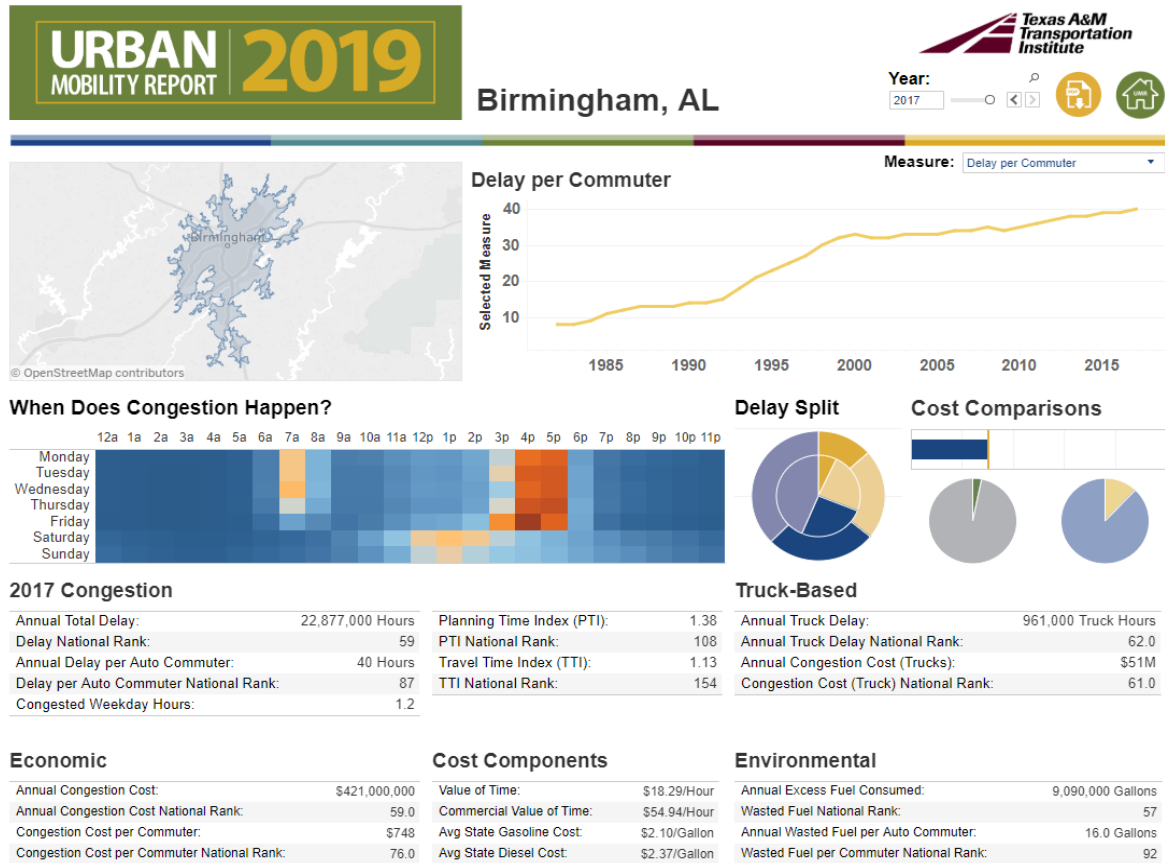


Summary: 2019 Urban Mobility Report on Alabama Cities



This is a summary of the 2019 Urban Mobility Report by David Schrank, Bill Eisele, and Tim Lomax of the Texas A&M Transportation Institute, August 2019, as it addresses Alabama cities.

The 2019 Urban Mobility Report is the product of a collaboration between the Texas A&M Transportation Institute and INRIX. The report is based on data taken every 15 minutes at hundreds of locations for almost every mile of major roads in 494 U.S. urban areas. Visitors to the *Report's* webpage (<https://mobility.tamu.edu/umr/>) may also access a map and visual statistics for each data point in the sample. As an example, below is a screenshot of the visual statistics data for Birmingham, Alabama. Website visitors may access congestion data for Birmingham for every year from 1982 – 2017.



The report divides cities into five categories: Very large (>3M people), Large (1M-3M people), Medium (0.5M-1M people), Small (<0.5M people), and Other Assorted Populations. Among Alabama cities, Birmingham is included in the “Medium Urban Areas” category, and eleven other Alabama cities are found in the “Other Assorted Populations” category (Anniston-Oxford, Auburn, Daphne-Fairhope, Decatur, Dothan, Florence, Gadsden, Huntsville, Mobile, Montgomery, and Tuscaloosa).

Below are provided two summary tables for the traffic conditions and congestion statistics: one for Birmingham and one for the eleven cities that fall in the “Other” category in the *Report*. In the *Report*, more statistical data is available for Birmingham than for Alabama cities of a smaller size.

Table 1. Traffic Conditions in Birmingham, AL

Congestion indicator	Value for Birmingham	Average value for 32 medium-size urban areas used for 2019 Urban Mobility Report	Rank based on the sample of 494 U.S. cities in the 2019 Urban Mobility Report	National rank
Yearly Delay per Auto Commuter	40 hours	44 hours	75	87
Travel Time Index	1.13	1.18	83	154
Excess Fuel per Auto Commuter	16 gallons	19 gallons	77	92
Congestion Cost per Auto Commuter	\$750	\$750	55	76
Travel Delay	22,877,000 hours	21,700,000	57	59
Excess Fuel Consumed	9,090,000 gallons	9,080,000 gallons	56	57
Truck Congestion Cost	\$51 million	\$50 million	57	61
Total Congestion Cost	\$421 million	\$400 million	57	59
Freeway Planning Index	1.38	1.45	57	108
Freeway Commuter Stress Index	1.14	1.20	65	-
Freeway Travel Time Index	1.10	1.15	72	-

Figure 1. Delay Split in Birmingham

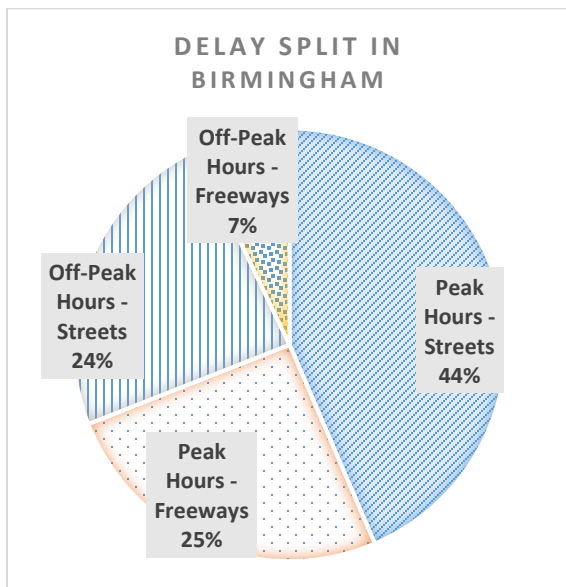
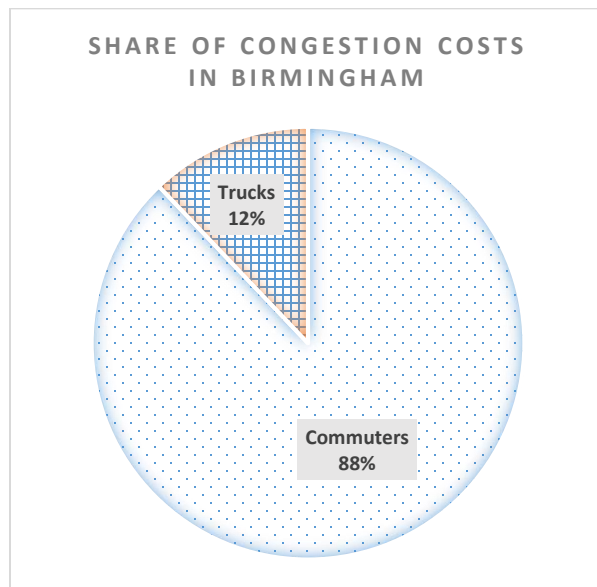


Figure 2. Share of Congestion Costs in Birmingham



The tables and visuals provided above show that the city of Birmingham reports congestion statistics that are very close to the average for the 32 medium-size cities selected for the *2019 Urban Mobility Report*.

The national rankings for each congestion category indicate that Birmingham would be in the upper quarter of the national ranking for all but one congestion indicator (Travel Time Index, for which Birmingham ranks 154th in the nation). This means that Birmingham may be considered as more congested than the majority of U.S. cities.

Table 2. Travel Delay and Travel Time in Alabama Cities

Urban Area	Total Annual Hours of Delay (thousand hours)	Total Annual Hours of Delay, National Rank	Annual Hours of Delay per Commuter, hours	Annual Hours of Delay per Commuter, National Rank	Planning Time Index	Planning Time Index, National Rank	Travel Time Index	Travel Time Index, National Rank
Anniston-Oxford	1,370	386	16	346	1.05	400	1.05	418
Auburn	2,101	305	25	190	1.02	450	1.08	302
Daphne-Fairhope	2,053	309	21	242	1.04	421	1.11	195
Decatur	1,550	363	20	260	1.02	450	1.08	302
Dothan	2,717	261	32	127	-	258	1.11	252
Florence	2,206	296	26	180	-		1.11	195
Gadsden	1,850	332	28	152	1.11	275	1.10	223
Huntsville	7,384	133	24	199	1.26	159	1.11	195
Mobile	9,776	106	28	152	1.09	309	1.10	223
Montgomery	6,695	142	25	190	1.08	323	1.08	302
Tuscaloosa	4,600	181	30	138	1.14	234	1.11	195

Table 3. Congestion Costs and Fuel Waste in Alabama Cities

Urban Area	Total Annual Congestion Cost (Million \$)	Total Annual Congestion Cost, National Rank	Congestion Cost per Auto Commuter (\$)	Congestion Cost per Auto Commuter, National Rank	Annual Excess Fuel Consumed (gallons)	Annual Excess Fuel Consumed, National Rank	Annual Wasted Fuel per Auto Commuter (gallons)	Annual Wasted Fuel per Auto Commuter, National Rank
Anniston-Oxford	28	389	322	363	548,000	401	6.0	369
Auburn	43	307	509	197	947,000	300	11.0	166
Daphne-Fairhope	42	312	418	271	840,000	320	8.0	279
Decatur	32	369	414	275	320	362	279	231
Dothan	57	263	673	108	1,284,000	246	16.0	92
Florence	45	298	528	191	1,021,000	288	12.0	147
Gadsden	39	323	586	149	848,000	318	13.0	133
Huntsville	148	132	473	221	2,771,000	143	9.0	231
Mobile	199	105	566	164	4,408,000	99	13.0	133
Montgomery	137	140	509	197	2,984,000	134	11.0	166
Tuscaloosa	95	180	624	129	2,005,000	178	13.0	133

Among other Alabama cities included in the *2019 Report*, congestion statistics vary significantly (Tables 2-3). Based on the national ranking provided for each congestion indicator in the report, Alabama cities with larger population sizes such as Mobile, Montgomery, Huntsville and Tuscaloosa tend to have more congested roads causing more delay, fuel waste and higher associated economic costs.

For all Alabama cities included in the report, the majority of congestion costs come from commuters while trucks may contribute up to about 15% of congestion costs (Figure 2 and Table 4).

Table 4. Share of Congestion Costs in Alabama Cities

Urban Area	Commuters	Trucks
Anniston-Oxford	89.3%	10.7%
Auburn	90.7%	9.3%
Daphne-Fairhope	90.5%	9.5%
Decatur	87.5%	12.5%
Dothan	86.0%	14.0%
Florence	91.1%	8.9%
Gadsden	84.6%	15.4%
Huntsville	91.9%	8.1%
Mobile	90.5%	9.5%
Montgomery	89.8%	10.2%
Tuscaloosa	88.4%	11.6%

The report suggests ways to improve mobility, including (1) low-cost solutions such as removing crashed vehicles faster, timing the traffic signals, and improving road design; (2) providing more travel alternatives including additional routes, departure times, and travel modes; (3) adding capacity in critical corridors; (4) diversifying the urban development patterns to avoid congestion areas, (5) technology advances and (6) improving travel time awareness and predictability.

Acknowledgement

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