

“The Meaning and Value of ITS in Our Community”

By Lauren Netherton

Without change there is no innovation, creativity, or incentive for improvement. Those who initiate change will have a better opportunity to manage the change that is inevitable. - William Pollard

Writer William Pollard would agree that change is an inevitable part of life. Our culture is constantly changing and adapting. Innovation drives and forms our culture as it has throughout time. I do not consider the 21st century as the peak century of innovation. As time progresses, more areas of improvement appear with more horizons to explore. ITS provides an area to explore and research as we move forward. As we evolve culturally, we must advance with the efficient use of our existing infrastructure. ITS impacts our community, and has the power to be of great benefit to many people in Tennessee. From transporting goods from local farms to downtown markets, to handling the outpour of traffic from country music events, ITS has a place in Tennessee.

ITS has the power to transform our transportation system into one that is powerful and beneficial to all Tennesseans. Through an information rich network, Tennessee's transportation network ideally could be fully connected, able to address safety concerns, environmental issues, and mobility changes at the drop of a hat. For this to happen, Tennessee needs to band together to support ITS initiatives. The beneficiaries of a transformed transportation network are the travelers, agencies, and industries currently here and to come in Tennessee.

The main beneficiaries of a robust information network are the travelers. A happy traveler is one who is able to notice a reduction in crashes, has eco-friendly mode choices, and is able to take the quickest route. As Tennessee advances with ITS, our citizens will notice quicker commute times, better air quality, and real-time re-routing to name a few. Better connectivity will change how our communities interact. A new social cosmos will be generated through the ease of travel between cities. Tennesseans could efficiently visit loved ones and friends without being “trapped” in traffic. More productive work days will be seen throughout all the major cities such as Nashville, Memphis, Chattanooga, and Knoxville. People will have shorter, less frustrating commute times. One example of this is the bus priority soon to be implemented in Nashville. Nashville is working on a bus signal priority system that will allow MTA to have priority on corridors. Along with the bus priority, multimodal usage is growing in popularity in Nashville. The use of all modes of transportation is paramount in providing the traveler with an efficient trip.

Transportation agencies in Tennessee also will benefit with ITS. With large sets of data, transportation agencies can make wise decisions that will be advantageous to travelers, while minimizing cost to the agency. Transportation agencies will be able to respond dynamically to changing conditions to better serve the community in a safe and effective way. Signal timing, transit capacity and ramp operations are just a few areas that agencies will be able to adjust remotely. At my current job in Nashville Public Works, the benefit of a sensitive transportation system would mean so much to the Traffic Department. Working with antiquated technology can often be frustrating to the laborers who have to fix it daily. Not only do the citizens suffer from inadequate technological difficulties, so does our department. We lose time, money, and valuable resources every time we have to go fix something that was never adequate to begin with.

Tennessee industry will also benefit from ITS. ITS will provide a place for inspired academics and professionals to pursue transportation research. ITS may even provide a marketplace in Tennessee that will support new inventions, creative products, and services that were never used of thought of

before. As for the industries that use the road daily, a transformed transportation system will permit efficient deliveries and dynamic deployments of fleets. This benefit will trickle from the industry down to the layman.

In my local community I can see how ITS will benefit Nashville. As many locals know, our infrastructure cannot handle the demand that is currently set upon it. Parking downtown has a fixed number of spots with inconsistent turnover. Nashville is looking for a way to maximize the efficiency of downtown parking. This will keep spots filled with some still available for the local visitor. As for our large Titans football games, Predators hockey games and country music events, our future traffic center will be able to respond to the large influx and exodus of traffic demand remotely in real-time. With ITS, the visitors to Nashville will be able to enjoy the large scale events that draw so many people to our vivacious city. Our bikeshare "b-cycles" and transit lines will also allow for multimodal transportation use. As Nashville grows, the reliance on informative and adaptive transportation is going to increase exponentially.

In conclusion, ITS will contribute to Tennessee's economic growth, safety, and mobility. These three factors are paramount to the creation of a beneficial community and society. From my study of Civil Engineering in school, to my job at Public Works, I have realized how important it is to create a system that is interconnected and functioning in regard to transportation. This synergy is vital to the health of the community that it serves. From the local traveler to administrative entities, industry, and tourists, ITS has great value to all road users, and is an important area for professional and academic research. I believe Pollard was right when he said that change is inevitable and that we must initiate change in order to control and manage it. Our communities must initiate a systematic approach to the inevitable needs in our transportation system. This approach will come from a transformed transportation network through ITS initiatives.