

2026 Regional Transportation Plan (RTP) / Sustainable Communities Strategy (SCS)

Roundtable Meeting #1

July 26th, 2023

1:30-3:00pm

The background of the slide is a repeating pattern of white line-art icons on a dark blue background. The icons represent various modes of transportation: cars, trucks, bicycles, and motorcycles. At the top, there is a dark blue banner with a white arrow pointing to the right. Inside the banner, the text "REGIONAL TRANSPORTATION PLAN" is written in white, bold, uppercase letters.

REGIONAL TRANSPORTATION PLAN

Presentation Overview

- Welcome/Introductions
- The RTP/SCS – A long range plan for our transportation system and much more – Ben Raymond
- 2026 RTP/SCS Outreach Process – Becky Napier
- Comments Questions
- Adjourn

What is the Regional Transportation Plan (RTP)?

- Long-Term Plan of Transportation Projects
- Key Chapters / Appendices include:
 - Planning Goals / Policies
 - Planning Assumptions/Growth Forecast
 - Sustainable Community Strategy
 - Action Element / Project List
 - Financial Element / Fiscally Constrained
 - Public Outreach Summary
 - Integrated EJ/Performance Measure Analysis

<https://www.kerncog.org/category/docs/rtp/>



2022 Regional Transportation Plan/ Sustainable Communities Strategy



Ultra-Clean Renewable Diesel	Hydrogen Fuel-cell	Battery Electric	Renewable Natural Gas CNG/LNG	
Freightliner Cascadia Diesel Truck 6x4 Tandem Axel Drive Long Range Sleeper 0-60 in 14.5 Sec. @ 80K GCW	Nikola One Hydrogen Fuel Cell - Electric Truck 6x4 Mid-Box AWD Long Range Large Sleeper 0-60 in 30 Sec. @ 80K GCW	Tesla Truck Battery - Electric Truck 6x4 Mid-Box AWD Long Range Large Sleeper 0-60 in 30 Sec. @ 80K GCW	BYD Truck Battery - Electric Truck 6x4 Mid-Box AWD Medium Range No Sleeper 0-60 in 17 Sec. @ 80K GCW	Kenworth RNG CNG or LNG 6x4 Tandem Axel Drive Long Range Sleeper option 0-60 in 10 Sec. @ 80K GCW
				

Graphic adapted from: <https://seekingalpha.com/article/4127262-tesla-semi-revisited>

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Planning Goals

- Mobility
- Accessibility
- Reliability/Safety
- Efficiency
- Livability/Quality of Life
- Sustainability
- Equity

The policy element contains an integrated set of goals, policies, actions and performance measures that are consistent with publicly vetted principles to guide and monitor the improvements to Kern's transportation system

Policy/ Action No.	Policy/Action	Goals Supported						Strategic Action Element (Ch. 5)
		Mobility	Accessibility	Reliability/Safety	Efficiency	Livability/Quality of Life	Equity	
4.1	Seek and assist member agencies to apply for funding for bicycle and pedestrian projects from local, state, and federal sources.							AT

Regional Growth Forecast

- Guided by local assumptions
 - Economist/Project Steering Committee
 - Regional Planning Advisory Committee
- Consistent with State DOF projection
- Kern COG is scheduled to adopt an update to the Regional Growth Forecast in March 2024

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RTP/SCS Requirements

- Process Shall Be Continuous, Comprehensive, Collaborative and Consistent
 - Environmental Justice Analysis

Figure D-1: Minority Population Concentrations - U.S. EPA EJScreen Tool 2019

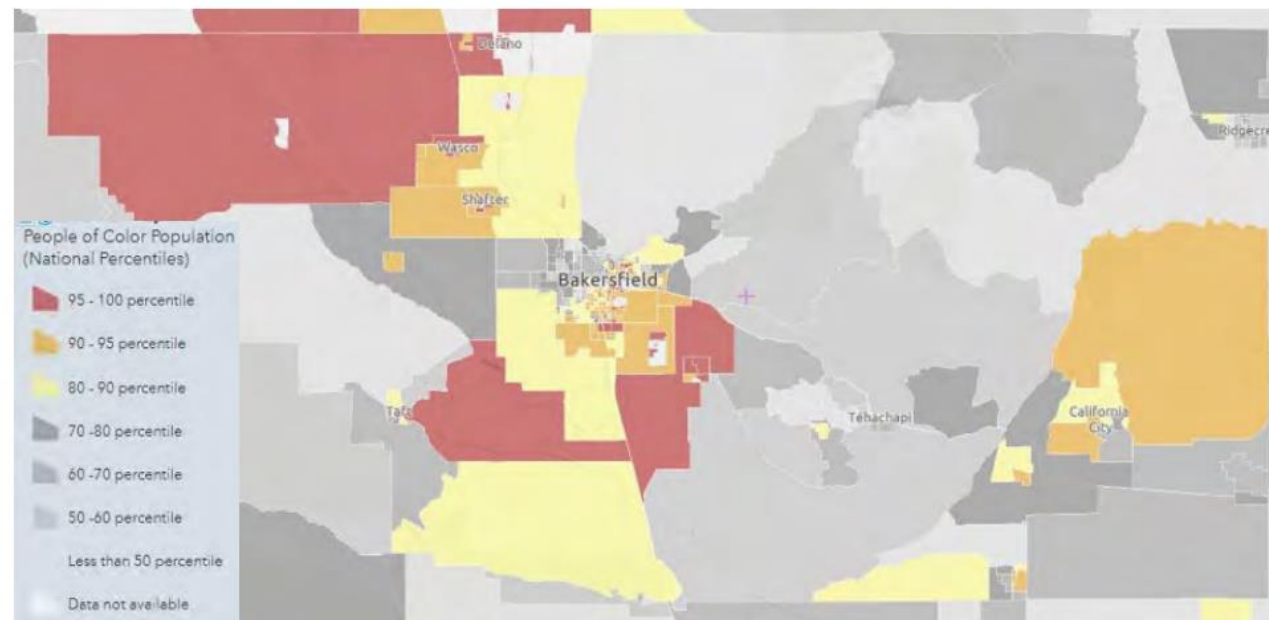
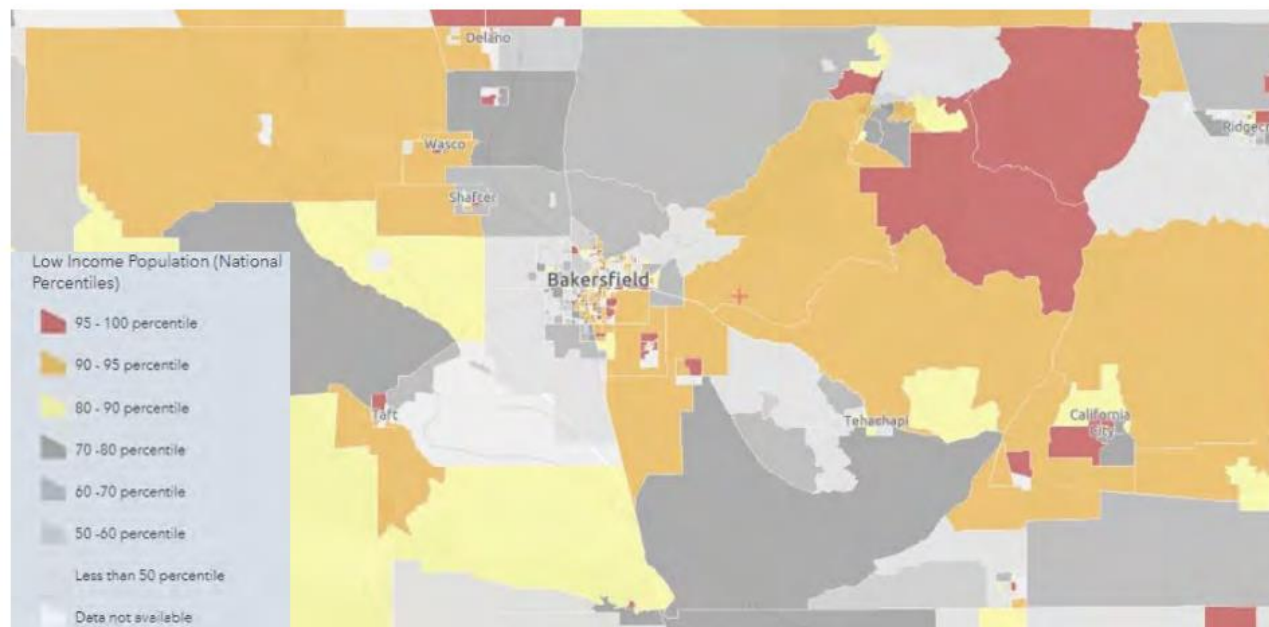


Figure D-2: Low Income Population Concentrations - U.S. EPA EJScreen Tool 2019



RTP/SCS Requirements

- Process Shall Be Continuous, Comprehensive, Collaborative and Consistent
 - Environmental Justice Analysis
 - Title VI Analysis

Figure D-3: Federal Title VI Areas (Minority Concentration Areas Only – Above 80th Percentile)

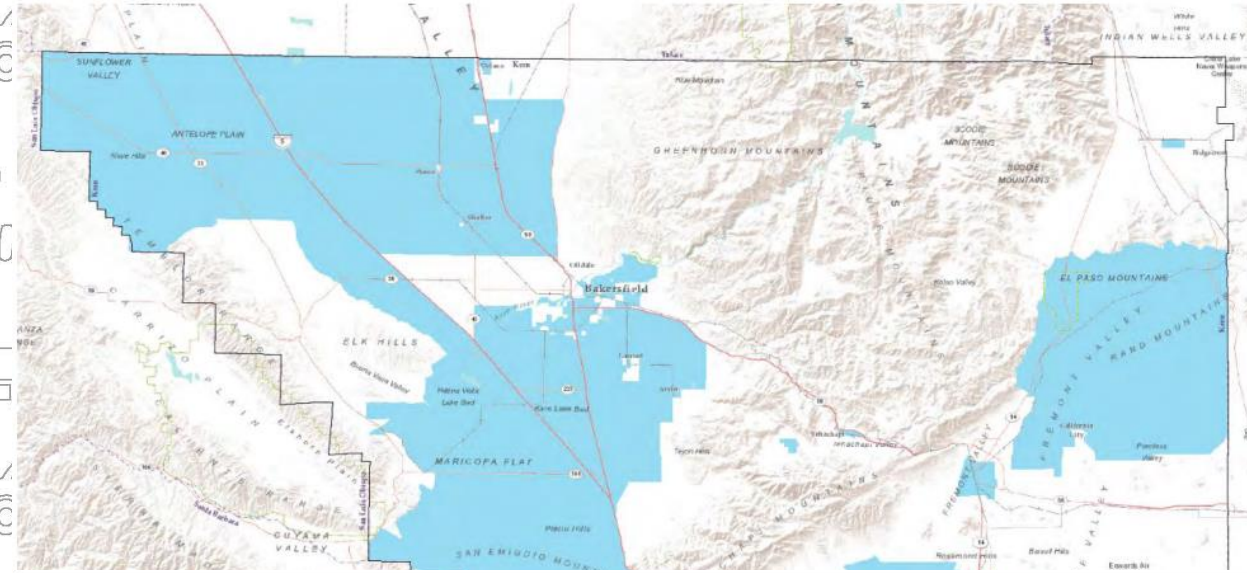
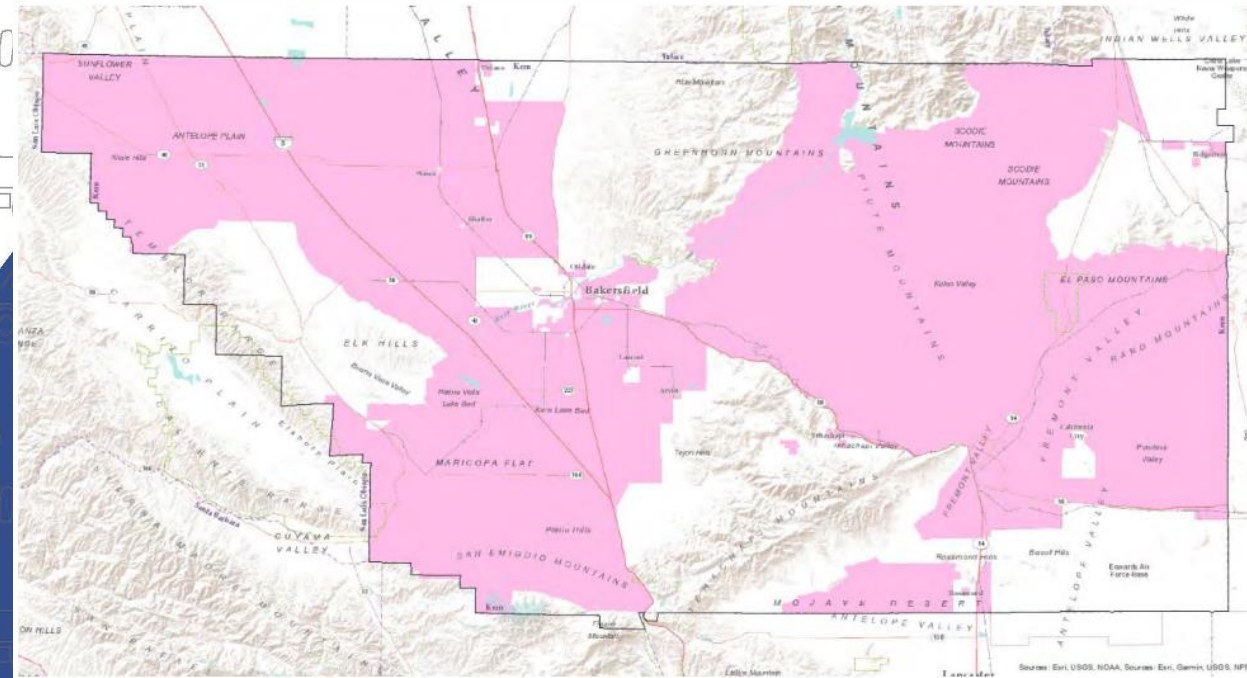


Figure D-4: Federal EJ Areas (Minority and Low Income Concentration Areas – Above 80th Percentile)



RTP/SCS Requirements

- Process Shall Be Continuous, Comprehensive, Collaborative and Consistent
 - Environmental Justice Analysis
 - Title VI Analysis
 - Integrated Performance Measures

1 of 16 Results Tables

TAZ = Transportation Analysis Zones

Table D-4a: All TAZs Average Travel Time – Peak Highway Trips (minutes)

Place Type	2020	2046 Build	2046 No Build
Urban/Metro	13.49	13.43	13.99
Rural Areas	24.21	24.36	24.07
Countywide	16.39	16.71	16.88

All TAZs

16.71

Table D-4b: EJ TAZs Average Travel Time – Peak Highway Trips (minutes)

Place Type	2020	2046 Build	2046 No Build
Urban/Metro	13.57	13.55	14.01
Rural Areas	24.28	23.16	23.39
Countywide	16.35	16.17	16.54

EJ TAZs

16.17

Table D-4c: Title VI TAZs Average Travel Time – Peak Highway Trips (minutes)

Place Type	2020	2046 Build	2046 No Build
Urban/Metro	13.74	13.72	14.17
Rural Areas	24.88	23.84	24.05
Countywide	16.15	16.11	16.45

T-VI TAZs

16.11

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RTP/SCS Requirements

- Process Shall Be Continuous, Comprehensive, Collaborative and Consistent
 - Environmental Justice Analysis
 - Title VI Analysis
 - Integrated Performance Measures
 - **Federal Performance Measures**



Transportation Performance Management

Focusing on Performance for Safe, Reliable Journeys

The Federal Highway Administration defines Transportation Performance Management (TPM) as a strategic approach that uses system information to make investment and policy decisions to achieve national performance goals.



Investment Decisions

Using goals, measures, and data to make better informed decisions about how to invest transportation funding.



Aimed at a Better Performing Transportation System

Setting targets, developing plans, reporting results, and being accountable for performance.



For Connected and Productive Communities

Focusing on the efficient delivery of goods and safe, reliable journeys to work, to school, to shopping, to community activities.

Federal Performance Measures

- Safety (PM1)
- Pavement Condition (PM2)
- Bridge Condition (PM2)
- System Performance (PM2)
- Freight Movement (PM3)
- Traffic Congestion (PM3)
- On-Road Mobile Source Emissions (PM3)

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RTP/SCS Requirements

- Process Shall Be Continuous, Comprehensive, Collaborative and Consistent
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 - Integrated Performance Measures
 - Federal Performance Measures
 - Sustainable Communities Strategy

SB 375 CO2 Emissions	2020	2035	2046
Modeled SB 375 CO2 Emissions by Passenger Vehicles per Weekday (tons)*	7,299	8,323	9,287
Off-Model SB 375 CO2 Emissions by Passenger Vehicles per Weekday (tons)**	-146	-206	-252
Total SB 375 CO2 Emissions by Passenger Vehicles per Weekday (tons)	7,152	8,117	9,035
CO2e Pounds Per Capita Reduction*	-10.9%	-15.1%	-15.4%
SB 375 Targets (Targets Beginning October 1, 2018)**	-9%	-15%	N/A

Table 4-8: Quantified SCS Strategy Types and Categories

Strategy Type	Quantification Approach	Responsible Agencies	Status -- Notes
Land Use:			
Infill, compact development, transit-oriented development, mixed-uses and allocation of growth along transportation corridors and in areas with higher access to bike, ped, and transit	Traffic/land use model	Local jurisdictions	Present in last plan -- Consistent with Core Area Impact Fee Development Incentive
Rebalance housing closer to employment/shopping areas	Traffic/land use model	Local jurisdictions	Present in last plan -- Assumes more shopping opportunities and housing in outlying communities near jobs
Accessory Dwelling Units (ADUs)	Traffic/land use model	Local jurisdictions	Present in last plan
Transit:			
Add new fixed transit lines/improve frequencies/Bus Rapid Transit/Express Bus Service	Traffic model	Transit Agencies	Present in last plan -- Long Range Transportation Plan (LRTP)
Expanded bus routes coordinated with planned centers/mobility hubs	Traffic/land use model	COG, Transit Agencies, Local Jurisdictions	Present in last plan -- LRTP
Transit/On-demand Micro Transit/Dial-a-Ride Improvements	Off model	Transit Agencies,	New quantified strategy
Transportation Demand Management (TDM):			
Vanpooling	Off model	Vanpool entities	New quantified strategy
Employer-based trip-reduction programs (Rule 9410) eTRIP	Off model	Air District	New quantified strategy
Additional Bike & Pedestrian Infrastructure	Off model	Local jurisdiction	New quantified strategy
Telecommuting Promotion	Off model	COG	New quantified strategy
Transportation System Management (TSM):			
Transportation System Management (TSM), Intelligent Transportation Systems (ITS)	Off model	Local jurisdiction	New quantified strategy

RTP/SCS Requirements

- Process Shall Be Continuous, Comprehensive, Collaborative and Consistent
 - Environmental Justice Analysis
 - Title VI Analysis
 - Integrated Performance Measures
 - Federal Performance Measures
 - Sustainable Communities Strategy
 - **Environmental Document**

Kern Council of Governments

Regional Transportation Plan and
Sustainability Communities Strategy
Program Environmental Impact Report

Prepared by:
**IMPACT
SCIENCES**

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Los Angeles, CA 90017

Prepared for:
Kern Council of
Governments
1401 19th Street
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RTP/SCS Requirements

- Process Shall Be Continuous, Comprehensive, Collaborative and Consistent
 - Environmental Justice Analysis
 - Title VI Analysis
 - Integrated Performance Measures
 - Federal Performance Measures
 - Sustainable Communities Strategy
 - Environmental Document
 - **Outreach**



REGIONAL TRANSPORTATION PLAN

RTP/SCS Timeline

Continuous RTP Process Oversight – Regional Planning Advisory Committee (RPAC)

Fall 2022
—
Commence
2026 RTP
Outreach

Summer
2023 —
RTP
Stakeholder
Roundtable
Process

Summer
2023–
Fall
2025 —
Public
Outreach,
Workshops,
Events

Spring
2026 —
Present
to 11 City
Councils
& County
Board

Spring
2026 —
Circulate
Draft
Documents

Summer
2026 –
Adoption

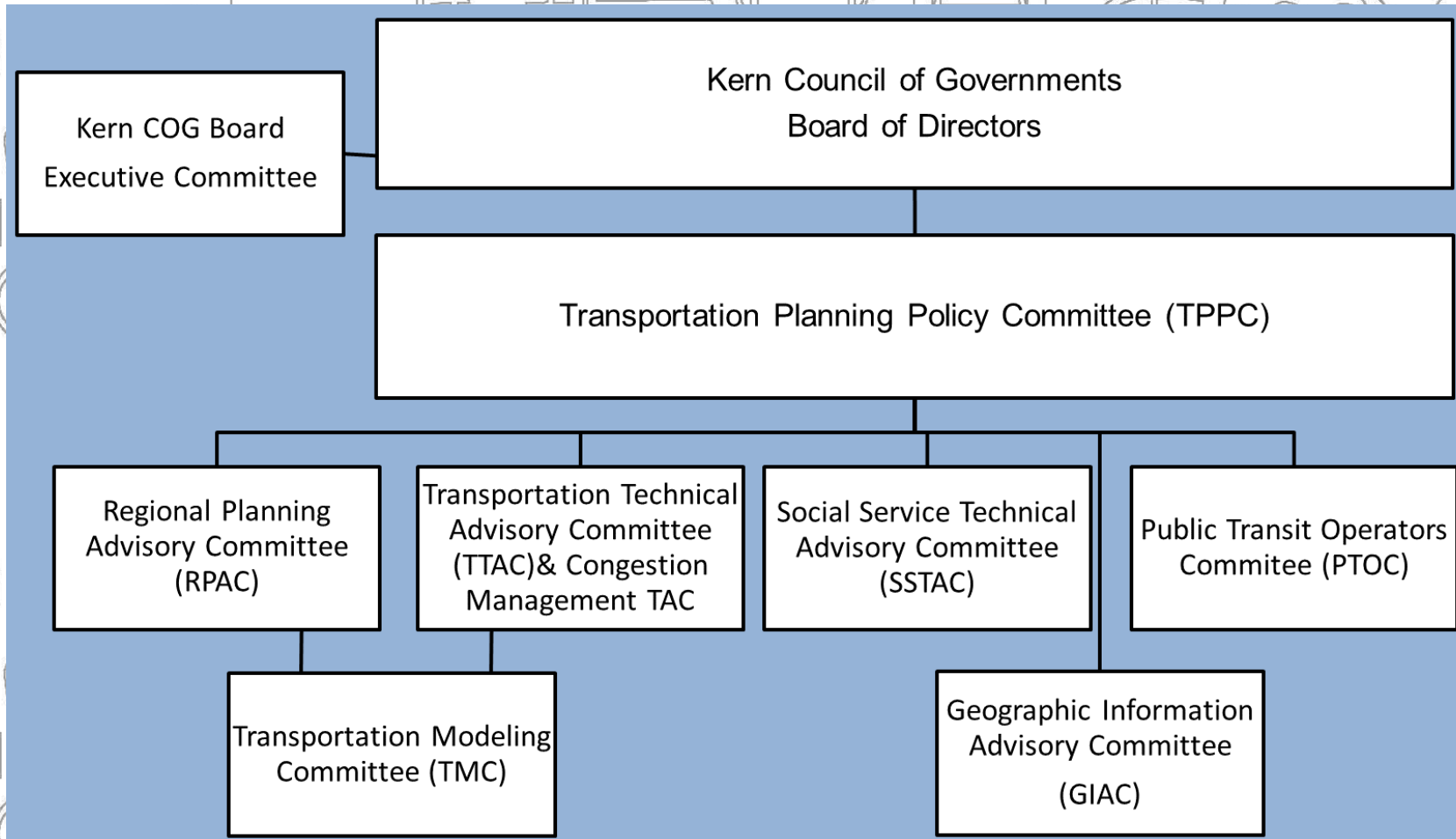
Continuous Public Outreach – Surveys, Workshops, Public Meetings, Events

2026 Regional Transportation Plan (RTP) Roundtable Stakeholders Meeting #1

Outreach Process

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Regional Planning Advisory Committee (RPAC) Oversight



Overview - 2026 RTP/SCS Proposed Outreach

- Annual 1,200 Person Statistically Valid Survey – 2007-2023
- Online Survey Tool – SurveyMonkey
- Fairs & Festival Booth Activities
- Potential Stakeholder Group Hosted Mini Grant Workshops
- Other Kern COG Planning Workshops
(Long Range Transit Plan Update, KTF Logistics Event, ...)
- Results of Outreach Presented to 11 City Councils and
- Board of Supervisors (2 Required by Law)



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Annual 1,200 Person Statistically Valid Survey – 2007-2023

Residents that Drive Alone to work or school increased from 63.7% in 2019 to 71.3% in 2023.

Residents that Carpool or Vanpool also increased from 4.3% in 2019 to 8.3% in 2023.

Most Liked Features of your City or Town were Cost of Living at 37.4%; Small-town atmosphere at 36.7% and Cost of Housing at 33.2%.

Conversely the Least Liked Features were Homelessness at 55.5%; Crime Rate at 51.2% and Air Quality at 43.6%.

Survey Sample is Kern County By Region: West Kern, East Kern, Mountains and Valley

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Online Survey Tool – SurveyMonkey

Survey 1:

September – November 2023

Survey 2:








Late January – March 2024

Survey 3:

To Be Determined

Survey No. 1

Ranking of Priorities for Future Growth

-  1. Enhance Economic Vitality
-  2. Provide a Variety of Housing Choices
-  3. Conserve Undeveloped Land & Spaces
-  4. Conserve Energy & Natural Resources
-  5. Provide Adequate & Equitable Services
-  6. Provide a Variety of Transportation Choices
-  7. Improve Community Assets & Infrastructure
8. Other?

Stakeholder Group Hosted Mini Grant Workshops

- Who is Kern COG
- What is the Regional Transportation Plan (RTP)
- Federal/State RTP Requirements
- Future Growth Options and Transportation Projects
- Information Tabulated and Shared with the Kern COG Board before Approval of the 2026 RTP



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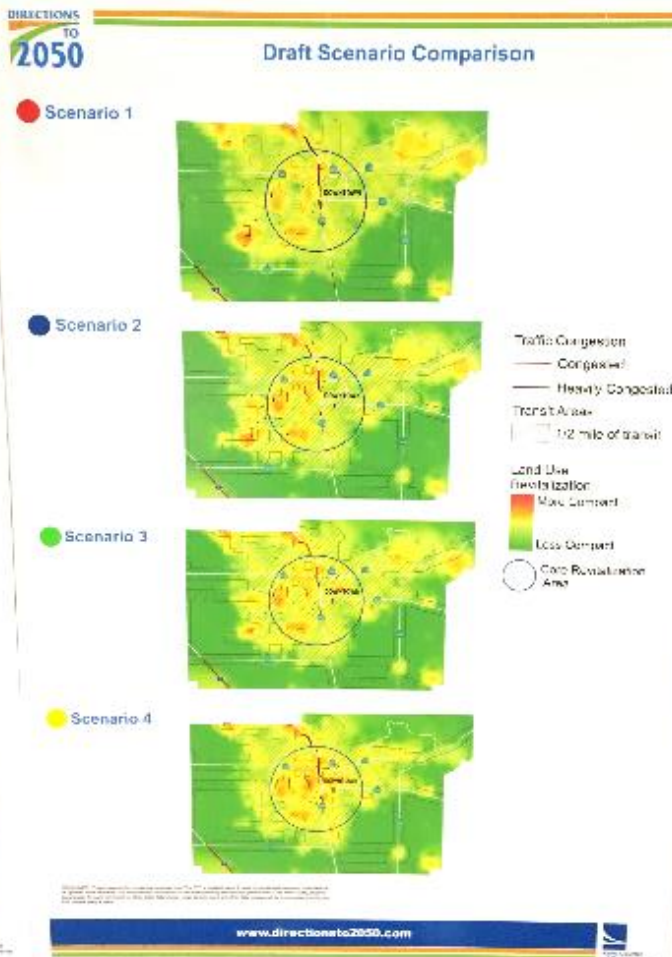
Dot Board Exercise at Workshops - Comparing Scenarios with Performance Measures

Process uses 4 scenarios each progressively more ambitious in density and strategy implementation.

2026 scenarios may be similar to 2022 RTP.

Scenario votes are weighted to develop the preferred alternative, allowing a range of results.

Preferred scenario of the 2022 RTP was similar to the preferred scenario in the 2018 RTP, at about 3.



REGIONAL TRANSPORTATION PLAN

Characteristics Compared

ÁREA METROPOLITANA DE BAKERSFIELD – CARACTERÍSTICAS DE LAS HIPÓTESIS DE TODO EL CONDADO PARA 2035

HIPÓTESIS 1

Extiende las opciones de inversión en desarrollo de terrenos y transporte de las últimas décadas hasta el año 2035 y más. Supone las tendencias históricas de crecimiento periférico del área metropolitana.

- Las inversiones en transporte favorecen la infraestructura de la calzada.
- Inversión modesta en estrategias para peatones y bicicletas.
- Carece de mejoras de servicio significativas para el transporte público.
- En cuanto a las opciones de vivienda, no cumple con las tendencias observadas en el mercado con respecto a viviendas ubicadas en zonas donde sea posible trasladarse preferentemente a pie.
- Inversión concentrada en mejoras de seguridad y capacidad, que incluye la circunvalación del sur (South Beltway) para 2040.
- Fondos para mantenimiento insuficientes en un 22%.
- Supone una renovación menor de la zona céntrica (Downtown).
- Supone un aumento de 2/3 en los costos de combustible para 2035.

HIPÓTESIS 2

Plan de inversión similar al de la Hipótesis 1. Aumenta la inversión en mantenimiento de calzada e infraestructura para transporte público, bicicletas y peatones. Supone la renovación de zonas desocupadas y subutilizadas para respaldar la inversión en la ampliación de las opciones de transporte.

- Inversión concentrada en el mantenimiento y en comunidades más aptas para la circulación de transporte público, bicicletas y peatones.
- Mejora en la conectividad entre modos de viaje.
- Contempla calles más seguras y un movimiento de mercancías más eficiente.
- Cambio modesto en la demanda de opciones de vivienda más aptas para la circulación de transporte público, bicicletas y peatones, que se encuentren más cerca de los trabajos y los centros de compras.
- Posterga la circunvalación del sur (South Beltway).

HIPÓTESIS 3

Plan de inversión similar al de la Hipótesis 2. Supone la renovación de la zona céntrica (Downtown) y de zonas desocupadas y subutilizadas para respaldar la ampliación de las opciones de transporte.

- Aumento moderado en la demanda de opciones de vivienda más aptas para la circulación de transporte público, bicicletas y peatones, que se encuentren más cerca de los trabajos y los centros de compras.

HIPÓTESIS 4

Acelera la inversión en infraestructura para transporte público, bicicletas y peatones en 15 años, a 2020. Extiende la renovación a las zonas con mayor servicio de transporte público.

- Cambio radical en la demanda de opciones de vivienda más aptas para la circulación de transporte público, bicicletas y peatones, que se encuentren más cerca de los trabajos y los centros de compras.
- Requiere una nueva inversión en infraestructura con un plazo más corto.

Todas las hipótesis suponen un crecimiento que llegará a **1.3 millones de** este crecimiento se producirá dentro del Área Metropolitana de Bakersfield de la tierra y para el transporte de Kern County.
<http://www.kerncog.org/transportation-modeling>

% de
mantenimiento
financiado

Inversión en
transporte

Infraestructura para
bicicletas/peatones/
transporte público

Impacto en
el tráfico

Plazo

Opciones de vivienda

METRO BAKERSFIELD—2035 COUNTYWIDE SCENARIO CHARACTERISTICS

SCENARIO 1

Extends land development and transportation investment choices of past decades out to 2035 and beyond. Assumes historic trends in peripheral growth in the metropolitan area.

- Transportation investments favor roadway infrastructure.
- Modest investment in walk and bike strategies.
- Lacks major service improvements to transit.
- Housing choice does not meet observed market trends for more walkable housing choices.
- Investment focused on capacity and safety improvements including a South Beltway by 2040.
- Maintenance underfunded by 22%.
- Minor revitalization of Downtown assumed.
- Assumes 2/3 increase in fuel costs by 2035.

SCENARIO 2

Investment plan similar to Scenario 1. Increases investment in roadway maintenance and transit, bike, and walk infrastructure. Assumes revitalizations of vacant and underused areas to support investment in broader transportation choices.

- Investment focused on maintenance and more transit, bike, and walk friendly communities.
- Improved connectivity between modes of travel.
- Provides safer roads and more streamlined goods movement.
- Modest change in demand for more transit, bike and walk friendly housing choices closer to jobs and shopping.
- Postpones South Beltway.

SCENARIO 3

Investment plan similar to Scenario 2. Assumes revitalization of Downtown, vacant, and underused areas to support the broader transportation choices.

- Moderate increase in demand for more transit, bike, and walk friendly housing choices closer to jobs and shopping.

SCENARIO 4

Accelerates investment in transit, bike, walk infrastructure by 15 years to 2020. Expands revitalization to areas with increased transit service.

- Major shift in demand for more transit, bike and walk friendly housing choices closer to jobs and shopping.
- Requires new investment in infrastructure with an expedited time frame.

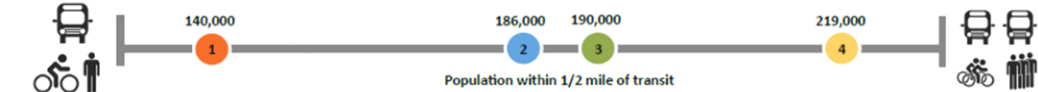
% of Maintenance
Funded



Transportation
Investment



Bike/Walk/Transit
Infrastructure



Traffic Impact



Timeline



Housing Choice



All scenarios assume growth to 1.3 million people; 417,000 households; and 461,000 jobs in Kern county by 2035. Approximately 2/3 of this growth is within Metropolitan Bakersfield. Scenarios analyze changes in Metro growth using Kern Council of Governments' land use and transportation modeling tools. Modeling documentation is available online at: <http://www.kerncog.org/transportation-modeling>

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Performance Measures

ÁREA METROPOLITANA DE BAKERSFIELD – RESULTADOS DE HIPÓTESIS DE TODO EL CONDADO PARA 2035

Todas las hipótesis suponen el mismo crecimiento general en términos de población, viviendas y empleo.



Costos de infraestructura local¹



Uso del agua²



Independencia energética³



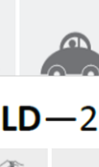
Millas recorridas por vehículo (VMT), siglas en inglés por consumo de combustible⁴



Costos de salud pública⁵



Costos de transporte de hogares⁶



Emissiones de aire de automóviles⁷



Consumo de tierra⁸

HIPÓTESIS 1 Extiende las opciones de inversión en desarrollo de terrenos y transporte de las últimas décadas hasta el año 2035 y más. Supone las tendencias históricas de crecimiento periférico del área metropolitana.



HIPÓTESIS 2 Plan de inversión similar al de la Hipótesis 1. Aumenta la inversión en mantenimiento de calzada e infraestructura para transporte público, bicicletas y peatones. Supone la renovación de zonas desocupadas y subutilizadas para respaldar la inversión en la ampliación de las opciones de transporte.



HIPÓTESIS 3 Plan de inversión similar al de la Hipótesis 2. Supone la renovación de la zona céntrica (Downtown) y de zonas desocupadas y subutilizadas para respaldar la ampliación de las opciones de transporte.



HIPÓTESIS 4 Acelera la inversión en infraestructura para transporte público, bicicletas y peatones en 15 años, a 2020. Extiende la renovación a las zonas con mayor servicio de transporte público.



¹ En dólares de 2012 (acumulado a 2035)

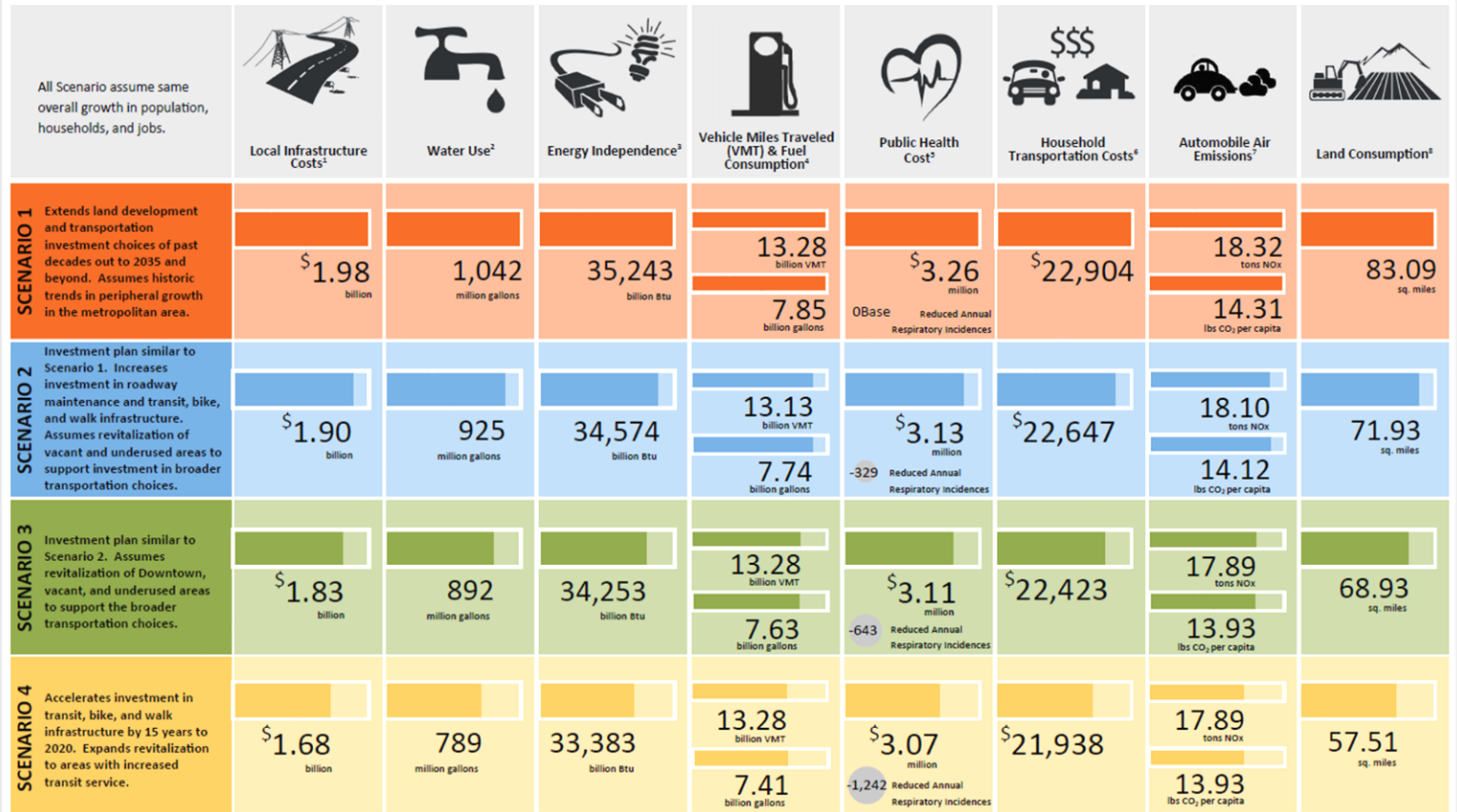
² Uso del agua diario de nuevo crecimiento 2050

³ Anual en 2035

⁴ Acumulado a 2035

METRO BAKERSFIELD—2035 COUNTYWIDE SCENARIO OUTCOMES

All Scenario assume same overall growth in population, households, and jobs.



¹ In 2012 dollars (cumulative to 2035)

² 2035 Daily water usage from new growth

³ Annual in 2035

⁴ Cumulative to 2035

⁵ Daily health-related costs due to transportation-related pollutant emissions

⁶ In 2012 dollars (annual in 2035)

⁷ Based on a weekday in 2035

⁸ Cumulative to 2035



REGIONAL TRANSPORTATION PLAN

Other Ideas / Comments / Questions / Contacts

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