

Southeast Area Transportation and Land Use Study

PROJECT MANAGEMENT PLAN

Davidson/Rutherford/Williamson/Wilson Counties, Tennessee

April 2013



Prepared for the Nashville Area
Metropolitan Planning Organization



G R E S H A M
S M I T H A N D
P A R T N E R S



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PROJECT MANAGEMENT PLAN

OVERVIEW

In February 2013, the Nashville Area Metropolitan Planning Organization (MPO) executed a contract with Gresham, Smith and Partners (GS&P) to perform a planning study for the southeast area of the Nashville metropolitan region. Drawing together state, regional, and local partners, the purpose of the study is to develop a preferred vision for growth and development in the area paralleling I-24 between I-40 and I-65 in Davidson, Rutherford, Williamson, and Wilson counties, and identify general land use and multimodal transportation recommendations that the MPO and local community partners can use to implement the preferred vision.

The Project Management Plan (PMP) has been developed to guide the study process and to ensure that the project schedule is maintained, key milestones are met, clear lines of communication are established, and a plan for quality is addressed.



I-24 eastbound at Exit 74A in Murfreesboro

I. SCOPE OF SERVICES

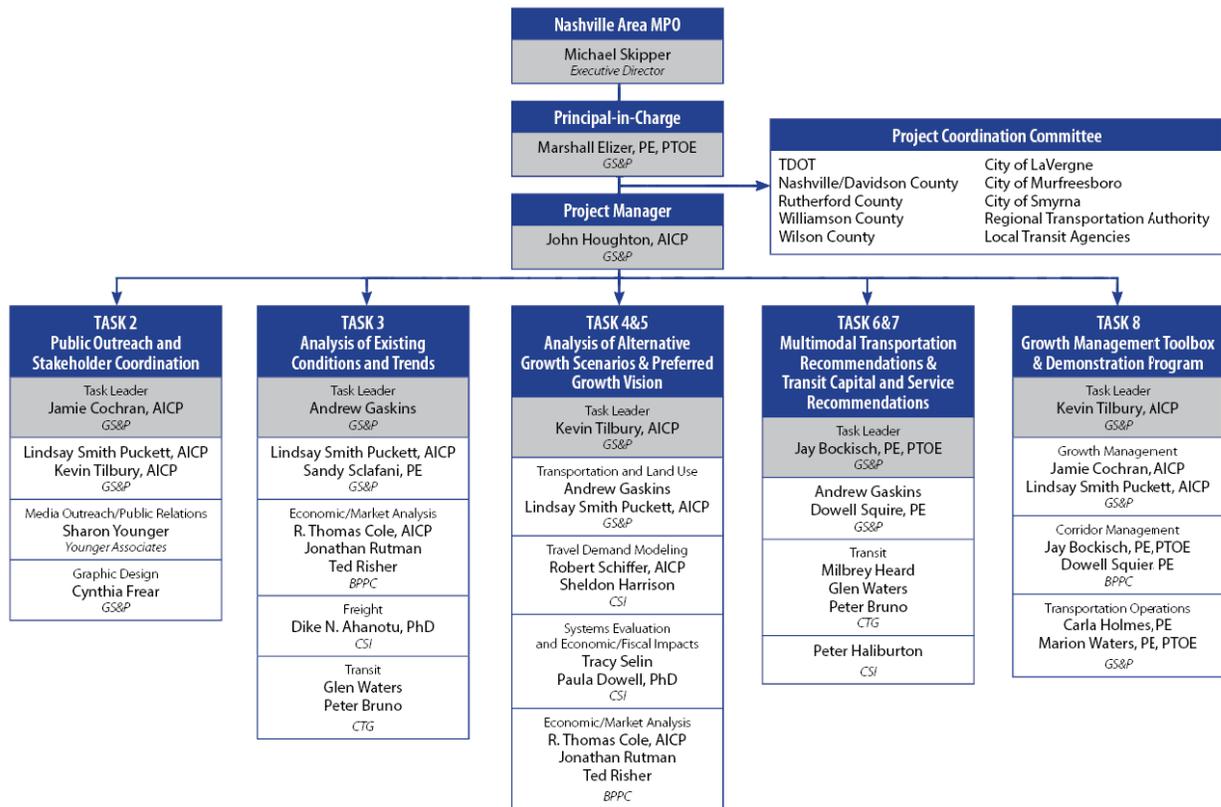
The scope of services divides the Southeast Area Transportation and Land Use Study (Southeast Area Study) into nine tasks. Collectively, the tasks describe the planning process and technical work necessary to develop a preferred growth vision and identify a set of multimodal transportation and land use recommendations.

The project begins with a series of start-up tasks describing existing conditions and laying the groundwork for stakeholder and public involvement. Based on the initial technical analysis and input from the Project Coordinating Committee (PCC), stakeholders, and the public, the project team will generate and evaluate a set of alternative growth scenarios. Working with the PCC, stakeholders, and the public, the project team then shifts to the development of a preferred growth scenario and related land use plan recommendations. The remaining work focuses on identifying multimodal transportation recommendations, with a specific emphasis on transit capital and service improvements, and a demonstration of growth management strategies. The full scope of services is located in Appendix A.

III. PROJECT TEAM

There are two distinct entities with direct involvement in the Southeast Area Study – the Nashville Area Metropolitan Planning Organization and the consultant team led by Gresham, Smith and Partners. The other members of the consultant team include Cambridge Systematics, Connetics Transportation Group, Basile Baumann Prost Cole & Associates, and Younger Associates. In addition, a Project Coordination Committee (PCC) representing local, regional, and state partners has been established. This section describes the proposed project governance structure, roles and responsibilities, and the review and approval process.

Figure 3-1. Organizational Chart



Project Governance

Successful completion of the project depends on clear and meaningful decision making about the direction of the project, project priorities, and project deliverables. Each team member's roles and responsibilities are described below.



Nashville Area Metropolitan Planning Organization (MPO)

The MPO is the owner of the contract and project sponsor, and is ultimately responsible for the project’s success. Specific responsibilities of the MPO include:

- Creating and communicating the project vision
- Serving as the decision maker for policy-level concerns of the stakeholder community
- Acting as the project’s advocate with other agencies and local governments
- Ensuring that political and organizational obstacles to project success are addressed in a timely manner
- Building commitment among stakeholder organizations

The role of the MPO Project Manager is to ensure that the project is delivered according to established expectations. The Project Manager carries out its role by:

- Acting as the MPO’s official contact with the consultants, providing direction, resources, and clarification as needed
- Overseeing review and approval of all project deliverables in a timely manner
- Serving as the internal clearinghouse for all project progress and resolving project related issues
- Attending and/or ensuring MPO participation in all coordination meetings, committee meetings and public meetings

The PCC will serve as the steering committee for the study and will support the work of the project team, providing invaluable local knowledge from project start-up to the final study document. The responsibilities of the PCC members are to:

- Offer policy recommendations and provide guidance to the study
- Receive and review technical memoranda
- Coordinate with their respective agencies
- Provide a sounding board for the project team to prepare for public outreach activities

Gresham, Smith and Partners

Gresham, Smith and Partners (GS&P) is the lead consultant for the contract and holds responsibility for the project and all deliverables. The GS&P Principal-in-Charge is ultimately responsible for the consultant’s performance on the project. Responsibilities of the GS&P Principal-in-Charge include:

Southeast Area Transportation and Land Use Study

- Establishing project goals relative to the scope of work for the consultant team
- Defining team members roles and responsibilities
- Assisting with facilitation of public meetings and supporting client and stakeholder meetings
- Addressing client's policy-level concerns
- Approving study development and review

The role of the GS&P Project Manager is to ensure that the project is delivered according to established expectations. The Project Manager carries out its role by:

- Acting as the consultant's official contact with the MPO
- Monitoring production and quality assurance/quality control of all project deliverables
- Managing and communicating with all subconsultants and vendors
- Managing the review and approval process of consultant work products
- Developing and distributing project status reports

Technical Teams have been identified for the project. Their role is to produce the team's interim and final work products. Technical team responsibilities include:

- Working closely with client project management to ensure project expectations are completely understood
- Developing interim and final work products while meeting the project's schedule, budget, and quality goals
- Ensuring deliverables have followed project review and approval process
- Coordinating with client, technical teams, and committee members as necessary
- Maintaining a repository of the technical team's information and documentation
- Identifying issues and risks and taking action, in conjunction with GS&P Project Manager, to resolve or avoid them

Review and Approval Process

The review and approval process identifies the types of approvals to be made, the individuals and organizations responsible, and expected approval timing. The process consists of four review levels:

1. **Technical Team Review:** Work product is submitted to GS&P Project Manager after review and approval by the Technical Team members.





2. **GS&P QA/QC Review:** GS&P Project Manager and one off-team, senior GS&P professional review work product and request revisions or approve. GS&P Project manager submits work product to MPO Project Manager.
3. **MPO Project Manager Review:** MPO Project Manager reviews work product and requests revisions or approves submission to the PCC. Work deliverables require only MPO Project Manager approval. Target: Complete review within three working days.
4. **PCC Review:** PCC members review work deliverables and submit comments. The MPO Project Manager will coordinate with the PCC members. Target: Complete review within five working days.

IV. COMMUNICATION

Having a clear plan for communication is important to the success of any project. The following sections outline GS&P’s strategy for communication on the Southeast Area Study.

External Communication

The MPO has primary responsibility for external communication. External communication may include contact with agencies, the press, or the general public. GS&P will provide support to and undertake external communications at the direction of the MPO.

If the MPO directs GS&P to undertake external communications, GS&P will use the following protocol. In situations where sensitive or official project information is being disseminated, GS&P will seek review and approval from the MPO in advance. In situations of basic communication where no critical information is disseminated, prior review and approval from the MPO is not necessary; however, GS&P will coordinate with the MPO on such communication where feasible and appropriate. Specific conditions involving prior review and approval are delineated in Table 4-1.

Table 4-1. Communication Plan

	Basic Communication – <i>Review and Approval from the MPO is <u>not</u> necessary.</i>	
	<ul style="list-style-type: none"> Data requests Status updates 	<ul style="list-style-type: none"> General coordination Meeting notification
	Dissemination of Information – <i>Review and approval from the MPO <u>is</u> necessary.</i>	
	<ul style="list-style-type: none"> Press releases Press interviews Project deliverables Interim project materials 	<ul style="list-style-type: none"> Meeting materials Web page content Communication with public officials and general public

Internal Communication

In an effort to streamline communication and eliminate confusion for the MPO, GS&P has implemented a single point of contact approach to internal communication. The MPO may use the point of contact for all matters related to the study, whether they be technical or administrative/procedural. Additionally, the MPO may refer outside individuals to the point of contact.

- Primary point of contact – The GS&P Project Manager will serve as the single point of contact for GS&P.
- Alternate point of contact – The GS&P Project Professional will serve as the alternative point of contact in the event that the primary point of contact is unavailable.

Unless directed otherwise, GS&P will use the MPO's Project Manager for the study as the MPO's point of contact. All internal communication from the consulting team will flow through this individual.

V. DATA COLLECTION

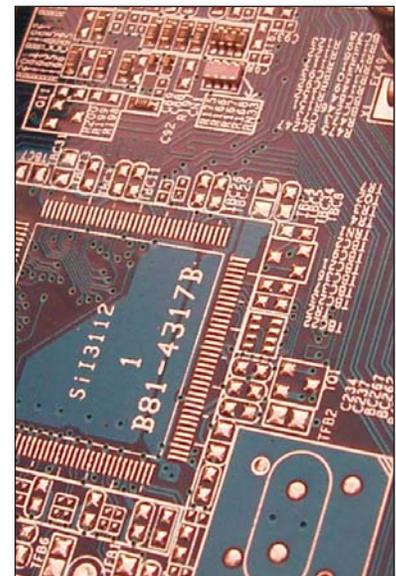
Gresham, Smith and Partners will coordinate public data collection through the MPO, and utilize private sources for any proprietary data, specifically economic and market data. GS&P will initiate and manage data collection according to the following procedures:

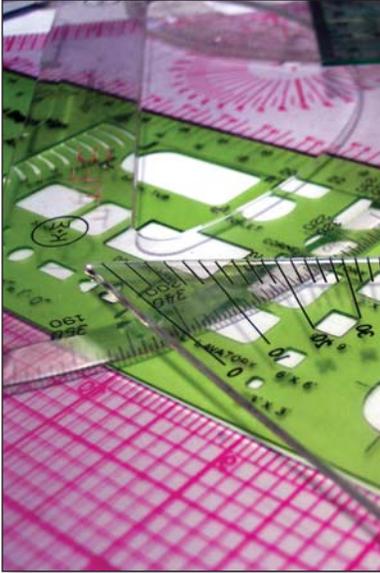
- **Identify data requirements** – including data requirements for all subconsultants
- **Develop data needs table** – including data needs by subject matter, type of data (GIS, plan, other), and any specific issues
- **Coordinate with client** – including data requests and data sharing agreements
- **Manage and maintain project data** – including data files associated with specific tasks and major deliverables

The following will be a target of the data collection effort:

- Inventory of existing plans and policies
- Inventory of existing capital budget and programs
- Land use/parcel information
- Transportation system and networks;
- Information about other public infrastructure systems
- Natural resources and environmental features
- Socio-cultural assets and resources
- Population and employment estimates and forecasts

Other data not listed above may be required as part of the study.





VI. QUALITY ASSURANCE/ QUALITY CONTROL

Gresham, Smith and Partners is committed to ensuring that all products developed as part of this study are of the highest quality and free of errors. As part of its quality assurance/quality control (QA/QC) process, GS&P has developed a Project Plan (see Appendix C) that establishes a review team and delineates a process for ensuring that all work products and deliverables have been thoroughly reviewed and verified by a qualified employee who is not directly involved in the project.

All deliverables identified in the Scope of Work will be subject to both on-team and off-team QA/QC reviews prior to submittal to the client. In most cases, administrative documents (e.g., meeting notes, internal memoranda) will be reviewed by on-team personnel only. Minimal information will be required to initiate a QA/QC review, and QA/QC review time will be built into the schedule for all deliverables. For each deliverable, reasonable advance notice (at least one week) will be given to QA/QC personnel prior to submitting for review.

APPENDIX A. SCOPE OF SERVICES

**SOUTHEAST AREA TRANSPORTATION AND LAND USE STUDY
NASHVILLE AREA METROPOLITAN PLANNING ORGANIZATION**

This scope of services describes the work necessary to provide the Nashville Area Metropolitan Planning Organization (MPO) and local community partners with a preferred vision for growth & development for the southeastern portion of the metropolitan area, and general land use and multi-modal transportation recommendations to guide the implementation of that vision. Interim and final study deliverables will be used by 1) local governments to update land use and transportation elements of their comprehensive plans, 2) local and regional transit providers to determine new transit service or service improvements within and along the corridor, and 3) the MPO as the basis for land use and transportation recommendations for the southeast portion of the planning area in the development of the *2040 Regional Transportation Plan*.

TASK 1. PROJECT MANAGEMENT/COORDINATION

1.1 Project Management Plan

Gresham, Smith and Partners ("CONSULTANT" hereafter) will be responsible for internal project organization and coordination with the MPO Project Manager. The CONSULTANT will prepare a project management plan that will outline coordination, roles, and study schedule. The plan will include:

- An organizational chart of the project team and a description of roles and responsibilities for consultant and subcontractor team members;
- A final scope of work with a detailed description of major tasks and deliverables;
- A schedule and budget for each major task and requested deliverable;
- A description of the project management protocol for quality control procedures and client progress reports;
- A list of project participants and the expected level of participation (e.g., MPO staff, project committee members, agency partners, etc.);
- An assessment of local data and information needed to carry out the scope of services, and a corresponding data collection plan.

Deliverable: Project Management Plan

1.2 Project Kickoff Meetings

The CONSULTANT will meet with appropriate MPO staff to discuss the task-specific schedule, establish ground rules and project expectations within the confines of the scope and fee, exchange relevant information and documents, initiate requests for other necessary data, and to explain administration of the contract. An in-house kick-off for the CONSULTANT team members is also included.

Deliverable: Meeting materials and meeting summary

1.3 Monthly Progress Reports and Meetings

The CONSULTANT will submit to the MPO brief monthly progress reports outlining the work completed to date and an updated schedule of the tasks remaining for timely completion of the project. The CONSULTANT will also attend regular progress meetings with MPO personnel to discuss project status and project issues.

Deliverable: Progress reports and meeting agendas and summaries

1.4 Project Coordination

This task includes overall project management, liaison with the MPO and team members, and written documentation as appropriate for all meetings that are not specifically addressed elsewhere in this Scope. Communications and coordination with other federal, state, and local agencies will be closely coordinated with the MPO and documented. The CONSULTANT's Project Manager will be responsible for project coordination and communication of issues under this task.

TASK 2: PUBLIC, STAKEHOLDER, AND MEDIA OUTREACH PLAN

2.1 Public, Stakeholder, and Media Outreach Plan

The CONSULTANT will prepare an outreach plan in cooperation with the MPO. The plan is intended to provide opportunities for the public, stakeholders, and the media to participate in the formation of the study's recommendations.

The plan will address:

- Outreach Coordination—The CONSULTANT will facilitate all meetings, prepare all meeting materials, and document public and stakeholder comments throughout the process, including synthesizing findings from public involvement conducted by local agencies during recent and ongoing comprehensive planning activities throughout the study area based on readily available data and information produced by others.
- Meetings—The plan will list potential meeting materials and present recommended meeting formats, potential time of day, and locations. In addition, the plan will specify lead roles at the meetings and that each meeting will be documented and made available on the project website.
 - Project Coordination Committee Meetings (5 meetings). The project coordination committee will consist of representatives from MPO staff, TDOT, local planning and public works departments, transit agencies, county highway departments, and other relevant organizations.
 - Stakeholder and Citizen Forums (2 meetings). The forums are targeted, special purpose sessions with major stakeholder and citizen groups in the study area to be defined in consultation with the project coordination committee.
 - Public Meetings (4 meetings). Two rounds of two meetings.
- Outreach and Engagement Strategies—Strategies include:
 - The CONSULTANT will work with the MPO and the project coordination committee to develop a database of stakeholders and interested parties that will be supplemented

throughout the life of the project. This database will be used primarily for meeting notices.

- Use of the MPO website: The CONSULTANT will work with the MPO by providing periodic updates for posting on the MPO project study webpage at key project milestones, such as in advance of and following public meetings and when study deliverables are available.
- Press releases and newspaper advertisements: The CONSULTANT will develop drafts for the MPO to coordinate with press and publications.
- Environmental Justice populations: The CONSULTANT will work to ensure that minority and low income populations receive meeting notifications and that meeting locations are readily accessible.

Deliverable: Public, Stakeholder, and Media Outreach Plan and Program

TASK 3: ANALYSIS OF EXISTING CONDITIONS AND TRENDS

3.1 Data Collection

The CONSULTANT will compile base year data to describe the existing conditions for the study area, and develop forecasts of the anticipated conditions for the short-, mid-, and long-term planning horizons. The consultant will then work with the project coordination committee to identify a set of performance measures/measures of effectiveness to evaluate the existing conditions and trends against a set of goals and objectives derived from local and regional plans. The following will be included in the analyses:

- Economic and market conditions;
- Land use and development patterns;
- Travel demand and transportation system performance;
- Demand for other public services (e.g., water, wastewater, schools, fire protection, etc.);
- Costs of public services/fiscal impact analysis;
- Environmental features and conflicts;
- Local planning practices;
- Natural resource conservation efforts;
- Public health and well-being.

The CONSULTANT will also compile data and plans from a variety of sources. The following will be a target of the data collection effort:

- Inventory of existing policies and plans;
- Inventory of existing capital budget and programs;
- Land use/parcel information;
- Transportation system and networks;
- Information about other public infrastructure systems;
- Natural resources and environmental features;
- Socio-cultural assets and resources;

- Population and employment estimates and forecasts.

The CONSULTANT will be responsible for obtaining, organizing, and analyzing this information, however, cooperation will be provided by the MPO and other public agencies, as needed. Other data not listed above may be required as part of the analysis. Special attention will be given to the following factors as the planning process advances.

3.1.1 Travel Demand Model Review

The current regional base year MPO model will be reviewed by the CONSULTANT within the project study area to ensure the sufficiency of network detail, trip distribution flows, mode splits, and assignments for the purposes of a subarea transportation study. The CONSULTANT will coordinate findings and recommendations with MPO staff prior to making any modifications to the base year model within the study area. Once this base year subarea validation is complete, future year sensitivity testing will be conducted by the CONSULTANT, followed by application of the model in testing alternative transportation and land use scenarios.

3.1.2 Economic and Market Analysis

The CONSULTANT will conduct a comprehensive analysis of the trends, issues and opportunities, as well as the market potential for various types of real estate development, focusing on major product types and any interrelationships they will have with existing and planned transportation infrastructure and services.

The CONSULTANT will begin by compiling and analyzing market data through an examination of current databases and records as well as through field inspections conducted by the team. Trends in vacancy rates, rental rates, and absorption will be obtained and analyzed. Additionally, key demographic indicators will be analyzed including population, employment, household income, household growth, age of householders, and business expansion.

The CONSULTANT will next identify key industries and examine current trends for historically strong industries and emerging sectors. This information will be applied to historical and current supply and demand figures and growth rates in the markets for residential, retail, office, and industrial space. Emerging trends in regional retail, office, residential, and industrial centers will also be explored. The goal of this task will be to identify those development types that have the most potential for success based on local market conditions and trends. Market and demographic information will then be woven back into the construct of the larger study to determine interrelationships with transportation planning and other long-term growth initiatives.

3.1.3 Freight Analysis

The CONSULTANT will utilize available truck data from TDOT and/or its consultant team on the I-24 corridor to identify location specific freight issues and deficiencies. Local officials and a review of aerial photography will be consulted to identify major freight-intensive areas and corridors. This information, combined with TDOT and local traffic data, will then be used to identify key truck routes that should

ideally be preserved for freight activity and routes that can be expected to have minimal truck activity and can therefore be prioritized for other uses.

3.1.4 Transit Market Analysis

The CONSULTANT will utilize available data from operators of mass transit (e.g., MTA, RTA, Murfreesboro Rover), meetings with transit agency representatives, and field inspections to conduct a comprehensive inventory and analysis of existing public transit routes and services within the study area. The analysis will include existing service levels, travel times, operating characteristics, historical ridership, and performance. Key performance indicators at the route level will include measures of service effectiveness, service efficiency, and cost effectiveness.

The CONSULTANT will then use GIS mapping to identify the locations within the study area that currently have transit service and the extent to which those locations are served. This will be accomplished through a series of maps depicting transit coverage by time period and transit service levels.

Using GIS mapping and existing socioeconomic data, the CONSULTANT will next identify needs and opportunities for service enhancements in the study area. This will be accomplished primarily through a series of maps showing locations within the study area with the highest potential for transit to be successful, based on household and employment densities and locations with concentrations of transportation disadvantaged populations.

3.2 Trend Scenario

The CONSULTANT will prepare a trend growth scenario depicting the location and pattern of future development and its related impacts over the next 10, 20, and 30 years. The trend scenario will be based on population and employment projections generated in the economic and market conditions analysis and coordinated with the MPO's travel demand model. It will also reflect susceptibility to change factors such as current zoning, future land use policy, planned and approved development, existing and planned roads, schools and infrastructure services.

The evaluation of the trend growth scenario establishes the baseline for the study and sets the stage for developing alternative growth scenarios. The CONSULTANT will assess the trend scenario against the performance measures. The CONSULTANT will also lead a discussion with the project coordination committee on the interpretation of the performance measures and the implications for transportation and land use planning in the study area and the costs associated with the trend scenario.

Deliverable: Technical Memo on the Analysis of Existing Conditions and Trends

TASK 4: ANALYSIS OF ALTERNATIVE GROWTH SCENARIOS

The CONSULTANT will use a combination of the region's latest travel demand model along with Community Viz to build up to three area-wide growth scenarios, in addition to one that represents

“Business as Usual” following existing trends as described in Task 3. The scenarios are not intended to represent specific proposals for directing growth and development, but instead will be used to measure and benchmark cost/benefit and trade-offs associated with various philosophies for growth (e.g., compact growth, centers & corridors, centers, etc.). The alternative scenarios will differ from each other in terms of character areas designations (urban, suburban, rural, activity center, etc.), or by varying the assumptions for land use policy, land development regulations, access management practices, and/or other infrastructure availability.

4.1 Defining Places

To begin the scenario planning process, the CONSULTANT will explore different types of places that may evolve in the study area. Each place will reflect a unique existing or planned development pattern, such as traditional downtowns, office building clusters, suburban retail areas, industrial/freight clusters, and even rural areas. The community placetypes will be illustrated either with a plan graphic, a three-dimensional model and/or precedent images that convey their look and feel to citizens and local officials. Through the various public outreach activities described in Task 2, citizens and stakeholders will critique existing places, development patterns, and transportation conditions in their community. The findings from the public outreach as well as the economic and market analysis in Task 3 will be used to create enhanced community placetypes to represent characteristics of desired future development patterns that will fit into the analysis of the alternative growth visions. The CONSULTANT will identify and define up to 12 unique placetypes.

4.2 Building Scenarios

The CONSULTANT will work with the public and stakeholders to articulate the vision for how the study area as a whole can evolve over the over the next 10, 20, and 30 years, identifying what the main considerations should be for new growth or enhancement of existing communities within a regional context. The public and stakeholders will also be engaged to identify potential complementary transportation investments and strategies. This could include improvements to existing roads and new networks, the identification of multimodal corridors (i.e. complete streets), freight connectors, and new transit service. The results of these exercises with stakeholders will be synthesized into distinct area-wide scenarios. These scenarios will not be detailed land use and/or transportation plans for the study area, but rather high-level illustrations intended to convey major concepts behind each scenario.

4.3 Evaluating Alternative Scenarios

The CONSULTANT will evaluate each scenario using the analytical framework and measures of effectiveness established in the analysis of existing conditions and trends performed in Task 3. The CONSULTANT will use Community Viz Scenario 360, the travel demand model, and other tools to generate a number of indicators to help critically evaluate different scenarios. These may include:

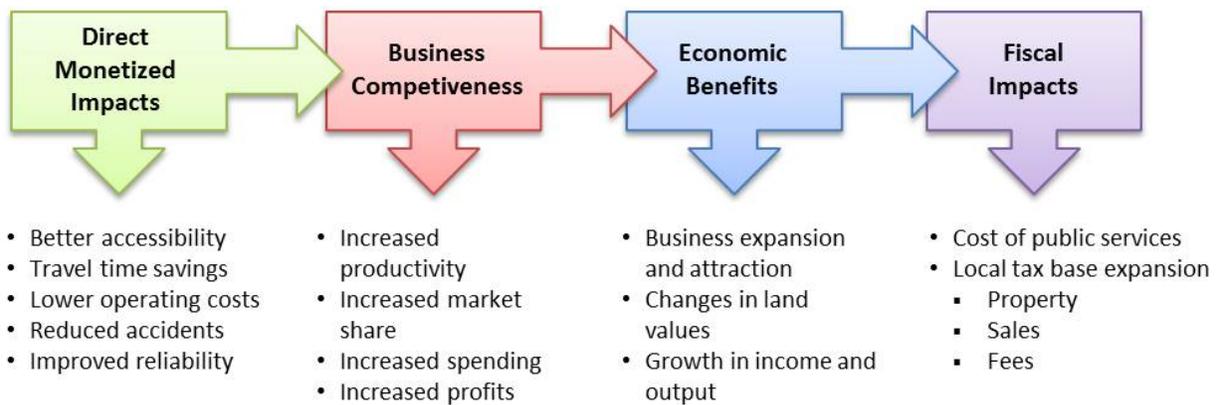
- Average trip length/travel time;
- Congestion and vehicle miles traveled;
- Number of households within walking/cycling distance of shopping, jobs, schools and transit;
- Total land consumed;
- Total infrastructure cost: roads, water, sewer, etc.;

- Economic impact;
- Fiscal impact.

The CONSULTANT will work with the MPO and the local jurisdictions to identify the indicators which are most meaningful.

Using the direct impacts from the travel demand modeling and Community Viz Scenario 360 of the various scenarios, the CONSULTANT will conduct a return on investment (ROI) analysis. As shown in Figure 1, the ROI analysis will examine how the changes in transportation efficiencies and costs arising from the various scenarios impact the region’s economic competitiveness, and thus, local government’s revenues and costs. The ROI analysis will consist of an economic and fiscal impact analyses.

Figure 1. Estimating Economic and Fiscal Impacts



4.3.1 Analysis of Economic Impacts

The CONSULTANT will conduct the economic impact analysis in two sub-phases. First, we will conduct an assessment of the “Business as Usual” (BAU) alternative. We will use the base case as a “pilot” study for developing the methodology and assumptions for conducting the ROI for the alternative. In addition to the BAU case, the CONSULTANT will analyze one additional scenario, the most aggressive variation to the BAU alternative. Based on the results of the BAU case and the one additional scenario, we will develop sketch level analysis of alternatives between the BAU and alternative scenario.

Following are the steps involved in conducting the ROI analysis:

- Step 1: Develop list of potential economic levers to assess and draft methodology for assessing the base case. The CONSULTANT will develop and document the methodology, data sources, and key assumptions in a draft technical memorandum for distribution to the project coordination committee based on the potential economic levers compiled from previous work tasks. Categories of benefits might include transit and highway user benefits, societal benefits including air quality and safety, land development impacts, state of good repair, market

connectivity benefits, and labor access benefits. Additional benefits and economic levers may be identified by the study team and project advisory committee.

- Step 2: Finalize methodology based on project coordination committee input. The CONSULTANT will facilitate a meeting of the project coordination committee to review the methodology, address concerns and issues, and solicit input into key assumptions.
- Step 3: Conduct analysis of the BAU alternative. Following agreement by the project coordination committee, the CONSULTANT will implement the research design developed in Step 2 for the BAU alternative. This includes estimating both benefit cost ratios and economic impacts. For this study, we will use the IMPLAN economic impact modeling system for modeling of the broader impacts.
- Step 4: Conduct analysis of alternative growth scenarios. Upon approval from the project sponsor, the CONSULTANT will conduct the benefit cost and economic impact assessment of the three alternative growth scenarios.

4.3.2 Fiscal Impact Analysis

Using the output from the economic impact analysis, the CONSULTANT will generate fiscal impact estimates for the BAU and the alternative scenario modeled in the economic impact analysis, and sketch level analysis for the other alternative growth scenarios. The fiscal impact analysis will be tailored for each sub-region and the level of government likely to be responsible for implementation.

Fiscal impact estimates will include both costs and revenues. To complete this subtask we will:

- (1) Use recent fiscal data specific to the sub-region to the greatest extent practical;
- (2) Develop unit estimates per capita, per employee, per lane-mile, or other appropriate metric;
- (3) Include lump sum costs or revenues that do not scale with the level of implementation;
- (4) Distinguish between one-time and ongoing costs or revenues;
- (5) Distinguish between public agency versus private party costs or revenues such as those associated with congestion pricing and employer-based transportation demand management programs;
- (6) Scale for each implementation level, e.g. “expanded current practice”, “more aggressive”, and “maximum effort”; and
- (7) Scale by community size based on metrics such as population or developed land area.

In addition, revenue sources for each strategy will identify “probable” versus “possible” sources based on funding options available within the region. We will focus on the level of support needed from public general purpose revenues, if any, versus the ability to rely on dedicated revenues associated with the strategy such as special taxes, fees, grants, and intergovernmental sources.

The output from the economic analysis along with the cost information from the alternative investment scenarios will serve as the starting point for the fiscal impact analysis. Understanding how the economy changes in terms of employment and income will allow the CONSULTANT to estimate the changes in the tax base. Land use changes will also serve as inputs. The change in local public revenue will be estimated by combining the estimated changes in tax base elements with the current and forecast tax

rates. The change in public cost will be driven by estimated changes in population, employment, and the overall cost of the investment alternatives.

Deliverable: Technical Memo on the Analysis of Alternative Growth Scenarios

TASK 5: PREFERRED GROWTH VISION AND GENERAL LAND USE RECOMMENDATIONS

5.1 Preferred Growth Vision

Using output from the “trend” scenario modeled in Task 3 to represent a baseline, and the evaluation of the alternative growth scenarios of Task 4 to provide a comparative analysis of trade-offs, the CONSULTANT will work through the project coordination committee to engage citizens/businesses groups to define a “preferred” vision for growth and development for the study area. The vision will represent a realistic growth scenario that promotes a balance between community goals and objectives, as defined at the local level, and the ability of public or private entities to provide the supporting infrastructure and services.

The CONSULTANT will develop high-level models to test the assumptions on tax base growth and new bonding capacity to alleviate the pressures to existing infrastructure (transportation, utilities, schools, services, etc.) that accompanies new development. A preferred growth vision, supported by stringent market research and financial analysis, will ensure the exercise is conducted within a realistic construct and retain future flexibility as a planning tool.

The preferred vision document will include the following elements:

- Guiding principles that establish a framework for desired growth and development outcomes;
- Goals and objectives that promote the advancement of the guiding principles;
- Policies that provide general parameters for local and regional implementation of the vision;
- Performance measures and targets to be used in monitoring implementation progress;
- Economic and fiscal impacts analysis; and
- A map illustrating the vision, depicting areas of desired growth and conservation in the form of character area designations.

5.2 Land Use Recommendations

The CONSULTANT will make recommendations and provide guidance to local governments to align land use plans with the preferred vision for growth. The CONSULTANT will provide a gap analysis between 1) existing policies/ordinances and 2) those policies/ordinances necessary to implement the “preferred” vision. We will use overlays to depict opportunities for amending existing land use plans, and document recommended changes in land use policies and zoning districts.

Deliverable: Technical Memo on the Preferred Vision & Land Use Recommendations

Deliverable: Promotional Brochure Presenting the Preferred Growth Vision

TASK 6: MULTIMODAL TRANSPORTATION RECOMMENDATIONS FOR REGIONAL AND LOCAL PLANS

6.1 Multimodal Transportation Recommendations

The CONSULTANT will develop multimodal transportation recommendations to improve driving, transit, walking, and bicycling conditions, and freight movement within and through the study area. Recommendations will focus on 1) meeting the travel demand anticipated from the preferred growth vision, and 2) enabling opportunities for economic and community development that is consistent with the vision. This effort will require close coordination with the MPO and local governments throughout the study area to translate those recommendations into specific projects that can be identified in local major thoroughfare plans, incorporated into the MPO's regional needs list and fiscally-constrained long-range plan, and programmed in local or regional work programs. This task will include the following:

- An inventory of existing transportation plans and programmed improvements across the area;
- An analysis of volume to capacity and travel times for current conditions, trends, and the preferred growth vision;
- An analysis of crash data and roadway safety concerns;
- An analysis of transit and non-motorized transportation needs;
- An analysis of freight movement and delivery needs;
- An evaluation of projects currently identified in plans and programs;
- Recommendations for safety and capacity improvements;
- A list of potential transportation projects, design guidelines, and rough cost estimates;
- Recommendations for prioritizing transportation projects/needs for local and regional transportation plans;
- Project recommendations for the *2040 Regional Transportation Plan*; and
- Maps and illustrations that clearly communicate recommendations.

Deliverable: Technical Memo on Transportation Needs and Recommendations

TASK 7: TRANSIT CAPITAL AND SERVICE RECOMMENDATIONS

7.1 Transit Capital and Service Recommendations

The CONSULTANT will expand upon the transportation recommendations produced in Task 6 to develop detailed short- and mid-range transit service recommendations that support the study area's preferred growth vision, and advance regional transit initiatives included in the MPO's *2035 Regional Transportation Plan*. Specifically, the CONSULTANT will 1) evaluate potential options for introducing new local transit services to the City of La Vergne and Town of Smyrna, 2) identify improvements to local services provided by the Murfreesboro Rover and regional services provided by the RTA, and 3) evaluate the findings and recommendations of the MPO's *Southeast Corridor Alternatives Analysis* for their continued appropriateness for the corridor given changes in the region and to federal grant programs since the completion of the study. This task will produce a list of capital projects and service improvements, along with cost estimates, and implementation strategies.

7.1.1 I-24/Murfreesboro Road Corridor Transit Recommendations

While short- and mid-term transit service recommendations will be made for the entire study area, special emphasis will be placed on service to/from and within the communities along the I-24 and Murfreesboro Road corridor (La Vergne, Smyrna, and Murfreesboro). In coordination with all applicable local and regional agencies, the CONSULTANT will develop detailed “market-driven” local and regional recommendations in this corridor that support the preferred growth vision, and identify feasible new local transit services in La Verge and Smyrna.

Building on the transit market analysis in Task 3, the CONSULTANT will evaluate the feasibility of local transit services in Smyrna and La Vergne, and develop appropriate service recommendations. The process followed will include developing initial public transit service options, estimating service requirements and operating and capital costs, meeting with the appropriate local jurisdictions and transit agencies to solicit feedback, and developing a preferred transit service plan. The CONSULTANT will also recommend potential service improvements to the Murfreesboro Rover local transit services building on recent service planning efforts and in consultation with Murfreesboro staff.

A key element of the service plans will be defining transit services in a manner that provides for transfer connections between local services and existing and future RTA express and limited stop routes. For that reason, the CONSULTANT will develop regional transit route recommendations in coordination with both regional and local agencies. These recommendations will build upon recent and ongoing regional service planning efforts.

The CONSULTANT will then evaluate the findings and recommendations of the *Southeast Corridor Alternatives Analysis*. This evaluation will include a comparison of the AA’s recommendations to this study’s local and regional service recommendations described above, a summary of changes to grant programs (e.g., CMAQ, Section 5307) being implemented under the MAP-21 transportation legislation since the AA was completed and their potential impact, and an assessment of the appropriateness of the AA’s findings and recommendations.

7.1.2 Short- and Mid-Term Transit Service Recommendations

The CONSULTANT will develop short- and mid-term transit service recommendations for the entire study area, incorporating the I-24/Murfreesboro Road corridor transit recommendations described above. These recommendations will be defined at a higher level of geographic and operational detail than the transit recommendations developed in Task 6. Operations and maintenance (O&M) and capital cost estimates will also be more detailed and specific, based on complete service parameters. Unit costs will be based on actual, current costs incurred by area transit agencies.

The short- and mid-term transit recommendations will be detailed in the following manner:

- Maps and alignment descriptions of all route alignments or service areas;
- Complete service parameters for service type or route by day of the week, including service spans, frequencies, peak vehicle requirements, revenue hours and miles, estimated roundtrip running times and distances, and transfer locations;
- Associated passenger facilities (e.g., transit centers, park-n-ride lots);
- Costs for both O&M and capital items; and
- A phasing plan or implementation strategies.

Deliverable: Technical Memo on Transit Capital and Service Recommendations

TASK 8: GROWTH MANAGEMENT TOOLBOX & DEMONSTRATION PROGRAM

The CONSULTANT will prepare a resource guidebook that provides a menu of growth management strategies, regulatory measures, and market incentives that will outfit local and regional planning agencies with tools to manage or facilitate economic and community development in a manner that is consistent with the preferred growth vision. Using best practices literature from around the country, we will develop a concise catalogue and guidebook as well as a highly visual presentation of approximately 20 tools deemed most appropriate for the study area. These might include traffic impact analysis processes, travel-shed analysis procedures, transit-oriented planning and development concepts, corridor management agreements, transfer of development rights, and other innovative tools. The CONSULTANT will model or demonstrate implementation of up to two of these technical tools, relying on assistance from the local government and Nashville MPO for coordination with local elected officials and legal assistance, if needed. The implementation assistance will also identify a procedure for local officials to use in gauging the effectiveness of each tool.

Deliverable: Growth Management Toolbox and Demonstration Program

TASK 9: FINAL REPORT & EXECUTIVE SUMMARY

The CONSULTANT will develop a promotional brochure, executive summary, and a final report on the study's findings and recommendations. The final report will incorporate information from the technical memorandums and include supporting documentation for analyses and modeling, but be produced as a stand-alone document. In addition, the CONSULTANT will present findings and recommendations to the appropriate project committees, the MPO Technical Coordinating Committee and Executive Board, and to the local planning commissions and/or legislative bodies representing the jurisdictions participating in the study (at the discretion of the local planning director). All data and reports shall be provided in electronic and hard copy format, as appropriate. GIS data should be provided to the MPO in a format compatible with ESRI software. Travel demand model files should be compatible with TransCAD software.

Deliverable: 500 full-size tri-fold promotional brochures summarizing the study findings and recommendations

Deliverable: 50 hard copies of a stand-alone executive summary document

Deliverable: 50 hard copies of the final report and appendices

APPENDIX B. DETAILED SCHEDULE

**Southeast Area Transportation and Land Use Study
Project Schedule**



- ★ Project Coordination Committee Meetings
- Round of Public Meetings
- ◆ Major Deliverables

APPENDIX C. PROJECT PLAN FOR QUALITY

GS&P Way to Manage PROJECT PLAN

1	Project Name
Project Name	<i>Southeast Area Transportation and Land Use Study</i>
Client	<i>Nashville Area Metropolitan Planning Organization</i>
Project Manager	<i>John Houghton</i>
Project Number	<i>29448.00</i>
Date Prepared	<i>March 15, 2013</i>
Revision Date	
2	Project Description/Scope of Work
<i>G:\29448\01_Project Management</i>	
<i>The scope of services describes the work necessary to provide the Nashville Area Metropolitan Planning Organization (MPO) and local community partners with a preferred vision for growth & development for the southeastern portion of the metropolitan area, and general land use and multi-modal transportation recommendations to guide the implementation of that vision.</i>	
3	Agreement
<i>G:\29448\01_Project Management</i>	
4	Roles and Responsibilities/Project Team
<i>See attached project directory.</i>	
5	Work Breakdown / Man-hour and Fee Budget
<i>G:\29448\01_Project Management</i>	
6	Schedule and Deliverables
<i>G:\29448\01_Project Management</i>	
7	Risk Management Plan
<i>G:\29448\01_Project Management</i>	
8	Quality Assurance and Control
<i>G:\29448\01_Project Management</i>	
9	Execution Plan/BIM/Practice Technology
<i>N/A</i>	
10	Project Safety/HR/Training
<i>N/A</i>	

Project Directory

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