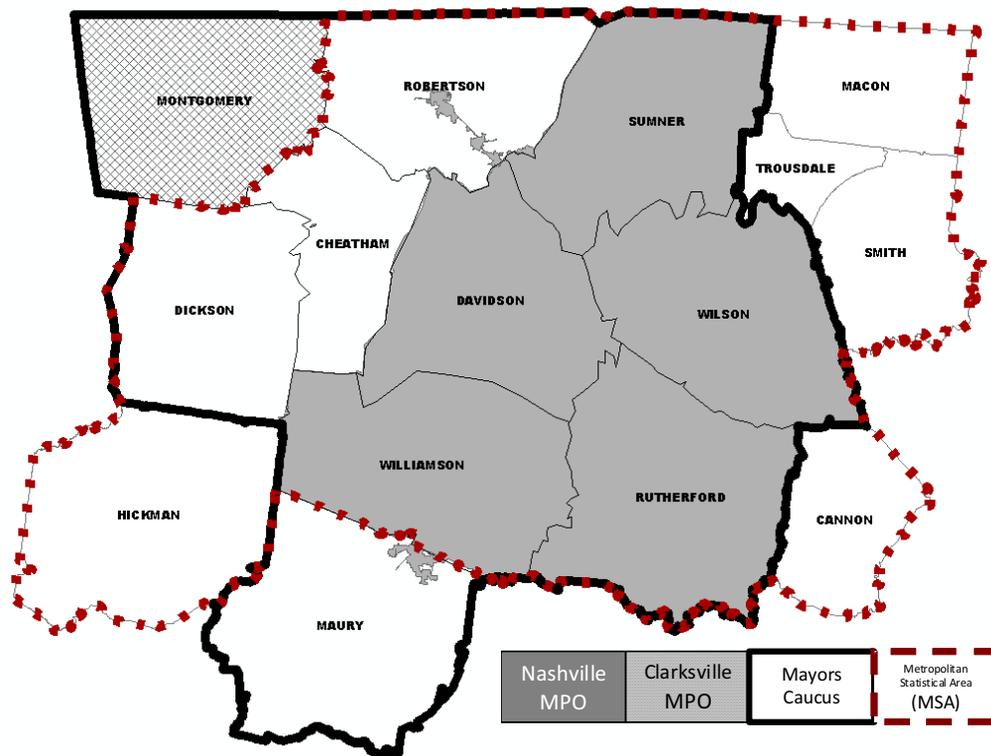


## 2.0 A Regional Context for Transportation Planning

### 2.1 Defining a Region

There are numerous ways to define a region. For the past decade or so, the Middle Tennessee region generally has been defined by 10 counties that share strong economic and political ties. While the Nashville Area MPO's planning area includes only a portion of that 10-county area, it is important for the agency to consider the larger context that lies beyond the edges of its jurisdiction in order to understand the true needs of the region for which it plans.

Figure 3. Regional Geographies



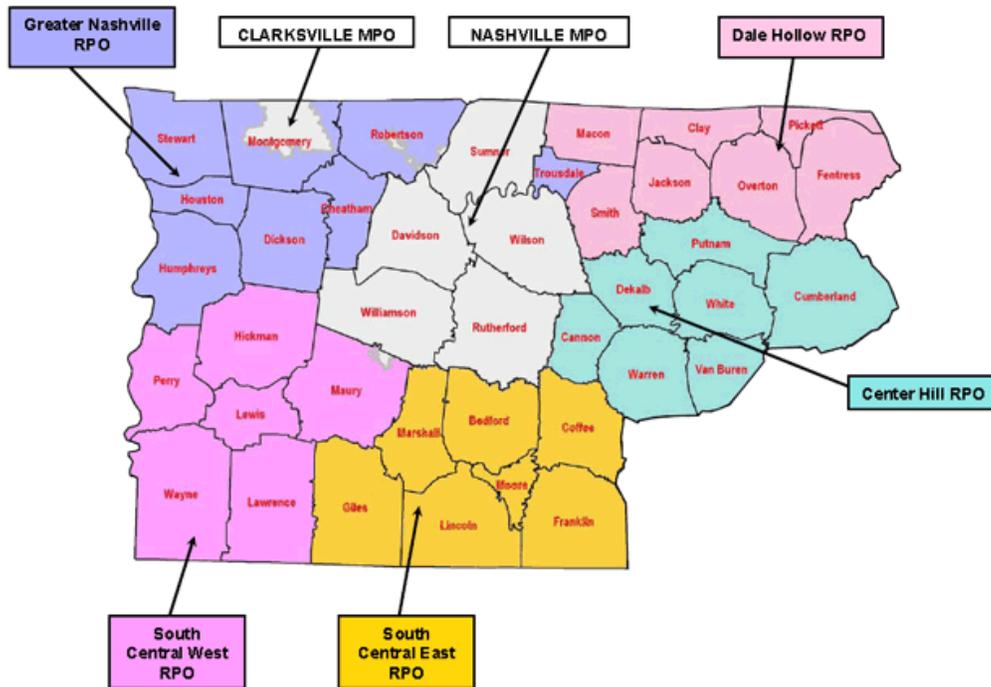
#### A 10-County Middle Tennessee Region

Initial actions to define the region's geography occurred during the last decade. In the late 1990's, local leaders first began conversations about the effects of the region's rapid economic growth following a 1999 study sponsored by the Vanderbilt Institute for Public Policy Studies and published in the *Tennessean*. The study yielded *The Peirce Report* which detailed the region's assets, liabilities, and challenges as it related to growth issues. The report also provided possible strategies to deal with those challenges. A one-day regional planning summit sponsored by Vanderbilt University and the Greater Nashville Regional Council was organized around issues raised by the report in 1999. This first major event served as the catalyst for the region's collaborative work that has been dedicated to planning for the future livability and economic vitality of the ten-county Middle Tennessee region since that time including the establishment of several regional organizations such as Leadership Middle Tennessee, Cumberland Region Tomorrow, the Nashville Civic Design Center, and most recently, the Middle Tennessee Mayors Caucus.

## Transportation Planning Areas

Across the 10-county Middle Tennessee Region, transportation planning and programming responsibilities fall to two separate MPOs and the Tennessee Department of Transportation. In urban areas of the region, the Clarksville Urbanized Area MPO and the Nashville Area MPO take the lead role in regional planning and programming. In rural portions of the region, TDOT works through rural planning organizations to establish priorities for state and federal funding for transportation projects.

**Figure 4. Transportation Planning Areas in Middle Tennessee**



## Metropolitan Statistical Area

The 13-County Nashville-Davidson-Murfreesboro-Franklin, TN Metropolitan Statistical Area is defined by the United States Office of Management and Budget (OMB) according to published standards that are applied to Census Bureau data. The general concept of a metropolitan or micropolitan statistical area is that of a core area containing a substantial population nucleus, together with adjacent communities having a high degree of economic and social integration with that core.

## 2.2 Challenges & Opportunities for Regional Thinking

### Growth & Development Pressures

Middle Tennessee is made up of 3.4 million acres and more than 1.7 million residents. The area has emerged as one of the most land-extensive metropolitan regions in the country. Over the last decade, the region has experienced a significant expansion of a sprawling development pattern which has threatened the region's rural countryside and has placed increased pressure on the area's fiscal capacity to keep up with growing demands for new infrastructure and community services. Several growth indicators related to energy and transportation (e.g., vehicle miles traveled per capita) show that our land development patterns have created an unsustainable

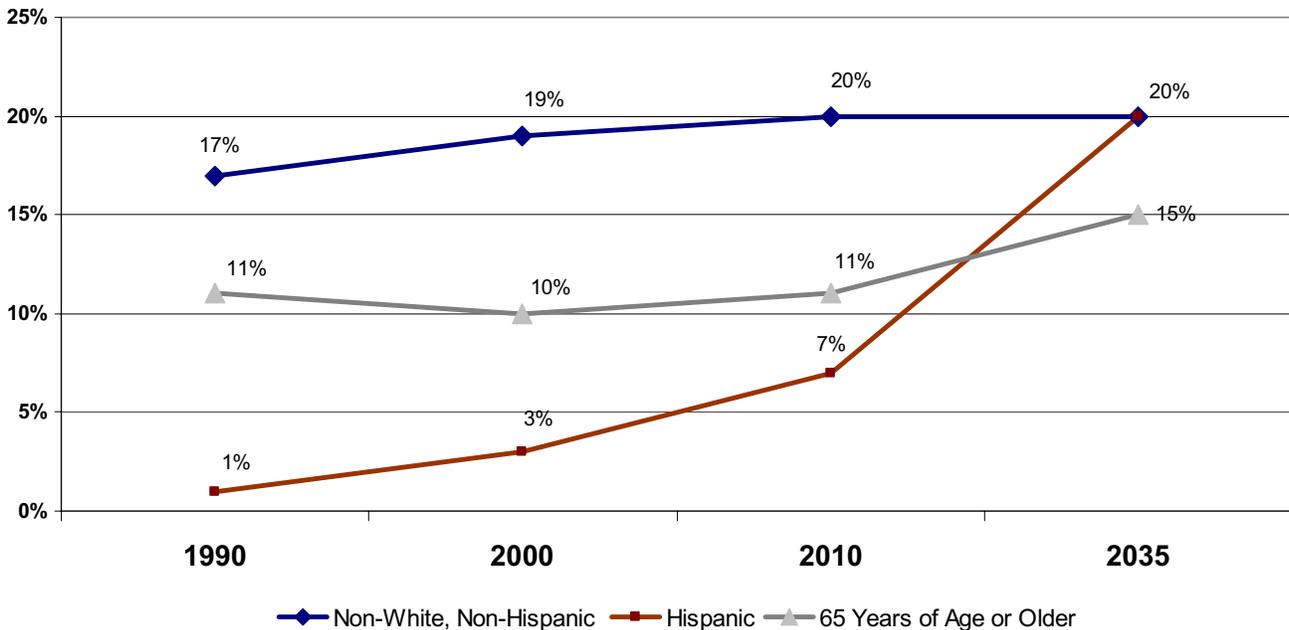
urbanized foot print that needs to be addressed in the short-term in order to ensure future, long-term prosperity.

Within the next 25 years, the population of the 10-county Middle Tennessee region is expected to increase by nearly one million people, making the area roughly the size of Denver, Colorado in terms of population. This growth will create further pressure on our existing transportation system, negatively impact our environment, and if not managed well, detract from the future economic competitiveness of our region and that of the state of Tennessee.

### Aging of America and Increasing Ethnic Diversity

Not only is the region forecasted to grow by 45 percent between 2010 and 2035, but it is predicted to grow older and more diverse. By the year 2035, about 15 percent of Middle Tennesseans will be 65 years or older, compared with about 11 percent today. Nationally, by the year 2025, experts expect less than one-third of all households will have children living at home – compared with about half of households back in the 1950s. The region’s population also will be more racially and ethnically diverse. According to MPO forecasts provided by Woods and Poole Economics, by the year 2035, the percentage of the population within the region of Hispanic ethnicity will grow to 19 percent from about 6 percent in 2010.

**Figure 5. Changes in Race, Ethnicity, and Age 1990 to 2035**



### Declining Physical Activity and Personal Health

The United States is experiencing an epidemic health crisis of diseases related to obesity. The increasing rates of people, both children and adults, who are either overweight or obese is increasing rapidly. According to the Centers for Disease Control, in 2008 thirty-three percent of American children and sixty-seven percent of adults were overweight or obese (2008 National Health and Nutrition Examination Survey, NCHS). As of Summer 2010, of all 50 states, Tennessee ranked first in adult physical inactivity, second in highest rate of overweight adults (over 68 percent), third highest for number of obese adults (over 30 percent), fourth highest in extreme obesity and fifth highest for percentage of children ages 10-17 who are overweight or obese.

Research indicates that the rise in obesity is related to food intake and physical inactivity. Food consumption may be influenced by food availability, especially in 'food deserts'. Food deserts are areas in which the population is typically low income, the rate of personal vehicle ownership is low, there is a lack of a full-service grocery store that offers fresh fruits and vegetables, and there is no direct transit route to access the closest full-service store. Many factors influence the presence of a full-service grocery store including zoning and parking requirements, economic conditions and crime. A recent Canadian study shows that when a full-service grocery store is located within a neighborhood, there is a 50 percent increase in consumption of fresh fruits and vegetables and customers arrive on foot or bicycle up to 50 percent of the time.

In addition to consumption of food, physical activity plays a major role in overall health. The Surgeon General and American Heart Association recommend that children get 60 minutes of moderate to vigorous physical activity every day and that adults get at least 30 minutes of exercise a day. Some people get physical activity by visiting a gym or a community center. Not everyone has access to these facilities, and using them creates an extra trip or outing. However, getting physical activity as part of a transportation trip is an affordable and time-saving way to get physical activity. According to the National Household Transportation Survey, 40 percent of trips in urban and suburban areas are 2 miles or less, a distance that is easily bicycled or walked. Taking a portion of these trips out of a car and transferring them into transit, walking or bicycling trips not only helps to improve congestion and air quality, but helps people get their daily physical activity. In recent years, research shows that small bouts of physical activity as short as five or ten minutes throughout a day can be just as effective as getting the recommended daily physical activity at one time.

### **Continued Change in the Earth's Climate**

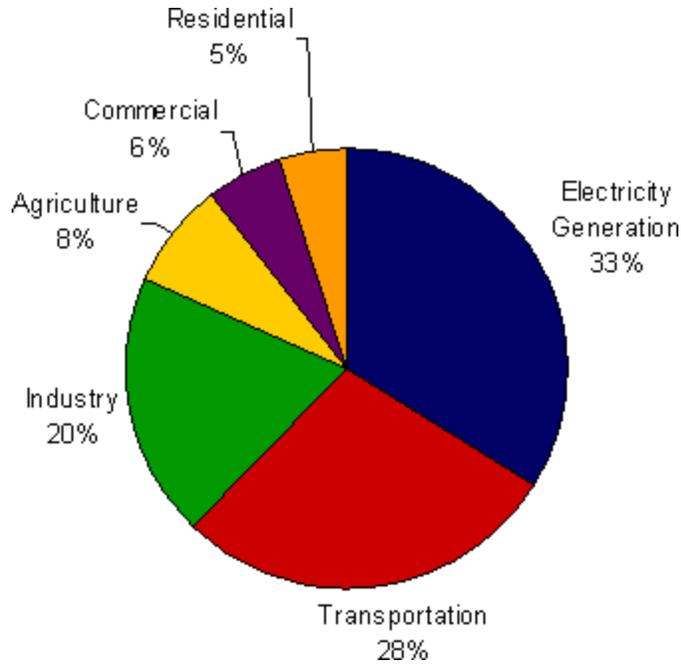
The earth's climate is predicted to continue changing over the next several generations, in part because human activities are altering the chemical composition of the atmosphere through the buildup of greenhouse gases - primarily carbon dioxide, methane, and nitrous oxide. The heat-trapping property of these gases is undisputed. Although uncertainty exists about exactly how the earth's climate responds to these gases, global temperatures are rising due to three main factors:

- Natural factors, such as changes in the sun's intensity or slow changes in the earth's orbit around the sun;
- Natural processes within the climate system (e.g. changes in ocean circulation); and
- Human activities that change the atmosphere's composition (e.g. through burning fossil fuels) and the land surface (e.g. deforestation, reforestation, urbanization, desertification, etc.).

Virtually all human activities have an impact on our environment, and transportation is no exception. While transportation is crucial to our economy and our personal lives, as a sector it is also a significant source of greenhouse gas (GHG) emissions. Since 1990, transportation has been one of the fastest-growing sources of U.S. GHGs and accounts for roughly 28 percent of the total GHG emissions across the nation.

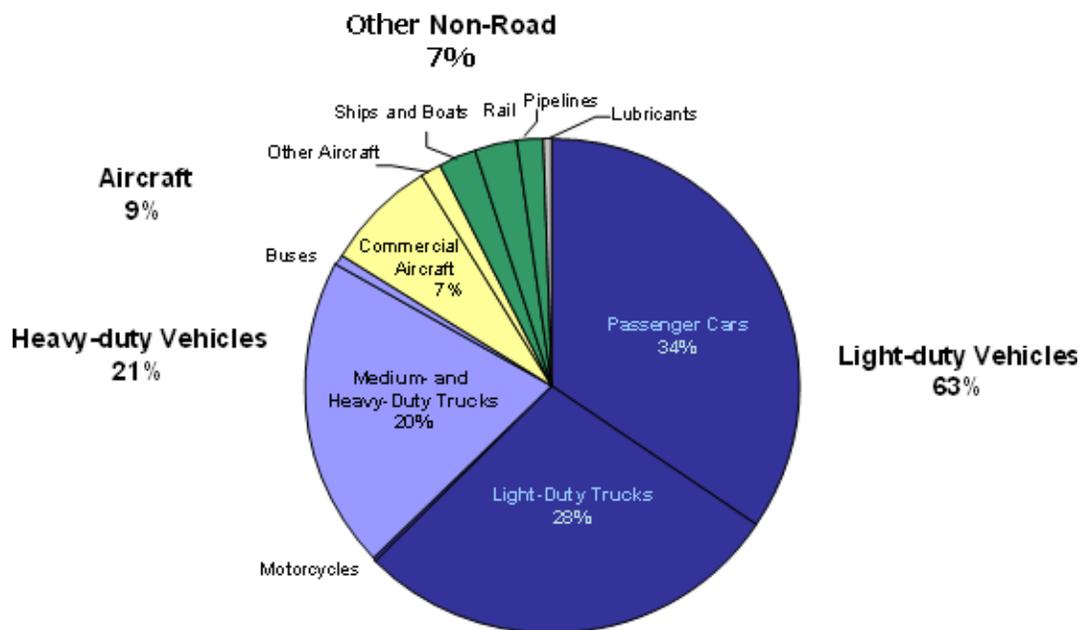


**Figure 6. Source of U.S. Greenhouse Gas Emissions**



The largest sources of transportation GHGs in 2006 were passenger cars (34%) and light duty trucks, which include sport utility vehicles, pickup trucks, and minivans (28%). Together with motorcycles, these light-duty vehicles made up about 63 percent of transportation GHG emissions. The next largest sources were freight trucks (20%) and commercial aircraft (7%), along with other non-road sources (which combined, totaled about 7%). These figures include direct emissions from fossil fuel combustion, as well as emissions from mobile air conditioners and refrigerated transport allocated to these vehicle types.

**Figure 7. Source of U.S. Transportation-Related Greenhouse Gas Emissions**



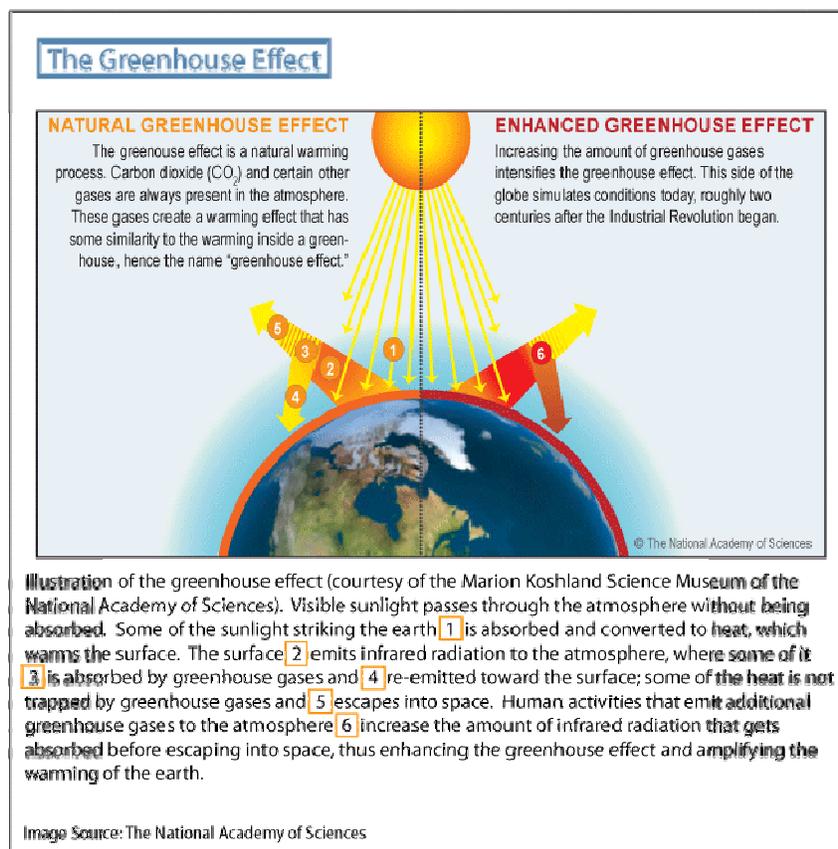
## Impacts of the Greenhouse Effect

The greenhouse effect keeps the earth warm and habitable; without it, the earth's surface would be about 60 degrees Fahrenheit colder on average. Since the average temperature of the earth is about 45 degrees Fahrenheit, the natural greenhouse effect is clearly a good thing. But the enhanced greenhouse effect means even more of the sun's heat is trapped, causing global temperatures to rise.

Scientists refer to what has been happening in the earth's atmosphere over the past century as the "enhanced greenhouse effect." By pumping man-made greenhouse gases into the atmosphere, humans are altering the process by which naturally occurring greenhouse gases trap the sun's heat before it can be released back into space.

Since the beginning of the industrial revolution, atmospheric concentrations of carbon dioxide have increased nearly 30 percent, methane concentrations have more than doubled, and nitrous oxide concentrations have risen by about 15 percent. These increases have enhanced the heat-trapping capability of the earth's atmosphere which has led to a decrease in the polar ice caps and an increase in sea levels. Such trends are a particular threat to coastal communities in the U.S. and around the world which are vulnerable to flooding and increased tropical storm activity.

**Figure 8. Greenhouse Gas Effect**



## **Fluctuations in the Economy**

The economic health of the region depends on remaining competitive by attracting and maintaining a well-trained labor force and maintaining the low cost of living and doing business. The 2035 Regional Transportation Plan recognizes that the transportation system plays a crucial role in sustaining the economic health of the area and the state of Tennessee. Many sectors of the regional economy depend heavily on the safe and efficient movement of people and goods and services by car, truck, rail, air and water. Additionally, the economic health of the Region depends on attracting high-quality jobs that are dependent on a region that maintains a desirable quality of life.

Using transportation investments as a way to support urban reinvestment and infill provides tremendous advantages to enhancing the economic health of our Region. The necessary transportation, water, sewer, and other infrastructure are already present, thus reducing the cost of development. Transportation investments geared toward creating more livable, walkable places provide choice in the marketplace, allowing for increased diversity to flourish and the Region as a whole to prosper. Furthermore, strong central places are engines that drive regional economic growth. The economic competitiveness of Middle Tennessee depends upon its community centers to serve as core areas for business, government, education, health care, culture and entertainment. Failure to attract and support development in the city centers and urban corridors will contribute to further loss of activity in these areas and additional decentralization. Transportation investments supportive of growth and redevelopment in town centers and along urban corridors promote the efficient use of land and existing infrastructure. They also have the potential to improve quality of life by enhancing our main streets and central business districts, making them safer and more attractive for business and public activities.

## **Rising Costs of Transportation**

Geopolitical instability, uncertain energy supplies and other trends will continue to drive up transportation costs, affecting project costs and household expenditures. Rising costs are felt collectively and individually. Higher prices for all petroleum products—not just fuel—are here to stay. We may experience some fluctuation in the cost of fuel, but the reality is we have a finite supply, and we need to think about how to make our Region's transportation system more sustainable. For example, the price of asphalt more than doubled in Tennessee from January 2008- December 2008. This increase has contributed to a doubling of project costs in some cases. While the costs have very recently fluctuated and even dropped in some instances, in general, transportation construction costs have risen quickly in the last 10 years. Due to the overall and projected rising cost of gasoline, personal vehicle upkeep and insurance and greater driving distances between destinations, transportation costs per household in the Region are also increasing. Transportation is the second highest household expense after housing, with lower-income households spending a higher percentage of their income on transportation costs than on housing.

Increasing evidence suggests that communities with more options for active transportation thrive better economically and spend less money on congestion due to increased safety for all modes. These communities also have healthier residents overall and may spend less money treating chronic diseases such as heart disease and asthma. Although research of this type is still relatively new, the conclusions so far strongly point to the relationship between active transportation options, economic health and reduced costs due to congestion and disease.

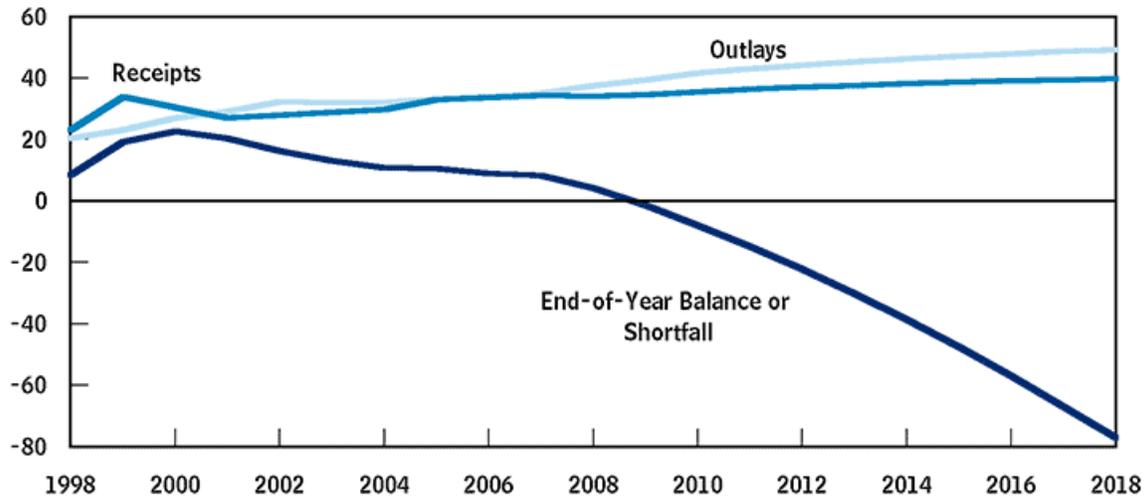
## **Shortfalls in Transportation Funding**

Revenue from Federal and state transportation sources are not keeping up with growing needs. As the following graphic shows, at current spending levels and without new sources of funding, the federal highway trust fund



will expend all available revenues projected to be collected during 2009. State and local government purchasing power is steadily declining because the federal gas tax has not been increased since 1997, and Tennessee’s state gas tax has not been increased since 1989. Since that time inflation has reduced its value by more than 40 percent. Attempts to adjust the gas tax have failed, and persistently higher pump prices for gasoline will continue to thwart any attempts to adjust the state or federal fuel tax. This will increasingly force local governments to find other means to meet their funding needs.

**National Highway Trust Fund Balances, 1998-2018**



Reduced purchasing power of current revenues leads to increasing competition for transportation funds, and less capability to expand, improve and maintain the transportation infrastructure we currently have. Meanwhile, the Region’s transportation infrastructure continues to age, requiring increasing maintenance. Over the next two decades, the gap will grow between the revenues we have and the investments we need to make just to keep interstates, streets and transit systems in their current condition.

**The Emergence of Regional Collaboration and Problem Solving -- “Regionalism”**

One of the defining strengths of Middle Tennessee lies within its demonstrated capacity to effectively organize key leaders to address issues of regional significance – the development of the 2035 Regional Transportation Plan being no exception as thousands of community leaders have spent significant time thinking about and discussing the regional goals and objectives and desired outcomes of the regional plan. The following organizations play a major role in shaping the region’s response to a variety of challenges facing the area including those associated with the movement of people and goods to support a regional economy and way of life.

***Middle Tennessee Mayors Caucus***

The Middle Tennessee Mayors Caucus was formed on July 22, 2009 in order to provide leadership on important issues facing a rapidly changing regional landscape. Transportation, and particularly the pursuit of a modern mass transit system, served as the early catalyst, but in its brief history the Caucus has served as an effective forum to build personal relationship among the mayors, improve relationships among jurisdictions, and helped local governments support each other on issues ranging from flood recovery to proposed state regulation.

The Caucus includes approximately 40 city and county mayors from across the 10 Middle Tennessee counties of Cheatham, Davidson, Dickson, Maury, Montgomery, Robertson, Rutherford, Sumner, Williamson, and Wilson. City of Gallatin Mayor Jo Ann Graves serves as chair and is supported by Metro Nashville Mayor Karl Dean and

Montgomery County Mayor Carolyn Bowers as vice chairs, and a 10 member executive committee that manages meeting topics and joint regional issues.

### ***Cumberland Region Tomorrow***

Cumberland Region Tomorrow was formed in 2000 as a non-profit regional organization dedicated to working with the public sector to support and encourage quality growth planning. Through its work, CRT brings people together to address the challenges and opportunities that come with growth and development in Middle Tennessee. Its mission is to foster communication, collaboration, and action as the region plans for the long-term livability, economic vitality and sustainability.

### ***Partnership 2020***

The Nashville Area Chamber of Commerce, through its regional economic development initiative Partnership 2020, pursues opportunities to grow the Nashville region through corporate relocation, expansion of existing business and entrepreneurship. It offers diverse programming in workforce development, public policy and also addresses issues related to quality-of-life enhancement. The Chamber is Middle Tennessee's largest business federation, representing more than 2,300 businesses in 10 counties (Davidson, Dickson, Montgomery, Cheatham, Robertson, Wilson, Sumner, Williamson, Rutherford and Maury).

Leveraging its assets in government, the music industry, healthcare and other top industry sectors, the Nashville area features one of the most dynamic economies and lifestyles in the nation. Its economic and demographic strengths have landed the Nashville region on dozens of "top places" lists in previous years. Among the Nashville area's 2009 rankings include: Market Watch's "Best Cities for Business"; Forbes' "Fastest-Recovering Cities"; Black Enterprise's "10 Best Cities for African Americans"; Fourth Best City for Live Music (Society of American Travel Writers); America's Friendliest City (Travel + Leisure magazine); and Forbes' "Best Places to Begin a Career.

### ***Greater Nashville Regional Council***

The Greater Nashville Regional Council (GNRC) was established by the Tennessee General Assembly as the state development district for northern Middle Tennessee. Today, it is a regional organization comprised of 13 counties and 52 cities offering a variety of programming, products and services, both on the municipal and regional level, to member counties. GNRC serves the counties of Stewart, Montgomery, Robertson, Sumner, Houston, Cheatham, Davidson, Wilson, Trousdale, Humphreys, Rutherford and Williamson counties.

GNRC works daily with local elected officials, economic development councils, chamber of commerce officials, and other local leaders to help communities organize and prepare for economic and community development needs. These activities are critical to providing safe, sanitary, and affordable energy efficient housing, as well as essential public infrastructure and services required to accommodate regional growth and development including new job opportunities for our growing population.

### ***Transit Alliance of Middle Tennessee***

The Transit Alliance of Middle Tennessee is a non-profit organization with the mission of encouraging private sector as well as public sector support for new investments in mass transit in the 10-county region of Middle Tennessee. The Alliance is committed to communicating the value of regional mass transportation needs and options. The Alliance fosters education across the region about the economic value of mass transit investments. Through these communication and education efforts, the Alliance will actively participate in the steps necessary to secure dedicated revenues for mass transit in the months and years ahead.



### ***Leadership Middle Tennessee***

Leadership Middle Tennessee (LMT) is a regional leadership institute founded in 1999 as a result of the Regional Partnerships initiative of Partnership 2000. The initiative was founded in 1994 in direct response to the "lack of a regional agenda" as identified in the Partnership 2000 agenda. Its mission is to broaden the regional perspective of diverse and proven community leaders. Through networking, collaboration, and strategic thinking, LMT is committed to developing regional leaders who can contribute to long-term solutions that sustain and balance the quality of life and economic growth for the region's collective communities.

Leadership Middle Tennessee serves a 10-county area including Cheatham, Davidson, Dickson, Maury, Montgomery, Robertson, Rutherford, Sumner, Williamson, and Wilson counties.

### ***Tennessee Obesity Taskforce***

The Tennessee Obesity Taskforce is a partnership of over 100 organizations across Tennessee, including the State Department of Health, which is working to mitigate obesity by implementing the strategies of the recently released *Eat Well, Play More Tennessee* state obesity plan. The Plan was released in the fall of 2010 and will be implemented over the next three years in a variety of policies and programs. The Nashville Area MPO is serving as co-chair of the Tennessee Obesity Taskforce along with the YMCA of Middle Tennessee. Policy recommendations of the Plan around the built environment and transportation include school-siting, joint-use agreement, Safe Routes to School and Complete Streets.

### **Recent Accomplishments in Regionalism**

Since 2000, a coalition of regional and state partner agencies including Cumberland Region Tomorrow, the Mayors Caucus, the businesses community, and the MPOs in Middle Tennessee have accomplished the following major milestone activities to address the challenges that face the area and to advance the region towards a more sustainable future.

- Developed and presented regional growth scenarios and growth trend data in the 2001 – 2003 Regional Visioning Project, along with regional policy and comprehensive planning strategies, that have created understanding and consensus for shared benefits of moving to a regional sustainable growth scenario;
- Created Quality Growth tools and resources that have moved a critical mass of communities in the ten county region toward successful development and implementation of local and regional comprehensive plans that align with Cumberland Region Quality Growth Principles and Sustainable Communities Livability Principles;
- Organized successful Convening the Region Summit events in 2009 and 2010 that are now our recognized annual "Power of Ten" Regional Summits that serve our communication, education and collaboration needs and strategically brings together key regional leaders to learn about and commit to focused collaborative efforts to address our key regional issues and opportunities;
- Created more than 233,955 net jobs, recruited 601 companies since the Nashville Area Chamber of Commerce initiated Partnership 2000. Since then, the partnership has continued to set goals for regional economic development, most recently as Partnership 2020;
- Collaborated to develop a new transportation plan that includes a bold, new vision for mass transit, support for active transportation and walkable communities, and the preservation and enhancement of strategic roadway corridors – a departure from the business-as-usual MPO planning strategies;



- Organized to draft and support the passage of state enabling legislation to establish a legal framework for cities and counties within a metropolitan area to pursue a regional mass transit system and a prescription for dedicating funding for that purpose;
- Established new regional organizations to help guide the implementation of planning recommendations including the Middle Tennessee Mayors Caucus and the Transit Alliance of Middle Tennessee;
- Connecting with the newly established state-wide Farmland Legacy Partnership and Sustainable Community Partnership Network that are providing support and project actions that will support our region's future implementation success;
- Emergence of the Tennessee Interagency Partnership for Sustainable Communities as an official joining of key state agencies to support successful implementation of the federal Sustainable Communities Partnership program goals and objectives and regional applications;
- Established new staff positions within local governments dedicated to promoting sustainable policies. In Nashville, The Mayor's Green Ribbon Committee on Environmental Sustainability was created to assure that Nashville continues to be a livable city with clean air, clean water, open spaces, transportation infrastructure and an energy use profile necessary to provide a prosperous community for current and future generations. The committee presented a summary report of 16 goals and 71 recommendations to Mayor Karl Dean on April 16, 2009 which included a recommendation to establish a director of sustainability within the Mayor's Office. The City of Franklin also has established a director of sustainability.

## 2.3 Public & Stakeholder Participation

Public involvement is a critical element of all planning that is done through the Nashville Area MPO. Such involvement ensures that the planning process conforms to the vision, goals, and objectives of the region. Over the last three years the MPO has engaged the community through a variety of forums with the strategic objective to engage a broad and diverse audience with specific efforts to target the following:

- General public;
- Traditionally-undeserved populations including the low-income and minority groups;
- Governmental partners including local, state, and federal agencies;
- Local and regional transit agencies and private transit operators;
- State and local political leadership;
- Business community including area chambers of commerce and economic developers;
- Non-profit community including quality growth advocacy groups; and
- Freight shippers and transportation providers.

In order to engage those audiences in the most effective way, the MPO used a variety of tools and techniques to augment the standard public workshops that are often used in public planning.

- **MPO Website:** In early 2010, the MPO launched a brand new website developed to make regional plans and programs more accessible to the general public. The website provides an overview of the MPO and its responsibilities and information about staff, executive board leadership, regional planning efforts, regional data and forecasts, meeting information, and items for public review and comment. The



website also contains a multi-media section which houses relevant videos, PowerPoint presentations, and photo slideshows, and a public involvement section containing access to social media outlets.

- **Print, Radio, and Television Media:** Throughout the past three years, the MPO has used the media to communicate its proposed plans and programs and to encourage public participation at regional events and local workshops. During the development of the 2030 plan, MPO staff and board leadership contributed to numerous newspaper articles and conducted several radio and television interviews.
- **Social Media:** In early 2010, the MPO launched a presence on various social media outlets, including Facebook and Twitter, to broaden its outreach to younger audiences looking to get involved in shaping the region's future.
- **Regional Symposiums/ Summits:** Since 2008, the MPO has hosted or co-hosted five large regional summits or symposiums to educate the public and stakeholders about important regional issues including context sensitive solutions, complete streets, school-siting, regional transit development, and regional growth and development.
- **Speaker's Bureau:** MPO staff have been very active over the last two to three years to visiting a variety of organizations throughout the region to provide presentations aimed at communicating proposed plans and programs as well as soliciting input through facilitated conversations.
- **Survey Research:** In recent years, the MPO has conducted various telephone and web-based surveys to measure attitudes and perceptions towards transportation policy. The largest of the efforts included statistically valid telephone survey of 1,100 residents from across the 10-county Middle Tennessee region.
- **Videos and other Visualizations:** The MPO has invested significantly in recent years to produce visualization tools in order to increase the public's understanding of proposed plans and programs. To kick-off the final stretch of public outreach for the 2035 plan, the MPO produced a 4-minute video to communicate the MPO's major policy initiatives and to illustrate the main concepts proposed by the plan.

## Participation through Regional Studies

Even before the 2035 Regional Transportation Plan was conceived of as a comprehensive document, the MPO began to engage the public and interested stakeholders through a series of major studies focused on improving certain elements of the transportation system and/ or the relationship between transportation and land use, urban design, and economic development. The following provides an overview of the major studies conducted during the development of the plan. Each contained a robust public involvement process that included a range of activities, from public meetings and workshops to web-based and telephone surveys.

- **Southeast Corridor Transit Alternatives Analysis:** A formal Federal Transit Alternatives Analysis for the region's 30+ mile southeast corridor connecting Nashville with Murfreesboro. The study followed strict FTA guidelines for the analysis of transit alternatives including a series of interactions with the public to ultimately select a locally-preferred transit alternative for the corridor.
- **Northeast Corridor Mobility Study:** A comprehensive planning effort focused on developing transportation investment strategies that support the priorities of communities between downtown Nashville and Gallatin, TN. The study examined the economic growth potential of various land use and urban design scenarios for the fast growing corridor en route to evaluating potential transportation projects like passenger rail and bus rapid transit.



- **Tri-County Transportation & Land Use Study:** A first of its kind effort in the region to bring local governments, citizens, and businesses together to talk about significant growth issues across jurisdictional boundaries. The effort created a formal forum for local leaders in the counties of Robertson, Sumner, and Wilson to consider the growth plans of their neighboring communities in an effort to improve their own – all for the sake of regional coordination and decision-making. The MPO used the effort to generate ideas for the regional transportation plan while local governments used the effort to develop or improve upon their own local comprehensive plan.
- **Regional Freight & Goods Movement Study:** A major effort to bring together local leaders, freight industry representatives, and major freight shippers and receivers to discuss the influence that regional freight movements have on our quality of life. The effort helped the MPO to recognize the significant contributions that freight makes in the region while at the same time helped to identify improvements to the transportation system to minimize the undesirable side-effects of being located at the convergence of three major Interstates (I-65, I-40, and I-24).
- **Regional Bicycle and Pedestrian Study:** A multiple award winning study that provided the region with a comprehensive inventory of non-motorized modal facilities, a measure of the levels of service for walking and bicycling on regional roadways, a model for predicting potential demand for active transportation, a long-range vision for building a multi-modal network, a process to prioritize candidate projects, a funding toolbox, and a set of roadway design guideline/ considerations. As part of the study, the MPO established a standing Bicycle and Advisory Committee comprised of public and private-sector representatives to help guide future active transportation planning efforts of the MPO.
- **Nashville MTA Master Plan:** A strategic guide to help the MPO and the Nashville MTA set forth a set of guiding principles and policies for improving public transportation in Nashville/Davidson County, as well as describe actions and projects for the short, medium and long term. The plan is an action-oriented strategy that leads MTA closer to the long-term vision established through local collaboration and the long range transportation plan adopted by the MPO
- Others major efforts included an update to the Regional ITS Architecture, a Regional Roadway Safety Analysis, a regional Transit Needs Assessment, and the Southwest Area Transportation & Land Use Study.

## Formal Interagency Consultation and Public Review

The MPO's SAFETEA-LU compliant Public Participation Plan (PPP) provides guidelines for how the public and interested stakeholders will be involved in the development of the regional transportation plan. While public involvement opportunities have been numerous over the past three years, the formal public review and comment period associated specifically with the 2035 Regional Transportation Plan occurred during a 30-day period leading up to the final public adoption hearing for the plan.

During the 30-day period, copies of the 2035 Regional Transportation Plan were made available on the MPO's website and at local branch libraries throughout the MPO region. Several workshops and meetings were held around the region to provide an opportunity for members of the public and stakeholder groups to evaluate the proposed policies, programs, and projects.

In addition, local, state, and federal agencies involved in natural resources, land use management, environmental protection, conservation, and historic preservation also were given an opportunity to review the draft plan to ensure adequate interagency consultation yielded a plan that was consistent with the goals and objectives of other public agencies that are affected by transportation plans, programs, and policies. Many of



them had indicated an interest in the regional plan through a survey conducted during the development of the MPO's Public Participation Plan.

### ***Key Dates of the Public Review and Comment Period***

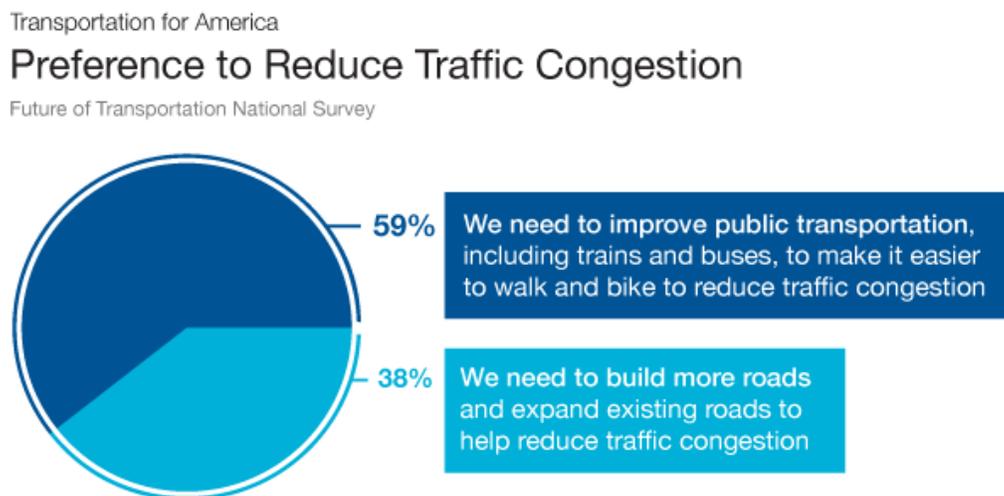
- **November 8, 2010:** Draft copies of the plan placed on website and in area libraries.
- **November 9 - December 12, 2010:** Formal public workshops in counties throughout the MPO region,
- **December 1, 2010:** First public hearing,
- **December 15, 2010:** Second public hearing/ Adoption.

Comments received through the public involvement period were provided to the MPO Executive Board prior to adoption and summarized in Appendix C.

## **2.4 Public Attitudes towards Transportation Policy and Programs**

### **American Attitudes toward Transportation Policy**

Americans today are overwhelmingly supportive of broader access to public transportation and safe walking & biking. A national poll released by Transportation for America in 2010 revealed that Americans have a strong and broadly shared desire to expand the transportation options available to them, and for the federal government to take a more active role in financing a wide range of mobility options – including public transportation, biking, and walking.



- Over 4-in-5 voters (82%) agree that “the U.S. would benefit from an expanded & improved transportation system, such as rail & buses.” A solid majority (56%) “strongly agree” with that statement. 79 percent of rural voters also agreed with the statement, despite much lower use of public transportation compared to Americans in urban areas.
- When asked about reducing traffic congestion, three-in-five voters choose improving public transportation and making it easier to walk & bike over building more roads or expanding existing roads (59% to 38%).
- Americans who have not taken a bus, train or ferry in the last month for a trip to school, work, errands, or shopping, the primary reason cited is that transit simply is not available in their community (47%),

while another 35 percent say it's not convenient to work, home, school (35%). Only 8 percent said they preferred to drive.

- Americans would prefer to nearly double the federal budgetary allocation to public transportation, saying that 37 cents of every dollar should be the norm. Fifty-nine percent (59%) of the electorate cite some amount greater than what the federal government currently spends (18 cents or greater).

Also according to Transportation for America, "the desire to increase the amount of funding allocated to options beyond roads and highways" was shared across demographic, geographic and political lines, including:

- Sixty-seven (67%) percent of residents in the Northeast, 58 percent in the West, 57 percent in the Midwest, and 52 percent in the South regions of the U.S.,
- Sixty-two percent (62%) of urban areas, 59 percent of suburbanites, 60 percent in small towns and 50 percent in rural areas,
- Sixty-six (66%) percent of Democrats, 59 percent of Independents, and 49 percent of Republicans.

Even in the current economic times, a majority of voters are willing to increase their own taxes in order to expand/improve public transportation in their community. Nationally, 52 percent of respondents said that they would support increasing funding to expand and improve public transportation in your community, if it required a small increase in taxes or fees.

### *National Perceptions on Walking Facilities*

A 2002 Surface Transportation Policy Project national random sample telephone survey (800 adults) found that Americans would like to walk more than they are currently, but are held back by poorly-designed communities that encourage speeding and dangerous intersections, and whose footprint is inconvenient to walk to shops and restaurants.

- More than half of the American public (55%) says it would like to walk more throughout the day either for exercise or to get to specific places. Four in ten (41%) Americans would choose driving over walking for wherever they need to go.
- Eight in ten Americans (80%) would like to walk more for exercise, with over half (54%) saying they would like to walk "a lot" more for exercise. Similarly, 78 percent would walk more for fun (46% "a lot" more). And, nearly two-thirds (63%) say they would like to walk more to stores or to run errands (36% "a lot" more).
- Majorities of the public associate walking with good exercise (65% say this describes walking "very well"), relaxation (56%), and fun (48%). Walking is considered "fun" more often by women than men. To a lesser degree, walking is viewed as a "good way to get around" (35%). The public, however, does not associate walking with being inconvenient (16%) or exhausting (13%).
- One of the reasons walking may not be so closely related to getting around is a lack of access to stores, restaurants and other areas within walking distance of people's homes. Over half of Americans (54%) say there are too few shops or restaurants within walking distance of their home.
- The main reasons Americans report not walking more are that "things are too far to get to" (61% - reason for not walking more), and that they "don't have enough time" (57%). Fear of crime, a dislike of walking, or laziness, however, are not reasons that Americans point to for why they do not walk more often.

- When thinking about deciding where to live, having sidewalks and places to take walks for exercise or fun is important to nearly eight in ten Americans (79%), and “very” important to four in ten (44%). Having areas to walk in the neighborhood rates third on a list of seven items asked in the survey, behind feeling safe from crime and the quality of the public schools.

### ***National perceptions on Growth, Transportation, and Energy***

The 2009 Growth and Transportation Survey, a national telephone survey of 1,005 adults commissioned by Transportation for America and the National Association of Realtors, describes what Americans think about how development affects their immediate community.

- Eighty percent (80%) of Americans expressed that they wanted transportation & infrastructure spending included in the economic stimulus bill to target projects that achieve multiple goals and create new jobs.
- An overwhelming 80 percent believe it is more important that a stimulus plan include efforts to repair existing highways and build public transit rather than build new highways.
- Forty-five percent (45%) said construction of new highways should “definitely” or “probably” not be included in the plan.
- The survey found that Americans wanted Congress and the incoming Obama administration to factor plans for reducing dependence on foreign oil, improving the environment, and increasing transportation choices into the stimulus, even if it were to temporarily delay job creation.
- Eighty-nine percent (89%) of those surveyed agreed that transportation investments should support goals for reducing energy use, with 58 percent agreeing strongly.
- Three in four of those polled wanted ARRA to support the reduction of carbon emissions that lead to global warming and climate change.

### **Middle Tennesseans' Attitudes towards Transportation**

As part of its overall public involvement strategy for the 2035 Regional Transportation Plan, the Nashville Area MPO commissioned a statistically-valid research effort on public opinions about transportation among Middle Tennesseans. While national data on the public’s attitudes and perceptions about today’s mobility status in U.S. metro areas can be helpful in formulating public policies for a southeastern urbanized region, qualitative evidence of a mirroring of overall national attitudes and opinions was surfacing at local public meetings and other speaking engagements held across the ten-county Middle Tennessee region. Subsequently, formal quantitative research data via a 2010 telephone survey revealed the following about localized attitudes & opinions on various transportation-related issues:

#### ***Satisfaction with Current Transportation System***

- Middle Tennessee residents are most satisfied with the maintenance of roadways in their area (63%) and overall levels of roadway congestion in their area (54%),
- Middle Tennessee residents are least satisfied with how walkable their community is (49%), how safe it is to ride a bicycle in their community (42%), and the availability of mass transit services in their area (29%). The lack of transit options is considered the greatest problem in Middle Tennessee, followed by the lack of walking and bicycling options.

### ***Transportation Priorities for the Future***

- Respondents were asked to prioritize the strategies for improving transportation. The first choice was to improve and expand mass transit options, the second choice was to build or widen existing roadways, and the third choice was to make communities more walkable and bicycle-friendly. In the more urban areas of Middle Tennessee the second and third choice were reversed.
- When asked about preferences for alternative sources of funding for transportation improvements, the largest amount of support was for applying a new impact fee on private land developers (55%) followed by a vehicle registration fee or wheel tax (47%), a vehicle emissions fee (46%), and a fee for single occupant cars to use in a carpool lane (46%).

### ***Mass Transit***

- Respondents generally agreed that mass transit provided numerous benefits to the region. Eighty-three percent (83%) agreed that mass transit is important for the economy, 83 percent agreed that the area needs regional mass transit to prepare for growth, and 74 percent agreed that more people will use transit due to increasing fuel prices.

## **2.5 Guiding Principles, Regional Goals, and Major Objectives**

The development of the MPO's plan provides a significant opportunity to identify and document community values and to define goals and objectives for transportation planning and policy for the next 25 years. Working through a comprehensive, continuing and cooperative effort with the Federal Highway Administration, Federal Transit Administration, Tennessee Department of Transportation, local transit operators, the public, and other interested parties, the MPO strives to identify the most appropriate set of short-, mid-, and long-term projects that address the anticipated needs within the region as embodied by a set of guiding principles, regional goals, and major objectives developed through extensive public and stakeholder involvement.

### **Guiding Principles**

Guiding principles direct how the Nashville Area MPO -- working as part of a larger regional coalition comprised of the interests of local governments, non-profit organizations, the business community, and public citizens -- will contribute to overall quality of life for the region.

#### **Guiding Principle #1: *Livability***

MPO plans and programs will work to enhance the quality of life in the region by supporting initiatives that increase opportunities for affordable housing, education, jobs, recreation, and civic involvement without increasing the burden on citizens to enjoy their community.

#### **Guiding Principle #2: *Sustainability***

MPO plans and programs will strive to support growth and prosperity without sacrificing the health, environment, natural and socio-cultural resources, or financial stability of this or future generations.

#### **Guiding Principle #3: *Prosperity***

MPO plans and programs will contribute to the continued economic well-being of the greater Nashville area by investing in transportation solutions that increase access to education, jobs, and amenities, reduce the cost of living and doing business, and attract new investment to the region.



## Guiding Principle #4: *Diversity*

MPO plans and programs will recognize the multitude of needs and the variety of perspectives and backgrounds of the people that live and work in the greater Nashville area by promoting a range of transportation choices that are designed with sensitivity to the desired context.

## Regional Goals

The regional goals embody a general set of strategies by which the Nashville Area MPO will seek to help the region in its pursuit of quality growth as directed by the overarching guiding principles.

- Goal # 1:** Maintain and Preserve the Efficiency, Safety, and Security of the Region's Existing Transportation Infrastructure.
- Goal # 2:** Manage Congestion to Keep People and Goods Moving.
- Goal # 3:** Encourage Quality Growth and Sustainable Land Development Practices.
- Goal # 4:** Protect the Region's Health & Environment.
- Goal # 5:** Support the Economic Competitiveness of the Greater Nashville Area.
- Goal # 6:** Offer Meaningful Transportation Choices for a Diverse Population including the Aging
- Goal # 7:** Encourage Regional Coordination, Cooperation, & Decision-Making.
- Goal # 8:** Practice Thoughtful, Transparent Financial Stewardship by Ensuring that Transportation Improvements meet Regional Goals.

## Major Objectives

The major objectives represent specific strategies and actions that the MPO seek to implement en route to achieving the regional goals of the 2035 Regional Transportation Plan.

- Objective #1:** Adopt a "fix-it-first" mentality in directing transportation funding. Initial focus should always be on the maintenance or improvement of existing facilities.
- Objective #2:** Strive for quality over quantity. Build out all elements of priority projects or phases rather than stringing funding out over several incomplete projects or incomplete phases.
- Objective #3:** Shift investment strategies towards providing a diversification of modes, rather than solely on strategies focused on roadway capacity.
- Objective #4:** Improve marketing and promotion of successful existing transportation services. It is acceptable to use federal transportation funds to do this.
- Objective #5:** Provide opportunities and define roles for all types of organizations and/or individuals (public or private) to assist in the implementation of programs and projects.
- Objective #6:** Improve the coordination of land use, urban design, transportation, rural and environmental feature preservation, and economic development policies and decisions through incentives and/or policies.
- Objective #7:** Encourage the development of context sensitive solutions to ensure that community values are not sacrificed for a mobility improvement.

- Objective #8:** Increase efforts to improve the form and function of transportation corridors in order to contribute to the “sense of place.” Such investments can: improve attractiveness to visitors or prospective businesses or residents; compliment existing natural and cultural resources; improve the function of the road for a variety of users; and foster civic pride toward public investments in infrastructure.
- Objective #9:** Consider how transportation policies, programs, and investment strategies affect the overall health of people and the environment including air quality, physical activity, biodiversity, and the natural resources.
- Objective #10:** Invest in the development of walkable communities that offer citizens the ability to access residences, jobs, retail, recreation, and other community amenities without the need to rely on an automobile.
- Objective #11:** Invest in a modern regional mass transit system to maintain the region’s economic competitiveness with other metropolitan regions, and to ensure continued economic prosperity in the face of growing energy costs, environmental concerns, and increasingly expensive automobile traffic.
- Objective #12:** Work to ensure that Middle Tennessee is given priority consideration in proposed national plans for high-speed rail. Identify opportunities to coordinate regional mass transit planning efforts with super-regional and national efforts to invest in rail infrastructure.
- Objective #13:** Provide proper guidance to the region for how to bridge the gap between the MPO's "cost-feasible" plan and the ultimate vision for how transportation will shape the future of the region.

## **Relating Regional Goals to Federal Planning Factors**

The *Safe Accountable Flexible Efficient Transportation Equity Act – a Legacy for Users* (SAFETEA-LU), federal transportation legislation passed by U.S. Congress and signed by the President in 2005, defines specific planning factors to be considered when developing transportation plans and programs in a metropolitan area. Current legislation calls for MPOs to conduct planning that:

- #1. Supports the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.
- #2. Increases the safety of the transportation system for motorized and non-motorized users.
- #3. Increases the security of the transportation system for motorized and non-motorized users
- #4. Increases the accessibility and mobility options available to people and for freight.
- #5. Protects and enhance the environment, promotes energy conservation, and improves quality of life, and promotes consistency between transportation improvements and state and local planned growth and economic development patterns
- #6. Enhances the integration and connectivity of the transportation system, across and between modes, for people and freight.
- #7. Promotes efficient system management and operation.
- #8. Emphasizes the preservation of the existing transportation system.



The following table illustrates how the MPO's regional goals relate to each of those factors.

**MPO Goals and SAFETEA-LU Planning Factors**

MPO Regional Goal	Applicable SAFETEA-LU Federal Planning Factors
Goal # 1: Maintain and Preserve the Efficiency, Safety, and Security of the Region's Existing Transportation Infrastructure.	1, 2, 3, 7, 8
Goal # 2: Manage Congestion to Keep People and Goods Moving.	1, 4, 7
Goal # 3: Encourage Quality Growth and Sustainable Land Development Practices.	1, 4, 5,
Goal # 4: Protect the Region's Health & Environment.	1, 5
Goal # 5: Support the Economic Competitiveness of the Greater Nashville Area.	1
Goal # 6: Offer Meaningful Transportation Choices for a Diverse Population including the Aging.	4, 6
Goal # 7: Encourage Regional Coordination, Cooperation, & Decision-Making.	1, 5
Goal # 8: Practice Thoughtful, Transparent Financial Stewardship by Ensuring that Transportation Improvements meet Regional Goals.	1, 2, 3, 4,5, 6, 7, 8