Roads to Ruin

Transportation Funding Options for Kern County

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To address growing transportation issues, a group of concerned citizens formed the Kern Transportation Foundation in 1992. A nonprofit public benefit corporation, Kern Transportation Foundation's mission is to promote a modern, balanced transportation system that enhances our quality of life and supports the economic vitality of all communities.

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Chapter I: Executive Summary

Kern County's roads and public transportation systems are in dire straits.

Each year, Kern's cities and the county fall further behind in maintaining already beleaguered roads, while agencies such as Golden Empire Transit have no operating money to meet growing demands for its services. Meanwhile, the pace of new capital transportation projects cannot hope to meet anticipated needs under current funding projections. The disparity between funding levels, capacity demands, and air quality conditions is summarized through a glimpse of a few statistics:

Population forecast

- Kern County's population in 2000 was 671,295. The population is predicted to increase more than 60% by 2020 to 1,088,600.

Current road conditions

- California vehicle owners spend an estimated $354 each year in unnecessary vehicle maintenance costs attributable to poor road conditions, according to The Road Information Program (TRIP). Only three other states have drivers who spend more.

- Research shows that for "every $100 million spent on highway safety improvements…145 lives [will be saved] over a 10-year period."(TRIP)

Capital improvements

- The 66 capital transportation projects already identified by Kern COG and its member agencies as necessary to address congestion relief, safety concerns, and economic development are estimated to cost more than $2 billion, and do not include public transportation or rehabilitation projects. Those will add an additional $1 billion in costs. Kern COG will receive an estimated $1 billion by 2030, leaving at least a $2 billion shortfall.

- The Bakersfield System Plan promotes a project that serves the needs of metro Bakersfield. Today's estimates figure the project cost at $1.6 billion.

Road maintenance expenses

- The County of Kern estimates a road maintenance backlog of about $200 million. Currently, the county spends $16 million each year on road maintenance – just over half the $30 million it would take to ideally maintain its system.

Road maintenance expenses (cont'd)

- City of Bakersfield road officials estimate a cost of $15 million annually to maintain existing streets with no backlog. The City, however, only has approximately $6 million available during the 2001-02 budget year for road maintenance, creating a cumulative $89 million maintenance deficit.

- The region's other 10 cities have a combined maintenance backlog of $60.5 million on top of the nearly $9.2 million they are already spending each year to keep their streets drivable.

Air quality

- Kern COG alone has agreed to spend $750,000 on measures that would promote ridesharing, public transportation, vanpooling and other ozone–saving concepts. This is expected to garner less than one percent reduction in transportation-related emissions.

- The San Joaquin Valley Unified Air Pollution Control District has indicated that ozone emissions must be reduced by approximately 30 percent – or 300 tons – between mobile and non-mobile sources to bring the Valley into compliance with federal air quality regulations.

Public transportation operations

- Golden Empire Transit, the region's largest public transportation provider, is facing a cumulative operating deficit of between $46 and $78 million by 2015. Despite a relatively healthy capital budget outlook, GET receives far less funding for operating from the federal government, and by law cannot redirect the capital funding it does receive from Washington.

Rail, air passenger, and water systems

- The research in this report is not inclusive of rail, air, and water transportation systems. These projects would be above and beyond those mentioned.

Potential Revenue Sources

Several potential revenue sources are available to assist Kern County's growing transportation needs. Among other possibilities, voters could approve a countywide, special transportation-related sales tax measure; a 'special district' sales tax measure; a countywide parcel-based tax; a gasoline tax increase; a regional impact fee; or a combination of these sources.

Sales Tax

Of the sources listed above, a countywide sales tax increase appears to generate the most revenue with the least turmoil for taxpayers. A sales tax requires two-thirds voter approval. Kern COG estimates that a countywide half-cent sales tax would generate $931.6 million over a 20-year period. In contrast, a quarter-cent tax would generate $465.8 million and a one-cent tax $1.8 billion over the same time period.

One potential option for a less-than-countywide sales tax would be to target the metro Bakersfield area only. Such a tax, at the rate of a half-cent over 20 years, is projected to net $619.5 million. Assuming the same time period, a quarter-cent tax would provide $309.7 million and, a full cent, $1.2 billion.

Special legislation could theoretically provide for multiple transportation districts within the same county. Using specific boundaries, voters in areas as geographically disparate as the San Joaquin Air Basin and the Mojave Air Basin may be able to approve a sales tax increase as separate transportation districts with separate boards. Were a 20-year sales tax to pass in the San Joaquin Valley Air Basin, the revenue stream would produce $810.5 million on a half-cent tax; $405.3 million on a quarter-cent tax; and $1.6 billion on a full cent. The same criteria in the Mojave Air Basin would generate $121.1 million from a half-cent tax, $60.6 million on a quarter cent and $242.2 million on a full cent sales tax.

Parcel Tax

California cities and counties have the authority to place an initiative on the ballot for a parcel tax increase for transportation purposes with a two-thirds voter approval. The parcel tax is typically used by the jurisdiction as the security for issuing general obligation bonds. Assuming a growth rate (Kern County Assessor's Office estimates) of approximately 3,000 new parcels each year, a tax of $100 per parcel would generate $840 million over a 20-year period – roughly the same amount as a 20-year, half-cent sales tax.

Gas Tax

California counties also have the authority to ask voters to authorize a local fuel tax for transportation purposes. A countywide gas tax also requires two-thirds voter approval. This type of funding measure has not been successfully implemented in California since the two-thirds majority rule took effect. A 7.8-cent gas tax would be estimated to generate the same revenue as a countywide half-cent sales tax over a 20-year period.

Regional Impact Fees

Impact fees are already levied on new development within the metropolitan Bakersfield area and in unincorporated Rosamond. The procedure for approval of impact fees is by ordinance. The impact fee programs are estimated to generate $200 million over 20 years. The impact fee option would involve an expanded program for regional transportation projects with a uniform rate applied throughout the county.

Under this scenario, new commercial developments in Kern County would have to be assessed an impact fee of $16.22 per square foot to equal the revenue generated from a 20-year, countywide ½-cent sales tax. For residential construction, the fee would be $6,304 per new housing unit to equal the revenue from a 20-year, countywide ½-cent sales tax. Currently, metro Bakersfield and Rosamond pay fees of $2,197 and $1,461 respectively. Those communities would fall under this new schedule were it to be adopted.

Selling the Plan

California courts have upheld a super majority rule for special purpose sales tax increases, requiring a two-thirds voter approval for such a measure to pass. Historically, meeting such a burden in Kern County has been practically impossible. However, a sales tax initiative may be targeted at specific communities or air basins to increase its chances for success. Conversely, at least one California county – Santa Clara – addressed the super majority issue from a different perspective. Instead of a special sales tax, the county promoted a general sales tax that was tied specifically to a list of transportation projects, thereby requiring a 50.1 percent voter approval rate.

Regardless of which strategy appears the most viable, however, the consequences of continuing to rely solely on traditional funding are abundantly clear: the regional transportation system in Kern County will continue to deteriorate on an increasingly rapid scale, and will become more and more congested. Drivers will pay more and wait longer to commute; public transportation operators will be unable to provide for the additional demands for service; and capital project construction will take too long to provide meaningful congestion relief.

The question no longer is whether additional transportation revenue is necessary to ensure a properly maintained and functioning transportation system, but rather will the infrastructure last until new revenue arrives?

Chapter II: Population Forecast

"The amount of traffic has not only affected decisions about when to travel and which roads to use but also where to live, where to work, and which hours to work…All of these choices affect growth, livability, and prosperity of communities."(Moving Ahead: The American Public Speaks on Roadways and Transportation in Communities, page 14)

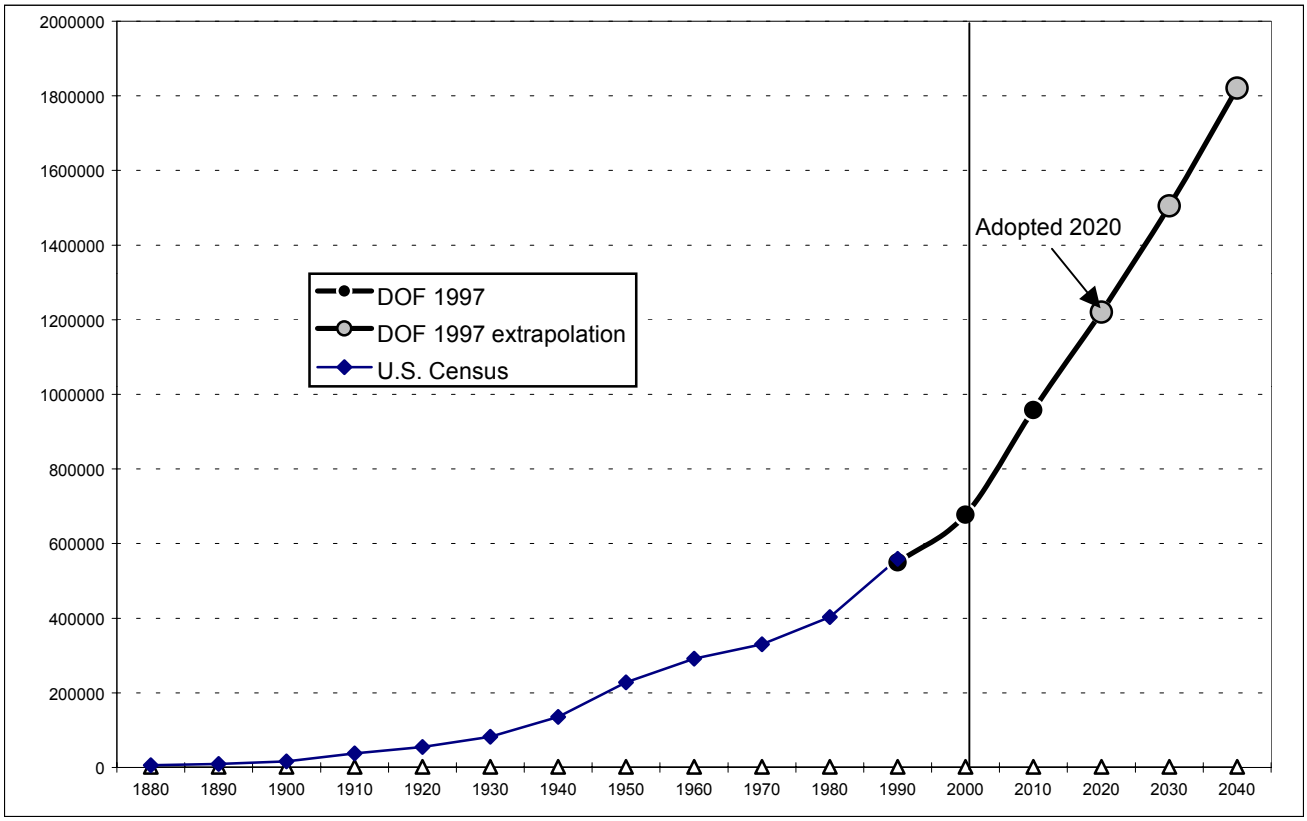
Kern County is a crossroads linking Southern California, the San Joaquin Valley and California's High Desert. There is much to discover in Kern County. Some people come to escape larger city life. Others come because of agricultural interests. Still others decide on Kern County because of job availability. Because of the consequent population growth, the number of vehicles on the road continues to increase. The following table suggests that Kern County as a whole will experience significant population growth in the years to come.

Table 1: Kern County Population Forecast 2000 to 2020

	2000	Population % County	2010	Population % County	2020	Population % County
Arvin	13,202	1.97%	17,420	2.00%	23,949	2.20%
Bakersfield	250,473	37.31%	301,500	34.62%	366,096	33.63%
California City	8,513	1.27%	11,838	1.36%	15,016	1.38%
Delano	39,404	5.87%	52,260	6.00%	68,038	6.25%
Maricopa	1,126	0.17%	1,670	0.19%	2,118	0.19%
McFarland	9,878	1.47%	12,804	1.47%	16,329	1.50%
Ridgecrest	25,260	3.76%	34,840	4.00%	47,214	4.34%
Shafter	13,086	1.95%	17,420	2.00%	23,949	2.20%
Taft	8,867	1.32%	12,132	1.39%	15,389	1.41%
Tehachapi	11,608	1.73%	17,337	1.99%	21,992	2.02%
Wasco	21,062	3.14%	27,527	3.16%	34,918	3.21%
Incorporated	402,479	59.96%	506,747	58.18%	635,009	58.33%
Unincorporated	268,816	40.04%	364,253	41.82%	453,591	41.67%
County Total	671,295	100.00%	871,000	100.00%	1,088,600	100.00%

Sources:
2000 Population for Incorporated Cities and Kern County from California Department of Finance, May 2001
2010 and 2020 Kern County Population Projections from the California Department of Finance, June 2001
Bakersfield City and Metropolitan Bakersfield Population Projections from City of Bakersfield, May 2000

Figure 1: County of Kern Graphical Forecast



Source: Department of Finance
United States Census

While every incorporated city will see population increases, there are key factors that affect projections even more. Kern County has been able to influence large corporations to locate here. If a large company decides that Kern County benefits it the most, the usual circumstances are such that a job base is created and a pool of workers, either from within or from outside of Kern County, will be recruited. More people require more schools, more grocers, more housing, and so on. These necessities revolve around transportation. Schools require buses that transport children. Grocers require trucks to deliver their product. Housing requires vehicles to transport building materials. In all of these scenarios there are employees who use some form of transportation to get to their jobs.

The reality is that roads are used not only for recreation, but for goods movement as well. If the economy depends on transport, adequate roads have to bear such demand. Kern County's "agriculture industry continues to provide the world with food…Kern County's [wind energy,] oil, and natural gas deposits make the county this nation's most significant energy producer…[In addition,] Kern County has become the distribution center for some of the world's largest companies." (County of Kern website) With the area's affordability and connection to various regions, Kern County meets the criteria that companies seek.

These factors affect quality of life. The companies that locate in Kern County influence population increases. Funding increases must occur as the population increases to maintain and develop infrastructure that will sustain such numbers. Sustainability consists of housing and mobility. How much housing is enough? According to Kern Council of Governments' 2000 Regional Housing Allocation Plan, the number of additional household demand from 2000 to 2007 is 39,703. Household demand and housing need is further broken down in Table 2 below.

Table 2:

Household Demand and Housing Needed

Kern County - 2000 to 2007

Additional Household Demand 2000 – 2007	39,703
Vacancy and Housing Stock Loss Adjustment	<9,692>
Additional Housing Construction Needed by 2007	30,011

Source: Kern Council of Governments 2000 Regional Housing Allocation Plan

Housing developments are integral, as are the roads to gain access to and through them. Depending on the type of development, roadway improvements, new roadway construction, traffic signals, and infrastructure improvements will be necessary. While new housing will necessitate new road miles, older neighborhoods may need new or improved access.

Chapter III: Existing Streets and Roads Funding

The cities and County continue to allocate both transportation specific and general fund revenues to transportation-related activities, however, other priorities limit the amounts that are available from year to year. Law enforcement, public libraries, and human health services are just a sample of other programs partially provided for through general fund revenues.

More funding is needed to maintain a coordinated transportation system. The table below illustrates that the average total funding available compared to estimated need, is short by $365 million.

Table 3: Revenue for Streets and Roads

3 year average of available local funding for streets and roads					Estimated	
	General Fund	Gas Tax	TDA/Roads	Total Available	Need	Shortfall
Arvin	$48,107	$188,728	$270,433	$507,268	$2,275,000	$1,767,732
Bakersfield	$9,662,158	$3,550,172	$3,309	$13,215,639	$95,000,000	$81,784,361
California City	$101,032	$154,025	$10,201	$265,258	$1,525,000	$1,259,742
Delano	$135,489	$537,561	$219,150	$892,200	$10,800,000	$9,907,800
Maricopa	N/A	$26,787	N/A	$26,787	$400,000	$373,213
McFarland	$110,820	$138,839	$93,519	$343,178	$2,275,000	$1,931,822
Ridgecrest	$83,217	$506,593	$459,789	$1,049,599	$24,000,000	$22,950,401
Shafter	N/A	$192,228	$131,655	$323,883	$13,100,000	$12,776,117
Taft	$17,661	$117,649	$68,255	$203,565	$6,760,000	$6,556,435
Tehachapi	$340,714	$119,191	$99,075	$558,980	$4,000,000	$3,441,020
Wasco	$31,697	$314,431	$323,306	$669,434	$6,550,000	$5,880,566
Kern County	$1,408,667	$11,427,978	$707,587	$13,544,232	$230,000,000	$216,455,768
TOTAL	$11,939,562	$17,274,182	$2,386,279	$31,600,023	$396,685,000	$365,084,977

Sources: Revenue information taken from "State of California Streets and Roads Annual Report", tables 3 and 9, for 1996-97, 1997-98, 1998-99.
Estimated need is from Table 6 of this report.

Kern Council of Governments handles regional planning for Kern County. In order to perform the projects involved, Kern Council of Governments administers two state highway funding programs and five local streets and roads funding programs. These programs fund capital and maintenance/rehabilitation projects. These programs vary in funding availability from year to year. All funds have distinct criteria and factors that influence distribution.

State Highway Funding Programs

- **Interregional Improvement Program (IIP)**

Kern COG works with Caltrans to develop IIP projects. IIP funds projects of regional significance. These funds are not available to routes in urbanized areas outside metropolitan communities. IIP money is also used on routes of interregional significance such as I-5, 14, 46 (from I-5 west to San Luis Obispo County line), 58, 99, and 395 (from 14 to San Bernardino County line). Figure 2 on the next page shows these routes. Note: Federal and State funds require a local match.

- **Regional Improvement Program (RIP)**

RIP projects are prioritized and selected at the regional level. Kern COG and its member agencies develop and select the projects that meet federal standards. This money helps construct new facilities or increase the capacity of any existing highway, freeway, street or road on the federal aid system. These funds are often used to leverage other discretionary state highway funds. Note: Federal and State funds require a local match.

Local Streets and Roads Funding Programs

- **Local Gas Tax**

Highway Users Tax funds in the Transportation Tax Fund (gas taxes) are revenues from taxes imposed by the state on the sale of motor vehicle fuel. A portion of the state gas tax is returned to local agencies for transportation purposes. The local gas tax can be used for research, planning, construction, improvement, maintenance, and operation of public streets and highways (and related public facilities for non-motorized traffic), including mitigation of their environmental effect, payment for property taken or damaged for such purposes and necessary administrative costs.

- **Transportation Development Act (TDA), Article 8**

Overall TDA funding is provided through two revenue streams created and administered at the local level by the regional transportation planning agency (RTPA/Kern COG) and the county auditor-controller. The first revenue stream is financed by ¼ cent of the retail sales tax, and is channeled back to the source region through the Local Transportation Fund (LTF). The second stream is financed by state budgetary appropriations from a portion of the statewide sales tax on gasoline and diesel fuel and is channeled by prescribed formula through the State Transit Assistance Fund (STAF). The LTF may be used for a wide variety of transportation related activities, including streets and roads services. The STAF, however, is restricted solely to funding public transportation services. Statutes governing TDA funding for "other claims" are codified in California Public Utilities Code, Article 8, Section 99400 through 99408. Eligible agencies include the County of Kern and the eleven incorporated cities within Kern County.

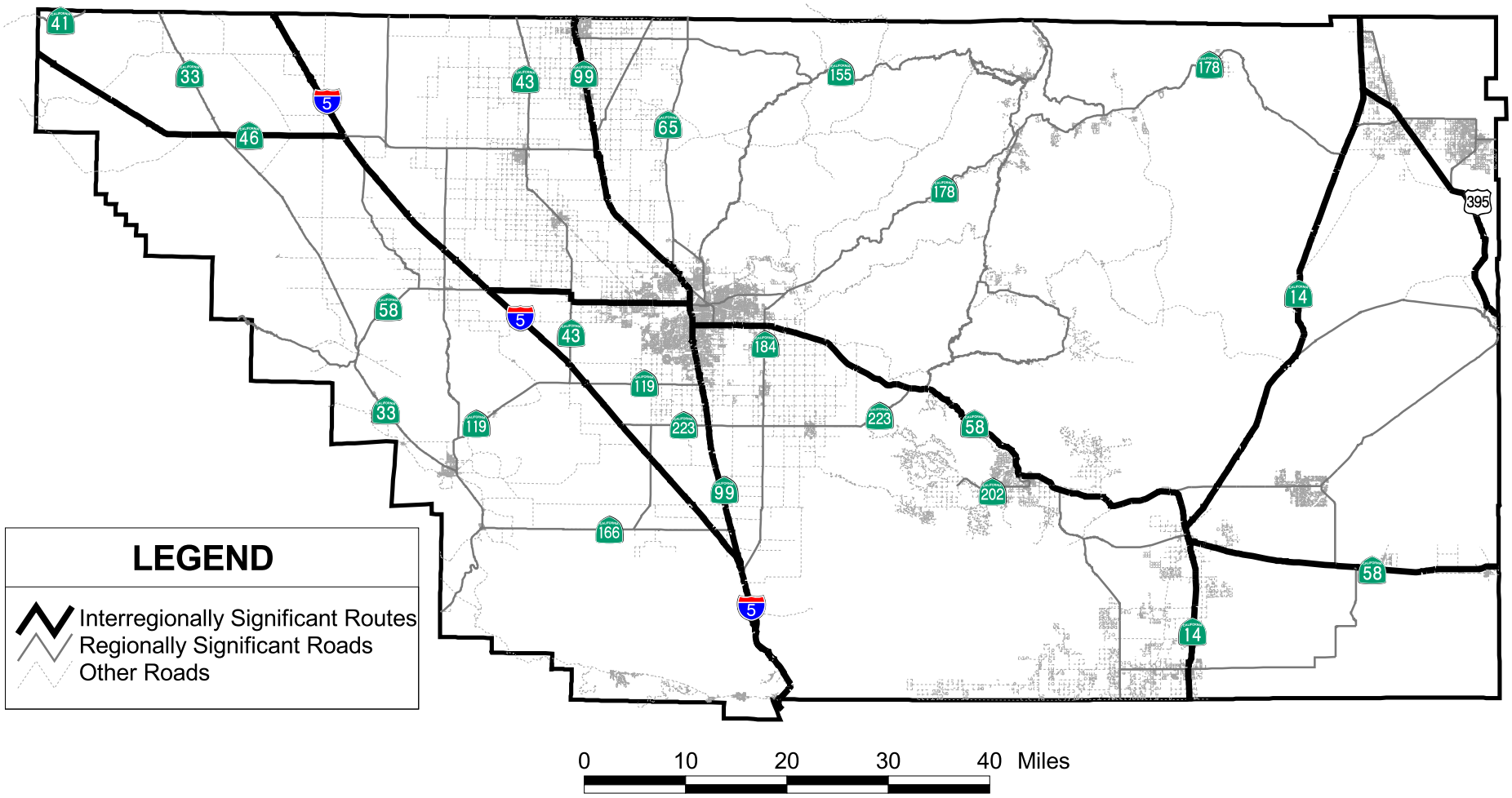


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Figure 2

Routes Of Interregional Significance

Local Streets and Roads Funding Programs (cont'd)

- **Congestion Mitigation Air Quality Program (CMAQ)**

All CMAQ projects must show an air quality improvement. CMAQ funds have several qualifiers that control the purpose and place of their use. CMAQ may not be used to fund additional single occupancy vehicle lanes but may be used to create or add multiple occupancy vehicle (Diamond) lanes. CMAQ may also be used for transit capital improvement projects. Historically, Kern COG member agencies have funded a variety of improvements including transit capital, safety work on local arterials, and signalization related improvements. Note: Federal funds require a local match.

- **Regional Surface Transportation Program (RSTP)**

RSTP funds allocated by Kern COG to its member agencies may be used on federal aid routes (highways, streets, roads, etc.) to increase capacity or build new facilities. RSTP funds may also be used to rehabilitate these same federal aid routes or to improve safety. Historically, Kern COG member agencies have largely chosen to use these funds in the resurfacing and reconstruction areas. Note: Federal funds require a local match.

- **Transportation Impact Fees**

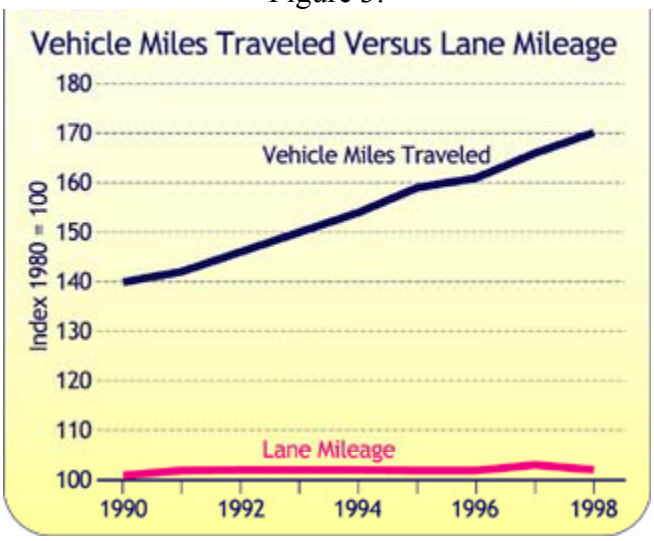
Impact fees are a form of development extraction used by local governments to impose charges on new development. The fees provide capital funding for off-site facility expansion necessitated by new development. An impact fee is a land regulatory device, as distinguished from a revenue-raising device. It encourages orderly land development by ensuring adequate availability of capital facilities to service new growth and development.

Chapter IV: Streets and Roads

"Over the last two decades, the amount of travel has grown at almost the same rate as our booming economy – 140% in the 80's and 147% in the 90's. Growth in roadway capacity, however, has almost flat-lined at 0.3% a year in the last decade" (see Figure 3). (Managing Our Congested Streets and Highways – 2001)

Managing our streets and roads is a complex task. Some of the elements involved are planning, funding, and public participation. Some of the consequences of inadequate funding are delays caused by traffic congestion, not enough highway capacity, road system not well planned, and air pollution. Increased funding can mean planning safer construction zones. More funding can make the difference between heavy congestion 20 years from now and heavy congestion 40 years from now.

Figure 3:



Source: Managing Our Congested Streets and Highways:
Federal Highway Administration,
Operations Core Business Unit

Travel on today's roads has been on a continual rise while construction of new roadways (lane mileage) has remained constant. People are traveling more and more for varying reasons. In order to keep people moving capital improvement, maintenance, and rehabilitation projects need to be done.

Capital Improvement Projects

Capital improvement projects can save lives in Kern County. According to The Road Information Program, research shows that for "every $100 million spent on highway safety improvements…145 lives [will be saved] over a 10-year period." Figure 4 demonstrates the percentage of actual to expected accident rates in Kern County. Based on capacity and road classifications, there are a certain number of accidents expected each year on a given segment of roadway. In some cases, the actual number of accidents is greater than the number of accidents expected and these route segments are identified in red (greater than 101% of expected) on the map. The existing transportation system is reaching its capacity; safety and connectivity issues have become commonplace.

Funding is necessary to alleviate problems in the existing road system. Funding for capital improvement projects is based on road designations and population, with a significant portion of the funds being allocated by a competitive process. Many factors contribute to when a project is approved. But if funding were made available earlier, projects could potentially be moved forward and be constructed in less time. The Bakersfield System Plan (2001), which envisions a $1.6 billion east-west freeway system through the metro area, is an example of a group of projects that will be prolonged. The study is a joint effort by the City of Bakersfield, County of Kern, Caltrans, and Kern Council of Governments to identify transportation needs for the Bakersfield metropolitan area. Extensive public participation and education, financial and economic impacts, and detailed traffic analysis have resulted in the selection of an alternative. However, the alternative cannot advance until a funding schedule can be finalized.

The Bakersfield System Plan (2001) does not address other projects in the candidate list (Appendix A) that total $567 million or the list in Figure 5 that consists of projects that are in the State Highway/Regional Choice Program of Projects (Kern COG 2000 Federal Transportation Improvement Program). Although, funding has been committed to advance the projects in Figure 5 toward the construction phase; cost estimates continue to multiply because of inflation, land use changes, and increased federal regulation. Kern COG member agencies also continue to submit more candidate projects in order to have functional roadway systems.

In addition to the regionally significant projects identified, there is a local list of capital projects. The Kern Council of Governments' Regional Transportation Plan, Local Street and Roads Capital Improvement Program, a 20-year forecast, anticipates a shortfall of almost $900 million. Local streets and roads capital improvement projects include bridge widenings, grade separations, reconstruction of intersections, etc. that enhance capacity, improve connectivity, reduce congestion, and improve safety.

There is simply not enough funding in the federal, state, or local budgets to implement the most crucial projects in a timely manner. Level of service designations cannot be ignored. Transportation projects are intended to alleviate congestion, which results in delays and safety concerns. However, projects are not being completed fast

enough to provide a reasonable solution to existing problems. For example, in theory, the Bakersfield System Plan provides an ideal solution to a transportation problem. However, only three components of the alternative will be completed by 2020 – the Westside Parkway, the Hageman Road Flyover, and the Centennial Corridor – which by then will be insufficient to bring levels of service (LOS) into the normal range. Level of service is based on a scale of A through F (see Table 4). The maps following Figure 5 demonstrate the conditions in Kern County.

Table 4: Levels of Service – A through F

Level of Service (LOS) is the "yardstick" in standard use to categorize the flow, or efficiency, of highways, roads and intersections. (This term is also used in most other infrastructures descriptions, but the "yardstick" or units of measurement vary, depending upon the specific type of infrastructure; i.e., water, sewer, power, etc.)	
LOS A	Free flow traffic conditions, with minimal delay to stopped vehicles (no vehicle is delayed longer than one cycle at signalized intersection).
LOS B	Generally stable traffic flow conditions.
LOS C	Occasional back-ups may develop, but delay to vehicles is short-term and still tolerable.
LOS D	During short periods of the peak hour, delays to approaching vehicles may be substantial but are tolerable during times of less demand (i.e., vehicle delayed one cycle or less at signal).
LOS E	Intersections operate at or near capacity, with long queues developing on all approaches and long delays.
LOS F	Jammed conditions on all approaches with excessively long delays and vehicles unable to move at times.

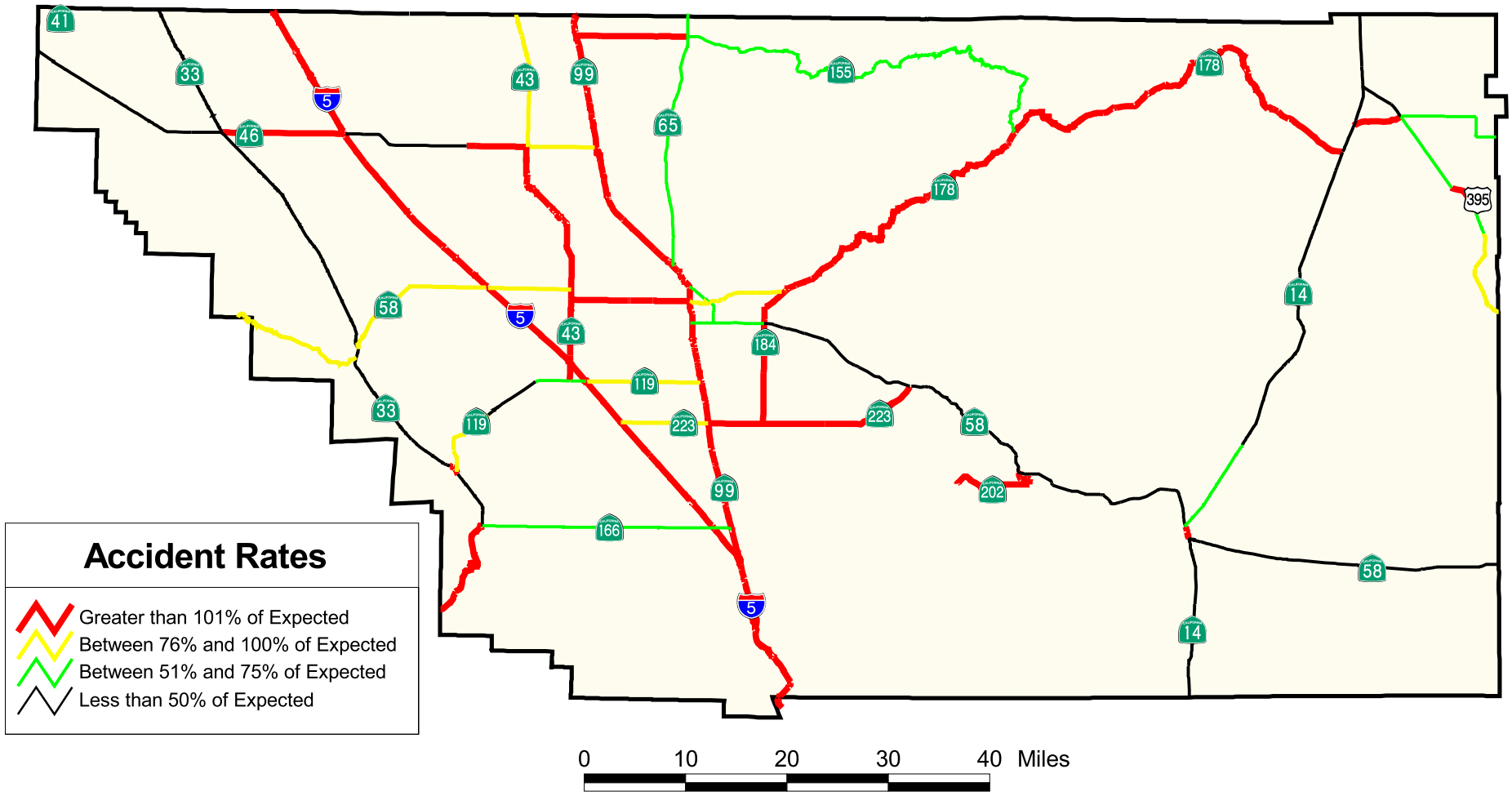


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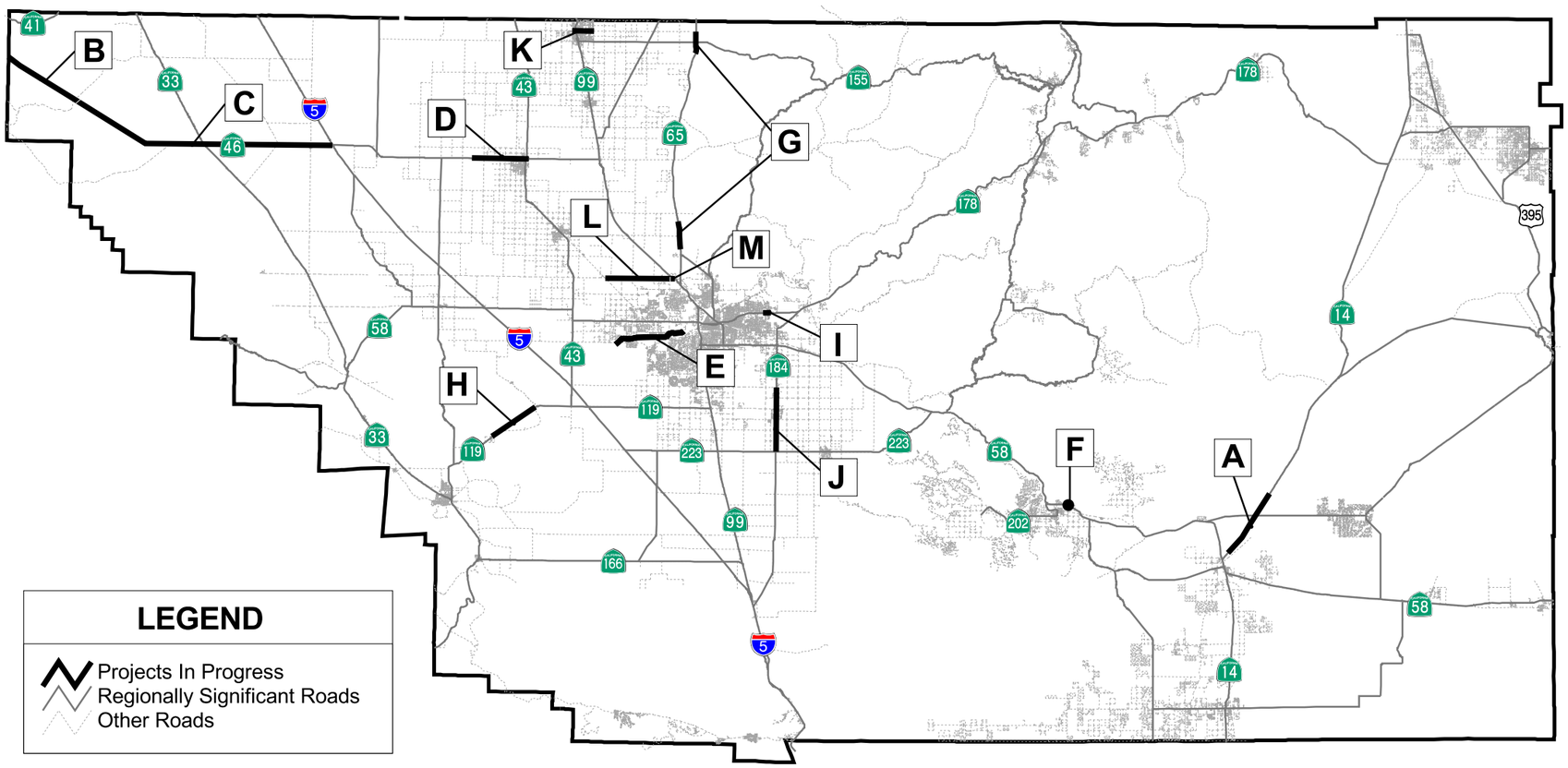
Figure 4

Actual to Expected Accidents



LEGEND

- Projects In Progress
- Regionally Significant Roads
- Other Roads

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0 15 30 45 60 Miles

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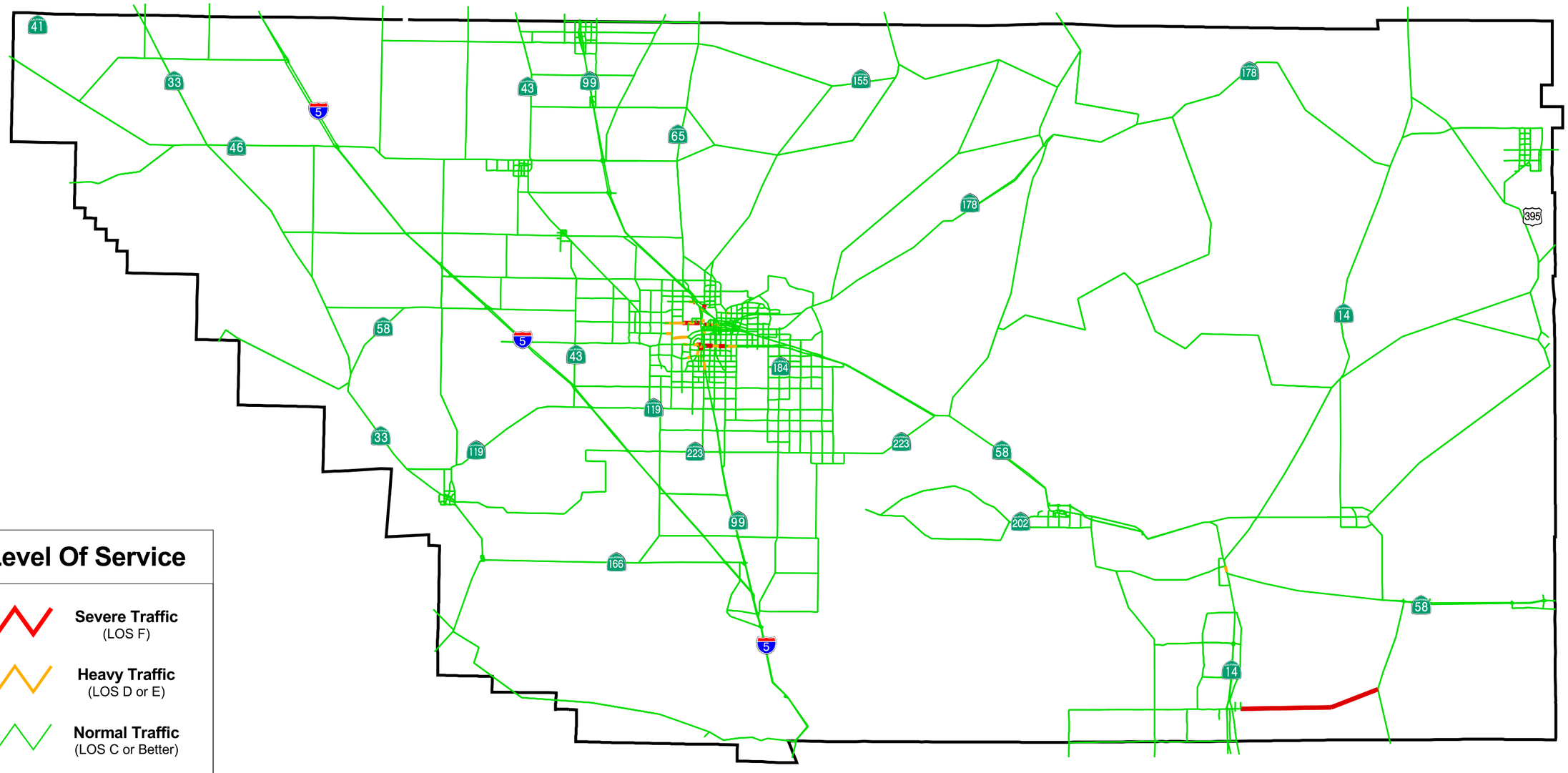
ID	Project	Cost
A	SR 14 - North Mojave 4- Lane	$ 59,898,000
B	SR 46 - Expressway Conversion	$ 44,370,000
C	SR 46 - Keck's Rd 4-Lane	$ 166,550,000
D	SR 46 - Wasco 4- Lane	$ 36,400,000
E	SR 58 - Westside Parkway	$ 187,900,000
F	SR 58 - Dennison Road Improvement	$ 8,000,000
G	SR 65 - Widening	$ 13,300,000
H	SR 119 - Cherry Avenue 4- Lane	$ 63,170,000
I	SR 178 - Fairfax Interchange	$ 10,300,000
J	SR 184 - Weedpatch 4- Lane	$ 76,614,000
K	Delano - Cecil Avenue	$ 26,631,000
L	Shafter - 7th Standard Road Expressway	$ 11,000,000
M	Shafter - 7th Standard Road/ SR 99 Interchange	$ 13,900,000
TOTAL		$ 717,980,000

Sources: Caltrans, Status of Projects
California Transportation Improvement Program System

July 2001 Capital Improvement Projects In Progress

Figure 5



Level Of Service

- **Severe Traffic** (LOS F)
- **Heavy Traffic** (LOS D or E)
- **Normal Traffic** (LOS C or Better)

0 10 20 30 40 Miles

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Figure 6

1998 Kern County Traffic Congestion

Level Of Service

- **Severe Traffic** (LOS F)
- **Heavy Traffic** (LOS D or E)
- **Normal Traffic** (LOS C or Better)
- 2010 General Plan Area

0 3 6 9 12 Miles

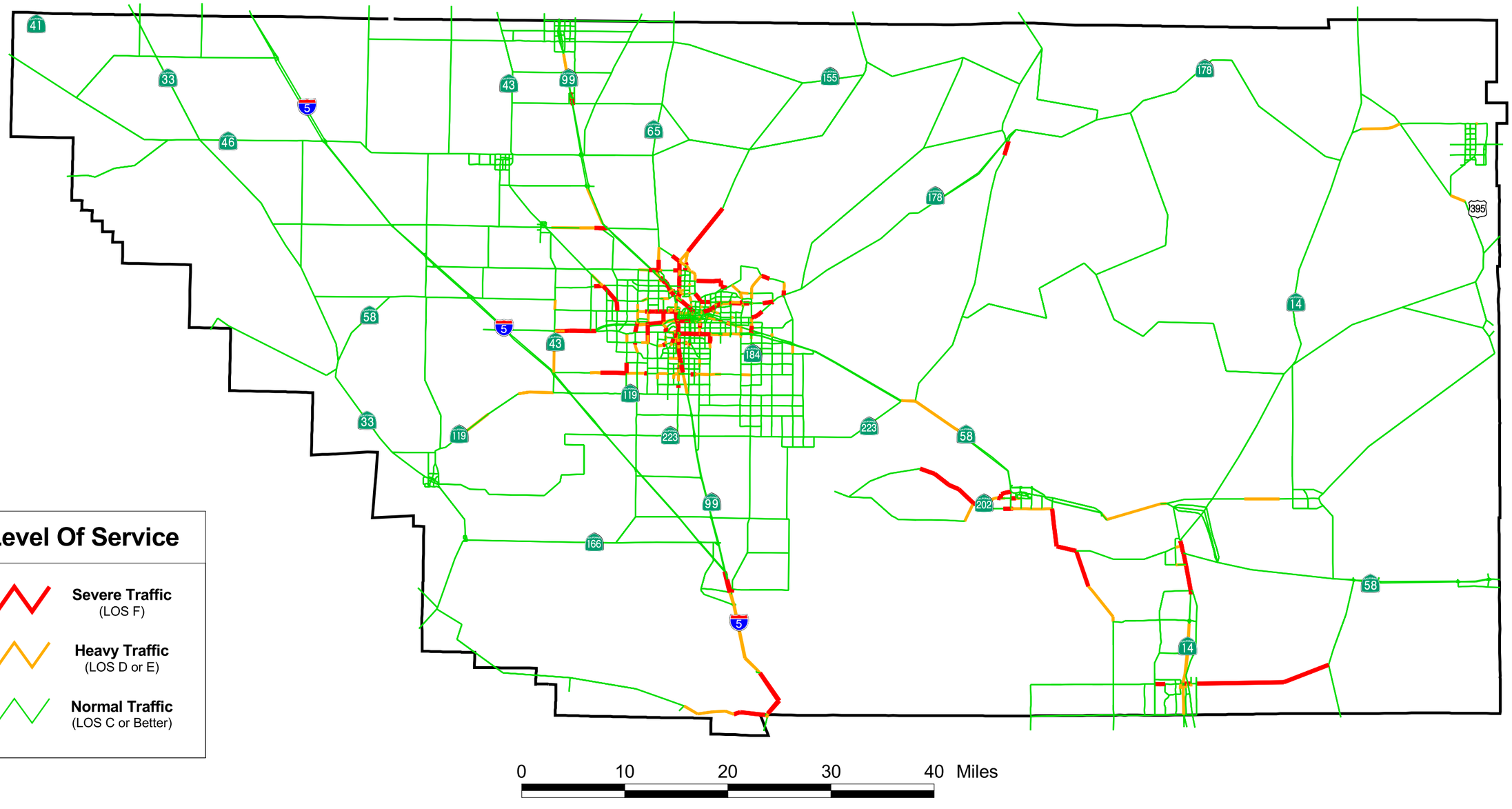
Kern Transportation Foundation

N

Kern Council of Governments

1998 Bakersfield Metropolitan Area

Figure 7



Level Of Service

- **Severe Traffic** (LOS F)
- **Heavy Traffic** (LOS D or E)
- **Normal Traffic** (LOS C or Better)

0 10 20 30 40 Miles

N

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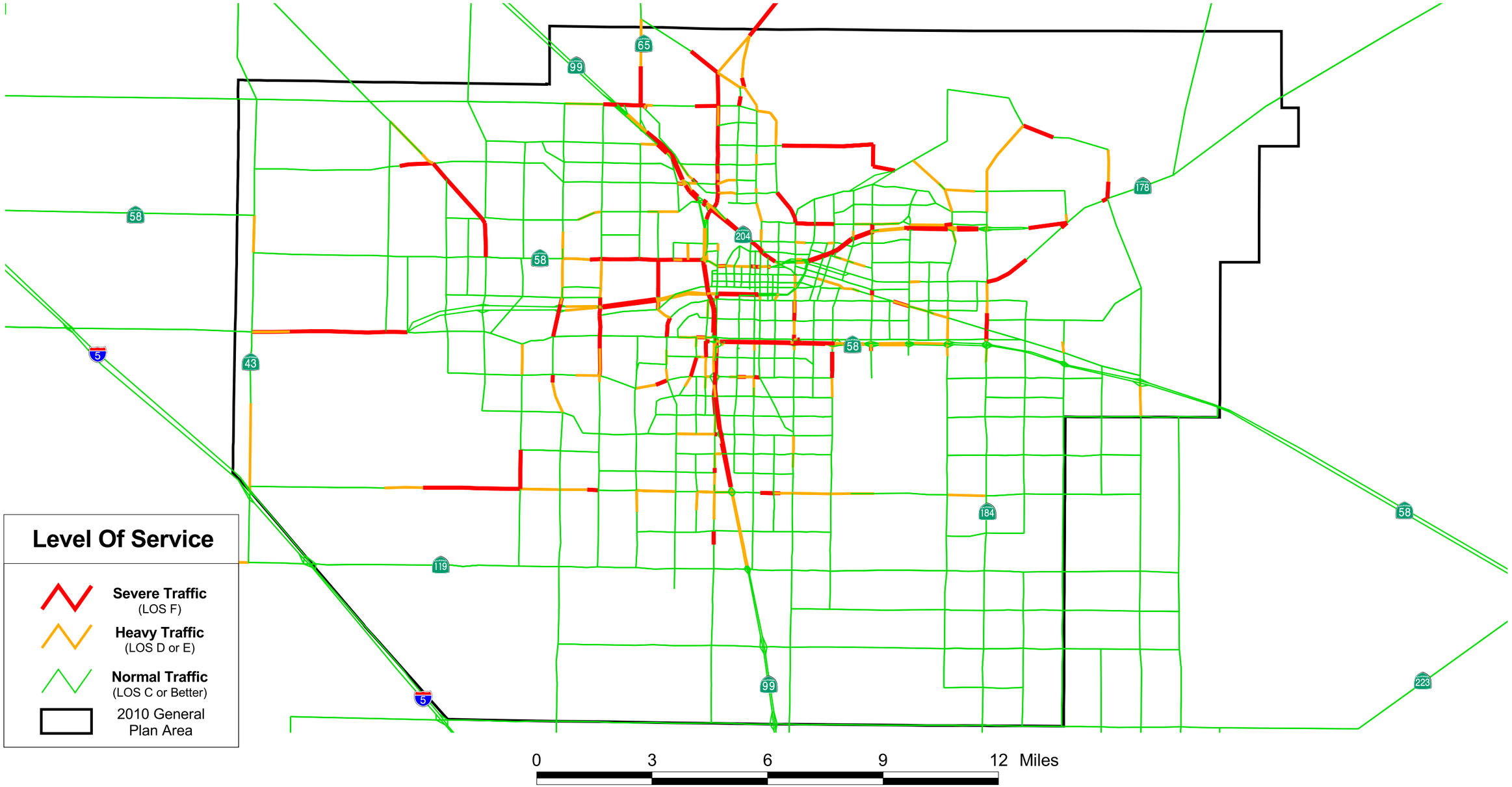
Kern Council of Governments

2020 Kern County Traffic Congestion

Figure 8



Kern Transportation Foundation

Kern Council of Governments

2020 Bakersfield Metropolitan Area

Figure 9

Maintenance and Rehabilitation Projects

"The Highway Development and Management Model study found that road deterioration increases [automobile] ownership, repair, fuel and tire costs. The report found that deteriorated roads accelerate the pace of depreciation of vehicles and the need for repairs because the stress on the vehicle increases in proportion to the level of roughness of the pavement surface."(California's Roads and Highways: Conditions and Travel Trends – February 2001)

Historically, Kern County has endured its share of deteriorating roads. The data, obtained from the State Controllers Office (Appendix B), illustrate on average there has been an increase in road maintenance expenditures. Reductions in road repair time, traffic flow improvements, pavement condition upgrades, navigable work zones, fewer accidents, and less vehicle maintenance improves the road system for everyone. These kinds of projects keep local streets and roads operating safely, but are difficult to fund in a timely manner. Kern County is "larger than the land area of Massachusetts, New Jersey or Hawaii. It is also larger than the areas of Delaware, Rhode Island and Connecticut combined." (County of Kern website) The mileage maintained by each of the jurisdictions within Kern County is shown in Table 5. The information reflects only local streets and roads. State highway miles are not included.

Table 5: 1998 Maintained Mileage Estimates by Jurisdiction

AGENCY	Rural	Urban	Total
City of Arvin	0.0	28.4	28.4
City of Bakersfield	0.0	799.6	799.6
City of California City	0.0	602.2	602.2
City of Delano	0.0	92.7	92.7
City of Maricopa	10.9	0.0	10.9
City of McFarland	2.5	19.9	22.4
City of Ridgecrest	0.0	127.3	127.3
City of Shafter	0.0	54.9	54.9
City of Taft	0.0	41.8	41.8
City of Tehachapi	0.0	32.1	32.1
City of Wasco	2.0	47.8	49.8
County (unincorp.)	2,549.9	738.9	3,288.8
TOTAL	2,565.3	2,585.6	5,150.9

Sources: 1998 Assembly of Statistical Reports: California Public Road & Related Data November 2000

Reconstruction, hazard elimination, routine maintenance, and resurfacing projects are required in managing roads. There is a funding shortfall in the maintenance of our local streets and roads. In order to get a glimpse of this shortfall in Kern County, a road maintenance and rehabilitation survey was conducted during June/July 2001. The research objective was to obtain a compilation of road budget estimates from the 11

incorporated cities and Kern County. The maintenance/rehabilitation results are shown in Table 6. The results of the survey show that there is backlog of $340.5 million countywide.

Even without the backlog, the annual budget needed to maintain the road system is predicted to be larger than what is available. The shortfall would be $24.9 million when comparing today's maintenance budget and the predicted cost without any backlog. Estimates for the individual agencies on average show that the predicted cost is double the present expenditure amounts. Delano is an exception because, at present, an unusual number of large-scale projects are under way. Federal, state, and local agencies all have separate budgets that include funds to maintain the streets and roads system. The maintenance schedules both past and present reveal a need to increase allocations.

Table 6: Maintenance and Rehabilitation Expenditure Estimations

AGENCY	Annual Expenditure to Maintain System	Cost of Backlog Projects	Predicted Cost to Maintain w/ No Backlog
City of Arvin	$125,000	$2,000,000	$275,000
City of Bakersfield	$6,000,000	$80,000,000	$15,000,000
City of California City	$300,000	$1,200,000	$325,000
City of Delano	$4,300,000	$10,000,000	$800,000
City of Maricopa	$65,000	$300,000	$100,000
City of McFarland *	$125,000	$2,000,000	$275,000
City of Ridgecrest	$2,000,000	$20,000,000	$4,000,000
City of Shafter	$750,000	$11,000,000	$2,100,000
City of Taft	$316,000	$6,000,000	$760,000
City of Tehachapi	$619,314	$2,500,000	$1,500,000
City of Wasco	$600,000	$5,500,000	$1,050,000
Kern County	$16,000,000	$200,000,000	$30,000,000
TOTAL	$31,200,314	$340,500,000	$56,185,000

Sources: Estimates achieved in June/July 2001 by phone calls, faxes, and letters to Public Works Directors, City Managers, Administrators, Finance Directors, and City Engineers from the respective cities and county. *No response was received and numbers used are Kern COG estimates.

Chapter V: Future Public Transportation Need

As the number of people without private vehicles rises due to economic or age limitations, the need for adequate public transportation services becomes more significant for school, work, and recreation. The task of having sufficient service available consists of operation, maintenance, and system expansion when necessary. Within the Kern region there are two large public transportation services – Golden Empire Transit District and Kern Regional Transit – and various smaller agencies operated by the cities of Arvin, California City, Delano, McFarland, Ridgecrest, Shafter, Taft, Tehachapi, Wasco and the Consolidated Transportation Service Agency (CTSA serves metro Bakersfield seniors and disabled).

Public transportation capital costs have been on the rise and operating costs have remained constant for several years, as shown in Table 7. But the table does not provide an entirely accurate picture, because it does not demonstrate optimal performance levels. Golden Empire Transit District (GET), already serving 7 million transit trips a year, continues to experience increasing demand for its services. More service attracts more riders, resulting in a potential for better air quality. Additional services mean faster travel for public transportation users. An increase in public transportation ridership could also result in a better flow of traffic due to the potential of fewer cars on the road. In addition, some public transportation agencies are operated under the umbrella of agencies that have other priorities to manage. Money that could be used to create improved public transportation is oftentimes diverted to fund higher priority street and road projects.

Table 7: Public Transportation Service Expenditures

	1997-98		1998-99		1999-00	
Operator	**Capital Costs**	**Operating Costs**	**Capital Costs**	**Operating Costs**	**Capital Costs**	**Operating Costs**
Small Operators	$350,000	$2,598,527	$336,000	$2,782,279	$2,625,000	$3,533,628
Kern Regional Trans	$788,000	$3,075,035	$240,000	$3,300,589	$1,290,000	$3,731,199
GET	$450,000	$10,562,899	$4,563,000	$9,539,138	$3,143,000	$10,805,372
TOTAL	$1,588,000	$16,236,461	$5,139,000	$15,622,006	$7,058,000	$18,070,199

Sources:
TDA Audits, State Controller - Transit Operators and Non-Transit Claimants Annual Report, Kern COG
GET Capital Costs from Kern COG FTIP database.
Small Operators are Arvin, California City, Delano, McFarland, Ridgecrest, Shafter, Taft, Tehachapi, Wasco, CTSA

Golden Empire Transit District

Golden Empire Transit District (GET), formed in 1973, is the largest public transportation provider in Kern County (see Appendix C). GET operates18 routes in metropolitan Bakersfield, serving two major public transportation centers, both colleges, shopping destinations and other activity centers. Service is available on most routes Monday through Sunday; late evening service is available on most routes, Monday through Friday.

Transportation for Seniors and People with Disabilities

GET also operates 13 GET-A-Lift units, which provide curb-to-curb service for people with disabilities. Approximately 350 trips are taken each day on GET-A-Lift.

All fixed route buses are equipped with wheelchair lifts to accommodate customers who use wheelchairs or who are otherwise unable to board a bus using the steps. Additional capacity will be needed as Bakersfield's senior and disabled populations grows. More than 188,000 annual trips are taken by seniors and people with disabilities on GET's fixed route system; more than 50,000 annual trips are taken on GET-A-Lift.

Air Quality

GET's board of directors has committed to convert its entire fleet to a clean-burning alternative fuel by phasing out its fleet of diesel buses. Most GET vehicles (fixed route and paratransit) are fueled by compressed natural gas (CNG); full conversion is planned by 2005. A CNG fueling station was built on GET property in 1997. All fixed-route buses are also equipped with bicycle racks. The District has 244 recycled benches placed along GET routes.

Expansion

GET is experiencing significant ridership increases and a growing demand for expanded service in a system already burdened by over-capacity buses. During the past seven years, passenger trips have increased from 4.4 million annual trips to 7.1 million annual trips, a 61 percent increase.

- **Capital Needs**

GET needs to purchase between 9 and 13 buses in a five-year period in order to accommodate increases in ridership. Nine buses would cost $3,150,000 (or $350,000 each) in today's dollars. The need for additional public transportation centers will also continue to grow as ridership continues to increase. The estimated cost of additional facilities is approximately $1 million. Site improvements such as bus shelters will also be needed. One thing, however, holds up progress of these elements: insufficient operating funds.

- **Operating Needs**

Operating costs are on a continual rise because of the increased use of public transportation by first-time passengers and repeat customers alike. As more people use GET's services, more services need to be created. A recent study indicated GET's

operating costs between 1997 and 2015 would range from $21.7 to $24.9 million annually, with a shortfall of between $2.5 and $4.3 million annually. Specific operating deficits would depend on service phasing, and projected operating costs and fare revenues.

Replacement

GET has been limited to replacing existing buses as they become eligible for replacement. GET has the largest public transportation fleet in Kern County and is expected to replace 18 to 55 buses over a given five-year period. Kern Council of Governments and GET have invested in fueling stations over the last eight years, and continue to be leaders in bus conversions.

Countywide Public Transportation

Kern Regional Transit, which is operated by the County of Kern Roads Department, provides public transportation services in the unincorporated areas of the county as well as inter-community transportation. Kern Regional Transit connects Arvin, Buttonwillow, Frazier Park, Lake Isabella, Lamont, Lost Hills, Mojave/California City, Ridgecrest, Taft, Tehachapi, and Wasco with Bakersfield (see Appendix D).

The smaller public transportation agencies that provide demand response systems (commonly known as dial-a-rides) are operated by the cities of Arvin, California City, Delano, McFarland, Ridgecrest, Shafter, Taft, Tehachapi, Wasco and the Consolidated Transportation Service Agency (CTSA). The City of Delano operates a fixed route system. Including GET, every incorporated city in Kern County, with the exception of Maricopa, provides public transportation services for its citizens.

There are rising costs for small operators on average. Table 7 illustrates fund allocations. Kern Regional Transit needs to replace two, 20-25 passenger and six, 16 passenger buses per year due to high mileage. Smaller agencies have a difficult time getting one or two replacements. Furthermore, additional routes create demand for additional buses. Smaller operators replace one to two buses about every two years.

Land use practices have precluded public transportation from being as efficient as it could be. Operating costs are prohibitive when services are provided in corridors with very low ridership. Changes in land use that encourage higher density along low public transportation corridors may provide the increases needed to attract more riders and funding for financially sustainable and efficient services.

More money must be found to provide public transportation for a growing population. Greyhound ceased service to East Kern in summer 2001, and public transportation from East Kern to Bakersfield had to be provided by Kern Regional Transit in conjunction with the cities of California City and Ridgecrest. Public transportation will take a prominent place in future planning. Continual innovation will be necessary to accommodate operational stability. Funding revenues will continue to dictate the type of experience public transportation users will have, whether it's efficiency or increased delays.

Existing Public Transportation Funding

Kern Council of Governments' 2000 Regional Transportation Plan provides a list of funded transit capital improvement projects and a list of projects that have no identified funding. Funded projects total $171 million for the years 1998 to 2018, while the total for unfunded projects is $43 million. According to a Five-Year Service Plan for Golden Empire Transit, the federal government appears to be committed to providing capital assistance. However, there are insufficient funds to operate the public transportation services necessary to respond to an annual increase in public demand, inflation, and public policy. Federal and state dollars for public transportation come in the form of:

- **Congestion Mitigation Air Quality Program (CMAQ)**

CMAQ money may be used for transit capital improvement projects. CMAQ funds have several criteria that control acceptable expenditures. Projects must show air quality improvements and may not be used for single occupancy vehicle lanes or maintenance.

- **Elderly and Persons with Disabilities Program (Section 5310)**

This program provides capital grants that assist private non-profit corporations and, under certain circumstances, public agencies in providing transportation services to meet the needs of elderly persons and persons with disabilities for whom public mass transportation services are otherwise unavailable, insufficient, or inappropriate.

- **Non-Urbanized Area Formula Program (Section 5311)**

The program provides federal funds to public transportation operators in non-urbanized areas for capital and operating assistance projects. Projects are funded through agreements between public transportation operators and the State. California receives annual apportionments from the Federal Transit Administration. All Kern County public transportation operators except GET and the Consolidated Transportation Service Agency are eligible.

- **Transportation Development Act (TDA), Article 4**

TDA funding flows through two revenue streams created and administered by the regional transportation planning agency (Kern COG) and the county auditor-controller. The first stream is financed through a quarter cent on the statewide retail sales tax and is channeled back to the source region through the Local Transportation Fund (LTF) on the basis of population. The second stream is financed by state appropriations from a portion of the statewide sales tax on gasoline and diesel fuel, and is channeled by prescribed formula through the State Transit Assistance Fund (STAF). The LTF is used for public transportation planning and public transportation program support. The STAF funds transit capital and operators. GET, the County of Kern and the eleven incorporated Kern cities are eligible.

- **Urbanized Area Formula Program (Section 5307)**

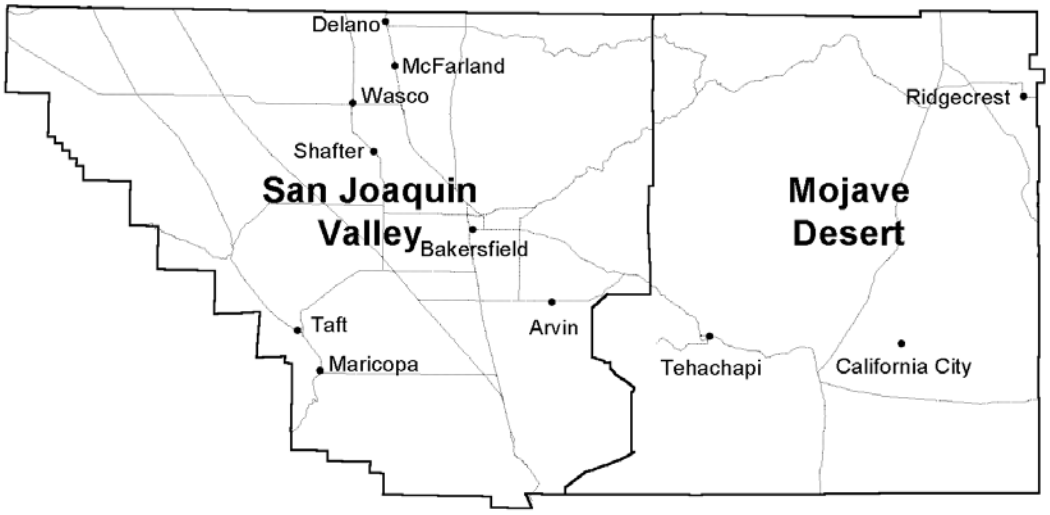
Golden Empire Transit District is the local designated recipient in Kern for this program, which provides for transit capital and operating assistance.

Chapter VI: Air Quality Issues

Introduction

In November 2001, the Federal Environmental Protection Agency (EPA) reclassified the San Joaquin Valley Air Basin, also known as the Valley, from "serious" to "severe" for failing to meet minimum standards related to ozone levels. Regionally, the county is divided into two air basins, characterized geographically by the San Joaquin Valley and the Mojave Desert.

Figure 10: Kern County Air Basins



This redesignation comes with a potentially steep penalty: Either the San Joaquin Valley Air Pollution Control District submits a plan by May 2002 that demonstrates its ability and intent to attain the minimum standards, or it will face a ticking sanctions clock that could freeze all federal funding for transportation purposes by 2005, other than for those projects with a demonstrable air quality benefit.

In addition to the challenge of meeting federal regulations, the Air District is also potentially subject to lawsuits from environmental groups monitoring progress toward air quality goals. This vulnerability to litigation is also a significant driver in the District's attempts to comply with minimum ozone standards. The conundrum facing local agencies is that while a freeze on transportation funding for a full five-year planning cycle would certainly lead to slower project development, the cost of complying with the regulations is also expensive.

Reasonably Available Transportation Control Measures

Included in the Valley's Severe Area Ozone Plan is a list of all reasonably available transportation control measures (TCMs) for the Valley, totaling more than 130. Each of the eight San Joaquin Valley Councils of Governments is developing TCM lists for transportation-related ozone emission sources.

The Kern COG Board of Directors alone has agreed to spend $750,000 from July 2004 through June 2007 on measures that would promote ridesharing, public transportation use, vanpooling and other ozone-saving concepts. In addition, managers and planners with the eight incorporated Kern County cities in the Valley have agreed to either implement new, or expand upon existing TCMs. Other Valley COGs have committed to similar schedules. The TCMs are divided into categories designated by federal code. Example categories and their corresponding measures are provided in the table below.

Table 8: Example Transportation Control Measures

Public Transportation	Express bus program; public transportation access to airports; diesel-powered bus particulate trap program; expand existing public transportation system; Intelligent Transportation Systems application to public transportation systems
Roadway Improvements	High-occupancy Vehicle (HOV) lanes; arterial bus and carpool lanes
Employer-Based Management Plans	Purchase vans for vanpools
Traffic-Flow Improvements	Intelligent Transportation System applications to existing transportation corridors; coordinate traffic signal systems; intersection traffic control improvements; bus pullouts for passenger loading; freeway service patrols
Non-Motorized Measures	Bicycle lanes and facilities; pedestrian facilities/overpasses
Alternatives to Transportation	Telecommuting centers at remote locations; teleconferencing centers
Alternative Fuels Program	Natural gas buses; alternative fuel stations; heavy-duty vehicle fleet conversions

Nevertheless, total mobile emissions equate to only about 40 percent of the 300 tons of ozone that the Air District is being asked to reduce. Preliminary reports to the District indicate that the Valley will not be able to show enough improvement before the deadline to avoid sanctions. Already, the District is considering a voluntary request for yet another "bump-up" in its designation – from severe to extreme – which would buy it more time to develop an ozone plan that actually shows attainment, but would also require demonstrable savings earlier.

Sanction Specifics

Should the EPA impose sanctions on the San Joaquin Valley, the penalty will prohibit the U.S. Department of Transportation from approving or funding all but a few types of transportation projects. The funding halt applies to the following major programs:

- Surface Transportation Program (STP)
- Congestion Mitigation and Air Quality Program (CMAQ)
- National Highway System
- Interstate maintenance
- Bridges
- Interstate construction
- Interstate substitution

Exemptions to the highway sanctions include projects that do not promote single occupancy vehicles and those that are safety-related. Other projects that are public transportation-related; CMAQ-funded TCMs; and certain SHOPP initiatives may also be exempt. However, funding for road rehabilitation, where safety issues are not a factor, would be subject to the sanctions.

Air Quality Costs and Benefits

To date, a comprehensive cost/benefit analysis of the TCMs proposed by the EPA has not been conducted because of the inconsistent application of each measure throughout the Valley. Nevertheless, Kern COG has estimated the costs and benefits for those measures funded through CMAQ dollars as well as a sampling of the measures recently adopted by the Kern COG Board for that agency to implement.

The CMAQ ozone emissions savings estimates for projects that are already programmed, and included in the currently used TCM list, provides approximately ½ ton of savings per day. An estimated $4 million will be spent on those measures and projects between 2000 and 2005.

Kern COG's recently allocated $750,000 will pay for three measures between June 2004 and July 2007. While the estimated benefit depends largely on implementation levels, the range is expected to be less than .1 ton per day in savings for a total reduction in transportation-related emissions of less than one percent. The San Joaquin Valley Unified Air Pollution Control District has indicated that ozone emissions must be reduced by approximately 30 percent – or 300 tons – between mobile and non-mobile sources to bring the Valley into compliance with federal air quality regulations.

What's Next for Air Quality

Ozone attainment standards have quickly become one of the most significant issues facing Valley transportation agencies, cities and counties. A quick glance suggests the situation is hopeless: On one hand, sanctions would result in a federal funding freeze for a five-year planning cycle. On the other hand, avoiding the sanctions means spending significant amounts of money for apparently negligible benefit.

Nevertheless, the roughly $90 million generated by a potential half-cent sales tax between 2002 and 2005 could be used to purchase additional TCMs, if not strictly for the benefit derived, then at least for the good will $90 million would purchase as a faithful effort at improving air quality. Conversely, money generated from a "self-help" sales tax would not be vulnerable to federal sanctions, and could be used to leverage matching funds from the state for transportation projects otherwise financed by federal dollars, should they be lost during a sanctions period.

The only certain things in the air quality debate is that a solution comes neither cheap nor easily and that the issue will be with the Valley for a long, long time. Deciding on what approach to take is a fairly simple proposition compared to determining the impact of that decision. Only time will allow us to understand those implications.

Chapter VII: Other County Tax Measures

Countywide special sales taxes, passed with the intent of supplementing state and federal transportation/transit funding for local maintenance and capital projects, have become ubiquitous throughout California. Estimates indicate that 85 percent of the state's population resides in regions where voters themselves have imposed special taxes specifically for transportation purposes, also known as "self-help" counties. In the San Joaquin Valley alone, Fresno, Madera and San Joaquin counties all have such measures, resulting in hundreds of millions of dollars in additional revenues at local discretion.

Figure 11: Self-Help Counties

Self-help counties shaded

Currently Kern County is the largest populated county in California not to have a "self-help" measure. The map illustrates those counties whose voters have endorsed some type of self-help tax measure for transportation purposes.

While many of these measures were approved by voters prior to a court ruling that established a two-thirds majority for passage, at least one county – Santa Clara – succeeded in achieving the same goal through a general sales tax linked conceptually to a specific list of transportation projects. The following is a breakdown of what several other counties have accomplished with the revenues generated from their sales tax initiatives, how they passed them, and how they intend to maintain voter interest in transportation projects.

Table 9: Approved County Transportation Sales Taxes in California

County	Date Approved	County	Date Approved
San Benito	1988	San Bernardino	1989
Madera	1990	Santa Barbara	1989
Fresno	1986	San Francisco	1990
Sacramento	1988	Orange	1990
San Diego	1987	San Joaquin	1990
San Mateo	1988	Los Angeles	1981/1991
Contra Costa	1988	Santa Clara	1997
Riverside	1989	Alameda	2000
Imperial	1989		

Source: Transportation For California's Future: Facts About Transportation Requirements and Funding in the Golden State (Los Angeles' sales tax totals one cent.)

Fresno County

- Enacted in 1988, Fresno County's ½-cent sales tax measure was anticipated to bring in approximately $686.3 million during its 20-year life.
- The Fresno County Transportation Authority administers the proceeds, with 25 percent ($171.6 million) going directly to cities and the county for local transportation purposes.
- The remainder, $514.7 million, is made available to use with other federal, state and local revenues to finance state highway capital improvements throughout Fresno County.
- Highway funds are further split, with 30 percent, or $154.4 million going to rural projects and 70 percent ($360.3 million) for urban highways.
- To date, more than 500 lane miles of freeway, highway and expressway have been environmentally cleared.
- In addition, more than $865 million in projects were under construction, awarded or completed by July 2001.
- Eight years before the sales tax is due to expire, 85 percent of the urban program envisioned has been delivered, as well as 62 percent of the rural program.
- Estimates suggest that Measure C construction on the Fresno-Clovis highway system will result in more than 14,000 jobs, and an increase of more than $1 billion in local business income, $318 million in personal income and net government revenues of more than $5.7 million.
- Fresno County has launched a significant public relations campaign aimed at getting voters to reauthorize the measure in 2002 for a full 30 years. Although special legislation was required to place a 30-year extension on the ballot (the normal period is 20 years) Fresno has again concentrated its efforts on accountability by tying the proposal to a specific, clearly defined expenditure plan so voters can easily see what they'll be getting for their money.
- A transportation survey involving 600 registered voters revealed that 77% would likely endorse an extension aimed at the November 2002 ballot. (The Fresno Bee)

Madera County

- In April 1990, Madera County voters approved Measure A by a 62 percent majority. The ½-cent sales tax increase was approved for a 15-year period and was projected to yield $63 million over its lifetime.
- In 2000, the tax garnered about $4 million for transportation purposes. It is estimated to gross $5 million in 2001.
- The money is used exclusively for streets and roads, with projects nominated by member agencies and accepted by the Madera County Transportation Authority. Projects are prioritized first upon highway safety and congestion relief.
- So far, $1,847,345 has been allocated for projects in Chowchilla, $7,330,354 for projects in Madera and $17,028,321 for County projects.
- Measure A sunsets in 2005. The Authority will attempt a 20-year renewal in 2002, and is in the beginning stages of developing an expenditure plan. Public transportation, along with bicycle and pedestrian projects may be added for the renewal.

San Joaquin County

- Approved in 1991, San Joaquin COG's ½-cent sales tax was estimated to earn $735 million (or $400 million in 1990 constant dollars) over its 20-year lifetime.
- Of the revenue assumptions, 35 percent, or $140 million, is designated for local street repairs; 25 percent, or $100 million, to congestion relief projects; 32.5 percent, or $130 million for passenger rail and bus service; and 7.5 percent or $30 million for railroad crossing safety projects.
- While renewal has been a topic among SJCOG staff, no work has begun on any campaign effort.

Santa Clara County

- Santa Clara County voters approved a ½-cent sales tax under Measure A-B that began on April 1, 1997 and is scheduled to end in March 2006. Measure A-B was unique in that it combined a voter-approved list of transportation projects (Measure A) with a ballot initiative for a general ½-cent sales tax (Measure B).
- By placing a general tax on the ballot rather than a special tax for transportation purposes, that required a 2/3 majority vote, the measures only required a simple majority. Such a strategy, however, did leave

itself open to opponents' charges that the money raised was not necessarily earmarked for transportation purposes since it was a general, rather than a special sales tax. To counter this criticism, the authority immediately sold bonds to protect the revenues for transportation purposes.

- According to the Santa Clara County Counsel's office, Measure B was anticipated to cost the average resident $32 a year and raise $1.6 billion over its nine-year lifetime.

San Bernardino County

San Bernardino's ½-cent sales tax, Measure I, was approved by 57 percent of voters in November 1989 and was estimated to raise $1.6 billion over its 20-year lifetime. In the ten years since it took effect, it has provided an additional $740 million for transportation projects in San Bernardino County. To raise the measure's public awareness, San Bernardino Associated Governments developed a seven-point program establishing specific, measurable objectives along the way. The seven-point process included:

- Developing a logo and incorporating it into SANBAG materials;
- Defining a target audience, developing key messages for each group and creating strategies for disseminating messages to each audience;
- Preparing printed materials;
- Creation of a speaker's bureau to contact service clubs, city councils, chambers of commerce, etc. to build support;
- Incorporating Measure I messages into "Transportation Talk" videos and producing the video for use by the speaker's bureau;
- Providing the logo to other jurisdictions and expand signage;
- Using existing public information sources, such as quarterly newsletters, pitching stories to the media, etc.
- Measure I was unique in its approach to identifying projects. The region was divided into sub-regions with separate and unique expenditure plans. This approach allowed each sub-region to address individual transportation issues.

CHAPTER VIII: POTENTIAL SOURCES OF REVENUE

Sales Taxes: Countywide

Under California's Public Utilities Code Division 19, Section 180050, et seq., a designated Local Transportation Authority is authorized to call for a special sales tax for transportation purposes and have it placed on the ballot. Specifically, the Code states that:

- A countywide retail transactions and use tax ordinance may be imposed by a designated county transportation authority if approved by a two-thirds vote of the authority and two-thirds of electors, provided a transportation expenditure plan is adopted.

- The special tax, if approved, shall sunset after no more than 20 years, but may be continued using the same process through which it was originally adopted.

- The tax rate may be imposed in ¼-percent increments and shall not exceed 1 percent. The transportation authority will be responsible for stating the nature of the tax, providing the tax rate, specifying the time period over which the tax will be implemented, and the purposes for which the money will be used.

- Funds generated from the tax may be spent on the construction and improvements of state highways; the operation, maintenance or construction of local roads, streets and highways; and the operation, maintenance or construction of public transportation systems.

In 1988, Kern COG was appointed as the Local Transportation Authority in Kern County. Kern COG estimates that a countywide sales tax would generate the following revenues depending on the percentage increase and duration of the measure. The totals listed below assume a tax beginning in 2001 in millions.

Sales Tax	¼-cent	½-cent	1-cent
10-year:	$223.8	$447.6	$895.2
20-year:	$465.8	$931.6	$1,863.2
30-year:	$777.3	$1,554.6	$3,109.2

Sales Tax: Transportation District(s)

There is no provision in state law for a "local" sales tax to be implemented on less than a countywide basis. However, special legislation authored and carried by a local legislator could pave the way for one of two "targeted" taxes intended to serve only the specific constituencies that have approved them.

Similarly, current law disallows special, local sales tax provisions from going beyond a 20-year time limit without returning to the voters for an extension by ballot measure. The Council of Fresno County Governments is today lobbying for special legislation to extend that time limit to 30 years. Again, even if allowed under new legislation, such a measure would first have to be approved by local voters before becoming law.

Sales Tax: Metro Area Only

One potential option for a less-than-countywide sales tax would be to target the metro Bakersfield area only. The following numbers, in millions, represent the amount a ¼-cent, ½-cent and full cent special sales tax could be expected to generate over a 10, 20 and 30-year period based on 2030 population projections:

Sales Tax	¼-cent	½-cent	1-cent
10-year:	$150.3	$300.7	$601.5
20-year:	$309.7	$619.5	$1,200.0
30-year:	$492.2	$984.4	$1,900.0

In 2001, the City of Bakersfield estimates its road maintenance expenditures at $6 million per year, including money paid for street light upkeep and electricity. The city further estimates its list of backlogged maintenance projects at $80 million – an amount that continues to grow at an estimated $9 million a year. To ideally maintain Bakersfield's transportation system year-to-year, the City's Public Works estimates it would need $15 million annually. The County of Kern's metropolitan area backlog estimate is $40 million, which is separate from the City of Bakersfield backlog. These figures do not include the group of projects identified in the Bakersfield System Plan (2001), projected at $1.6 billion. Such a measure would not include funding for Kern County's ten other incorporated cities and rural communities.

Sales Tax: Multiple-District

Special legislation could theoretically provide for multiple transportation districts within the same county. Using specific boundaries, voters in areas as geographically disparate as the San Joaquin Air Basin and the Mojave Air Basin (East Kern) may be able to approve a sales tax increase as separate transportation districts with separate boards.

The best example of a precedent for this scenario, according to the Kern County Counsel's office, comes from section 60000, et seq., of the California Public Utilities Code, which establishes the Yolo County Transportation District. That section spells out the specific duties, number of board members, limitations and powers of the district. While, in Yolo County's case, the district happens to be countywide, the County Counsel has indicated that needn't necessarily be the case. Any established district, however, would be required to have identifiable and contiguous boundaries. Were such a sales tax to pass in the two jurisdictions or districts mentioned above, the revenue stream would look like this (in millions):

San Joaquin Valley Air Basin	¼-cent	½-cent	1-cent
10-year:	$194.71	$389.42	$778.83
20-year:	$405.25	$810.49	$1,620.98
30-year:	$676.25	$1,352.50	$2,705.00

East Kern	¼-cent	½-cent	1-cent
10-year:	$29.10	$58.19	$116.38
20-year:	$60.55	$121.11	$242.22
30-year:	$101.05	$202.10	$404.20

Countywide Parcel-Based Tax

California cities and counties have the authority to place an initiative on the ballot for a parcel tax increase for transportation purposes with approval of two-thirds of the voters. The parcel tax is typically used by the jurisdiction as the security for issuing general obligation bonds. Assuming a growth rate of approximately 3,000 new parcels each year, the following revenue estimates, in millions, are projected under this scenario:

Parcel Tax	$10 per parcel	$25 per parcel	$50 per parcel	$100 per parcel	$150 per parcel
10-year:	$36.73	$91.84	$183.60	$367.30	$551.00
20-year:	$79.37	$210.00	$420.00	$840.00	$1,190.00
30-year:	$128.80	$322.10	$644.30	$1,200.00	$1,930.00

Gasoline Tax

California counties have the authority to place an initiative on the ballot for voters to authorize a local fuel tax for transportation purposes. A countywide gas tax also requires two-thirds voter approval. This funding measure has not been successfully implemented in California since the two-thirds majority rule took effect. Assuming a rate of 3, 6 or 9 cents per gallon, revenue projections for a gas tax would look like this (in millions):

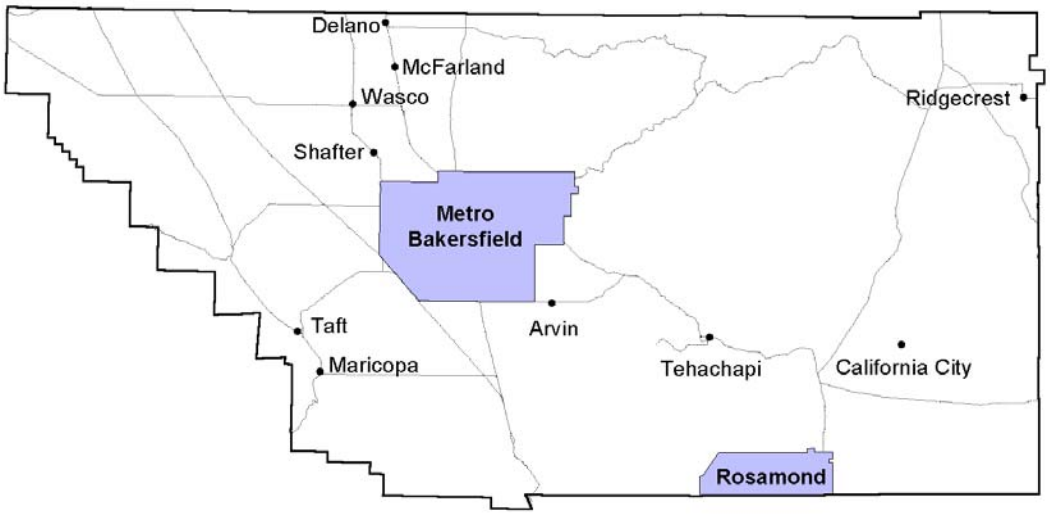
Gas Tax	$.03 per gallon	$.06 per gallon	$.09 per gallon
10-year:	$111.20	$222.50	$333.70
20-year:	$305.10	$610.30	$978.80
30-year:	$639.40	$1,200.00	$1,900.00

The 7.8-cent gas tax would be estimated to generate the same revenue as a countywide ½-cent sales tax over a 20-year period.

Regional Impact Fee

Impact fees are already levied on new development within the metropolitan Bakersfield area and in unincorporated Rosamond. These areas are illustrated in Figure 10 on the next page. The impact fee programs are estimated to generate $200 million over 20 years. The impact fee option would involve an expanded program for regional transportation projects with a uniform rate applied throughout the county.

Figure 12: Regional Impact Fee Areas



The metropolitan Bakersfield area charges $2,197 for a single-family dwelling, and between $35 and $87 per average daily traffic trip (ADT) for light/heavy service industrial, office commercial and retail commercial developments, depending on square footage and ADT. In Rosamond, developers are charged $1,461 for a single-family dwelling and between $25 and $87 for non-residential commercial industrial, office or retail units, depending on ADT and square footage.

Under the regional impact fee scenario, new commercial developments in Kern County would have to be assessed $16.22 per square foot to equal the revenue generated from a 20-year, countywide ½-cent sales tax. That fee would increase to $16.53 per square foot to equal a 30-year sales tax. For residential construction, a $6,304 fee per housing unit would equal the revenue from a 20-year, countywide ½-cent sales tax. That figure would jump to $6,684 per residential unit to equal a 30-year ½-cent sales tax. Were a regional impact fee to be implemented, metro Bakersfield and Rosamond would no longer pay their current schedules.

Regional Impact Fee	**New Commercial Developments**		**Residential Construction**	
	$16.22 sq ft.	**$16.53 sq ft.**	**$6,304/unit**	**$6,684/unit**
10-year:	$412.7	$371.2	$375.0	$443.1
20-year:	$931.6	$881.1	$811.3	$963.7
30-year:	$639.4	$1,554.0	$1,466.0	$1,554.6

Vehicle License Fee

The Vehicle License Fee (VLF) is currently an annual 2% fee based on a registered vehicle's current estimated value. The VLF is paid on top of other vehicle taxes – registration, weight and sales taxes. Cities and counties receive about 5% of their revenues from the VLF. The following table gives the 2001 apportionment of VLF by city and county. The way these discretionary funds are spent varies, but many local cities and counties use them to pay for police and fire services.

Vehicle License Fee	**Apportionment of VLF by City and County**			
	Kern County	$65,124,817	McFarland	$521,537
	Arvin	$702,540	Ridgecrest	$1,351,669
	Bakersfield	$13,396,687	Shafter	$690,611
	California City	$454,677	Taft	$594,144
	Delano	$2,105,235	Tehachapi	$594,144
	Maricopa	$60,244	Wasco	$1,152,988

Source: State Senator Charles Poochigian

Chapter IX: Conclusion

The one certainty of any road system is this: As more vehicles are added to the roadways, newer facilities become a greater priority while older roads continue to deteriorate.

- *Will more vehicles in our existing network of roads hinder traffic flow?* Yes, there will be congestion if measures are not taken to divert such conditions.

- *Will roads continue to become deteriorated and even closed off because of rehabilitation needs?* Yes, if there is an insufficient amount of money for repair.

- *What is the best way to pursue a solution to the already dire state of affairs?* The region must decide what methods effectively benefit the transportation system. Consideration must be given to all ideas that will adequately meet the demands of those who work and play by way of transportation.

- *Will the necessary revenue be there when needed, or will the shortfall continue to increase, and inhibit the potential for innovation, enhancements, and services?* If new sources of revenue in Kern County are not found, then the road system will not be sufficient to serve the community.

Industry experts have shown that deferring roadway maintenance may increase final repair costs five-fold over original estimates.

- Delaying major maintenance in Kern County can make a $100,000 per mile overlay look inexpensive when juxtaposed against a $350,000 to $500,000 per mile reconstruction project at a later date.

- The costs associated with any transportation project are only estimates provided at that time. Every day a project is postponed there is the potential that estimates may increase due to extended labor, material/equipment and planning costs.

- Public needs cannot be met if traffic grinds to a halt. Emergency services, safety patrols, labor, agriculture and other aspects of our society cannot function at their full potential.

Existing revenue streams are simply not keeping pace with growing transportation demands. Alternative funding sources are available if the public is ready to approve measures that would generate revenue for transportation-related activity.

While even the nearly $1 billion that could be generated from a ½-cent sales tax cannot solve all of Kern County's problems, the funding would go a long way toward fixing a transportation system that is quickly deteriorating beyond repair. This formula has worked successfully in many other regions.

- At least 15 other agencies have demonstrated that their transportation projects were essential and have gone through the hurdles of getting measures approved.
- Through the additional funding, projects have been completed at a time when they would not normally have even begun.
- Much-needed jobs have been created.
- The community has become aware of transportation issues that are now discussed in forums, publications, and interviews.

A p p e n d i c e s

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Description

APPENDIX A

Candidate Capital Improvement List of Projects

Candidate Capital Improvement List of Projects

This appendix is comprised of the comprehensive list of candidate projects that have no funding commitments. The cost estimates are 1998 figures. In essence, if evaluated today the estimates have increased due to inflation alone, not to mention other factors as well. The list of projects may not be funded in the near future and new projects continue to be introduced.

Project	Cost Estimate
SR 14 - postmile 45.9/57.5 - near Inyokern from 0.8 miles north of Redrock/Inyokern Road to 0.3 miles south of Route 178 - widen from two to four lanes	$24,000,000
SR 33 - postmile 11.5/17.5 - from Maricopa at Welch Street to Taft at Wood Street - widen from two to four lanes	$7,000,000
SR 33 - postmile 19.3/20.3 - in Taft from 0.2 miles west of 10th Street to 1.2 miles west of 10th Street - widen from two to four lanes	$5,000,000
SR 33 - postmile 20.3/23.3 - in Taft from 1.2 miles west of 10th Street to Midway Road - widen from two to four lanes	$7,000,000
SR 43 - postmile 12.2/16.4 - near Shafter from 7th Standard Road to Euclid Avenue - widen from two to four lanes	$9,600,000
SR 46 - postmile 57.4 - near Wasco at SR 46/99 interchange - interchange and bridge work to realign	$10,650,000
SR 46 -postmile 32.5/46.0 - near Wasco from Jumper Avenue to I-5 - widen from two to four lanes	$8,300,000
SR 46 - postmile 51.2/57.8 - near Wasco from SR 43 north to SR 99 - widen from two to four lanes	$8,300,000
SR 58 - postmile 40.0/45.0 - west of Bakersfield on Rosedale Highway from SR 43 to Renfro Road - widen from two to four lanes	$14,400,000
SR 58 - postmile 31.0/40.0 - west of Bakersfield on Rosedale Highway from SR 43 to I-5 - widen from two to four lanes	$18,000,000
SR 58 - postmile 52.3/55.4 - in Bakersfield from SR 99 to Cottonwood Road - widen from four to six lanes	$24,000,000
SR 58 - postmile R126.6/R128.8 - south of California City from 1 mile west of California City Blvd. to 1 mile east of California City Blvd. - construct interchange	$7,200,000
SR 65 - postmile 0.2/25.2 - north of Bakersfield from 7th Standard Rd. to county line - widen from two to four lanes	$60,000,000
SR 99 - postmile 54.5/57.6 - in Delano from Woollomes Avenue to county line road - upgrade ramps	$6,500,000
SR 119 - postmile 0.0/6.2 - in Taft from SR 33 to Cherry Avenue - widen from two to four lanes	$9,900,000
SR 119 - postmile R13.32/20.1 - near Taft from Tupman Road to I-5 - widen from two to four lanes	$9,900,000
SR 155 - postmile R0.0/R0.52 - in Delano from SR 99 to Madison Street - widen from two to four lanes conventional highway including SR 99 bridge widening	$7,200,000
SR 155 - postmile R0.52/R0.97 - in Delano from Madison Street to Randolph Street - widen from two to four lanes conventional highway and separation of grade at railroad	$7,200,000
SR 155 - postmile R0.9/R1.46 - in Delano from Randolph Street to Browning Road - widen from two to four lanes conventional highway	$7,200,000
SR 166 - postmile 4.98 - in Maricopa at Basic School Road intersection - reconstruct (elevate) grade due to flood hazard	$240,000
SR 166 - postmile 0.00/0.04 - in Maricopa at the intersection of SR 33 and Route 166 - upgrade stop sign with flashing warning lights	$150,000

Candidate Capital Improvement List of Projects

Project	Cost Estimate
SR 184 - postmile 4.05/10.0 - near Arvin from Panama Lane to SR 178 - widen from two to four lanes	$10,300,000
SR 223 - postmile R10.15/R16.01 - near Arvin from Route 184 to Route 99 - widen from two to four lanes	$10,000,000
SR 223 - postmile R16.01/R20.15 - near Arvin from Comanche Road to SR 184 - widen from two to four lanes	$8,500,000
SR 223 - postmile 21.38/25.13 - near Arvin from east city limits of Arvin east 4.25 miles east - widen from two to four lanes	$7,000,000
SR 223 - postmile 25.64/31.92 - near Arvin from 4.25 miles east of eastern city limits of Arvin to SR 58 - widen from two to four lanes	$9,100,000
SR 395 - postmile 0.0/7.0 - near Johannesburg from San Bernardino county line to 1 mile south of Searles Road - widen from two to four lanes	$11,000,000
SR 395 - postmile 7.0/11.2 - near Ridgecrest (9 miles) north of Johannesburg) from 1.25 miles south of Searles Road to 0.4 miles south of Randsburg Road - widen from two to four lanes	$6,300,000
SR 395 - postmile 11.2/R15.2 - near Ridgecrest from Johannesburg 15 miles north of Johannesburg at Business 395 turnoff - widen from two to four lanes	$6,300,000
SR 395 - postmile R15.2/R23.0 - south of Inyokern from South China Lake Blvd. to SR 178 - widen from two to four lanes	$25,160,000
SR 395 - postmile 23.0/29.4 - near Inyokern from Route 178 to Route 14 junction - widen from two to four lanes	$12,000,000
East of Bakersfield on Wheeler Ridge Road from I-5 to SR 223 (16 miles) - widen from two to four lanes	$32,000,000
Near Delano on Garces Highway - upgrade Garces Highway to state highway - widen from two to four lanes (phase 3 2 mile segment)	$8,000,000
Near Delano on Garces Highway - upgrade Garces Highway to state highway - widen from two to four lanes (phase 5 2 mile segment)	$8,000,000
Near Delano on Garces Highway - upgrade Garces Highway to state highway and widen from two to four lanes	$8,000,000
In Delano at Woolomes Avenue interchange - widen bridge from two to four lanes and modify ramps	$7,500,000
In California City on California City Blvd. from SR 14 east six miles - widen from two to four lanes	$10,650,000
Near Delano on Garces Highway from SR 99 (Ellington Street) to Hiett Avenue extension - widen from two to four lanes	$7,400,000
Near Delano upgrade Garces Highway to state highway - widen from two to four lanes (2 mile segment phase 1)	$8,000,000
Near Delano upgrade Garces Highway to state highway - widen from two to four lanes (2 mile segment phase 2)	$8,000,000
In Ridgecrest on Mahan Street from Inyokern Road to South China Lake Blvd. (4.25 miles) widening from two to four lanes and new construction to add four lanes	$4,000,000
In Ridgecrest South China Lake Blvd. (Business 395) from SR 395 to College Heights Blvd. (4.9 miles) - reconstruction including repairs,overlay and shoulder widening	$5,000,000
Near Ridgecrest on Richmond Road from Bowman Road to East Ridgecrest Blvd. (1.0 mile) - reconstruction including widen from two to four lanes	$1,440,000
In Ridgecrest on Bowman Road from China Lake Blvd. to county line road (2 miles) - reconstruct 1 mile to raise grade; add shoulders and drainage structures and widen from two to four lanes	$2,000,000
In the city of Ridgecrest on West Ridgecrest Blvd. from Mahan Street to China Lake Blvd. (1.5 miles) - reconstruction, overlay and widen from two to four lanes	$1,800,000

Candidate Capital Improvement List of Projects

Project	Cost Estimate
In Shafter on 7th Standard Road from Santa Fe Way to SR 43 - widen from two to four lanes	$5,330,000
In Shafter on 7th Standard Road from SR 43 to Palm Avenue - widen from two to four lanes	$9,730,000
In Shafter on 7th Standard Road from Palm Avenue to I-5 - widen from two to four lanes	$9,230,000
In Shafter on Zachary Road from 7th Standard Road to Lerdo Hwy. (four miles) - reconstruct first two miles and widen from two to four lanes; last two miles construct four lanes	$7,280,000
In Shafter on Zachary Road from 7th Standard Road to Lerdo Hwy. - reconstruct first two miles and widen from two to four lanes; new construction for last two miles (construction four lanes)	$1,690,000
In Tehachapi on Red Apple Road - construct new four lane road from Tucker Road to Westwood Street (1.25 miles)	$4,500,000
Near Tehachapi on Tehachapi Willowsprings Road from Rosamond Blvd. to SR 58 (approximately 19 miles) widen from two to four lanes	$60,000,000
TOTAL	**$566,950,000**

APPENDIX B

Kern County Road Maintenance Expenditures

1993 – 1998

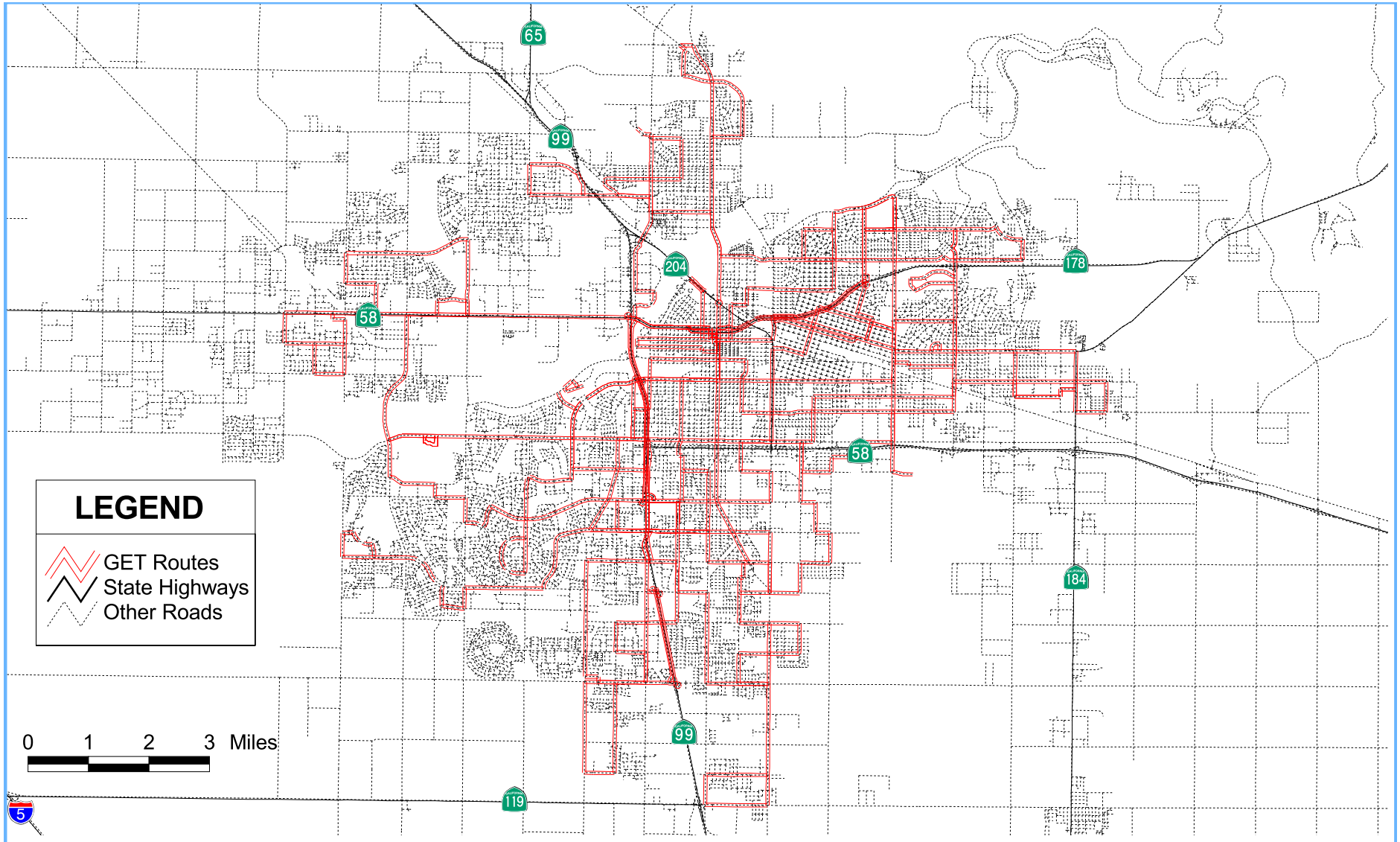
Kern County Road Maintenance Expenditures 1993-1998

Cities	1993-94			1994-95			1995-96			1996-97			1997-98		
	Functional expenditures	General Fund expenditures	Total	Functional expenditures	General Fund expenditures	Total	Functional expenditures	General Fund expenditures	Total	Functional expenditures	General Fund expenditures	Total	Functional expenditures	General Fund expenditures	Total
Arvin	$ 199,243	$ 73,341	$ 272,584	$ 275,422	$ (97,016)	$ 178,406	$ 109,276	$ 295,294	$ 404,570	$ 560,978	$ (95,114)	$ 465,484	$ 601,420	$ 30,875	$ 632,295
Bakersfield	$ 21,462,744	$ (11,038,686)	$ 10,424,058	$ 7,852,840	$ 1,754,834	$ 9,607,674	$ 8,592,897	$ 9,492,154	$ 18,085,051	$ 11,894,280	$ 10,656,113	$ 22,550,393	$ 6,007,938	$ 10,220,617	$ 16,228,555
California City	$ 2,370,868	$ (870,340)	$ 1,500,528	$ 1,409,129	$ 455,420	$ 1,864,549	$ 311,287	$ 76,103	$ 387,390	$ 313,693	$ 120,560	$ 434,253	$ 773,203	$ 114,208	$ 887,411
Delano	$ 437,733	$ 49,285	$ 487,018	$ 538,609	$ (45,581)	$ 493,028	$ 522,953	$ 514,600	$ 1,037,553	$ 3,441,908	$ (572,544)	$ 2,869,364	$ 1,619,143	$ (608,712)	$ 1,010,431
Maricopa	$ 30,820	$ (5,388)	$ 25,432	$ 28,378	$ 31,171	$ 31,549	$ 32,577	$ 16,930	$ 49,507	$ 39,665	$ 8,377	$ 38,042	$ 31,791	$ 11,884	$ 43,675
McFarland	$ 249,372	$ (38,596)	$ 210,776	$ 279,175	$ 31,592	$ 310,767	$ 259,875	$ 96,017	$ 355,892	$ 344,646	$ 101,703	$ 446,349	$ 290,975	$ 68,083	$ 359,058
Ridgecrest	$ 1,118,316	$ 66,543	$ 1,184,859	$ 771,872	$ 8,133	$ 780,005	$ 1,466,332	$ (19,993)	$ 1,446,339	$ 1,038,879	$ (131,090)	$ 907,789	$ 949,670	$ 716,108	$ 1,665,778
Shafter	$ 387,605	$ 237,507	$ 625,112	$ 313,804	$ 270,817	$ 584,621	$ 441,675	$ 226,516	$ 668,191	$ 496,728	$ 114,156	$ 610,884	$ 913,396	$ 244,116	$ 1,157,512
Taft	$ 248,045	$ 528,067	$ 812,112	$ 701,883	$ 330,953	$ 1,032,836	$ 606,256	$ 162,787	$ 769,043	$ 396,158	$ 471,775	$ 867,933	$ 240,885	$ 319,427	$ 560,312
Tehachapi	$ 334,678	$ 54,674	$ 389,352	$ 515,463	$ 360,974	$ 876,437	$ 530,706	$ 66,090	$ 596,796	$ 322,806	$ 172,688	$ 495,494	$ 2,619,020	$ (2,078,907)	$ 540,113
Wasco	$ 519,270	$ 578,568	$ 1,097,838	$ 750,995	$ 358,008	$ 1,109,003	----------	----------	----------	$ 739,535	$ 150,867	$ 890,402	$ 808,903	$ (191,925)	$ 666,978
Kern County			$ 19,507,058			$ 16,389,909			$ 18,096,797			$ 16,597,357			$ 21,940,686

Sources: Expenditure information taken from "State of California Streets and Roads Annual Report", for 1993-94, 1994-95, 1995-96, 1996-97, 1997-98.

APPENDIX C

Golden Empire Transportation Bakersfield Area



GET
Golden Empire Transit District
A Pollution Solution

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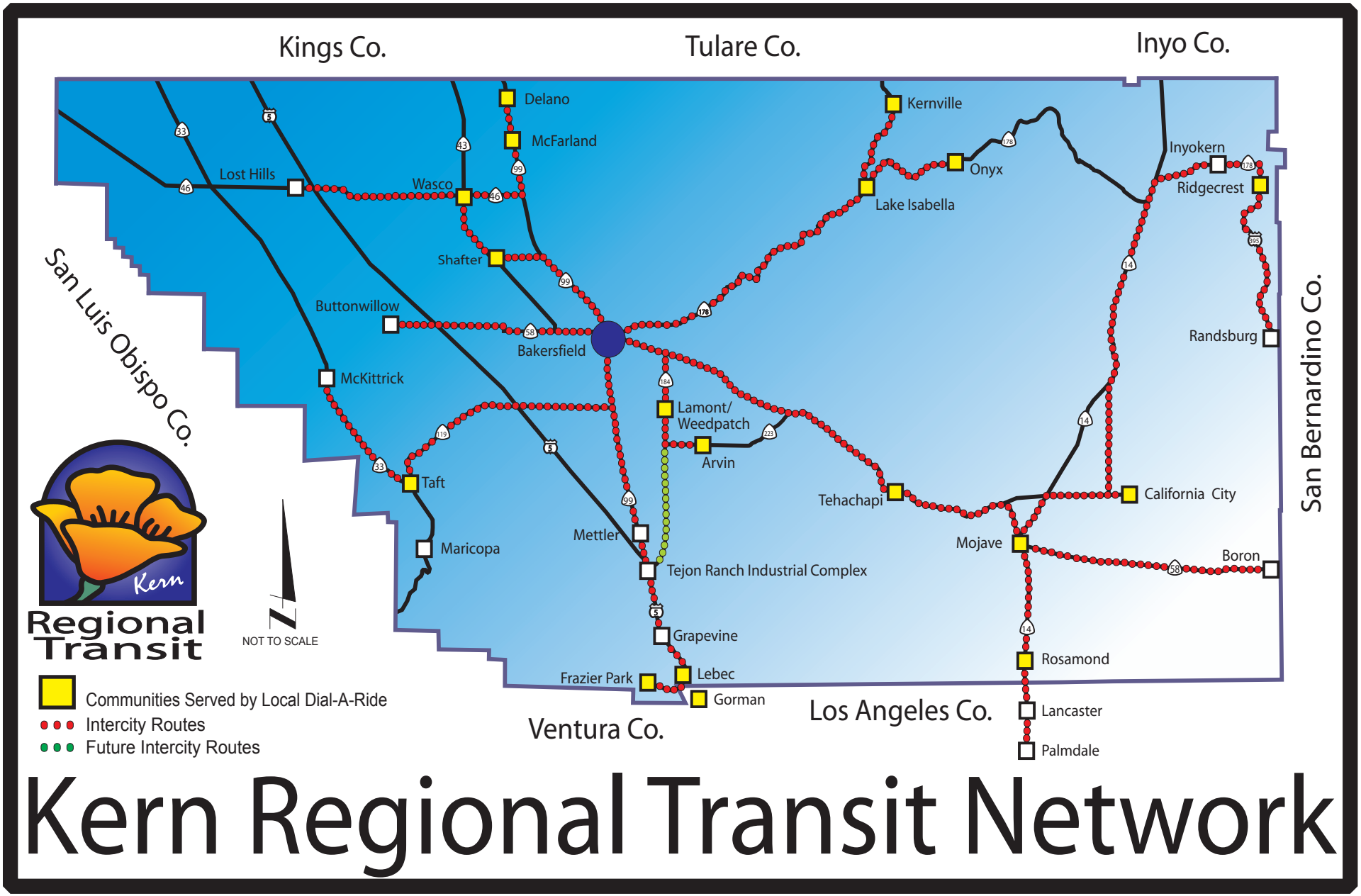
Kern Council of Governments

Golden Empire Transportation Bakersfield Area

APPENDIX D

Kern Regional Transit Network



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