

COUNCIL ACTION FORM

SUBJECT: SIGNALIZED INTERSECTION TRAFFIC CAMERA SYSTEM PURCHASE

BACKGROUND:

As traffic signal technology continues to evolve, City staff periodically review new products for implementation. One component that has seen significant advances is traffic signal detection equipment.

Staff sought product samples of four different camera detection systems to evaluate. The camera system gathers and interprets traffic movement and provides real time analytics, which includes bicycle detection using a camera system providing view of the entire intersection. **Staff has selected GRIDSMART camera system as its preferred vendor and device.**

The GRIDSMART system has a variety of strengths that provide a single 360-degree camera on multiple approaches and real time data on the vehicles such as volume, turning movements, traffic counts, and length-based classifications which give us an advantage over traditional cameras. In addition, GRIDSMART uses a tracking technology that starts tracking vehicles 350 feet from the camera in each direction. The system is simple to install, which includes free software with multiple users able to access at one time.

GRIDSMART operates through local dealers based on territory. As a result, General Traffic Controls of Spencer, Iowa is a sole source vendor for the product. The total system price per standard intersection is \$18,455. The proposal includes equipment, system setup, configuration, testing, and training. It also includes a 3-year warranty for cameras.

In FY 2019/20, there are seven cameras needed for FY 2020/21 for intersection improvements and one camera to be placed traffic operations inventory. Also in FY 2020/21 an additional seven units are planned for five intersection improvements. Proposed costs for the GRIDSMART system are as follows:

FY 2019/20		
CIP Program/Budget	Location	Cost
Collector Street Pavement Improv.	Bloomington & Grand	\$18,455
Multi-Modal Roadway Improvements	30 th & Grand	\$18,455
MOU with ISU (per CC 10/10/19)	State & Mortensen	\$18,455
Regional Count Program	Mobile Data Collection Trailer	\$18,455
Traffic Signal Program	S Grand & DOT/HyVee Entrance	\$18,455
Traffic Signal Program	Lincoln Way & Beach	\$18,455
Multi-Modal Roadway Improvements	13 th & Clark	\$18,455
Traffic Operating Budget	Traffic Inventory	\$18,455
FY 2019/20 Total		\$147,640

FY 2020/21		
CIP Program/Budget	Location	Cost
Traffic Signal Program	S Duff & S 5 th	\$18,455
U.S. Highway 69 Improvements	S Duff & Hwy 30 EB Off Ramp	\$18,455
Grand Avenue Extension	S 16 th & S Grand & S Duff (2 units)	\$36,910
South Dayton Improvements	S Dayton & Hwy 30 (2 units)	\$36,910
Arterial Street Pavement Improv.	13 th & Duff	\$18,455
	FY 2020/21 Total	\$124,185

City policies require that a sole source purchase in this amount be approved by the City Council. Each camera system will be charged to appropriate CIP project. Funding for the FY 2019/20 and FY 2020/21 purchases has been approved in the budget through the respective projects/programs.

ALTERNATIVES:

1. Approve the purchase of GRIDSMART traffic intersection camera systems from General Traffic Controls, Spencer, IA in an amount not to exceed \$271,825 as a sole source purchase.

Camera detection systems will not be purchased until the respective intersection improvement project has been bid and approved by the City Council.

2. Do not approve the purchase of traffic camera systems.

MANAGER'S RECOMMENDED ACTION:

Staff has reviewed available options, selected the system best suited to our traffic signal network needs, and negotiated the best price. **Funding for these units have already been approved through the annual budget process.**

Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1, as noted above.