



THE CITY OF CHATTANOOGA

SMART TRANSPORTATION SYSTEMS

Transportation Department 2015

SMART TRANSPORTATION SYSTEMS

What comes to mind when we mention the term “Smart Transportation? or its more generic term “ITS.” (Intelligent Transportation Systems)

Is it a smart, integrated roadway network?

Is it providing the user with safe and efficient transportation options?

Truth is, that it is both. The City of Chattanooga is working on some very high-tech solutions to transportation problems, as well as some simple fixes to provide a safer path for bicyclist and pedestrians.



ITS HISTORY IN CHATTANOOGA

The Chattanooga Central Business District Project
CBD: \$2.5 Million ARRA 2009 Project – Upgraded 85 Intersections



ITS HISTORY IN CHATTANOOGA

The Chattanooga Regional ITS Project:

Phase 1: \$9.9 Million CMAQ Project – 115 Intersections

- Both Projects have provided high-speed communications and new infrastructure to approximately 200 of our 350 signalized intersections.
- This includes connection with over 20 additional traffic signals in the Cities of Red Bank and East Ridge.
- We have also built monitoring stations to verify traffic vehicle counts, and travel times within a corridor.

CHATTANOOGA REGIONAL ITS PROJECT, CONTINUED

Phase 1A & 3 - 7:

- The CDOT ITS program will continue through 2020, with additional technologies to provide our Transportation Management Center (TMC) real-time information on the health of the transportation network.
- New phases include cameras that detect vehicles (both cars and bicycles) for better operation of a traffic signal. These are not red-light or speed cameras, but a technology that provides data to better time and manage a traffic signal.

PROPOSED CCTV TECHNOLOGY

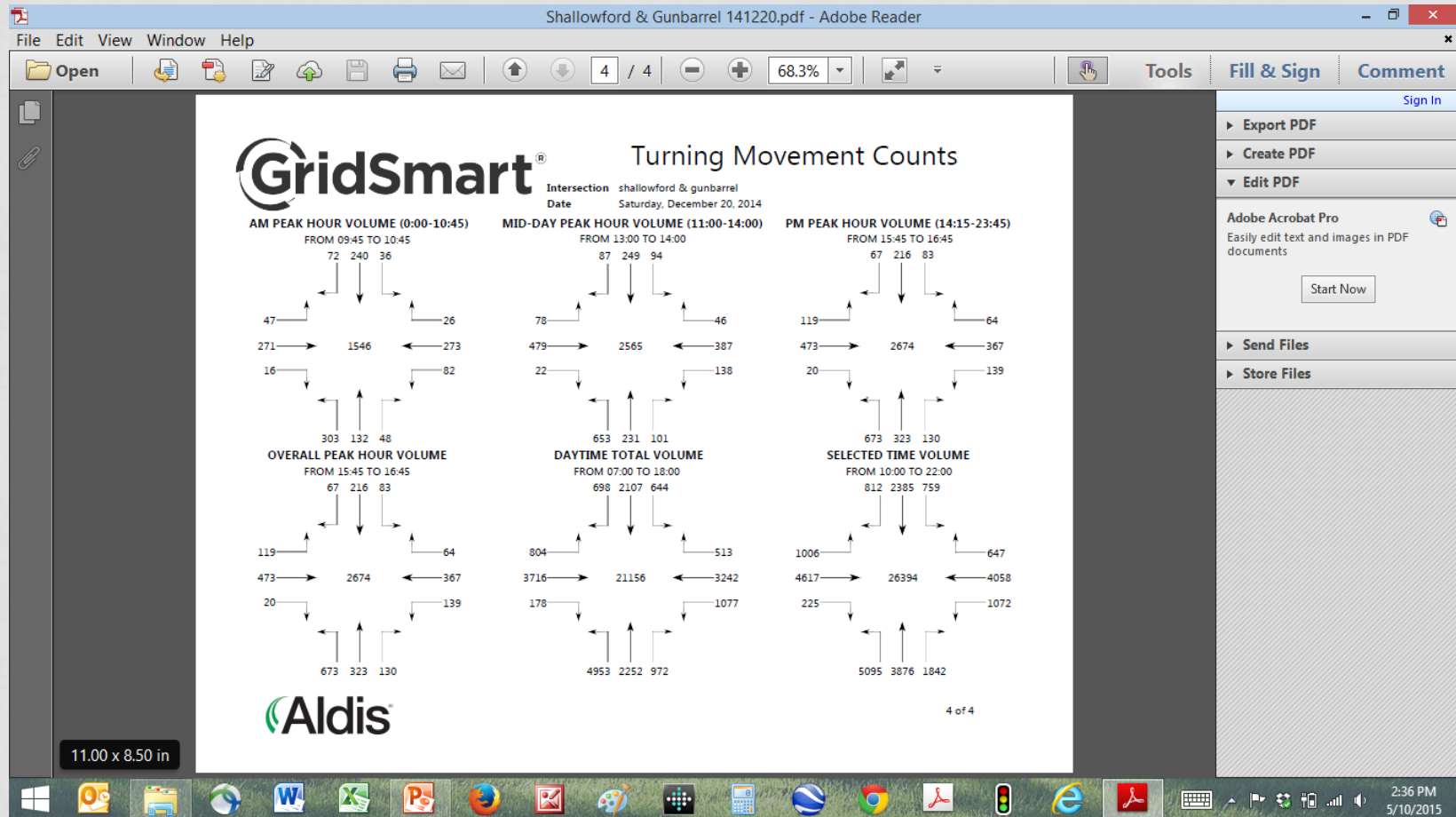


INTERSECTION VIEW



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DATA COLLECTION



ADVANCED TRANSPORTATION MANAGEMENT SYSTEM (ATMS)

Chattanooga Regional ITS Phase 2:

- Advanced Transportation Management System (ATMS) will tie databases together from across the City and County.
- It will compile information about delays, congestion, construction, where parking or transit options are most available and providing that information to the public in an open architecture format.



CONNECTED VEHICLE TECHNOLOGIES

- CDOT is working with academia on a USDOT Connected Vehicle Program test bed project which will provide the City of Chattanooga with one of the first Connected Vehicle projects in the country. The project is a “Vehicle to Infrastructure” (V2I) project and indicates a new direction in the technology focus from vehicles.



CONNECTED VEHICLE TECHNOLOGIES

- The project is intended to provide connection between Freight, Transit and Emergency Vehicles in the SR 153 & Enterprise South Business Park area
- The project will be monitoring pollution and self adjusting signals to compensate for increases in the pollution and other factors.



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CHOICE

- Finally, the City has also applied for and been awarded grants to improve the Bike and Pedestrian network in the City.
- The City's new Form Based Code identifies 4 major "character areas" of the City and requires that the infrastructure match the "character" of those areas.
- Sidewalk "Gap" study looks at locations where sidewalks can be extended, completed with the most benefit.
- Key routes were identified for the "Bike Implementation Plan" and are being installed throughout the City.
- In addition to this, we have also recently applied for a grant to improve Transit, Bike and Pedestrian infrastructure along the City of Chattanooga's busiest transit route (CARTA #4 Brainerd Road)

CDOT'S GOALS

Roadway widening projects are expensive. Consider an urban or suburban environment with limited right-of-way, or natural obstacles not to mention the costs of construction.

The Mayor and CDOT recognize this dilemma and are working towards better solutions. This presentation indicates some of those solutions.

1. Use Technology to improve our existing systems.
2. Provide safe, efficient and accessible choices in mode.
3. Provide safe, efficient and accessible choices in route.

QUESTIONS ?

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We cannot solve our problems with the same thinking we used when we created them...Albert Einstein

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