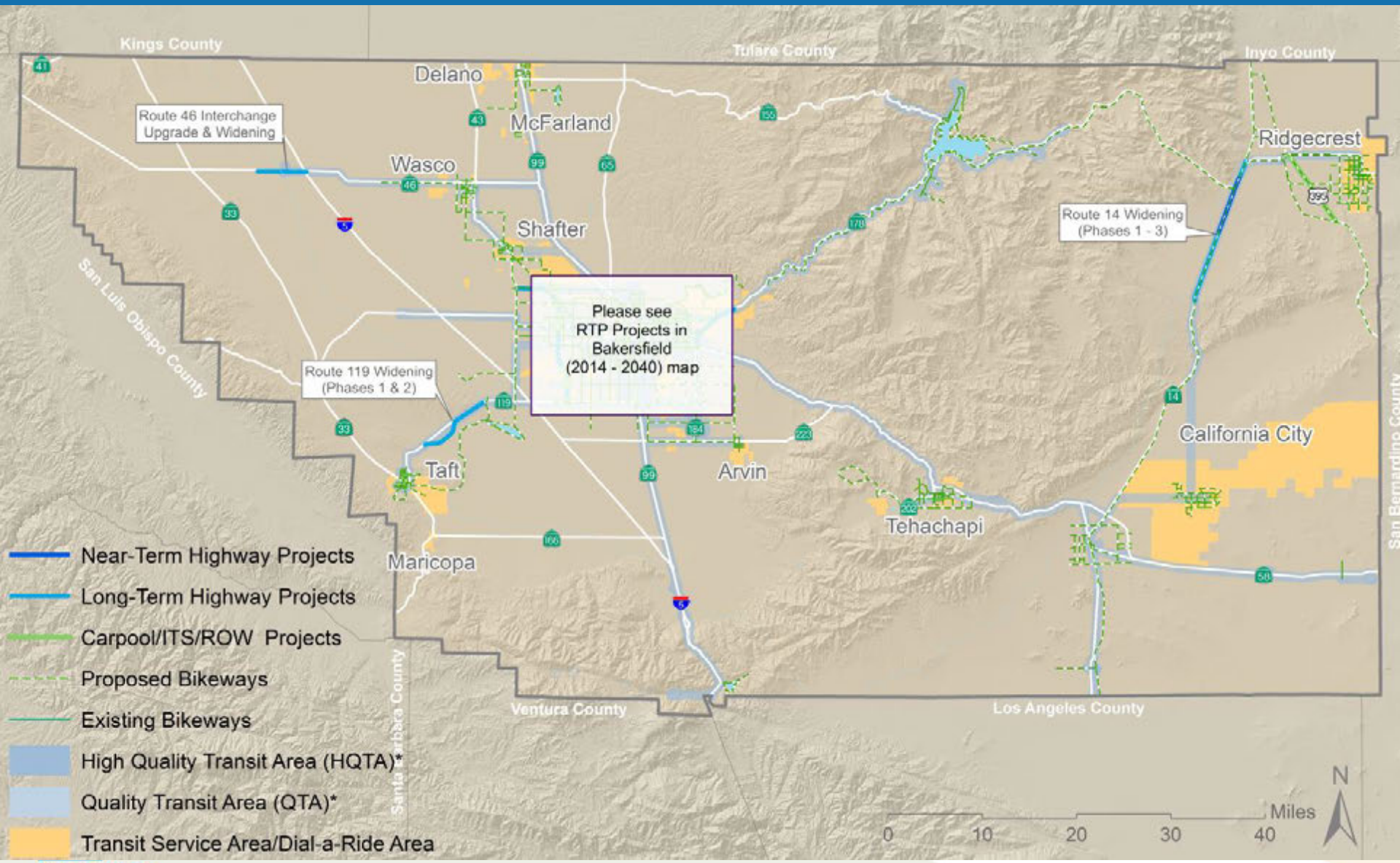
Proposed Projects



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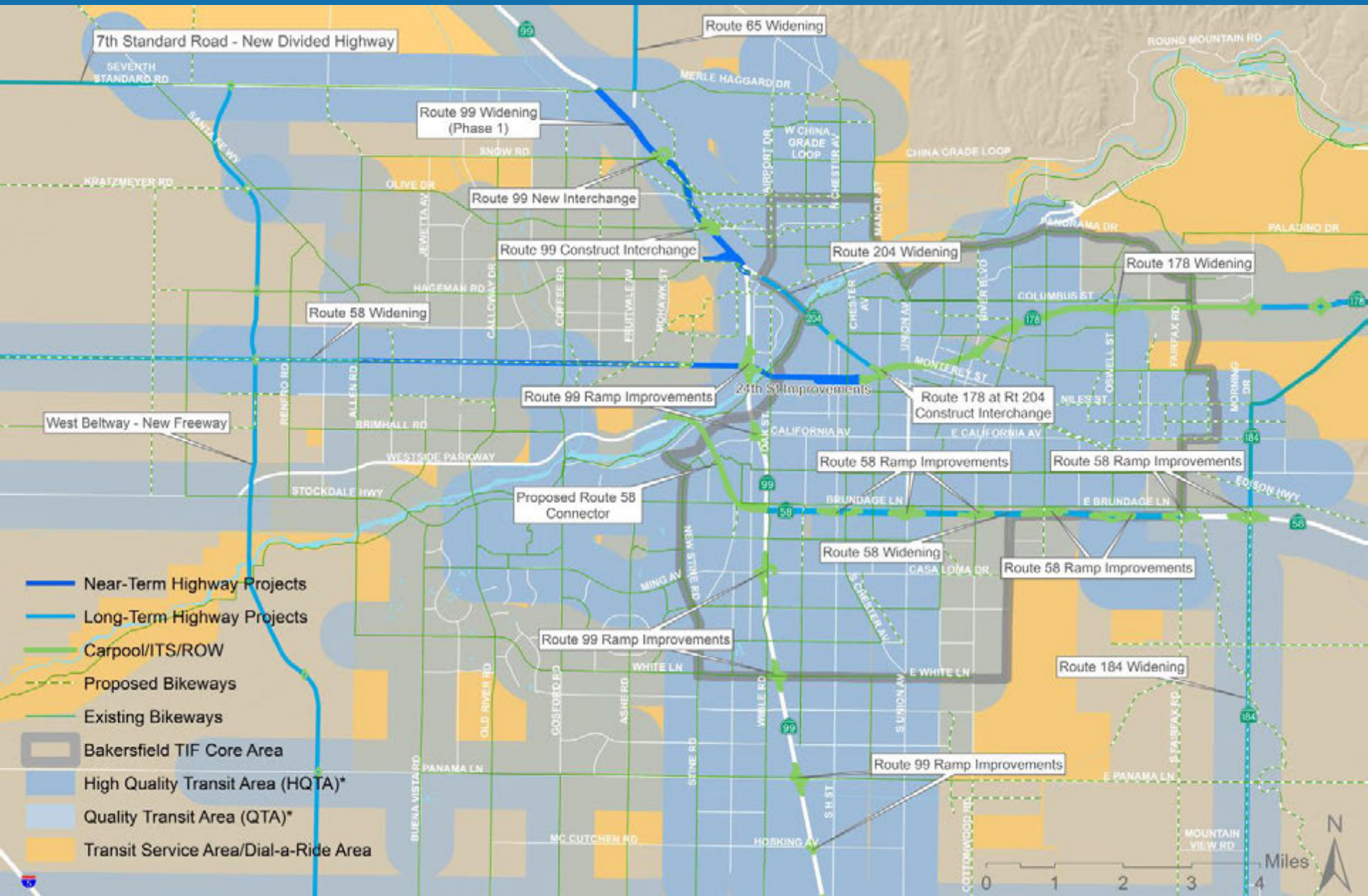
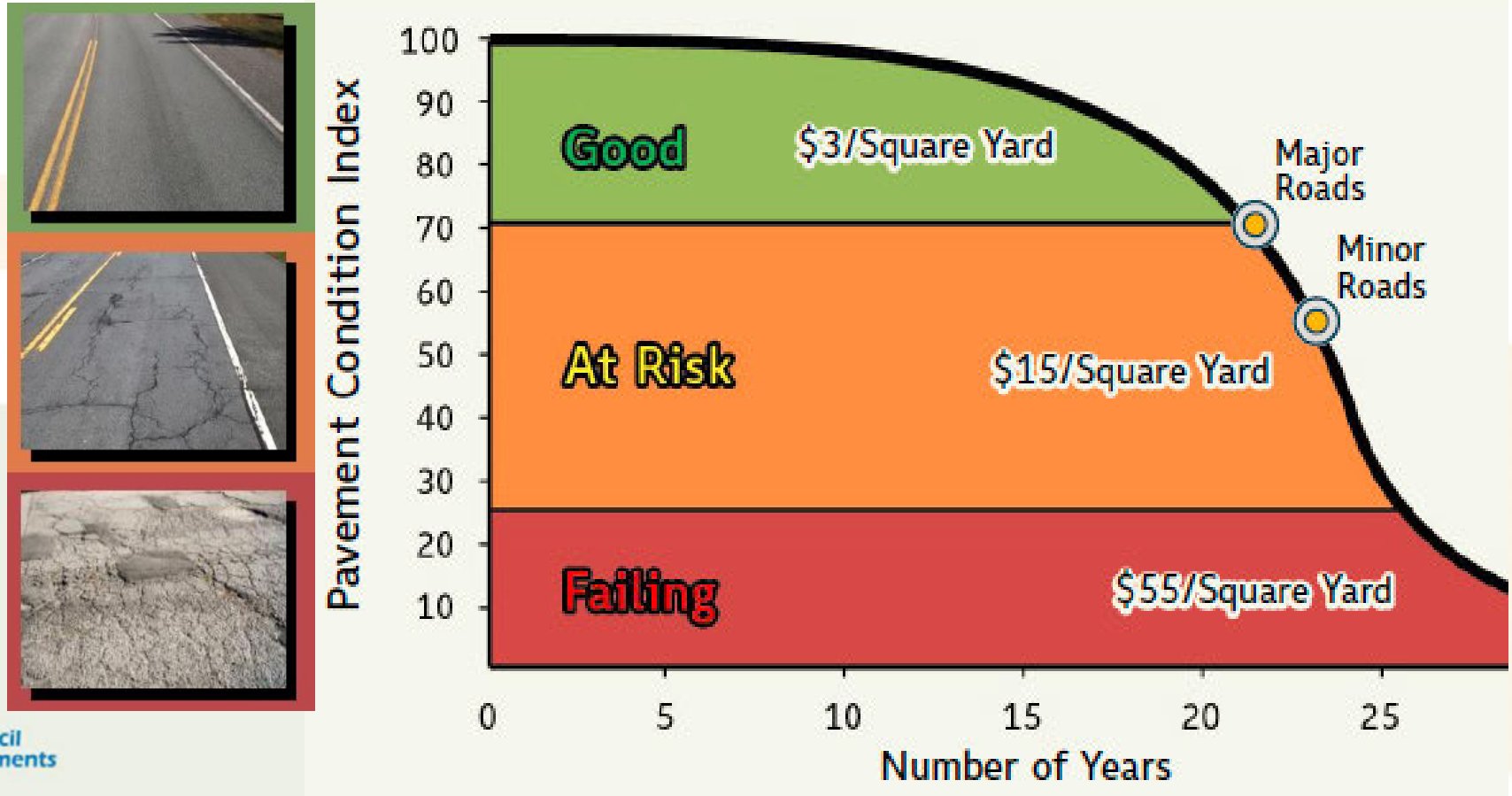
2014 RTP - Proposed Projects



Maintain & Fix What We Have

- At current funding levels, 25% of Kern roads will need to be rebuilt at 4 times the cost by 2022



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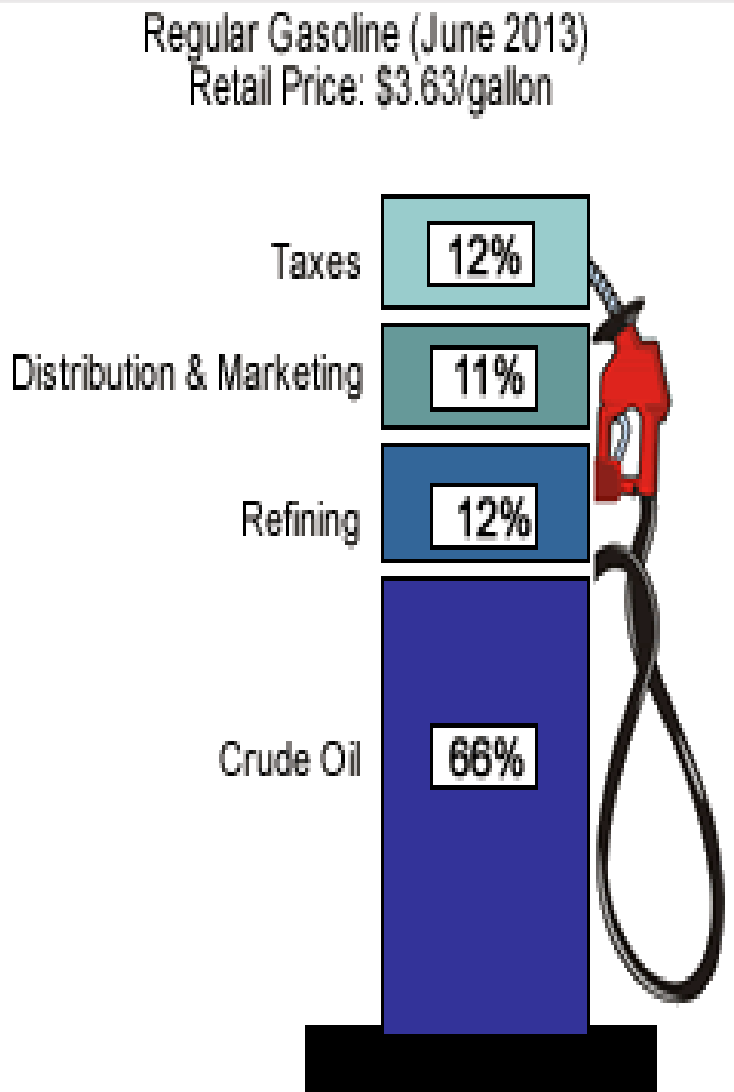
Fuel Tax and Price of Gasoline

- National Highway Trust Fund is broke
- Nationally, average tax on fuel has dropped to 12% from 30% in 2000
- Average price of gasoline:
  - $3 in 2000
  - $4 in 2012



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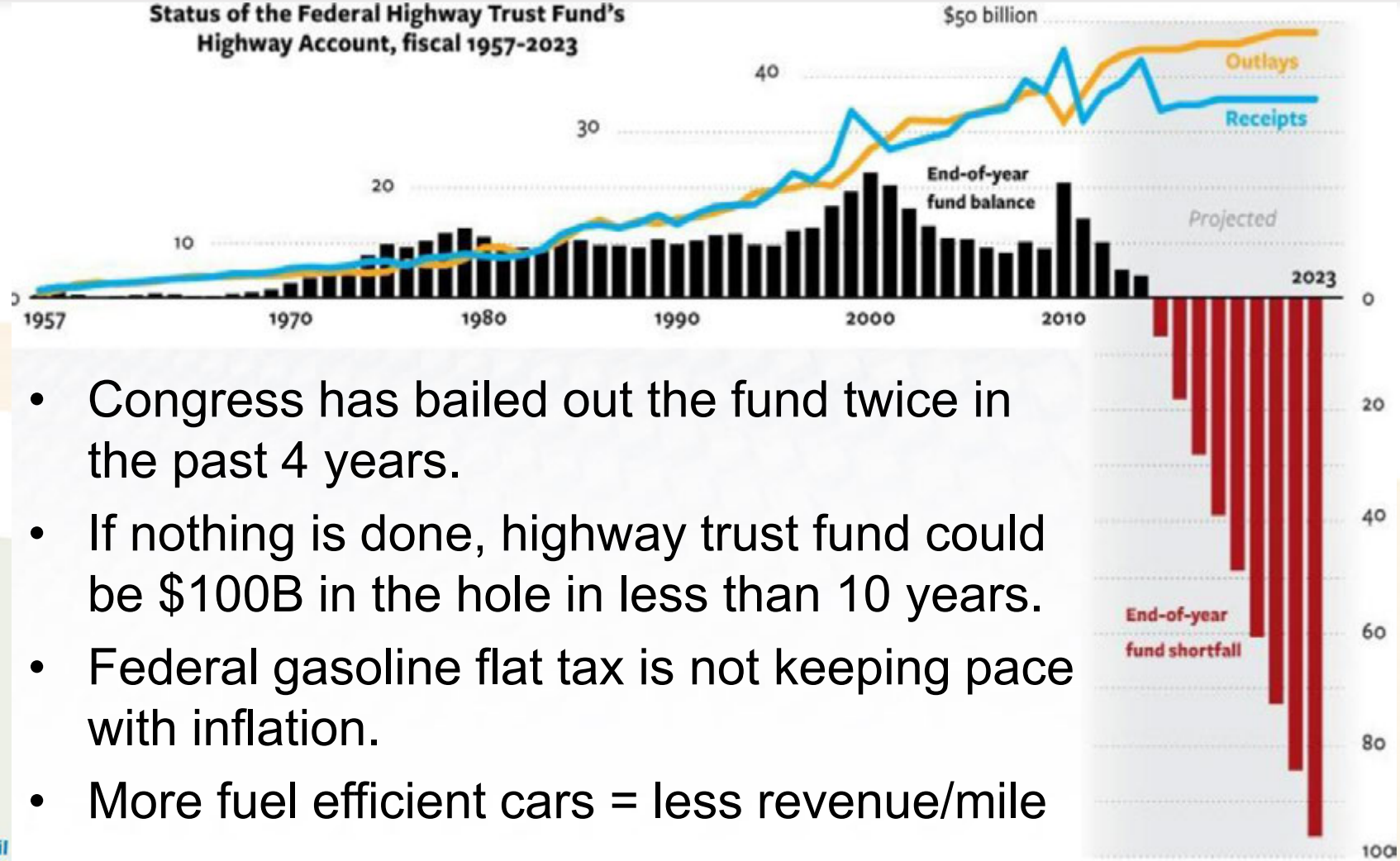
Federal Highway Trust Fund Insolvent



- Congress has bailed out the fund twice in the past 4 years.
- If nothing is done, highway trust fund could be $100B in the hole in less than 10 years.
- Federal gasoline flat tax is not keeping pace with inflation.
- More fuel efficient cars = less revenue/mile

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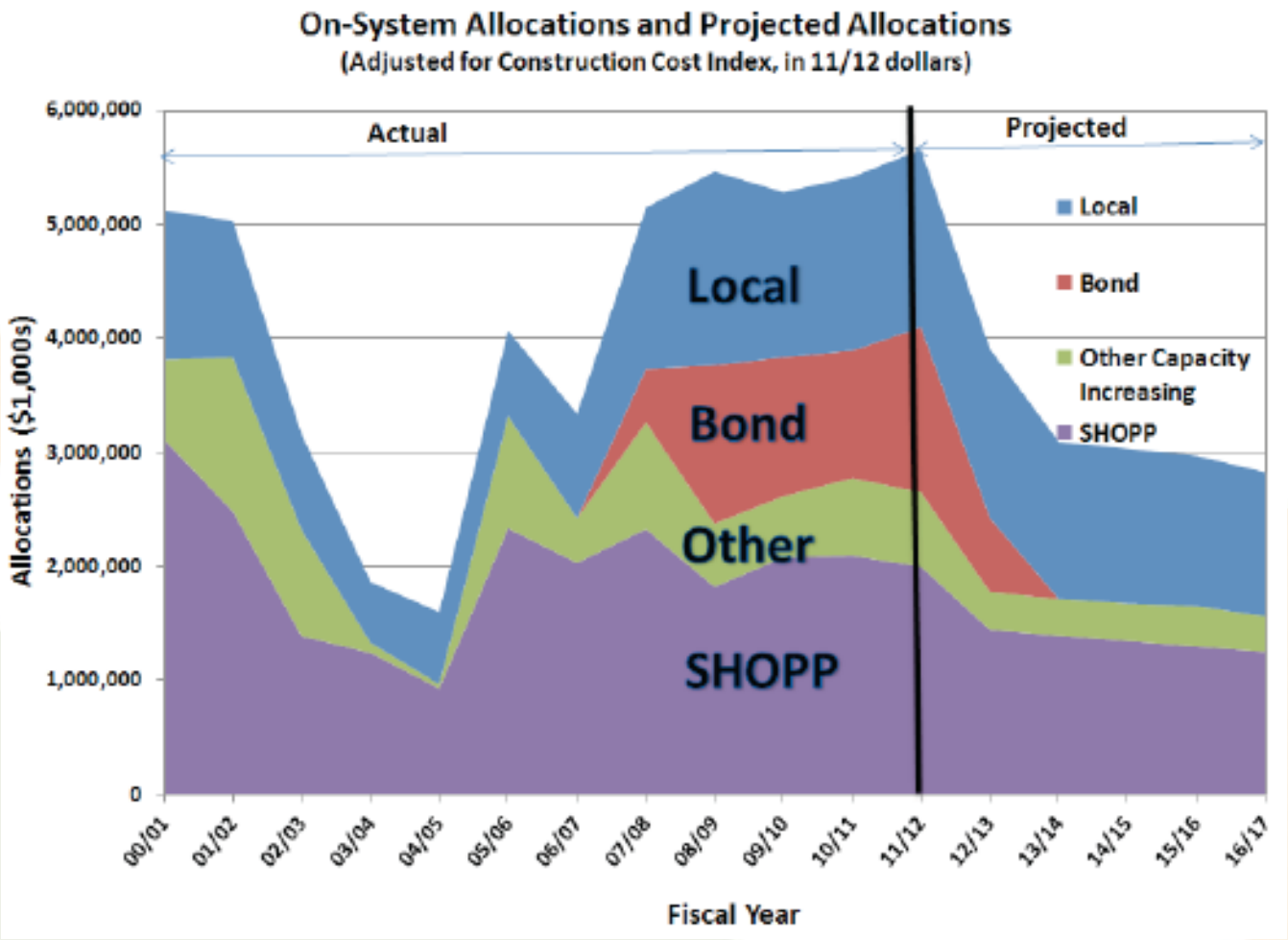
State Transportation Funding Falls 50%

- 2014 - Bond funding has dried up
- 50% of all funding and 75% of new projects statewide are funded by local funds



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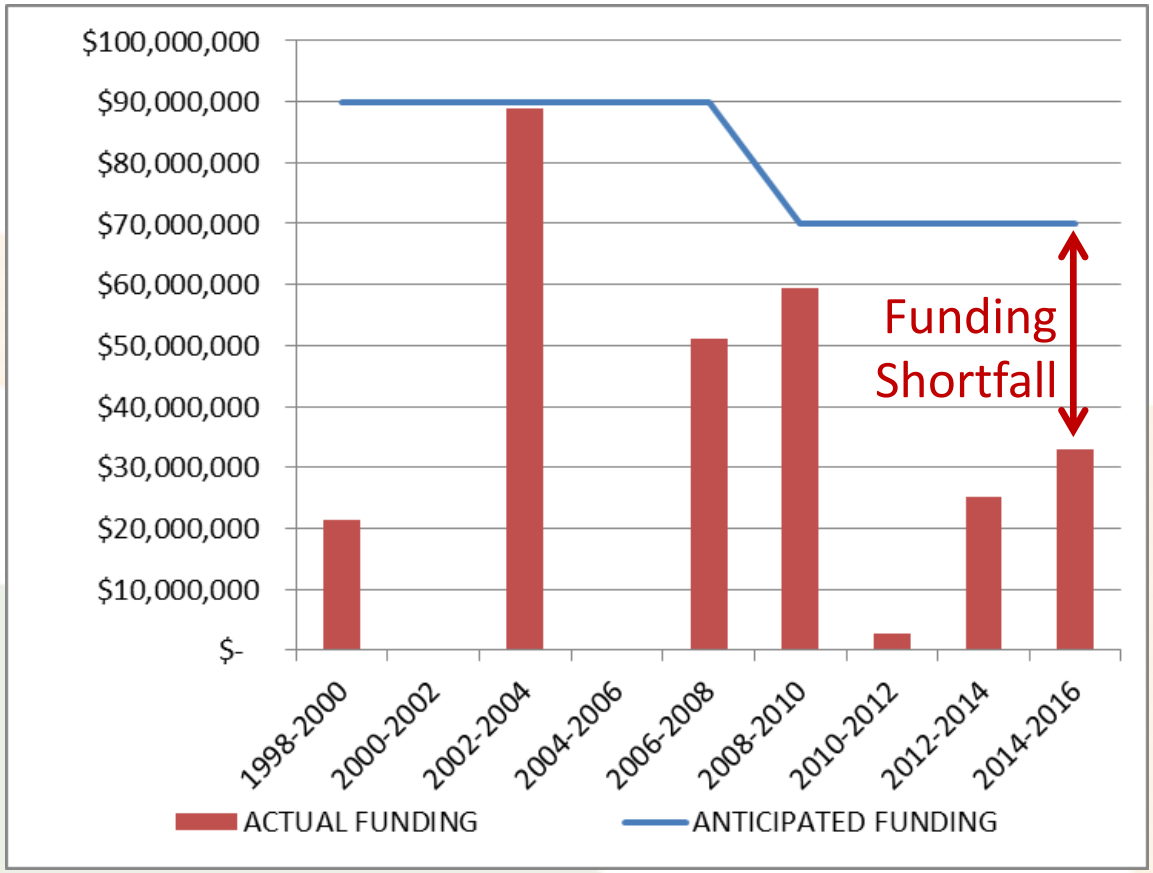
Kern COG: Doing More With Less

- Average $25 million shortfall per year
- 60% less funding than RTP anticipated in 1998
- Up to $35 Billion need still unfunded
- Environment for creative solutions
- Still the 2014 RTP may create 124,000 job yrs. over 26 yrs.

2-Year Funding Cycles

Regional Transportation Improvement Program (RTIP)



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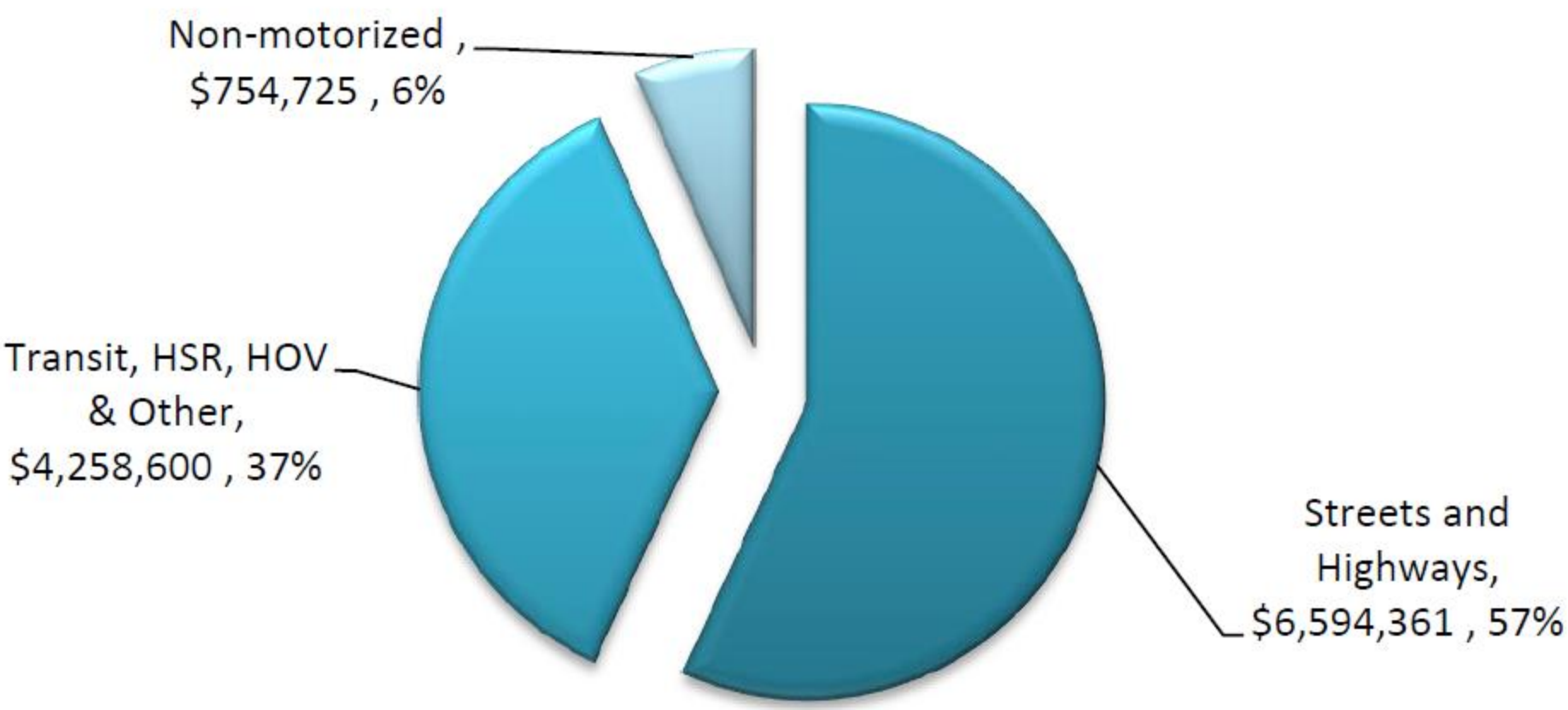
Draft Expenditure Plan

Figure 6-2: Investments by Mode 2014–2040 ($ x 1,000)



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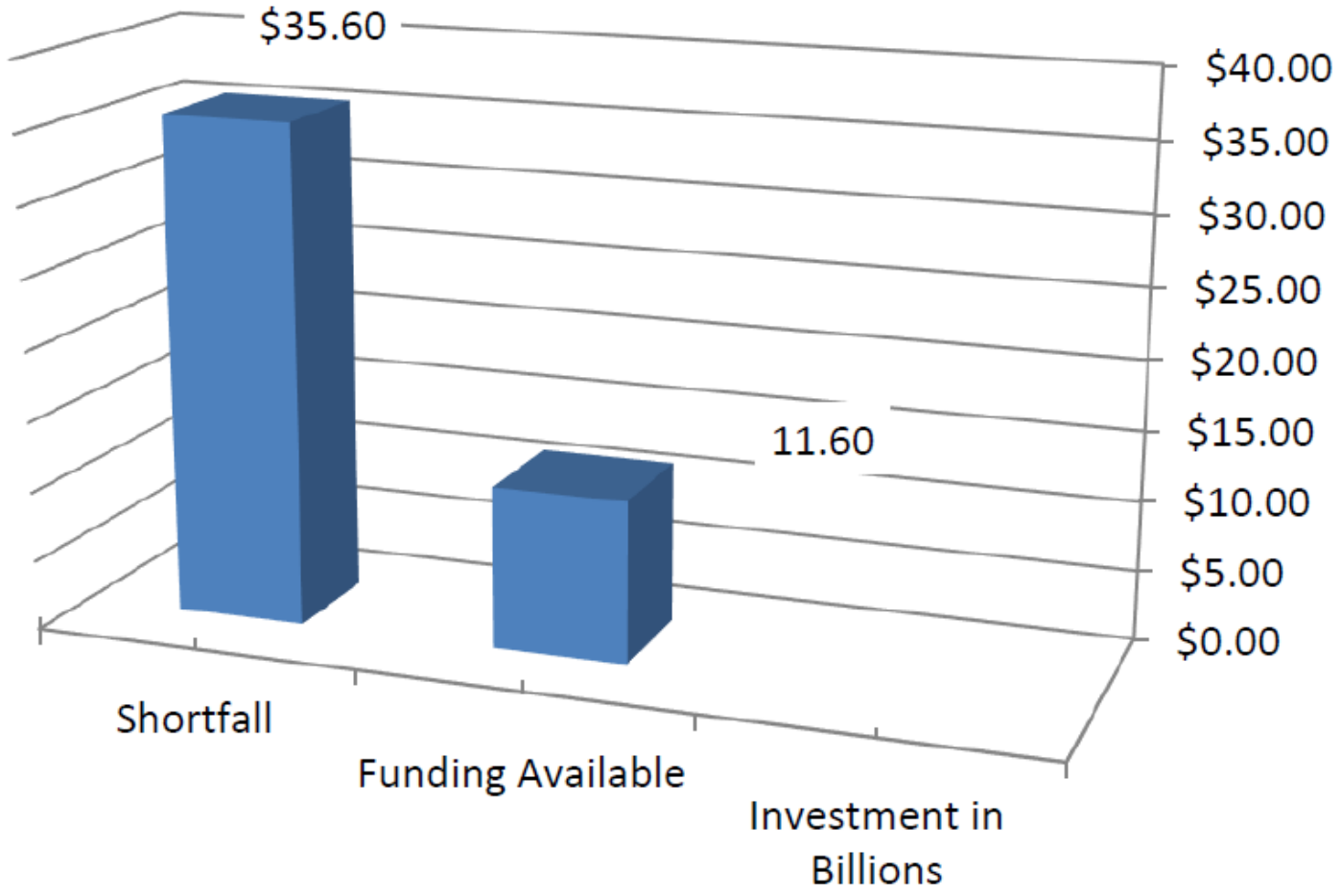
Assumes an 11% increase in funding from various potential new sources to be used primarily for road maintenance.

Still A Huge Need



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WHAT ARE THE STRATEGIES TO MEET OUR GOALS?

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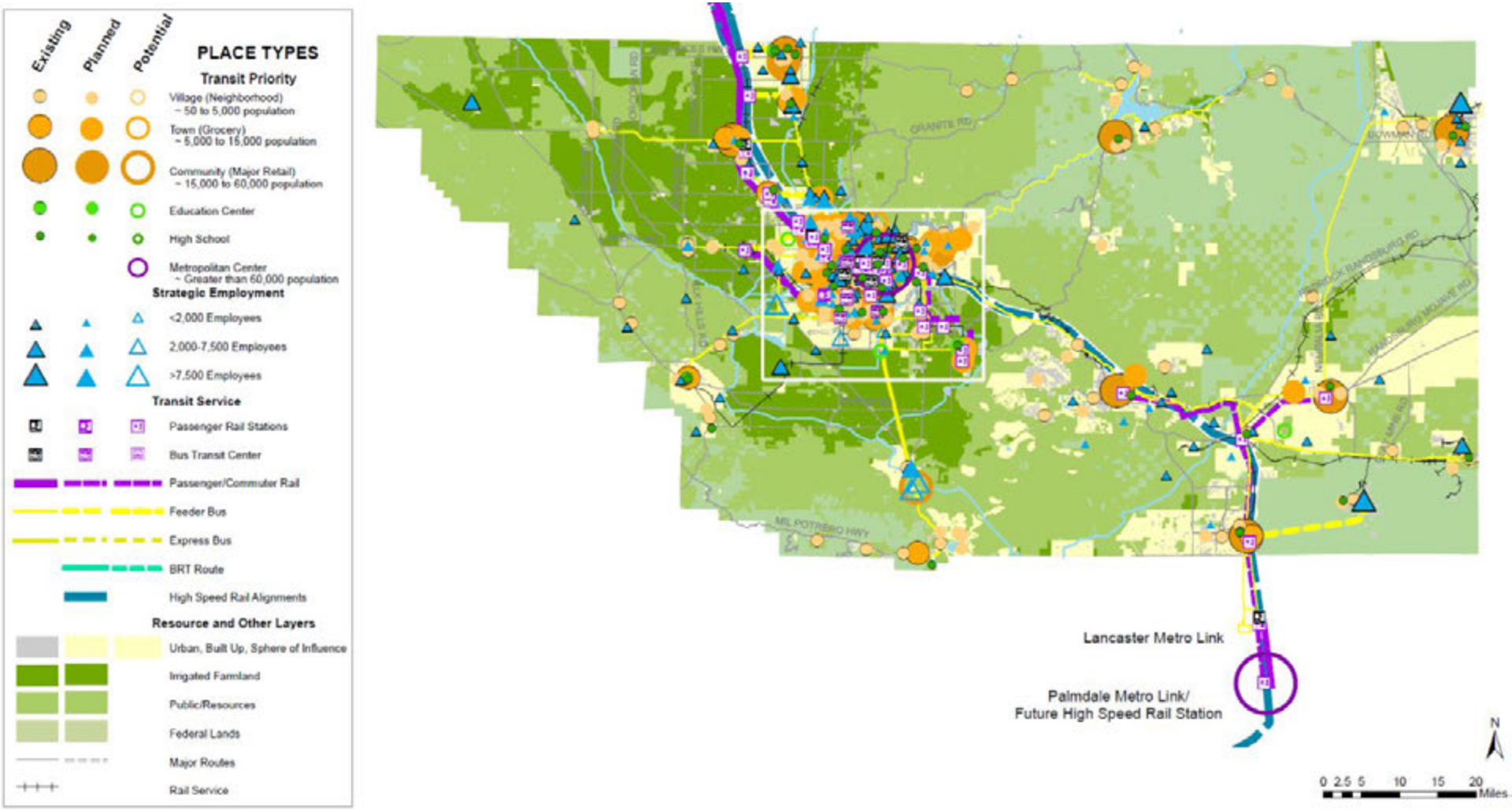
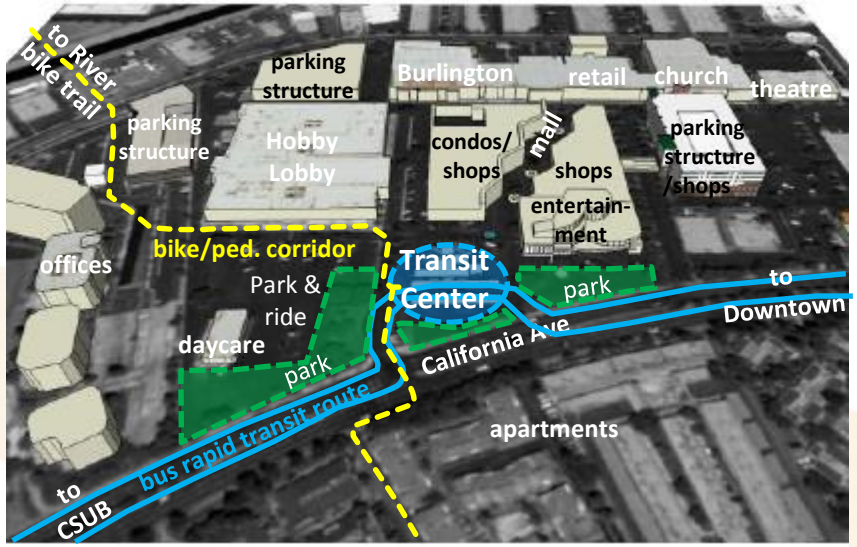
Coordinating Transportation and Local Land Use – Preliminary SCS



Potential Revitalization of Existing Centers

Existing Bakersfield Plaza on California Ave

Add Parking Structures, Shopping, Transit Center



Conceptual Visualization By Kern COG

- Increasing the presence of people in traditional retail centers supports business and transit investment while providing “eyes-on-the-street” at night and weekends, making for a safer community.
- Kern COG and GET are working on a Transit Centers Study for Metropolitan Bakersfield to be completed next year.

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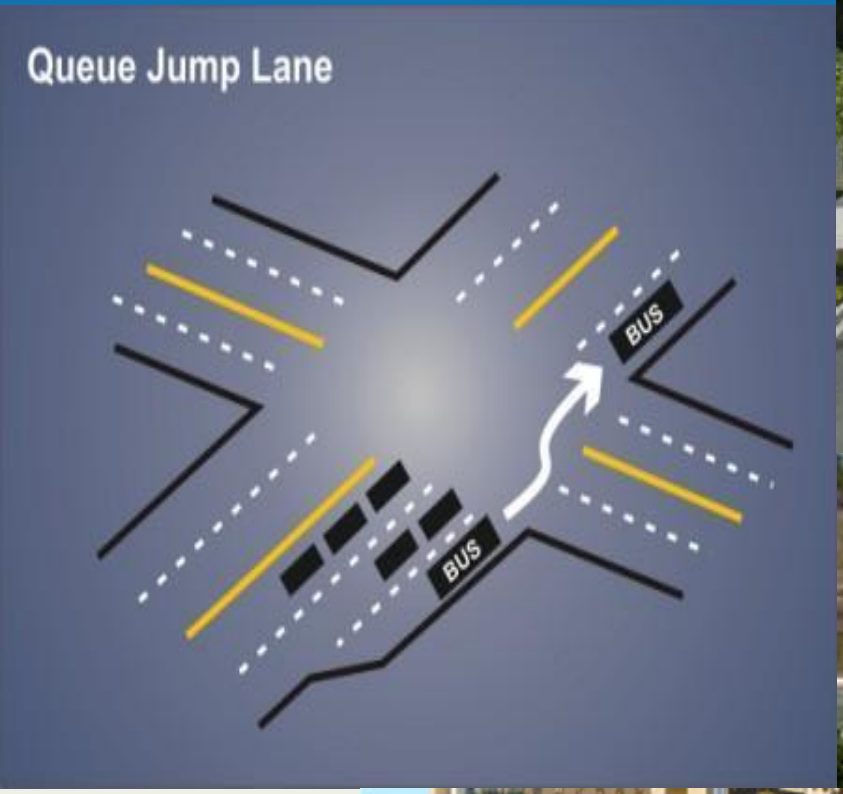
BRT and Jump Lanes



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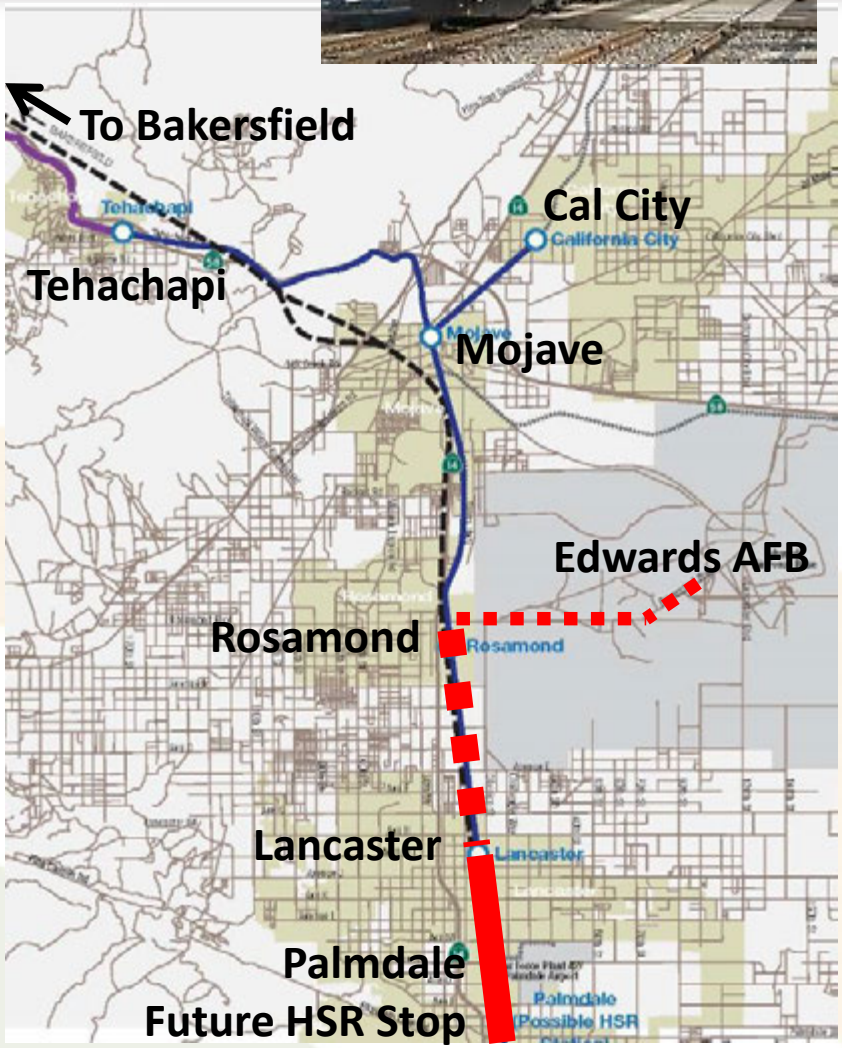
Kern Commuter Rail Study – Eastern Kern County

- Extend Metrolink service to: Rosamond
- Shuttle to Edwards AFB = 10,000 employees with 5,500 from Palmdale/Lancaster
- Long-term recommendations (15 years +)
  - Finalize JPA requirements with Metrolink
  - Explore the potential for purchasing rights-of-way along Southeast corridor
  - Estimated Cost- $40,571,937 (includes under and over crossings - $27,000,000)



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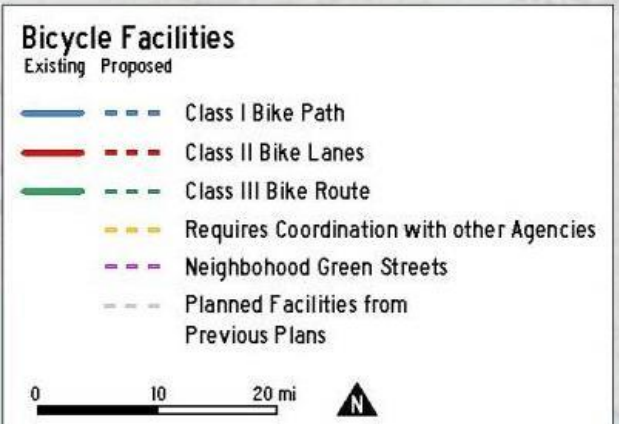
Expanding the Bike Network by 1,100 Miles

Kern Bicycle Master Plan



Bakersfield Bike Plan

Complete Streets – Walkable Communities

Kern Council of Governments

Kern Commuter Connection

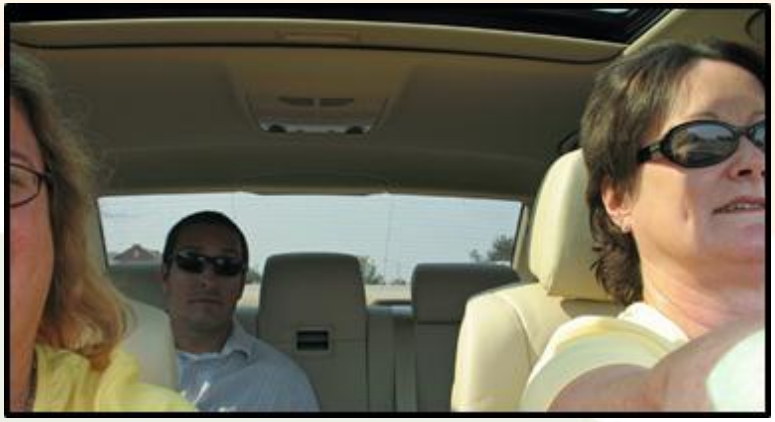
BECAUSE YOU'RE GOING PLACES

- Vanpooling
- Telework
- Walking
- Park and Ride facility use
- Flexible scheduling
- Outreach to employers
- Resources to commuters
- Forum for discussion and sharing resources
- Daily tracking

Using Public Transit

Bicycling

Nearly half of all cars on Kern's roads have more than 1 occupant



Carpooling

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Success Story: CalVans Vanpool Program

- Provides 7, 8, and 15-passenger vans
- 65 vanpools currently in operation in Kern
  - Equivalent to 1.7 million miles less travel annually
- Joined the JPA to expand service in Kern to 200 vanpools

Local college students who use CalVans

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Two New Park & Rides Express Transit Centers California City & Greenfield

Cal City – West Way Station - Multi-modal Transit Center on City owned property at the southwest corner of California City Blvd. and Wonder Ave. The Transit Center includes a parking lot, lighting, restrooms, landscaping, and Kern Regional Transit bus stops.

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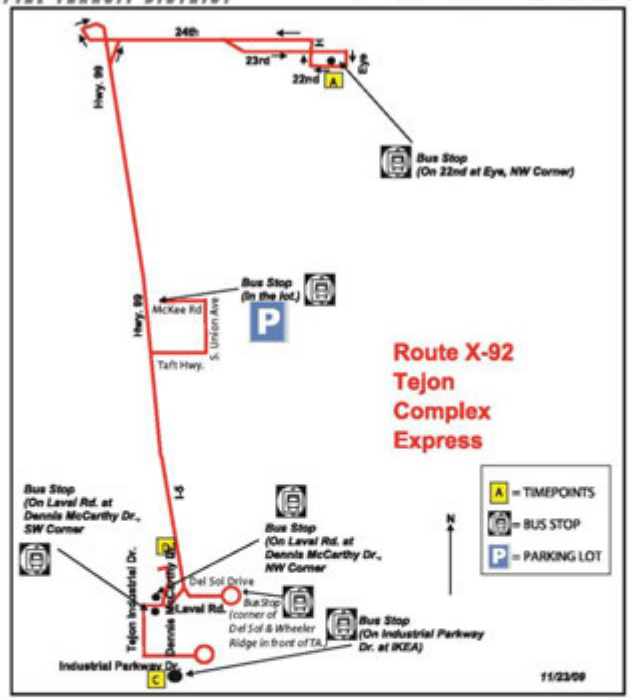
Employer Subsidized Transit

- 19,000 employee trips per year
- 1.4 Million Miles Less Travel Annually

GET bus
GOLDEN EMPIRE TRANSIT DISTRICT

KERN DELTA
PARK AND RIDE



Downtown Transit Center	Park & Ride McKee Rd	IKEA	Park & Ride McKee Rd	Downtown Transit Center
3:50 AM	4:10 AM	5:00 AM	5:30 AM	5:50 AM
5:55 AM	6:15 AM	7:00 AM	7:30 AM	7:50 AM
7:55 AM	8:15 AM	9:00 AM	9:30 AM	9:50 AM
9:55 AM	10:15 AM	11:00 AM	11:30 PM	11:50 PM
12:30 PM	12:50 PM	1:35 PM	2:05 PM	------
------	2:05 PM	2:45 PM	3:25 PM	------
------	3:25 PM	3:55 PM	4:35 PM	4:55 PM
5:15 PM	5:35 PM	6:05 PM	6:40 PM	7:00 PM
10:30 PM	10:50 PM	11:40 PM	12:10 AM	------

Bus also stops at TA on east side of freeway

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Real-time Travel Info

KERN 511

Mobile Site

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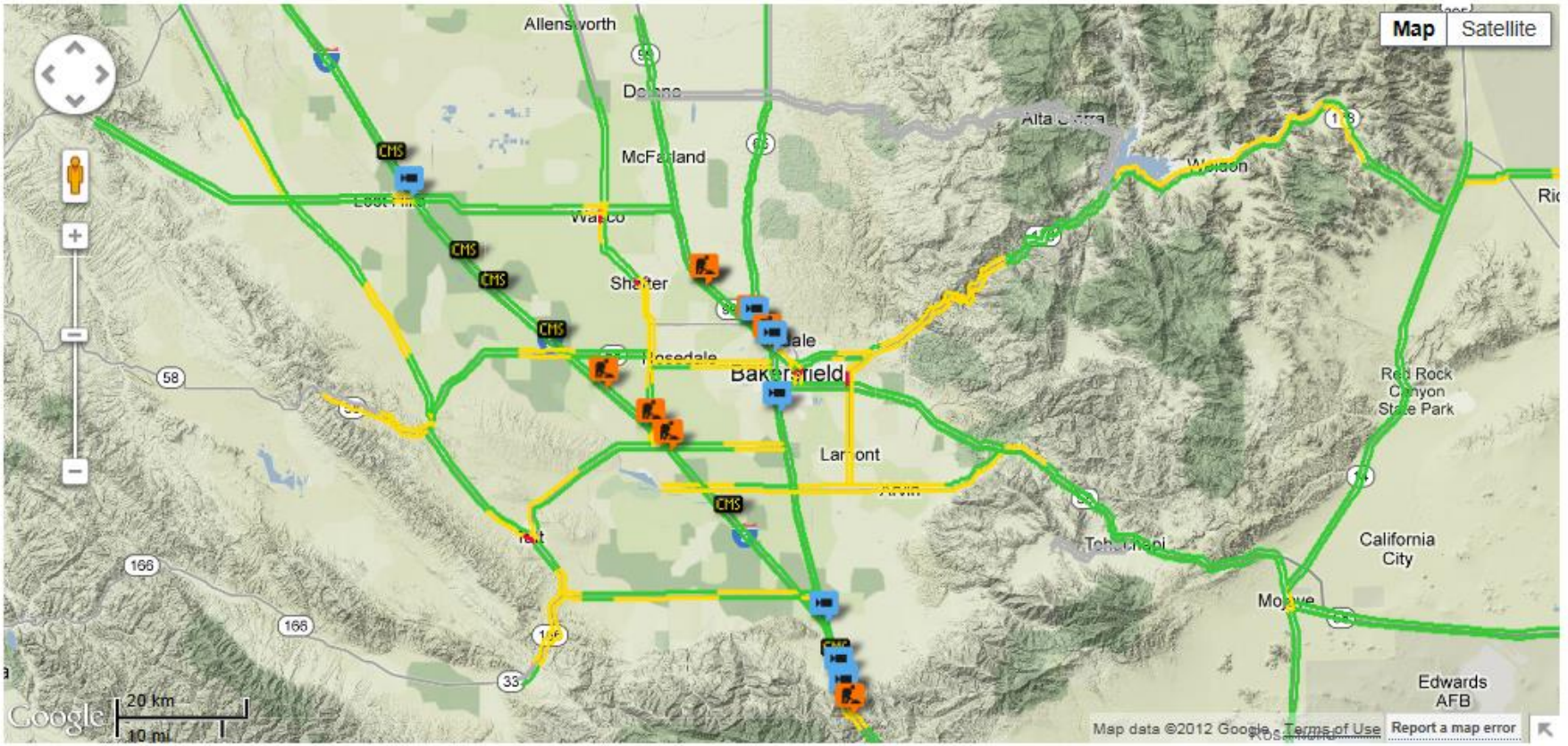
REAL-TIME CONDITIONS | ABOUT KERN 511 | RESOURCES | CONTACT US



Legend

- Traffic Speeds
  - 50+ mph
  - 25 - 49 mph
  - 0 - 24 mph
  - No data

  Click on link for travel times
- Incidents
  - incident
  - sigalert
- Cameras
- Changeable Message Sign

Text Alternatives

- Travel Times
- Incidents
- Cameras
- Changeable Message Signs
- Construction

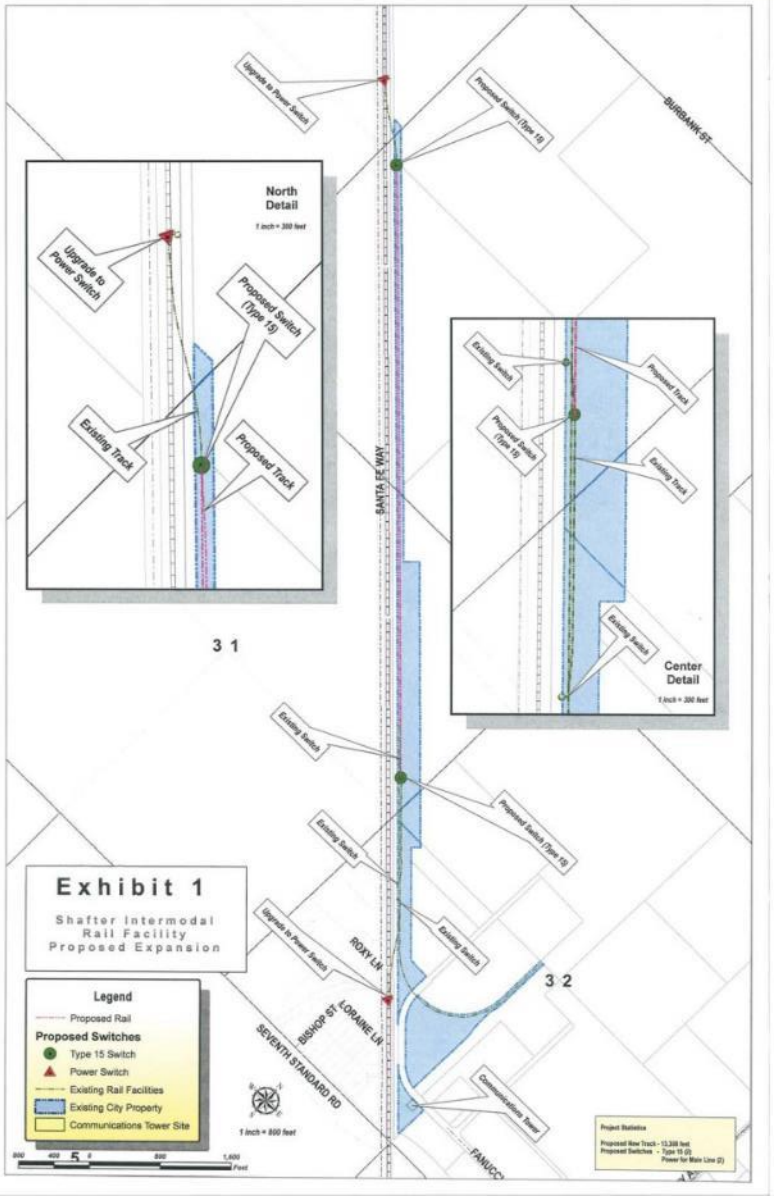
LAST UPDATED: 7/26/2012 10:41 AM PT

REFRESH

kern511.org

Diverting Trucks to Rail: Shafter Intermodal Rail Facility (SIRF) Expansion

The rail facility will establish a dedicated reliable intra-state rail shuttle connecting the Port of Oakland in northern California with the southern San Joaquin Valley.



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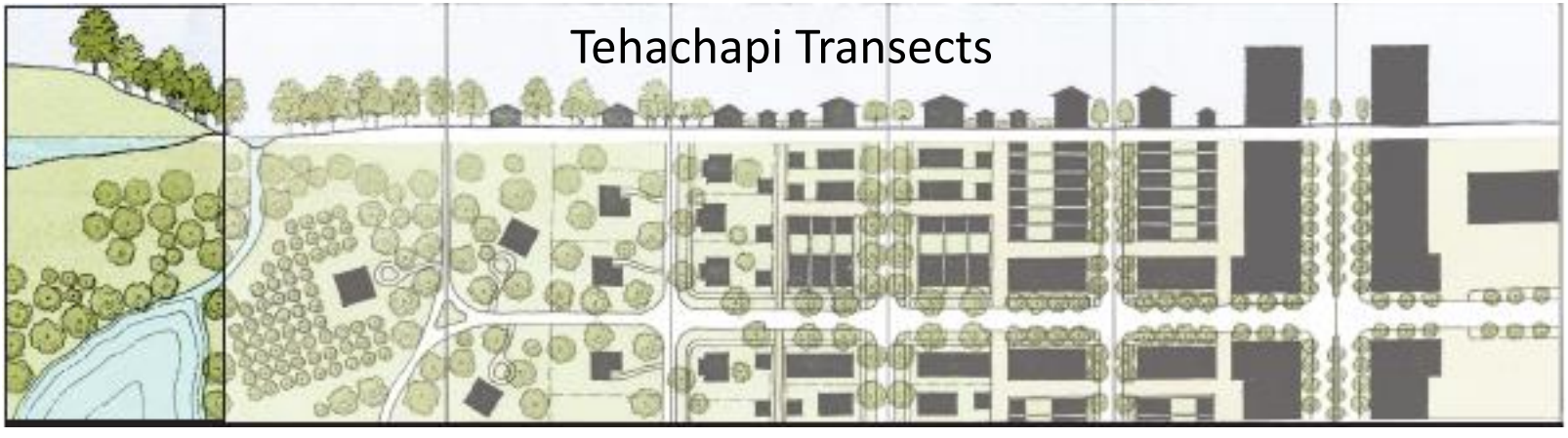
City of Tehachapi
Form Based Code General Plan

The City of Tehachapi adopted the 2035 General Plan Update, and the new General Plan will contribute towards the implementation of SB 375. The new General Plan is characterized as a Form Based General Plan because it emphasizes facilitating mixed use, walkable neighborhoods and developments.



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San Joaquin Valley Air Pollution Control District's **Indirect Source Review (ISR) Rule 9510**

Examples of Smart Growth Development located in Downtown Bakersfield

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City of Bakersfield Redevelopment Projects
Mill Creek, Baker Street, Arts District

Baker Street Village Project

Mill Creek Linear Project

Downtown Arts District

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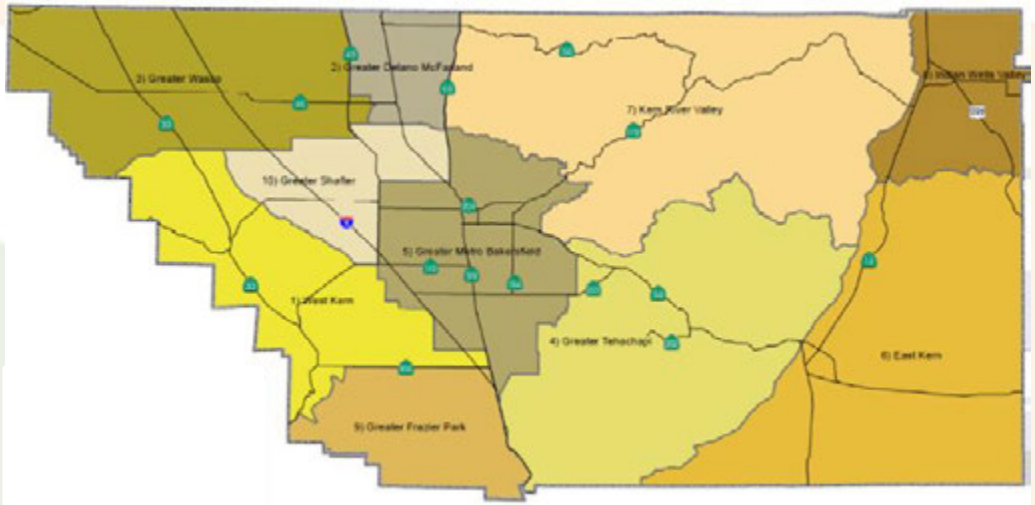
Kern's Voluntary Performance Monitoring by Community - Lowering Auto Travel

	Old Plan (A10)					Preliminary Plan (C35)				
Subarea	HHLD	EMP	VMT	% VMT	VMT per HHLD+EMP	HHLD	EMP	VMT	% VMT	VMT per HHLD+EMP
West Kern	9,024	14,869	897,183	3.3%	37.55	9,053	14,908	887,471	3.3%	37.04
Delano McFarland	16,792	29,262	1,316,671	4.8%	28.59	16,798	29,310	1,309,587	4.9%	28.40
Greater Wasco	10,664	18,061	1,237,210	4.5%	43.07	10,708	18,035	1,230,233	4.6%	42.80
Greater Tehachapi	22,640	22,823	2,200,533	8.0%	48.40	27,330	22,810	2,373,061	8.9%	47.33
Metro Bakersfield Area	277,007	267,121	15,861,358	57.8%	29.15	275,513	267,086	15,068,578	56.3%	27.77
Southeast Kern	25,483	37,046	1,552,845	5.7%	24.83	25,484	37,074	1,550,542	5.8%	24.79
Kern River Valley	11,851	5,554	918,598	3.3%	52.78	11,335	5,573	913,033	3.4%	54.00
Indian Wells Valley	17,440	22,743	764,526	2.8%	19.03	17,444	22,737	753,739	2.8%	18.76
Greater Frazier Park	9,125	6,418	692,671	2.5%	44.57	8,135	6,402	672,464	2.5%	46.26
Greater Shafter	17,849	35,524	2,009,945	7.3%	37.66	16,113	36,603	1,998,936	7.5%	37.92
Total	**417,874**	**459,420**	**27,451,540**	**100.0%**	**31.29**	**417,912**	**460,537**	**26,757,644**	**100.0%**	**30.46**

Source: Vehicle Miles Traveled (VMT) is from the Kern COG MIP Transportation Model for 2035 Old Plan and 2035 Draft Plan and includes travel outside each the sub area.



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HOW CAN I SHARE MY IDEAS?

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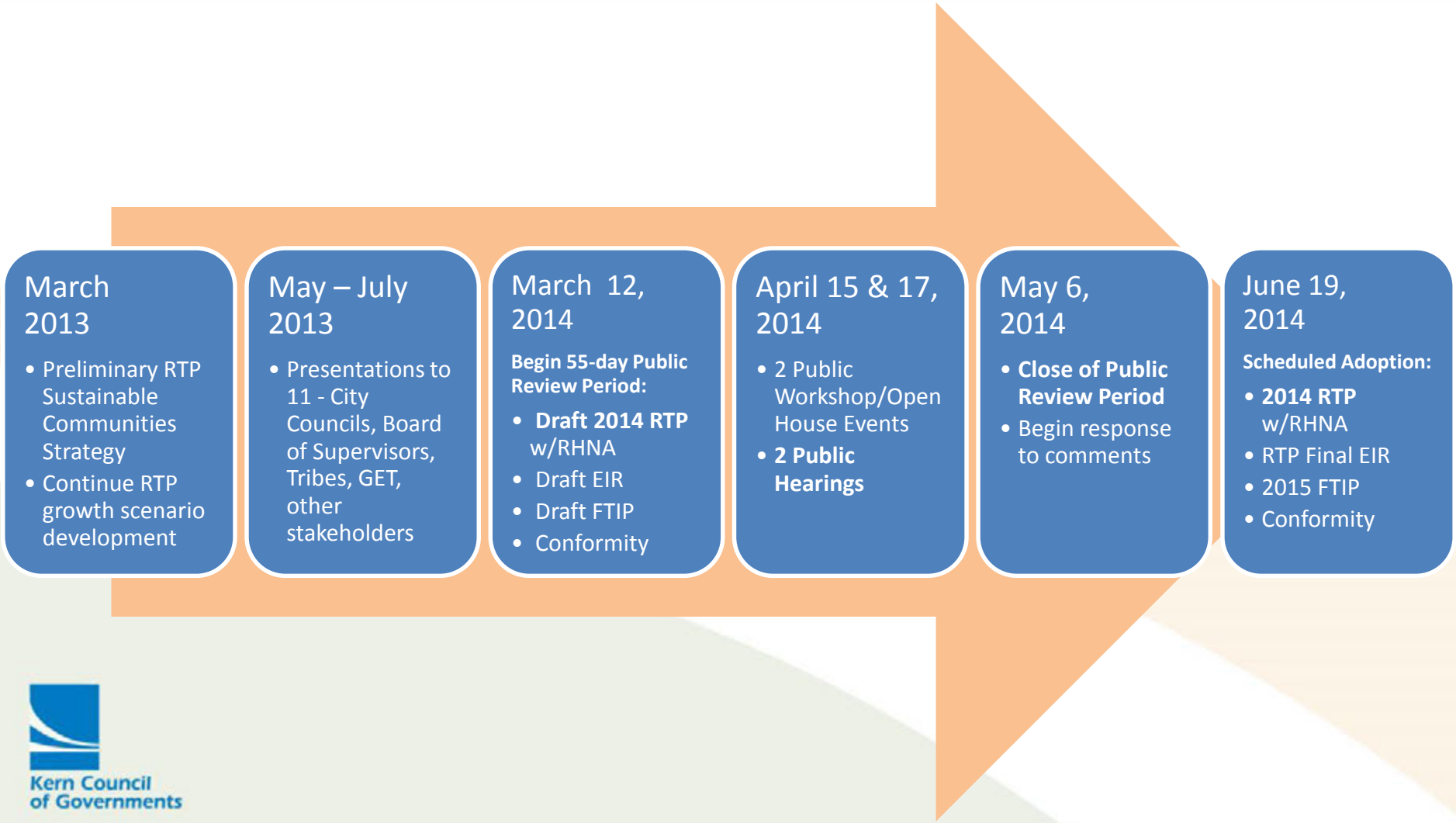
of Governments

RTP Process Schedule



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Comments Due Tues., May 6, 2014

- **Draft** RTP(with SCS/RHNA), EIR, FTIP, Conformity **available** for review at: http://www.kerncog.org/
- **2015 FTIP** - Raquel Pacheco at 661/861-2191, rpacheco@kerncog.org
- **2014 RTP or EIR** - Becky Napier, 661/861-2191, bnapier@kerncog.org
- **RHNA Plan or Conformity Analysis -** Robert Ball, 661/861-2191, rball@kerncog.org
- **2 Public Hearings** will be held:
  - April 15, 2014 6:00 P.M. (California City)
  - April 17, 2014 6:30 P.M. (Bakersfield)
  - **Public Workshop/open house** will be held ½ hour prior to each advertised public hearing

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