Advanced Traffic Management System (ATMS) Status Report

Martin County
February, 2009
Advanced Traffic Management System

- **What is an ATMS?**
  - A system of vehicle detectors, cameras, and communication systems used to monitor traffic, optimize signal timing, and improve flow of traffic.

- **How did we get here?**
  - MPO reprioritized $2,015,000 in State funds through 2010.
  - Martin County B.O.C.C. funded master plan of ATMS.
  - June 30, 2008 Joint Participation Agreement between Martin County B.O.C.C. and FDOT to construct project.
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- Phasing was prioritized based on congestion and proximity to TMC.
- JPA has funding for phases A-C & equipment for Traffic Management Center (TMC).
- Initial phases on US-1 and SR-714 in City of Stuart
- Remaining phases currently unfunded.
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**Project Scope of Work**
- Traffic management center building (County funded)
- Computer / video hardware for traffic management center
- Central traffic management system software
- Fiber Optic Backbone
- Closed Circuit Television Cameras (CCTV)
- New traffic signal controllers & cabinets (where necessary)
- Video detection cameras in lieu of pavement loops
- Training for County Traffic Engineering personnel.
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• Progress since JPA
  - Martin County Staff has completed a significant amount of preliminary engineering:
    - Extensive research with electronic vendors, contractors, fiber manufacturers, municipalities, and consultant firms.
    - Phase A conduit route design completed and permitted.
    - GPS mapping of existing conduit and pull boxes.
    - Permitting and inspection of Roosevelt Bridge by to utilize existing conduit.
    - Agreed to conceptual cost sharing methodology for fiber optic network with Martin County Information Technology.
    - Negotiation of central traffic management system software.
    - Submitted permits for TMC building.
    - Preparation of design-build bid package.
    - Phase B and C conduit route design in progress by ARCADIS.
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- Evaluated several methods for ATMS procurement:
  - Piggy back other municipalities annual contracts.
  - System Integrator / System Manager.
  - Traditional design-bid-build.
  - Design-Build.
  - Limited staff availability for project management and desire for turn key system.
  - Unlike road or bridge construction projects training and documentation are necessary for a successful ATMS project.
  - Chose Design-Build procurement.
  - Design-Build allows selection based on both technical merits and cost.
  - Traffic signal controllers, video detection cameras, and cabinets will be procured separately to reduce mark up.
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- **Schedule**
  - March 2009 Design-Build award date.
  - April 2009 installation of central traffic signal software.
  - May 2009 begin construction of phase A.
  - May 2011 completion of all funded phases.
  - Evaluate system and seek continued funding for additional phases as necessary.
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