

REQUEST FOR PROPOSALS

Project Management and Technical Oversight for CTPP Application Programming Interface and Web-Based User Interface

Background on AASHTO and CTPP

The Census Transportation Planning Products (CTPP) Program is a Technical Service Program (TSP) of the American Association of State Highway and Transportation Officials (AASHTO). AASHTO is the representative association for State Departments of Transportation; more information on AASHTO can be found here: www.transportation.org. The CTPP Program has as its critical mission the acquisition and dissemination of a special tabulation of transportation specific census data down to small geographies. Historically this data has been distributed by disk, then on the web, and now we are looking to move to a yet more modern delivery. More information on the mission and history of CTPP can be found here: www.ctpp.transportation.org.

The CTPP Program requests proposals on the project below.

Purpose/Project Overview

CTPP data products are created from American Community Survey (ACS) data collected by the US Census Bureau (CB). These data products are a set of several hundred tables in various geographies such as census tracts, transportation analysis zones (TAZ), transportation analysis districts (TAD), county, and place. The geographical coverage of CTPP products is the entire United States and Puerto Rico. CTPP tables are available for 1990, 2000, 2006–2010, and 2012–2016. The next data products will be based on the 2017–2021 ACS.

CTPP tables are specified by the CTPP Oversight Board. Through an agreement with the CB and the CTPP Board, the CB creates the tables in the specified geographies covering the nation. The CB transfers the special tabulation to the CTPP Program in the form of ASCII text files for each state. The details of the format, internal structures of these files, and how they are converted into the backend database to be used by the current application interface are described in [this document](#).

To make these products available for public use, the CTPP Board has sponsored development of web-based data access software. The software has been built on a Microsoft SQL Server database platform accessible through a flexible web interface. The software also includes a geographic component enabling the user to create maps directly from the software. In short, the data access software enables the user to query the CTPP tables by content and geography and creates project-specific summary tables and maps.

CTPP data access software is designed to be flexible with virtually no requirements for the user other than web browsing capabilities, which are widely available. This design has served the transportation planning community for more than 10 years. During this period, the method of accessing data in a central location has been changed alongside popularity of CTPP products. The CTPP board intends to improve accessibility of the CTPP tables to users by providing updated design of the data structures, an application program interface (API), and new web-based user interface (UI).

The board is seeking services for a consultant or team to assist in both guiding the development of an RFP for services in API/UI design and supervision for implementation. The implementation plan envisions two sets of independent contracts. The first contract is to help the CTPP Board to create a conceptual design for an API, integrating user and Board feedback, and to write an RFP for the second contractor. It is likely that the winning contractor will continue aiding the board for supervision of the second stage. The second stage includes refinements to the conceptual design and design implementation by the second contractor. The main product of the second stage is the backend data, API production, and development of a UI interacting with the API. The focus of this RFP is on the first stage of the implementation plan; recruitment of the oversight contractor.

The details of the expected tasks for the first stage contractor are described in the scope section of this document. The contractor team should possess professional knowledge in data storage technology, web user interface, and API design. It is expected that the contractor team is knowledgeable of CB ACS data and/or CTPP datasets. Knowledge of these products' applications in the transportation and elsewhere is preferred.

The contractor team will work at the direction of the CTPP Board and will have access to CTPP Program resources such as the CTPP listserv, web meeting software, and survey software.

Project Scope

The CTPP Program is seeking a consultant to provide project management and technical oversight (PM/TO) for a future contract to develop an API and web-based UI built upon the API. The goal for the CTPP API will be to broaden data access for users and their applications. The Program anticipates a need for continued access to the data via a UI. The goal for the new UI is to improve user experience.

This RFP will hire an oversight contractor for Phase 1. Phase 2 activities are expected to be evaluated as part of this contract. The Phase 1 consultant will

- 1) Make recommendations in a formal report to the CTPP Board and its Data Access Software Subcommittee based on feedback from the Board and CTPP data user community, knowledge of CTPP data structure, and knowledge of successful API and software implementations. Recommendations must include advice on costs and associated level of effort related to ongoing maintenance for the eventual API.
- 2) Draft an RFP to be reviewed by Board and aid the selection process for the API/UI developer.

In Phase 2, the consultant will oversee the work performed by the API/UI developer. The PM/TO consultant will ensure the API/UI development team

- works within the project schedule and budget;
- acts with the best interests of the CTPP Program and user community in mind; and
- produces high quality products adhering to best practices.

The project management consultant will also make recommendations on how the Program and the API/UI developer handles items related to the API/UI development, such as development of an extract, transform, load (ETL) engine; or data storage and hosting strategies.

Products

- A report outlining 1) User feedback, 2) an analysis of CTPP data structure related to conceptual API implementation, 3) an analysis of alternative approaches to implementing an API, and 4) a recommended implementation strategy, and 5) A draft summary budget recommendation for yearly maintenance costs, activities and ongoing needs beyond initial API development.
- An RFP for API/UI development for Phase 2
- Ongoing oversight of development process and progress reports

Target Deliverable Schedule

Phase	Task	Expected Timeframe
I	1. Understanding current data structure	Month 1
	2. Meet with DAS Subcommittee	
	3. Develop content for public outreach	Month 2
	4. Conduct survey/town hall	Month 3
	5. Report on user feedback	Month 4
	6. Draft RFP	Month 5
	7. DAS Subcommittee and AASHTO reviews RFP	Month 6
	8. Finalize and publish	Month 7
	9. Make themselves available for potential bidder questions	Month 8
	10. Aid selection process	
II	11. Overseeing API/Software contract	Months 9-21 (perhaps 25)

Budget

- Phase 1 (until 2nd RFP is awarded) \$49,990
- Phase 2 TBD

Evaluation Process

Applications will be evaluated by the CTPP Data Access Subcommittee, using the following criteria:

- Experience with similar role in the lifecycle of a comparable API/Software development process
- Experience with RFP writing and pros and cons of level of specifications (provide philosophy on level of specifications for a task like this)
- Knowledge of data storage needs
- Experience with synthesizing user experience and making recommendations based on user feedback
- Skill in data structure, analysis, and reporting; including an understanding of public data access requirements
- Knowledge of census, ACS, CTPP, and transportation data
- Demonstrated creation of business intelligence products and strategies
- Experience with web products with mapping components

Contents and Criteria for Submission

Please include a letter of interest and associated team member names, resumes/credentials, and hours of availability over the next year (per team member). Specifically, each proposal must contain:

- A Letter of Interest outlining:
 - Approach
 - Potential roadblocks/obstacles
- Budget
- Resume of each team member's experience/credentials and hours of availability over the project timeline
- Schedule

Schedule for Submission and Selection

Posting of Request for Proposal	Wednesday, September 23, 2020
Submission of RFP Inquiries by Email	Monday, October 5, 2020 at 11:59 PM EST
Posting of Responses to Inquiries	Monday, October 12, 2020
Proposal Deadline	Wednesday, October 21, 2020 at 11:59 PM EST

Submissions

Submit questions or register to receive questions and answers by emailing pweinberger@ashto.org please use **API RFP** as the subject.

Submit proposals by the deadline to pweinberger@ashto.org please use **APIPMTO proposal** as the subject.