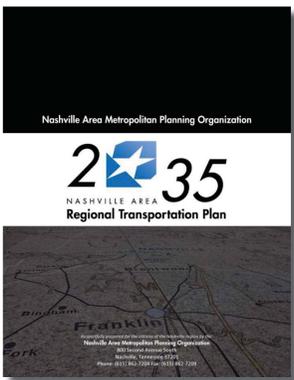




Nashville Area MPO's 2035 Regional Transportation Plan: LINKING MOBILITY & HEALTH

THE PLAN

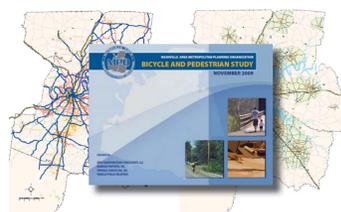
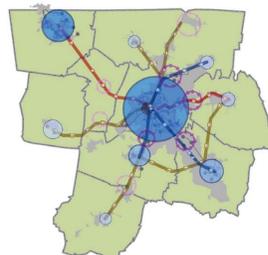
\$6 BILLION in transportation investments to contribute to the overall sustainability, livability, prosperity, and diversity of Middle Tennessee.



MAJOR POLICY INITIATIVES

The 2035 Plan lays out a strategy to invest nearly **\$6 billion** in anticipated revenues into the region's transportation system as it absorbs nearly one million more residents and a significant increase in vehicle miles traveled.

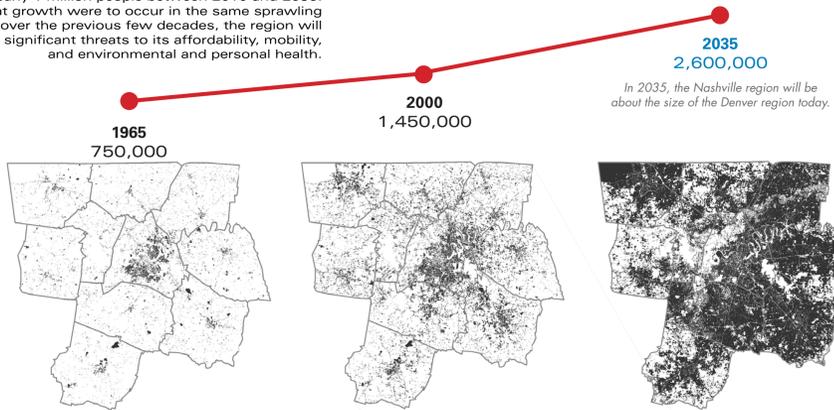
- 1 CREATE A BOLD, NEW VISION FOR MASS TRANSIT** to help guide the expansion and modernization of the region's mass transit system in preparation for an increasing competitive global economy, and to proactively address growing concerns about the health of our environment, worsening congestion, and sprawling land development patterns that encroach upon the area's cherished rural countryside.
- 2 SUPPORT ACTIVE TRANSPORTATION & THE DEVELOPMENT OF WALKABLE COMMUNITIES** to improve connectivity between people and places within the urbanizing area of the region, foster healthier activity for Middle Tennessee's citizens, and serve as the backbone of investments in mass transit.
- 3 PRESERVE & ENHANCE STRATEGIC ROADWAY CORRIDORS** with a focus on repairing aging roadways and bridges to ensure the safety of the traveling public and freight transport, improving operations through the integration of new technologies, and completing streets to provide a balanced system that works for all users.



A GROWING REGION WITH A HISTORY OF SPRAWL

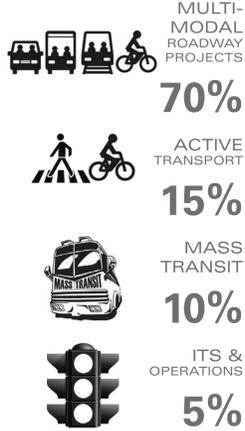
New MPO policy is intended to help mitigate decades of sprawl in Middle Tennessee.

The 10-County Middle Tennessee region is projected to grow by nearly 1 million people between 2010 and 2035. If that growth were to occur in the same sprawling pattern over the previous few decades, the region will experience significant threats to its affordability, mobility, and environmental and personal health.



URBAN INVESTMENT STRATEGY

MPO STP GRANT FUNDS



As a demonstration of commitment to the 2035 Plan, the MPO elected to redirect its share of federal Surface Transportation Program (STP) grant funds to projects and programs that directly support the Plan's three major policy initiatives.

MULTI-MODAL ROADWAY CAPACITY & SAFETY: 70% programmed on traditional roadway projects where improving safety and implementing complete streets principles are emphasized.

ACTIVE TRANSPORTATION PROGRAM: 15% dedicated to active transportation accommodations and education.

MASS TRANSIT PROGRAM: 10% flexed to be combined with FTA funds to modernize and enhance the area's transit system.

SYSTEM OPERATIONS & ITS PROGRAM: 5% dedicated to operational improvements, stand-alone ITS, and incident management upgrades.

MAJOR TRENDS

- STRONG CROSS-COUNTY COMMUTING PATTERNS:** According to recent American Community Survey data, one out of every three Middle Tennessee commuters works outside of their home county. The number grows to nearly 1 in 2 when looking at residents outside of Nashville-Davidson County and Clarksville-Montgomery County. These strong cross-county commuting patterns are a defining characteristic of Middle Tennessee clearly demonstrating why regional coordination on issues like transportation, housing, and economic development is crucial to the long-term success and livability of individual communities.
- GROWING COSTS OF TRAFFIC CONGESTION:** According to the Texas Transportation Institute's 2009 *Urban Mobility Report*, congestion costs the Nashville-Davidson urbanized area more than \$624 million annually in wasted fuel and lost time – and that is based on a \$2.50 per gallon gasoline. Assuming levels of congestion and the price of fuel hold steady into the future, those costs would equal \$15.6 billion over the next 25 years. Compare that with the \$6 billion in revenues that the Nashville Area MPO estimates being available during that same timespan from federal, state, and local sources to invest in the infrastructure to mitigate congestion.
- HOUSEHOLD BUDGETS CONSUMED BY TRANSPORTATION COSTS:** Personal budgets are being significantly impaired by transportation costs. According to the Center for Neighborhood Technology (CNT) and the U.S. Department of Housing and Urban Development, the average American household spends approximately 18% of its annual income on costs related to transportation – auto ownership, transit fare, fuel, parking, and other expenses. The situation is much worse in Middle Tennessee where CNT estimates that more than 9 out of every 10 households spend more than 1 in 5 dollars earned on transportation costs, and an alarming 16% spend more than 28%. Compare those figures with a region like Denver's – where only 42% of households spend more than 20% of household income on transportation-related expenses.
- SPRAWL-INDUCED TRAVEL TIMES:** When it comes to measuring the effectiveness of a transportation system, levels of congestion and personal costs might be the most obvious indicators. But increasingly, regional planners are beginning to realize that land use patterns are influencing commutes as much as volume-to-capacity ratios. According to *Driven Apart* – a report published by CEOs for Cities – the Nashville region has the worst commutes in America when expressed in terms of the average amount of time spent traveling during peak commute periods. In Middle Tennessee, that status is not driven by congestion (as the region ranks 31st worst for congestion-related delay by TTI), but by the average distances between households and job sites.
- FEW OPTIONS FOR SENIORS:** A recent report regarding public transit for seniors shows Nashville as the fourth-worst in the nation among metropolitan areas with a population of 1 million or more. Commissioned by Transportation for America and titled, *Aging in Place, Stuck without Options*, the report shows that Nashville's percentage of citizens aged 65 to 79 with poor transit access will be 85% in 2015. Only Atlanta, Kansas City and Oklahoma City project to have higher percentages. Raleigh-Durham, N.C., ranks fifth, with 80% of its seniors expected to have poor access to transit by 2015.
- DANGEROUS BY DESIGN:** According to Transportation for America, the Nashville region is the 14th most dangerous metropolitan area for pedestrians in the nation, with 1.4 pedestrians killed each year per 100,000 people.

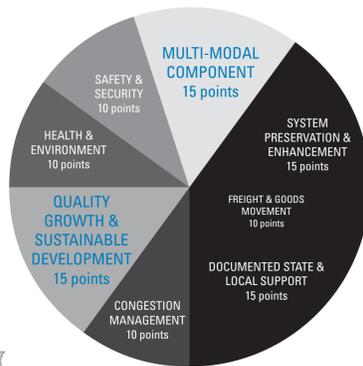
PROJECT EVALUATION

In updating its Long-Range Transportation Plan, the Nashville Area MPO implemented a rigorous data-driven project evaluation process that placed an increased emphasis on the importance of active transportation for personal health and quality-of-life.

Sixty percent (60%) of project selection criteria used for the Plan relate directly to health, safety, congestion reduction, and active transportation.

- 15 out of 100 points are given if a transportation project has a multi-modal component such as a sidewalk, bikeway, or transit element.
- 10 out of 100 points are given if a project addresses safety concerns, including those demonstrated by bicycle and pedestrian crash data.
- 10 out of 100 points are given if a project provides an opportunity to improve health such as reducing emissions and providing an opportunity for physical activity through an active transportation facility, especially if the project falls in a High Health Impact Area.
- Additional health-related criteria are included in other categories such as Quality Growth & Sustainable Development and Congestion Management.

HIGHLIGHTS OF THE EVALUATION CRITERIA USED IN 2035 PLAN PROJECT SELECTION

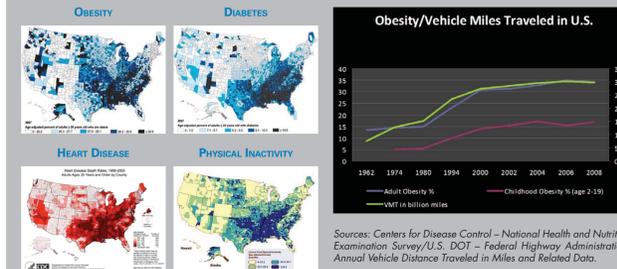


A FOCUS ON HEALTH

Recognizing the correlative relationship between the built environment and health outcomes, the Nashville Area MPO adopted policy around the idea of **protecting the region's health and environment** as part of a 25-year plan for transportation infrastructure in the greater-Nashville area.

GROWING EVIDENCE

SUPPORTING THE LINKS BETWEEN TRANSPORTATION & HEALTH OUTCOMES



TENNESSEE'S GRADES FOR OBESITY



REGIONAL PLANNING

The MPO has worked with a broad coalition to develop a new transportation plan that will set policy for how the region will fund transportation improvements over the next 25 years. That effort culminated in December 2010 when mayors from across the region adopted the 2035 Regional Transportation Plan, which rests on the view that transportation infrastructure is more than just a tool to improve mobility – it is a significant contributor to the overall health, sustainability, prosperity, and character of a place – be that a small community or a large metropolitan area.

MPO HEALTH-CENTRIC PLANNING ACTIVITIES

- Conducted Middle Tennessee's first-ever **comprehensive regional bicycle & pedestrian study** which included detailed analysis of existing conditions and levels of service for non-motorized modes; a latent demand model to forecast the likelihood of walking and bicycling trips; and a set of recommendations calling for significant investments in walking and bicycling infrastructure.
- Analyzed candidate transportation projects for their **proximity to healthy food options** including grocery stores, farmers' markets, and emergency food sources – highlighting the relationship between transportation options and food access.
- Conducted **hands-on training**, led by national experts, for regional & community leadership on **complete streets and school-siting policy**.
- Established **health-related standards for Transit Oriented Developments** – research that's now serving as the basis for incorporation of Health Impact Analysis criteria into land development review & design processes of local governments.
- Championed a **transportation & built environment focus area** in the Tennessee Obesity Taskforce's *Eat Well, Play More Tennessee* plan to combat & prevent disease related to obesity and physical inactivity in Tennessee.
- Designed a **special health study** as part of a 10-County household travel survey research effort to collect data describing the relationship between travel behaviors, physical activity expenditure, and personal health outcomes.

INDEPENDENT EVALUATION

- MPO policies and planning activities recently underwent an assessment and review by the **Centers for Disease Control Division of Nutrition, Physical Activity and Obesity (DNPAO)**. The review is a pre-evaluation assessment of the MPO's policies around physical activity, with the intent of collecting an evidence base of policy-based initiatives for the purpose of widespread replication.
- The MPO also underwent a review by the CDC-funded **Center for Translational Research and Training in the Center for Health Promotion and Disease Prevention** (Prevention Research Center) at the University of North Carolina, Chapel Hill. The MPO was selected by the Center TRT to be reviewed as an emerging intervention that shows promise based on theory and approach for potential public health impact for one or more obesity related outcomes. In a separate process, the Center TRT conducted a site visit with the MPO and created an evaluation logic model and process for the MPO to conduct a self-evaluation of the impact of its policies around health. Should funding become available, the MPO could be a potential candidate for a full evaluation conducted by the Centers for Disease Control.

