



Legislation Text

File #: 21-0319, Version: 1

TO: Mayor Richard C. Irvin

FROM: Tim Weidner, P.E., Engineering Coordinator

DATE: May 10, 2021

SUBJECT:

A Resolution authorizing the execution of an Engineering Agreement with Transmap Corporation in the not to exceed amount of \$133,682.50 to update the City's Pavement Management System.

PURPOSE:

To provide the inspection and analysis required to update the City's Pavement Management System (PMS), which will be utilized to develop a maintenance program for the next five years.

BACKGROUND:

The City established the existing PMS in 2010 with the intent of determining the required annual roadway rehabilitation budget and also the most cost-effective way to utilize those funds to maintain the City's 530 miles of roadway in a condition that is acceptable to the motoring public.

A critical component of the PMS is accurate field data of the existing roadway conditions, also known as the Pavement Condition Index, or PCI. Due to many factors, roadways all deteriorate at different rates, therefore data is generally considered outdated after about five years. For that reason, the roadways were surveyed again in 2014 and a scheduled reinspection in 2020 was postponed due to budget concerns from the COVID 19 Pandemic. As those budget concerns have eased in 2021, it is recommended to conduct a new condition evaluation in order to update the PMS and use the new data for developing roadway programs for the next five years.

DISCUSSION:

Due to the specialized equipment required to obtain and analyze the data, it is more cost effective to utilize an outside vendor for these tasks.

The City published a Request for Proposals (RFP) for the Pavement Evaluation services on March 3, 2020. Staff reviewed the proposals and determined that Transmap Corporation (Transmap) was the most qualified firm. Fourteen (14) firms submitted their proposals and the top 3 firm's scores are attached as Exhibit 'B'.

This partially followed the Request for Qualifications process and is not subject to the local preference policy. The proposals were first reviewed solely based on their qualifications. Firms were also asked to submit a separate price based on their proposed pavement evaluation methodology and software. Thirty percent (30%) of the score was "value" which incorporated the firm's submitted price.

Transmap's vehicles are equipped with a Pavemetrics Laser Crack Measurement System (LCMS). This system uses laser line projectors, high-speed cameras, an inertial navigation system, and advanced optics to acquire high-resolution 3D profiles of the road. This collection of data will objectively rate pavement condition and determine the PCI for each segment of roadway that the City maintains. The PCI measures pavement condition and provides a number from 0 (worst) to 100 (best). ASTM (American Standard Test Method) has adopted the PCI as standard practice for roadway ratings (D6433).

The results of the pavement evaluation will be analyzed using the MicroPAVER software. MicroPAVER was developed by the Army Corps of Engineers and is an industry-wide recognized non-proprietary software to analyze pavement information. MicroPAVER provides pavement management capabilities to develop and organize pavement inventory, assess the current condition of pavements, develop models to predict future conditions, report on past and future pavement performance, develop scenarios for maintenance & rehabilitation based on budget or condition requirements and plan projects.

The attached Engineering Services Agreement from Transmap Corporation noted as Exhibit 'A' provides the detailed scope of services and proposed price. Tasks 1, 2 and 3 as shown in Exhibit 2 of the agreement will be all that Transmap Corporation will be asked to perform at this time, for an amount not to exceed \$133,682.50. Tasks 4, 5, 6 and 7 are only included for reference/pricing, if the City at some point in the future wishes to extract certain data from the Transmap's site visit (such as signage, trees and other assets in the right-of-way). As noted in task 2, this price includes software installation and training for City staff to run the program in the future. Additionally, the 11 miles of alleys in the City will be evaluated per task 3.

The 2021 City Budget provides \$133,682.50 for this item in account no. 212-4460-431.73-91 with a total budget of \$2,100,000.00 for Roadway resurfacing(Municipal Motor Fuel Tax).

IMPACT STATEMENT:

Coordination with IT will be required for installation and future updates of the MicroPAVER software program and also GIS support for creating exhibits and layers for the GIS database. As part of this contract, Transmap will purchase the MicroPAVER software for the City. After the first year, a \$550/year maintenance fee would be required to receive software updates (at no additional cost) and technical support. The motoring public will not be affected during the ongoing field work and there will be no lane closures or other significant delays during that process.

RECOMMENDATIONS:

Please forward this resolution to the Infrastructure and Technology Committee for their review and recommendation.

cc: Infrastructure and Technology Committee



CITY OF AURORA, ILLINOIS

RESOLUTION NO. _____
DATE OF PASSAGE _____

A Resolution authorizing the execution of an Engineering Agreement with Transmap Corporation in the not to exceed amount of \$133,682.50 to update the City's Pavement Management System. WHEREAS, the City of Aurora has a population of more than 25,000 persons and is, therefore, a home rule unit under subsection (a) of Section 6 of Article VII of the Illinois Constitution of 1970; and

WHEREAS, subject to said Section, a home rule unit may exercise any power and perform any function pertaining to its government and affairs for the protection of the public health, safety, morals, and welfare; and

WHEREAS, it is necessary and desirable to have an Engineering Agreement to update the City's Pavement Management System; and

WHEREAS, the City published a Request for Proposals (RFP) for the Pavement Evaluation services on March 3, 2020. Staff reviewed the proposals and determined that Transmap Corporation (Transmap) was the most qualified firm; and

WHEREAS, there is a need for an Engineering Agreement with Transmap Corporation, 5030 Transamerica Drive, Columbus, Ohio 43228 in an amount not to exceed \$133,682.50, a copy of which agreement is attached hereto and incorporated herein as Exhibit 'A'; and

WHEREAS, the 2021 City Budget provides \$133,682.50 for this item in account no. 212-4460-431.73 -91 (Municipal Motor Fuel Tax).

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Aurora, Illinois, as follows: that the City Clerk and Director of Purchasing are hereby authorized to execute the Engineering Agreement with Transmap Corporation. as set forth in Exhibit 'A'.