

# Scope of Work: Effingham County Transportation Master Plan Update

## Scope of Work

The following tasks comprise the suggested scope of work for the Effingham County Transportation Master Plan (TMP) Update. This planning-level update is intended to incorporate the results of other studies and planned development, relook critical transportation links and bottlenecks, incorporate needs for roadway paving, and provide guidance on transportation requirements to be incorporated into development regulations. All tasks will consider maximizing safety, connectivity, efficiency, and equitable transportation access.

### Project Coordination

#### Task 1: Project Management and Coordination

Pond will perform the project management and administration functions necessary to properly deliver this task order. Tasks include coordinating all aspects of the project. This includes, but is not limited to, facilitating a kick-off meeting, developing a Project Management Plan (PMP), identifying approaches for communication, coordination, schedule and budget management, QA/QC, and final delivery of the study documents. During the PMP process, a detailed schedule will be developed to clearly outline a step-by-step breakdown for each task of all analysis, data collection, and major milestones and deliverables.

Routine communication is important to the successful completion of this planning study. It is proposed that the monthly Project Management Team (PMT) meeting be held to make timely decisions and ensure the project is advancing as scheduled. The project kickoff is proposed to be held in person, while the monthly PMT meetings are proposed as virtual meetings.

##### Task 1A: Coordination with Effingham County

- Coordination and keeping a record of correspondence
- Organization and participation in stakeholder/design meetings and discussions
- Develop a Project Management Plan
- Develop and maintain a detailed project schedule
- Participation in meetings relating to the Project and provide presentations and/or meeting summary notes.
- Consultant PM and Effingham County PM will hold monthly project management (PMT) meetings via Microsoft Teams with three (3) in-person meetings/work sessions to include a kickoff meeting, needs assessment review, and discussion of draft recommendations.
- Supervise and execute Project Administration and Controls for the project.
- Hold monthly internal project reviews that serve as diagnostic checks with respect to budget, schedule, and staffing/resource assignment needs.

##### Task 1B: Consulting Team Coordination and Quality Control

- Ensure the Quality Assurance/Quality Control plan is performed on all deliverables.
- Develop a Risk Management Plan for the project.
- Execution of the Planning Study documents and recommendations

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## *Deliverables*

- *Meeting agendas and minutes*
- *As needed email status reports to address project progress, outstanding issues, and/or action items*
- *Monthly status reports to accompany invoices*
- *Development and maintenance of project schedule*
- *Project Management Plan*
- *QA/QC plan, documentation, and coordination*

## Needs Assessment

### Task 2: Needs Assessment Update

The TMP Needs Assessment section will be updated to reflect changes since the last plan and to address freight and transit needs. The existing traffic data and analysis will remain as part of the revised document and will be supplemented with new data and information.

#### Task 2A: Data Compilation

Pond will compile data needed to provide an updated needs assessment, including traffic counts, County GIS data, and Census-based demographic information, as well as information on the current county improvement program and anticipated development.

- Traffic Data Collection, 24-hour Volume Counts - New 24-hour bi-directional traffic volume counts with vehicle classification will be conducted once along each of the 12 original study corridors plus four additional locations along the corridors (16 locations). This will be used to determine the pace of growth to understand and reassess when improvements recommended in the plan will be needed.
- Traffic Data Collection, Turning Movement Counts - New turning movement counts will be performed at 10 locations that could be along the original 12 study corridors or at other locations to be determined in coordination with the County. These AM and PM peak period turning movement counts will be used to analyze intersection operations and level of service and identify improvement needs to supplement those already included in the report.
- Crash Data - The crash history will be updated to include the most recent crash data available from the GDOT GEARS system. In addition, Pond will coordinate with the SS4A-Safety Action Plan consultant to include summary information from their study in the TMP update.
- GIS Data from Effingham County and US Census – Pond will obtain updated GIS information from Effingham County for use in the TMP Update, as well as the current census data. Population and employment data will be obtained from census data sources and used to update related maps in the TMP. Freight network data will be obtained from GDOT, and freight employment will be from the US census data.
- Bridge Sufficiency Data – Bridge data will be obtained from the National Bridge Inventory to identify bridge conditions in the County.

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- DRI/Anticipated Developments – Information on active Developments of Regional Impact (DRIs) and developments anticipated by Effingham County and the Industrial Development Authority will be identified and considered.
- Pavement Management - Information on the Pavement type and conditions in Effingham County will be obtained from the County. This will include information on roads that have been paved using various pavement thickness (to the extent known by staff), as well as unpaved and chip seal paved roads. This information will be obtained in GIS or map format if available or will be obtained in a working session with Effingham County staff to map these roads by type.
- Capital Work Program/TSPLOST Program - Pond will obtain information on the current transportation Capital work program, TSPLOST program, and pavement maintenance program from Effingham County.

In addition to the data and information provided above, Pond will also review and incorporate the findings from recent County and regional transportation studies, including:

- Old Augusta Road Corridor Study (Effingham Park of Commerce)
- Southeastern Roadway Network (SERN) Study
- Forrest Haven
- Goshen Road Concept Design
- GDOT Coastal Empire Study
- CORE MPO Regional Freight Transportation Plan – Being updated through August 2024
- Safe Streets and Roads for All (SS4A) Safety Action Plan
- Blue Jay Corridor Study – parallel study
- Commercial Corridor Study – parallel study
- Local comprehensive plans

Pond will also coordinate with the CORE MPO as they prepare their Metropolitan Transportation Plan (MTP) update to understand the changes that affect Effingham County and discuss the components of the County plan.

## Task 2B: Traffic Congestion and Safety Analysis

Pond will analyze the traffic data to identify areas of current and potential future congestion. The new daily traffic volume data will be used to gauge the growth along the previous study corridors to determine if the need for future improvements is likely to occur earlier or later than was anticipated in the TMP so that implementation phasing can be adjusted where needed.

In addition, the 15 intersections identified with Effingham County will be analyzed using Synchro software to determine operations and level of service for current year and year 2050 conditions. As in the previous TMP, future year growth will be estimated based on GDOT data and CORE MPO model growth. Where future deficiencies are determined for these additional intersections, limited alternatives analysis will be performed using Synchro software to identify and assess improvement options for use in defining an improvement project.

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The crash data obtained in Task 2A will be used to identify high crash locations. This will be combined with the SS4A Safety Action Plan safety improvement recommendations.

## Task 2C: Multimodal Travel Needs

The TMP will be expanded to include address multimodal travel needs, including truck/freight needs, bicycle/pedestrian needs, and transit/rideshare needs.

- Expand Truck/Commercial Freight Routes – Pond will examine truck travel patterns and truck volumes present currently and will examine the potential changes with the implementation of planned development and new planned connections including Effingham Parkway and connecting roads, such as East-West Connector and Blue Jay Road, as well as connections and improvements included in the Coastal Empire Plan.
- Designated Truck Routes – Pond will examine the truck route ordinance, including the designated truck routes and those with prohibitions and will compare these to need due to current traffic and emerging growth areas.
- Bicycle and Pedestrian Safety/Improvements – The previous TMP provides recommendations regarding multiuse trail connections for longer distances across the county. The Pond team will coordinate with the Cities to include their planned pedestrian and bicycle improvements. In addition, Pond will coordinate with the SS4A Safety Action Plan to include pedestrian and bicycle-related safety needs that are identified in that plan and reference them in the updated TMP.
- Transit – Pond will identify key transit issues and provide big ideas to address challenges. Understanding the relationship between CAT and Coastal Regional Coaches (CRC) will help Pond explore supplemental transit service options such as shuttle service, microtransit, vanpool, on-demand service, and park and rides to determine appropriate service recommendations for the County. Pond will study the feasibility of potential CRC expansion. Forecasted demand, operational modes, and cost will not be included in the TMP update.

## *Deliverables*

- *Needs Assessment*

## Community Engagement

### Task 3: Stakeholder and Public Outreach

The outreach strategy will be centered around a technical update with the involvement of agency stakeholders and a final meeting with the public. Pond will develop all outreach materials, including flyers, content for email blasts, press releases, and/or infographics. The public meeting will be an open house held toward the end of the project to share key findings, recommendations, and proposed policies. It will take place at the mid-point of a 30-day comment period, where the draft report will be available online for review and comment or in person at the County DOT office. Stakeholders, cities, and local agencies will provide location specific input on safety concerns, congested locations, bicycle or pedestrian needs, and other/general comments through the stakeholder outreach meetings planned

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during the TMP update. Pond will create all meeting materials and perform Stakeholder meeting facilitation for up to three in-person meetings: needs assessment, draft recommendations, and prioritization. The County will be responsible for identifying public and stakeholder meeting locations.

## Task 3A: Stakeholder Outreach

- Stakeholder, Cities, and agencies
  - Stakeholder Identification and communication – anticipated stakeholders include:
    - Cities of Guyton, Rincon, and Springfield
    - CORE MPO
    - GDOT District 5 and GDOT Office of Planning
    - Effingham County Industrial Development Authority
  - Meeting Material Prep
  - Three in-person meetings
    - Needs Assessment
    - Draft Recommendations
    - Draft Document / Prioritization

## Task 3B: Public Outreach

- Public
  - One in-person public meeting
  - Meeting Materials available on the web for 30-day comment period with the in-person public meeting in the middle of that period
  - Location correspondence
  - Post-meeting organization and analysis
- Advertising
  - Material preparation for advertisement of the public meeting and project awareness
  - Coordination and advisement on posting

### *Deliverables*

- *Meeting Materials*
- *Stakeholder Meeting Agendas and Notes*
- *Public Meeting and online materials with notes*

## Project Identification

### Task 4: Prepare Project Recommendations

The TMP project recommendations section will be updated to reflect recommendations that have already been implemented, new recommendations to reflect changing needs, and new recommendations to reflect a deeper look at multimodal improvement and safety needs identified in the SS4A Safety Action Plan.

#### Task 4A: Intersection Improvement Recommendations

Pond will examine the intersection needs and improvement recommendations in the previous TMP and will examine new traffic volumes, growth patterns, and intersection analysis results from the 15 new intersections being analyzed. This information will be used to adjust the recommended timeline for implementation of improvements and to identify new improvement needs in congested areas. In areas

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where new intersection counts are being performed, Synchro software will be used to identify specific improvement needs and options. For other intersections where future growth and connectivity result in future improvement needs, intersection improvements for mid to long term implementation will be identified for future scoping and implementation.

## **Task 4B: Network Improvement Recommendations**

Pond will use traffic volume data in conjunction with an examination of new growth areas and improvements recommended in the GDOT Coastal Empire Study, as well as other studies indicated in Task 1, to determine the need for future roadway capacity improvements and needs including:

- Roadway widenings
- Freight Upgrades
- New Roadways
- Bridge Replacements

These needs will be identified based on traffic volume growth from applied growth rates and identification of major development areas and traffic routing patterns through a sketch planning process. The development of a travel demand model or similar detailed modeling tool is not anticipated. The results of the TMP update will be coordinated with the CORE MPO to allow them to take that information into account in their regional travel demand modeling when portions of Effingham County are incorporated into the MPO, anticipated late 2024.

Roadway Connection between HW-17S at Jabez Jones Rd and US HWY 80. - The examination of roadway network improvement needs will include examination of a connection between HW-17S at Jabez Jones Rd and US HWY 80. This examination will estimate the traffic that will use the new roadway, along with number of lanes needed and traffic control proposed for the endpoints of the new road connection. Please note, that these will be planning level recommendations and do not include traffic engineering studies for review and approval by GDOT. In addition, inclusion of this corridor in the TMP does not include a detailed alignment study or environmental review.

## **Task 4C: Multimodal Improvement Recommendations**

In addition to traditional intersection and roadway recommendations, Pond will examine multimodal travel needs to determine the need for enhancements to facilitate the use of that mode.

- Trucks/Freight – This will include an examination of the current truck routes and prohibitions and consideration of changes that may be needed due to commercial growth and roadway functional classification.
- Bicycle/Pedestrian – This will include improvements to facilitate bicycle and pedestrian travel. These modes will be considered within the city limits for purposes of long-term connectivity (for example a bicycle route traveling along a Countywide route that passes through a city. Pond assumes that the Cities will provide information on their existing and planned routes/network and information on City sidewalk networks will be limited to what they provide electronically. Also, information and recommendations for bicycle and pedestrian safety will be provided by the County’s SS4A – Safety Action Plan consultant.

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- Transit – This includes an examination of carpool/vanpool and rideshare opportunities, as well as identification of CRC transit and future micro transit compatible areas.

## **Task 4D: Policy Guidance (OPTIONAL TASK)**

Policy guidance can assist decision-makers regarding implementation of recommended improvements and ongoing changes due to maintenance activities or new development plans. The Pond will prepare recommended policy guidance on a variety of topics:

- Expanding Roadway Network – This section is in the current TMP and will be retained with minor updates and examples of network changes. This section recommends the continuation of roads and new connections to increase the connectivity of the Effingham County road network over time.
- Access Management – This section is in the current TMP and will be expanded to provide some direct guidance on intersection and access point spacing based on roadway functional classification.
- Roadway Materials and Elements - This section is in the current TMP and will be expanded to include a standard policy for improvement of roadways as needs grow and change over time, as recommended in the previous TMP.
- Decision Process for Intersection Control – Pond will reference the GDOT Intersection Control Evaluation process and the benefits of various innovative intersection improvements. Guidance will be provided on the volume and physical conditions that would be applicable for treatment of intersections in Effingham County primarily using the intersection control below.
  - Side Street Stop with Turn Lanes
  - R-Cuts
  - Roundabouts
  - Signals
- Functional Classification System – Pond will review the Effingham County roadway functional classification system and will make recommendations for changes based on roadway volume and connectivity. These changes will not represent an exhaustive effort to look at volumes for each road, but will be based on discussion sessions with staff and review of select roads identified in a work session.
- Development Standards for Road and Drainage - The Pond team will review the development standards for roads and drainage and will provide recommendations for modifications to the standards that reflect the policies guidance provided above, as well as best practices.

### *Deliverables*

- *Project Recommendations for Various Travel Modes*
- *Maps of Current Functional Classification System and Recommended Changes*
- *Policy Guidance for Topics Indicated*

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## Implementation Plan

### Task 5: Prepare Implementation Plan and Documentation

Pond will prepare an implementation plan and documentation for the TMP update. The previous document will have additional details regarding funding sources and pavement management.

#### **Task 5A: Roadway and Intersection Policies/Standards**

The policy guidance provided in Task 4D will be incorporated into the implementation action plan so that the steps for implementation of the policies will be reflected.

#### **Task 5B: Pavement Management**

Pond will examine the pavement management system that Effingham County has in place including the miles of roads needing improvement (maintenance, rehabilitation, and reconstruction) versus the costs to provide those. This will be matched with available County funding to determine the time needed to bring conditions up to good levels Countywide and what is needed to keep pace with new development.

Discussion of Desired Pavement Standards – Pond will review the pavement condition data including the number of roads that fall into each category and will have a discussion with County regarding the desired level of quality they would like to achieve/maintain. The Current Program- TSPLOST 23' spreadsheet w/ road conditions will be examined along with the current sources of funding for pavement maintenance.

Pavement Assessment Map and Data – The data provided by the County (GIS format) will be mapped to show the type of improvement needed.

Maintenance Recommendations – Pond, in coordination with T&H and Effingham County, will make recommendations regarding pavement maintenance and associated costs. This will also consider the planned progression of roadway pavement needs as growth occurs and volumes increase (unpaved to paved, chip seal to paved, local route pavement to truck route pavement). The recommendations will be included in the TMP report along with the GIS and spreadsheet database.

#### **Task 5C: Capital Project Recommendations**

Pond will compile capital project recommendations. Projects identified in the previous TMP that are completed or underway will be noted, and new project recommendations will be added. The costs for previous projects will be increased to reflect inflation and planning-level cost estimates will be prepared for new projects.

Improvement Recommendations will be grouped into the following funding categories:

- Roadway improvements
- New Road connections
- Intersection Improvements
- Bicycle/Pedestrian Improvements
- Safety Improvements (to be identified through the SS4A Safety Action Plan)
- Transit/TOD Improvements



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Improvement recommendations will be compared to one another through a prioritization process and will be grouped into short, mid, and long-range implementation periods. Although this plan is not financially constrained, the short and mid-range project recommendations will be comprised of projects that could be funded via ongoing SPLOST initiatives. In addition, potential funding sources will be identified for the projects (SPLOST and others).

## **Task 5D: Revised Documentation and Presentation to County Commission**

The revised TMP document will follow the same basic style as the previous document with some materials reused. The report will be prepared with InDesign software. Once the draft document is prepared, Pond anticipates two rounds of comments from Effingham County, as well as addressing public comments. Pond will also compile GIS data and web-accessible information and will provide that to Effingham County, as well.

Following completion of the study report, Pond will provide a briefing (PowerPoint presentation) for the County Commissioners regarding the plan update.

### *Deliverables*

- *Pavement Management Recommendations*
- *Draft and Final TMP report Document*
- *GIS Data*

## Proposed Schedule

The proposed schedule for the plan update assumes a total of nine months. This schedule corresponds with the timeframe for update of the CORE MPO MTP. The proposal includes Coordination with stakeholders at three times during the process: Needs Assessment, Preliminary Recommendations, and Final Recommendations (Prioritized Projects). In addition to the stakeholder outreach, one public meeting is scheduled to be held in month seven.

### **Proposed Schedule (9-Months)**

Task 1: Project Management and Coordination	Months 1-9
Task 2: Needs Assessment Update	Months 1-3
Task 3: Community (Stakeholder and Public) Engagement	Months 2-7
Task 4: Project Recommendations	Months 3-7
Task 5: Implementation Plan and Documentation	Months 6-8

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## Proposed Fee

Pond proposes the fee per Task indicated below to prepare the Transportation Master Plan Update. This fee includes all Pond labor, as well as overhead and direct costs for travel assuming six round trips from metro Atlanta to Effingham County. The costs also include a direct cost of \$10,750 for data collection from National Data and Surveying (NDS) for 16 bidirectional traffic volume counts (24 hours) and 10 AM and PM peak period turning movement counts (see attached sheet for hours per task).

- Task 1: Project Management and Coordination - \$42,483
- Task 2: Needs Assessment Update - \$58,502
- Task 3: Community (Stakeholder and Public) Engagement - \$26,528
- Task 4A-C: Project Recommendations - \$25,499
- Task 5: Implementation Plan and Documentation - \$79,345
- Total Base Tasks - \$232,357**
- Task 4D: Policy Guidance (Optional) - \$33,739
- Total All Tasks - \$266,096**

### Scope of work and Fee submitted by

Pond & Company



Richard Fangmann, PE

Vice President

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**Effingham County Transportation Master Plan Update**

**Proposed Fee**

Staff Person	Role	Labor Category	Rate	Task 1		Task 2		Task 3		Task 4 A-C		Task 4D Optional		Task 5		Total	
				Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost
Richard Fangmann, PE, PTOE	Principal In Charge-SR Advisor	Project Manager	\$ 238	23	\$5,474	0	\$0	22	\$5,236	2	\$476	9	\$2,142	14	\$3,332	70	\$16,660
Rebecca Hester	Task Order Manager/Transit	Senior Planner	\$ 189	135	\$25,515	26	\$4,914	59	\$11,151	18	\$3,402	12	\$2,268	62	\$11,718	312	\$58,968
Wade Carroll, AICP	QA/QC-Freight	Project Manager	\$ 238	2	\$476	10	\$2,380	0	\$0	10	\$2,380	0	\$0	6	\$1,428	28	\$6,664
Patrick McArdle, EIT	Data/Traffic Analysis	Traffic Engineer	\$ 157	0	\$0	90	\$14,130	0	\$0	32	\$5,024	24	\$3,768	54	\$8,478	200	\$31,400
Serah Mungai	Planning/Traffic Support	Staff Planner	\$ 146	0	\$0	62	\$9,052	16	\$2,336	44	\$6,424	24	\$3,504	202	\$29,492	348	\$50,808
Dominique Vittti	Planning Support	Staff Planner	\$ 146	0	\$0	82	\$11,972	40	\$5,840	30	\$4,380	0	\$0	78	\$11,388	230	\$33,580
Zach Puckett, PE	Concept Development	Traffic Director	\$ 195	14	\$2,730	0	\$0	0	\$0	2	\$390	8	\$1,560	12	\$2,340	36	\$7,020
Matt Flynn, PE	Traffic Engineering	SR. Traffic Engineer	\$ 189	6	\$1,134	6	\$1,134	0	\$0	6	\$1,134	62	\$11,718	28	\$5,292	108	\$20,412
Cody Owenby, PE	Development Regulations	Civil Engineer	\$ 157	0	\$0	4	\$628	0	\$0	0	\$0	40	\$6,280	0	\$0	44	\$6,908
Gina Wilson	Project Admin	Clerical	\$ 87	6	\$522	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	6	\$522
Hannah Laury	Project Admin	Clerical	\$ 87	14	\$1,218	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	14	\$1,218
<b>Total</b>				<b>200</b>	<b>\$37,069</b>	<b>280</b>	<b>\$44,210</b>	<b>137</b>	<b>\$24,563</b>	<b>144</b>	<b>\$23,610</b>	<b>179</b>	<b>\$31,240</b>	<b>456</b>	<b>\$73,468</b>	<b>1396</b>	<b>\$234,160</b>

Direct Cost: NDS-National Data & Surveying Services (Traffic Data Collection)	\$	<b>10,755</b>
Travel ( 6 trips to Meetings in Effingham x 1 vehicles = 6 trips x 320 miles = 1920 miles x \$0.65)	\$	<b>1,248</b>
Direct Expenses	\$	<b>1,200</b>
Total		<b>\$247,363</b>
8% Labor Contingency	\$	<b>18,733</b>
Total Optional Task 4D	\$	<b>33,739</b>
Total Base Tasks	\$	<b>232,357</b>
<b>Total All Tasks</b>	<b>\$</b>	<b>266,096</b>