

## BIRMINGHAM METRO AREA REPORT CARD

TRIP has assigned the following grades to the Birmingham metro area highway system.

	<b>GRADE</b>	<b>COMMENT</b>
<b>Roads</b>	<b>C-</b>	<i>In 2006 (the latest year for which data is available), 13 percent of major roads in the Birmingham metro area were rated in poor condition and an additional 17 percent were in mediocre condition. Substandard road conditions cost the average Birmingham motorist \$280 in extra vehicle operating costs each year. This report contains a list of the most deteriorated sections of roadway in the Birmingham area.</i>
<b>Bridges</b>	<b>C</b>	<i>Five percent of the region's 548 bridges are rated as structurally deficient and 18 percent are rated functionally obsolete. This report contains a list of the most deficient bridges in the Birmingham area.</i>
<b>Congestion</b>	<b>C-</b>	<i>The average rush hour trip in Birmingham takes approximately 15 percent longer to complete than during non-rush hour times. By 2030, the average rush hour trip is expected to take 30 percent longer to complete –double the current rate - putting congestion levels in Birmingham on par with present day Tampa, Philadelphia and Boston. TRIP has provided a list of the most congested sections of roadway in the Birmingham region.</i>
<b>Safety</b>	<b>F</b>	<i>In 2006, the Birmingham area had a traffic fatality rate of 12.8 fatalities per 100,000 population. From 2002 to 2006, an average of 85 traffic fatalities occurred each year in the Birmingham area. Roadway safety features such as widened lanes, added or improved medians, improved intersection design, paved shoulders and added rumble strips, where appropriate, can reduce traffic fatalities and serious accidents.</i>
<b>Funding</b>	<b>F</b>	<i>Key regional projects, including improvements to I-59, I-65, I-459 and the Birmingham North Beltline, will not move forward without additional funding. According to the Alabama Department of Transportation, the state faces a \$6.9 billion shortfall from 2008 to 2017 in highway transportation funding for needed highway projects. This report includes a list of needed highway projects in the Birmingham area that are not funded through 2011.</i>

## **ROAD CONDITIONS**

**Pavement conditions on Birmingham's major roads are below desirable standards, with a nearly one-third of major roads in the Birmingham metro area in poor or mediocre condition.**

- Thirteen percent of Birmingham's major roads are rated in poor condition, and an additional 17 percent are in mediocre condition. This includes Interstates, highways, connecting urban arterials, and key urban streets that are maintained by state, county or municipal governments.
- Roads rated in poor condition often have significant rutting, potholes or other visible signs of deterioration. Roads in poor condition typically need to be resurfaced or reconstructed. Roads rated in mediocre condition show signs of significant wear and may also have some visible pavement distress. Most pavements in mediocre condition can be repaired by resurfacing, but some may need more extensive reconstruction to return them to good condition.
- Fifty percent of Birmingham's major roads are in good condition. A desirable goal for state and local organizations responsible for road maintenance is to keep 75 percent of major roads in good condition.
- Driving on roads in need of repair costs each Birmingham motorist \$280 annually in extra vehicle operating costs, including accelerated vehicle depreciation, additional repair costs and increased fuel consumption and tire wear.
- The following is a list of ten sections of deteriorated roadway in the Birmingham area in immediate need of repair or replacement, for which repairs are not scheduled through the end of 2008.

	<b>Route Name</b>	<b>From</b>	<b>To</b>	<b>Length in Miles</b>	<b>Average Daily Traffic</b>
<b>1</b>	<b>I-59</b>	<b>M.P. 100</b>	<b>M.P. 105.95</b>	<b>5</b>	<b>63,040</b>
<b>2</b>	<b>I-59</b>	<b>M.P. 128</b>	<b>M.P. 129.72</b>	<b>1.7</b>	<b>144,620</b>
<b>3</b>	<b>I-65</b>	<b>M.P. 237.4</b>	<b>M.P. 250.7</b>	<b>13.3</b>	<b>85,760</b>
<b>4</b>	<b>I-20</b>	<b>M.P. 140.56</b>	<b>M.P. 142.94</b>	<b>2.4</b>	<b>64,250</b>
<b>5</b>	<b>I-459</b>	<b>M.P. 14.87</b>	<b>M.P. 17.51</b>	<b>2.6</b>	<b>104,370</b>
<b>6</b>	<b>US-11</b>	<b>M.P. 147.26</b>	<b>M.P. 148.69</b>	<b>1.4</b>	<b>30,620</b>
<b>7</b>	<b>I-65</b>	<b>M.P. 274.60</b>	<b>M.P. 275.6</b>	<b>1</b>	<b>52,460</b>
<b>8</b>	<b>I-65</b>	<b>M.P. 252</b>	<b>M.P. 253.5</b>	<b>1.5</b>	<b>122,040</b>
<b>9</b>	<b>I-65</b>	<b>M.P. 255.36</b>	<b>M.P. 258.65</b>	<b>3.3</b>	<b>131,570</b>
<b>10</b>	<b>I-459</b>	<b>M.P. 13</b>	<b>M.P. 14</b>	<b>0.6</b>	<b>N/A</b>

**Source: Alabama Department of Transportation**

## **BRIDGE CONDITIONS**

**Nearly a quarter of bridges in the Birmingham area are structurally deficient or functionally obsolete. This includes all state, local and municipal bridges 20 feet and longer.**

- Five percent of bridges in the Birmingham area are rated as structurally deficient, showing significant deterioration to decks and other major components.
- Eighteen percent of bridges in the Birmingham area are functionally obsolete. These bridges no longer meet modern design standards for safety features such as lane widths or alignment with connecting roads or are no longer adequate for the volume of traffic being carried.
- Bridge deficiencies have an impact on mobility and safety. Restrictions on vehicle weight may cause many vehicles – especially emergency vehicles, commercial trucks, school buses and farm equipment – to use alternate routes to avoid these bridges. Narrow bridge lanes, inadequate clearances and poorly aligned bridge approaches reduce traffic safety. Redirected trips lengthen travel time, waste fuel and reduce the efficiency of the local economy.
- The following is a list of the most structurally deficient bridges in the Birmingham area, carrying at least 5,000 vehicles per day.

	<b>Route</b>	<b>City or County</b>	<b>Route or feature intersected</b>	<b>Average Daily Traffic</b>	<b>Year Built</b>
<b>1</b>	<b>US-11</b>	<b>City of Brighton</b>	<b>Branch</b>	<b>21,230</b>	<b>1937</b>
<b>2</b>	<b>US-31</b>	<b>Jefferson County</b>	<b>Patton Creek</b>	<b>29,160</b>	<b>1926</b>
<b>3</b>	<b>I-65</b>	<b>City of Birmingham</b>	<b>Railroad &amp; City Streets</b>	<b>145,890</b>	<b>1970</b>
<b>4</b>	<b>US-11</b>	<b>City of Trussville</b>	<b>Branch</b>	<b>25,940</b>	<b>1928</b>
<b>5</b>	<b>US-11</b>	<b>City of Bessemer</b>	<b>Branch</b>	<b>22,640</b>	<b>1936</b>
<b>6</b>	<b>US-11</b>	<b>City of Birmingham</b>	<b>Valley Creek</b>	<b>17,310</b>	<b>1910</b>
<b>7</b>	<b>US-11</b>	<b>City of Bessemer</b>	<b>Valley Creek Relief</b>	<b>22,640</b>	<b>1936</b>
<b>8</b>	<b>SR-75</b>	<b>City of Birmingham</b>	<b>Yancey Creek</b>	<b>54,940</b>	<b>1935</b>
<b>9</b>	<b>US-11</b>	<b>City of Midfield</b>	<b>Branch</b>	<b>21,230</b>	<b>1936</b>
<b>10</b>	<b>US-11</b>	<b>City of Birmingham</b>	<b>Railroad</b>	<b>15,050</b>	<b>1950</b>

**Source: Alabama Department of Transportation**

## CONGESTION

**Growing travel demand in the Birmingham metro area has led to rising levels of traffic congestion.**

- The average rush hour trip in Birmingham takes approximately 15 percent longer to complete than during non-rush hour times.
- A recent report by the Reason Foundation found that by 2030 the average rush hour trip in Birmingham will take 30 percent longer to complete than during non-rush hour – double the current rate - unless significant highway improvements are completed. This would put Birmingham congestion at the same level as present day Tampa, Boston or Philadelphia.
- From 1995 to 2005 (the latest year for which data is available), daily traffic per freeway lane mile in Birmingham increased by 29 percent and daily vehicle travel increased 19 percent.
- A region’s major highways and streets are rated based on their level of service using the letter grades A, B, C, D, E or F. Roads rated D, E, or F are considered moderately to severely congested. The following is a definition of each Level of Service (LOS) designation:

<b>A</b>	Free flow of traffic with operation of individual vehicles largely unaffected by presence of other vehicles
<b>B</b>	Stable flow of traffic with slight decline in freedom to maneuver
<b>C</b>	Stable flow of traffic, but vehicle operation is significantly affected by presence of other vehicles in traffic stream
<b>D</b>	Crowded roadway with some decline in speeds. Large number of vehicles restrict mobility and stable traffic flow
<b>E</b>	Unstable, slow traffic flow with virtually no gaps in traffic stream, subject to traffic flow breakdowns
<b>F</b>	Stop-and-go traffic with low speeds and little or poor maneuverability

- The following is a list of major roadways in the Birmingham metro area that have the greatest level of traffic congestion, based on level of service rating:

	Route	From	To	Length	LOS	ADT	Lanes
1	US-280	Hollywood BLVD	Belmont Road	0.5	F	62,820	6
2	US-280	Invernes Parkway	MeadowBrook Road	1.0	F	56,860	4
3	I-20 / 59	I-65	I-20 interchange	5.9	E	155,820	6
4	I-65	SR-119	Green Springs	12.0	E	131,090	6
5	I-459	I-65	Acton Road	2.1	E	99,400	6
6	I-65	US-31	Oak Mountain Park Rd.	6.2	E	73,480	4
7	US-31	SR-38	I-20 / 59	3.3	E	71,840	6
8	I-65	SR-70	US-31	6.0	E	52,540	4
9	I-20	B'ham Urban Boundary	SR-25	5.5	D	59,650	6
10	I-20 / 59	SR-216	B'ham Urban Boundary	5.0	D	51,880	4

Source: Alabama Department of Transportation

## **SAFETY**

**Improving safety features on Birmingham's roads and highways would likely result in a decrease in traffic fatalities in the area. Roadway design is an important factor in approximately one-third of fatal and serious traffic accidents.**

- In 2006, the Birmingham area had a traffic fatality rate of 12.8 fatalities per 100,000 population. From 2002 to 2006 there was an average of 85 traffic fatalities in the Birmingham area each year.
- Highway improvements such as removing or shielding obstacles, adding or improving medians, widening lanes, widening and paving shoulders, upgrading roads from two lanes to four lanes and installing better road markings and traffic signals, where appropriate, can reduce traffic fatalities and accidents.
- The Federal Highway Administration has found that every \$100 million spent on needed highway safety improvements will result in 145 fewer traffic fatalities over a 10-year period.

## **FUNDING**

**Alabama faces a transportation funding shortfall of approximately \$6.9 billion from 2008 to 2017. As a result, needed highway projects will not be able to move forward without additional funding.**

- The Alabama Department of Transportation (ALDOT) projects a funding shortfall of \$6.9 billion from 2008 to 2017.
- ALDOT estimates that from 2008 to 2017, approximately \$16.2 billion is needed to allow the state to significantly improve road and bridge conditions, make reasonable roadway safety improvements and address needed traffic congestion relief.
- According to ALDOT estimates, anticipated funding levels from 2008 to 2017 will be only \$9.3 billion. As a result, needed highway improvement and maintenance projects will not be able to move forward without additional transportation funding.
- The following is a list of needed highway projects in the Birmingham area that are currently unfunded through 2011.

<b>Route</b>	<b>Length (Mi.)</b>	<b>New or existing</b>	<b>Reason for project</b>	<b>Project description</b>
US-280	1.0	Improvement	Capacity	US-280 from Inverness Pkwy. to Meadowbrook Rd.
US-280	0.5	Improvement	Capacity	SR-38 (US-280) add lanes from Hollywood Blvd. to Belmont Rd.
I-59	6.3	Improvement	Capacity	Add lanes to I-59 from 18th / 18th St. (Exit 112) to CR-56 (Exit 118)
SR-959 B-ham N Beltline	3.4	New	Cong. Relief & Econ. Dev.	Birmingham Northern Beltline (SR-959) from E of Old Springville Rd. to I-59 SW of Argo
I-59	3.5	Improvement	Capacity	Add lanes to I-59 N of CR-80 to S of Arkadelphia Rd.
I-65	1.0	Improvement	Congressionally mandated	Interchange modification on I-65 at Valleydale Rd (Flyover Ramps)
SR-119	5.1	Improvement	Capacity	SR-119 from S of Oak Mtn. Elementary to N of Graystone Way
I-459	2.0	Improvement	Capacity	I-459 additional lanes and bridge widening from SR-38 (US-280_ to proposed interchange at Liberty Park
SR-261	2.6	Improvement	Capacity	Add lanes to SR-261 from Bearden Rd. to SR-3 (US-31)
US-31	2.5	Improvement	Capacity	US-31 from Riverchase Pkwy to I-65, includes ramp modification at I-495

**Source: Alabama Department of Transportation**

*Sources of information for this report include the U.S. Department of Transportation (USDOT), Federal Highway Administration (FHWA), the U.S. Census Bureau, the National Highway Traffic Safety Administration (NHTSA), the Reason Foundation and the Alabama Department of Transportation (ALDOT).*