

KERN COUNTY GRADE



B-



B+



C



D+



C+



C-



B



D+



C



About the Grades

Infrastructure is graded based on eight criteria: **capacity, condition, funding, future need, operation and maintenance, public safety, resilience, and innovation.** ASCE grades on the following scale and defines these grades as:



**Exceptional,
Fit for the
Future**



**Good,
Adequate
for Now**



**Mediocre,
Requires
Attention**



**Poor,
At Risk**



**Failing/Critical,
Unfit for Purpose**

5 STEPS WE CAN TAKE

- 1** **Vote no on Proposition 6 in November 2018.** This ensures Senate Bill 1 (SB1), which is an essential source of funding for local agencies to maintain highways, roads, transit systems and bridges, remains intact. Traffic in Bakersfield is significantly better today than 10 years ago because of one-time grant funding. The funding through SB1 will ensure we can maintain that infrastructure for the future.
- 2** **Enhance public transit service.** Kern County has a robust transit system, yet only 1% of the population uses it. Innovation – such as mobile ticketing, free Wi-Fi, and streamlined routes – will help make transit a preferred option for Kern County residents. Increased use of transit reduces our traffic and keeps our air cleaner.
- 3** **Provide consistent and reliable funding for Parks and Recreation agencies.** People in Kern County love their parks year-round. Yet, maintenance staff and budgets are stretched thinner each year. We need to make parks a priority.
- 4** **Construct additional water storage reservoirs.** Water supply and availability are perennial topics in Kern County, but the challenges in having enough water for our growing population will continue to increase. We need to be proactive in working together with other central valley and southern California agencies to permanently solve our regional water problem.
- 5** **Increase revenue for local airports.** Kern County is fortunate to have received \$49 million in grant funding from the Federal Aviation Administration for rehabilitation of runways and taxiways at Meadows Field. Local matching funds are required to obtain grants. There are many other projects that are needed throughout the county to maintain general aviation and commercial service.

About the Southern San Joaquin Branch

Established in 1971, the Southern San Joaquin Branch of the American Society of Civil Engineers (ASCE) comprises all of Kern County, California. Our membership includes approximately 200 licensed civil, geotechnical, and structural engineers who make Kern County home. We are the public officials and private consultants who design and build projects that improve our communities. This Report Card is prepared entirely by volunteers who graded each infrastructure category according to the following eight criteria: capacity, condition, funding, future need, operation and maintenance, public safety, resilience, and innovation.

ASCE represents more than 150,000 members of the civil engineering profession in 177 countries. Founded in 1852, ASCE is the nation's oldest engineering society.

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REPORT CARD FOR KERN COUNTY'S INFRASTRUCTURE

2018

Infrastructure Matters

Kern County is the third largest county in California. The county's 8,161 square miles make it larger than Connecticut and Delaware combined. Approximately 893,000 residents call the region home, and the 11 incorporated cities include Bakersfield, the ninth biggest city in California. Kern is the largest agricultural producing county in the state and the second largest oil producing county in the nation. The region is also home to logistics and manufacturing companies including IKEA, Target, Caterpillar, and Frito-Lay, to name a few.

A well-built and maintained infrastructure network is vital to supporting Kern County's varied industries and growing population. Thanks to major investments over the past 10 years, Kern County's transportation network has increased capacity and improved levels of service, but sustainable funding is needed to maintain these upgraded assets. And while our roads and bridges have benefited from increased investment, some areas of infrastructure, including transit and parks, have been shortchanged by recent budget cycles and must be prioritized going forward.

The 2018 Kern County Report Card is designed to help residents and decision-makers understand the state of our infrastructure and prioritize necessary maintenance and improvements. This Report Card should start the conversation about how we continue to improve our existing roads, bridges, drinking and wastewater pipes, and much more so we can be better prepared for the future.

How You Can Get Involved

- 1** **Get the full story behind this Report Card at www.infrastructurereportcard.org/kerncounty.**
- 2** **Find out the condition of the infrastructure near you on the Save America's Infrastructure app available on iTunes and,**
- 3** **Ask your elected leaders what they're doing to make sure your infrastructure is reliable for the future. Use your zip code to find your list of elected officials at www.infrastructurereportcard.org/take-action.**



2018 KERN COUNTY'S INFRASTRUCTURE REPORT CARD

The 2018 Report Card on Kern County's Infrastructure evaluates 9 infrastructure categories. Of those 9, three infrastructure categories are in good condition, three in mediocre condition and three are in poor condition.

The good news is there are solutions to all these challenges, and we can raise Kern County's infrastructure grades. By learning more today about the conditions of the infrastructure you use every day, you too can help raise the grade.

AVIATION B-

Kern County is home to 12 general aviation airports, a spaceport, and one of only two international airports in the San Joaquin Valley.

Historically Meadows Field, our sole commercial airport, was well funded. Commercial passenger service has decreased since 2006, however, even while Kern County's population has surged. Fewer passengers and fewer flights have reduced revenue. Fortunately, runway and taxiway pavement conditions at Meadows Field are improving thanks to \$49 million in grants from the Federal Aviation Administration. Providing the matching funds to get these grants, however, has stretched the County's Airport Enterprise Fund to its limits. Additional funding will be required in the future to maintain our infrastructure and keep us competitive for grants.

BRIDGES B+

Public agencies in Kern County own a total of 598 bridges, including 47 new bridges built since 2010.

Kern County has beaten the national average, reducing the number of bridges requiring significant repair or upgrades from 9.1% in 2008 to 2.5% in 2016. This tremendous success is due in part to the Thomas Roads Improvement Program (TRIP), which is a cooperative effort between the City of Bakersfield, County of Kern, Caltrans, and the Kern Council of Governments. Working together, these agencies were able to obtain state and federal grants to construct needed improvements. Grants are one-time revenue sources and permanent funding, including revenue from California Senate Bill 1 (SB1), is necessary for local agencies to maintain these facilities into the future. This is especially important as Kern County's bridges continue to age; 53% of bridges in the region have exceeded their original 50-year lifespans and require regular maintenance and upkeep to remain in working condition and ultimately, be replaced.

DRINKING WATER C

There are 330 water distribution systems in Kern County that provide drinking water to the majority of our residents.

What would you do if you turned on the faucet and nothing came out? Most Kern County residents are fortunate enough to never think about that question. The majority of metropolitan Bakersfield is served by large utilities that are proactively maintaining their infrastructure and preparing for the future. Many of the smaller water systems, especially in the rural areas, often lack the economic resources or technical expertise to adequately maintain their infrastructure, let alone plan for the future. This is exacerbated by water supply, as a changing climate and increased regulation has limited the functional capacity of the State Water Project and Central Valley Project. Additional reservoirs are needed to capture runoff when it is available.

PARKS D+

No matter how hot it is outside, Kern County residents love our local parks.

The Trust for Public Land ranked Bakersfield #65 of the nation's 100 largest cities in regard to public parks. This score is better than both Los Angeles (#66) and Fresno (#94), but still far behind many other, smaller urban areas. One of the key reasons for the low score was access; while we have many great parks that you can drive to, very few are within walking distance of residents. Whereas the Kern County General Plan and Metropolitan Bakersfield General Plan both include a goal of 2.5 acres of park per 1,000 residents, the current average is at 1.6 acres per 1,000 residents, once you exclude large regional parks. In addition to access challenges, park and recreation agencies do not typically have dedicated sources of funding, and instead rely on the general fund for operation and maintenance and public safety. As existing revenue sources have remained constant or declined, costs have continued to rise. Ten years ago, a full-time parks employee would have been responsible for 9.2 acres, but today that same employee is responsible for 12.6 acres. Additional staff is needed to maintain the existing level of service, let alone improve it.



RAIL C+

Kern County provides critical freight and passenger connections between the San Joaquin Valley and the rest of the United States.

For nearly 140 years, railroads have been a defining force in Kern County and a critical link to the nation's infrastructure. We are fortunate to have two of the nation's largest railroads, BNSF and Union Pacific, provide service locally. Previous private/public partnerships resulted in capacity improvements for the historic Tehachapi Loop. Billions of dollars in private investments by the railroads in Positive Train Control (PTC) will improve safety through our communities. Passenger rail service is provided by Amtrak on the "San Joaquins" route with service from Bakersfield to both Oakland and Sacramento. The future looks bright with ongoing construction for High-Speed Rail, which will provide rapid service from San Francisco to Bakersfield in the first operating segment. Continued opposition could derail this key infrastructure, however.

ROADS C-

Kern County has 6,400 miles of public roads that serve our growing population and freight volumes.

Public agencies in Kern County have done an exemplary job of constructing regional transportation projects to increase capacity and maintain an acceptable level of service. Much of this success is due to the Thomas Roads Improvement Program (TRIP), as well as Caltrans' State Route widening projects. While capacity has improved, pavement condition on older roads is a concern. Approximately \$375 million is needed to bring Kern County's roads to a good condition. Fortunately, the newly-approved SB1 funding will provide the region with \$35 million in additional funds over the next two years for maintenance projects. However, voters must reject an effort to repeal SB1 in November 2018 by voting No on Prop. 6 in order for Kern to receive this much-needed funding.

SOLID WASTE B

Solid Waste infrastructure in Kern County includes seven active landfills, three special waste facilities, 11 recycling drop-off centers, and four transfer stations.

Kern County has sufficient existing solid waste disposal capacity for the next 50 years and has planned for the needs of the next 100 years. Local jurisdictions are complying with state laws and regulations aimed at reducing solid waste generation and increasing recycling. Available funding is increasing, from \$30 million in 2011 to \$45.5 million in 2016. Tipping fees are \$45 per ton, which is less than the national average of \$50.59 per ton. Because solid waste management requirements become more stringent over time, continued diligence is required to maintain compliance in the future. New technologies that should be further expanded, including Engineered Municipal Solid Waste, which is now helping to fuel the Lehigh Cement Plant in Tehachapi reduce their use of coal. Projects such as this decrease greenhouse gas emissions at the plant while helping to increase diversions of waste to landfills.



TRANSIT D+

Public transit in Kern County consists primarily of buses and vans, owned and operated by local agencies.

One of the largest agencies is Kern Transit, which provides service to the unincorporated communities of Buttonwillow, Lamont, Kern River Valley, Frazier Park, Rosamond, and Mojave. The other is Golden Empire Transit (GET), which serves the metropolitan Bakersfield area, a population of 495,000. These two transit agencies provide routes that reach most population centers in the county, but only 1% of the population commutes by transit, primarily due to high rates of automobile dependency. GET & Kern Transit have invested in fleet upgrades over the last 10 years, but significant funding will be required in the coming years to accommodate potential growths in ridership and to meet anticipated state-wide zero emission requirements. And while Kern Transit ridership is increasing, GET transit is losing customers, and its long-term sustainability may be at risk if low ridership continues to pose a financial hardship.

WASTE WATER C

Kern County is served by 60 permitted wastewater treatment plants with a total treatment capacity of 103 million gallons per day.

Wastewater collection and treatment is self-funded, meaning that the rates set by the utilities need to be adequate for both operation and future investment. The larger agencies are already planning for needed upgrades, but smaller communities, especially those that are economically disadvantaged, have a more difficult time being proactive and often their rates are insufficient to cover future need. State and federal grants help these smaller operators when a failure occurs, but appropriate rates are needed for long-term sustainability.