Smart Choices, Less Traffic

50 Best and Worst Transportation Projects In the United States

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Smart Choices, Less Traffic: 50 Best and Worst Transportation Projects in the United States

Introduction

Each year, America invests more than $200 billion in federal, state, and local tax dollars on transportation infrastructure—bridges and highways, aviation and waterways, public transit and sidewalks.[1] But too often transportation projects undermine the higher national goals of reducing oil consumption, increasing safety, improving public health, and saving local, state or federal government—and citizens—money.

Americans are struggling with the health, climate, and economic costs of our oil-centered transportation system. While new standards that double fuel efficiency of new vehicles to 54.5 mpg by 2025 and cut carbon emissions in half are essential to reducing our dependence on oil and its many consequences, our transportation investments should provide an opportunity to further reduce our dependence on oil, reverse climate disruption, and save money. Because transportation infrastructure lasts for decades, the impacts of transportation investments are felt for many years to come, with huge consequences for America's ability to move beyond oil.

The transportation infrastructure we build today will either keep us stranded in our cars and at the mercy of gas prices—a situation that today drains nearly $1 billion from our economy every day[2] to pay for foreign oil—*or* it can promote transportation choices that reduce our reliance on oil, curb air, water, and climate pollution, boost local economies, and improve transportation equity and public health.

This report is based on a 2002 Sierra Club report called "Smart Choices, Less Traffic." The 50 transportation projects included in this report serve as examples of the "best" and "worst" in transportation investment.

This report shows that Americans can and should expect the dollars we spend on transportation to contribute to solving environmental and economic problems. Smart transportation investments are already providing Americans with transportation options that reduce our dependence on oil, improve air and water quality and public health, and keep more money in local economies. But, old highway spending habits die hard.

Policies that more closely link transportation investments to performance measures such as oil use, fair access to transportation choices, and air quality, will help ensure that America's transportation investments help address the challenges of the 21st century.

Federal Transportation Policy: Why are we making bad investments in the first place?

For the last century, encouraged by federal policy, oil and transportation have gone hand in hand.

Since the 1930s, national transportation policy in the United States has been structured around building a federal highway system that moved private vehicles from one place to another.[3]

Today, with an extensive highway system across the country, the United States is the world's largest consumer of oil, burning more than 18 million barrels of petroleum products a day,[4] with serious consequences for public health, the climate, the environment, national security, and the economy.

Transportation accounts for roughly two-thirds of oil use in the US, and roughly one-third of US greenhouse gas pollution.[5] Americans' personal cars, light trucks and SUVs consume two thirds of the oil used for transportation.[6]

As we've moved into the 21st century, US policy has missed opportunities to modernize our 20th century transportation system that's built around oil.

Today, there is a growing demand for oil-free transportation options.

Americans agree; federal transportation policy should support the development of biking, transit, and pedestrian infrastructure to ensure our roads are safe, convenient, and accessible for all.

- Eighty-two percent of Americans—both urban and rural—feel that "the United States would benefit from an expanded and improved transportation system, such as rail and buses."[7]
- More than 80 percent of Americans support maintaining or increasing federal funding for biking and walking.[8]
- Increasingly, people are choosing to live in walkable, mixed-use communities with transportation choices and recreational opportunities.[9] The Baby Boomer generation is increasingly demanding opportunities for continued independence, which means accessible transportation options.[10] Between 1960 and 2003, the elderly population in the United States more than doubled, increasing 116 percent.[11] Projections show that the steady increase in elderly population growth will continue unabated until at least 2030.[12]
- Eighty percent of Americans now live in metropolitan areas.[13]
- In 2004, vehicle miles traveled peaked and, for the first year since World War II, Americans began driving less.[14]
- By 2011, Americans drove 6% fewer miles per year than they were in 2004.[15]
- One third of Americans don't drive at all.[16]

However, our national transportation policy has failed to keep pace with the growing demand for oil-free transportation choices, leaving too many Americans without the opportunity to move—literally—beyond oil.

US transportation policy is largely getting it wrong. Transit ridership is at record highs—transit use was up for the sixth consecutive quarter since the beginning of 2011.[17] Yet transit systems across the country are forced to cut service and raise fares due to weak public investment at the federal, state, and local levels.[18]

Despite the broad demand for transit, only 54 percent of Americans have access to any kind of public transportation, and the typical job location in a major metropolitan area is accessible by public transportation to only 27 percent of working age adults within a 90 minute commute.[19] Lack of public transportation leaves too many Americans without a way to connect with a paycheck, and leaves too many employers without a way to attract non-driving employees. In both cases, the biggest losers are jobs and economic growth.

Meanwhile, funding for safe bicycling is not keeping up. More Americans are choosing to bicycle for everyday transportation—bike commuting grew 40 percent between 2000 and 2010.[20] Biking and walking account for 12 percent of all trips in the US and 14 percent of road fatalities, but these transportation modes receive only roughly 1.6 percent of federal transportation spending—far less than their fair share.[21]

Though federal transportation policy has made some small steps in the right direction, transportation policy remains stuck in the 20th century. The transportation law Congress passed at the end of June 2012, called MAP-21, failed to include significant steps to address the problem. Notably, the final bill dropped key provisions that would have made streets safer for cyclists and pedestrians, maintained transit commuter benefits at a level equal to parking benefits, and set a national objective for addressing energy consumption in transportation. Though MAP-21 authorizes $105 billion in federal spending for transportation over two years, it spends four times as much on highways as on other modes of transportation.[22]

In many places, local communities are doing what they can to supply non-oil dependent transportation that Americans are demanding in the 21st Century. Examples of these kinds of projects are highlighted in this report. But the report also highlights the many transportation projects, straight out of the 1940s, that perpetuate our reliance on oil.

Transportation Equity

The average American household spends more on transportation than on food, education or healthcare—16 percent of their annual budget.[23] Low-income families spend as much as 55 percent of their household budgets on transportation.[24] The average annual operating cost of a private vehicle is $8,220/year, versus $308/year for a bicycle.[25]

Meanwhile, not every American drives a car. In fact, a third of Americans do not drive at all.[26] By investing nearly all transportation funding on road and highways, our transportation system is failing those who cannot or choose not to drive and saddling those who do drive with high fuel costs.

About the projects in this report

This report highlights 50 examples of transportation projects that demonstrate smart transportation investments versus others that move us in the wrong direction.

Projects included in this report were chosen using an open nominations process in early 2012 and were reviewed and selected by report authors and a review committee.

To be considered for the report, nominations had to be a transportation infrastructure project that was currently in the planning process or recently completed.

Projects were reviewed based on five criteria:

1. Oil use impact
2. Environmental impact
3. Health impact
4. Economic impact
5. Land use impact

The Best and Worst in Transportation Investments: The best projects provide transportation choices that allow Americans to reduce oil use and meet their mobility needs without driving, while the worst projects reinforce an expensive and polluting dependence on oil.

- The best projects facilitate the safe, efficient movement of people, including people with disabilities, elderly, those who rely on public transit, including the third of Americans who don't drive.[27] Examples include the Pinellas County Regional Transit Plan in Florida, the Santa Fe Intermodal Station in Oklahoma, or the Caltrain Electrification project in California.

- The worst transportation projects tend to be vestiges of an outdated vision of America and are narrow in scope, focusing only on moving cars as quickly as possible with little consideration for the communities they pass through. Many of these projects were proposed decades ago when a gallon of gas cost less than a dollar, but were never reconsidered in light of increased gas prices or the increased demand for public transportation options. Examples include the I-69 highway expansion in Indiana (a 142-mile highway expansion first proposed in the 1940s,) or the Outer Beltway in Virginia (first proposed in the 1960s.) Some projects on the worst list actually are built for the express

purpose of fossil fuel development, including the Coalfields Expressway in Virginia and the Foothills West Transportation Access Project in Alaska.

The best projects minimize transportation impacts on the environment, while the worst projects degrade air and water quality.

- **Air Quality and Climate:** Transportation projects that perpetuate oil-dependence and car-centric transportation contribute to climate disruption and dangerous smog pollution, which threatens public health by triggering asthma attacks and other respiratory ailments.[28] Cars, trucks, and buses are the largest source of cancer-causing air pollution in the US, emitting more than 12 billion pounds of toxic chemicals such as nitrogen oxides, hydrocarbons, and particulate matter each year, or almost 50 pounds per person.[29] The Outer Beltway around Washington D.C. will contribute to air pollution in a region already struggling with congestion and poor air quality, while projects like the Salt Lake City Bikeways and the Atlanta Beltline, a network of public parks, multi-use trails and transit by repurposing 22-miles of historic railroad corridors circling downtown Atlanta, will help to improve air quality.

- **Water quality:** Runoff of motor oil, dirt, deposited vehicle exhaust, road particles, tire particles, and automotive fluids contaminate bodies of water. The EPA estimates the amount of oil and grease runoff from roads is on the order of hundreds of thousands of tons annually.[30] Wetlands—nature's water filters—are also under attack. The Environmental Protection Agency estimates that between 1955 and 1980 alone, as many as 310,000 to 570,000 acres of wetland could have been lost to highway construction.[31] Since wetlands can remove up to 90 percent of the pollutants in water, wetlands destruction leads directly to increased water pollution.[32] So projects like the Texas State Highway 45 SW, which would cross 300 aquifer recharge features in its 3.5 mile route, is a double hit to water pollution, contributing pollution while destroying wetlands that could otherwise filter the pollution. The Everglades Skyway, on the other hand, elevates a highway, improving water quality by reconnecting freshwater flows to the Everglades.

The best projects improve public health, while the worst ones threaten and degrade it.

- **Pollution burden:** Twenty percent of Americans live in areas where doctors and scientists say the air is not safe to breathe.[33] Exposure to smog can trigger or cause a range of illnesses and conditions, from asthma to pneumonia.[34] According to EPA, more than half of all cancers that are attributed to outdoor air toxins like benzene, which is found in gasoline, can be traced back to mobile sources such as cars, trucks, and SUVs.[35] Infrastructure projects that allow people to meet their transportation needs without an automobile, like Washington D.C.'s Capital Bikeshare, reduce the transportation pollution burden on public health, while projects that increase car travel in already

polluted areas, like the I-5 highway expansion in California, further threaten public health.

- **Physical activity:** Today, less than half of Americans meet the minimum standard of 30 minutes of moderate intensity activity five days a week recommended by the Surgeon General.[36] There is a strong link between neighborhood design and physical activity.[37] In walkable, bikeable communities with sidewalks, bike lanes, and nearby destinations, twice as many people report getting moderate amounts of exercise compared to those in auto-oriented communities,[38] while according to a 2004 study, the odds of obesity increased by six percent for each additional hour spent in a car each day.[39] Thus, there are enormous public health benefits to projects that create opportunities for people to incorporate physical activity into their daily lives through active transportation like walking or biking, even for short trips. Twenty-five percent of all trips are within a mile of the home, 40 percent of all trips are within two miles of the home, and 50 percent of the working population commutes five miles or less to work.[40] Active transportation is also known to be an effective preventative medicine for cardiovascular disease, cancer, hypertension, depression, and osteoporosis.[41] Projects that improve livability and provide safe, accessible opportunities for active transportation—like the Sheboygan County Non-motorized Transportation Pilot Program in Wisconsin—help to improve the overall health of a community, while projects like I-269, another outer beltway in Memphis, encourages car-centric, sprawling development that discourages active transportation.

- **Road fatalities:** Between 2000 and 2009, more than 47,000 pedestrians were killed in the US.[42] Another 688,000 pedestrians were injured, the equivalent of a pedestrian being struck by a moving vehicle every seven minutes.[43] The majority of these deaths occur along 'arterial' roadways that are dangerous for pedestrians by design—that is, they are engineered for fast-moving automobile traffic with little or no provision for people on foot, in wheelchairs, or on bicycles. Fortunately, most pedestrian injuries and deaths can be prevented by retrofitting existing roads as "complete streets" to accommodate all types of street users and introducing traffic-calming elements.[44] Projects like Chicago's Streets for Cycling 2020 Plan set out to reduce road fatalities and encourage safety.

The best projects create more jobs and boost the local economy, while the worst projects are costly and don't solve problems for the long term.

- **Cost:** Highway projects tend to be extremely expensive, while multimodal projects stretch public dollars. The Trinity River Parkway in Dallas, for example, costs $222 million for a single mile of highway and the Eastern Corridor Highway in Ohio is expected to cost upwards of $100 million per mile for 10 miles of highway. On the other hand, the Cincinnati Streetcar costs $25 million per mile for a four-mile line. Also for the cost of $25 million, Sheboygan County was able to implement a comprehensive bike plan that provides

transportation choices for residents, reduces oil use and air pollution, and improves public health.

- **Induced demand:** The worst transportation infrastructure projects drain resources from local economies, costing billions of tax dollars while failing to solve the problems they intend to fix. Frequently, transportation projects are intended to reduce congestion; however, studies show that building or widening highways only invites more traffic, a phenomenon called "induced demand."[45] Upon the opening of new road capacity, motorists take longer and more frequent trips or switch routes to take advantage of the new capacity, or new drivers are attracted to the development. Often, induced traffic eats up to 50 to 100 percent of the roadway's new capacity within a few years and creates extra traffic on local streets at both ends of the trip.[46] Examples of this kind of project include the Grand Parkway in Texas, the Jefferson Parkway in Colorado, and the Highway 100 Extension in Iowa.

- **Jobs:** According to the latest Texas Transportation Institute congestion report, public transit doesn't just get Americans to work—it puts Americans to work.[47] The public transit industry employs more than 400,000 people, and every dollar invested in public transportation generates approximately four dollars in economic returns.[48] These returns aren't Wall Street dividends or oil company profits—these are salaries that pay mortgages, put kids through college, and take families on vacation. Studies show that investment in transit creates more jobs per dollar invested than does road building.[49] Investment in bike infrastructure has also been shown to create 46 percent more jobs-per-dollar-invested than road building.[50] Job-creating investments in transit and rail include the Southwest Light Rail in Minnesota and the Silver Line in Virginia. Rail projects like the Midwest High Speed Rail project also have huge job-creation potential.

- **Stimulating local economies**: Projects that reinforce oil-based transportation mean more dollars leaving the local economy—each day the US sends as much as one billion dollars overseas to pay for oil.[51] However, projects that promote transportation options, like the New Orleans Streetcar Expansion, serve as an economic boon for local communities. Companies today often choose where they operate based on where they can attract the most talented employees. Improving the livability of a community by pursuing smart growth can be a competitive selling point attracting top talent. Furthermore, when transportation projects allow for street life, outdoor dining, window-shopping, and places to hang out, people are encouraged to spend locally.[52]

Transportation projects can positively or negatively influence land use and development; the best projects reduce sprawl while the worst exacerbate it.

- **Sprawl:** Poorly designed transportation projects result in decentralized, automobile-oriented rather than people-oriented development. Residents of sprawling communities drive three to four times more than those living in

efficient areas that offer more transportation choices.[53] Sprawl is also costly to communities, requiring residents to subsidize public services and over greater areas.[54] In addition, sprawl destroys more than one million acres of parks, farms, and open space each year.[55] Experts estimate that one-fifth of the land area in the United States has been affected by road building,[56] turning parks, open spaces, and farmland into freeways and strip malls. Many projects in this report, including the Northern Corridor Freeway in Utah, I-3 in Georgia, North Carolina, and Tennessee, the Heartland Parkway in Florida, and the South Lawrence Trafficway in Kansas pass through urban parks, nature preserves, cultural heritage sites, open spaces, and valuable farmland.

- Promoting positive development: Hundreds of urban, suburban and rural neighborhoods are using Transit Oriented Development (TOD) to address the problems caused by sprawl. TOD emphasizes creating vibrant, livable communities that are compact, walkable, and centered around transit facilities. Rather than develop open spaces based around new roads, TOD builds on existing development and public services. TOD happens on a smaller-scale, streets tend to be narrower and destinations closer together to facilitate multiple modes of transportation. TOD can also stimulate local economies by spurring private investment around transit stations; Portland's well-known streetcar line attracted $3.5 billion in private investment within three blocks of the line.[57] Importantly, TOD done right must create and maintain affordable housing as a central component of development to ensure that existing residents and those who rely on public transit and are not displaced as the area attracts new investment. The Purple Line in Maryland is one example of a project that encourages transit-centered development in an already urbanized area.

50 Best and Worst Transportation Projects in the US, 2012

Alabama	
 **New Little River Canyon Bridge** Alabama	The new Little River Canyon Bridge replaces the old State Highway 35 Bridge built in 1948. Due to its structural integrity and environmentally-sensitive design, the bridge project serves as a role model for future bridges. The bridge has a fully-developed pedestrian lane featuring three viewing areas with benches overlooking the scenic Little River Canyon and falls. It allows visitors to the National Park Service site to enjoy views from both sides of the river without the need for a vehicle. The new bridge has only one pier set in the middle of the streambed, minimizing impact to the natural flow of the river. Support beams and rebar were manufactured using recycled steel, and recycled asphalt was used to pave the driving surface. Allowing for added pedestrian access and spectacular views of the structure, boardwalks made of recycled plastic bottles have been constructed around and under the bridge. Guardrails from the old bridge were reused as seating for an adjoining outdoor "Sustainability Classroom" at Jacksonville State University's Little River Canyon Center. The bridge was completed two months ahead of time at a cost of $7.6 million.[58]
 **Eastern Bypass** Tuscaloosa	The Eastern Bypass is a 4-lane, 18-mile, $250 million project planned to bisect Hurricane Creek Park. The route will necessitate the construction of 5 bridges as it attempts to cross the Creek's unique M-bend. The bypass is intended to serve freight trucks. However, local residents fear the route will irreversibly damage the public park, displace hundreds of local residents, drastically alter noise and pollution levels, and divide communities. There is also concern over the effects of such a monstrosity on the flow and health of Hurricane Creek. Since the Final Environmental Impact Statement was approved in 1998, the 249-acre park was established to provide a natural outdoor experience for the public and to protect the spectacular M-bend. Turning the creek watershed into a trucking route will impact the residents who use it and cannot afford other forms of recreation. ALDOT held a public forum in March 2012 to announce their plans to pursue this project.[59]

Alaska	
 **Foothills West Transportation Access Project** Umiat	This is a proposed one-lane gravel road that spans 100 miles, crossing untouched wild Arctic landscapes and crossing six major rivers. The purpose of the project is to allow year-round access for exploitation of oil and gas resources in the area, including access for heavy equipment and "industrial traffic in arctic conditions," according to the Environmental Impact Statement. This project would allow fossil fuel development companies to access previously inaccessible land. Alaska Native leaders and governments from across the region have expressed their opposition to the project over concern that it would alter caribou migration routes and their ability to practice their way of life, which depends on the caribou and other subsistence resources. The environmental impact statement for this project is due to be published in fall of 2013.[60]

Arkansas	
 **Interstate 49 "NAFTA Highway"** Fayetteville	Construction on Interstate 49 began in the 1980s when gas cost $1.25/gal. It was imagined as a throughway from Winnipeg, MB to New Orleans, LA. Currently, the only completed section of the highway is in Louisiana, with the Missouri section of the highway set to open in December 2012. Plans to continue the route through Arkansas began in the mid-2000s, and construction is ongoing or in the planning process. The project is composed of western and eastern beltways through northwest Arkansas cutting through rural and semi-rural, environmentally sensitive areas with little or no public transit service. In the summer of 2012, 1.4 miles of I-540 will be widened from 4 to 6-lanes costing $5.8 million. The full project, including six additional sections, will cost $125 million.[61]

Arizona	
 **Tucson SunLink** Tucson	Tucson is installing a 4-mile electric streetcar system that will link the University Medical Center, the University of Arizona, Downtown, Rio Nuevo and Congress Street. Ten percent of Tucson residents live, work, or attend school within walking distance of the electric streetcar line. The project will allow greater access for students and residents to trek downtown without using a car, and provide commuting options for people who work downtown or at the university. The project began construction in April 2012 and is currently in the first phase. It is scheduled to open in late 2013.[62]
 **South Mountain Freeway** Phoenix	The South Mountain Freeway project is a proposed 22-mile, 8-lane freeway in Arizona that will cost $2 billion to build. The project has been under consideration in the Phoenix area for over 25 years, but due to a lack of funding and support, it is still in the planning phase. The project, as proposed, would cut through the western portion of South Mountain Park, encourage long commutes between the eastern and western portions of the metro area, and exacerbate urban sprawl. Many communities in the area do not support this project, including members of the Gila River Indian Community, which voted in 2012 against allowing the freeway to run through their lands and disrupt sacred places. Many of the affected mountains in the South Mountain Range are sacred homelands of the O'odham people. Furthermore, the project will cut through a critical wildlife corridor connecting South Mountain Park to the Estrella Mountains, limiting connectivity for mountain lions, coyotes, javelina, reptiles, roadrunners, and other desert animals.[63]

California	
 **Caltrain Electrification** San Francisco	The Metropolitan Transportation Commission recently approved a plan to electrify Caltrain, a 149-year-old rail line that links San Francisco with San Mateo and Santa Clara counties. The plan will install an advanced train-control system and replace its fleet of diesel trains with 44 cleaner, faster electric-powered trains. Electrification of this rail line will reduce diesel pollution from hazardous fine particulates. Electrification will significantly cut the railroad's operating costs by avoiding the purchase of 4.5 million gallons of diesel fuel a year and replacing it with far cheaper and cleaner electric power. The faster electric service and shorter schedules are expected to attract more passengers, and the lower operating costs can allow increases in the number of trains that run each day. The Caltrain electrification is part of a larger project extending the existing line by 1.5 miles into the Transbay Transit Center (TTC), a huge new transportation center in San Francisco connecting with Bay Area Rapid Transit (BART) and regional bus lines. The TTC will also serve as a hub for transit oriented development with 2,600 units of housing planned nearby. Local Sierra Club Chapters are working to ensure that this project moves forward while not impacting funding for local bus and other transit priorities. The project is expected to be complete in 2019.[64]
 **Interstate 5 Widening** San Diego	This project will widen I-5 to 12 lanes in North San Diego County at a cost of up to $4.5 billion. The project could add up to 6 lanes in some parts of the highway, encouraging more vehicles on the road and acting as only a temporary solution to congestion. New lanes will attract more traffic, a phenomenon known as induced demand, and congestion will reach their current levels within a few years Furthermore, residents and businesses along the route will lose their property to the expansion. Runoff will pollute the nearby lagoons, and air pollution will increase. Construction on this project is expected to begin in 2013.[65]

Colorado	
 **Jefferson Parkway** Denver	The Jefferson Parkway is a proposed 4-lane public/private toll road that would build a section of a beltway surrounding Denver. The idea of a federally funded freeway called Interstate 470 around the city of Denver was first proposed in the early 1970s when gas cost $.40/gal. However, the Jefferson Parkway will end several miles from the northern and southern terminals of the Denver beltway, dumping traffic onto local roads in Broomfield, Superior, and Golden causing congestion. The congestion generated on local streets will increase air pollution near residential neighborhoods and schools. Both the city of Golden and town of Superior have sued to prevent the continuation of this project. The Jefferson Parkway will increase oil use and auto-dependence by opening up undeveloped land for sprawling development. Additionally, the proposed route would cut through the eastern edge of the Rocky Flats National Wildlife Refuge, paving a 300 foot wide, 3.5 mile long stretch of Rocky Flats for auto traffic. The Rocky Flats National Wildlife Refuge was created from the former Rocky Flats Nuclear Weapons facility and is closed to the public due to plutonium contamination of its soils. Construction of the Jefferson Parkway will disrupt this contaminated soil, opening the possibility for it to spread to surrounding communities. The 10-mile project is estimated to cost $813 million however; construction is not scheduled to begin until the lawsuit is resolved.[66]

District of Columbia	
Capital Bikeshare	Opened in 2008, Capital Bikeshare is a bicycle sharing system that serves Washington, DC and Arlington County, Virginia. The program encourages smarter transportation use in the city, easing air pollution and promoting healthy lifestyles by providing a convenient way to get around the city. The station and bicycles are owned by the local governments and operated in a public-private partnership. Capital Bikeshare has been very successful in increasing the relevance of bikeshares around the United States, inspiring similar programs in Los Angeles, Chicago, and New York City. With more than 1,500 bicycles operating from 165 stations, the system is currently the largest bike sharing service in the United States, although the New York system opening in late 2012 is expected to surpass it. Capital Bikeshare resolves the "first and last mile" dilemma for many transit users by providing convenient transportation to and from transit stations. User surveys show that the bikeshare eliminated 5 million miles of driving in 2011.[67]

Florida	
Everglades Skyway	The Everglades Skyway project is a 6.5 mile series of elevated bridges along US highway 41. The Everglades Skyway retrofits part of the Tamiami Trail (US 41) that in 1928 cut off vital water flow into Shark River Slough, the main water artery into Everglades National Park and Florida Bay. The new bridges will restore water flow to these valuable habitats, revitalizing the ecology and wildlife of the region. Residents of South Florida will benefit as the project restores fresh water flow to a parched environment. Restoring flow will help maintain a clean and reliable drinking water supply and make South Florida more resilient to the effects of climate change, including flooding caused by sea level rise. The project is expected to generate 3,700 new jobs and $439 million in local business sales. The project will also offer a unique panoramic vista across the Everglades. Construction on this project began in 2009.[68]
SunRail Orlando	Expected to be completed by 2016, this 61.5 mile commuter-rail service will link the greater Orlando area by connecting Kissimmee and Deland. Trains will run on existing freight routes through four counties during morning and evening rush hours. It will carry as many commuters as one lane of the highway it parallels during rush hour and is expected to generate significant travel time savings and reduce congestion during peak travel hours. The Central Florida Commuter Rail Commission will address the "first-last mile dilemma" – transportation to and from the station between origin and destination – with enhanced bus and shuttle services feeding the SunRail stations. SunRail eliminates the need to build another auto-bridge across St. John's River. The SunRail has the potential to create nearly 250,000 jobs, with a $7.1 billion economic impact.[69] Work on SunRail's Longwood station began in October, and is already underway on several other stations.[70]
Pinellas County Regional Transit Plan Pinellas Co.	Pinellas County currently provides people with few choices to get around other than driving their car or truck. The proposed project outlined in the Pinellas County Regional Transit Plan would expand the bus system by 70% and add a 24-mile light rail system with 16 stations between downtown St. Petersburg and Clearwater, Florida. Under the plan, buses would serve the light rail stations and surrounding areas to help get people to and from the light rail lines. The plan also includes significant improvements to bus service with buses running every 15 minutes during peak hours. This project would greatly increase accessibility and connectivity in the region by providing an affordable and convenient alternative to the automobile. Although no funding source has been identified, the county is considering a penny sales tax.[71]

Florida	
 **Heartland Parkway** Collins County	Florida's Heartland Parkway is a proposed 150-mile high-speed tolled expressway from Polk County to near Fort Myers in Collier County. Proposed in 2006 but still in the early planning stages, the toll road will traverse rural counties in central Florida, taking over a decade to construct at a cost of $5.6 billion. The state has said that they have no money to finance the road, but that it would be privately owned and constructed. Opposed by some counties and most of the state's environmental organizations, the toll road would open up some of the last remaining rural areas of the state to development. . The road would dissect the habitat of the endangered Florida Panther, cutting through some of the last state remaining scrub ecosystems with unique flora and fauna. The State Senate Budget Committee Chairman, who has advocated for the project, owns a large property in Central Florida and serves to benefit if the road is constructed.[72]

Georgia	
 **Atlanta Beltline** Atlanta	This project provides a network of public parks, multi-use trails and transit by repurposing 22-miles of historic railroad corridors circling downtown Atlanta and remediating over 1,000 acres of brownfield. The beltline will reduce air pollution and improve public health through the use of efficient electric transit and attractive pedestrian and bicycle trails. The project has already resulted in new, denser living and retail development and further economic development is anticipated. Three trail segments connect four newly renovated parks. Additionally, affordable housing has opened along the corridor. However, much work remains and this comprehensive urban redevelopment effort will take another 20 years to complete.[73] While progress has been made in terms of improvements to parks and some affordable housing developments, the transit line has a long way to go.[74]
 **Interstate 3**	Interstate 3 is a proposed highway linking Savannah, GA and Knoxville TN. The highway was originally proposed in 2004. I-3 would traverse mountains in Georgia, North Carolina, and Tennessee, threatening four National Forests and the Great Smoky Mountains National Park. The route would cut through the heart of the wild country near Brasstown Bald, Georgia's highest peak. The pristine Upper Chattahoochee River would be subjected to increased pollution from highway runoff as would the whole Chattahoochee National Park. The proposed I-3 is a great example of superfluous highway-building: a shorter interstate highway route from Savannah to Knoxville already exists. Despite opposition by local groups, including Sierra Club Chapters in three states, the planning committee completed a study of proposed routes in late 2011.[75]

Illinois	
 **Midwest High Speed Rail** Chicago	The Midwest High Speed Rail will improve rail service and reduce car and air traffic between major Midwestern cities, specifically Chicago, St. Louis, and Detroit. The track improvement will allow Amtrak trains to run at 110 mph rather than the traditional 79 mph. High speed trains in the Midwest could be three times as energy efficient as cars and six times as energy efficient as planes. The project will reduce travel time, increase service reliability, and enhance safety in ways that will attract travelers from automobile and air travel to this new and improved mode of transportation, reducing oil use and air pollution. The regional network is expected to create an average of 15,200 jobs annually during the construction period and 57,000 permanent jobs throughout the region. Construction on this project began in 2010, and the first line, between Chicago and St. Louis, is expected to be complete by the end of 2012.[76]
 **Streets for Cycling Plan 2020** Chicago	Over the next 4 years, the City of Chicago plans to add over 100 miles of protected bicycle lanes, in addition to shared lanes and neighborhood greenways. A more complete city wide bike network will connect medium and high density areas and transit centers. The completion of the network will ensure that all Chicagoans are within half a mile of a bicycle facility. Safety is a large focus of the plan, as it aims to reduce crashes by 50% from 2006 levels while increasing overall bike ridership. The bike infrastructure will create more favorable conditions for a wider range of people to use bicycles for everyday transportation - to work, school, shopping, social events, and other activities. Getting more Chicagoans on bikes through this investment in better, safer infrastructure will improve air quality and road safety. Getting people out of cars and on to bikes will also help cut Chicago's oil use.[77]
 **Illiana Expressway**	The vision for the Illiana Corridor dates back to a 1909 Plan of Chicago that included an outer encircling highway serving northeastern Illinois and northwest Indiana. The Illianna Expressway is a proposed public/private four-lane toll road from Interstate 55 in Illinois to Interstate 65 in Indiana. This project would encourage sprawl development across the rural area, including development of a major "third airport" for the Chicago region in a rural area as well as shifting of freight from rail to truck. The project runs along the southern border of the 20,000-acre Midewin National Tallgrass Prairie. The negative impacts of this project on this natural area are unknown, but additional air and water pollution from the roadway and the sprawl footprint are likely. The official EIS study began in April of 2011 and the project is not currently funded.[78]

Indiana	
 **I-69 Extension** Evansville	The I-69 extension connecting Evansville and Indianapolis has been under consideration in Indiana since the 1940s. The price of gas has significantly increased since then, with the price of gas in the 1940s at $0.18 per gallon, but the current road proposal has not reflected the change. Currently estimated at $250 million, the first 90 miles of the proposed 142-mile expansion of Interstate 69 through Southern Indiana has already cost over $1 billion. Based on plans released in recent years, the remaining two phases of the project will likely cost between $800 million and $1.7 billion. The expansion will pave over 4,000 acres of prime farmland and forest. Citizens have raised concerns not only over the loss of land, but also the noise pollution, lack of bicycling and walking access, and transportation dollars going to new roads rather than fixing and maintaining existing infrastructure.[79]

Iowa	
 **Highway 100 Extension** Cedar Rapids	This outdated project was conceived more than 30 years ago when gasoline cost $1.24/gal. It was first envisioned as part of a bypass around Cedar Rapids. Since then a town has emerged in the center of the proposed route. The proposed Highway 100 extension, a 3.8-mile, $200 million project, would add another 10,000 cars per day to the main street, Collins Road, causing congestion, air pollution, and dangerous conditions for people who want to walk or bike through town. Moreover, the Highway 100 extension would cut through Rock Island Nature Preserve, one of the most pristine nature preserves in Iowa. Rock Island Preserve contains prairie, wetlands, and woodlands and is home to rare and endangered turtles and butterflies. The proposed route through the preserve would fragment and degrade habitat while polluting air and water. The Sierra Club of Iowa is opposing construction of the project because the Environmental Impact Statement fails to look at alternatives outside of the preserve. Iowa DOT declared the project a priority in June 2012 and will be accepting construction bids in early 2013. The project is expected to be completed in 2017.[80]

Kentucky	
 **I-265 Bridge** Louisville	This $2.6 billion bridge over the Ohio River is a joint project of Indiana and Kentucky. It is the epitome of a classic highway boondoggle. The project calls for a bridge widening to complete Louisville's outer belt. However, the most controversial aspect of the project is the 2,000 foot 'tunnel under the trees.' A private residence in the path of the proposed bridge is a registered historic landmark. The 55-acre property was once landscaped by Fredrick Law Olmstead. Worried about sprawl and environmental deterioration, a local group petitioned for landmark status to thwart the bridge project when they first heard about it in 1988. However, the planners intend to proceed with an additional $255 million in funding for this tunnel. The federal government approved this project signaling the start of construction in early 2012.[81]

Kansas	
 **South Lawrence Trafficway** Lawrence	The South Lawrence Traffic Way is a bypass to connect I-70 and K-10. This project was documented in the 2002 report as a "wrong direction" project and has returned to the list in 2012. The project has been considered since the mid-1980s, when gas cost $1.20/gallon. The completed highway would run through and disrupt water flow in the Haskell-Baker Wetlands, home to over 200 species of birds and other fauna and the location of historical and cultural sites for local Native Americans. The Haskell Indian Nations University refused to permit the construction of the 4-lane, 6-mile highway through their sacred wetlands, which are used for recreational and educational purposes. The wetlands are sacred because when Haskell opened as a mandatory Indian boarding school in 1884, many of the children forced to live there ran away to the wetlands and died there. Members of the 152 tribes whose children were sent to Haskell agree that it would be disrespectful to build a road over their dead. Many groups, including the Sierra Club, have engaged in legal battles over the last 20 years to stop the project. An appellate court ruled in 2012 that the final section of the road paving over the wetlands could move forward, and the road could open as soon as 2016.[82]

Louisiana	
 **New Orleans Streetcar Expansion** New Orleans	This streetcar system expansion seeks to inter-connect the neighborhoods of the French Quarter riverfront, hotel district, and Central Business District, resulting in reduced dependence on taxis and cars in that congested area of the city. The new route will also serve other neighborhoods by improving access to jobs in the downtown tourist and business districts. The project will also increase the tax base by spurring economic growth and redevelopment near the intermodal Amtrak and Greyhound station. The project was fully funded by a federal 'TIGER' grant and is scheduled to be completed in the winter of 2012.[83]

Maine	
 **East-West Highway**	The East-West Highway is a proposed 220-mile project that would connect the Canadian provinces of Quebec and New Brunswick by a direct route through forested regions in Maine. The idea has been studied and rejected numerous times in the past, but it is being re-introduced as a $2 billion, privately-funded, toll highway to serve large industry and trucking interests. The four-lane highway would cut through the Maine woods region, and would have negative impacts on air and water quality and critical wildlife habitat. The state of Maine has allocated 300,000 tax-payer dollars towards a feasibility study of this private highway, despite widespread opposition to the project. The highway's proposed route parallels an existing rail line network. By revitalizing the freight rail line, the state could reduce vehicle miles traveled and redirect public investments towards passenger and commuter rail, thus improving air quality, reducing greenhouse emissions, and providing opportunities for business growth via an improved freight transportation system.[84]

Maryland	
 **Purple Line** DC Metro	The D.C. Metro area consistently has among the worst traffic in the nation, contributing to wasted time, increased levels of stress and sub-par air quality. The Purple Line will provide a convenient transportation alternative for those commuting in the D.C. metro area. The Purple Line is a proposed 16-mile light rail through the Maryland inner suburbs of Washington, DC, and links different lines of the heavy rail Metro system. Because the Purple Line is near the core city, it will draw development inward, encouraging revitalization and development where it is most needed. A partial multi-use trail will be completed alongside the Purple Line, providing walking and biking options. The project will be on "grass tracks," reducing storm water runoff and heat gain. The Purple Line is estimated to have 68,000 daily commuters when complete, replacing an enormous amount of automobile traffic, enhancing air quality and decreasing greenhouse gas pollution. The Purple Line is expected to bring in $1.8 billion in revenue, raise property values $8.4 billion and create 27,000 new jobs every year over the course of 30 years according to the Maryland Transit Administration. Construction on this project is scheduled to begin in 2015 and open in 2020.[85]

Massachusetts	
 **Amtrak Rerouting** Greenfield	Recovery Act funding in the Northeast is being used to repair tracks and change the route of AMTRAK's Vermonter line through Connecticut, Massachusetts, and Vermont. Improvements will allow the Vermonter line to reduce travel time and restore passenger service to the towns of Northampton and Greenfield, Massachusetts. Federal Rail Administration analysis shows that the improvements will cut 30 minutes off the trip from Brattleboro, VT to Springfield, MA, attract more passengers, and contribute to local economies. As part of the service restoration in Greenfield, MA, the AMTRAK station is being renovated as an energy neutral building and will serve as a multi-modal station for both bus and rail. By providing transportation choices along the Vermont/Connecticut/Massachusetts corridor, this AMTRAK revitalization has the potential to change long distance commuting patterns in the Northeast. The project is scheduled to begin service in late 2012.[86]

Minnesota	
 **Southwest Light Rail Transit** Minneapolis	The proposed Southwest Light Rail Transit line is a high frequency train intended to serve the rapidly growing southwest Minneapolis metro area. The Southwest LRT line will serve the Intermodal Station in downtown Minneapolis, where Hiawatha, Central, and Northstar lines will converge. The LRT line will be approximately 14 miles in length and connect two of the region's largest job centers: downtown Minneapolis and the Opus/Golden Triangle Area. There will be an estimated 24,000 to 30,000 rides per day by year 2030. Public support for this project is widespread. A poll of likely Minnesota voters showed 64 percent of the metro area supports state funding for the project. The Southwest LRT is projected to open in 2018, though at time of publication, the project still needs additional state investment to match federal funding. Additionally, the Central Corridor, which began construction in 2010 and opens in 2014, will connect St. Paul and Minneapolis by light rail. The corridor presently contains working-class residents and immigrant populations. Many environmental justice advocates were concerned that the stops for light rail would be placed too far apart. They feared that along with reductions in bus service, transportation options for these communities would be reduced. In response to these concerns, project designers added three additional stops along the route making it more accessible to neighborhood residents. Furthermore, the project will generate jobs running and operating the light rail.[87] The Federal Transit Administration is working to align the permitting and review processes to occur simultaneously in order begin shave several months off the project. [88]
 **St. Croix River Crossing** Stillwater	The St. Croix River Crossing bridge project will replace an 80-year old lift bridge connecting Stillwater, Minnesota to rural, western Wisconsin with a massive, highway-style mega bridge. A smaller, less expensive, and less intrusive bridge design over this federally designated Wild and Scenic River was rejected by the state of Minnesota in favor of the $690 million mega bridge. Because of its scope, the new bridge, located just seven miles from an existing highway bridge, required an act of Congress to exempt it from the Wild and Scenic Rivers Act, setting a dangerous precedent. The new highway-style bridge will open new areas of western Wisconsin to sprawling development - increasing pollution and the consumption of dirty oil in the region.[89]

Montana	
 **Bike Missoula** Missoula	The city of Missoula has undergone an aggressive transformation in recent years to become one of the most bike friendly places in America. 65% of the city's arterial streets have been restriped to include bike lanes over 15 years. The number of lanes on half a dozen main roads is getting removed. Those with 4 or 5 lanes will now have 3 making them safer for everyone. Intersection improvements are also improving safety for cyclists. The community is overwhelmingly supportive of the initiative, with an 85% approval rating that continues to increase. This cycling infrastructure is critical to reducing the community's dependence on oil by providing a safe, convenient, and affordable transportation option for short trips. The city of Missoula is continuing to make spot improvements at dangerous intersections and corridors in hopes of improving bicycle safety and ridership.[90]

North Carolina	
 **Triangle Regional Transit** Chapel Hill	The fast-growing Research Triangle region is introducing a light rail line from Chapel Hill (UNC) to east Durham and a commuter rail line from Durham and the Research Triangle Park to southeast of Raleigh. The project will reduce the need for car commuting on increasingly congested highways and as a result will reduce air pollution and greenhouse gas emissions. The project will also concentrate future development near rail line stations creating "green field" communities stations. Greenfield development is efficient urban planning that aims to provide practical, affordable, sustainable living spaces for growing urban populations. It is expected that many new jobs will be associated with the more than 30 new stations and with the project's construction. This transportation oriented development is intended to increase the amount of walking and cycling along the transit corridors. The project is currently in the process of accruing funding before beginning construction.[91] In June 2012, the Orange Board of County Commissioners approved the Orange Bus/Rail Investment Plan and authorized a November 2012 referendum on a one-half cent sales tax to fund new and expanded transit improvements.
 **Monroe Bypass Toll Road** Charlotte	The proposed tolled, 20-mile multi-lane highway project parallels an existing major road near sprawling suburbs east of Charlotte, the state's largest city. Despite the road's location, it is not expected to reduce congestion on the existing road and will instead increase the amount of driving in the area. The aim of the project is to extend the road system to an area where no major arterials exist. This will likely generate suburban sprawl in largely-undeveloped parts of Union County. The project exacerbates Charlotte's existing sprawl problem, increasing auto pollution in the Charlotte metro region. This is especially devastating because the Charlotte metro area has the longest history of air quality violations in the Carolinas. The road would pave over hundreds of acres of woods and fields in the Yadkin River watershed, affecting rare and threatened aquatic species, especially mollusks. This project is expected to cost $800 million but has been postponed indefinitely after it was found that NCDOT misled the public in the project's Environmental Impact Statement.[92]

North Carolina	
 **Corridor K** Cheoah Mountains	In 2008, the North Carolina Department of Transportation announced its plans to drill a 2,870-foot long tunnel almost 500 feet beneath Stecoah Gap, a saddle in the Cheoah Mountains of western North Carolina. The construction of the tunnel will occur through areas containing minerals that can release acidic runoff into rivers and streams, contributing to water pollution. This project is coupled with an expansion of a 9-mile stretch of two-lane winding highway to a four lane expressway. Corridor K is one of the 'incomplete' segments of the Appalachian Regional Commission's 1965 plan to build a highway system through the Appalachian mountain chain-- a now-outdated plan that was created when gas cost $0.31/gal. It has been rendered obsolete by the Interstate System, with I-40, I-75, 1-20, and I-16 all in the vicinity. Such an enormous construction project in such a pristine mountain range will have devastating environmental consequences. In addition the area will be negatively impacted by congestion and air pollution from increased traffic, including large trucks. The project is currently in the process of amassing funding before beginning construction.[93]

Ohio	
 **Cincinnati Streetcar** Cincinnati	The Cincinnati Streetcar is a new electric streetcar project that will connect key communities in the city's urban core while improving neighborhood accessibility, stimulating development, and creating jobs. The streetcar system will go from the River to the Zoo, University, and hospital area. There are currently more than 500 vacant buildings along the streetcar's 4-mile route. The streetcar will help attract residents and businesses to these rehabbed buildings, putting people to work and boosting the city's tax revenue. Streetcars will increase accessibility and active transportation in the region by creating denser, more walkable, mixed use development. The streetcars are designed to accommodate both wheelchairs and bicycles and will serve as a complement to the city's existing bus transit. Construction began in February 2012 and the streetcar is expected to open in 2014.[94]
 **Eastern Corridor Project** Cincinnati	The Eastern Corridor Highway in Cincinnati, Ohio was first proposed in 1999 when the price of gas was $1.14. The project is currently under study, with plans to convert a road into a 10-mile, four- to six-lane expressway. The Highway poses a significant threat to the scenic Little Miami River. The route parallels the river and plans to cross it in an ecologically threatened area, where numerous rare, threatened and endangered species live. Furthermore, the highway will slice the historic village of Newton in half, which would disrupt the community and its tax base, adding traffic and pollution. The village's mayor has been an outspoken critic of the project. The highway project is expected to cost upwards of a billion dollars.[95]

Oklahoma	
 **Santa Fe Intermodal Station** Oklahoma City	The historic Santa Fe Depot is undergoing a retrofit to service commuter rail, light rail, modern streetcars, Amtrak, high-speed rail, bus rapid transit and inter-city buses. E.K Gaylord Boulevard, home to the station, is also being redeveloped into a major transit and pedestrian corridor. Part of this development will reopen and expand a historic pedestrian tunnel connecting Bricktown to Downtown, providing pedestrian mobility that will spur additional economic development in the area. The intermodal nature of this project and its central location will bring prominence to Oklahoma City's transportation choices and make transit more convenient and accessible. The project is still in the planning stages.[96]

Tennessee	
 **I-269** Memphis	Interstate 269 is a 60-mile outer beltway around Memphis, 15 to 20 miles beyond the inner beltway, I-240. The route, mostly through farmland, wetlands, and open spaces, is part of the I-69 "NAFTA Highway" system that was designed to reduce congestion on the inner beltway. But truckers believe that the highway, which was first proposed in the early 2000s when gas was around $2.00 per gallon, will add 40-plus miles to their trips. Initial proposals for the project were opposed by the citizens and mayors of Memphis and Shelby County, citing "nothing but problems for Memphis." They feared the project would induce sprawl and deepen economic segregation in the region. Another objection is that it is mainly a real estate development scheme, designed to spur the growth of suburbs that will waste tax dollars for the benefit of developers. The regional Memphis Planning Organization is planning more six to eight lane suburban roadways, continuing the trend of auto-dependence in Memphis. This project and the Planning Organization's "Vision Study" may encourage exurban officials to think ahead about what type of development they want, but the impacts of these highway projects on Memphis and the larger region must be part of the future conversation.

Texas	
 **Texas State Highway 45 Southwest** Austin	Texas State Highway 45 SW is a remnant of an Outer Loop beltway highway around Austin that TxDOT proposed in the 1980s when gas prices were around $1.24/gal. A large portion of the southwest quadrant of the loop was long ago deleted due to lack of need and the environmental sensitivity of the area. Since the 1980s, more than ten thousand acres of land in the area, one of central Texas' most sensitive environmental areas, have been preserved from development, further reducing the demand for such a road. However, this 3.5-mile toll road project is routed through this sensitive area: the Barton Springs portion of the Edwards Aquifer serves 60,000 people as a primary source of drinking water, and gives rise to a number of springs including the famous Barton Springs, the water source for Austin's iconic natural urban swimming pool. The porous limestone aquifer is recharged as rainwater flows into fissures in creek beds and into open natural land. The road threatens the endangered Barton Springs salamander, passes through endangered Golden-cheeked warbler habitat, and passes directly over at least one cave known to harbor extremely rare cave-dwelling invertebrates. Texas Department of Transportation consultants have mapped significant recharge features for the aquifer in the 3.5 mile right of way of the toll road. Impervious cover and road and traffic runoff would seriously threaten the quality and quantity of water from this key aquifer.[97]
 **Houston Light Rail** Houston	METRORail is a 7.5 mile light rail line in Houston, Texas that began service in 2004. With a daily ridership of 34,000, the METRORail ranks as one of the most-traveled light rail systems in the United States per route mile. The light rail is currently undergoing an expansion, with two new rail lines under construction, scheduled to be completed in 2015. There are three additional lines in the planning stages, adding a total of 26 miles of tracks to the rail system. The light rail expansion will continue to address the city's air quality problem, by providing residents with an alternative to driving.[98] The North Corridor project will receive $94 million for a 5.3-mile light rail transit extension that begins at the existing University of Houston-Downtown Station and runs north to Interstate 45, ending at Northline Commons. The project includes eight new stations, expansion of the existing rail operations center, and purchase of 22 light rail vehicles. The $94 million grant for the Southeast Corridor covers design and construction of a new 6.6-mile light rail line from downtown Houston to a terminal at Palm Center. The project includes 10 new stations, a new vehicle storage and wash facility, and purchase of 29 light rail vehicles.[99]

Texas	
 **Grand Parkway** Houston	Located in Houston, TX, the Grand Parkway is a highway beltway proposed almost 50 years ago, when the price of a gallon of gas was $0.31. Serving as a third beltway around Houston, the Parkway will encourage additional sprawl. Broken into eleven different stages, only 2 segments have been completed, totaling 25 of the planned 185 miles. Construction of a third 15.2-mile, $462 million section, called 'Segment E', began in summer 2011 and is expected to open in 2013. However, even the Grand Parkway Association admits there isn't a traffic-based need for the Segment E; it's about sprawl and development. Segment E crosses through the middle of the Katy Prairie Wetland Habitat, a rest point for migrating waterfowl. The Parkway proposal and associated secondary development poses a flooding threat due to the paving over of this permeable prairie soil, which retains rainfall and reduces runoff downstream. The most immediate downstream collection site for runoff in this area is behind the Addicks Dam, which is one of only six dams rated by the US Army Corps of Engineers at the highest risk level for dam safety. Consequently, the Sierra Club has appealed to the Army Corps of Engineers to deny the permit needed to fill in wetlands. Recently, US District Court issued a ruling in the case of Sierra Club v. US Army Corps of Engineers, which was filed on the basis that the Corps had not properly considered the cumulative impacts on runoff and dam safety arising from Segment E construction. The court found that the Corps had not property considered the cumulative impacts and remanded the Environmental Assessment to the Corps for revision. However, the court did not issue an injunction to halt work on Segment E.[100]
 **Trinity River Parkway** Dallas	First proposed in 1998, the Trinity River Parkway is a proposed 10-mile, 6-lane, controlled access toll road intended to relieve congestion on I-30 and I-35. Currently, the parkway is estimated to cost between $1.4 and $1.8 billion. This means, at up to $222 million per mile, the Trinity River Parkway will have one of the highest costs per mile in the country. In a city with over 40 lanes of freeway surrounding its downtown, another 6 lanes will make no difference in solving the congestion problem. The parkway adds an eighth highway to downtown Dallas, a metro area that is already a non-attainment zone for ozone levels. Furthermore, the route is in the floodway of the notoriously polluted Trinity River and premier recreational urban park. A busy, noisy parkway would ruin the ambient atmosphere that large parks are supposed to generate and provide to the public. The North Texas Tollway Authority is currently in the process of working on an EIS for this roadway.[101]

Utah	
 **Salt Lake City Bikeways** Salt Lake City	The Salt Lake City Bicycle/Pedestrian Coordinator added 50 miles of urban bikeways to the downtown region. Most of the improvements involve striping bike lanes. However, in some cases, the city used innovative ideas to help safely accommodate bicyclists into existing traffic patterns, including installing green bike lanes where there was no room for an extra bike lane and experimenting with cycle tracks. The city has also installed removable "bike corral" parking in on-street parking spots near business districts, providing a great example of retrofitting car-oriented transportation infrastructure to accommodate other users of the road. The improvements resulted in a 27 percent increase in the number of bicyclists in the span of one year. This dramatic increase in bicycle ridership is especially significant because Salt Lake City has chronic air quality problems and is in violation of EPA air quality standards. Reducing the number of cars on the road by providing safe biking infrastructure helps to address air quality problems in Salt Lake City.[102]

Utah	
 **Northern Corridor Freeway** Washington County	This proposal is for a freeway through the Red Cliffs Desert Tortoise Reserve and Bureau of Land Management's Red Cliffs National Conservation Area in Washington County, Utah. The stated purpose of the road is to reduce congestion on east-west corridors in the region. The Northern Corridor is in direct conflict with the terms of the Habitat Conservation Plan enacted in 1996 to protect the threatened desert tortoise whose Mojave population is in continued decline. If the road were to bisect the habitat, it would not only degrade the tortoise habitat, but also establish an undesirable precedent undermining Habitat Conservation Plans nationwide. The tortoises would face additional stresses, including light, noise, vibration, vehicle traffic, habitat fragmentation, and degraded air quality. This project was first proposed in the early 2000s and its environmental assessment was rejected in 2009 by the US Fish and Wildlife Service. However, UDOT is currently in the process of pursuing a feasibility study for the project.[103]

Virginia	
 **Silver Line** Falls Church	The Silver Line is a 23 mile heavy rail addition to the DC regional Metrorail system running from Falls Church, VA to Dulles Airport and Loudoun County. The first 11.5 miles should open in 2013, and will reduce vehicle trips in the country's most congested metropolitan area by providing alternatives to driving. The project's Environmental Impact Statement estimates that the Silver Line could displace 59,000 trips in phase 1 (by 2014) and another 32,000 trips by 2020. Fewer trips made by vehicle will save energy, improve air quality and reduce climate pollution. Furthermore, the Silver Line has already stimulated Transit oriented development (TOD), mixed-use development that encourages the use of public transit, in Tyson's Corner, an "edge city" with a population that quadruples during the workday. Local urban planners hope to change this car commuting culture by enticing more people to live in Tyson's Corner in addition to just working there. The county plans to urbanize Tyson's Corner by adding multiple modes of transit, bike lanes, a pedestrian-friendly street grid, and a robust mix of uses. The project will also help preserve the rural nature of western Loudoun County by absorbing growth in higher density TOD around the two stations in the eastern part of that County.[104] The first phase of the project from which runs through Tysons Corner to Wiehle Avenue has begun and is expected to be completed by 2013, however, politics is delaying the construction of the second phase from Reston the Dulles Airport. [105]
 **Outer Beltway** Loudoun County	This proposed 50-mile project connecting I-95 in Prince William County to Route 7 in Loudoun County, will serve as a second beltway to the Washington, D.C. area. The project has been repeatedly rejected because it doesn't relieve traffic on the overly congested Washington D.C. Beltway, I-95, or I-66. It will induce greater traffic demand by encouraging housing developments, strip malls and office parks along its route in the now rural areas of western Prince William and Loudoun Counties. This will, in turn, exacerbate environmental problems as auto-dependency and congestion in the region worsen. The proposed beltway will desecrate historic landscapes and historic districts on the western boundary of the National Battlefield of Manassas, a valuable tourist attraction in the region. The Outer Beltway project was originally proposed in the early 1960s when gas prices were $0.31/gal. It could cost between $3.5 and 5 billion, depending, in part, on whether proponents succeed in extending it across the Potomac River to Maryland. The state has begun setting aside funds and preparing plans for this on again, off again project.[106]

Virginia	
 **Coalfields Expressway**	The Coalfields Expressway, located in Southwest Virginia, is a proposed project to construct a new four-lane highway through rural areas of the Appalachian Mountains via mountain top removal coal mining methods. This project is a partnership between the Virginia Department of Transportation and the coal industry, which will benefit from easier permitting requirements and the coal extracted from the project. The project is expected to cost $2.1 billion, not including the external costs of mountaintop removal, which pollute ground and surface water, fills valleys and flattens mountains, destroys habitat, and negatively impacts the health of the region's inhabitants. A recent study has shown that birth defects are almost twice as common in areas subject to mountaintop removal mining. Although the CFX is touted as an economic development activity, the region has little traffic demand, and the road will bypass existing economic centers. The State of Virginia has allocated over $250 million for the project rather than use the money to maintain current roads and expand public transportation. [107]
 **US Route 460** Suffolk	The US Route 460 Corridor Improvements Project is a proposed 55-mile, four-lane, divided toll highway with an estimated cost between $1.5 and $2 billion. Rather than dedicating these funds to improving the existing Rt. 460 and making needed transit and road improvements to Hampton Roads, which transportation advocates say will provide real benefit to the region, Governor McDonnell has made the new highway project a top priority, allocating $750 million to the project. The remainder of the project cost would be financed by tolls. The proposed highway would parallel an existing undivided 4-lane highway connecting the greater Richmond area to the Port of Virginia, passing through small towns en route. The toll road would traverse a low-lying, lightly populated area containing many streams and wetlands, degrading and destroying these wetlands and streams and encouraging continued auto-dependence and low-density sprawl. The new parallel highway is intended to serve as a truck corridor for the Port of Virginia, detracting from a less oil-intensive freight rail alternative for the port. This project was originally proposed in 1995 and is expected to have accrued the necessary funding to proceed by the end of 2012.[108]

Washington	
 **Seattle Alaska Way Viaduct Replacement Tunnel** Seattle	A two mile long, 57 foot wide tunnel under downtown Seattle is set to replace the current aging above-grade viaduct. This enormous $3.1 billion highway project will require boring the largest diameter tunnel ever attempted with a single bore underneath fragile, historic Pioneer Square in downtown Seattle. The project encourages driving, contributes to greenhouse-gas and other air pollution, and sucks up transportation dollars that could be better spent on less-polluting alternatives. The project replaces a current high-use artery, with nearly 100,000 trips daily, and adds a $3 one-way toll, which will cause a large portion of drivers to seek alternate routes, increasing vehicle traffic and pollution in downtown Seattle. The project reinforces an auto centric culture, as the tunnel, by design, emphasizes shuttling single occupant vehicles. The megaproject budget originally promised a portion of funding for the local transit system, but 100% of the transit funding has been cut. Construction began in fall of 2011 and is scheduled to be complete by early 2016.[109]

Wisconsin	
 **Sheboygan County NOMO** Sheboygan County	In 2006, Sheboygan County was selected as one of four communities in the nation to participate in the Federal Highway Administration's Non-Motorized Transportation Pilot program. The projects have focused primarily on building key network connections, with a strong emphasis on providing facilities near schools. The signature project is a 1.7 mile multiuse path on a portion of an abandoned Union Pacific corridor. The corridor is centrally located and 20 schools, many commercial businesses, and almost ⅓ of the county's population are located within a mile of the corridor. The plan also includes 60 miles of on-street bicycle lanes, 22 miles of shared lane marks, 14 miles of sidewalk, and 1,500 bicycle parking spaces.[110]

USA	
 **Transit System Cuts** Nationwide	Transit systems across the country are being forced to cut service and raise fares due to weak public investment at the federal, state, and local levels. While this is not an infrastructure project like others in this report in the sense of a project that's being built, it is a significant roll-back of service on existing infrastructure—essentially the un-building of public transit in the US. This trend is occurring across the country at a time when transit ridership is growing and gas prices are high, leaving those Americans who don't drive stranded at the bus stop, and those looking to avoid pain at the pump without options. One of the most striking examples of a city cutting transit service due to flat or declining public funding at the state and local level is Pittsburgh, which has proposed cuts that would eliminate nearly half of the bus routes in the region, But Pittsburgh is not alone in this terrible trend. A survey of 117 transit agencies by the American Public Transit Association in 2011 found that "nearly eight in ten transit agencies (79%) have cut service or raised fares or are considering either of those actions. Half of the transit agencies (51%) have already cut service or raised fares."[111]

Where are they now? An update of the projects from the 2002 report

In 2002, the Sierra Club released a report entitled More Choices, Less Traffic calling out examples of the best and worst transportation projects underway at the time. Ten years later, we took another look at these projects to see where they are now.

Of the 20 projects highlighted in 2002 as examples of the best kinds of transportation projects in the US, 80 percent have either been completed or are currently under construction. Of these, almost half were so successful that they are being expanded. For example:

- The College Avenue Bicycle/Pedestrian Bridge in Tempe, Arizona was completed in 2011. It was so effective in increasing safety and bike ridership that it was expanded to include enhanced sidewalk improvements, raised medians, bike lanes, and pedestrian friendly intersection improvements along College Avenue leading up to the bridge.[112]
- The Mainstreet Light-Rail line in Houston, Texas began operation in January 2004. Today, it has the second highest light rail ridership per mile in America.[113] As a result, the light rail is currently undergoing a massive expansion and is included in this report as the Houston Light Rail project.

Unfortunately, four of the 2002 best projects were terminated due to loss of political support and lack of adequate funding:

- The Anchorage Commuter Rail project in Alaska, which would have connected Palmer, Wasilla, and Anchorage, Alaska, via rail, offering a transit connection and alternative to Alaska's Glenn Highway, was halted when legislation failed to pass establishing a Regional Transit Authority to oversee the completion of the project.[114]
- Similarly, the Southeastern Regional Transit Authority in Wisconsin was dissolved by Wisconsin's state legislature in 2011, resulting in the indefinite postponement of the KRM commuter rail line, which would have connected the cities of Kenosha, Racine, and Milwaukee along Wisconsin's Lake Michigan shoreline.[115]
- While Ohio's Cleveland-Columbus-Cincinnati High Speed Rail project received federal funding in 2010, Governor Kasich shut down the project later that year and returned the $400 million in federal funding to the federal government explaining that the 'only kind of train he approves of is a freight train.'[116]
- The North-South Rail Link was meant to unify Boston's separate northern and southern commuter rail terminals and greatly improve rail connectivity along the east coast. However, the project was shelved in 2003 in the beginning of the Romney Administration due to lack of funding and the Environmental Impact Statement (EIS) was never completed.[117]

Of the 26 projects included in the 2002 report as examples of the worst transportation investments, a mere five projects have been completed over the course of the last decade, with an additional seven currently under construction. This means that less than half of these projects are at or nearing completion, compared with the 80 percent completion rate for the best examples. Some of the "worst" projects that were completed include:

- The Parks and Glenn Highway Interchange in Alaska was completed in November 2004.[118] However in February 2012, the State began seeking federal funding to expand the interchange from two to four lanes to relieve congestion. The expansion is intended to be complete by 2015.[119]
- The Woodrow Wilson Bridge is a 12-lane replacement drawbridge across the Potomac River that is wider than the eight-lane Capital Beltway it connects. While the project grossly exceeded its $2.5 billion budget, construction finished in 2008.[120]
- The Paseo del Norte Extension, a six-lane highway through Petroglyph National Monument in New Mexico, was completed in 2007 despite controversy and widespread opposition to the destruction of the sacred Native American monument.[121]

Meanwhile, 14 projects have either been terminated or indefinitely delayed. Eight cases cited local opposition as the main reason the project was abandoned. The other six cases cited lack of funding, which is also often due to a lack of public support. Among the worst example projects included on the 2002 report that have not been completed:

- The Tuscaloosa Eastern Bypass was going to threaten one of Hurricane Creek's most unspoiled and environmentally sensitive areas. However, due to local opposition in the form of petitions, email campaigns, and a strong presence at public meetings, the project has not progressed since the EIS was first drafted almost 15 years ago.[122]
- The 50 mile, four-lane Northern Arc that would have been located 20 miles outside of Atlanta's existing beltway was defeated in 2003 by a coalition of environmental groups. The Northern Arc Coalition, in conjunction with the Georgia Conservancy, galvanized suburban opposition to the project and instigated a legal battle. Meanwhile, the Georgia Chapter of the Sierra Club researched and publicized the Arc's devastating environmental impact.[123] However, many are concerned that the recently introduced Sugarloaf Parkway is an attempt to build the Arc in piecemeal fashion.[124]
- In May 2004, a lawsuit from the Conservation Law Foundation halted construction of the proposed Chittenden County Circumferential Highway, a 16-mile bypass around Burlington, Vermont due to violations of the Clean Air Act and widespread demand for maintenance of existing roads over building new ones.[125]
- I-66, a proposed interstate through rural Kentucky, would have cut through Mammoth Cave National Park and the Daniel Boone National Forest, wiping out valuable farmland in its path. However, a coalition of local groups opposed

the highway in favor of improvements to existing roadways. Consequently the project was abandoned in 2007 due to lack of support.[126]

The progress (or lack thereof) of the best and worst projects highlighted in the 2002 report emphasizes the role of public participation and funding in transportation planning. The 80 percent completion rate for the best projects reflects the strong public support for projects that provide transportation choices, while public opposition and high cost of the worst projects kept many from being built.

Conclusion

One of the best ways to curb our country's dependence to oil is through wise transportation planning and investments in projects that give Americans transportation choices. By providing transportation options like convenient, reliable public transit and safe biking and walking, we can reduce air, water, and climate pollution while protecting open space, farmland and wildlife habitat. Smart, green transportation projects, matched with smart zoning and land use policies, can help downtown business thrive, keep dollars in the local economy, and enhance the quality, livability, equity, and vitality of our communities.

As this report shows, however, too many projects are not moving us in the right direction. Short-sighted, outdated transportation planning and investments keep America spending too much on projects that keep Americans at the mercy of rising gas prices and hurt communities by polluting our air and water, wasting taxpayer dollars, and harming public health. In addition to perpetuating a transportation system that sends billions of dollars per year overseas to pay for oil, these projects eat up our open space, farmland, and precious habitats and increase commute times and distances. They drain funds from local economies, dilute the local tax base, and shift businesses away from downtown. Finally, these projects limit transportation choices, leaving behind those who cannot or do not drive and making transportation dangerous for vulnerable road users like bicyclists, pedestrians, and public transit riders. However, these kinds of bad projects are not inevitable.

We already know how to build the kind of transportation infrastructure that will help America meet the challenges of the 21st century, and many communities—highlighted in the "best" examples in this report—are investing in transportation options that help move us beyond oil while at the same time improving local economies, the environment, and public health. The only thing left to do is to follow their lead.

Looking Forward: *Policy Recommendations*

By prioritizing investment in transportation infrastructure that helps us move beyond oil, we can give Americans more transportation options and better reflect America's priorities for a clean environment, good health, and livable communities.

In order to move America beyond oil, protect our communities and our climate, and clean our air, water, and environment, transportation policy should:

- Fund transportation projects based on performance metrics, including oil use, fair access to transportation choices, and air quality, ensuring that transportation projects meet goals and solve multiple problems at once
- Focus road spending on fixing and maintaining current infrastructure.
- Make significant investments in public transportation to connect more people with jobs, education, services, and recreation

- Improve walking and bicycling facilities, adopt "complete streets" provisions that make streets safe for all users and encourage more bike and foot traffic
- Work hand in hand with planners and housing authorities to ensure affordable housing near transit and job centers
- Promote and support regional and statewide planning that combines transportation, land use, and environmental planning
- Support public involvement in the transportation and land use planning process
- Fund innovative incentive-based programs for encouraging less oil-intense transportation, such as commuter tax benefit programs for public transit or biking, parking cash-out, and parking fees

Take Action: *What can you do?*

Your voice matters: speak up about the future of transportation in your community:

- Attend a local planning meeting or hearing to find out what is going on in your community and speak up for transportation choices that reduce our dependence on oil
- Write letters and make phone calls to your representatives at all levels of government about your vision for transportation investments in your community
- Reach out to your neighbors and invite them to join you in shaping your community's transportation future

Not all transportation projects are multi-million dollar undertakings. Start your own initiative:

- Conduct a community audit to identify where transportation investment should be made—does your community need sidewalks? Bike lanes? Better public transportation?
- Petition for complete streets or traffic calming measures on dangerous roads and intersections
- Host a neighborhood walk or bike to promote active transportation, and invite local leaders

For more information, or to get involved, visit www.sierraclub.org/transportation

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