YEAR 2035 TRANSPORTATION PLAN

HUNTSVILLE AREA TRANSPORTATION STUDY

Prepared by the City of Huntsville Planning Division in Cooperation with the Bureau of Transportation Planning, Alabama Department of Transportation



Adopted by the Metropolitan Planning Organization March 2010

> Amended June 2011 June 2012 September 2012 February 2013 April 2014 September 2014

HUNTSVILLE AREA TRANSPORTATION STUDY

FINAL

Year 2035 Transportation Plan

This document is posted at: <u>http://www.huntsvillempo.org</u>

For further information, please contact the Long Range Planning Staff of the City of Huntsville Planning Division, Huntsville, Alabama E-mail: LongRangePlanning@huntsvilleal.gov

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Adopted by the Metropolitan Planning Organization Amended: June 2011 June 2012 September 2012 February 2013 April 2014 September 2014

HUNTSVILLE AREA TRANSPORTATION STUDY METROPOLITAN PLANNING ORGANIZATION (MPO)

MPO and Advisory Committee Officers Updated to Fiscal Year 2014

Huntsville Area Transportation Study, MPO Dale Strong, Chairman	Chairman, Madison County Commission
Technical Coordinating Committee (TCC) Shane Davis, Transportation Planning Coordinator	Director, City of Huntsville Urban Development
Anne Burkett, Vice-Chairman	Director, MadisonCounty Planning and Economic Development
Richard Grace, Secretary	Director, Madison County Public Works Department
Citizens Advisory Committee Bill Weaver, Chairman	City of Madison
City of Huntsville Department of Urban Development - Planning Division Serving as staff to the Huntsville Area Transportation Study (MPO)	Director Urban Davalanment
Shane Davis Dennis Madsen	Director, Urban Development Manager of Urban and Long Range Planning

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MPO and Advisory Committee Members Updated to Fiscal Year 2014

Huntsville Area Transportation Study, MPO

Tommy Battle Troy Trulock Dale Strong John Olshefski Tony Craig Mary Caudle Johnny Harris Mark D. Bartlett (non-voting) Robert Jilla (non-voting) Nancy Robertson (non-voting) Mayor, City of Huntsville Mayor, City of Madison Chairman, Madison County Commission Huntsville City Council Mayor, Town of Owens Cross Roads Mayor, Town of Triana Alabama Department of Transportation (ALDOT) Federal Highway Administration ALDOT Bureau of Transportation Planning & Modal Programs Top of Alabama Regional Council of Governments

Technical Coordinating Committee

Shane Davis Amy Bell Richard Grace Gary Chynoweth Emmanuel Oranika Clint Andrews Abigail Rivera Kathy Martin Richard Kramer Dennis Thompson Tommy Brown Peter Joffrion Kenneth Binion Daniel Shea

Anne Burkett Carlen Williams Nick Werner, Interim Director Janet Watson Rick Tucker Les Hopson Allen Teague Jeff Pruitt Tom Richardson Stacy Cantrell Melvin McKinstry Diana Standridge Connie R. Graham Karen P. Monroe **Transportation Planning Coordinator** Director of Planning. City of Madison County Engineer, Madison County City Engineer, City of Madison Alabama Department of Transportation Federal Highway Administration Federal Transit Administration City Engineer, City of Huntsville Traffic Engineer, City of Huntsville City of Huntsville Traffic Engineering City of Huntsville Parking and Public Transit City Attorney, City of Huntsville Director of Community Development, City of Huntsville Director of Natural Resources & Environmental Management, City of Huntsville Director, Madison County Planning & Economic Development Huntsville Housing Authority Huntsville Marina & Port Authority Chairman. Huntsville Planning Commission Executive Director, Huntsville-Madison Co. Airport Authority Alabama Department of Transportation Alabama Department of Transportation Top of Alabama Regional Council of Governments **Redstone Arsenal** Huntsville Utilities Marshall Space Flight Center U.S. Space & Rocket Center City of Huntsville Planning Division Huntsville-Madison County Railroad Authority

<u>Citizens Advisory Committee</u> David Cousins

David Cousins Trent Griffin Jennifer Nelson John Ofenlock David Slyman Tony Smith Gary Whitley Chris Robinson Bob Devlin Curtis Potts Bill Weaver Scott Baker Larry Furlough Jurlene Rogers Luis Ferrer City of Huntsville Madison County Madison County City of Madison City of Madison Town of Owens Cross Roads Town of Owens Cross Roads Town of Triana Town of Triana

RESOLUTION 10-10 HUNTSVILLE AREA TRANSPORTATION STUDY METROPOLITAN PLANNING ORGANIZATION (MPO) ADOPTING THE YEAR 2035 TRANSPORTATION PLAN

WHEREAS, the Huntsville Area Transportation Study Metropolitan Planning Organization (MPO) is the organization designated by the Governor of the State of Alabama as being responsible, together with the State of Alabama, for implementing the applicable provisions of amended 23 USC 134 and 135 (SAFETEA-LU 6001, August 2005); 29 USC 794; 42 USC 126, 2000d-1, 4321 et seq., 7401 et seq.; 49 USC 5303, 5304; 23 CFR 450 and 500; 40 CFR 51 and 93; 49 CFR 26 and 613; and,

WHEREAS, the U. S. Department of Transportation requires all urbanized areas, as established by the U. S. Bureau of the Census, conducting area-wide urban transportation planning, to submit a 2035 Long Range Transportation Plan as a condition for meeting the provisions of 23 USC 134 and defining principles of 23 CFR 450.322; and

WHEREAS, consistent with the declaration of these provisions, the City of Huntsville Planning Division and Huntsville Area Transportation Study (MPO) Planning Staff, in cooperation with the Alabama Department of Transportation, has prepared a Final Year 2035 Transportation Plan for the Huntsville Area; now

THEREFORE, BE IT RESOLVED by the Huntsville Area Transportation Study Metropolitan Planning Organization (MPO) that the same does hereby adopt the Final Year 2035 Transportation Plan.

Adopted this 24th day of March, 2010

Chairman, Metropolitan Planning Organization

Secretary, Metropolitan Planning Organization

Notary Public:

My Commission Expires: 9 - 25 - 13

ATTEST:

the Date 3-24-10 Chairman, TCC



RESOLUTION NO. 7-11

HUNTSVILLE AREA TRANSPORTATION STUDY METROPOLITAN PLANNING ORGANIZATION

AMENDING THE YEAR 2035 TRANSPORTATION PLAN

WHEREAS, the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) requires MPOs to update and maintain a transportation plan with at least a 20 year planning horizon; and

WHEREAS, the MPO has adopted the <u>Year 2035 Transportation Plan</u> in February 2010 to meet this requirement; and

WHEREAS, the City of Huntsville has requested that the <u>Year 2035 Transportation Plan</u> be amended; and

WHEREAS, the City of Huntsville requests that the project: Research Park Boulevard and Interchanges from I-565 to Alabama Highway 53 be modified to add improvements to the interchanges located at I-565 and Research Park Boulevard and University Drive and Research Park Boulevard; and

WHEREAS, these project changes will alter various Sections of the Year 2035 Transportation Plan;

NOW, THEREFORE, BE IT RESOLVED by the Huntsville Area Transportation Study Metropolitan Planning Organization (MPO) that the <u>Year 2035 Transportation Plan</u> be amended to reflect the attached changes requested by the City of Huntsville.

ADOPTED, this the 29th day of June, 2011.

Chairman, Metropolitan Planning Organization

Secretary, Metropolitan Planning Organization

Bal & Date 6 Chairman, MPO TCC

Notary Public:

My Commission Expires:

MY COMMISSION EXPIRES 4-8-2012

RESOLUTION NO. 7-12

HUNTSVILLE AREA TRANSPORTATION STUDY METROPOLITAN PLANNING ORGANIZATION

AMENDING THE YEAR 2035 TRANSPORTATION PLAN

WHEREAS, the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) requires MPOs to update and maintain a transportation plan with at least a 20 year planning horizon; and

WHEREAS, the MPO has adopted the Year 2035 Transportation Plan in March 2010 to meet this requirement, and the document was amended in June 2011; and

WHEREAS, the City of Huntsville has requested that the <u>Year 2035 Transportation Plan</u> be further amended to add the following maintenance and operation project: Church Street Bridge at Big Spring Park; and

WHEREAS, this project change will alter various Sections of the Year 2035 Transportation Plan;

NOW, THEREFORE, BE IT RESOLVED by the Huntsville Area Transportation Study Metropolitan Planning Organization (MPO) that the <u>Year 2035 Transportation Plan</u> be amended to reflect the attached changes requested by the City of Huntsville.

ADOPTED, this the 6th day of June, 2012.

Chairman, Metropolitan Planning Organization

Secretary, Metropolitan Planning Organization

ATTEST: Date 6-6-12 Chairman, MPO TCC

Lore Campbell 6-6-12



RESOLUTION NO. 17-12

HUNTSVILLE AREA TRANSPORTATION STUDY METROPOLITAN PLANNING ORGANIZATION

AMENDING THE YEAR 2035 TRANSPORTATION PLAN

WHEREAS, the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) requires MPOs to update and maintain a transportation plan with at least a 20 year planning horizon; and

WHEREAS, the MPO has adopted the <u>Year 2035 Transportation Plan</u> in March 2010 to meet this requirement, and the document was amended in June 2011 and June 2012; and

WHEREAS, the City of Huntsville has requested that the Year 2035 Transportation Plan be further amended to indicate funding availability for the following projects: Northern Bypass from East of Pulaski Pike to US 231, Martin Road from Zierdt Road to Rideout Road, Martin Road from Zierdt Road to Laracy Drive, and I-565 from I-65 to Wall Triana Highway; and

WHEREAS, the <u>Year 2035 Transportation Plan</u> is further amended to indicate that the Interchange at Research Park Boulevard and Blake Bottom Road is to be funded with STP Huntsville Urbanized Funds instead of STP Any Area funds; and

WHEREAS, these project changes will alter various Sections of the Year 2035 Transportation Plan;

NOW, THEREFORE, BE IT RESOLVED by the Huntsville Area Transportation Study Metropolitan Planning Organization (MPO) that the <u>Year 2035 Transportation Plan</u> be amended to reflect the attached changes.

ADOPTED, this the 12th day of September, 2012.

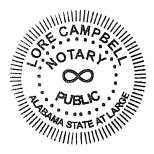
Chairman, Metropolitan Planning Organization

Secretary, Metropolitan Planning Or anization

Notary Public

My Commission Expires: 1 - 14 - 2013

ATTEST: <u>Marie</u> BrilDate 9/17/12 Chairman, MPO TCC



RESOLUTION NO. 1-13

HUNTSVILLE AREA TRANSPORTATION STUDY METROPOLITAN PLANNING ORGANIZATION AMENDING THE 2035 TRANSPORTATION PLAN

WHEREAS, the Huntsville Area Transportation Study Metropolitan Planning Organization (MPO) is the organization designated by the Governor of the State of Alabama as being responsible, together with the State of Alabama, for implementing the applicable provisions of amended 23 USC 134 and 135 (SAFETEA-LU 6001, August 2005); 42 USC 126, 2000d-1, 4321 et seq., 7401 et seq; 23 CFR 450 and 500; 40 CFR 51 and 93; and

WHEREAS, the U. S. Department of Transportation requires all urbanized areas, as established by the U. S. Bureau of the Census, conducting area-wide urban transportation planning, to submit a 2035 Transportation Plan as a condition for meeting the provisions of 23 USC 134 and defining principles of 23 CFR 450.322; and

WHEREAS, the MPO adopted the 2035 Long Range Plan in March 2010 to meet the above requirements, and the document was amended in June 2011, June 2012, and September 2012; and

WHEREAS, the State of Alabama has requested that the 2035 Transportation Plan be further amended to add a project and indicate the funding availability for: Maysville Road Connector from Maysville Road to Epworth Drive; and

WHEREAS, the City of Huntsville has requested that the High Mountain Road Extension project be removed from the Year 2035 Transportation Plan, as it no longer a project the City of Huntsville desires to construct; and

WHEREAS, these changes will require altering various Sections of the 2035 Transportation Plan; now

THEREFORE, BE IT RESOLVED by the Huntsville Area Transportation Study Metropolitan Planning Organization (MPO) that the 2035 Transportation Plan has been amended to reflect the attached changes requested by the State of Alabama.

ADOPTED, this the 27th day of February 2013.

Chairman, Metropolitan Planning Organization

Secretary, Metropolitan Planning Organization





WIT COMMISSION EXPIRES 1-14-2017

RESOLUTION NO. 9-14

HUNTSVILLE AREA TRANSPORTATION STUDY METROPOLITAN PLANNING ORGANIZATION AMENDING THE 2035 TRANSPORTATION PLAN

WHEREAS, the Huntsville Area Transportation Study Metropolitan Planning Organization (MPO) is the organization designated by the Governor of the State of Alabama as being responsible, together with the State of Alabama, for implementing the applicable provisions of amended 23 USC 134 and 135 (MAP-21, Sections 1201 and 1202, July 2012); 42 USC 126, 2000d-1, 4321 et seq., 7401 et seq; 23 CFR 450 and 500; 40 CFR 51 and 93; and

WHEREAS, the U. S. Department of Transportation requires all urbanized areas, as established by the U. S. Bureau of the Census, conducting area-wide urban transportation planning, to submit a 2035 Transportation Plan as a condition for meeting the provisions of 23 USC 134 and defining principles of 23 CFR 450.322; and

WHEREAS, the MPO adopted the 2035 Long Range Plan in March 2010 to meet the above requirements, and the document was amended in June 2011, June 2012, September 2012, and February 2013; and

WHEREAS, consistent with the declaration of the aforementioned provisions, the City of Huntsville Planning Division, Huntsville Area Transportation Study (MPO) Planning Staff, acting for the City of Huntsville, City of Madison and Madison County, in cooperation with the Alabama Department of Transportation, has prepared an amendment to the <u>Year 2035 Transportation Plan</u> for the Huntsville Area; and

WHEREAS, the City of Huntsville has agreed with the State of Alabama to fund improvements on US 231 and has requested that the following maintenance and operations project be added to the plan:

US 231 Access Management and Intersection Improvements from Hobbs Road to Weatherly Road - \$7,500,000; and

WHEREAS, the City of Madison and Madison County has received funding through the Alabama Transportation and Rehabilitation Improvement Program (ATRIP) for the following project, and has requested that it be added to the plan:

Zierdt Road/Kellner Road Corridor from Kellner Road to Zierdt Road - \$8,040,000; and

WHEREAS, Madison County has received ATRIP funding to improve Jeff Road from Capshaw Road to Douglass Road, and the Jeff Road project descriptions have been modified to reflect this funding commitment so that the plan may now indicate:

Jeff Road (Phase 2) from Capshaw Road to Douglass Road - \$9,045,000; and

WHEREAS, the City of Madison has requested that a new project at I-565 be added to the plan as an unfunded, visionary project, described as follows:

I-565 Interchange near Zierdt Road - \$35,975,490; and

WHEREAS, the above changes will alter certain sections and project listings, and will require adjustment to project tables;

NOW THEREFORE, BE IT RESOLVED by the Huntsville Area Transportation Study Metropolitan Planning Organization (MPO) that the <u>Year 2035 Transportation Plan</u> has been amended to reflect the attached changes requested by the City of Huntsville, City of Madison, and Madison County, and the MPO does adopt the amended Year 2035 Transportation Plan.

ADOPTED, this the 23rd day of April 2014. hairman, Metropolitan Planning Organization Secretary, Metropolitan Planning Organization

ATTEST Date 🕂 Chairman, MPO TCC

RESOLUTION NO. 36-14

HUNTSVILLE AREA TRANSPORTATION STUDY METROPOLITAN PLANNING ORGANIZATION AMENDING THE 2035 TRANSPORTATION PLAN

WHEREAS, the Huntsville Area Transportation Study Metropolitan Planning Organization (MPO) is the organization designated by the Governor of the State of Alabama as being responsible, together with the State of Alabama, for implementing the applicable provisions of amended 23 USC 134 and 135 (MAP-21, Sections 1201 and 1202, July 2012); 42 USC 126, 2000d-1, 4321 et seq., 7401 et seq; 23 CFR 450 and 500; 40 CFR 51 and 93; and

WHEREAS, the U. S. Department of Transportation requires all urbanized areas, as established by the U. S. Bureau of the Census, conducting area-wide urban transportation planning, to submit a 2035 Transportation Plan as a condition for meeting the provisions of 23 USC 134 and defining principles of 23 CFR 450.322; and

WHEREAS, the MPO adopted the 2035 Long Range Plan in March 2010 to meet the above requirements, and the document was amended in June 2011, June 2012, September 2012, February 2013, and April 2014; and

WHEREAS, consistent with the declaration of the aforementioned provisions, the City of Huntsville Planning Division, Huntsville Area Transportation Study (MPO) Planning Staff, acting on behalf for the City of Madison and in cooperation with the Alabama Department of Transportation, has prepared an amendment to the <u>Year 2035 Transportation Plan</u> for the Huntsville Area; and

WHEREAS, during its April 2014 meeting, the MPO added the project to the <u>Year 2035</u> <u>Transportation Plan</u>: I-565 Interchange near Zierdt Road, as an unfunded and visionary project on behalf of the City of Madison; and

WHEREAS, the above project is now being financed through the Town Madison Cooperative District and local bonds, requiring that the project be listed as a funded project in the <u>Year 2035</u> <u>Transportation Plan</u> for the Huntsville Area; and

WHEREAS, the above modification will alter certain sections of the plan;

NOW THEREFORE, BE IT RESOLVED by the Huntsville Area Transportation Study Metropolitan Planning Organization (MPO) that the <u>Year 2035 Transportation Plan</u> has been amended to reflect the attached changes requested by the City of Madison, and the MPO does hereby adopt the amended <u>Year 2035 Transportation Plan</u>.

ADOPTED, this the 24th day of September 2014. Chairman Metropolitan Planning Organization

ATTEST Date 9/25/14 Chairman, MPO TCC Secretary, Metropolitan Planning Organization

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EXECUTIVE SUMMARY

ES 1.0 Introduction

The **Year 2035 Transportation Plan** is a vision of the future transportation needs of the Huntsville Metropolitan area. It will serve as a guide for decisions about major transportation improvements in the Huntsville urbanized area over the next 3-5 years. It addresses areawide transportation needs identified through forecasting future travel demand, developing and testing alternatives, and selecting those options which meet the mobility needs of the area. Additionally, it addresses future traffic volumes, roadway and intersection capacities, new transportation corridors, alternative transportation modes, pedestrian/bicycle trails, signalization needs, and funding alternatives.

The plan experienced a comprehensive and full update during 2005 under the provisions of the Transportation Equity Act for the 21st Century (TEA-21). The TEA-21 legislation was replaced by the Safe, Accountable, Flexible, and Efficient Transportation Equity Act (SAFETEA-LU) in August 2005. The plan was amended during August 2007 due to federal requirements which stipulate any amendment to the long range plan after July 1, 2007 requires compliance with SAFETEA-LU. A matrix of the changes required under SAFETEA-LU, and how the MPO is meeting these strategies is shown at the end of the Executive Summary in **Table ES-1**. SAFETEA-LU planning factors are also discussed in **Section 5 - Highway Project Evaluation**.

Among the continuing provisions of SAFETEA-LU is that the plan must maintain a 20-year planning perspective, air quality consistency, fiscal constraint, and public involvement. This 20-year plan exhibits all of these characteristics.

The **Year 2035 Transportation Plan** has been developed by the transportation planning staff with input and involvement of city and county officials and the public. Fiscal constraint has been a priority during the selection of the plans' proposed projects. Careful consideration has been given to projects which would reduce congestion and/or minimize trip distances in an effort to maintain air quality at current attainment standards.

As of July 1997, the U.S. Environmental Protection Agency (EPA) promulgated stringent National Ambient Air Quality Standards for particulate matter and ozone under the Clean Air Act. While Huntsville has always been an attainment area for all criteria pollutants under the Clean Air Act, these strict standards could put Madison County at risk for non-attainment status in the future. A designation of "non-attainment" would require transportation control measures to reduce vehicle emissions and could result in delays for transportation projects. Quality long range transportation plans are critical if communities are to balance the growth and development of the urban area with environmental concerns.

ES 2.0 Overview of Socio-Economic Projections

Household and employment projections of the year 2035 for the Huntsville urban area have been conducted and were vital for plan development. It is projected that households in the Huntsville urban area will increase by over 50,000by the year 2035. Total households for the year 2035are projected at 175,266. This growth will also impact employment. It is projected that nearly 150,000 new jobs will be added to the economy of the urban area from the year 2005, bringing total employment for the year 2035to 407,893 jobs. The reason for such staggering employment growth is based upon a diverse economy, the direct impact of the 2008 Base Realignment and Closure (BRAC) transfers, and the area's solid foundation in aerospace and defense technology.

Community leaders envision that Cummings Research Park will continue to attract high technology jobs and the other industrial parks will continue growth as well. Huntsville's downtown as a center for employment will keep in step with market demand, and the Huntsville International Airport will become a connecting hub with a thriving intermodal center.

It is also assumed that area residents will still rely primarily on their motor vehicles for most trips, but will have more opportunities to utilize transit, walking, and cycling for shorter trips. Investment in transit, bikeways, and pedestrian ways will result in a higher level of usage of these modes. The **Year 2035 Transportation Plan** calls for continued investment in these modes of transportation. Additionally, further investment is proposed for a bypass system of roadways that will ring the city, and for Memorial Parkway to be an expressway from Walker Lane to the Tennessee River.

ES 3.0 Overview of Plan Element Updates

Based upon the latest household and employment projections and the vision for the Huntsville urban area, updates were developed for the highway element, public transit system, bicycle and pedestrian plans, traffic operations and safety plans, and multi-modal facilities. A synopsis of these updates follows, categorized per major element:

ES 3.1 Highway Element

Land use projections have been developed for the year 2035for testing various highway alternatives. **Map 4.1**, located in **Section 4 - Highway Element**, summarizes the major highway projects selected for improvement through the year 2035. The proposals are general and do not represent specific alignments and locations. Additional preliminary engineering studies will be conducted for each project to determine specific location and right-of-way needs. In addition, the plan can be amended as needed.

Prior to the development of this plan, a special study was conducted in 2007 by the University of Alabama entitled: **Huntsville Area BRAC Transfers: Economic and Transportation Impact Assessment.** This study was performed to better prepare for the influx of persons into the region due to the Base Realignment and Closure decisions made in 2005. An outcome of the report was the identification of several corridors that would impact

mobility on the transportation network because of projected growth. These corridors have been included in the plan. While some project descriptions in the BRAC study indicate different terminus points, the length of some projects were extended due to further study and modeling, and were incorporated into the **Year 2035 Transportation Plan.** These projects are as follows:

- Blake Bottom Road from Jeff Rd to Research Park Blvd
- Eastview Drive from Slaughter Rd to Hughes Rd
- I-565 from I-65 to Wall Triana Highway
- Martin Rd from Zierdt Rd to Rideout Rd
- Old Madison Pike from Hughes Rd to Slaughter Rd
- Patton Rd from Aerobee Rd to Redstone Rd
- Pulaski Pike from Beaver Dam Rd to Grimwood Rd
- Research Park Blvd and Interchanges from I-565 to Ardmore Highway (AL-53)
- Wall Triana Highway from Capshaw Rd to Yarbrough Rd

ES 3.2 Transit Element

Recommendations for public transportation within the MPO Study Area include:

- Expansion of fixed route service to the following areas given financial feasibility:
 - 1. Eastward, serving the Chapman and Blossomwood communities
 - 2. Space & Rocket Center/Airport
 - 3. West Huntsville
 - 4. Redstone Arsenal/NASA
 - 5. Northwest Huntsville, providing access to the North Huntsville Industrial Park, as the area develops.
- Expanding Handi-Ride service as fixed route service expands
- Expanding service hours for Handi-Ride and fixed routes
- Decreasing headways on fixed service routes
- Expanding the County's demand response transit service (TRAM) as necessary

ES 3.3 Congestion Management Element

The Congestion Management Element incorporates the Congestion Management Process (CMP) into **Section 8**per SAFETEA-LU. This provides opportunities for more shortterm congestion relief measures to be implemented, as well as cost effective management and operational strategies.

Various traffic operation improvements which can aid in congestion management were discussed. The staff and members of the MPO's Technical Coordinating Committee:

- Identified 9 Maintenance and Operations projects that address congestion and safety. These projects can be further defined as 2 congestion management projects, 1 safety management project, and 6 projects that address both congestion and safety.
- Selected the top current and future congested corridors for strategy evaluations.
- Recommends execution of the strategic plan for the implementation of Intelligent

Transportation Systems (ITS) technologies for the City of Huntsville and the design and construction of a fiber optic communication system throughout the Huntsville area transportation network as funding is available.

• Identified additional safety criteria and addresses safety and security as standalone planning factors per SAFETEA-LU.

ES 3.4 Multimodal Transportation Element

Much has been done recently to expand multimodal facilities and capabilities in the area. It is recommended that monitoring of recent long-term expansions continue to be conducted, and modifications be developed as required.

- Huntsville International Airport Passenger and Cargo Hubbing: Huntsville International Airport is a prime candidate for a connecting hub and supports proposed expansion plans.
- Huntsville International Airport International Intermodal Center Expansion: the MPO supports the recent International Intermodal Center expansion, which should provide effective long-term service to users.
- A river port facility feasibility study has been conducted and a prime site for development has been procured.

ES 3.5 Bicycle/Pedestrian Element

There has been a renewed interest in the expansion of bicycle and pedestrian facilities and capabilities in the area. It is recommended that monitoring of recent long-term expansions continue to be conducted, and modifications be developed as required.

- Pedestrian/Bicycle/Greenways Plans: the MPO adopts regional pedestrian and bikeway plans. These plans are published under separate cover and are included within the Long-Range Transportation Plan, **Section 7**.
- Recent guidance from the Federal Highway Administration indicates that all projects utilizing federal funds include bike and pedestrian facilities, unless the cost to do so exceeds 20% of the total project cost or if other exceptional reasons exist. A conscious effort is being made to incorporate these facilities into new and planned projects. Refer to **Section 7** for additional information.

ES 4.0 Plan Implementation

Successful implementation of the plan is dependent primarily upon the availability of financing the improvements required. This plan identifies a total of 99 capacity adding projects, requiring over \$2.077 billion in federal funds to construct. Based upon the anticipated federal revenues to be received within the next 25 years, a total of \$387,587,400 of projects can reasonably be funded. This may change, depending upon the availability of other sources of revenue. A list of all projects to be financed with anticipated federal revenues is shown in **Section 10**.

Additional projects requiring a total of \$1,622,678,490 of federal funds have been identified, but are unfunded. Approximately \$744 million of the \$1,622,678,490 is required for the Memphis to

Atlanta Highway and the Southern Bypass. The remaining \$878.67 million is needed to upgrade other corridors on the transportation network, with approximately 22% of those federal funds required to upgrade minor and major collectors. Approximately 6% of federal funds will be required to construct bike routes and greenways. The financing of these "unfunded" projects is essential, as the future year network indicates that a majority of congested miles traveled on the transportation system occurs on minor and major collectors. A formal list of all unfunded projects and their estimated costs can be found in **Section 10**.

ES 5.0 Conclusion

The **Year 2035 Transportation Plan** is a comprehensive review of the area transportation network and modes of urban mobility, resulting in the identification of projects and programs to be implemented. A more detailed description of selected projects and the methodology by which they were selected is presented in the document which follows.

Table ES-1: SAFETEA-LU Transportation Planning and Programming Requirements (as Amended by SAFETEA-LU Sections 3005, 3006, and 6001)

Statutory Planning and Programming Requirements	Key Changes Between ISTEA/TEA-21 and SAFETEA-LU	How the Long Range Plan Addresses the New Requirements
UPDATE CYCLES Metropolitan transportation plans [23 U.S.C. 134/49 U.S.C 5303(i)(1)]	Metropolitan transportation plans in air quality attainment areas No key change (to be updated every five years)	Not Applicable to Huntsville Area MPO.
METROPOLITAN AND STATEWIDE TRANSPORTATION PLANNING FACTORS [23 U.S.C. 134/49 U.S.C. 5303(h)(1) AND 23 U.S.C 135/49 U.S.C. 5304(d)(1)].	Added a new stand-alone factor "increase the safety of the transportation system for motorized and non-motorized users."	The State of Alabama as well as local jurisdictions maintain traffic accident data which assists them in determining which safety issues to address. As a result of ongoing data collection and analysis, these projects have been identified in Section 8 . The MPO staff has been involved with meetings of the ITS working group, which includes law enforcement and other public safety personnel, to discuss ITS implementation and strategies for utilizing technology for increasing safety of the transportation networks within the MPO jurisdiction. Refer to Section 8 . Huntsville Public Transit is investing in an automatic vehicle locating (AVL) system for all of its fleet. This system will enhance the safety of the transit system. Refer to Section 8 .

Statutory Planning and Programming Requirements	Key Changes Between ISTEA/TEA-21 and SAFETEA-LU	How the Long Range Plan Addresses the New Requirements
METROPOLITAN AND STATEWIDE TRANSPORTATION PLANNING FACTORS [23 U.S.C. 134/49 U.S.C. 5303(h)(1) AND 23 U.S.C 135/49 U.S.C. 5304(d)(1)].	Added a new stand-alone factor "increase the security of the transportation system for motorized and non-motorized users."	Huntsville Public Transit is investing in an automatic vehicle locating (AVL) system for all of its fleet. This system will enhance the security of the transit system. Refer to Section 8
		The Huntsville-Madison County Emergency Management Agency, which coordinates all emergency response plans with all jurisdictions represented on the MPO, has identified critical facilities and transportation system elements in its Emergency Operations Plan. Additionally, Madison County is designated as a host county for possible nuclear power plant evacuees in adjacent Morgan County. Capabilities of securing the local transportation system are exercised yearly with emergency response organizations county-wide. Refer to Section 8
	Expanded the environmental factor by adding the phrase "promote consistency of transportation plan and transportation improvements with State and local planned growth and economic development patterns."	Environmental factors in the transportation planning process are addressed in Section 5. Section 5 was amended to include phrasing that this activity actually occurs.
FISCAL CONSTRAINT [23 U.S.C. 134/49 U.S.C. 5303(i)(2)(C); (j)(1) (C); (j)(2)(B); and (j)(3)(D) and 23 U.S.C. 135/49 U.S.C. 5304(f)(5); (g)(4)(E); and (g)(4)(F)]	No significant changes in SAFETEA-LU; however, rates of inflation must be shown for all identified projects.	Inflation rates are taken under consideration, and projects costs have been calculated for Section 10 bearing this in mind.

Statutory Planning and Programming Requirements	Key Changes Between ISTEA/TEA-21 and SAFETEA-LU	How the Long Range Plan Addresses the New Requirements
ENVIRONMENTAL MITIGATION ACTIVITIES [U.S.C. 134/49 U.S.C. 5303(i)(2)(B) and 23 U.S.C. 135/49 U.S.C. 5304(f)(4)]	 Metropolitan and statewide transportation plans shall include "discussion" of environmental mitigation activities. This "discussion" shall be developed with Federal, State, and Tribal wildlife, land management, and regulatory agencies 	Environmental and land use factors are considered in Section 5 . All corridors identified for improvement are analyzed for environmental concerns so that mitigation activities can be considered during the planning phase. Transportation plans are considered and compared with other Local, State, and Federal agency generated plans, maps, and inventories. Discussions are also held with other agencies to determine any environmental concerns regarding the overall proposed future plan network. This section was updated to show that closer coordination with other agencies exists, and that potential mitigation activities and creative strategies may be developed to consider environmental protection of natural and man-made assets.
CONSULTATION AND COOPERATION Transportation Plans [23 U.S.C. 134/49 U.S.C. 5303(g) and (i)(4) and 23 U.S.C. 135/49 U.S.C. 5304(f)(2)]	MPOs and State DOTs shall consult with local/State land use management, natural resource, historic and other agencies in the development of transportation plans.	Environmental and land use factors are considered in Section 5 . Transportation plans are considered and compared with other Local, State, and Federal agency generated plans, maps, and inventories. Discussions are also held with other agencies to determine any environmental concerns regarding the overall proposed future plan network. This section was updated to show that closer coordination with other agencies exists. Appendix B includes a documentation spreadsheet that indicates these actions were performed.
PUBLIC TRANSIT ELEMENT	Coordinated Public Transit-Human Services Transportation Plan (per 49 U.S.C. 5310, 5316, and 5317).	This has been addressed. The Huntsville Area MPO has entered into an agreement with TARCOG to include the MPO jurisdiction in its Human Services Transportation Plan. The plan has been completed and is being implemented. (See Section 6)

Statutory Planning and Programming Requirements	Key Changes Between ISTEA/TEA-21 and SAFETEA-LU	How the Long Range Plan Addresses the New Requirements
TRANSPORTATION FACILITIES [23 U.S.C. 134/49 U.S.C. 134/49 U.S.C. 5303(k)(3); 23 U.S.C. 135/49 U.S.C. 5304(f)(7); and 23 U.S.C. 135/49 U.S.C. 5304(i)]	Operations and management strategies in metropolitan transportation plans and long-range statewide transportation plans	Performance measures for transportation system operations and management, with a focus on mobility and safety, are addressed as part of the Congestion Management Process in Section 8 . Additionally, the Huntsville Area MPO employs Transportation System Management and Travel Demand Management strategies to not only preserve the existing network, but to increase the mobility and safety of persons and freight accessing the transportation network. All of this is addressed in Section 8 . Capital expenditures are considered in terms of implementation of particular projects. These costs are reflected in Section 10 .
INTERESTED PARTIES AND PARTICIPATION [23 U.S.C 134/49 U.S.C. 5303(i)(5), (i)(6), and (j)(4) and 23 U.S.C. 135/49 U.S.C. 5304 (f)(3) and (g)(3)]	 Definition of interested parties to be engaged in statewide and metropolitan transportation planning has been expanded. Participation Plan (required for MPOs) Shall be developed in consultation with interested parties. Publish or make available for public view transportation plans, STIPS, and TIPs. Hold public meetings at convenient and accessible times and locations. Publication of statewide and metropolitan transportation plans, and TIPto the maximum extent practicable. Make information available for metropolitan transportation plans, and the maximum extent practicable. Make information available in electronically accessible formats (e.g., world wide web) Use visualization techniques. 	The Huntsville Area MPO updated its Public Involvement Plan during 2005 and amended it during 2007. This plan is periodically reviewed, and techniques utilized are measured for success. The plan meets all requirements of SAFETEA-LU. The updated plan is attached as Appendix A . The plan is currently available on the internet.

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