

WYOMING TRANSPORTATION BY THE NUMBERS:

Meeting the State's Need for Safe and Efficient Mobility

JANUARY 2013



Founded in 1971, TRIP® of Washington, DC, is a nonprofit organization that researches, evaluates and distributes economic and technical data on surface transportation issues. TRIP is sponsored by insurance companies, equipment manufacturers, distributors and suppliers; businesses involved in highway and transit engineering and construction; labor unions; and organizations concerned with efficient and safe surface transportation.

Ten Key Transportation Numbers in Wyoming

<p>\$109.5 million</p> <p>\$332 million</p>	<p>Maintaining Wyoming’s transportation system in its current condition would require an additional investment of \$109.5 million annually over the next decade. Improving the state’s transportation system and making needed safety and capacity enhancements would require an additional \$332 million each year for the next decade.</p>
<p>\$250 million</p>	<p>To keep pace with the transportation needs of the state’s rapidly growing energy extraction sector, WYDOT estimates that at least \$250 million in additional transportation projects are needed to improve and expand the state’s roads, highways and bridges to accommodate increased traffic.</p>
<p>21%</p> <p>34 %</p>	<p>Due to a lack of available transportation funding, the number of miles of roadway in poor condition is projected to increase from 21 percent in 2012 to 34 percent in poor condition in 2023.</p>
<p>23 %</p>	<p>Currently, a total of 23 percent of Wyoming bridges are structurally deficient or functionally obsolete.</p>
<p>46 %</p>	<p>Under current funding, the number of bridges in need of significant repair or reconstruction in Wyoming is expected to increase 46 percent from 396 currently to 579 by 2023.</p>
<p>793</p> <p>159</p>	<p>Between 2006 and 2010, a total of 793 people were killed in traffic crashes in Wyoming, an average of 159 fatalities per year.</p>
<p>5th</p>	<p>Wyoming’s traffic fatality rate of 1.62 fatalities per 100 million vehicle miles of travel is the fifth highest in the nation.</p>
<p>\$187 million</p> <p>\$461</p>	<p>TRIP estimates that additional vehicle operating costs borne by Wyoming motorists annually as a result of poor road conditions is \$187 million statewide, or \$461 per motorist.</p>
<p>64 %</p>	<p>Vehicle miles of travel (VMT) in Wyoming increased 64 percent from 5.8 billion VMT in 1990 to 9.6 billion VMT in 2010. By 2030, VMT in Wyoming is projected to increase an additional 40 percent.</p>
<p>216,496</p>	<p>There are 216,496 licensed drivers in Wyoming.</p>

Executive Summary

Wyoming's extensive system of roads, highways and bridges provides the state's residents, visitors and businesses with a high level of mobility. This transportation system forms the backbone that supports the Equality State's economy. Wyoming's surface transportation system enables the state's residents and visitors to travel to work and school, visit family and friends, and frequent tourist and recreation attractions while providing its businesses with reliable access to customers, materials, suppliers and employees.

As Wyoming looks to achieve further economic growth and take advantage of its booming energy sector, the state will need to maintain and modernize its roads, highways and bridges by improving the physical condition of its transportation network and enhancing the system's ability to provide efficient and reliable mobility for motorists and businesses. Making needed improvements to Wyoming's roads, highways and bridges could also provide a significant boost to the state's economy by creating jobs in the short term and stimulating long-term economic growth as a result of enhanced mobility and access.

Meeting Wyoming's need to modernize and maintain its system of roads, highways and bridges will require a significant boost in local, state and federal funding.

Wyoming faces a significant shortfall in the amount of funding needed just to maintain the state's transportation system in its current condition over the next decade. Because of a lack of available funding, the condition of Wyoming's roads and bridges will decline over the next decade and the state will struggle to improve and expand the current transportation system to a level that will adequately accommodate the burgeoning energy extraction sector.

- According to the Wyoming Department of Transportation (WYDOT), just maintaining the state's transportation system in its current condition would require an additional \$109.5 million in transportation funding each year through 2023.
- In order to improve Wyoming's transportation system and make needed safety and capacity enhancements, WYDOT estimates that an additional \$332 million in transportation funding would be needed each year through 2023.
- To keep pace with the transportation needs of the state's rapidly growing energy extraction sector, WYDOT estimates that at least \$250 million in additional transportation projects are needed to improve and expand the state's roads, highways and bridges to accommodate increased traffic.
- In order to aid economic development in the state, WYDOT estimates that approximately 409 centerlane miles of new roads will need to be added through 2023. However, under current funding, only 13 centerlane miles of new roads to aid economic development are scheduled to be completed through 2023.

- A [2007 analysis by the Federal Highway Administration](#) found that every \$1 billion invested in highway construction would support approximately 27,800 jobs, including approximately 9,500 in the construction sector, approximately 4,300 jobs in industries supporting the construction sector, and approximately 14,000 other jobs induced in non-construction related sectors of the economy.

Population and economic growth in Wyoming have resulted in increased demands on the state's major roads and highways, leading to increased wear and tear on the transportation system.

- Wyoming's population reached 568,000 in 2010, a 25 percent increase since 1990, when the state's population was approximately 454,000. Wyoming has 216,496 licensed drivers.
- Vehicle miles traveled (VMT) in Wyoming increased by 64 percent from 1990 to 2010 – jumping from 5.8 billion VMT in 1990 to 9.6 billion VMT in 2010.
- By 2030, vehicle travel in Wyoming is projected to increase by another 40 percent.
- From 1990 to 2010, Wyoming's gross domestic product, a measure of the state's economic output, increased by 76 percent, when adjusted for inflation.

Twenty-one percent of all miles of roads and highways in Wyoming have pavement surfaces in poor condition, providing a rough ride and costing motorists in the form of additional vehicle operating costs. Pavement conditions are expected to deteriorate in the future due to a lack of available transportation funding.

- According to the Wyoming Department of Transportation, 21 percent of miles of pavement are in poor condition, while an additional 24 percent are rated in fair condition. Twenty-six percent of lane miles of Wyoming highways and roadways are rated in good condition and the remaining 29 percent are rated in excellent condition.
- Due to a lack of available transportation funding, the number of miles of roadway in poor condition is projected to increase from 21 percent in 2012 to 34 percent in poor condition in 2023.
- The condition of the Wyoming's Interstate system is projected to deteriorate in the coming years due to a lack of available transportation funding. The number of Interstate miles in poor condition is expected to more than double in the next decade, rising from six percent of Interstate miles in poor condition in 2012 to 14 percent in poor condition in 2023.
- Roads rated in poor condition may show signs of deterioration, including rutting, cracks and potholes. In some cases, poor roads can be resurfaced, but often are too deteriorated and must be reconstructed.

- Driving on rough roads costs the average Wyoming motorist an average of \$461 annually in extra vehicle operating costs – a total of \$187 million statewide. Costs include accelerated vehicle depreciation, additional repair costs, and increased fuel consumption and tire wear.

Twenty-three percent of bridges in Wyoming show significant deterioration or do not meet current design standards. This includes all bridges that are 20 feet or more in length. Due to a lack of adequate transportation funding, the number of bridges that are deficient or in need of significant repair or reconstruction is expected to increase significantly in the coming years.

- Fourteen percent of Wyoming’s bridges are structurally deficient. A bridge is structurally deficient if there is significant deterioration of the bridge deck, supports or other major components. Structurally deficient bridges are often posted for lower weight or closed to traffic, restricting or redirecting large vehicles, including commercial trucks and emergency services vehicles.
- Nine percent of Wyoming’s bridges are functionally obsolete. Bridges that are functionally obsolete no longer meet current highway design standards, often because of narrow lanes, inadequate clearances or poor alignment.
- By 2023, WYDOT projects that a total of 31 percent of bridges will be structurally deficient or functionally obsolete due to a lack of available transportation funding. WYDOT estimates that in 2023, approximately 22 percent of bridges will be structurally deficient and nine percent will be functionally obsolete.
- Under current funding constraints, the number of bridges in need of significant repair or reconstruction in Wyoming is expected to increase 46 percent from 396 bridges currently in need of significant repair or reconstruction to 579 by 2013.

Wyoming’s traffic fatality rate on rural, non-Interstate routes is more than double that on all other roads and highways in the state. Improving safety features on Wyoming’s roads and highways would likely result in a decrease in traffic fatalities and serious crashes in the state. Roadway features are likely a contributing factor in approximately one-third of all fatal and serious traffic crashes.

- Between 2006 and 2010, a total of 793 people were killed in traffic crashes in Wyoming, an average of 159 fatalities per year.
- Wyoming’s overall traffic fatality rate of 1.62 fatalities per 100 million vehicle miles of travel in 2010 is the fifth highest fatality rate in the nation and 46 percent higher than the national average of 1.11 fatalities per 100 million vehicle miles of travel.
- The fatality rate on Wyoming’s rural non-Interstate roads was 2.12 fatalities per 100 million vehicle miles of travel in 2010, significantly higher than the 1.19 fatality rate in 2010 on all other roads and highways in the state.

- The number of fatalities occurring on the state’s non-Interstate rural roads is disproportionately higher than the amount of vehicle travel on these roads. While 46 percent of all vehicle travel in the state takes place on Wyoming’s non-Interstate rural roads, 61 percent of fatalities in the state occurred on non-Interstate rural roads.
- Several factors are associated with vehicle crashes that result in fatalities, including driver behavior, vehicle characteristics and roadway features. It is estimated that roadway features are likely a contributing factor in approximately one-third of fatal traffic crashes.
- Roadway features that impact safety include the number of lanes, lane widths, lighting, lane markings, rumble strips, shoulders, guard rails, other shielding devices, median barriers and intersection design.
- Where appropriate, highway improvements can reduce traffic fatalities and crashes while improving traffic flow to help relieve congestion. Such improvements include removing or shielding obstacles; adding or improving medians; improved lighting; adding rumble strips, wider lanes, wider and paved shoulders; upgrading roads from two lanes to four lanes; and better road markings and traffic signals.
- Investments in rural traffic safety have been found to result in significant reductions in serious traffic crashes. A 2012 report by the [Texas Transportation Institute](#) (TTI) found that improvements completed recently by the Texas Department of Transportation that widened lanes, improved shoulders and made other safety improvements on 1,159 miles of rural state roadways resulted in 133 fewer fatalities on these roads in the first three years after the improvements were completed (as compared to the three years prior). TTI estimates that the improvements on these roads are likely to save 880 lives over the next 20 years.

The efficiency of Wyoming’s transportation system, particularly its highways, is critical to the health of the state’s economy. Businesses are increasingly reliant on an efficient and reliable transportation system to move products and services. A key component in business efficiency and success is the level and ease of access to customers, markets, materials and workers.

- Annually, \$23.8 billion in goods are shipped from sites in Wyoming and another \$27.7 billion in goods are shipped to sites in Wyoming, mostly by truck.
- Fifty-three percent of the goods shipped annually from sites in Wyoming are carried by trucks and another seven percent are carried by courier services or multiple mode deliveries, which include trucking.
- Businesses have responded to improved communications and greater competition by moving from a push-style distribution system, which relies on low-cost movement of bulk commodities and large-scale warehousing, to a pull-style distribution system, which

relies on smaller, more strategic and time-sensitive movement of goods.

- Increasingly, companies are looking at the quality of a region's transportation system when deciding where to re-locate or expand. Regions with congested or poorly maintained roads may see businesses relocate to areas with a smoother, more efficient and more modern transportation system.
- [Site Selection magazine's 2010 survey](#) of corporate real estate executives found that transportation infrastructure was the third most important selection factor in site location decisions, behind only work force skills and state and local taxes.

Sources of information for this report include the Wyoming Department of Transportation (WYDOT), the Federal Highway Administration (FHWA), the Bureau of Transportation Statistics (BTS), the U.S. Census Bureau, the Texas Transportation Institute (TTI) and the National Highway Traffic Safety Administration (NHTSA).

Introduction

Wyoming's roads, highways and bridges form vital transportation links for the state's residents, visitors and businesses, providing daily access to homes, jobs, shopping, natural resources and recreation. Today, with the state hoping to foster quality of life improvements and economic competitiveness, the modernization of Wyoming's transportation system is crucial, particularly to critical areas of the state's economy including tourism, agriculture and energy extraction.

As the U.S. and Wyoming look to rebound from the recent economic downturn, the modernization of the state's transportation system could play an important role in improving Wyoming's economic wellbeing by providing critically needed jobs in the short term and by improving the productivity and competitiveness of the state's businesses in the long term.

As Wyoming faces the challenge of preserving and modernizing its transportation system, the future level of federal, state and local highway funding will be a critical factor in whether the state's residents and visitors continue to enjoy access to a safe and efficient transportation network.

This report examines the condition, use and safety of Wyoming's roads, highways and bridges, federal, state and local funding needs, and the future mobility needs of the state. Sources of information for this report include the Wyoming Department of Transportation (WYDOT), the Federal Highway Administration (FHWA), the U.S. Census Bureau, the Texas Transportation Institute (TTI), the Bureau of Transportation Statistics (BTS), and the National Highway Traffic Safety Administration (NHTSA).

Population, Travel and Economic Trends in Wyoming

Wyoming residents and businesses require a high level of personal and commercial mobility. Population and economic growth in the state has resulted in an increase in the demand for mobility as well as an increase in vehicle miles of travel. To foster a high quality of life and economic development in Wyoming, it will be critical that the state provide a safe and modern transportation system that can accommodate future growth in population, tourism, recreation and vehicle travel.

Wyoming's population grew to 568,000 residents in 2010, a 25 percent increase since 1990, when the state's population was approximately 454,000.¹ Wyoming has 216,496 licensed drivers.² From 1990 to 2010, Wyoming's gross domestic product, a measure of the state's economic output, increased by 76 percent, when adjusted for inflation.³

Population and economic growth in Wyoming have resulted in an increase in vehicle travel in the state. From 1990 to 2010, annual vehicle miles of travel in Wyoming increased by 64 percent, from 5.8 billion miles traveled annually to 9.6 billion miles traveled annually.⁴ Based on population and other lifestyle trends, TRIP estimates that travel on Wyoming's roads and highways will increase by another 40 percent by 2030.⁵

Condition of Wyoming's Roads

The life cycle of Wyoming's roads is greatly affected by the state's ability to perform timely maintenance and upgrades to ensure that road and highway surfaces last as long as possible. The pavement condition of the state's roads is evaluated annually by WYDOT and classified as being in poor, fair, good or excellent condition.

According to the Wyoming Department of Transportation, 21 percent of pavement is in poor condition, while an additional 24 percent is rated in fair condition.⁶ Twenty-six percent of Wyoming highways and roadways are rated in good condition and the remaining 29 percent are rated in excellent condition.⁷

WYDOT estimates that due to a lack of available transportation funding, the number of total miles of roadway in poor condition is projected to increase from 21 percent in 2012 to 34 percent in poor condition in 2023.⁸

The condition of the Wyoming's Interstate system is projected to deteriorate in the coming years due to a lack of available transportation funding. According to WYDOT, the number of Interstate miles in poor condition is expected to more than double in the next decade, rising from six percent of Interstate miles in poor condition in 2012 to 14 percent in poor condition in 2023.⁹

Roads rated poor may show signs of deterioration, including rutting, cracks and potholes. In some cases, poor roads can be resurfaced but often are too deteriorated and must be reconstructed.

Pavement failure is caused by a combination of traffic, moisture and climate. Moisture often works its way into road surfaces and the materials that form the road's foundation. Road surfaces at intersections are even more prone to deterioration because the slow-moving or standing loads occurring at these sites subject the pavement to higher levels of stress. It is critical that roads are fixed before they require major repairs because reconstructing roads costs approximately four times more than resurfacing them.¹⁰ As roads and highways continue to age, they will reach a point of deterioration where routine paving and maintenance will not be

adequate to keep pavement surfaces in good condition and costly reconstruction of the roadway and its underlying surfaces will become necessary.

The Costs to Motorists of Roads in Inadequate Condition

TRIP has calculated the additional cost to motorists of driving on roads in poor or unacceptable condition. When roads are in poor condition – which may include potholes, rutting or rough surfaces – the cost to operate and maintain a vehicle increases. These additional vehicle operating costs include accelerated vehicle depreciation, additional vehicle repair costs, increased fuel consumption and increased tire wear. TRIP estimates that additional vehicle operating costs borne by Wyoming motorists annually as a result of poor road conditions is \$187 million statewide or \$461 per motorist.¹¹

Additional vehicle operating costs have been calculated in the Highway Development and Management Model (HDM), which is recognized by the U.S. Department of Transportation and more than 100 other countries as the definitive analysis of the impact of road conditions on vehicle operating costs. The HDM report is based on numerous studies that have measured the impact of various factors, including road conditions, on vehicle operating costs.¹²

The HDM study found that road deterioration increases ownership, repair, fuel and tire costs. The report found that deteriorated roads accelerate the pace of depreciation of vehicles and the need for repairs because the stress on the vehicle increases in proportion to the level of roughness of the pavement surface. Similarly, tire wear and fuel consumption increase as roads deteriorate since there is less efficient transfer of power to the drive train and additional friction between the road and the tires.

TRIP's additional vehicle operating cost estimate is based on taking the average number of miles driven annually by a motorist, calculating current vehicle operating costs based on AAA's 2012 vehicle operating costs and then using the HDM model to estimate the additional vehicle operating costs paid by drivers as a result of substandard roads.¹³ Additional research on the impact of road conditions on fuel consumption by the Texas Transportation Institute (TTI) is also factored into TRIP's vehicle operating cost methodology.

Bridge Conditions in Wyoming

Wyoming's bridges form key links in the state's highway system, providing communities and individuals access to employment, schools, shopping and medical facilities, and facilitating commerce and access for emergency vehicles.

A total of 23 percent of Wyoming's bridges (20 feet or longer) are currently rated as structurally deficient or functionally obsolete.¹⁴

Fourteen percent of Wyoming's bridges (20 feet or longer) are rated as structurally deficient.¹⁵ A bridge is structurally deficient if there is significant deterioration of the bridge deck, supports or other major components. Bridges that are structurally deficient may be posted for lower weight limits or closed if their condition warrants such action. Deteriorated bridges can have a significant impact on daily life. Restrictions on vehicle weight may cause many vehicles – especially emergency vehicles, commercial trucks, school buses and farm equipment – to use alternate routes to avoid posted bridges. Redirected trips also lengthen travel time, waste fuel and reduce the efficiency of the local economy.

Nine percent of Wyoming's bridges are rated functionally obsolete.¹⁶ Bridges that are functionally obsolete no longer meet current highway design standards, often because of narrow lanes, inadequate clearances or poor alignment with the approaching roadway.

According to WYDOT projections, due to a lack of available transportation funding, the number of bridges that are deficient is projected to increase in the coming years. Currently, a total of 23 percent of bridges in Wyoming are either structurally deficient or functionally obsolete.¹⁷ By 2023, WYDOT projects that a total of 31 percent of bridges will be structurally deficient or functionally obsolete due to a lack of available transportation funding. WYDOT estimates that in 2023, approximately 22 percent of bridges will be structurally deficient and nine percent will be functionally obsolete.¹⁸

The number of bridges in Wyoming in need of significant repair or reconstruction is also expected to increase in the future due to insufficient transportation funding. Under current funding, the number of bridges in need of significant repair or reconstruction in Wyoming is expected to increase 46 percent from 396 bridges currently in need of significant repair or reconstruction to 579 by 2023.¹⁹

The service life of bridges can be extended by performing routine maintenance such as resurfacing decks, painting surfaces, insuring that a facility has good drainage and replacing deteriorating components. But most bridges will eventually require more costly reconstruction or major rehabilitation to remain operable.

Wyoming's Ability to Fund Needed Transportation Improvements

Wyoming faces a significant shortfall in the amount of funding needed just to maintain the state's transportation system in its current condition over the next decade. Because of a lack of available funding, the condition of Wyoming's road and bridge will decline over the next decade and the state will struggle to improve and expand the current transportation system to a level that will adequately accommodate the burgeoning energy extraction sector.

According to the Wyoming Department of Transportation (WYDOT), just maintaining the state's transportation system in its current condition would require an additional \$109.5 million in transportation funding each year through 2023.²⁰ If the state is to improve its transportation system and make needed safety and capacity enhancements, WYDOT estimates that an additional \$332.2 million in transportation funding would be needed each year through 2023.²¹

To keep pace with the transportation needs of the state's rapidly growing energy extraction sector, WYDOT estimates that at least \$250 million in additional transportation projects are needed to improve and expand the state's roads, highways and bridges to accommodate increased traffic.²²

In order to aid economic development in the state, WYDOT estimates that approximately 409 centerlane miles of new roads will need to be added through 2023.²³ However, under current funding, only 13 centerlane miles of new roads are scheduled to be completed to aid economic development through 2023.²⁴

Increasing investment in the state's roads, highways and bridges will also assist the state's economy by creating jobs. A [2007 analysis by the Federal Highway Administration](#)

found that every \$1 billion invested in highway construction would support approximately 27,800 jobs, including approximately 9,500 in the construction sector, approximately 4,300 jobs in industries supporting the construction sector, and approximately 14,000 other jobs induced in non-construction related sectors of the economy.²⁵

Traffic Safety in Wyoming

A total of 793 people were killed in motor vehicle crashes in Wyoming from 2006 through 2010, an average of 159 fatalities per year.²⁶

Chart 1. Traffic fatalities in Wyoming from 2006 – 2010.

<i>Year</i>	<i>Fatalities</i>
2006	195
2007	150
2008	159
2009	134
2010	155
Total	793

Source: National Highway Traffic Safety Administration

Three major factors are associated with fatal vehicle crashes: driver behavior, vehicle characteristics and roadway features. It is estimated that roadway features are likely a contributing factor in approximately one-third of fatal traffic crashes. Roadway features that impact safety include the number of lanes, lane widths, lighting, lane markings, rumble strips, shoulders, guard rails, other shielding devices, median barriers and intersection design.

Wyoming's overall traffic fatality rate of 1.62 fatalities per 100 million vehicle miles of travel in 2010 is the fifth highest in the nation and 46 percent higher than the national average of 1.11 fatalities per 100 million vehicle miles of travel.²⁷

The state's non-Interstate rural roads are particularly deadly, with a significantly higher rate and occurrence of fatalities taking place on these roads. The traffic fatality rate on Wyoming's rural, non-Interstate routes is more than double the rate on all other roads and highways in the state. The fatality rate on Wyoming's non-Interstate rural roads was 2.12 fatalities per 100 million vehicle miles of travel in 2010, while the fatality rate in 2010 on all other roads and highways in the state was 1.19.²⁸ And, while 46 percent of vehicles miles of travel in Wyoming in 2010 occurred on rural, non-Interstate routes, 61 percent of all traffic fatalities in the state in 2010 occurred on rural, non-Interstate roads.²⁹

Improving safety on Wyoming's roadways can be achieved through further improvements in vehicle safety; improvements in driver, pedestrian, and bicyclist behavior; and a variety of improvements in roadway safety features.

The severity of serious traffic crashes could be reduced through roadway improvements such as adding turn lanes, removing or shielding obstacles, adding or improving medians, widening lanes, widening and paving shoulders, improving intersection layout, and providing better road markings and upgrading or installing traffic signals where appropriate.

Roads with poor geometry, with insufficient clear distances, without turn lanes, inadequate shoulders for the posted speed limits, or poorly laid out intersections or interchanges, pose greater risks to motorists, pedestrians and bicyclists.

Investments in rural traffic safety have been found to result in significant reductions in serious traffic crashes. A 2012 report by the [Texas Transportation Institute](#) (TTI) found that

improvements completed recently by the Texas Department of Transportation that widened lanes, improved shoulders and made other safety improvements on 1,159 miles of rural state roadways resulted in 133 fewer fatalities on these roads in the first three years after the improvements were completed (as compared to the three years prior). TTI estimates that the improvements on these roads are likely to save 880 lives over the next 20 years.³⁰

Importance of Transportation to Economic Growth

Today's culture of business demands that an area have well-maintained and efficient roads, highways and bridges if it is to remain economically competitive. The advent of modern national and global communications and the impact of free trade in North America and elsewhere have resulted in a significant increase in freight movement. Consequently, the quality of a region's transportation system has become a key component in a business's ability to compete locally, nationally and internationally.

Businesses have responded to improved communications and the need to cut costs with a variety of innovations including just-in-time delivery, increased small package delivery, demand-side inventory management and by accepting customer orders through the Internet. The result of these changes has been a significant improvement in logistics efficiency as firms move from a push-style distribution system, which relies on large-scale warehousing of materials, to a pull-style distribution system, which relies on smaller, more strategic movement of goods. These improvements have made mobile inventories the norm, resulting in the nation's trucks literally becoming rolling warehouses.

Highways are vitally important to continued economic development in Wyoming, particularly to the state's tourism, energy extraction, lumber, agriculture and manufacturing sectors. As the economy expands, creating more jobs and increasing consumer confidence, the demand for consumer and business products grows. In turn, manufacturers ship greater quantities of goods to market to meet this demand, a process that adds to truck traffic on the state's highways and major arterial roads.

[Site Selection magazine's 2010 survey](#) of corporate real estate executives found that transportation infrastructure was the third most important selection factor in site location decisions, behind only work force skills and state and local taxes.

Every year, \$23.8 billion in goods are shipped from sites in Wyoming and another \$27.7 billion in goods are shipped to sites in Wyoming, mostly by trucks.³¹ Fifty-three percent of the goods shipped annually from sites in Wyoming are carried by trucks and another seven percent are carried by courier services or multiple-mode deliveries, which include trucking.³²

Conclusion

As Wyoming looks to enhance and build a thriving, growing and dynamic state, it will be critical that it is able to provide a 21st century network of roads, highways and bridges that can accommodate the mobility demands of a modern society.

As the nation looks to rebound from the current economic downturn, the U.S. will need to modernize its surface transportation system by improving the physical condition of its transportation network and enhancing the system's ability to provide efficient and reliable

mobility for motorists and businesses. Making needed improvements to Wyoming's roads, highways and bridges could provide a significant boost to the state's economy by creating jobs in the short term and stimulating long-term economic growth as a result of enhanced mobility and access.

But without a substantial boost in federal, state and local highway funding, numerous projects to improve the condition and expand the capacity of Wyoming's roads, highways and bridges will not be able to proceed, hampering the state's ability to improve the condition of its transportation system and to enhance economic development opportunities in the state.

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Endnotes

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- ¹ U.S. Census Bureau (2011).
- ² Highway Statistics (2010). Federal Highway Administration. DL-1C
- ³ TRIP analysis of Bureau of Economic Analysis data.
- ⁴ U.S. Department of Transportation - Federal Highway Administration: Highway Statistics 1990 and 2010.
- ⁵ TRIP calculation based on U.S. Census and Federal Highway Administration data.
- ⁶ WYDOT response to TRIP survey, December 2012.
- ⁷ Ibid.
- ⁸ Ibid.
- ⁹ Ibid.
- ¹⁰ Selecting a Preventative Maintenance Treatment for Flexible Pavements. R. Hicks, J. Moulthrop. Transportation Research Board. 1999. Figure 1.
- ¹¹ TRIP estimate.
- ¹² Highway Development and Management: Volume Seven. Modeling Road User and Environmental Effects in HDM-4. Bennett, C. and Greenwood, I. 2000.
- ¹³ Your Driving Costs. American Automobile Association. 2012.
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- ¹⁵ Ibid.
- ¹⁶ Ibid.
- ¹⁷ Ibid.
- ¹⁸ Ibid.
- ¹⁹ Ibid.
- ²⁰ Ibid.
- ²¹ Ibid.
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- ²³ Ibid.
- ²⁴ Ibid.
- ²⁵ Federal Highway Administration, 2008. Employment Impacts of Highway Infrastructure Investment.
- ²⁶ TRIP analysis of National Highway Traffic Safety Administration data (2012).
- ²⁷ TRIP analysis of National Highway Traffic Safety Administration and Federal Highway Administration data (2012).
- ²⁸ Ibid.
- ²⁹ Ibid.
- ³⁰ Adding Highway Shoulders, Width, Reduce Crash Numbers and Save Lives (August 9, 2012). Texas Department of Transportation.
- ³¹ Bureau of Transportation Statistics (2010), U.S. Department of Transportation. 2007 Commodity Flow Survey, State Summaries. http://www.bts.gov/publications/commodity_flow_survey/2007/states/
- ³² Ibid.