



Date: June 7, 2018

To: City of Appleton Common Council
Fox Cities Transit Commission

From: Ron McDonald 

Award Recommendation to Replace Intelligent Transportation System (ITS)

BACKGROUND

Valley Transit purchased and installed its first ITS system in 2011 from a vendor called Trapeze. The system included hardware onboard each vehicle: a processing unit (on-board server); driver display/keypad; GPS & cellular antennas; modem; next bus stop interior signs; and interface cabling to the farebox and headsign. To manage the system and operational parameters, Trapeze installed software on a server at City Hall. Trapeze's web-based program, called ITS, was included for staff to monitor operations, run reports and make minor system adjustments.

The main benefits of the system were to provide access to more data for the benefit riders and Valley Transit staff. This data included vehicle location, next bus arrival texts for riders, onboard announcements, and various types of operation data.

From the outset, the Trapeze system did not function properly. There have been significant issues on the hardware and software side. The system is very complex to manage and designed for large urban transit systems. It requires full-time monitoring by an in-house expert and continual follow-up with the vendor. The current system is now over 7 years old and requires replacement. After considering these factors and reviewing other products available in the market, Valley Transit determined the best course was to procure a new system.

In preparation for this procurement, Valley Transit staff began formulating a request for proposal (RFP) to solicit contractors to provide a new ITS system. As part of this process staff reviewed similar RFP documents used by other transit systems that recently purchase an ITS system. In the scope of work, staff took into consideration lessons learned from the previous ITS system. This included selecting a contractor that would provide a solution that was easy for staff to maintain and included the following features: cloud-based server; tablet-based onboard hardware; a smartphone bus tracking app; increased install and acceptance terms; and proven success at similar sized transit systems. All of these issues were incorporated into the RFP document for consideration and review during the evaluation process.

The RFP document was sent directly to vendors who were known ITS system suppliers; posted on the State of Wisconsin's Vendornet system; and advertised online with the *Post-Crescent*



and *Passenger Transport* (transit publication). Proposals were due on May 9, 2018. Seven proposals were received and all met the mandatory requirements in response to the RFP.

ANALYSIS

An evaluation team was assembled to review the proposals. The team included Valley Transit staff, an IT department rep and a planning/GIS rep. Each proposal was evaluated based on the proposed ITS solution, experience, technical support & price. The evaluation team agreed that two of the seven vendors were in a competitive range and able to move forward with the evaluation. The two remaining vendors were invited to a demonstration and interview on May 25, 2018. After considering the initial evaluation and interview, the evaluation team unanimously concluded that DoubleMap (Indianapolis, IN) had proposed the best solution for Valley Transit. Additionally, DoubleMap's was the best value with the lowest cost proposal.

DoubleMap's solution includes the following hardware: a rugged tablet; interface cabling; automatic passenger counters (APC) and cellular/GPS antennas. The server is cloud-based.

A summary of the tools & features of the new system includes: mobile bus tracking app; bus tracking public website; automatic voice announcement system; automatic passenger counting system; GTFS feed generation (data needed for Google Transit); pre-trip/post-trip e-forms; administrative software; and access to data in established reports or raw format.

FISCAL IMPACT

The project will have a total year-one fiscal impact of \$315,901.01. The project includes an additional support agreement for years 2-5 with an annual fee of \$34,034.68.

The operating costs will be supported within Valley Transit's operating budget. The current annual support amount provided to Trapeze and Sprint is \$59,836. The agreement with DoubleMap results in an annual operating cost savings of \$25,801.32.

Valley Transit has secured federal grants to support 80% of the capital costs and the remaining 20% will be covered by the restricted cash account.

RECOMMENDATION

Authorize Valley Transit to enter into a contract with Double Map to purchase an ITS System not to exceed \$315,901 utilizing \$252,720 federal grant funding and \$63,181 restricted cash.