



Chicago Metropolitan Agency for Planning

433 West Van Buren Street
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Chicago, IL 60607

312-454-0400
cmap.illinois.gov

May 8, 2024

REQUEST FOR PROPOSALS (RFP) NO. 299 Freight Model Scenario Development

The Chicago Metropolitan Agency for Planning (CMAP) is requesting proposals from interested firms for Freight Model Scenario Development as described in the enclosed Request for Proposals (RFP). If your team is qualified and experienced in performing the described services, CMAP would appreciate receiving your submission as indicated in the RFP.

CMAP will conduct a non-mandatory pre-bid information webinar on:

May 15, 2024, at 9:00 AM Central Time

Participation in the pre-bid discussion is non-mandatory but is offered as a way to best understand the scope of work we are trying to accomplish. The questions and responses noted during the pre-bid discussion will be posted to the CMAP website. Please use the information provided below to attend.

Microsoft Teams

[Join the meeting now](#)

Meeting ID: 238 692 575 738

Passcode: bXkGx5

The deadline for responding to the RFP is:

May 22, 2024, by 3:00 PM Central Time

Thank you, and if you have any questions, please email us at procurements@cmap.illinois.gov



REQUEST FOR PROPOSALS (RFP) NO. 299 Freight Model Scenario Development

The Chicago Metropolitan Agency for Planning (CMAP) invites vendors or consultants to submit proposals for this RFP as described in this scope of services. Please read each section carefully for information regarding the proposal and submittal instructions.

Section 1: Background and General Information

The Chicago Metropolitan Agency for Planning (CMAP) is the region’s metropolitan planning organization. The agency and its partners have developed ON TO 2050, a comprehensive plan that builds upon its predecessor GO TO 2040, to help the seven counties and 284 communities of northeastern Illinois implement strategies that address community, prosperity, the environment, governance, transportation, and mobility. CMAP has adopted core values, which are: lead with excellence, pursue equity, passion for public service, drive innovation and foster collaboration. These values guide all of the decisions taken by the agency and the CMAP team. See www.cmap.illinois.gov for more information.

Through this solicitation, CMAP is seeking one (1) consultant to develop future year scenarios using CMAP’s freight model and create a data visualizer reporting key metrics of modeled freight scenarios.

As a result of responses to this RFP, CMAP plans to review submissions and potentially conduct interviews with selected consultants it determines can best meet the requirements outlined below. Negotiations will be held on both the scope and the cost to select the consultant that CMAP believes can best satisfy its requirements at rates it perceives are reasonable for the services provided. Subject to “Reservation of Rights” herein, it is anticipated that a contract will be awarded for the work described. The contract may be awarded for a for a term up to 24-months with three, one-year optional renewals.

Section 2: Scope of Services

The selected submitter is expected to complete the work tasks outlined the Scope Statement attached hereto as **Attachment 1**. This scope statement will be included in the final contract for services therefore any requested modifications or exceptions to the scope must be clearly stated in the Proposal Submittal Form. The granting of requested exceptions to the scope statement shall be at the sole discretion of CMAP.

Section 3: Submittal Requirements

Proposals must be submitted via email to CMAP at procurements@cmap.illinois.gov no later than 3:00 PM Central Time on May 22, 2024. There will be no public opening for this RFP. Late submissions will be rejected.

Other key dates

RFP Advertisement/Release	May 8, 2024
Pre-bid Meeting (optional)	May 15, 2024 at 9:00 AM Central Time
Deadline for Questions	May 17, 2024, by 3:00 PM Central Time



Estimated Award Recommendation	May 29, 2024
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All responses to this request for proposals must submit all required documents by the submission deadline in order to be considered for the solicitation. The required documents are outlined in the Submittal Requirements attached hereto as **Attachment 2**.

All RFP responses without all signed and dated required documents will be deemed unresponsive and will not be evaluated.

RFP responses without DUNS Numbers will be deemed unresponsive and will not be evaluated.

CMAA cannot legally enter into a contractual relationship without a valid, active cage code. All contracted vendors MUST have a valid and ACTIVE System for Award Management (SAM) CAGE Code. If your firm does not have a CAGE Code, please begin the process now at www.sam.gov and register your entity. There is no fee for this registration.

Section 4: Proposal Evaluation

All responses to this request for proposals will be analyzed for completeness and cost effectiveness. The criteria outlined in the Evaluation Criteria attached hereto as **Attachment 3** will be used in evaluating submissions.

All timely responses received to this solicitation will be reviewed. CMAA does not anticipate conducting interviews for this solicitation but reserves the right to interview the selected submitters CMAA determines can best meet the above requirements, if needed. Cost will be evaluated against other factors based upon the professional judgment of those involved in the evaluation. An internal CMAA committee will make the selection decision.

As applicable, hourly rates for personnel the submitter proposes to use will be requested and negotiations will be held on both the scope and the cost to select the submitter CMAA believes can best satisfy its requirements at rates it perceives are reasonable for the services provided.

Section 5: Contractual Agreement and Rights

The contract CMAA anticipates awarding as a result of this RFP and subsequent rate submissions and negotiations, if any, will indicate the service requirements, time periods involved and applicable hourly rates. In addition, it will include the General Provisions, included herein as **Attachment 4** General Terms and Conditions, which will apply to the contract.

Said General Terms and Conditions apply to the solicitation to which this section is attached and to any contract that results from the solicitation. Signatories' proposals of this solicitation certify and agree that these conditions and procedures and terms and the conditions and any procedures specific to this project will be adhered to unless amended in writing. Therefore, any requested modifications or exceptions to the General Terms and Conditions must be clearly stated in the Proposal Submittal Form. The granting of requested exceptions to the general terms and conditions shall be at the sole discretion of CMAA.



Once a contract is executed change requests made to personnel, titles, personnel hours, hourly rates or subcontractors, including subcontractor personnel, personnel hours or hourly rates must receive prior written approval from the CMAP procurement coordinator. Changes made without prior written approval will not be reimbursed.

Section 6: Reservation of Rights

CMAP reserves the following rights if using them will be more advantageous to CMAP:

- 1) Withdraw this RFP at any time without prior notice
- 2) Accept or reject any and all submissions, or any item or part thereof
- 3) Postpone qualifications due date
- 4) Not award a contract to any submitter responding to this RFP
- 5) Award a contract without negotiations or discussions

List of Attachments:

Attachment 1: Scope Statement

Attachment 2: Submittal Requirements

Attachment 3: Evaluation Criteria

Attachment 4: General Terms and Conditions



ATTACHMENT 1: SCOPE STATEMENT

WORK PLAN NO.	PROJECT TITLE	DATE
2010.035	Freight Model Scenario Development	05/08/2024

1. Procurement purpose

Through this solicitation, CMAP is seeking one (1) consultant to develop future year scenarios using CMAP’s freight model and create a data visualizer reporting key metrics of modeled freight scenarios.

2. Background

CMAP performs travel demand modeling and freight forecasting to support its responsibilities as the designated metropolitan planning organization (MPO) for the Chicago area, as well as its efforts in regional planning. For these purposes, CMAP maintains both trip-based and activity-based travel demand models, which use Emme modeling software, and CMAP is working to deploy a freight model written in the R programming language. To complement the freight model, CMAP developed a commercial services vehicle model to account for the movement of commercial vehicles operating in the region for non-freight hauling purposes. Collectively, these tools model all vehicle trips in the CMAP region.

Northeastern Illinois is home to an extensive, multimodal network of freight facilities, and within the Chicago region, the movement of over \$1 trillion in goods plays a critical role in almost every sector of the local economy. While CMAP is in the process of deploying the freight model, it is also necessary to develop future year scenarios as well as tools for reporting and visualizing model outputs. These tools will help CMAP fulfill its role in regional planning and capitalize on the region’s existing freight assets.

3. Project Description

This project will develop future year scenarios using CMAP’s freight model and will create a data visualizer reporting key metrics of modeled freight scenarios.

The core of CMAP’s freight model is written in open-source R statistical programming language. The model is a meso-scale freight forecasting model with agent-based supply chain evolution and is fundamentally a scenario-modeling tool. [Documentation](#) of the freight model is available on the CMAP website. The freight model code is maintained in a GitHub [repository](#) that contains working code for the development of CMAP’s tour-based and supply chain freight model, which represents the full supply chain for specific commodities shipped from supplier to customer. It includes an agent-based computational economics extension to the model, which models commodity markets as evolving decentralized systems of autonomous agents. The cornerstone of this extension is the Procurement Market Game (PMG) module, which uses game theory in matching buyers and sellers within commodity markets and allows them to develop preferential trading partners over successive iterations of the market interactions.

After annual commodity flows between individual firms are developed in the national supply chain model, a regional tour-based daily truck model simulates the tours of pickups and deliveries made by individual trucks operating in the CMAP region.

This project involves developing a set of input files that will be used to model several future year scenarios in the freight model. The overall goal is not to develop a detailed economic forecast for each of the future years, but to develop a set of reasonable assumptions about the future that can be used to define the freight model scenarios and inform the model input files. The future scenarios will be tested in the freight model and the results reviewed for reasonableness. The results visualizer will include performance metrics and content that allows for the evaluation of freight model scenario results and the comparison to other scenarios.

CMAP has a number of datasets that may be useful to the development of future year scenarios including:

- The socioeconomic forecast files for the update to the ON TO 2050 long-range plan (adopted in October 2022) covering the 21-county CMAP modeling area. This includes the local area allocation of employment and households throughout the modeling region. Note: concurrently with this project CMAP staff will be developing a new socioeconomic forecast for the long-range transportation plan to be adopted in October 2026. Draft local area allocation files of employment and household location from the new forecast may be available to support this freight model work.
- Employment data purchased from both Woods & Poole and Moody’s.
- A 2020 regional [land use inventory](#).
- The Northeastern Illinois Development Database, a relational database that CMAP maintains which includes all significant developments and redevelopments in the 7-county region.

4. Services

This scope of work outlines anticipated tasks and deliverables with the goal of developing future year scenarios for CMAP’s freight model and an accompanying data visualizer for model outputs. The delivered final products are to include all data files, scripts and technical files as well as a methodology memo and model implementation memo. Contractors can expect that CMAP staff will be available to supplement work on the project.

CMAP is currently implementing two updates to the freight model. The first involves the addition of code to auto-calibrate commodity flows within the national supply chain model. The working code for this task is stored in the “modelDevelopment” branch of the freight model repository and CMAP expects this version of the code to be used for the tasks in this RFP. Second, CMAP will update the modeling zone system used in the regional truck touring model to its current system (“zone17”). Both updates are expected to be substantially, if not entirely, completed prior to the commencement of work on this RFP. Regardless, both tasks are outside the scope of work of this RFP.

5. Tasks and deliverables

All deliverables produced must use ADA-compliant accessibility formats, use accessible language, being language that includes everyone and is easy to understand, and may require materials to be translated into the region or area’s most spoken languages.

NO.	TASK AND DELIVERABLES
1	<p>Develop project work program and management plan</p> <p>The Contractor will hold a kickoff meeting to discuss approach, prominent needs or issues, and to formulate a method for regularly scheduled progress reports. Proposals should include a description of roles, responsibilities, and time commitments (and may suggest roles for CMAP staff), as well as a</p>

draft schedule of target dates for all task milestones and deliverables to be finalized at the start of the project.

- *Deliverable: Detailed work plan with schedule*

Develop future year scenarios

The Contractor will develop future year scenarios for CMAP’s freight model for the years 2030, 2040, 2050 and 2060. Scenarios for the intermediate years of 2025, 2035 and 2045 are also desirable but are optional for this RFP. Proposals should indicate whether development of the intermediate year scenarios will be included in this work item.

The overall goal of this task is not to develop a detailed economic forecast for the CMAP region for each of the future years, but rather to develop a set of reasonable assumptions about the future that can be used to define the freight model scenarios and to develop a set of model input files that reflect those assumptions. In coordination with CMAP, the Contractor will test the future year scenarios in the freight model using the approved assumptions.

The scenario development process should consider the following types of illustrative questions:

Macroeconomic conditions – How will employment by industry change within the region and nationally? Will the distribution of firms by number of employees change within industries? What will changes in the import and export of commodities look like in future years? Will employee productivity change within industries?

Business and operating strategies – Collectively, will firms within specific industries change their preferences for cost savings versus responsive service (i.e., reducing shipping costs versus reducing shipping times)?

Transport and logistics costs and capacities – Where will new warehouses and distribution centers be sited in the CMAP region?

Microeconomic interactions – Will assumptions about how firms interact within procurement markets change? For example, will buyer firms be more willing to use suppliers they don’t already have a trading relationship with?

Definitions of the future year scenarios will be finalized in consultation with CMAP.

- *Deliverable: A set of freight model input files for each future year scenario developed*
- *Deliverable: All data files, scripts and technical files developed for the creation of future year scenarios*
- *Deliverable: Technical memorandum or report documenting the scenario development process and final descriptions of the scenarios. The document must include detailed descriptions of each script used to develop the future scenario inputs and describe the contents of each updated data file*

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3	<p>Develop and deploy a results visualizer</p> <p>The Contractor will develop and deploy a data visualizer for model outputs in an open source code format. In addition to reporting various output content for each future scenario, the visualizer will also allow for comparison between scenarios. Potential content to be included in the visualizer includes:</p> <p><u>Value and tonnage of goods by commodity</u> – including annual and average weekday values for goods into, out of and through the CMAP region by mode. It might also be useful to convert these flows to other metrics (i.e., number of trucks, railcars or twenty-foot equivalent units [TEUs]).</p> <p><u>Weekday regional truck tour statistics</u> – including the number of tours and trips by vehicle class and time of day, estimated VMT by vehicle class and time of day, and stops by county.</p> <p><u>Regional insights</u> – including the number of synthesized firms by industry and county, and employment by industry and county.</p> <p><u>Origin-destination flows</u> – including the ability to highlight major O-D flows for commodities originating from or destined for the CMAP region.</p> <p>Content for the model results visualizer will be finalized in consultation with CMAP. CMAP will share the agency’s brand guidelines and official logos with the selected Contactor, so the results visualizer conforms to CMAP’s style guidelines.</p> <ul style="list-style-type: none"> ○ <i>Deliverable: An interactive data visualizer capable of reporting relevant model output content for each future year scenario as well as between scenarios</i> <p><i>Deliverable: All data files, scripts and technical files developed for the creation of the data visualizer, including open source code and instructions on using the data visualizer</i></p>
4	<p>Recommended updates and future improvements</p> <p>The Contractor will provide recommendations for maintaining the model and ideas for enhancing the model beyond the scope or limitations of this project.</p> <ul style="list-style-type: none"> ○ <i>Deliverable: Technical memorandum documenting recommended maintenance or update activities and thoughts on improving weaknesses or expanding capabilities of the model</i>

5. Timeline

The contract scope of work is anticipated to be completed in fourteen (14) months.



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ATTACHMENT 2: SUBMITTAL REQUIREMENTS - CONSULTANT SERVICES

All responses to this request for proposals must submit **all** required documents by the submission deadline in order to be considered for the solicitation. The following documents are required:

1. **Proposal Submittal Form.** Submit the Proposal submittal form in the format provided along with all required executed sub-forms and certifications. Among other information, this form is to be used to identify the consultant team(s) and key staff that will be involved in this project including their qualifications and defined role. Provide links to resumes and/or short biographies for all team members with time on the project. The sub-forms and certifications include:
 - Project Examples - provide a minimum of three (3) and no more than five (5) examples of the Consultant team's relevant experience in producing similar work or other projects that the Consultant deems to be relevant to this solicitation.
 - Bidder Information - basic information for both the primary firm and any subcontractors
 - References - three (3) references that CMAP staff may contact regarding the consultant's qualifications to undertake this project. Reference information shall include: organization name, contact name, title, phone number, email, and nature of relationship to reference.
 - Price Proposal Detail - with **all** proposed pricing for this project. Specify number of hours and hourly rates by project role/job title on the price proposal form, as well as costs for travel, facility rental charges for public meetings (if applicable), and other expenses.
 - Certifications - including Certification for Federally Funded Agreements and Specific Provisions Certifications Regarding Workers' Compensation Insurance; Bidder Information; DBE Information; and FTA Certification Regarding Lobbying
2. **Code Report.** A copy of the firms' SAMS.gov CAGE Code Report.
3. **Project Approach.** Provide a narrative proposal of the approach the applicant will use to complete the outlined scope of services to demonstrate understanding of the work. Include a narrative describing the combined qualifications and strengths of the firms and/or organizations on the team. Including the Consultant's approach to integrating CMAP's [Core Values](#) into the project. Any recommended modifications to the scope should also be described.

Provide a project schedule that shows the activities and the estimated timeline for completion for each.

Submittal material for this section shall be a maximum of four (4) pages, with one (1) page being the project schedule.

4. **Optional - Project Example supporting materials.** In addition to the Project Examples Form, you have the option to provide supporting materials for each of the three (3) to five (5) examples you listed.

Submittal material for this section shall be a maximum of two (2) pages in length for each example.

All RFP responses without all signed and dated required documents will be deemed unresponsive and will not be evaluated.

RFP responses without DUNS Numbers will be deemed unresponsive and will not be evaluated.

CMAP cannot legally enter into a contractual relationship without a valid, active cage code.

All contracted vendors **MUST** have a valid and **ACTIVE** System for Award Management (SAM) CAGE Code. If your firm does not have a CAGE Code, please begin the process now at www.sam.gov and register your entity. There is no fee for this registration.



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ATTACHMENT 3: EVALUATION CRITERIA - CONSUTANT SERVICES

CMAP will evaluate all responses to this proposal request for completeness and cost-effectiveness. The evaluation criteria shall include:

- 1) **Project team and firm capability.** Demonstrated record of experience of the Consultant firm(s) and identified staff, verified by references, in providing the professional services described in the scope of services.
 - 2) **Project approach and understanding.** Demonstrated understanding of the scope of services through the project approach; any recommended modifications to the scope are reasonable; and the project schedule is reasonable and meets the project goals.
 - 3) **Integration of Core Values.** Demonstrated understanding and commitment to CMAP's [Core Values](#) through the project approach, alignment with the consultant's core values, and/or through the project examples demonstrating experience working with diverse and marginalized communities to achieve equitable outcomes.
 - 4) **Project examples.** Verifiable examples of the Consultant firm(s) completing the same or similar deliverables through project examples.
 - 5) **Past performance.** Prior performance on previous CMAP contracts. Vendors who are or have been seriously deficient in current or recent contract performance, in the absence of evidence to the contrary or circumstances properly beyond the control of the Vendor, shall be presumed to be unable to meet these requirements. Past unsatisfactory performance is sufficient to justify a finding of non-responsibility.
- (Bonus) **DBE/MBE/WBE/VBE Participation.** CMAP will award one (1) bonus point overall to those qualified prime consultant respondents who have been certified as a DBE by the Illinois Unified Certification Program (IL-UCP); as a Minority Business Enterprise (MBE), or Women-Owned Business Enterprise (WBE) by the City of Chicago; or as an MBE, WBE, or Veteran-Owned Business Enterprise (VBE) by Cook County.

Selection will be weighted and based on the following criteria:

Evaluation Criteria	Maximum Points
1) Project team and firm capability	20
2) Project approach and understanding	25
3) Integration of Core Values	25
4) Project examples	30
5) Past performance	Responsible or non-responsible
Bonus) DBE/MBE/WBE/VBE Participation	1
Cost	



Chicago Metropolitan Agency for Planning

ATTACHMENT 4: CMAP GENERAL TERMS AND CONDITIONS

Signatories of this Agreement certify that these conditions and procedures and terms and the conditions and procedures specific to this project will be adhered to unless amended in writing.

1) Complete Agreement.

- a. This Agreement (which also may be herein referred to as "Contract"), including all exhibits and other documents incorporated or referenced in the agreement, constitutes the complete and exclusive statement of the terms and conditions of the agreement between CMAP and Contractor and it supersedes all prior representations, understandings and communications. The invalidity in whole or in part of any term or condition of this Agreement shall not affect the validity of other terms or conditions.
- b. Order of Precedence: Conflicting provisions hereof, if any, shall prevail in the following descending order of precedence: (1) the provisions of the executed contract, including its exhibits; (2) the provisions of the RFP on which the contract is based including any and all Addendums; (3) the proposal submitted to CMAP by the Contractor in response to said RFP; and (4) any other documents cited or incorporated herein by reference.
- c. CMAP's failure to insist in any one or more instances upon the performance of any terms or conditions of this Agreement shall not be construed as a waiver or relinquishment of CMAP's right to such performance by the Contractor or to future performance of such terms or conditions and Contractor's obligation in respect thereto shall continue in full force and effect. Contractor shall be responsible for having taken steps reasonably necessary to ascertain the nature and location of the work, and the general and local conditions that can affect the work or the cost thereof. Any failure by the Contractor to do so will not relieve it from responsibility for successfully performing the work without additional expense to CMAP.
- d. CMAP assumes no responsibility for any understanding or representations made by any of its officers, employees or agents prior to the execution of this Agreement, unless such understanding or representations by CMAP are expressly stated in this Agreement.
- e. Changes: CMAP may from time to time order work suspension or make any change in the general scope of this Agreement including, but not limited to changes, as applicable, in the drawings, specifications, delivery schedules or any other particulars of the description, statement of work or provisions of this Agreement. If any such change causes an increase or decrease in the cost or time required for performance of any part of the work under this Agreement, the Contractor shall promptly notify CMAP thereof and assert its claim for adjustment within thirty (30) days after the change is ordered. A written amendment will be prepared for agreement between CMAP and the Contractor for changes in scope, time and/or costs. No amendments are effective until there is a written agreement that has been signed

by both parties. No claim by the Contractor for equitable adjustment hereunder shall be allowed if asserted after final payment under this Agreement.

- f. Changes to any portion of this Agreement shall not be binding upon CMAP except when specifically confirmed in writing by an authorized representative of CMAP.
 - g. Only the Executive Director of CMAP, or designee, shall have the authority to act for and exercise any of the rights of CMAP as set forth in this Agreement, subsequent to and in accordance with the authority granted by CMAP's Board of Directors
 - h. For its convenience, CMAP reserves the right to extend the Term of this agreement. Any changes to the Term of this Agreement shall not be binding until specifically confirmed in writing by authorized representatives of both parties.
- 2) Independent Contractor. Contractor's relationship to CMAP in the performance of this Agreement is that of an independent contractor. Contractor's personnel performing work under this Agreement shall at all times be under Contractor's exclusive direction and control and shall be employees of Contractor and not employees of CMAP. Contractor shall pay all wages, salaries and other amounts due its employees in connection with this Agreement and shall be responsible for all reports and obligations respecting them, including, but not limited to, social security, income tax withholding, and unemployment compensation, workers compensation insurance and similar matters.
- 3) Assignment.
- a. This agreement shall be binding upon, and inure to the benefit of, the respective successors, assigns, heirs, and personal representatives of CMAP and Contractor. Any successor to the Contractor's rights under this Agreement must be approved by CMAP unless the transaction is specifically authorized under federal law. Any successor will be required to accede to all the terms, conditions and requirements of the Agreement as a condition precedent to such succession.
 - b. The Contractor shall not assign any interest in this Agreement and shall not transfer any interest in the same (whether by assignment or novation), without the prior written consent of CMAP hereto, provided, however, that claims for money due or to become due to the Contractor from CMAP under this Agreement may be assigned to a bank, trust company or other financial institution without such approval. Notice of any such assignment or transfer shall be furnished to CMAP.
- 4) Availability of Appropriation (30 ILCS 500/20-60). This Agreement is contingent upon and subject to the availability of funds. CMAP, at its sole option, may terminate or suspend this Agreement, in whole or in part, without penalty or further payment being required, if the Illinois General Assembly, the state funding source, or the federal funding source fails to make an appropriation sufficient to pay such obligation, or if funds needed are insufficient for any reason. The contractor will be notified in writing of the failure of appropriation or of a reduction or decrease.

5) Allowable Charges. No expenditures or charges shall be included in the cost of the Project and no part of the money paid to the Contractor shall be used by the Contractor for expenditures or charges that are: (i) contrary to provisions of this Agreement or the latest budget approved by a duly-authorized official of CMAP; (ii) not directly for carrying out the Project; (iii) of a regular and continuing nature, except that of salaries and wages of appointed principal executives of the Contractor who have not been appointed specifically for the purposes of directing the Project, who devote official time directly to the Project under specific assignments, and respecting whom adequate records of the time devoted to and services performed for the Project are maintained by the Contractor may be considered as proper costs of the Project to the extent of the time thus devoted and recorded if they are otherwise in accordance with the provisions hereof; or (iv) incurred without the consent of CMAP after written notice of the suspension or termination of any or all of CMAP's obligations under this Agreement.

6) Method of Payment. Project expenditures are paid directly from federal and/or state funds. Because CMAP is responsible for obtaining federal reimbursement for project expenditures, it is necessary that CMAP monitor all procedures and documents which will be used to claim and support project-related expenditures. The following procedures should be observed to secure payment:

- a. Based on services performed, CONTRACTOR may submit invoices as frequently as once a month, but is required to submit invoices no later than fifteen (15) days after the end of each quarter. Failure to submit such payment request timely will render the amounts billed an unallowable cost for which the CONTRACTOR cannot be reimbursed. CMAP is committed to reducing paper use and has established an electronic invoicing system. All invoices are to be submitted through email to: accounting@cmapp.illinois.gov

All invoices shall be signed by an authorized representative of the CONTRACTOR

- b. Subject to the conditions of this Agreement, CMAP will honor invoices in amounts deemed by it to be proper to insure the carrying out of the approved scope of services and shall be obligated to pay the Contractor such amounts as may be approved by CMAP. Invoices shall detail expenses and amount of time spent on CMAP assignments. If an invoice is not acceptable, CMAP shall promptly provide the Contractor a written statement regarding its ineligibility or deficiencies to be eliminated prior to its acceptance and processing. All invoices for services performed and expenses incurred by CONTRACTOR for the services of this Agreement must be presented to CMAP no later than fifteen (15) days after the close of the fiscal year for multi-year contracts, or no later than fifteen (15) days after the end of this Agreement for shorter term contracts. Notwithstanding any other provision of this Agreement, CMAP shall not be obligated to make payment to CONTRACTOR on invoices presented after said date. No payments will be made for services performed prior to the effective date of this Agreement. All payments will be transferred electronically to Contractor's business bank account. The successful Contractor will be requested to provide transfer numbers for the business bank account when the contract is finalized, in addition to a copy of its IRS W-9 (Request for Taxpayer Identification Number and Certification).
- c. CMAP shall make every effort to pay invoices in accordance with its normal processes and procedures for all undisputed amounts within ninety (90) days of receipt of a valid invoice, provided CMAP, as applicable, received, approved and/or issued an acceptance for the particular component of work or phase of work included in said invoice. Transfer of funds will be made electronically, with a notification of the transfer will be made to the CONTRACTOR.

- d. Each invoice and report submitted must contain: the contract number, a unique vendor invoice number, a description of the services performed, the hourly rates and number of hours worked for each contractor, an itemization of travel and other costs which are chargeable to the contract and the following certification by an official authorized to legally bind the CONTRACTOR:
 - i. By signing this payment request, I certify that to the best of my knowledge and belief that the payment request is true, complete, and accurate, and the expenditures, disbursements and cash receipts are for the purposes and objectives set forth in the terms and conditions of this contract. I am aware that any false, fictitious, or fraudulent information, or the omission of any material fact, may subject me to criminal, civil or administrative penalties for fraud, false statements, false claims or otherwise. (U.S. Code Title 18, Section 1001 and Title 31, Sections 3729-3730 and 3801-3812).
 - e. The Contractor is required to pay all subcontractors within thirty days of receiving payment for that portion of the work from CMAP. Failure to pay subcontractors within thirty days may jeopardize future CMAP contract awards.
- 7) Conflict of Interest. In order to avoid any potential conflict of interest, the Contractor agrees during the term of this Agreement not to undertake any activities which could conflict directly or indirectly with the interest of CMAP. Contractor shall immediately advise CMAP of any such conflict of interest. CMAP shall make the ultimate determination as to whether a conflict of interest exists.
- 8) Audits. The records and supportive documentation for all completed projects are subject to an on-site audit by CMAP. CMAP reserves the right to inspect and review, during normal working hours, the work papers of the CONTRACTOR in support of their invoices.
- 9) Access to Records.
- a. The Contractor and its Subcontractor, under this Agreement shall preserve and produce upon request of the authorized representatives of CMAP all data, records, reports, correspondence and memoranda of every description of the CONTRACTOR and its Subcontractors, if any, under this Agreement relating to carrying out this Agreement for the purposes of an audit, inspection or work review for a period of three (3) years after completion of the project, except that:
 - i. If any litigation, claim, or audit is started before the expiration of three-year period, the records shall be retained until all litigation, claims or audit findings involving the records have been resolved.
 - ii. Records for nonexpendable property acquired with federal funds shall be retained for three (3) years after its final disposition.

The CONTRACTOR shall include a provision in all of its subcontracts, if any, such provisions.

10) Subcontracts.

- a. Any subcontractors or outside associates or contractors required by the Contractor in connection with the services covered by this Agreement will be limited to such individuals or firms as were specifically identified and agreed to during negotiations. Any substitutions in or additions to such subcontractors, associates or contractors will be subject to the prior approval of CMAP.
 - b. All subcontracts for work under this Agreement shall contain those applicable provisions which are required in this Agreement.
 - c. The Contractor may not subcontract services agreed to under this Agreement without prior written approval of CMAP.
- 11) Equipment Inventory. An inventory of non-expendable personal property having a useful life of more than two years and an acquisition cost of \$500 or more is subject to periodic inspection by CMAP.
- 12) Suspension. If the CONTRACTOR fails to comply with the special conditions and/or the general terms and conditions of this Agreement, CMAP may, after written notice to the CONTRACTOR, suspend the Agreement and withhold further payments or prohibit the CONTRACTOR from incurring additional obligations of funds pending corrective action by the CONTRACTOR. If corrective action has not been completed within sixty (60) calendar days after service of written notice of suspension, CMAP shall notify the CONTRACTOR in writing that the Agreement has been terminated by reason of default in accordance with paragraph 14 hereof. CMAP may determine to allow such necessary and proper costs which the CONTRACTOR could not reasonably avoid during the period of suspension provided such costs meet the provisions of the U.S. Office Management and Budget 2 CFR 200 in effect on the date first above written.
- 13) Termination.
- a. This Agreement may be terminated in whole or in part in writing by either party in the event of substantial failure (hereinafter termed "Termination by Default") by the other party to fulfill its obligations under this Agreement through no fault of the terminating party, provided that no such termination may be affected unless the other party is given (i) not less than seven (7) calendar days written notice (delivered by certified mail, return receipt requested) of intent to Termination by Default, and (ii) an opportunity for consultation with the terminating party prior to Termination by Default.
 - b. This Agreement may be terminated in whole or in part in writing by CMAP for its convenience (hereinafter termed "Termination for Convenience"), provided that the CONTRACTOR is given not less than seven (7) calendar days written notice (delivered by certified mail, return receipt requested) of intent to terminate.
 - c. If Termination by Default is effected by CMAP, an equitable adjustment in the price provided for in this Agreement shall be made, but (i) no amount shall be allowed for anticipated profit on unperformed services or other work, and (ii) any payment due to the CONTRACTOR at the time of termination may be adjusted to the extent of any additional costs occasioned to CMAP by reason of the CONTRACTOR'S default. If Termination by Default is effected by the CONTRACTOR, or if Termination for Convenience is

effected by CMAP, the equitable adjustment shall include a reasonable profit for services or other work performed. The equitable adjustment for any termination shall provide payment to the CONTRACTOR for services rendered and expenses incurred prior to termination, in addition CMAP may include cost reasonably incurred by the CONTRACTOR relating to commitments which had become firm prior to termination.

- d. Upon notice of termination action pursuant to paragraphs (a) or (b) of this clause, the CONTRACTOR shall (i) promptly discontinue all services affected (unless the notice directs otherwise) and (ii) deliver or otherwise make available to CMAP all data, drawings, specifications, reports, estimates, summaries and such other information and materials as may have been accumulated by the CONTRACTOR in performing this Agreement, whether completed or in process.
- e. Upon termination pursuant to paragraphs (a) or (b) of this clause, CMAP may take over the work and prosecute the same to completion by agreement with another party otherwise.
- f. In the event the CONTRACTOR must terminate this Agreement due to circumstances beyond its control, the termination shall be deemed to have been effected for the convenience of CMAP. In such event, adjustment of the price provided for in this Agreement shall be made as provided in paragraph c of this clause.

14) Patents and Copyright Responsibility.

- a. The Contractor agrees that any material or design specified by the Contractor or supplied by the Contractor pursuant to this Agreement shall not infringe any patent or copyright and the Contractor shall be solely responsible for securing any necessary licenses required for patented or copyrighted material used by the Contractor.
- b. If any claim is brought against CMAP by third parties for alleged infringement of third-party patent and copyright and intellectual rights, which claim is caused by breach of the Contractor's promise as contained in paragraph a of this clause, the Contractor shall save harmless and indemnify CMAP from all loss, damage or expense (including attorney's fees) due to defending CMAP from such claim.
- a. If the principal purpose of this Agreement is to create, develop or improve products, processes or methods; or to explore into fields which directly concern public health, safety or welfare, or if the Project is in a field of science or technology in which there has been little significant experience outside of work funded by federal assistance; and any discovery or invention arises or is developed in the course of or under this Agreement, such invention or discovery shall be subject to the reporting and rights provisions of U.S. Office of Management and Budget Circular No. A-102, and to the pertinent regulations of the grantor agency(ies) in effect on the date of execution of this Agreement. The Contractor shall include provisions appropriate to effectuate the purpose of this condition in all subcontracts under this Agreement involving research, developmental, experimental or demonstration work.
- c. Remedies. Except as may be otherwise provided in this Agreement, all claims, counterclaims, disputes and other matters in question between CMAP and the CONTRACTOR arising out of or relating to this

Agreement or the breach thereof will be decided by arbitration. If the parties hereto mutually agree, a request for remedy may be sought from a court of competent jurisdiction within the State of Illinois, County of Cook.

- d. Ownership of Documents/Title of Work. All documents, data and records produced by the Contractor in carrying out the Contractor's obligations and services hereunder, without limitation and whether preliminary or final, shall become and remain the property of CMAP. CMAP shall have the right to use all such documents, data and records without restriction or limitation and without additional compensation to the Contractor. All documents, data and records utilized in performing research shall be available for examination by CMAP upon request. Upon completion of the services hereunder or at the termination of this Agreement, all such documents, data and records shall, at the option of CMAP, be appropriately arranged, indexed and delivered to CMAP by the Contractor.
- e. Software. All software, related computer programs, and source code produced and developed by the Contractor (or authorized contractor or subcontractor thereof) in carrying out the Contractor's obligation hereunder, without limitation and whether preliminary or final, shall become and remain the property of both CMAP and the Contractor. CMAP shall be free to sell, give, offer or otherwise provide said software and related computer programs to any other agency, department, commission, or board of the State of Illinois, as well as any other agency, department, commission, board, or other governmental entity of any country, state, county, municipality, or any other unit of local government or to any entity consisting of representative of any unit of government, for official use by said entity. Additionally, CMAP shall be free to offer or otherwise provide said software and related computer programs to any current or future contractor.

CMAP agrees that any entity to whom the software and related computer programs will be given, sold or otherwise offered shall be granted only a use license, limited to use for official or authorized purposes, and said entity shall otherwise be prohibited from selling, giving or otherwise offering said software and related computer programs without the written consent of both CMAP and the Contractor.

- 15) Publication. CMAP shall have royalty-free, nonexclusive and irrevocable license to reproduce, publish, disclose, distribute, and otherwise use, in whole or in part, any reports, data or other materials specifically prepared under this Agreement, and to authorize other material to do so. The Contractor shall include provisions appropriate to effectuate the purpose of this clause in all subcontracts for work under this Agreement.
- 16) Confidentiality Clause. Any documents, data, records, or other information given to or prepared by the CONTRACTOR pursuant to this Agreement shall not be made available to any individual or organization without prior written approval by CMAP. All information secured by the Contractor from CMAP in connection with the performance of services pursuant to this Agreement shall be kept confidential unless disclosure of such information is approved in writing by CMAP or required by law.
- 17) Reporting/Consultation. The Contractor shall consult with and keep CMAP fully informed as to the progress of all matters covered by this Agreement.

- 18) Identification of Documents. All reports, maps, and other documents completed as part of this Agreement, other than documents exclusively for internal use within the Contractor's offices, shall carry the following notation on the front cover or a title page or, in the case of maps, in the same area which contains the name of CMAP and of the Contractor. "This material was prepared in consultation with CMAP, the Chicago Metropolitan Agency for Planning, (<http://www.cmap.illinois.gov>)."
- 19) Force Majeure. Either party shall be excused from performing its obligations under this Agreement during the time and to the extent that it is prevented from performing by a cause beyond its control including, but not limited to: any incidence of fire, flood; acts of God; commandeering of material, products, plants or facilities by the Federal, state or local government; epidemics, pandemics, national fuel shortage; or a material act of omission by the other party; when satisfactory evidence of such cause is presented to the other party, and provided further that such nonperformance is unforeseeable or inevitable, beyond the control and is not due to the fault or negligence of the party not performing.
- 20) Hold Harmless and Indemnity. Neither Party shall be liable for actions chargeable to the other party under this agreement including but not limited to, the negligent acts and omissions of the Party's agents, employees or subcontractors in performance of their duties as described under this agreement, unless such liability is imposed by law. This agreement shall not be constructed as seeking to enlarge or diminish any obligation of duty owed by one Party against the other party.