Chicago Metropolitan Agency for Planning

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February 27, 2015

REQUEST FOR PROPOSALS (RFP) No. 131
INTEGRATED TRANSPORTATION PLANNING, PROGRAMMING AND TRACKING DATABASE AND VISUALIZATIONS SOLUTION

Chicago Metropolitan Agency for Planning (CMAP) is issuing a request for proposals for an integrated transportation planning, programming and tracking database and visualizations solution from interested and qualified firms, as described in the enclosed Request for Proposals (RFP).

CMAP will conduct a non-mandatory pre-bid information session on Thursday March 5, 2015 at 11:00 am local time. Consultants may attend in person or by webinar/conference call. To attend in person, call CMAP at 312-454-0400 to be added to the Willis Tower visitor list. Driver's license or state ID required for entry into the building. To join by webinar/conference call, email Procurements@cmap.illinois.gov requesting RFP 131 webinar/conference call information. An email with the webinar/conference call information will be sent to all who have registered by noon on Wednesday, March 4, 2015.

If your firm is qualified and experienced in performing/providing the described services, CMAP would appreciate receiving your quote as indicated in the RFP. The deadline for receipt of submissions in response to the RFP is **3:00 p.m., Friday March 27, 2015.**

Thank you, and if you have any questions, please call me at (312) 386-8756.

Sincerely,

Penny A. DuBernat
Procurement Officer

Enclosure

REQUEST FOR PROPOSALS (RFP) No. 131

The Chicago Metropolitan Agency for Planning (CMAP) invites firms to submit proposals for an integrated transportation planning, programming and tracking database and visualizations solution *as described in the enclosed Request for Proposals (RFP). Please read each section carefully for information regarding the proposal and submittal instructions.*

SECTION 1: Background and General Information

About CMAP

The Chicago Metropolitan Agency for Planning (CMAP) is the official regional planning organization for the northeastern Illinois counties of Cook, DuPage, Kane, Kendall, Lake, McHenry, and Will. CMAP developed and now leads the implementation of GO TO 2040, metropolitan Chicago's first comprehensive regional plan in more than 100 years. To address anticipated population growth of more than 2 million new residents, GO TO 2040 establishes coordinated strategies that help the region's 284 communities address transportation, housing, economic development, open space, the environment, and other quality-of-life issues. See www.cmap.illinois.gov for more information.

Project Background

CMAP's MPO Policy Committee is designated by the governor of Illinois and northeastern Illinois local officials as the region's Metropolitan Planning Organization (MPO). The MPO plans, develops and maintains an affordable, safe and efficient transportation system for the region, providing the forum through which local decision makers develop regional plans and programs.

As the MPO, CMAP is responsible for developing a long range transportation plan (LRTP) - GO TO 2040. It includes the policies that guide the selection and implementation of the fiscally constrained multi-modal Transportation Improvement Program (TIP) for the region.

The TIP identifies and tracks federally funded and regionally significant transportation projects over a six-year period for the seven county Chicago region. It is a multimodal list of projects that includes highway, rail, bus facility improvements, signal synchronizations, intersection improvements, bicycle and pedestrian projects, and other transportation-related activities. The TIP is a six-year agenda of surface transportation projects approved according to federal regulations and must be fiscally constrained at all times. The TIP is compiled in cooperation with entities with jurisdiction over the various parts of the region's transportation system. These entities work to satisfy their responsibilities to maintain, modernize, and expand regional infrastructure.

The TIP database is currently hosted in-house within Microsoft SQL Server and uses a web-based interface to coordinate more than 40 Federal, State, regional and local programming agencies representing over 300 implementing agencies in tracking more than 1,900 transportation improvement projects within the region. In addition to collecting information required for the Transportation Improvement Program, the TIP database also collects project-level data that are key inputs into the conformity modeling process and acts as a reporting vehicle for the federally required Annual Obligations Report. The current TIP database is available for review. Public access is available by entering the word "guest" for both username and password.

Statement of Purpose

CMAP is seeking an integrated transportation planning, programming and tracking database and visualizations solution. This solution may be provided by either a consultant that currently provides an "out-of-the-box" application or, a team of consultants that will provide custom database planning, development, programming, training, and on-going technical support for a new SQL-based database application or set of integrated database applications (the Database) with a web user interface to replace its existing TIP application. CMAP further seeks to enhance the new application with data visualizations, enhanced reporting and an ArcGIS mapping component. The proposed application will provide both a public-facing website and a secured user interface with the capacity to interface with other partner agencies and their database applications.

Further, comprehensive analyses of the TIP will be required to meet the region's performance-based programming goals and to improve transportation decision making.

Although a SQL based database and ESRI based GIS application are preferred, other platforms will be considered.

General Information

As a result of responses to this RFP, CMAP plans to review submissions and may, if necessary, conduct interviews with selected firms it determines can best meet the requirements outlined below. As applicable, negotiations will be held as necessary to select the firm that CMAP believes can best satisfy its requirements at rates it perceives are reasonable for the services provided. It is expected that CMAP will hire a single consultant in response to this RFP, although this may be a multi-firm team with one lead firm and several subcontractors. It is anticipated that these multi-firm teams will require the assistance of a GIS application development firm and a transportation engineering firm in addition to their in-house staff. Subject to "Reservation of Rights" below, it is anticipated that a contract will be awarded for three years in length with two one-year options for renewal.

SECTION 2: Scope of Project and Procurement Details

Scope of Services

The integrated transportation planning, programming, and tracking database, and visualizations solution project is made up of four distinct but connected components:

1. a "back end" database for storing, processing, and organizing data;
2. a front end "user interface" for entering, querying, and retrieving data from the database;
3. a GIS-based mapping application for entering, displaying, querying, and retrieving location-based data; and
4. an analysis and visualization component for displaying and querying data interactively via tables, charts, and/or graphs.

Integration of the database with other internal and external data sources through direct links and/or the ability to import/export is also desired. Data must be collected from the web interface, mapping application, and via imports from other databases/spreadsheets internal and external to CMAP. Project data, including illustrative data that is not part of the adopted TIP, will generally be collected at four different levels: Project Information, Financial Line Items, Travel Demand and Air Quality Model Information, and Categories (by project and/or by line item). Background Information and Administrative Information will also be collected and may or may not be associated with individual projects or line items. Once collected, the data must be validated for accuracy, completeness, and compliance with fiscal constraint criteria. New projects and changes to existing projects must be analyzed for the type of action required to include them in the region's adopted TIP. Standard reports and visualizations (map and dashboards) must be generated for the adopted fiscally constrained TIP, the TIP with illustrative projects/line items, and for pending changes to the TIP.

Due to its complex nature, CMAP envisions that this project will be completed in phases, beginning with a Planning Phase that will define the structure and function of all components of the project. It is also during the Planning Phase that all items currently under review will be finalized, and any elements defined as desired but not required will be planned for eventual incorporation, possibly during the Maintenance and Future Development Phase. Once all planning phase deliverables have been completed and accepted by CMAP, the actual Development and Programming or build phase should commence. The Third Phase will include cross walking existing data to the new application, testing, final documentation, and staff training. The fourth phase of this project will include Maintenance and Future Development. Maintenance and Future Development will encompass planned for, but yet uncompleted desired elements, application development enhancements, and possibly hardware and software maintenance,

depending upon the final configuration and hosting decisions. Application development enhancements will be on a task order basis while maintenance will be on an annual budget basis. CMAP is open to a completely custom solution, an "out of the box" or "software as a service (SaaS)" solution, or a combination of these.

Terms and definitions used throughout this scope are provided in Attachment 5.

Phase 1 – Planning

I. Database Schema Design

Deliverables: Database schema, including, but not limited to, a complete descriptive list of tables, fields, field properties, and relationships.

All data collected and stored in the TIP database belongs to one of the following groups: Project Information, Financial Information, Travel Demand and Air Quality Model Information, and Background Information. Some data may be attached to records within the TIP database via links to other data sources. Some information is required to be collected, while other information is desired.

A. Project Information: Project information includes descriptive information that applies to an entire project. There are currently approximately 1,900 projects in the TIP database.

Project Identification Number (TIP ID): The primary unique identifier for each project included in the TIP database is the TIP ID. The TIP ID must be auto-generated at the time of initial project entry into the TIP. The current TIP ID (XX-XX-XXXX) assignment procedure must be maintained. Each ID contains three parts, separated by dashes. The first two digits indicate the location of the project, by subregional council, City of Chicago, or transit service board. The location is determined using a hierarchy that includes the programming agency, location (county and municipality), and other agencies participating in the project. The hierarchy is included as Attachment 6. The second two digits indicate the federal fiscal year (FFY) in which the project initially entered the TIP database, and the final four digits are sequential.

Project Programmers' Identification Number(s): Individual programming agencies may also have one or more distinct identifiers for projects and projects may have unique identifiers related to the fund source(s) being used. The ability for project programmers to enter multiple local or fund-specific ID numbers to facilitate searching and tracking projects, and the linking of imported/exported data must be provided for programming agency unique identifiers in addition to the TIP ID. The identification field(s) format should be customizable by programmer. For fund sources that have unique identifiers, the user should be prompted to add the ID when adding that fund source to the project.

Programming Agency: Several agencies and individuals are associated with every TIP project, including the agency responsible for programming the project in the TIP, the project sponsor(s) and partner(s), the actual implementer(s) of the project including their consultant(s), and various contacts (public, programming and technical, at a minimum). All must be included in the project record.

Project Description: The work being done on a project is made up of a list of work types. Currently, there are 115 unique work types used in the TIP database. The work type(s) determine what other project information, such as travel demand and air quality model information is required to submit a new project and/or project change to the database. Current work types are available as Attachment 7.

Project Location: A full description of the physical location of a project is required. For linear projects, such as highways, rail lines, or bike paths, the location includes the main facility ("Northwest Highway", "UPNW RR", "Illinois Prairie Path"), the limits ("from 1st Ave. to 5th Ave."), the county, and where applicable, the municipality. For point projects, such as intersections, train stations, or bus stops, the location may include the main facility and the intersecting facility ("US 14 at US 31"), the name of the facility ("Clybourn Metra Station"), and/or the physical address of the facility, along with the county, and where applicable, the municipality. Some projects may occur at "various" locations or may cover a wider area ("regionwide", "throughout DuPage County", or "within the area bounded by IL 176 to the north, US 14 to the south, IL 31 to the east and Main Street to the west"), which may be represented on a map by a polygon or which may not be mapped due to a large coverage area. Exceptions to the limits ("from 1st Ave. to 5th Ave., excluding 2nd Ave. to 3rd Ave.") and further explanation of "various locations" must also be included in the location description. For consistency throughout the region, projects are generally referred to by their full location (Northwest Highway from 1st Ave. to 5th Ave. in the Village of Cary) on reports. Finally some projects included in the TIP are not spatial in nature, such as purchasing vehicles or marketing campaigns. Projects that will not be spatially represented must contain some kind of descriptive name in place of the location information, for example "Pace Regionwide Bus Replacement" or "CTA Ridership Marketing Plan".

The use of an online mapping application to allow programmers to "draw" projects is desired. A more detailed description of the scope of the mapping application is provided later in this document. The location data fields (facility, limits, county, municipality, etc.) should be populated based on the mapped location. Background information that is GIS-based should be populated based on the mapped location. Please see section D. below for more detailed information on background data.

Consistency with the LRTP: Projects within or proposed to be included in the adopted TIP must be consistent with the adopted Long Range Transportation Plan (LRTP). How that consistency will be demonstrated is currently under discussion at CMAP. The demonstration may be via a narrative explanation entered by programmers, may be a series of check boxes, and/or may be based on some values calculated within the database based on project, financial or background information.

Attributes/Assets that are affected by the project: CMAP is currently developing indicators that will be used to guide performance-based programming decisions. It is anticipated that the collection of attribute and asset data for project locations, both before a project is completed and after a project is completed will be required in order to perform analyses of how individual projects, proposed changes to projects, and the adopted TIP as a whole affect the indicators. Some examples of attribute or asset data include, but are not limited to, pavement condition, lane widths, vehicle type (transit/rail), traffic counts, and crash rates. Much of the before data would come from existing data sources outside of the TIP, both internal and external to CMAP, including sources that are part of the mapping application. The after data would likely be provided by users or be calculated based on "rules of thumb" or standards defined by CMAP.

Project Categories: Projects may be identified or grouped by categories, which will be established by CMAP, as part of ongoing efforts to implement GO TO 2040 and to develop the next Long Range Transportation Plan for the region. Categories may be assigned to projects based on project status in the Long Range Transportation Plan (Major Capital Projects, Constrained Projects, and Unconstrained Projects), location, work types, funding types, roadway functional classification, or other project information and may be based on combinations of this information. Multiple categories are likely and some may be calculated based on look-up tables. The data fields and logic necessary to obtain and report on categories by project should be built into the database for future use.

Documents and Notes: It is not always possible to capture all relevant project information within the fields included in the TIP database; therefore the ability to add notes to projects is required. Also, over time there are many documents that are associated with a project. Staff, project programmers, and regulatory/review agencies must be able to attach these documents via hyperlinks or by uploading files to the database server. The notes and attachments should be indexed and searchable, and should be able to be marked as public or private, with viewing privileges related to a user's database access level.

Project Timelines: Tracking of the completion of major milestones and the actual and anticipated timeline of a project is required and should be accomplished by collecting various dates through direct data entry, time stamping, or calculation based on lookup tables or established rules. At project creation, anticipated/target dates for project and line item implementation actions should be collected. As each TIP change is made, the dates should be updated as appropriate. Some updates may be calculated, and others may be entered by users. Graphical representation of the project timeline is a required output of the database.

B. Financial Information

Financial Line Items: Line items describe how and when individual phases of projects will be funded. Each project has at least one financial line item and some projects (currently about 5%) have more than 40 individual line items. The average number of financial lines per project is three. There are currently about 5,400 active and illustrative financial line items within the TIP database. A complete line item includes a fund source, federal fiscal year, phase, and funding amounts (total, federal, state/local, and matching funds). Line items that include FFYs that are not within the active years of the TIP are defined via an administrative lookup table and are considered illustrative, and are not reported or acted on as part of the adopted TIP. Financial data is required and is used to demonstrate fiscal constraint for federal fund sources.

Source and Date Estimates: The ability to collect, track, and report on the source and timing of estimates is desired**.** The date and source of the cost estimate used to arrive at the programmed amount; for example, "Planning estimate", "Phase 1 Design Approval: 1/1/2014" or "Final Engineer's Estimate: 5/30/14".

Phase/Line Specific Identification Numbers: For tracking of expenditures, each financial line item has a series of unique identifiers that are used in federal and state databases. These IDs are critical to matching TIP projects with data from FHWA, FTA and IDOT databases and must be collected in a way that will allow for joining of data on these fields.

Line Item Categories: There may be a need to assign categories to financial line items and/or to sub-divide line items to demonstrate the investments being made for each category. For analysis purposes, it is likely that whole projects will be assigned to one or more categories and individual line items may also be assigned to one or more categories. The ability to sub-divide and/or to assign categories to individual financial line items is desired. The assignment of categories by line item versus or in addition to categories by project is currently under discussion at CMAP. The data fields and logic necessary to obtain and report on categories by financial line should be built into the database for future use. Sub-dividing may include, but is not limited to describing physical segments of a project (from A to B, from B to C, etc.) that are funded separately, breaking out cost elements for a phase by the type of work being done (for example costs of roadway, bikeway, sidewalk, safety, maintenance of traffic, etc. within one larger line item) or "staging" of a phase (most likely construction) within a single FFY.

Implementation Actions: The date and costs related to implementation actions, including but not limited to federal authorization, contract award, letting, start date, and end date must be collected. Implementation data will be used to create Obligation Reports, which are required at least annually by federal law. The ability to collect, track and report on implementation actions at static points in time and dynamically via dashboards is required. Implementation action information may be obtained directly from FHWA's FMIS database and FTA's TrAMS (currently TEAM) database or via data entry by programmers and/or CMAP staff.

C. Travel Demand and Air Quality Model Information

Information used to properly represent project location and attributes in the travel demand and air quality models must be collected and is generally referred to as "model information". This information is required only for projects that contain work types that may have an effect on the region's ability to meet air quality requirements. Some model information may be entered by users or may be calculated in the mapping application from the project location and background GIS information. If calculated, the user should be required to validate the information prior to submitting a new project or project change. Information that could potentially be calculated includes highway segment characteristics (number of lanes, lane width, and speed limits), transit parking information, or transit vehicle characteristics Regardless of how this data is collected in the TIP database, it must be exportable as a .csv file including specific fields for ease of import into the models. Exports in other standard file formats may also be desired. The data collected varies by the type of project (highway vs. transit) and project scope (work types). Projects for which model information is required are referred to as "Not Exempt" or "Exempt Tested" projects, based on the work type(s). The requirements are documented in the current database User Guide beginning on page 29 (Attachment 8).

D. Background Information

Background information includes data collected and maintained by CMAP and partner agencies independent of TIP projects that may inform the TIP and/or may be used as part of the analyses performed within the TIP. Background data, in combination with project and/or financial line item data may be used to define project categories. Much of the background data is locational in nature and is available as GIS layers and/or feature services. Additional background data is likely to come from external data sources, such as IDOT's Illinois Highway Information System (IHIS), the RTA's Regional Transportation Authority Mapping and Statistics (RTAMS) web-based data warehouse, and other state-wide, regional or local data sources via automated processing methods or imports/exports.

Following are examples of background data that may be collected. These examples are not an all-inclusive list. CMAP is working to determine the desired data and potential sources of that data.

a) **Location/Political Boundaries**: Municipality, County, Township, State and Federal Legislative Districts, Subregional Council

b) **Assets**: Bus stops along/near corridor, existing/proposed bike/ped facilities, transit vehicle type(s), pavement type, traffic signals, ADA facilities

c) **Condition**: Pavement condition, bridge/culvert structural rating, transit vehicle condition

d) **Location Characteristics**: Adjacent land uses, environmental (NEPA defined) characteristics, cultural resources

II. Business Rules

Deliverables: Documentation of the data processing actions to be applied, and the order in which they will be applied; Documentation of the data validation rules to be applied to each data field and/or combinations of fields; Documentation of Fiscal Constraint procedures to be applied; and Documentation of the Notification System, including but not limited to, who will be notified of what types of actions taken within the database.

The addition or deletion of projects in the database, and/or changes to projects in the database may require public comment and CMAP committee approval before being approved for inclusion in the adopted TIP. Some changes may be considered administrative in nature ("modifications") and are approved without public comment or CMAP committee action. The logic for the type of approval action is complex and must be applied to determine the required action. In some cases, the level of action cannot be determined by applying the logic; CMAP staff must have the ability to override the application of the logic and manually "move" pending changes from one class of action to another. The current logic is provided in Attachment 9.

A. Data Processing Actions

All changes to project data in the TIP database trigger actions within and outside of the database.

As part of the tracking and approval process, the status of all projects is continually monitored. As projects are added, deleted, or changed in the database, they must be categorized by status. A dynamic list of all projects grouped by current status must always be available. Each list may be assigned different user access rights. CMAP staff should be able to take action (approve, deny, delete, or place on hold) on pending changes from the status lists and from individual project records. The status groups include but may not be limited to the following:

- Pending New Projects
- Pending Changes
- Pending Deletions
- Changes on Hold
- Recent Modifications
- Line Item Awards
- Project Awards
- Complete/Closed Projects
- Active Projects
- Deleted Projects

In addition to status reports, all changes to project status must be logged to produce the history reports described in the Outputs section of this scope.

Once collected, the data must be validated for accuracy, completeness, and compliance with fiscal constraint criteria. New projects and changes to existing projects must be analyzed for the type of action required to include them in the region's adopted TIP. Standard reports and visualizations (map and dashboards) must be generated for the adopted fiscally constrained TIP, the TIP with illustrative projects/line items, and for pending changes to the TIP

B. Data Validations

Data must be validated at various levels and for differing purposes. Data must be complete (required fields) and logical (Add Lanes projects require the number of lanes after the project to be greater than the number of lanes before the project, for example). Uniform data entry (ID numbers with or without dashes, for example) and reduction of spelling errors is desired. The web interface should include the ability to provide "instantaneous" data validation for a single field/group of fields and should offer spell-checking or auto-correct and provide input masks to increase consistent formatting. When certain terms are entered or selected, users should immediately be prompted to provide additional information, such as when "various" is used in a location field, or when a "miscellaneous" work type is selected. Validation rules can change at any time, based on changing federal legislation, amendment procedures, etc. A list of current data validations is provided in Attachment 10.

C. Fiscal Constraint

Changes to financial line items, even those which do not trigger a need for approval action, must be checked against the region's available financial resources to maintain fiscal constraint. The sum of all financial line items on all projects within the database, including proposed changes (additions and subtractions), for each combination of fund source, federal fiscal year, and, for some fund sources, subregional council location or programming agency, cannot exceed the available resources for that source, year, and location/agency.

D. Notification System

Programming responsibilities in the region are complex. In most cases, programming responsibility is tied to fund sources, but it may also be determined by the status of a project, the maintenance jurisdiction of a facility being improved, or the type of work being completed. Because of these complexities, it is possible for more than one user to submit changes to a single project. A notification system is required to alert all responsible programmers of changes made to projects for which they also have programming responsibility. Additionally, projects that are the programming responsibility of one agency may have a direct impact on the assets of another agency. Extending the notification system to alert asset owners of projects of potential impact to their assets is desired.

III. Administration

Deliverables: Documentation of the administrative functions of the database, including but not limited to a complete descriptive list of tables, fields, field properties, and relationships.

Administrative data is used to set user permissions, to set trigger dates for various actions, to populate various drop-down lists, to provide "plain English" descriptions for the numerous acronyms in the TIP, and to provide information that is based on other selections made in the database, such as the exempt status of work types or the type of funds (federal, state, or local) by fund code. Administrative data includes data that populates various lookup tables in the database, including but not limited to the following items:

- Valid Completion Years
- Project Contacts (by Programming Agency)
- List of Counties
- List of Municipalities
- List of Subregional Councils and City of Chicago
- List of Chicago Community Areas
- Valid Fiscal Years
- Valid Phases
- Route Abbreviations

- Year End Dates
- List of Programming Agencies
- List of Work Types
- List of Fund Sources
- List of Trigger Dates
- Active TIP Years
- Conformity Years
- Fiscal Constraint parameters
- Users

IV. Reporting Outputs

Deliverables: "Mock-ups" of all reports; Documentation of the fields to be included in each report and the sort and filter options for each report.

In addition to being a data storage and management tool, the database will also be used to generate a wide variety of reports to visually communicate project and program information to CMAP, local elected officials, implementers, regulatory agencies, and the public. Both static and dynamic versions of standard reports are required. Static versions are presented for public comment, committee action, and official reports. Dynamic versions reflecting the current state of projects are utilized by CMAP staff and programmers to review project changes for accuracy, prepare for committee actions, and determine what project changes are needed. Sample reports from the current CMAP TIP database and the databases and/or websites of other MPO's or Transportation Planning agencies are included in Attachment 11.

A. Project Fact Sheets

Transportation projects are complex and the data within the TIP is very technical in nature and not always easy to understand, particularly for persons that are not involved in transportation programming. Easy to read "fact sheets" summarizing key data about each project within the TIP database are required. Several different styles, with varying data (including location maps and/or photographs), may be developed for use by different audiences.

B. Project Histories

Every action taken in the database, including project additions, amendments, modifications and miscellaneous changes, must be logged to create project histories. The user taking action, the date of the action and the time of the action must also be logged. Histories may be narrative, tabular, and/or graphical. Reports that combine these displays may be developed. Reporting of values both before and after each change may be included in some versions of the history reports.

At a minimum, the following histories are required:

- Comprehensive log of all project actions
- Summary history (actions defined as "major" only)
- Financial history
- Action history (adoption/amendments)
- Scope history (changes to location and/or work types)
- Categorical history (changes may be due to policy shift or project changes)

C. Obligation Reports

At the conclusion of every federal fiscal year, an obligation report containing, at a minimum, a listing of federal funds obligated on project phases during that fiscal year and changes to

federal fund obligations from prior fiscal years must be produced and published, per federal regulations. Summary tables and graphics by fund source/type, programmer, project type, categories, etc. are required database outputs. Trends or summaries of obligations over time, fund source, and by category are also desired. The ability to produce both a static obligation report(s) to meet federal requirements and dynamic obligation reports is desired.

D. **Change Reports**

The TIP is CMAP's officially adopted list of projects which implement the Long Range Transportation Plan (LRTP). Adoption occurs semi-annually with the conformity determination of the LRTP and the TIP made by the CMAP Board and MPO Policy Committee. The TIP is also routinely amended with the approval of the Transportation Committee, approximately eight times per calendar year.

All changes made to projects in the TIP database fall into one of three categories: Conformity Amendments, Amendments, or Modifications. Conformity Amendments are those which require demonstration of the region's capacity to make progress toward meeting National Ambient Air Quality Standards (NAAQS) and require at least 30 days of public comment, review by the Transportation Committee, and final approval by the MPO Policy Committee. Amendments are major changes to the scope or schedule of a project, along with financial changes meeting defined thresholds, and require at least seven days of public comment and approval by the Transportation Committee. All other changes are considered Modifications and take effect immediately but must be reported to the Transportation Committee as information.

The Change Report must contain the "before" and "after" project scope and financial information for all projects with pending changes in a complete public-friendly format. The Change Report must be able to be generated as a full report, with changes grouped by the type of action, as well as three individual reports, one for each type of action. At any time, the Amendment Report should reflect the before and after data for all projects with pending changes. However, due to public comment requirements and committee meeting schedules, there is a period of time when the Change Report should remain static; during these periods, pending changes are held from being included in the report.

E. **Change Summary/Action Reports**

Summary reports are required to assist the public, local elected officials, programmers, and CMAP committees in understanding the impacts of TIP changes. The summaries must include "before changes" and "after changes" data. Reports may include the total financial impact of all proposed changes, the impact of changes on fiscal constraint, the impact on performance measures due to the acceleration or delaying of projects, and other general conclusions about the proposed changes. It is anticipated that the summaries will be derived from various dashboards included in the database.

F. **Fiscal Constraint Reports**

To satisfy federal requirements, CMAP must demonstrate at all times that the TIP is fiscally constrained for all federal fund sources. A report of the allotments, carryover, adjustments, and programmed funds (both before and after any proposed changes), and the balance of funds available for future programming changes must be continuously available. The report must have the option to be presented by each fund source and federal fiscal year, with filtering/grouping by programming agency required for fund sources that are constrained by programmer and desired for all other fund sources.

G. **"All Projects" Reports**

The All Projects Report satisfies the federal requirement for a list of fiscally constrained projects. The All Projects Report contains only adopted projects and the financial line items that are within the active years of the TIP. The All Projects Report must be a concise but easy to understand listing of projects.

Due to the format of this report, it is often requested to be modified to include other projects and/or illustrative line items. Therefore, the ability to produce filtered versions of the report, both with and without illustrative lines, is required.

H. **Dynamic/Custom Reports**

Using standard reports as a base, users must be able to develop and apply filters/queries to generate custom reports. Custom reports should be produced for the entire TIP (with options to include or not include illustrative line items and/or pending TIP changes) and for filtered versions of the TIP. Filters may include, but are not limited to, geographies, programming or implementing agencies, FFYs, fund sources, work types, and categories. Standard reports are typically sorted by TIP ID, but options for sorting by other fields must be provided.

I. **Timeline Reports**

Graphical representation of the project timeline is a required output of the database. Tracking of the completion of major milestones and the actual and anticipated timeline of a project is required.

V. Web Interface Design

Deliverables: "Mock-ups" of all page templates; and Menu and Navigation Structure

The database(s) must be accessible to registered users and guests via a web-based user interface. The web interface is the public-facing view of the TIP database and must be visually pleasing and simple to navigate while providing the required functionality for registered users and CMAP staff. The interface must be compatible with common browsing platforms as described in the Technical Requirements section of this scope and must utilize CMAP style guidelines as described in the Style Requirements section of this scope.

CMAP staff must have the ability to edit all sections of the web interface, except those directly tied to entering or retrieving data, via a content management system or standard html editing software. Page and report headers and footers must be included in the editable content.

All look-up tables must be able to be managed and edited via an administrative section of the web interface. To the maximum extent possible, parameters and triggers should be set via the administrative section and should not be "hard coded" into database code, logic, scripts, and triggers.

VI. Integration

Deliverables: Documentation of potential input sources, including but not limited to documentation of the ownership, location, access procedures, and type of source data; Documentation of the data fields, formats, and relationships within import source data; Documentation of the proposed relationships between input sources and the TIP database; and Documentation of fields and/or tables to be exported, the export file format(s), and the destination for the exported data.

Integration of the TIP with other internal and external data sources through direct links and/or the ability to import/export is also desired. Data must be collected from the web interface, mapping application, and via imports from other databases/spreadsheets internal and external to CMAP.

A. Direct Input

Currently all data is manually entered into the database by the programmers or CMAP staff via the web interface. As CMAP desires to collect more robust data, all opportunities to auto-populate fields should be explored to lessen the data entry burden for programmers. As much "on the fly" data validation as possible, including prompts and warning messages, should be built into the web interface to reduce the need for all data or significant portions of data to be reviewed and/or re-entered when a validation error occurs. This may be accomplished by breaking data entry into sections or modules that can be individually edited.

B. Imported or Linked Data

The ability to allow users to import a table(s) containing all or partial project information, including financial line items, is desired. A field matching tool to join users' data with the corresponding data fields in the TIP database is desired. Bulk updates by import may be allowed. All imported data must be subject to the same data validations and be analyzed for change actions just as they would be if entered individually.

C. Data Exports

CMAP staff and other programmers often have a need to export data, standard reports, and custom reports from the TIP database for use in other products and analyses. While the development of dashboards is expected to reduce the need for data exports, the below exports are required. Additional exports may be desired and identified as database development progresses.

1. Network Export

   Information used to properly represent project location and attributes in the travel demand and air quality models must be exportable as a .csv file with specific field names and formats for ease of import into the models. This information is used for semi-annual conformity determinations. The network export must include an accounting of changes to each project's model information since the last conformity determination. Exports in other standard file formats may also be desired.

2. Line Items

   All financial line item information which includes fund source, year, phase, federal/state/local amounts, and associated project numbers as well as any expenditure, obligation, and/or authorization data into a .csv file or easily shareable file format. Filtering and multi-select capabilities should be present to select which data to export.

3. GIS Export

   Project location data must be able to be exported from the Mapping Application to extract the "shapefiles" of TIP projects and the associated data tables for use in other mapping applications.

VII. GIS Application

Deliverables: Documentation of the tool(s) to be used, including but not limited to the software and applications to be used, the base layer(s) to be included, relationships to the TIP database, relationships to other potential data sources, definition of navigation tools, display controls, and other listed required functionalities.

A web-based, configurable mapping application capable of connecting to both spatial and non-spatial data that meets the geospatial visualization needs of CMAP is required. If the proposed solution is a

custom database application, CMAP would prefer that the mapping application be hosted on CMAP's servers. If the proposed solution is an "out-of-the-box" or software as a service (SaaS) application, it is expected that all data will be hosted on the provider's servers.

If the proposed solution is a custom database application, the proposed solution must be able to withstand Operating System (OS) updates (patches) without any major outages and is expected to be compatible with all major anti-virus software and withstand anti-virus updates without any major outages.

CMAP currently uses ArcGIS server as the primary mapping platform. The system was built on the Environmental Systems Research Institute (ESRI) ArcGIS software. This software will continue to be the foundation for all future CMAP GIS projects. The GIS platform was installed on a virtual server (Windows Server 2008) using CMAP's VMWare infrastructure.

The mapping application may be a part of the data entry web interface or may be a standalone application that draws data from and sends data to the TIP database. The application must be capable of performing graphical searches. Map searches should include "area" searches, by entering a parameter, such as a street address, intersection, or zip code and a distance range, such as "within one mile". The map should also be searchable by drawing a selection box and/or defining a buffer area. Search results should be shown both on the map and returned as a table/list.

Potential sources of data may include, but are not limited to, the following:

Internal GIS Data – may include but is not limited to:

- the Regional Inventories datasets (Bikeways, Land Use)
- Northeastern Illinois Development Database (NDD)
- socioeconomic forecasts
- traffic projections
- Congestion Management System (CMS)
- and the Green Infrastructure Vision

These datasets will be used as the basis for spatial analysis calculations and for display on maps alongside TIP data, but the datasets will likely always need to be referenced externally rather than being added to the TIP database. CMAP data may also include data from outside sources, such as:

- The US Census Bureau.
- IHIS/IRIS
- IDOT PPS and MFT databases
- RTAMS
- TEAM /TrAMS
- Local Programmer/Implementer databases/spreadsheets
- FHWA FMIS database

These data may be subject to restrictions on use and sharing with the public and/or users external to CMAP.

The mapping application will be used when entering new projects into the database, to modify the limits of existing projects in the database, to populate project data fields with "background" information that is geographic in nature, to display projects in and/or proposed to be added to the adopted TIP and Long Range Transportation Plan (with or without simultaneous display of background information), to search for and select projects, and to perform statistical analyses of the TIP by various geographies, including custom selections.

Instead of or in addition to manually entering the text for project location/limits in database fields, the mapping application should allow programmers to "draw" new projects or edit existing projects on an interactive map or import projects from existing GIS applications. The ability to add projects to the map which had location/limits information entered via database fields is desired. The mapping application

should be capable of accepting data as points, lines, or polygons and must have the capacity to link to or be imported into CMAP's existing GIS applications.

All GIS data (including TIP project data and other datasets) should be stored as "ArcGIS feature services", preferably hosted on CMAP servers, to make the data publicly available with different levels of access set for different users and to accommodate custom web map interfaces to display multiple feature services and tools (such as those provided by ESRI) for performing spatial analyses of the feature services.

The map should be searchable using standard geographic searches such as address, city/state, zip code, intersecting streets, etc. and navigable using standard zoom in/out buttons, panning, or by selecting an area to zoom to. In addition to standard geographic searches, the ability to filter projects displayed on the map by other TIP data fields including, but not limited to, programming or implementing agency, work types, and fund sources is desired. Users should be able select an area by drawing a polygon or selecting a standard geography (county, municipality, subregional council, etc.) to generate statistical summaries of TIP data via the standard dashboards. Sample maps are provided in Attachment 12.

The mapping application must provide the minimum requirements listed below:

A. General
   Solution must be scalable to provide either multiple websites or multiple instances, if hosted internally.
   1. Solution must be easily deployed between development environment and production environment, if part of a custom database application.
   2. Solution must be customizable to include CMAP branding and look
   3. Must support ArcGIS Server 10.x (Compact Cache storage format, Data Extraction, Feature attachments, etc.)
   4. Provide support for all mapping functionality via msd-based map services
   5. Accept search parameters via URL variables, and automatically zoom to search results
   6. Allow user project/session to be saved and opened
   7. Provide option to utilize on-line map based services such as, Bing, Google, HERE in addition to ArcGIS Online (ArcGIS.com) base map services
   8. Provide basic help documentation for built-in tools/functions
   9. Allow display of disclaimer window upon application startup
   10. Cross-browser support for Internet Explorer, Firefox, Safari, Chrome

B. Map Content
   1. Provide ability to assign transparency to ArcGIS Server map services, both cached and dynamic
   2. Provide ability to overlay multiple ArcGIS Server cached services in the same map Frame/display

C. Map Navigation
   1. Pan View
   2. Zoom to full extents
   3. Zoom In (User-defined area)
   4. Zoom Out (User-defined area)
   5. Zoom to Previous extents (Back) - must keep at least 10 previous extents
   6. Zoom to Next extents (Forward) - must keep at least 10 next extents
   7. Activity indicator - display notification while map/data is being processed
   8. Scale input box - allow user to enter representative fraction scale for dynamic services For cached services, scale box should contain dropdown menu of available cache scale (levels of detail)
   9. Zoom to Selected Features
   10. Show/hide mouse coordinates
   11. North arrow

12. Scale bar
13. Map Tips - open callout window by hovering over feature
14. Zoom to various levels of geography; county, municipality, intersection.
15. Pick lists for feature extents zoom (parks, schools, etc.)
16. Option for level-of-detail slider bar for cached services

D. Map Layer Display Controls
   1. Immediate map refresh upon layer change of layer display
   2. Ability to group layers and control display of individual layers within groups
      a. -Must allow grouping at least 2 levels deep
      b. -Must allow grouping of annotation layers
      c. -Must allow visibility control at the group level
   3. Allow linking to TIP database data.
   4. Must read and utilize geodatabase domain values (coded value) and subtypes

E. Tools
   1. Identify
      a. Must be able to identify multiple overlapping features on the same layer
      b. Must be able to add identified features to selection
      c. Option to show map coordinates of identify point
      d. Must allow for hyper linking based on feature attributes
   2. Measure
      a. Change units of the measure tool while executing the tool
      b. Units for display configurable by administrator
      c. Measurements must be retained until cleared by erase control
   3. Search / Selection
      a. Select by point, line, or polygon
      b. Select by all feature attributes, including shape attributes (area, length)
      c. Buffer selected features
         (1) Use different symbol for buffer shape
      d. Select features of a second geometry type based on buffers from a different first geometry type
      e. Save selected records to. xls, .csv file
      f. Search by spatial location (overlay)
      g. Masked text input (i.e., ###-###-####) for search text boxes
      h. Auto-complete text boxes based on either feature attributes or linked records
      i. Search GIS features based on linked attributes
      j. Allow drop-down boxes for search terms, including both pre-configured and dynamic based on unique values

F. Data Linking
   1. Allow linking from tables in SQL Server (not registered with a geodatabase)
   2. Recognition of related tables defined by ArcGIS geodatabase relationship classes (related tables)

G. Markup
   1. Add markup as point, line, polygon, and text
   2. Allow modification of markup symbology. Polygon markup must be allowed to have a semi-transparent solid fill symbol
   3. Allow a user to save markup in application or export markup to standalone file
   4. Ability to bring markup file into ArcGIS
   5. Allow retrieval of saved markup

H. Print
   1. Provide print framework for high-quality cartographic output, with a graphic (WYSIWYG) template designer

2. Provide graphic elements including scale bar, RF scale text, north arrow, disclaimer, logo, print date
3. Print date must be automatically added to output at application runtime
4. Export to multiple formats (pdf, jpg, etc.)
5. Provide control for pixel resolution of print image
6. User-supplied text fields including title and subtitle desirable
7. Legend configurable for which layer swatches to show desirable

I. Reporting
1. Provide reporting framework which should allow integration with Microsoft SQL Server Reporting Services or comparable database application.

J. Geoprocessing/Tasks
1. Support geoprocessing tasks: Find Address, Find Place, Search, Query, Editor Support all ArcGIS Server geoprocessing data types
2. Support tool layers with graphic picks as input

K. Security
1. Allow Active Directory, LDAP, or other security source
2. Security must apply to either entire application level or map service/layer/attribute level
3. Allow group-based security policies

L. CMAP GIS Data – may include, but is not limited to, the Regional Inventories datasets (Bikeways, Land Use), Northeastern Illinois Development Database (NDD), socioeconomic forecasts, traffic projections, the Congestion Management System (CMS), and the Green Infrastructure Vision. These datasets will be used as the basis for spatial analysis calculations and for displaying on maps alongside TIP data, but the datasets will likely always need to be referenced externally rather than being added to the TIP database. CMAP data may also include data from outside sources, such as the US Census Bureau, which may be subject to restrictions on use and sharing with the public and/or users external to CMAP.

VIII. Visualizations

Deliverables: "Mock ups" of the visualizations; Documentation of the data fields, sorting and filtering to be utilized for each visualization.

Data will be analyzed and reported on at various levels and for differing purposes, using a variety of visualization methods such as charts and graphs. All visualizations should include a "with pending changes" or "without pending changes" option. Some visualizations, such as project history, may be for a single project, while others will be for the entire program or portions of the program, such as all projects that include a certain fund type(s) or all projects within a selected subregional council. The visualization application may be a part of the data entry web interface or may be a standalone application that draws real-time data from the TIP database. Data visualizations should be able to be integrated in the main CMAP website and/or websites of partner agencies.

Visualizations by project shall include, but not be limited to:
- Project timelines (estimated and actual)
- Project financial history
- Project action history
- Project work type and/or category mix

Visualizations by program, or portions of the program, may include, but not be limited to:
- Project mix
- Funding mix
- Geographic mix
- Investments by categories (work types), geographies, programmers, implementers, roadway functional classification, mode, etc.

- Effects on priorities of the Long Range Transportation Plan (e.g. Indicators)

A fiscal summary of all line items making up a project, and of all line items included in the TIP, is a required output and a required dashboard. Some fiscal data, particularly implementation actions, may be obtained through direct links and/or export/import from federal databases, such as FTA's TrAMS (currently TEAM) database, FHWA's FMIS database, and IDOT's PPS database.

Visualization samples from other MPO's or Transportation Planning agencies are included in Attachment 13.

IX. Technical Requirements

Deliverables: Documentation of the hardware, software, and/or services to be utilized and/or developed for each component of the project; Draft documentation of a plan to maintain integrity and security of the data including disaster recovery. A final data integrity, security and disaster recovery plan will be delivered in Phase 3 of the project.

All components of the project are subject to the technical requirements described below.

A. Current Computing Environment

Software
CMAP has an Enterprise License Agreement with ESRI. Under this agreement CMAP has the following licenses available for the project:

ArcGIS for Server Enterprise Standard up to 4 cores, version 10.2 - 2 licenses
ArcGIS for Server Enterprise Basic up to 4 cores, version 10.2 – 2 licenses
ArcGIS Image Extension for Server Enterprise Standard up to 4 cores, version 10.2 - 1 license
ArcGIS for Desktop Advanced 10.2 - 10 Concurrent Use

CMAP uses VMware as the primary server virtualization platform and has the following licenses available for the project:

VMware vCenter Site Recovery Manager 5 Standard
VMware vSphere Essentials
VMware vShpere Data Protection Advanced

CMAP uses Microsoft as the primary server OS platform and has the following licenses available for the project:

Microsoft Server 2008 & 2012 R2
Microsoft SQL Server

Hardware
CMAP will provide HP and Dell servers and storage systems for this project.

Proposed Server Infrastructure
CMAP has implemented ArcGIS Server v10.2 on its own network.

Should a custom development option be proposed, the mapping application proposed by this RFP will be installed on one of CMAP's application servers. At this time, it is unclear whether the application will be installed on a physical server or virtual server using the agency's VMWare infrastructure. In either case the application server will be running Windows Server 2008 x64 or Windows Server 2008, and a maximum of four (4) CPU cores will be available to the server operating system. Respondents are encouraged to discuss virtualization options and describe recommendations as part of their proposal.

B. Web Browser Compatibility

Based on the web browsers currently in use by existing database users, the web interface is required to be designed to function fully and comparably within the following browser versions and all subsequent updates to these browsers: Microsoft Internet Explorer 9.0, Mozilla Firefox 33.1, Google Chrome Version 38.0.2125.111 m, Apple Safari 5.06 for Leopard, Apple Safari 5.17 for Windows and Apple Safari 5.1.10 for Snow Leopard. Mobile-friendly features are desired; however a standalone app is not desired.

C. Hosting Services

CMAP is open to proposals which include database and user interface web hosting services, as well as proposals which rely on CMAP's existing network and web environment.

Proposals which will rely on CMAP's existing network and web environment must work within CMAP's current computing environment. All servers will be hosted by CMAP as VMs behind CMAP's firewall. All hardware, software, and licensing will be provided by CMAP. The consultant(s) will be responsible for identifying all hardware, software, and licensing requirements well in advance of implementation.

Environment

- Windows Server
- IIS
- SQL Server
- ESRI GIS products

Architecture

- Reverse proxy in DMZ
- Application and database servers behind the firewall
- Three environments will be used for site implementation and maintenance:
    - Development
    - Staging
    - Production
- The consultant will be responsible for following change management protocols across these three environments.

D. Data Integrity and Security

The data contained in the database(s) is generally public in nature and therefore does not require encryption. Some of the background data that will be linked to and/or stored within the database is proprietary or in some way not appropriate for public use and access to these data sets must be restricted via individual user credentials.

The integrity of the data and continuous availability of the TIP database is of critical importance to ensuring the availability of federal transportation funds in the CMAP region. Appropriate redundancies and frequent routine backups of the database are required. The database and associated applications must have a disaster recovery plan, or be incorporated into CMAP's IT disaster recovery plan(s).

Developers will follow best practices in developing secure code, presenting CMAP with a description of what tools will be use to confirm custom code (e.g., VeraCode). Developers will provide secure authentication using SSL for application users. Consultants will remediate all issues discovered during authenticated vulnerability and penetration testing performed by a third party chosen by CMAP.

X. Style Requirements

Deliverables: Documentation of the design approach for all "public facing" components of the project, including request for diversions from the established style guide.

The consultant firm will work in collaboration with CMAP's communications and web services team on the design of all public facing elements of the database, including but not limited to the Web Interface, Reporting Outputs, GIS Application, and Visualizations. The consultant firm will collaborate closely with CMAP's existing team to create an approach to the content's visual design, defining the appropriate styles for use in each element of the database, prior to any development activities. Within the framework of that collaboration, the consultant will also be responsible for following CMAP's established branding standards, which CMAP has carefully established to reflect the agency's identity and priorities. The selected contractor must work within that established graphical framework to the maximum extent feasible in consultation with the CMAP project manager and communications staff. See http://cmap.is/cmap-style-guide for specifications, including graphics, typography, and usage. Development should be based on these standards, and it is important that the selected team use the guidelines in collaboration with CMAP's communications staff to increase the content's usability and aesthetic value. Diversions from the established style guide will require CMAP project manager sign-off.

Phase 2 – Development and Programming

Deliverables: Database; User Interface; Mapping Application; Visualization Solution(s); and Documentation of diversions from planning documents

All development and programming will be completed according to the documentation prepared and approved in Phase 1. Diversions from the documentation will require written justification and approval by the CMAP project manager.

Depending upon the final configuration, CMAP will own all code developed during this project. All development work will be maintained in a private Github code repository owned by CMAP. Developers will follow best practices in developing secure code, presenting CMAP with a description of what tools will be use to confirm custom code (e.g., VeraCode). Developers will provide secure authentication using SSL for application users. Consultants will remediate all issues discovered during authenticated vulnerability and penetration testing performed by a third party chosen by CMAP.

Phase 3 – Data Conversion, Testing, Documentation, and Staff Training

Deliverables: Testing site loaded with converted data; Updated versions of all Phase 1 deliverables documenting the final condition of each element; System Set-up and Configuration documentation; Technical Manual; System Data Dictionary; Administrative Guide; User Guide; and Administrative and User training materials, including PowerPoint presentation and handouts.

I. Conversion of Current Data

The current CMAP database is in a SQL Server format. This existing data will be converted or cross walked into the new application prior to testing. It is anticipated that a second data conversion will be necessary prior to "Go Live" to update the new environment with current data records.

II. Testing

The objective of this phase is to place the completed system into production, monitor its operation under a full production load and dynamically fine tune the system to ensure the system satisfies the

functionality in the final product. It is anticipated that the proposer will be onsite during a mutually agreed upon timeframe during the implementation testing. It is also anticipated that the integrated database will be utilized in parallel with the existing TIP database for a minimum of one and maximum of three TIP amendment cycles.

III. Documentation

The consultant will provide online help and user manuals for the internal and online application and interfaces. The documentation must include, but is not limited to the following topics:

- User guides for both internal staff and public agencies including data entry and reporting information and process flows.
- System set-up and configuration
- Technical manual that includes system utilities and backup/restore documentation
- System Data Dictionary and related entity diagrams

IV. Staff Training

The consultant will develop a training plan, develop training materials, and conduct train-the-trainer and other training sessions for designated staff.

The successful proposer must develop a training plan for:

- System administration processes
- Functional use processes
- System functions

Training materials must include:

- Agenda
- Project-side flow diagrams
- Step by step instruction manual

Phase 4 – Maintenance and Future Development

Deliverables: Maintenance Plan

I. Maintenance

Maintenance will be defined by a service level agreement (SLA), which will include levels of service, staffing roles to provide these levels of service, and hourly rates associated with these roles. All relevant billing rates must be included in the proposal and the contract. Billing rates not specifically defined in the contract will not be allowed on invoices presented to CMAP.

Support Services
Proactive Support: Defined by anticipated tasks involved in maintaining a stable, optimized environment. Most of these tasks will be incorporated into a monthly maintenance plan created by the consultant and approved by CMAP. Application patching and updating will be considered proactive maintenance.

Reactive Maintenance: Defined by unanticipated, urgent tasks that are approved by CMAP. Typically, these tasks are designated as:

- Emergency: 1-business day response time
- Non-Emergency: 3-business day response time
  Non-urgent tasks will fall under proactive support or development services.

II. Future Development Services

Improvements and enhancements to the existing site will be considered development services. The consultant will collaborate with CMAP to plan all development projects. CMAP will sign off on the final scope of work, schedule, cost, and deliverables before the consultant begins work. All relevant billing rates must be included in the proposal and the contract. Billing rates not specifically defined in the contract will not be allowed on invoices presented to CMAP. It is anticipated that any work issued as a result of this phase will be on a task order basis.

Procurement Details

Selection Process Schedule

February 27, 2015:	Issue RFP
March 5, 2015:	Pre-Bid Meeting
March 27, 2015:	Deadline for submission of proposals
April 1-10, 2015 :	CMAP reviews proposals and interviews potential vendors
May 13, 2015:	Estimated CMAP board approval
May 29, 2015:	Estimated contract signing
June 1, 2015:	Project begins

Evaluation and Award Process

All proposals submitted in response to this request for proposals will be analyzed for completeness and cost effectiveness, with particular emphasis on the examples and supporting materials provided by the consultant. The following criteria will be used in evaluating proposals:

- The firm's demonstrated understanding of the TIP process and regional planning.
- The firm's demonstrated record of experience and responsiveness in providing consulting services in the areas identified in the Scope of Services.
- The qualifications of the firm's personnel to be assigned to CMAP's work in the areas identified in the Scope of Services and their training and experience.
- The firm's depth of staff and availability of resources in the areas identified in the Scope of Services.
- The reputation of the firm based on references.
- Cost to CMAP.

All timely responses received to this RFP will be reviewed and interviews may be conducted with selected submitters CMAP determines can best meet the above requirements. Proposers who are deemed most responsive may be asked to answer questions from CMAP staff. Proposal cost will be evaluated against the other factors based upon the professional judgment of those involved in the evaluation. An in-house CMAP staff committee will make the selection decision.

As applicable, rates the submitter proposes to use will be requested and negotiations will be held as necessary to select the firm that CMAP believes can best satisfy its requirements at rates it perceives are reasonable for the services provided.

SECTION 3: Submittal Requirements

Proposals must be received at CMAP on or before 3:00 p.m. Friday, March 27, 2015

Submissions must include the following and be submitted in the order presented:

A. Consultant Team. Identify the consultant team that will be involved in the project. Clearly identify the project manager, and specify the role of subcontractors. Each individual with significant time on the project should be identified and their role defined whether they work for the lead firm or a subcontractor. Pertaining to each individual, specifically provide the following:

- Experience with regard to the required support service categories listed in the scope of services.
- Identification of training they may have received that is pertinent to CMAP's requirements.
- A resume

B. A detailed project timeline

C. Narrative proposal. Describe what approach the firm will use to complete the scope of services. Summarize the major points of the Request for Proposals and demonstrate an understanding of the services. The firm agrees to comply with the requirements as specified in the Scope of Work. Any exceptions must be documented and labeled Exception Summary Table and included as part of the proposal response. Any assumptions made by the proposer must also be included. Respondents are encouraged to discuss virtualization options and describe recommendations as part of their proposal.

D. Examples and supporting materials. At least two hyperlinks to current/prior clients' websites for which you have developed similar applications or services. Also include sample outputs (reports, maps, etc.) that demonstrate the ability to satisfy the requirements of this RFP.

E. Three current or recent clients for reference. Include in this section, three (3) references to current or recent (past three years) clients, identification of the scope of work performed, term of each engagement and the names of contact individuals with their addresses and telephone numbers.

F. The submitter shall also sign and submit the "Price Proposal Form," Attachment 1, including named staff, hourly rates, and other labor costs as well as fixed expenses. Proposals that do not contain option year costs can only be considered for the initial two year contract period.

G. The submitter shall also sign and submit the "Certificate Regarding Workers' Compensation Insurance," Attachment 2, the "Information to be provided by Bidder," Attachment 3, and "Certification for Contracts, Grants, Loans, and Cooperative Agreements" Attachment 4 for any proposals which may or will exceed $100,000.

Submission of Proposals

Three (3) paper copies of the proposal as well as one (1) electronic version in PDF format on CD ROM must be submitted no later than 3:00 p.m., March 27, 2015. Submissions must be in a sealed package or envelope. The applicant's organization name and address shall appear in the upper left corner of the package.

Submission of RFP by fax or e-mail is not acceptable. Submissions may be delivered to CMAP in person or sent (by U.S. Postal Service or other reliable means) to the following address:

Chicago Metropolitan Agency for Planning
Attn: Procurement Officer
Response to RFP No. 131
233 S. Wacker Drive, Suite 800
Chicago, IL 60606

There will be no public opening for this RFP. Late submissions will be rejected and returned unopened.

Questions may be referred to Penny DuBernat, (312) 386-8756 or Email: pdubernat@cmap.illinois.gov

SECTION 4: Contractual Agreement and Rights

Contractual Agreement
The contract CMAP 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, Section 5 hereto, and Special Provisions, Section 6 hereto, which will apply to the contract.

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

a. Withdraw this RFP at any time without prior notice.
b. Accept or reject any and all submissions, or any item or part thereof
c. Postpone qualifications due date.
d. Not award a contract to any submitter responding to this RFP.
e. Award a contract without negotiations or discussions.

Contractors 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 Contractor shall be presumed to be unable to meet these requirements. Past unsatisfactory performance will ordinarily be sufficient to justify a finding of non-responsibility.

SECTION 5: General Provisions

The following provisions apply to the solicitation to which this section is attached and to any contract that results from the solicitation:

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 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 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 particular 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.

2. Chicago Metropolitan Agency for Planning Designee. 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.

3. 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.

4. Reports and Methods of Payment.

a. Based on services performed, Contractor may submit invoices as frequently as once a month. CMAP is committed to reducing paper use and has established an electronic invoicing system. All invoices are to be submitted through email to:

accounting@cmap.illinois.gov

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.

c. 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.

5. Audit and Access to Records.

   a. The Contractor and its subcontracts 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:

      (1) 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.

      (2) Records for nonexpendable property acquired with federal funds shall be retained for three (3) years after its final disposition.

   b. The Contractor shall include in all subcontracts, if any, under this Agreement a provision that CMAP will have full access to and the right to examine any pertinent books, documents, papers, and records of any such subcontractor involving transactions related to the subcontract for three (3) years from the final payment under that subcontract except that:

      (1) If any litigation, claim or audit is started before the expiration of the three-year period, the records shall be retained until all litigation, claims or audit findings involving the records have been resolved.

      (2) Records for nonexpendable property acquired with federal funds shall be retained for three (3) years after its final disposition.

   The term “subcontract” as used in this clause excludes purchase orders not exceeding $2,500.

6. 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 11 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 Circular A-87 in effect on the date first above written.

7. 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.

8. 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.

9. Equal Employment Opportunity. The Contractor will comply with Executive Order 11246 entitled "Equal Employment Opportunity," as amended by U.S. Department of Labor regulations (41 CFR Part 60). In connection with the execution of this Agreement, the Contractor shall not discriminate against any employee or an applicant for employment because of race, religion, color, sex, national origin, ancestry, or physical or mental handicap unrelated to ability. The Contractor shall take affirmative actions to insure that applicants are employed and that employees are treated during their employment without regard to their race, religion, color, sex, national origin, ancestry, or physical or mental handicap unrelated to ability. Such actions shall include, but not be limited to, employment, promotion, demotion, transfer, recruitment, recruitment advertising, layoff, termination, rates of pay, other forms of compensation, and selection for training or apprenticeship. The Contractor shall cause the provisions of this paragraph to be inserted into all subcontractors work covered by this Agreement so that such provisions will be binding upon each subcontractor, provided that such provisions shall not apply to contracts or subcontracts for standard commercial supplies or raw materials.

10. Small and Minority Business Enterprise. In connection with the performance of this Agreement the Contractor will cooperate with CMAP in meeting its commitments and goals with respect to the maximum utilization of small business and minority business enterprises, and will use its best efforts to insure that small business and minority business enterprises shall have the maximum practicable opportunity to compete for subcontract work under this Agreement.

11. Political Activity. No portion of funds for this subcontract shall be used for any partisan political activity or to further the election or defeat of any candidate for public office.

12. Prohibited Interest.

a. No officer or employee of CMAP and no member of its governing body and no other public official of any locality in which the Project objectives will be carried out who exercises any functions or responsibilities in the review or approval of the undertaking or carrying out of such objectives shall (i) participate in any decision relating to any subcontract negotiated under this Agreement which affects his personal interest or the interest of any corporation, partnership or association in which he is, directly or indirectly, interested; or (ii) have any financial interest, direct or indirect, in such subcontract or in the work to be performed under such contract.

b. No member of or delegate of the Illinois General Assembly or the Congress of the United States of America, and no federal Resident Commissioner, shall be admitted to any share hereof or to any benefit arising herefrom.

c. The Contractor warrants and represents that no person or selling agency has been employed or retained to solicit or secure this Agreement, upon an agreement or understanding for a commission, percentage, bonus, brokerage or contingent fee, or gratuity, excepting its bona fide employees. For breach or violation of this warranty CMAP shall have the right to annul this Agreement without liability or, at its discretion, to deduct from the Agreement price or consideration, or otherwise recover, the full amount of such commission, percentage bonus, brokerage or contingent fee, or gratuity.

13. 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.

c. 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.

14. 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.

15. 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.

16. 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.

17. 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.

18. Software. All custom application 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.

19. 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.

20. 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)."

21. 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; 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, beyond the control and is not due to the fault or negligence of the party not performing.

22. Workers' Compensation Insurance. The Contractor and any subcontractors shall, at their own expense, obtain and maintain Workers' Compensation insurance to cover persons employed in connection with services under this agreement. The limits for the Worker's Compensation coverage shall be no less than the statutory limits required by the State of Illinois. A certificate of insurance must be included with this contract.

23. 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, unemployment compensation, workers' compensation insurance and similar matters.

24. Federal, State and Local Laws. Contractor warrants that in the performance of this Agreement it shall comply with all applicable federal, state and local laws, statutes and ordinances and all lawful orders, rules and regulations promulgated thereunder. Since laws, regulations, directives, etc. may be modified from time-to-time, the Contractor shall be responsible for compliance as modifications are implemented. The Contractor's failure to comply shall constitute a material breach of this contract.

25. Hold Harmless and Indemnity. Contractor shall indemnify, defend and hold harmless CMAP, its officers, directors, employees and agents from and against any and all claims (including attorney's fees and reasonable expenses for litigation or settlement) for any loss, or damages, bodily injuries, including death, damage to or loss of use of property caused by the negligent acts, omissions or willful misconduct of Contractor, its officers, directors, employees, agents, subcontractors or suppliers, in connection with or arising out of the performance of this Agreement.

26. Equal Employment Opportunities -- Affirmative Action Sexual Harassment. Contractor must comply with the Illinois Board of Human Rights Act and rules applicable to public funds, including equal employment opportunity, refraining from unlawful discrimination, and having written sexual harassment policies (775 ILCS 5/2-105).

27. International Boycott. Contractor certifies that neither Contractor nor any substantially owned affiliate is participating or shall participate in an international boycott in violation of the U.S. Export Administration Act of 1979 or the applicable regulation of the U.S. Department of Commerce. This applies to contracts that exceed $10,000 (30 ILCS 582).

28. Forced Labor. Contractor certifies it complies with the State Prohibition of Goods from Forced Labor Act, and certifies that no foreign-made equipment, materials, or supplies furnished to CMAP under this agreement have been or will be produced in whole or in part by forced labor, or indentured labor under penal sanction (30 ILCS 583).

Federally Funded Agreements

A. **Standard Assurances.** The Contractor assures that it will comply with all applicable federal statutes, regulations, executive orders, Federal Transit Administration (FTA) circulars, and other federal requirements in carrying out any project supported by federal funds. The Contractor recognizes that federal laws, regulations, policies, and administrative practices may be modified from time to time and those modifications may affect project implementation. The Contractor agrees that the most recent federal requirements will apply to the project as authorized by 49 U.S.C. Chapter 53, Title 23, United States Code (Highways), the Moving Ahead for Progress in the 21st Century Act (MAP-21), the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), as amended by the SAFETEA-LU Technical Corrections Act of 2008, or other Federal laws.

B. **Certification Regarding Lobbying.** As required by the United States Department of Transportation (U.S. DOT) regulations, "New Restrictions on Lobbying," at 49 CFR 20.110, the Contractor's authorized representative certifies to the best of his or her knowledge and belief that for each agreement for federal assistance exceeding $100,000:

1. No federal appropriated funds have been or will be paid by or on behalf of the Contractor to any person to influence or attempt to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress regarding the award of federal assistance, or the extension, continuation, renewal, amendment, or modification of any federal assistance agreement; and

2. If any funds other than federal appropriated funds have been or will be paid to any person to influence or attempt to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any application for federal assistance, the Contractor assures that it will complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," including information required by the instructions accompanying the form, which form may be amended to omit such information as authorized by 31 U.S.C. 1352.

3. The language of this certification shall be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements).

The Contractor understands that this certification is a material representation of fact upon which reliance is placed and that submission of this certification is a prerequisite for providing federal assistance for a transaction covered by 31 U.S.C. 1352. The Contractor also understands that any person who fails to file a required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

C. **Nondiscrimination Assurance.** As required by 49 U.S.C. 5332 (which prohibits discrimination on the basis of race, color, creed, national origin, sex, or age, and prohibits discrimination in employment or business opportunity), Title VI of the Civil Rights Act of 1964, as amended, 42 U.S.C. 2000d, and U.S. DOT regulations, "Nondiscrimination in Federally-Assisted Programs of the Department of Transportation--Effectuation of Title VI of the Civil Rights Act," 49 CFR Part 21 at 21.7, the Contractor assures that it will comply with all requirements of 49 CFR Part 21; FTA Circular 4702.1B, "Title VI and Title VI - Dependent Guidelines for Federal Transit Administration Recipients," and other applicable directives, so that no person in the United States, on the basis of race, color, national origin, creed, sex, or age will be excluded from participation in, be denied the benefits of, or otherwise be subjected to discrimination in any program or activity (particularly in the level and quality of transportation services and transportation-related benefits) for which the Contractor receives federal assistance.

Specifically, during the period in which federal assistance is extended to the project, or project property is used for a purpose for which the federal assistance is extended or for another purpose involving the provision of similar services or benefits, or as long as the Contractor retains

ownership or possession of the project property, whichever is longer, the Contractor R assures that:

1. Each project will be conducted, property acquisitions will be undertaken, and project facilities will be operated in accordance with all applicable requirements of 49 U.S.C. 5332 and 49 CFR Part 21, and understands that this assurance extends to its entire facility and to facilities operated in connection with the project.

2. It will promptly take the necessary actions to effectuate this assurance, including notifying the public that complaints of discrimination in the provision of transportation-related services or benefits may be filed with U.S. DOT or FTA. Upon request by U.S. DOT or FTA, the Contractor assures that it will submit the required information pertaining to its compliance with these requirements.

3. It will include in each subagreement, property transfer agreement, third party contract, third party subcontract, or participation agreement adequate provisions to extend the requirements of 49 U.S.C. 5332 and 49 CFR Part 21 to other parties involved therein including any subrecipient, transferee, third party contractor, third party subcontractor at any level, successor in interest, or any other participant in the project.

4. Should it transfer real property, structures, or improvements financed with federal assistance to another party, any deeds and instruments recording the transfer of that property shall contain a covenant running with the land assuring nondiscrimination for the period during which the property is used for a purpose for which the federal assistance is extended or for another purpose involving the provision of similar services or benefits.

5. The United States has a right to seek judicial enforcement with regard to any matter arising under the Act, regulations, and this assurance.

1. It will make any changes in its 49 U.S.C. 5332 and Title VI implementing procedures as U.S. DOT or FTA may request.

D. **Control of Property.** The Contractor certifies that the control, utilization and disposition of property or equipment acquired using federal funds is maintained according to the provisions of OMB Circular A 102 Common Rule.

E. **Cost Principles.** The cost principles of this Agreement are governed by the cost principles found in 49 CFR Part 18.22 and 2 CFR Part 225, “Cost Principles for State, local or Indian tribal governments” and all costs included in this Agreement are allowable under 49 CFR Part 18.22 and2 CFR Part 225, “Cost Principles for State, local or Indian tribal governments”. Additionally, 2 CFR Part 225 establishes principles and standards for determining costs for Federal awards carried out through grants and other agreements with state and local governments, and should be reviewed for further guidance on cost principles.

F. **Debarment.** The Contractor shall comply with Debarment provisions as contained in 2 CFR Part 1200, as amended. The Contractor certifies that to the best of its knowledge and belief, the Contractor and the Contractor’s principals: a) are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from covered transactions by any federal department or agency; b) within a three-year period preceding this Agreement have not been convicted of or had a civil judgment rendered against it for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain or performing a public (federal, state or local) transaction or contract under a public transaction, violation of federal or state anti-trust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements or receiving stolen property; c) are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (federal, state or local) with commission of any of the offenses enumerated in subsection (b), above; and d) have not within a three-year period preceding this Agreement had one or more public transactions (federal, state or local) terminated for cause or default.

The inability of the Contractor to certify to the certification in this section will not necessarily result in denial of participation in this Agreement. The Contractor shall submit an explanation of why it cannot provide the certification in this section. This certification is a material representation of fact upon which reliance was placed when CMAP determined whether to enter into this transaction. If it is later determined that the Contractor knowingly rendered an erroneous certification, in addition to other remedies available to the federal government, CMAP may terminate this Agreement for cause. The Contractor shall provide immediate written notice to CMAP if at any time the Contractor learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this Part shall have the meaning set out in the Definitions and Coverage sections of the rules implementing Executive Order 12549.

The Contractor agrees that it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible or voluntarily excluded from participation in this covered transaction, unless authorized, in writing, by CMAP. The Contractor agrees that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," provided by CMAP, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions. The Contractor may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not debarred, suspended, ineligible or voluntarily excluded from the covered transaction, unless the Contractor knows the certification is erroneous. The Contractor may decide the method and frequency by which it determines the eligibility of its principals. The Contractor may, but is not required to, check the Non-procurement List. If the Contractor knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible or voluntarily excluded from participation, in addition to other remedies available to the federal government, CMAP may terminate this Agreement for cause or default.

Nothing contained in this section shall be construed to require establishment of a system of records in order to render in good faith the certification required by this section. The knowledge and information of the Contractor is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

G. **Single Audit.** The Single Audit Act of 1984 (Public Law 98-502) and the Single Audit Amendments of 1996 (P.L. 104-156) require the following:

1. State or local governments that expend $500,000 or more a year in federal financial assistance shall have an audit made in accordance with the Office of Management and Budget (OMB) Circular No. A-133.
2. State or local governments that expend less than $500,000 a year shall be exempt from compliance with the Act and other federal requirements.
3. Nothing in this paragraph exempts state or local governments from maintaining records of federal financial assistance or from providing access to such records to federal Agencies, as provided for in federal law or in Circular A-133 "Audits of States, Local Governments and Non-Profit Organizations."
4. A copy of the audit report must be submitted to CMAP within 30 days after completion of the audit, but no later than one year after the end of the Contractor's fiscal year.

H. **Drug Free Workplace.** The Contractor certifies that it will comply with the requirements of the federal Drug Free Workplace Act, 41 U.S.C. 702 as amended, and 49 CFR 32.

I. **Disadvantaged Business Enterprise Assurance.** In accordance with 49 CFR 26.13(a), as amended, the Contractor assures that it shall not discriminate on the basis of race, color, national origin, or sex in the implementation of the project and in the award and performance of any third party contract, or subagreement supported with Federal assistance derived from the U.S. DOT or

in the administration of its Disadvantaged Business Enterprise (DBE) program or the requirements of 49 CFR Part 26, as amended. The Contractor assures that it shall take all necessary and reasonable steps set forth in 49 CFR Part 26, as amended, to ensure nondiscrimination in the award and administration of all third party contracts and subagreements supported with Federal assistance derived from the U.S. DOT. The Contractor's DBE program, as required by 49 CFR Part 26, as amended, will be incorporated by reference and made a part of this Agreement for any Federal assistance awarded by FTA or U.S. DOT. Implementation of this DBE program is a legal obligation of the Contractor, and failure to carry out its terms shall be treated as a violation of the Agreement. Upon notification by the Federal Government or CMAP to the Contractor of its failure to implement its approved DBE program, the U.S. DOT may impose sanctions as provided for under 49 CFR Part 26, as amended, and may in appropriate cases, refer the matter for enforcement under 18 U.S.C. 1001, as amended, and/or the Program Fraud Remedies Act, 31 U.S.C. 3801 *et seq*., as amended.

J. **Assurance of Nondiscrimination on the Basis of Disability.** As required by U.S. DOT regulations, "Nondiscrimination on the Basis of Handicap in Programs and Activities Receiving or Benefiting from Federal Financial Assistance," at 49 CFR 27.9, the Contractor assures that, as a condition to the approval or extension of any Federal assistance awarded by FTA to construct any facility, obtain any rolling stock or other equipment, undertake studies, conduct research, or to participate in or obtain any benefit from any program administered by FTA, no otherwise qualified person with a disability shall be, solely by reason of that disability, excluded from participation in, denied the benefits of, or otherwise subjected to discrimination in any program or activity receiving or benefiting from Federal assistance administered by the FTA or any entity within U.S. DOT. The Contractor assures that project implementation and operations so assisted will comply with all applicable requirements of U.S. DOT regulations implementing the Rehabilitation Act of 1973, as amended, 29 U.S.C. 794, *et seq*., and the Americans with Disabilities Act of 1990, as amended, 42 U.S.C. 12101 *et seq*., and implementing U.S. DOT regulations at 49 CFR parts 27, 37, and 38, and any applicable regulations and directives issued by other Federal departments or agencies.

K. **Procurement Compliance Certification.** The Contractor certifies that its procurements and procurement system will comply with all applicable third party procurement requirements of Federal laws, executive orders, regulations, and FTA directives, and requirements, as amended and revised, as well as other requirements FTA may issue including FTA Circular 4220.1F, "Third Party Contracting Guidance," and any revisions thereto, to the extent those requirements are applicable. The Contractor certifies that it will include in its contracts financed in whole or in part with FTA assistance all clauses required by Federal laws, executive orders, or regulations, and will ensure that each subrecipient and each contractor will also include in its subagreements and its contracts financed in whole or in part with FTA assistance all applicable clauses required by Federal laws, executive orders, or regulations.

L. **Intelligent Transportation Systems Program.** As used in this assurance, the term Intelligent Transportation Systems (ITS) project is defined to include any project that in whole or in part finances the acquisition of technologies or systems of technologies that provide or significantly contribute to the provision of one or more ITS user services as defined in the "National ITS Architecture."

1. In accordance with 23 U.S.C. 517(d), as amended by the Moving Ahead for Progress in the 21st Century Act (MAP-21), the Contractor assures it will comply with all applicable requirements of Section V (Regional ITS Architecture and Section VI (Project Implementation)) of FTA Notice, "FTA National ITS Architecture Policy on Transit Projects," at 66 *Fed. Reg.* 1455 *et seq*., January 8, 2001, and other FTA requirements that may be issued in connection with any ITS project it undertakes financed with Highway Trust Funds (including funds from the mass transit account) or funds made available for the Intelligent Transportation Systems Program.

2. With respect to any ITS project financed with Federal assistance derived from a source other than Highway Trust Funds (including funds from the Mass Transit Account) or 23

U.S.C. 517(d), the Contractor assures that is will use its best efforts to ensure that any ITS project it undertakes will not preclude interface with other intelligent transportation systems in the Region.

M. **Davis-Bacon Act.** To the extent applicable, the Contractor will comply with the Davis-Bacon Act, as amended, 40 U.S.C. 3141 *et seq.*, the Copeland "Anti-Kickback" Act, as amended, 18 U.S.C. 874, and the Contract Work Hours and Safety Standards Act, as amended, 40 U.S.C. 3701 *et seq.,* regarding labor standards for federally assisted subagreements.

N. **Certifications and Assurances Required by the U.S. Office of Management and Budget (OMB) (SF-424B and SF-424D).**

As required by OMB, the Contractor certifies that it:

1. Has the legal authority and the institutional, managerial, and financial capability (including funds sufficient to pay the non-federal share of project cost) to ensure proper planning, management, and completion of the project.
2. Will give the U.S. Secretary of Transportation, the Comptroller General of the United States, and, if appropriate, the state, through any authorized representative, access to and the right to examine all records, books, papers, or documents related to the award; and will establish a proper accounting system in accordance with generally accepted accounting standards or agency directives;
3. Will establish safeguards to prohibit employees from using their positions for a purpose that constitutes or presents the appearance of personal or organizational conflict of interest or personal gain;
4. Will initiate and complete the work within the applicable project time periods;
5. Will comply with all applicable Federal statutes relating to nondiscrimination including, but not limited to:
    - Title VI of the Civil Rights Act, 42 U.S.C. 2000d, which prohibits discrimination on the basis of race, color, or national origin;
    - Title IX of the Education Amendments of 1972, as amended, 20 U.S.C. 1681 through 1683, and 1685 through 1687, and U.S. DOT regulations, "Nondiscrimination on the Basis of Sex in Education Programs or Activities Receiving Federal Financial Assistance," 49 CFR Part 25, which prohibit discrimination on the basis of sex;
    - Section 504 of the Rehabilitation Act of 1973, as amended, 29 U.S.C. 794, which prohibits discrimination on the basis of handicap;
    - The Age Discrimination Act of 1975, as amended, 42 U.S.C. 6101 through 6107, which prohibits discrimination on the basis of age;
    - The Drug Abuse, Prevention, Treatment and Rehabilitation Act, Public Law 92-255, and amendments thereto, 21 U.S.C. 1101 *et seq*. relating to nondiscrimination on the basis of drug abuse;
    - The Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970, Public Law 91-616, and amendments thereto, 42 U.S.C. 4541 *et seq*. relating to nondiscrimination on the basis of alcohol abuse or alcoholism;
    - The Public Health Service Act of 1912, as amended, 42 U.S.C. 290dd-2 related to confidentiality of alcohol and drug abuse patient records;
    - Title VIII of the Civil Rights Act, 42 U.S.C. 3601 *et seq*., relating to nondiscrimination in the sale, rental, or financing of housing;
    - Any other nondiscrimination provisions in the specific statutes under which Federal assistance for the project may be provided including, but not limited, to 49 U.S.C. 5332, which prohibits discrimination on the basis of race, color, creed, national origin, sex, or age, and prohibits discrimination in employment or business opportunity, and Section 1101(b) of the Transportation Equity Act for

the 21st Century, 23 U.S.C. 101 note, which provides for participation of disadvantaged business enterprises in FTA programs; and
- Any other nondiscrimination statute(s) that may apply to the project.

6. Will comply with all federal environmental standards applicable to the project, including but not limited to:

    - Institution of environmental quality control measures under the National Environmental Policy Act of 1969 and Executive Order 11514;
    - Notification of violating facilities pursuant to Executive Order 11738;
    - Protection of wetlands pursuant to Executive Order 11990;
    - Evaluation of flood hazards in floodplains in accordance with Executive Order 11988;
    - Assurance of project consistency with the approved State management program developed under the Coastal Zone Management Act of 1972, 16 U.S.C. 1451 et seq.;
    - Conformity of federal Actions to State (Clean Air) Implementation Plans under Section 176(c) of the Clean Air Act of 1955, as amended, 42 U.S.C. 7401 et seq.;
    - Protection of underground sources of drinking water under the Safe Drinking Water Act of 1974, as amended;
    - Protection of endangered species under the Endangered Species Act of 1973, as amended;
    - The Wild and Scenic Rivers Act of 1968, 16 U.S.C. 1271 et seq., which relates to protecting components or potential components of the national wild scenic rivers system; and
    - Environmental impact and related procedures pursuant to 23 C.F.R. Part 771.

7. Will comply with all other federal statutes applicable to the project, including but not limited to:

    - Title II and III of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, which provides for fair and equitable treatment of persons displaced whose property is acquired as a result of federal or federally-assisted programs;
    - The Hatch Act, 5 U.S.C. 1501-1508 and 7324-7328, which limits the political activities of employees whose principal employment activities are funded in whole or in part with federal funds;
    - The Flood Disaster Protection Act of 1973, which requires the purchase of flood insurance in certain instances;
    - Section 106 of the National Historic Preservation Act of 1966, as amended, 16 U.S.C. 470;
    - Executive Order 11593, which relates to identification and protection of historic properties;
    - The Archaeological and Historic Preservation Act of 1974, 16 U.S.C. 469a-1 et seq.;
    - The Laboratory Animal Welfare Act of 1966, as amended, 7 U.S.C. 2131 et seq., which relates to the care, handling, and treatment of warm-blooded animals held for research, teaching, or other activities supported by a federal award of assistance;
    - The Lead-Based Paint Poisoning Prevention Act, 42 U.S.C. 4801 et seq., which relates to prohibiting the use of lead-based paint in construction or rehabilitation of residence structures;
    - The Single Audit Act Amendments of 1996 and OMB Circular No. A-133, “Audits of States, Local Governments, and Non-Profit Organizations”; and
    - Use of parks, recreation areas, wildlife and waterfowl refuges, and historic sites pursuant to 23 C.F.R. Part 774 (Section 4(f) requirements).

O. **Energy Conservation.** To the extent applicable, the Contractor and its third party contractors at all tiers shall comply with mandatory standards and policies relating to energy efficiency that are contained in applicable state energy conservation plans issued in compliance with the Energy Policy and Conservation Act, 42 U.S.C. Section 6321 et seq.

P. **Clean Water.** For all contracts and subcontracts exceeding $100,000, the Contractor agrees to comply with all applicable standards, orders, or regulations issued pursuant to the Water Pollution Control Act, 33 U.S.C. Section 1251 et seq.

Q. **Clean Air.** For all contracts and subcontracts exceeding $100,000, the Contractor agrees to comply with all applicable standards, orders, or regulations issued pursuant to the Clean Air Act, 42 U.S.C. 7401 et seq.

R. **Eligibility For Employment In The United States.** The Contractor shall complete and keep on file, as appropriate, Immigration and Naturalization Service Employment Eligibility Forms (I-9). These forms shall be used by the Contractor to verify that persons employed by the Contractor are eligible to work in the United States.

S. **Buy America.** As set forth in 49 U.S.C 5323(j) and 49 C.F.R. Part 661, only steel, iron and manufactured products produced in the United States may be purchased with Federal funds unless the Secretary of Transportation determines that such domestic purchases would be inconsistent with the public interest; that such materials are not reasonably available and of satisfactory quality; or that inclusion of domestic materials will increase the cost of overall project contract by more than 25 percent. Clear justification for the purchase of non-domestic items must be in the form of a waiver request submitted to and approved by the Secretary of Transportation.

T. **False Or Fraudulent Statements Or Claims.** The Contractor acknowledges that if it makes a false, fictitious, or fraudulent claim, statement, submission, or certification to CMAP in connection with this Agreement, CMAP reserves the right to impose on the Contractor the penalties of 18 U.S.C. Section 1001, 31 U.S.C. Section 3801, and 49 CFR Part 31, as CMAP may deem appropriate. Contractor agrees to include this clause in all state and federal assisted contracts and subcontracts.

U. **Changed Conditions Affecting Performance.** The Contractor shall immediately notify CMAP of any change in conditions or local law, or of any other event which may significantly affect its ability to perform the Project in accordance with the provisions of this Agreement.

V. **Third Party Disputes Or Breaches.** The Contractor agrees to pursue all legal rights available to it in the enforcement or defense of any third party contract, and FTA or U.S. DOT and CMAP reserve the right to concur in any compromise or settlement of any third party contract claim involving the Contractor. The Contractor will notify FTA or U.S. DOT and CMAP of any current or prospective major dispute pertaining to a third party contract. If the Contractor seeks to name CMAP as a party to the litigation, the Contractor agrees to inform both FTA or U.S. DOT and CMAP before doing so. CMAP retains a right to a proportionate share of any proceeds derived from any third party recovery. Unless permitted otherwise by CMAP, the Contractor will credit the Project Account with any liquidated damages recovered. Nothing herein is intended to nor shall it waive U.S. DOT's, FTA's or CMAP's immunity to suit.

W. **Fly America.** Contractor will comply with 49 U.S.C. §40118, 4 CFR §52 and U.S. GAO Guidelines B- 138942, 1981 U.S. Comp. Gen. LEXIS 2166,March 31, 1981 regarding costs of international air transportation by U.S. Flag air carriers.

X. **Non-Waiver.** The Contractor agrees that in no event shall any action or inaction on behalf of or by CMAP, including the making by CMAP of any payment under this Agreement, constitute or be construed as a waiver by CMAP of any breach by the Contractor of any terms of this Agreement or any default on the part of the Contractor which may then exist; and any action, including the making of a payment by CMAP, while any such breach or default shall exist, shall in no way

impair or prejudice any right or remedy available to CMAP in respect to such breach or default. The remedies available to CMAP under this Agreement are cumulative and not exclusive. The waiver or exercise of any remedy shall not be construed as a waiver of any other remedy available hereunder or under general principles of law or equity.

Y. **Preference for Recycled Products.** To the extent applicable, the Contractor agrees to give preference to the purchase of recycled products for use in this Agreement pursuant to the various U.S. Environmental Protection Agency (EPA) guidelines, "Comprehensive Procurement Guidelines for Products Containing Recovered Materials," 40 CFR Part 247, which implements section 6002 of the Resource Conservation and Recovery Act, as amended, 42 U.S.C. § 6962.

Z. **Cargo Preference.** Use of United States Flag Vessels. The Contractor agrees to comply with 46 U.S.C.§ 55305 and 46 CFR Part 381 and to insert the substance of those regulations in all applicable subcontracts issued pursuant to this Agreement, to the extent those regulations apply to this Agreement.

AA. **Contractor Registration.** Contractor is required to register with the System for Award Management (SAM), which is a web-enabled government-wide application that collects, validates, stores and disseminates business information about the federal government's trading partners in support of the contract award, grants and the electronic payment processes. If the Contractor does not have a DUNS number, the Contractor must register at https://sam.gov.

As a sub-recipient of federal funds equal to or greater than $25,000 (or which equals or exceeds that amount by addition of subsequent funds), this agreement is subject to the following award terms:
http://edocket.access.gpo.gov/2010/pdf/2010-22705.pdf and
http://edocket.access.gpo.gov/2010/pdf/2010-22706.pdf

All of the requirements listed in **Federally Funded Agreements**, paragraphs A through AA apply to the federally funded project. The Contractor agrees to include these requirements in each contract and subcontract financed in whole or in part with federal assistance.

SECTION 6: Special Provisions

1. Workers' Compensation. The State of Illinois Worker's Compensation Code requires the securing of workers' compensation by all non-state employers. The Submitter shall attest to understanding and complying with the State of Illinois Workers' Compensation Code requirement and submit a completed "Certificate Regarding Workers' Compensation Insurance," Attachment 2 to the RFP. In addition, the Submitter shall provide and maintain a waiver of subrogation endorsement.

2. FTA Certification Regarding Lobbying The Federal Transportation Authority (FTA) a source of funds for this project requires the Certification for Contracts, Grants, Loans, and Cooperative Agreements to be submitted with each bid or offer exceeding $100,000. The Submitter shall attest to understanding and complying with the FTA Certification Regarding Lobbying (49 CRF PART 20) requirement and submit a completed "Certification for Contracts, Grants, Loans, and Cooperative Agreements" Attachment 4 to the RFP for any proposals which may or will exceed $100,000.

3. Option to Renew Contract. In consideration of the contract, the Contractor hereby grants to CMAP the options to extend the service provided by the Contractor under the contract for up to two one-year periods. The option for each year may be exercised separately in writing at any time on or before sixty (60) calendar days prior to expiration of the contract period awarded to that time. Compensation related to each option year shall be included in the original contract.

Prior to exercising an option, CMAP shall serve notice to the Contractor of its intention to extend the contract into and through an additional one-year period. Such notice shall not be deemed to commit CMAP to such extension, nor shall it be binding upon the Contractor if postmarked less than sixty (60) days prior to the expiration of the current contract period.

It shall be mutually understood and agreed that all work performed and services provided under any exercised option shall be in strict compliance with all requirements of the contract, as amended.

Additionally, it shall be mutually understood and agreed that: 1) CMAP is under no obligation to exercise the option(s); 2) No representations have been made by CMAP committing it to exercise the option(s); and 3) CMAP may procure such option requirements elsewhere. Such option(s) may be exercised by modification of the contract, letter notification or by issuance of a new contract.

Attachment 1: Price Proposal Form

In response to Chicago Metropolitan Agency for Planning (CMAP) Request for Proposal (RFP) 131 INTEGRATED TRANSPORTATION PLANNING, PROGRAMMING AND TRACKING DATABASE AND VISUALIZATIONS SOLUTION Dated February 27, 2015, the undersigned, as an individual(s) with the authority to bind the Proposer, understands and agrees to the specifications, terms, conditions and provisions of the RFP and prices proposed below unless otherwise modified by mutual agreement of the parties. It is also agreed that the proposal submitted in response to the RFP is valid for ninety (90) calendar days from the proposal due date.

Please enter pricing into the follow matrixes. Costs for hourly rates for the three (3) initial contract years and each of the two (2) option years **must be completed in full**. Please provide additional specifics where possible. Attach additional sheets if necessary. For ease of entry, feel free to copy and paste the table into an Excel spreadsheet; insert lines as necessary. If price structure is variable by which of the firm's employees are assigned, please specify the employee billing level, the cost per hour for this level, and the total number hours to be billed at this level. It is expected that no one firm will be able to provide all levels of technical expertise necessary for the successful completion of this project and that primary firms will require the assistance from a GIS application development firm and a transportation engineering firm in additional to their in-house staff. Please provide information for any subcontractors that will be included on the primary firm's technical team.

Hourly Rates for Overall Scope of Services for Contract Year and Option Years for custom application development

Category: Project Management	**Job Title**	**Cost per hour year 1**	**Cost per hour year 2**	**Cost per hour year 3**	**Cost per hour (option year 1)**	**Cost per hour (option year 2)**
Staff (name)						
Staff (name)						
Staff (name)						

Category: Web Development	**Job Title**	**Cost per hour year 1**	**Cost per hour year 2**	**Cost per hour year 3**	**Cost per hour (option year 1)**	**Cost per hour (option year 2)**
Staff (name)						
Staff (name)						
Staff (name)						

Category: GIS Development	**Job Title**	**Cost per hour year 1**	**Cost per hour year 2**	**Cost per hour year 3**	**Cost per hour (option year 1)**	**Cost per hour (option year 2)**
Staff (name)						
Staff (name)						
Staff (name)						

Category: Visualization Development	**Job Title**	**Cost per hour year 1**	**Cost per hour year 2**	**Cost per hour year 3)**	**Cost per hour (option year 1)**	**Cost per hour (option year 2)**
Staff name)						
Staff (name)						
Staff (name)						

Category: Support and Maintenance	**Job Title**	**Cost per hour year 1**	**Cost per hour year 2**	**Cost per hour year 3)**	**Cost per hour (option year 1)**	**Cost per hour (option year 2)**
Staff name)						
Staff (name)						
Staff (name)						

Please include additional anticipated costs that may be associated with this project below

Rates for SaaS or Off-the-Shelf applications:

Upfront Development Costs: _____

Licensing Fees: _____

Service Fees: _____ **Term: Monthly Annually (circle one)**

Maintenance Fees: _____

Additional Post Launch Development Hourly Rates: _____

Please include additional anticipated costs that may be associated with this project below

Acknowledgement of Receipt of Addenda if any: (If none received, write "NONE.")	Addendum Number	Date Received
	_____	_____
	_____	_____

If awarded a contract, the undersigned hereby agrees to sign the contract and to furnish the necessary certificates if any.

Proposer's Authorized Signatory (Print): _____

Signature: _____

Title: _____

Company Name: _____

Address: _____

_____

Telephone Number: _____

Date: _____

Attachment 2: Certificate Regarding Workers' Compensation Insurance

Certificate Regarding Workers' Compensation Insurance

In conformance with current statutory requirements of Section 820 ILCS 305/1 et. seq., of the Illinois Labor Code, the undersigned certifies as follows:

> "I am aware of the provisions of Section 820 ILCS 305/1 of the Labor Code which require every employer to be insured against liability for Worker's Compensation or to undertake self-insurance in accordance with such provisions before commencing the performance of the work of this contract."

Bidder/Contactor_____

Signature_____

Name and Title_____

Date _____

Attachment 3: Information to be provided by Bidder

The Bidder is required to supply the following information (if necessary, attach additional sheets):

Firm Name: _____ Contact Person: _____

Business Address:

_____

Telephone: (____) _____ FAX: (____) _____ E-mail: _____

Years of Experience: _____

Type of Firm – Sole Proprietor, Partnership, Corporation, JointVenture, Etc.:_____

Organized under the laws of state of: _____

Business License No.: _____Business License Expiration Date: _____

List names and addresses of owners of the firm or names and titles of officers of the corporation:

_____

_____

_____

Client list of services rendered currently and/or in the recent past:

Type of Service/Product	Date Completed	Name and Address of Client	Contact Name and Phone Number
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Credit References (Include contact person's name, address, and telephone number for at least three references, one of which must be the Bidder's bank):

a. _____

_____

b. _____

_____

c. _____

_____

Bidder hereby certifies that it (check one): ____ IS ____ IS NOT an eligible Disadvantaged Business Enterprise (DBE) as defined in 49 CFR 23). If "IS" is checked, attach copy of document that certifies Bidder's status as a DBE.

Attachment 4: Information to be provided by Bidder for contracts that may or will exceed $100,000

The undersigned [Contractor] certifies, to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for making lobbying contacts to an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form--LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions [as amended by "Government wide Guidance for New Restrictions on Lobbying," 61 Fed. Reg. 1413 (1/19/96). Note: Language in paragraph (2) herein has been modified in accordance with Section 10 of the Lobbying Disclosure Act of 1995 (P.L. 104-65, to be codified at 2 U.S.C. 1601, et seq.)]

(3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31, U.S.C. § 1352 (as amended by the Lobbying Disclosure Act of 1995). Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

[Note: Pursuant to 31 U.S.C. § 1352(c)(1)-(2)(A), any person who makes a prohibited expenditure or fails to file or amend a required certification or disclosure form shall be subject to a civil penalty of not less than
$10,000 and not more than $100,000 for each such expenditure or failure.]

The Contractor, _____, certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Contractor understands and agrees that the provisions of 31 U.S.C. A 3801, et seq., apply to this certification and disclosure, if any.

_____ _____

Signature of Contractor's Authorized Official Date

Name and Title of Contractor's Authorized Official: _____

Attachment 5: Terms and Definitions

Terms and Definitions

The terms used throughout this document are defined below.

Desired Features – Throughout this scope, the terms “may”, “could”, “can”, and “might” refer to actions or features that are desired to be included in the database, web interface, and applications to be developed.

Federal Fiscal Year (FFY) – All years within the TIP database are FFYs, starting on October 1 and ending on September 30. For example, the current federal fiscal year, FFY 2015, started on October 1, 2014 and will end on September 30, 2015.

FHWA – Federal Highway Administration

FTA – Federal Transit Administration

Financial Line Item – A financial line item is a record specifying fund source, phase, year, funding amounts and additional line-specific information. Also referred to as a line item.

Fund Source – The specific federal, state or local fund being used to pay for a project phase, such as the National Highway Performance Program, Illinois Commerce Commission Grade Crossing Protection Fund, or locally imposed motor fuel taxes.

IDOT – Illinois Department of Transportation

IGIS – Illinois Geographic Information System. IDOT’s graphical display of various elements contained in IHIS.

IHIS – Illinois Highway Information System. IDOT’s master database resulting from the combination of the individual IRIS, IRRIS, ISIS and IGIS databases.

Illustrative Line Items – Financial Line Items that are programmed in FFYs before the current FFY and/or after the last active FFY of the adopted TIP.

IRIS – Illinois Roadway Information System. Contains roadway information such as surface type, traffic volumes and pavement condition. The IRIS manual (http://www.idot.illinois.gov/Assets/uploads/files/Transportation-System/Manuals-Guides-&-Handbooks/Highways/IRIS_Manual.pdf) contains data item description information.

IRRIS – Illinois Railroad Information System. Contains information for all public, private, pedestrian and grade separated rail crossings, such as location and physical and operational conditions. The IRRIS manual (http://www.idot.illinois.gov/assets/uploads/files/transportation-system/manuals-guides-&-handbooks/highways/illinois%20highway%20information%20system%20-%20railroad%20information%20procedure%20manual%202002.pdf) contains data item description information.

ISIS – Illinois Structure Information System. Contains information about structures, such as bridges, culverts and tunnels that accommodate or limit the continuity of highways, such as location, physical characteristics and conditions. The ISIS manual (http://www.idot.illinois.gov/Assets/uploads/files/Transportation-System/Manuals-Guides-&-Handbooks/Highways/ISIS_Manual_Internet.pdf) contains data item description information.

NEPA – National Environmental Protection Act. Defines environmental and physical (historic, cultural, etc.) resources that must be evaluated for impacts from transportation projects.

Phase - The implementation phase of an individual line item. Phases currently utilized in the database include Engineering (Phase 1 and Phase 2), Right of Way, Construction and Implementation.

Programmer – Refers to individuals and/or agencies responsible for entering and maintaining projects in the TIP database. Also referred to as programming agency.

Project – A project within the TIP database contains location information, a description of the scope (work types) of the project, information about the agencies involved in the project, information about the cost(s) and source(s) of funding for the project (as individual financial line items), and in some cases, information used to model the air quality impacts of the project. Other "background" data may also be associated with a project. Each project within the TIP database has a unique "TIP ID", which is the primary key for project information.

Required Features – Throughout this scope, the terms "will", "should", "shall", and "must" refer to actions or features that are required to be included in the database, web interface, and applications to be developed. Proposals that do not include these actions or features will not be considered.

RTA – Regional Transportation Authority

RTAMS – Regional Transportation Authority Mapping and Statistics. The RTA's data warehouse for planning and financial information on the transit system in the RTA service area. RTAMS information is available at www.rtams.org.

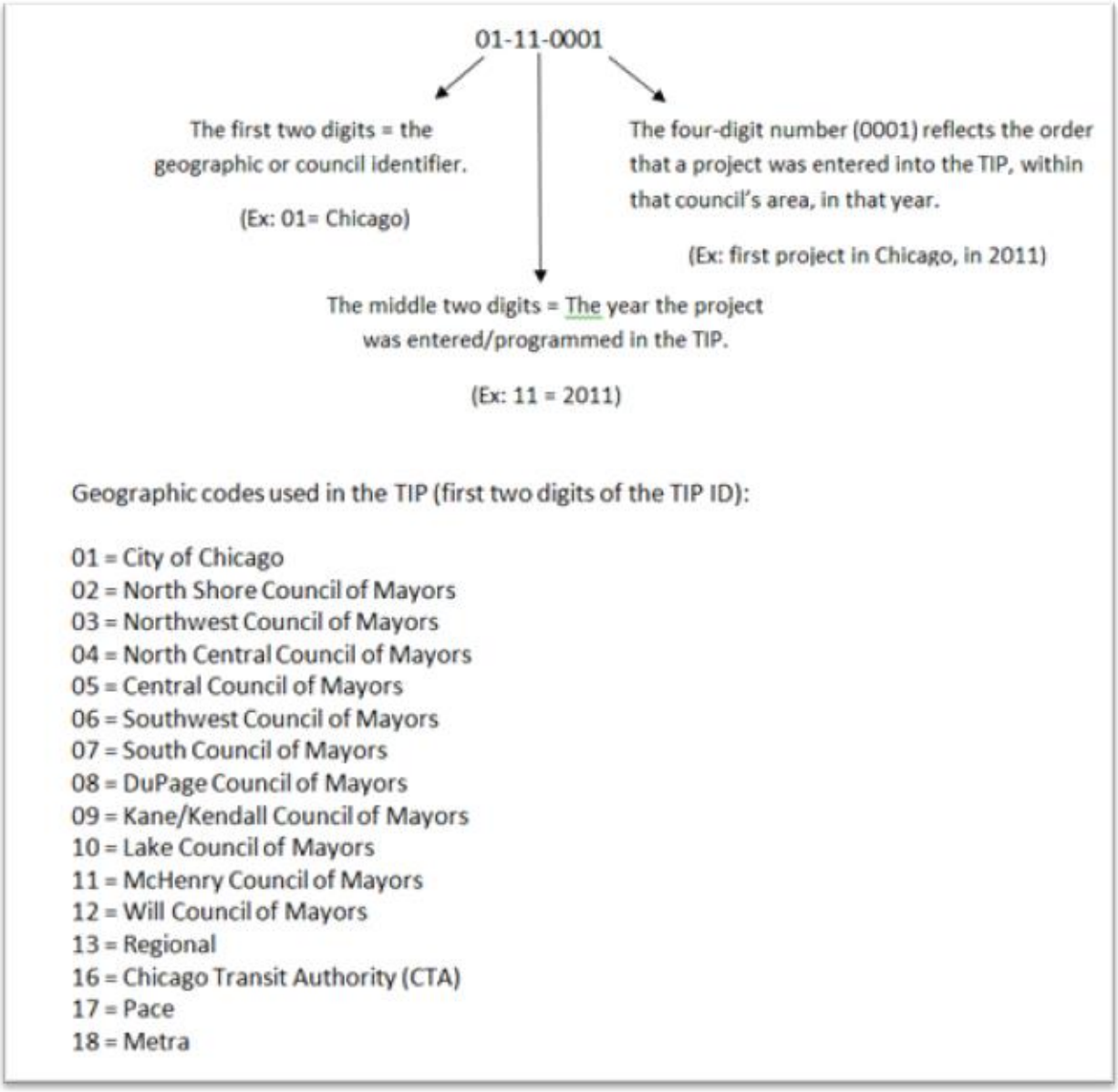
Scope (of a TIP project) – For projects in the TIP database, the scope of the project includes the project's location and the work being done (e.g. resurfacing, adding lanes, purchasing buses, expanding commuter parking, etc.).

TIP – Transportation Improvement Program. Three interdependent elements comprise what is commonly referred to as the CMAP TIP. They are an SQL database, a program satisfying federal, state and regional requirements, and the processes whereby data is gathered and decision points are set on the program. The program is made up of the projects and line items that fall within a defined range of federal fiscal years, typically the current FFY, plus the next three years. When used throughout this document, "TIP" or "adopted TIP" means the adopted projects and the line items that fall within the years of the adopted TIP.

TIP database – The TIP database includes projects with financial line items programmed wholly or partially within the adopted TIP, as well as projects either funded entirely with non-federal sources or made up entirely of illustrative line items that are programmed outside of the years of the adopted TIP. Throughout this document, "TIP database" refers to all data for all projects, whether illustrative or within the adopted TIP, and includes completed and deleted or withdrawn projects. "Database" alone refers to the entire structure, including tables, queries, reports, scripts, etc., of the database or system of databases.

User – Refers to individuals that use the TIP database. There are currently four user levels, with differing database access rights.

Attachment 6: TIP ID Hierarchy



The geographic codes are assigned based on the below hierarchy of data field values and codes:

1. Programming Agency: If the programming agency is Chicago, any regional council of mayors, any county (other than Cook), CTA, Pace or Metra, the geographic code is assigned according to the Geographic Code.

2. North/West Limit Cross Streets – Municipality: If not blank or "Uninc", the geographic code is assigned according to the Muni-Twp Code.

3. North/West Limit Cross Streets – County: If not blank or "Cook", the geographic code is assigned according the County Code.

4. South/East Limit Cross Streets – Municipality: If not blank or "Uninc", the geographic code is assigned according to the Muni-Twp Code.

5. South/East Limit Cross Streets – County: If not blank or “Cook”, the geographic code is assigned according the County Code.

6. Other Participating Agencies: If not blank, “CMAP”, “Cook County”, any “IDOT” department, “FHWA” or “RTA”, the geographic code is assigned according to the Muni-Twp Code.

7. If unable to assign based on steps 1 – 6, the geographic code defaults to “13”.

Programming Agency	TIP ID – geographic code
Central Council of Mayors	05
Chicago	01
CMAP	See Muni-Twp Codes
Cook County Department of Transportation and Highways	See Muni-Twp Codes
Chicago Transit Authority (CTA)	16
DuPage Council of Mayors	08
DuPage County Division of Transportation	08
Grundy County Highway Department	12
IDOT District 1 Division of Highways	See Muni-Twp Codes
IDOT District 1 Local Roads	See Muni-Twp Codes
IDOT District 3	See Muni-Twp Codes
IDOT District 3 Division of Highways	See Muni-Twp Codes
IDOT Division of Public & Intermodal Transportation	See Muni-Twp Codes
IDOT ITS Program Office	See Muni-Twp Codes
IDOT Office of Planning & Programming	See Muni-Twp Codes
IDOT Safe Routes to Schools	See Muni-Twp Codes
Illinois State Toll Highway Authority	See Muni-Twp Codes
Kane County Division of Transportation	09
Kane/Kendall Council of Mayors	09
Kendall County Highway Department	09
Lake County Council of Mayors	10
Lake County Division of Transportation	10
McHenry County Council of Mayors	11
McHenry County Division of Transportation	11
Metra	18
North Central Council of Mayors	04
North Shore Council of Mayors	02
Northwest Council of Mayors	03
Pace	17
Regional Transportation Authority	See Muni-Twp Codes
South Council of Mayors	07
Southwest Council of Mayors	06
Will County Council of Mayors	12
Will County Division of Transportation Department	12
FHWA - Eastern Federal Lands Highway Division	See Muni-Twp Codes

SAMPLE

County Codes

County	TIP ID
COOK	See Muni-Twp Codes, or 15 for unincorporated/blank muni
DUPAGE	08
KANE	09
LAKE	10
MCHENRY	11
REGIONWIDE	13
KENDALL	09
GRUNDY	12
WILL	12
DE KALB	09

Muni-Twp Codes

Municipality	TIP ID
Addison	08
Addison Township	08
Alden Township	11
Algonquin	11
Algonquin Township	11
Alsip	06
Antioch	10
Antioch Township	10
Arlington Heights	03
Association for Individual Development	13
Aurora	09
Aurora Township	09
Aux Sable Township	09
Avon Township	10
Bannockburn	10
Barrington	03
Barrington Countryside Park District	03
Barrington Hills	11
Bartlett	03
Batavia	09
Batavia Township	09
Beach Park	10
Bedford Park	06
Beecher	12
Bellwood	04
Bensenville	08
Benton Township	10
Berkeley	04
Berwyn	05
Big Rock	09
Big Rock Township	09

SAMPLE

Blackberry Township	09
Bloomingdale	08
Bloomingdale Township	08
Blue Island	06
Bolingbrook	12
Braceville	12
Braceville Township	12
Braidwood	12
Bridgeview	06
Bristol Township	09
Broadview	04
Brookfield	05
Buffalo Grove	10
Buffalo Grove Park District	10
Bull Valley	11
Burbank	06
Burlington	09
Burlington Township	09
Burnham	07
Burr Ridge	08
Burton Township	11
Calumet City	07
Calumet Park	07
Campton Hills	09
Campton Township	09
Carol Stream	08
Carpentersville	09
Cary	11
Central Council of Mayors	05
Channahon	12
Channahon Township	12
Chemung Township	11
Chicago	01
Chicago Department of the Environment	01
Chicago Department of Transportation	01
Chicago Dept. of Business Affairs & Consumer Protection	01
Chicago Heights	07
Chicago Park District	01
Chicago Public Schools	01
Chicago Ridge	06
Chicago South Suburban Mass Transit Dist.	07
Chicago State University	01
Cicero	05
Clarendon Hills	08
Coal City	12
Coral Township	11
Country Club Hills	07
Countryside	05
Crest Hill	12
Crestwood	06
Crete	07
Crete Township	12
Crystal Lake	11
CTA	16
Cuba Township	10
Custer Township	12
Darien	08
Deer Park	10

SAMPLE

Deerfield	10
Des Plaines	03
Diamond	12
Dixmoor	07
Dolton	07
Dorr Township	11
Downers Grove	08
Downers Grove Township	08
Dundee Township	09
Dunham Township	11
DuPage Council of Mayors	08
DuPage County	08
DuPage County Division of Transportation	08
DuPage Forest Preserve District	08
DuPage Township	12
East Dundee	09
East Hazel Crest	07
Ela Township	10
Elburn	09
Elgin	09
Elgin Township	09
Elk Grove Village	03
Elmhurst	08
Elmwood Park	04
Elwood	12
Evanston	02
Evergreen Park	06
Felix Township	12
Florence Township	12
Flossmoor	07
Ford Heights	07
Forest Park	04
Forest Preserve District of Will County	12
Forest View	05
Fox Lake	10
Fox River Grove	11
Fox Valley Park District	09
Frankfort	12
Frankfort Township	12
Franklin Park	04
Fremont Township	10
Geneva	09
Geneva Township	09
Gilberts	09
Glen Ellyn	08
Glencoe	02
Glendale Heights	08
Glenview	02
Glenwood	07
Godley	12
Golf	02
Goose Lake Township	12
Grafton Township	11
Grant Township	10
Grayslake	10
Green Garden Township	12
Green Oaks	10
Greenwood	11
Greenwood Township	11

SAMPLE

Grundy County Highway Department	
Gurnee	10
Hainesville	10
Hampshire	09
Hampshire Township	09
Hanover Park	03
Hanover Township	3
Hanover Township Senior Services	3
Hartland Township	11
Harvard	11
Harvey	07
Harwood Heights	04
Hawthorn Woods	10
Hazel Crest	07
Hebron	11
Hebron Township	11
Hickory Hills	06
Highland Park	10
Highwood	10
Hillside	04
Hinsdale	08
Hodgkins	05
Hoffman Estates	03
Hoffman Estates Park District	03
Holiday Hills	11
Homer Glen	12
Homer Township	12
Hometown	06
Homewood	07
Huntley	11
Indian Creek	10
Indian Head Park	05
Inverness	03
Island Lake	10
Itasca	08
Jackson Township	12
Johnsburg	11
Johnsburg Community School Dist. 12	11
Joliet	12
Joliet Township	12
Justice	06
Kane County Forest Preserve District	09
Kane County	09
Kane County Division of Transportation	09
Kane/Kendall Council of Mayors	09
Kaneville	09
Kaneville Township	09
Kendall County Highway Department	09
Kendall Township	09
Kenilworth	02
Kildeer	10
LaGrange	05
LaGrange Park	05
Lake Barrington	10
Lake Bluff	10
Lake County Council of Mayors	10
Lake County Department of Transportation	10
Lake County Forest Preserve	10
Lake Forest	10
Lake in the Hills	11

SAMPLE

Lake Villa	10
Lake Villa Township	10
Lake Zurich	10
Lakemoor	11
Lakewood	11
Lansing	07
Lemont	06
Libertyville	10
Libertyville Township	10
Lily Lake	09
Lincolnshire	10
Lincolnwood	02
Lindenhurst	10
Lindenhurst Park District	10
Lisbon	09
Lisle	08
Lisle Township	08
Little Rock Township	09
Lockport	12
Lockport Township	12
Lombard	08
Long Grove	10
Lynwood	07
Lyons	05
Manhattan	12
Manhattan Township	12
Maple Park	09
Marengo	11
Marengo Township	11
Markham	07
Matteson	07
Maywood	04
McCollom Lake	11
McCook	05
McHenry	11
McHenry County Conservation District	11
McHenry County Council of Mayors	11
McHenry County Division of Transportation	11
McHenry Twp	11
Melrose Park	04
Merrionette Park	06
Metra	18
Mettawa	10
Midlothian	07
Millbrook	09
Millington	09
Milton Township	08
Minooka	12
Mokena	12
Monee	12
Monee Township	12
Montgomery	09
Moraine Township	10
Morton Grove	02
Mount Prospect	03
Mundelein	10
Na-Au-Say Township	09
Naperville	08
Naperville Community Unit School Dist. 203	08
Naperville Township	08

SAMPLE

New Lenox	12
New Lenox Township	12
Newark	09
Newport Township	10
Niles	03
Norridge	04
North Aurora	09
North Barrington	10
North Central Council of Mayors	04
North Chicago	10
North Riverside	04
North Shore Council of Mayors	02
Northbrook	02
Northfield	02
Northlake	04
Northwest Council of Mayors	03
Nunda Township	11
Oak Brook	08
Oak Forest	07
Oak Lawn	06
Oak Park	04
Oakbrook Terrace	08
Oakbrook Terrace Park District	08
Oakwood Hills	11
Old Mill Creek	10
Olympia Fields	07
Orland Hills	06
Orland Park	06
Oswego	09
Oswego Township	09
Pace	17
Palatine	03
Palos Heights	06
Palos Hills	06
Palos Park	06
Park City	10
Park Forest	07
Park Ridge	03
Peotone	12
Peotone Township	12
Phoenix	07
Pingree Grove	09
Plainfield	12
Plainfield Township	12
Plano	09
Plato Township	09
Plattville	09
Port Barrington	11
Posen	07
Prairie Grove	11
Prospect Heights	03
Prospect Heights Park District	03
Reed Township	12
Richmond	11
Richmond Township	11
Richton Park	07
Riley Township	11
Ringwood	11
River Forest	04
River Forest Park District	04

SAMPLE

River Grove	04
Riverdale	07
Riverside	05
Riverwoods	10
Robbins	07
Rockdale	12
Rolling Meadows	03
Romeoville	12
Roselle	08
Rosemont	04
Round Lake	10
Round Lake Beach	10
Round Lake Heights	10
Round Lake Park	10
Rutland Township	09
Salvation Army Family & Community Services	13
Sandwich	09
Sandwich Township	09
Sauk Village	07
Schaumburg	03
Schaumburg Park District	03
Schiller Park	04
Seneca Township	11
Seward Township	09
Shields Township	10
Shorewood	12
Skokie	02
Skokie Park District	02
Sleepy Hollow	09
Somonauk	09
Somonauk Township	09
South Barrington	03
South Chicago Heights	07
South Council of Mayors	07
South Elgin	09
South Holland	07
Southwest Council of Mayors	06
Spring Grove	11
St. Charles	09
St. Charles Park District	09
St. Charles Township	09
Steger	07
Stickney	05
Stone Park	04
Streamwood	03
Sugar Grove	09
Sugar Grove Township	09
Summit	05
Symerton	12
Third Lake	10
Thornton	07
Tinley Park	07
Tower Lakes	10
Trout Valley	11
Troy Township	12
Union	11
University of Illinois-Chicago	01
University Park	07
Urban Transportation Center	01

SAMPLE

Vernon Hills	10
Vernon Township	10
Villa Park	08
Virgil	09
Virgil Township	09
Volo	10
Wadsworth	10
Warren Township	10
Warrenville	08
Washington Township	12
Wauconda	10
Wauconda Township	10
Waukegan	10
Waukegan Township	10
Wayne	09
Wayne Township	08
Wesley Township	12
West Chicago	08
West Deerfield Township	10
West Dundee	09
Westchester	04
Western Springs	05
Westmont	08
Wheatland Township	12
Wheaton	08
Wheaton Park District	08
Wheeling	03
Will County Council of Mayors	12
Will County Highway Department	12
Will Township	12
Willow Springs	06
Willowbrook	08
Wilmette	02
Wilmington	12
Wilmington Township	12
Wilton Township	12
Winfield	08
Winfield Township	08
Winnetka	02
Winthrop Harbor	10
Wonder Lake	11
Wood Dale	08
Woodridge	08
Woodstock	11
Worth	06
York Township	08
Yorkville	09
Zion	10
Zion Township	10

SAMPLE

Attachment 7: Current TIP Work Types

The work type table below is also available online.

Work Type Defined	Work Type Code	MME Code	Project Type	Exempt Status
ADA - Facility Improvements	D-FAC	Modernization	Transit	EXEMPT
Bicycle Parking	E-BIKEPARK	Modernization	Bicycle	EXEMPT
Bridge/Structure - New	B-NEW	Expansion	Highway	NOT EXEMPT
Bridge/Structure - Paint	B-PNT	Maintenance	Highway	EXEMPT
Bridge/Structure - Reconst/Rehab Chng in Lane Use/Widths	B-RECNFG	Modernization	Highway	EXEMPT TESTED
Bridge/Structure - Reconst/Rehab No Chng in #, Wdth, Or Lane	B-REPAIR	Maintenance	Highway	EXEMPT
Bridge/Structure - Replace	B-REPLACE	Modernization	Highway	EXEMPT
Bus Routes - Improve Service	T-IMPSVC	Modernization	Transit	EXEMPT
Bus Routes - New Service	T-NEWSVC	Expansion	Transit	EXEMPT
CPS - Improvement	U-CPSIMP	Modernization	Transit	EXEMPT
CPS - Maintenance	U-CPSMAINT	Maintenance	Transit	EXEMPT
Enhancement - Landscaping	E-LS	Modernization	Other	EXEMPT
Facility - Bus Turnaround	F-TRN	Modernization	Transit	EXEMPT
Facility - Office Facilities/Equipment	F-OFC	Modernization	Transit	EXEMPT
Facility - Revenue Collection Equipment	F-REV	Modernization	Transit	EXEMPT
Facility - Shop Facilities/Equipment	F-SHOP	Modernization	Transit	EXEMPT
Facility - Signal Priority For Transit	F-SPTV	Modernization	Transit	EXEMPT
Facility - Towers and Yards	F-YRDS	Maintenance	Transit	EXEMPT
Highway/Road - Add Lanes	H-AL	Expansion	Highway	NOT EXEMPT
Highway/Road - Continuous Bi-Directional Turn Lanes	H-CLTL	Modernization	Highway	EXEMPT TESTED
Highway/Road - Corridor Improvement	H-COR	TBD	Highway	NOT EXEMPT
Highway/Road - Curb and Gutter	H-C/G	Maintenance	Highway	EXEMPT
Highway/Road - Directional/Informational Signs	H-INFO	Modernization	Highway	EXEMPT
Highway/Road - Extend Road	H-EXT	Expansion	Highway	NOT EXEMPT
Highway/Road - HOV Lanes	H-HOV	TBD	Highway	NOT EXEMPT
Highway/Road - Intersection Improvement	H-INTIMP	Modernization	Highway	EXEMPT
Highway/Road - Intersection Reconstruction	H-INTRC	Maintenance	Highway	EXEMPT
Highway/Road - I-Pass Improvement	H-IPASS	Modernization	Highway	EXEMPT TESTED
Highway/Road - New Road	H-NEW	Expansion	Highway	NOT EXEMPT
Highway/Road - Pavement Patching	H-PATCH	Maintenance	Highway	EXEMPT
Highway/Road - Railroad Grade Separation	H-RRGS	Modernization	Highway	NOT EXEMPT
Highway/Road - Reconst With Change in Use or Width of Lane	H-RCNST	Modernization	Highway	EXEMPT TESTED
Highway/Road - Reconstruct In Kind	H-RCINKND	Maintenance	Highway	EXEMPT
Highway/Road - Remove Lanes	H-RL	Modernization	Highway	NOT EXEMPT
Highway/Road - Resurface (With No Lane Widening)	H-RS	Maintenance	Highway	EXEMPT
Highway/Road - Roundabout	H-RAB	Modernization	Highway	Exempt
Highway/Road - Vertical/Horizontal Alignment (e.g. Clearance)	H-ALIGN	Modernization	Highway	EXEMPT
Highway/Road - Widen Lanes and Resurface	H-WRS	Modernization	Highway	EXEMPT TESTED

SAMPLE

Work Type Defined	Work Type Code	MME Code	Project Type	Exempt Status
Historic Preservation	E-HIS	Maintenance	Other	EXEMPT
Improve Bicycle Facility	E-BIKEIMP	Modernization	Bicycle	EXEMPT
Improve Pedestrian Facility	E-PEDIMP	Modernization	Pedestrian	EXEMPT
Improve Shared Path Facility	E-SHAREDMODERN	Modernization	Bicycle	Exempt
Interchange - Expand (New Movements Added To Interchange)	I-EXP	Expansion	Highway	NOT EXEMPT
Interchange - New	I-NEW	Expansion	Highway	NOT EXEMPT
Interchange - Reconstruction	I-RCNST	Modernization	Highway	EXEMPT
Maintain Bicycle Facility	E-BIKEMAINT	Maintenance	Bicycle	EXEMPT
Maintain Pedestrian Facility	E-PEDMAINT	Maintenance	Pedestrian	EXEMPT
Maintain Shared Use Path	E-SHAREDMAINT	Maintenance	Bicycle	Exempt
Miscellaneous - Exempt Projects	Z-OTHEX	TBD	Other	EXEMPT
Miscellaneous - Exempt Tested Projects	Z-OTHXTST	TBD	Other	EXEMPT TESTED
Miscellaneous - Project Types Not Listed	Z-OTH	TBD	Other	NOT EXEMPT
Multi-Modal Center - Improve With Change in Service	M-IMP	Modernization	Transit	EXEMPT TESTED
Multi-Modal Center - Maintain, Rehabilitate, Replace	M-MAINT	Maintenance	Transit	EXEMPT
Multi-Modal Center - New	M-NEW	Expansion	Transit	EXEMPT TESTED
Multi-Modal Center - Relocate	M-RELOC	Maintenance	Transit	EXEMPT TESTED
New Bicycle Facility	E-BIKENEW	Expansion	Bicycle	EXEMPT
New Pedestrian Facility	E-PEDNEW	Expansion	Pedestrian	EXEMPT
New Shared Use Path	E-SHAREDNEW	Expansion	Bicycle	EXEMPT
Noise Attenuation	E-NOIS	Modernization	Highway	EXEMPT
Operations - Transit Operating Assistance	O-OPS	Maintenance	Transit	EXEMPT
Parking - Expand Number Of Spaces	P-EXP	Expansion	Transit	EXEMPT TESTED
Parking - Maintain, Rehabilitate, Replace	P-MAINT	Maintenance	Transit	EXEMPT
Parking - New Lot or Garage	P-NEW	Expansion	Transit	EXEMPT TESTED
Rail Line - Extend Line	R-EXP	Expansion	Transit	NOT EXEMPT
Rail Line - Improve Line	R-IMP	Modernization	Transit	EXEMPT TESTED
Rail Line - Maintain, Rehabilitate, Replace	R-MAINT	Maintenance	Transit	EXEMPT
Rail Line - New Line	R-NEW	Expansion	Transit	NOT EXEMPT
Rail Stations - Maintain, Rehabilitate, Replace	C-MAINT	Maintenance	Transit	EXEMPT
Rail Stations - Modernize, Replace	C-MOD	Modernization	Transit	EXEMPT
Rolling Stock - Alternate Fuels	J-FUEL	Modernization	Transit	EXEMPT
Rolling Stock - Expand Fleet	J-EXP	Expansion	Transit	NOT EXEMPT
Rolling Stock - Rehabilitate Vehicles	J-REHAB	Maintenance	Transit	EXEMPT
Rolling Stock - Replace Existing Vehicles	J-REP	Maintenance	Transit	EXEMPT TESTED
Rolling Stock - Retrofit Engine	J-RETRO	Modernization	Transit	EXEMPT
Safe Routes To School	E-SRTS	Modernization	Other	EXEMPT
Safety - Barriers	A-BAR	Modernization	Highway	EXEMPT
Safety - Beacons	A-BEA	Modernization	Highway	EXEMPT
Safety - Guardrails	A-GRD	Modernization	Highway	EXEMPT
Safety - Lighting	A-LTS	Modernization	Highway	EXEMPT

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Work Type Defined	Work Type Code	MME Code	Project Type	Exempt Status
Safety - Median Projects	A-MED	Modernization	Highway	EXEMPT
Safety - Other	A-OTH	Modernization	Highway	EXEMPT
Safety - Pavement Marking	A-PMRK	Modernization	Highway	EXEMPT
Safety - Railroad Crossing Improvements	A-RRXING	Modernization	Highway	EXEMPT
Safety - Shoulder Improvements	A-SHDR	Modernization	Highway	EXEMPT
Signals - Add Signals at Single Intersection	S-ASNG	Modernization	Highway	EXEMPT
Signals - Interconnects and Timing	S-TIM	Modernization	Highway	NOT EXEMPT
Signals - Modernization	S-MOD	Modernization	Highway	EXEMPT
Signals - New Signals For Multiple Intersections	S-NEW	Modernization	Highway	NOT EXEMPT
Station - Improve With Change In Service	C-IMP	Modernization	Transit	EXEMPT TESTED
Station - New	C-NEW	Expansion	Transit	NOT EXEMPT
Station - Relocate	C-RELOC	Modernization	Transit	EXEMPT TESTED
Transfer Facility - Improve With Change In Service	X-IMP	Modernization	Transit	EXEMPT TESTED
Transfer Facility - Maintain, Rehabilitate, Replace	X-MAINT	Maintenance	Transit	EXEMPT
Transfer Facility - Modernize, Replace	X-MOD	Modernization	Transit	EXEMPT
Transfer Facility - New	X-NEW	Expansion	Transit	EXEMPT TESTED
Travel Demand Management	E-MODE	Modernization	Other	EXEMPT
Vehicle Facility - Maintenance/Storage	V-MAINSTOR	Maintenance	Transit	EXEMPT

SAMPLE

Attachment 8: Current TIP Database User Guide

The TIP Database User Guide is available online.

Attachment 9: Current TIP Change Logic

SQL Database TIP Change Procedures
Possible actions when a project change is made:
HOLD FOR CONFORMITY (Note: when semi-annual conformity analysis is completed, the resulting changes are AMENDMENTS)
AMENDMENTS
MODIFICATIONS
MISCELLANEOUS CHANGES (typically changes to projects that are not within the adopted TIP)

A TIP Change Quick Reference is also available online for users of the database.

NEW PROJECTS – May be AMENDMENTS or MODIFICATIONS, depending on fund sources. Some may be held for conformity based on the below conditions.

Check PROJECT TYPE.

1. If TIP PROJECT:
    a. Check WORK TYPES.
        i. If at least one is NOT EXEMPT,
            1. If only non-exempt WORK TYPE = Signal Interconnect (S-TIM), goes to New Projects section of AMENDMENT report, with Action = “New Project” and set conformity status to “To Be Conformed”.
            2. Check PHASES FUNDED.
                a. If only E1 or AA within TIP years, goes to New Projects section of AMENDMENT report, with Action = “New Project” and set conformity status to “Not Conformed”.
                b. If any E2, ROW, CONST and/or IMP within TIP years, goes to HOLD FOR CONFORMITY and set conformity status to “To Be Conformed”. (Action after conformity analysis will be “New Project”)
        ii. If at least one is EXEMPT TESTED,
            1. If at least one line item is within the TIP Years, goes to AMENDMENT report, with Action “New Project”.
            2. If all line items are outside the years of the TIP, goes to MODIFICATION report, with Action “New Project”
        iii. If all are EXEMPT, check FUND SOURCES for all line items within TIP Years.
            1. If all line items are outside the years of the TIP, goes to MISCELLANEOUS CHANGE report.
            2. If all sources are non-federal (local and/or state), goes to MODIFICATION report, with Action “New Exempt Project”.
            3. If any line item is federally funded, goes to New Projects section of AMENDMENT report, with Action = “New Project”. Set conformity status to “Not Required.”
2. If MAJOR CAPITAL PROJECT [Currently RTP Projects], goes to “HOLD FOR CONFORMITY” and may be released individually by CMAP staff to the New Projects section of AMENDMENT report, with Action = “New Project”. Set conformity status to “To Be Conformed.”
3. If CONSTRAINED
    a. Check WORK TYPES.
        i. If at least one is NOT EXEMPT,
            1. If only non-exempt WORK TYPE = Signal Interconnect (S-TIM), Goes to New Projects section of AMENDMENT report, with Action = “New Project” and set conformity status to “To Be Conformed”.
            2. Check PHASES FUNDED.

SAMPLE

a. If only E1 or AA within TIP years, goes to New Projects section of AMENDMENT report, with Action = “New Project” and set conformity status to “To Be Conformed”.
b. If any E2, ROW, CONST and/or IMP within TIP years, goes to HOLD FOR CONFORMITY (Action after conformity analysis will be “New Project”).

ii. If at least one is EXEMPT TESTED, goes to New Projects section of AMENDMENT report, with Action = “New Project” and set conformity status to “Not Required” [Currently “Exempt” is used].

iii. If all are EXEMPT, goes to New Projects section of AMENDMENT report, with Action = “New Project”. Set conformity status to “Not Required.”

4. If UNCONSTRAINED, send to HOLD FOR CONFORMITY regardless of work type. These projects should not be added into the TIP without CMAP staff knowledge. (Action after conformity analysis will be “New Project”.)

DELETED PROJECTS – May be AMENDMENTS or MODIFICATIONS, depending on fund sources.
Some may be held for conformity based on the below conditions.

Check WORK TYPES.

1. If at least one is NOT EXEMPT
    a. Check CONFORMITY STATUS
        i. If CONFORMED or CONSULTATION, goes to HOLD FOR CONFORMITY (Action after conformity analysis will be “Deleted Project”).
        ii. If TO BE CONFORMED or NOT CONFORMED or NOT REQUIRED, goes to Deleted Projects section of AMENDMENT report, with Action = “Deleted Project”.
2. If at least one is EXEMPT TESTED, and any line item is within TIP Years, goes to Deleted Projects section of AMENDMENT report, with Action = “Deleted Project”.
3. If all are EXEMPT, check FUND SOURCES for all line items within TIP Years.
    a. If all sources are non-federal (local and/or state), goes to MODIFICATION report, with Action “Deleted Project”.
    b. If any line item is federally funded, goes to Deleted Projects section of AMENDMENT report, with Action “Deleted Project”.

PROJECT CHANGES

A. If WORK TYPES were added or removed,
    1. If all before and after are EXEMPT or EXEMPT TESTED, skip to C.
    2. If a NOT EXEMPT work type was ADDED or REMOVED,
        a. If the project previously had any other NOT EXEMPT work types, skip to B.
        b. If the only added/removed WORK TYPE = Signal Interconnect (S-TIM)
            i. If the project has additional NOT EXEMPT work types, skip to B
            ii. Otherwise, skip to C.
        c. If before *and* after, only E1 or AA PHASES are within TIP years, skip to C.
        d. If before *and* after, phases other than E1 or AA are funded only with OTH or TBD, skip to C.
        e. Otherwise - HOLD FOR CONFORMITY (Action after conformity analysis will be “Scope Changed”).

B. If changes (other than work type) were made to a NOT EXEMPT project,
    1. If the COMPLETION YEAR changed and crosses scenario years [currently 2020, 2025, 2030 and 2040] - HOLD FOR CONFORMITY (Action after conformity analysis will be “Completion Year”.)

SAMPLE

2. If the PROJECT LOCATION changed – HOLD FOR CONFORMITY, CMAP staff will review to determine if the change is an amendment (location/limit changes) or modification (addition of marked route, correction/clarification, etc.). Action will be “Location Change”.
3. If any MODELED PROJECT DATA or MODELED HIGHWAY DATA (# of lanes, parking spaces, etc.) changed – HOLD FOR CONFORMITY (Action after conformity analysis will be “Scope Change”).
4. If any new PHASES (that were not in any line item in the project) are added within the TIP years [currently years 15-19], and only E1 or AA were previously within the TIP years - HOLD FOR CONFORMITY (Action after conformity analysis will be “Non-Exempt Project moved into TIP”)
5. If all PHASES, except E1 or AA, are completely (all lines with that phase) deleted from the TIP years [currently years 15-19] – HOLD FOR CONFORMITY (Action after conformity analysis will be “Non-exempt Project moved out of TIP”).
6. If CONFORMITY STATUS changed due to semi-annual conformity analysis – goes to AMENDMENT report, with Action set to the action that occurred to place the project in hold for conformity (these actions are noted in parentheses where appropriate).

C. If the absolute change in FEDERAL funds is:
   1. >= 10000; or
   2. >=20% for projects with a before Federal cost of >=10000; or
   3. >=25% for projects with a before Federal cost of >=5000; or
   4. >=50% for projects with a before Federal cost of >=1000; or
   5. >=100%, goes to AMENDMENT report, with Action = “Cost Threshold”

D. If any new PHASES (that were not in any line item in the project) are added within the TIP years or completely (all lines with that phase) deleted from the TIP years [currently years 15-19], goes to AMENDMENT report, with Action = “Phase Added” or “Phase Deleted”.

E. If PHASES are changed, resulting in a new phase being added to the project or an entire phase being deleted from a project, [Note: Specific examples at end of document to clarify]
   1. If the PHASE is IMP, CONST or ROW, goes to AMENDMENT report, with Action = “Phases Changed”
   2. If the PHASE change involves ENG, ENG1 and/or ENG2:
      a. If “before” phase of ENG and/or ENG 1 is eliminated and ENG 2 is added, goes to AMENDMENT report, with Action = “Phases Changed”.
      b. If “before” phase of ENG 2 is eliminated and ENG and/or ENG 1 is added, goes to AMENDMENT report, with Action = “Phases Changed”.
      c. If an ENG 1 line item is split into ENG 1 and ENG 2, with the sum of federal and total dollars remaining the same, goes to AMENDMENT report, with Action = “Phases Changed”.
      d. If an ENG 2 line item is split into ENG 1 and ENG 2, with the sum of federal and total dollars remaining the same, goes to AMENDMENT report, with Action = “Phases Changed”.
      e. If “before” phase of ENG 1 is eliminated and ENG is added, goes to MODIFCATIONS report.
      f. If “before” phase of ENG is eliminated and ENG 1 is added, goes to MODIFICATIONS report.
      g. If an ENG line item is split into ENG 1 and ENG 2, with the sum of federal and total dollars remaining the same, goes to MODIFICATIONS report.

F. If the PROJECT LOCATION or LIMITS changes, or the MUNICIPALITY or COUNTY changes, goes to AMENDMENT report, with Action = “Location Change” (Note some of these may get manually approved by CMAP staff (to be modifications, not amendments) if it is determined that the change is a clarification of location, rather than an actual change).

SAMPLE

G. If a MUNICIPALITY, COUNTY or MARKED ROUTE is added, goes to MODIFICATION report.

All other changes are MODIFICATIONS.

PHASE CHANGE EXAMPLES

Before change line items

CMAQ	**ENG**	**15**	**$86**	**$72**
CMAQ	**ROW**	**16**	**$100**	**$80**
STP-L	**CST**	**17**	**$1000**	**$800**

After change line items: AMENDMENT by E.2.a.

CMAQ	ENG2	15	$86	$72	(ENG changed to ENG2)
CMAQ	ROW	16	$100	$80	
STP-L	CST	17	$1000	$800	

After change line items: MODIFICATION by E.2.f.

CMAQ	ENG1	15	$86	$72	(ENG changed to ENG1)
CMAQ	ROW	16	$100	$80	
STP-L	CST	17	$1000	$800	

After change line items: MODIFICATION by E.2.g.

CMAQ	ENG1	15	$6	$5	(ENG split into ENG1 & 2)
CMAQ	ENG2	15	$80	$67	
CMAQ	ROW	16	$100	$80	
STP-L	CST	17	$1000	$800	

Before change line items

CMAQ	**ENG1**	**15**	**$50**	**$40**
ILL	**ENG1**	**15**	**$100**	**$80**
ILL	**ENG2**	**16**	**$200**	**$160**
CMAQ	**ROW**	**16**	**$100**	**$80**

After change line items: MODIFICATION because ENG1 and ENG2 are included in project before and after (no new phase added, no phase deleted)

CMAQ	ENG2	15	$50	$40	(ENG1 changed to ENG2)
ILL	ENG1	15	$100	$80	
ILL	ENG2	16	$200	$160	
CMAQ	ROW	16	$100	$80	

After change line items: AMENDMENT because ENG1 has been completely deleted from project

CMAQ	ENG2	15	$50	$40	(ENG1 changed to ENG2)
ILL	ENG2	16	$300	$240	(ENG1 & ENG2 combined)
CMAQ	ROW	16	$100	$80	

SAMPLE

Data Validations

Any time a new project is added to the TIP database, or a change to a project is submitted, a series of data validations occur when the user clicks the Add New Project/Save Change button. Understanding the validations may assist programmers with avoiding frustrating and time consuming errors. Validations fall into three main categories: complete and logical data, fiscal constraint, and conformity requirements.

Complete and Logical Data

All projects require the following data in order to be saved:

- Programming Agency
- At least one Project Contact
- Either a Location Name or a System and Route Number pair
- At least one Work Type
- Total Project Cost
- At least one complete financial line (Fund Source, Phase, FFY, Total Cost, and Federal Cost)

The following logic applies to projects meeting the conditions described:

- If the location or either limit has a System Type selected, it must also have a Route Number.
- If the location or either limit has a Route Number entered, it must also have a System Type.
- The value entered in the Total Project Cost field must be greater than or equal to the sum of the Total Cost fields for all line items entered, regardless of fund source, phase or FFY, including illustrative line items.
- Each line item with a federal fund source (see Fund Source list) must have both a Total cost and Federal cost.
- For each line item, federal cost must be less than or equal to the total cost.
- Each line item with a state or local source (see Fund Source list) cannot have a Federal cost other than 0.
- For projects requiring a completion year, the completion year must be greater than the latest year entered in the financial line items. If any line items are in “MYB”, the completion year must be greater than the latest year of the active TIP years.
- The “After” number of lanes cannot be greater than the “Before” number of lanes unless the project contains an Add Lanes work type.
- The “After” number of lanes cannot be less than the “Before” number of lanes unless the project contains a Remove Lanes work type.

SAMPLE

Attachment 11: Sample Reports

The following reports are samples from the current CMAP TIP database and from other MPOs. The source of each sample and notes about each sample are provided below. Samples may also be annotated to highlight "required" and "desired" features and to note formats and layouts that are desirable.

Project Fact Sheets

ARC Plan 2040 RTP Update PROJECT FACT SHEET
Source: http://documents.atlantaregional.com/transportation/quarterlyfactsheets/AT-228.PDF
Notes: Very concise presentation of basic project information. Would be better if the "blank space" in the larger fields (Short Title and Detailed Description) were collapsed when not filled. Missing explanation of the strikethrough text and the Status field values.

Reach the NewMARC Project View
Source: http://connect.paladinpanoramic.com/Project/2202/54275
Notes: Photos and location map (aerial/satellite view) are good. Omission of some field names is good (Project name, description) as these don't need to be labeled. Needs the addition of financial line items.

DRCOG Project Description
Source: http://www3.drcog.org/trips/Project/2012-2017/details/46976
Notes: This is a page view, not a print view, but the organization of the information is good.

PENNDOT
Source:
http://www.dot7.state.pa.us/tip_visualization/Reports/ProjectReport.aspx?ProjectID=91634
Notes: Lacks a map, but the information presented is easy to read. The link on fund source acronym is good.

Indianapolis MPO IRTIP Project Overview
Source:
https://mitip.indympo.org/project_info.asp?project_id=1000982&version=9&frompage=is_from_full=True
Notes: Needs map. By year and by phase tables are good. Easy to read. The funding history is good, for CMAP it may need to be grouped differently by switching the phases with the fiscal years. The sample here has 9 amendments, but only the last 2 are shown on funding history. There should be links on the version numbers to the details of that version of the project.

Project History

DRCOG Project Description
Source: http://www3.drcog.org/trips/Project/2012-2017/details/46976
Notes: See Amendment History section. The narrative description of the funding changes is very public friendly.

DRCOG Amendments
Source: http://www3.drcog.org/trips/Project/2012-2017/amendments/47366
Notes: The "Amendment Character" is very public friendly. The option to "view" the full project record (via tabs) at any amendment point is good. This keeps the current record clean while also allowing a clean view of the historic data.

DRCOG Funding
Source: http://www3.drcog.org/trips/Project/2012-2017/funding/47366
Notes: Need totals in Project Financial Record Details section, rather than the Summary tables.

ARC Detailed Financial History
Source: http://planitpublic.atlantaregional.com/Projects/AccessProjectHistory?ARCID=AT-228
Notes: There is color-coding with no key. Displaying the full project financial record at each change is desirable.

Obligation Reports

CMAP Regional Project Award and Obligation Report for Northeastern Illinois, Federal Fiscal Year 2012
Source: The full report is available online.
Notes: The project listings that start on Page 14 should be generated from the TIP database. The summary graphics on pages 4 – 13 should be included in the visualization dashboards developed for the TIP. Exports of the dashboards for use in the Obligation Report are required.

Chittenden County FY13 Obligations
Source: http://www.ccrpcvt.org/TIP_docs/20140410_FY13Obligations.pdf
Notes: The project listing is easy to read. The grand totals on page 17 are also very clear on what was originally programmed, what was programmed as amended, and what was actually obligated. The notes about delays and advanced phases are good. Needs graphical summaries.

ARC Breaking Ground 2013 Implementation Report
Sources:
http://www.atlantaregional.com/File%20Library/Transportation/Project%20Delivery/Breaking_Ground_2013.pdf
http://www.atlantaregional.com/File%20Library/Transportation/Project%20Delivery/BG_2013Appendices.pdf (See appendix B for project listing)
Notes: The summary information is drawn from the Breaking Ground dashboard.

Change Report

CMAP FFY 2014-19 TIP Amendment Report
Source: CMAP TIP database – the last report is posted online.
Notes: More needs to be done to highlight changes, particularly on projects with large numbers of line items. Better descriptions of change actions that triggered an amendment are needed. Before/after funding totals are needed. A key (via hyperlink) to acronyms (such as fund sources) used is needed.

DRCOG Amendment Memo
Source: https://drcog.org/sites/drcog/files/resources/Web%20Memo%20September.pdf
Notes: The financial lines that changed are highlighted. There is a narrative description of the change.

Change Summary/Action Reports

Baltimore Metropolitan Council TIP Amendment Summary
Source: http://www.baltometro.org/TIP/12-15_Amendment_February2013_Summary.pdf
Notes: CMAP has too many amendments on a regular basis to have this detailed of a project list, but this is visually pleasing and easy to read. The type of change is easy to determine.

ARC Summary of Proposed Changes
Source:
http://www.atlantaregional.com/File%20Library/Transportation/Transportation%20Plans/tp_TIPamend10_issues_070210.pdf
Notes: The summaries under the heading “General Programmatic Issues” are useful. For example, “Advancement of six projects….”, “Delay of TIP funding for eight projects…” CMAP desires this type of information, in a more graphical presentation for use in summarizing the actions to be considered at each Transportation Committee meeting.

Fiscal Constraint Reports

Fiscal Constraint Reports
Source: CMAP TIP Database http://tip.cmap.illinois.gov/TIP/login.aspx
Notes: There are three different formats, which vary by the fields on which the report are grouped. Currently the grouping choices are by FFY with each programmer's details listed, by Programmer with each FFY's details listed, or by FFY with no detail. These three formats are required. The format and layout of the reports needs improvement.

Adopted TIP Project Listing

"All Projects" Report
Source: CMAP TIP Database – last adopted list is available online.

Chittenden County TIP
Source: http://www.ccrpcvt.org/TIP_docs/FY2015_TIP_As_Adopted.pdf
Notes: The split of financial lines by year and "other information" is good.

Attachment 12: Sample Maps

ESRI based maps:

http://map.ccrpcvt.org/ChittendenCountyVT/

Google based map:

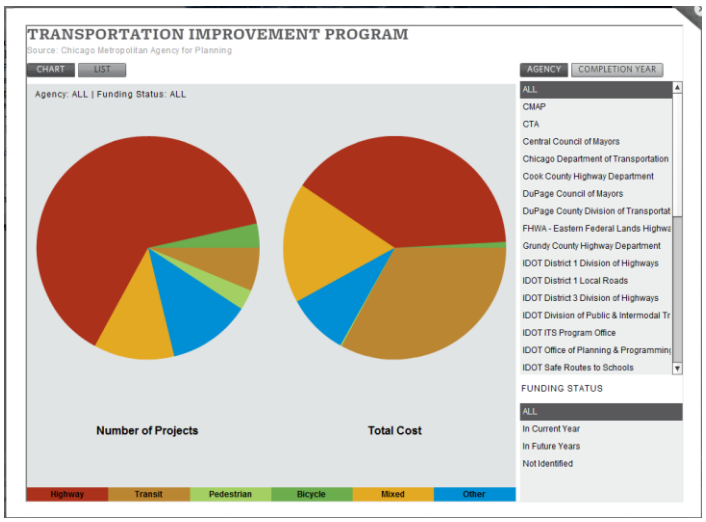
https://mitip.indympo.org/map2/estormap_report_kml_V3.asp
Notes: The list of projects “currently visible on map” is useful.

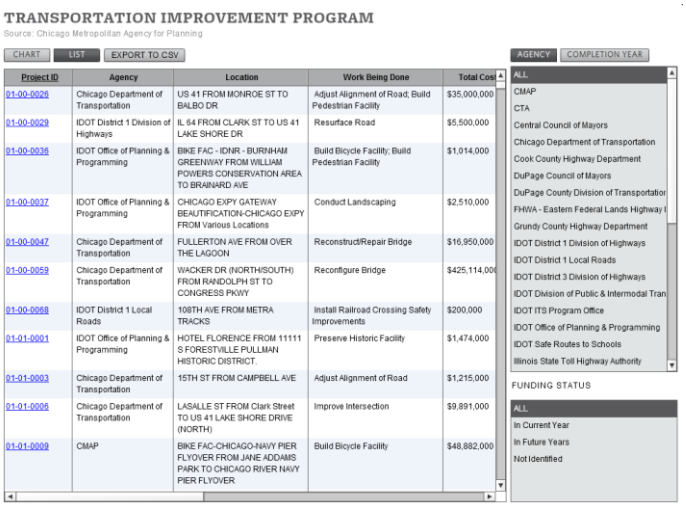
Attachment 13: Sample Visualizations

ARC PLAN 2040 TIP/RTP Quarterly Update
Source: http://documents.atlantaregional.com/transportation/tip-quarterly/TIPQuarterly_web.html
Notes: This summary dashboard provides a quick overview of the changing program over time. For CMAP, the summary should always include a "pending changes" summary. The Project & Program Detailed History has a limited number of filtering options. CMAP will likely desire a larger number of filters and the ability to filter on multiple fields simultaneously (such as sponsor and status or sponsor and project category). The Project Funding History table is easy to read and a similar format should be considered for project milestone timelines. Links to project fact sheets, details, and maps as part of project dashboards are required.

ARC Breaking Ground
Source: http://documents.atlantaregional.com/transportation/breaking-ground/BG_2013_v3.html
Notes: The summary tab is useful but not interactive. The Detailed Analysis tab, with the ability to filter is what CMAP is envisioning. ARC's dashboard is centered on the status of project line items. CMAP desires this type of functionality (filtered graphics) for a minimum of three scenarios, or sets of projects: the adopted TIP, the adopted TIP with pending changes, and the Obligation Report. The filtering and included data may differ for each scenario, but the functionality should be similar. Where ARC starts the filtering by FFY, CMAP would start filtering by scenario. Potential secondary filters include but are not limited to FFY, Sponsor or Sponsor Group, Fund Source, and Project/Line Item Categories. The number of line items programmed and sums of funds programmed are likely for calculating percentages for pie or doughnut charts and for display as y-axis values for bar charts. The ability to toggle between the Adopted TIP and the adopted TIP with pending changes scenario to see "at a glance" the potential effects of approving pending changes is required. The listing of projects included in each graphical display, with links to project fact sheets and/or details, is required.

CMAP Dashboards (now offline)
Source: The CMAP dashboards have been offline due to network security risks for several months. Screen captures are shown below.
Notes: These dashboards were very basic, and utilized only adopted TIP data, with no option to view pending changes. The dashboard provided a graphical summary of the number and total cost of projects by Project Type. The summary could be filtered by selecting an Agency or Completion Year. An additional filter for Funding Status could also be applied. A list of projects included in the graphical summary could also be viewed and downloaded. Details about each project were available by clicking the project ID link in the List view.





CMAP Obligation Report Graphics
Source: The full report is available online.
Notes: The summary graphics on pages 4 – 13 should be included in the visualization dashboards developed for the TIP. Exports of the dashboards for use in the Obligation Report are required.