



"... meeting community needs ... enhancing quality of life."

DEPARTMENT OF PUBLIC WORKS
Engineering Division – Traffic Section
2625 E. Glendale Avenue
Appleton, WI 54911
TEL (920) 832-5580
FAX (920) 832-5570

To: Municipal Services Committee
From: Michael Hardy, Assistant City Traffic Engineer
Date: January 17, 2024
Re: 2024 Sole Source Purchase Request – Various Traffic Equipment & Technologies
CC: Jenifer Huss, City Purchasing Manager

This sole source purchase request is reassessed and presented annually as required by the City Procurement Policy. It was last approved for calendar year 2023.

Background:

Traffic Signal and Control Equipment

Within the traffic signal control industry, there is a tremendous amount of proprietary functionality and limited interoperability. The number of vendors servicing traffic signal equipment is also very limited. For example, Traffic and Parking Control Company, Inc. (TAPCO), located in Elm Grove, Wisconsin, is the exclusive vendor in Wisconsin for Siemens traffic signal cabinet and control equipment, which the City of Appleton uses. TAPCO is also the exclusive state vendor for Eberle Design Inc. (EDI) cabinet equipment, Iteris video detection systems, and other support equipment used in traffic signal control systems. Because TAPCO is designated as the exclusive rights vendor in the state by these manufacturers, they have exclusive knowledge for set-up, testing and servicing, beyond that which the City is capable of performing. There are other vendors in nearby states that carry these product lines, but their manufacturer-vendor relationships do not allow overlap with each other. Thus, the City cannot, for example, do business with Brown Traffic Products, Inc., which is TAPCO's equivalent in Illinois and Minnesota.

Due to the above circumstances, it is common in the traffic industry that complete traffic signal control assemblies are sole-source purchased as complete, functional systems. Another unfortunate reality is that each manufacturer's equipment has its own proprietary firmware and controls, which makes it nearly impossible to competitively procure comparable equipment. In this situation, TAPCO or TCC will assemble the cabinet, controller, vehicle detection equipment and any other integrated equipment, and perform functional testing prior to shipment and installation. The advantage to this approach is it helps manage compatibility issues and puts responsibility on the sole source vendor to assure complete functionality of the system. The disadvantage is that procured equipment is not competitively bid in a formal process. The other common application in the traffic industry is that specifications are written to accept only one manufacturer's products. This gives the illusion of being competitive, but often only one vendor can meet the required specifications.

In 2023, there were some big changes related to the traffic controller and software the city uses. Siemens was acquired by a company called Yunex. Yunex then changed their distribution to a new vendor named Mobotrex. Several other product lines we use (Iteris, EDI, Polara) also transitioned from TAPCO to Mobotrex.

Traffic Signal Preventative Maintenance

Preventative maintenance is a service that is currently sole sourced. The current sole source vendor, TAPCO, has strong familiarity with our equipment since they are exclusive rights vendor in the state by the MMU manufacturer the City currently uses. Having considered this, we feel this is a reasonable cost and the best decision for the City at this time.

Decorative Street Lighting Equipment

Specific items that apply are decorative lighting components involving steel poles, concrete poles, arms and fixtures. One large contributing factor is the City has standardized on a specific appearance and quality using Stresscrete, King and Visco brand. While there are other decorative brands on the market simulating a comparable look, the quality of these off-brands has been much lower, leading to increased maintenance costs and decreased life. To meet the City purchasing policy, we have been competitively bidding these decorative lighting brands through the electrical supply chains. While this gives the appearance of competitive bidding, it actually amounts to a mark-up on a product we ultimately know we are going to purchase. Having considered the above, we feel sole source offers the best value of the City's time and resources.

LED Street Lighting

We have standardized on products from Cooper and Philips as the preferred fixtures. To comply with the City's purchasing policy, we would have to competitively bid these two brands thru the electrical supply chains. While this would give the appearance of competitive bidding, it would actually amount to a mark-up on the product. Based on this, we feel sole source offers the best value of the City's time and resources. We have established a relationship with the manufacturers and have been advised we can purchase from them directly. Where these two products are competitive with each other, we would be able to compare costs direct from the manufacturers which would meet the competitive spirit of the policy. However, three products would be needed to satisfy the policy as written. Having considered the above discussion, we feel a sole source exception offers the best value of the City's time and resources.

Summary:

The City Traffic Section continues to pursue equipment and services to help improve competition in our purchases. We often have alternative vendors bring us equipment to familiarize with and test for compatibility. When we evaluate comparable products, we try to take a holistic approach, considering additional software, training, stocking, etc. We also stay in touch routinely with our counterparts in the traffic industry, like WisDOT, City of Green Bay, and Milwaukee County to help evaluate pricing when and where sole sourcing is performed. This helps communicate between agencies on acceptance of alternative products. We also pursue alternative procurement options when available through the WisDOT procurement contract. Where equipment is consistent with WisDOT procurement contracts, a price match is pursued.

The following is the Traffic Section's current list of equipment and services we feel it is in the City's best interest to sole source for procurement:

Signal Controller and Control Software:

- Yunex (Mobotrex)
- Econolite (TTC)

Signal Control Cabinets:

- Mobotrex
- Econolite (TTC)

Signal Control Malfunction Management Unit:

- Eberle Design, Inc. (Mobotrex)
- Reno A & E (TTC)

Loop Detector Amplifiers:

- Eberle Design, Inc. (Mobotrex)
- Reno A & E (TTC)

Video Detection Systems:

- Iteris, Inc. (Mobotrex)
- Econolite (TTC)

Radar Detection Systems:

- MS Sedco / Intersector. (TAPCO)
- Wavetronix (TTC)
- Iteris, Inc. (Mobotrex)

Pedestrian Pushbuttons:

- Polara (Mobotrex)

Preemption:

- GTT (TTC)

Wireless Radio Communications:

- Encom Wireless (Mobotrex)

Radar Speed Signs:

- Information Display Company
- TAPCO
- Carmanah (Mobotrex)

Field Network Switch:

- Comnet (TAPCO)
- Antaira. (Mobotrex)

Traffic Signal Preventative Maintenance:

- TAPCO

Concrete Poles & Arms:

- Stresscrete / King Luminaire (Visual Impact Lighting, LLC)

Steel Poles & Arms:

- Visco (Commercial Lighting)
- Spring City (Visual Impact Lighting, LLC)
- Structura Inc.
- Candela Series (Spectrum Lighting)

LED Fixtures:

- Stresscrete / King Luminaire (Visual Impact Lighting, LLC)
- Beacon Viper
- Candela Series (Spectrum Lighting)
- Gardco

LED Street Light Fixtures:

- Philips (Neher Electric, TAPCO)
- Cooper Lighting (Neher Electric, TAPCO)

Traffic Cameras:

- Avigilon
- Axis (Hunter Security)
- Costar (Mobotrex)

School Zone Flasher & RRFB Controls:

- (TAPCO)
- Carmanah (Mobotrex)
- RTC