

# NATIONAL VISION AND ITS IN MARICOPA COUNTY, ARIZONA

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## Introduction to Maricopa County

Maricopa County has a population of over 3,200,000 people (2002). It is the fourth most populous county in the nation, and is home to more people than 21 states and the District of Columbia. Maricopa County has a land area of 9,226 square miles, 15.6 % is incorporated and 84.4 % is unincorporated. It is the fifth largest of Arizona's 15 counties, and the 14th largest county in the United States. Maricopa County is larger than seven states and the District of Columbia. The county measures 132 miles from east to west and 103 miles from north to south. Twenty-four cities and towns are located within Maricopa County's outer boundaries.

## National Vision

On the National Level the US DOT and ITS America have set a vision of "Zero Fatalities, and Zero Delays" also known as Vision Zero. While the impression of this vision would leave many people with the initial reaction of the impossible, it must be remembered that this is the vision, which should be strived for in the Management of traffic flow on our roadways. When a plane goes down, investigations continue until the cause of the accident is fully understood and new safety measures implemented to prevent that type of accident from occurring again. When a car accident happens, we tend to accept it as just another incident on our roadways.

## What does zero fatalities mean?

The transport system generates over 42,000 deaths and 3 million injuries each year, making it one of the largest contributors to the health burden in America. The toll on the economy of this health epidemic is estimated at \$230 billion each year. Vehicle accidents are also a leading killer of teens in America. The ITS America Zero Fatalities vision means that no deaths are considered acceptable. By focusing first on safety and eliminating injury, system designers can use intelligent transportation technologies to make the zero fatalities vision a reality.

The zero fatalities vision is the next critical step in the evolution and sophistication of our transportation system. It is important to begin looking at mobility and safety as a unified goal. We want to travel; we are a traveling nation and we want to feel safe when we travel. If we can eliminate fatalities and reduce serious injuries through ITS technologies, we make public safety a top priority in transportation operation. We will realize our goal that no amount of death on our nation's highway is acceptable. It is important that transportation leaders make a concerted effort to save lives and reduce injuries.

The ITS America vision is the first step in a roadmap. The organization has made a commitment that public safety in transportation using ITS technologies is a priority. ITS America has committed that ITS technologies give transportation engineers and system designers the tools to achieve the zero fatalities vision that was not possible 50 years ago when current transportation systems were designed. The roadmap includes establishing the ITS America commitment with key organizations, agencies, and legislators. The plan is to develop a coalition to create a movement of like-minded organizations developing the information, resources, and tools that will move transportation design to the next level.

To support the Vision Zero initiative, ITS America has identified the following nine strategic goals:

1. Lead and accelerate the achievement of the "zero fatalities, zero delays" vision through comprehensive advocacy, communications, and ITS research, deployment, and operations initiatives;
2. Position and promote the implementation and operation of ITS as a vital, top priority component of the nation's homeland security initiatives;
3. Engage and link public safety and health communities through expanded outreach and cooperation to fully integrate ITS operations and public safety initiatives;
4. Become overall facilitator and leader of an integrated network of transportation information working with other key stakeholder groups;
5. Advocate and educate the federal, state, and local governments to establish policies and funding to accelerate the implementation of ITS;
6. Create tools and resources that enable members to fulfill their ITS mission;
7. Increase targeted awareness of ITS;
8. Promote ITS development, deployment, and operations to mitigate congestion, increase mobility, and optimize transportation operations;
9. Engage and link freight and other inter-modal communities through expanded outreach and cooperation to fully integrate ITS in key inter-modal operations & activities.

Maricopa County's goal is to align with this vision and the following sections detail initiatives that support the national vision.

## AZTech Program

The AZTech Intelligent Transportation System (ITS) Model Deployment Initiative (MDI) was a seven-year project to develop an integrated Intelligent Transportation System for the Phoenix Metropolitan area. Phoenix was selected as 1 of four MDI sites in the country. It began in 1996 and through the initial grant of \$7.5m which leveraged several more million dollars through private partnerships, introduced a freeway and arterial street network that decrease travel time and enhance travel mobility, resulting in safer and more efficient facilities for the traveling public.

The philosophy behind AZTech is based on a growing realization among government leaders that separate transportation agendas serve neither traffic managers nor regional travelers. AZTech has become an integrated mechanism that has not only developed and integrated new transportation technology, but has also demonstrated some distinct advantages of a regional operation coalition. AZTech identifies regional traffic management concerns and implement ITS solutions on a regional basis.

MCOT was awarded a second, just under \$3m, Federal Grant for the AZTech program in 2003 to expand the initial grant funded project. The current project has three focus areas: strengthen connectivity between Traffic Management Centers in the Valley and extend the connectivity to Public Safety,

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develop conceptual designs for a regional fiber communication network, and enhance radio interoperability in the region. This project is currently in design with implementation scheduled for FY 05/06.

Over the past 20 years, traffic volumes have increased faster than the road capacity. There is a realization among Traffic Engineers that ongoing expansion of the roadway infrastructure is not going to solve our growing congestion problems. On the national level, the interstate freeway system is complete and the focus has shifted to how the existing infrastructure can be used to optimize traffic flow and safety on the system through ITS applications. Similar approaches are being followed at the local city levels where once the arterial network is build out, the focus is shifting to the installation of ITS technologies to manage traffic flow for optimization of the system. The 2004 Urban Mobility Study indicates that in terms of congestion increase between 1982 and 2002, total delay in the Phoenix area

has increased faster as compared to an average value for comparable urban areas in the 1 million to 3 million population groups.

The three areas which directly support the ITS America vision and which is the focus of MCDOT ITS and AZTech are Integrated Traffic Management, Incident Management (REACT) and Traveler Information. These initiatives were introduced as part of the initial AZTech Grant..

The following is a brief description of how these 3 areas contribute to Vision Zero:

**Integrated Traffic Management**

The integration of traffic signals within and across jurisdictional boundaries saves travel time and reduces delay. Smart Corridors represent concentrated applications of arterial traffic management technologies. Key elements of the SMART (Systematically Managed Arterials) Corridors that have been deployed to date are closed-circuit television (CCTV) cameras, variable message signs (VMS), vehicle detection, and traffic signal coordination. Traffic data and visual monitoring from CCTV cameras can be shared among different agencies. Traffic Management using VMS and signal timing can be performed from Traffic Management Centers (TMCs) at a variety of agencies. As a result, the operation of SMART Corridors has transcended boundaries in the Phoenix metropolitan area, for transportation agencies and the traveling public alike. Phase I of the Smart Corridor project was implemented under the initial

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**New England Section**



*Chris DeWolf*

The New England Section deeply regrets the passing of Chris DeWolf from the Newington Fire Department. Chris was killed in a car accident after being called into work during a snowstorm.

The tragedy to the New England IMSA Section is that the previous week, Chris had taken and passed the Level I Municipal Fire Alarm Certification Program that was put on by the New

England IMSA and hosted by the Newington Fire Department.

**Ontario Section**

**President's Message**

In October, IMSA Ontario Section held its 2nd annual Traffic Expo at the Holiday Inn, Burlington. It was a great success with more exhibitors and a wider range of products and services on display. Those who were unable to attend missed an opportunity of discussing new products and meeting fellow attendees from other municipalities.

We are in the preliminary planning stages of our 3rd Traffic Expo in 2005, which we anticipate will be bigger than the 2004 Expo.

The Ontario Section is reviewing all aspects of the operation of the Section. We will look where we have been, where we are now and where we are going. All operations-administration, schools, newsletter, the traffic expo, AGM, membership, etc. are under review. The objective is to streamline operations for the future benefit of the membership. If you have thoughts on what should be improved or other things we should be doing, please let me know by email: [jkeefe10@cogeca.ca](mailto:jkeefe10@cogeca.ca)



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