



VEHICLE TRAFFIC

INFORMATION COALITION

Benefits of Real-Time Traffic Information



INTRODUCTION

- ▶ Real-time traffic information mitigates traffic congestion with subsequent economic, environmental, public safety and homeland security benefits.
- ▶ Drivers, Traffic Managers and Public Safety Professionals benefit by using this information to avoid, mitigate and navigate around traffic congestion.
- ▶ By using real-time traffic information:
 - Goods and services flow more freely;
 - Fuel consumption decreases;
 - Air becomes cleaner;
 - Workday commutes are shortened;
 - Incident response times are faster;
 - Emergency evacuations are improved.

HOW DOES REAL-TIME TRAFFIC INFORMATION WORK?

- ▶ Sensors, observations, cameras, GPS devices and cell phone frequency patterns collect traffic flow information.
- ▶ Computer algorithms are used to analyze the data and communications technologies are used to convey continuous traffic and road condition information.
- ▶ Drivers receive congestion updates and/or routing instructions through:
 - onboard navigation systems;
 - cell phones;
 - 511 information systems; and
 - radio and satellite broadcasts.
- ▶ Empowered with this information, drivers with the help of technology can choose a more efficient route to their destination.

WHAT ARE THE SOURCES OF REAL-TIME TRAFFIC INFORMATION?

- ▶ Real-time traffic information is derived from several sources:
 - Public Sector;
 - Private Sector; and increasingly,
 - Partnerships between Public and Private entities.
- ▶ Governments are responsible today, and for the foreseeable future, for the collection of most traffic data. By making that data available to the private sector for instantaneous analysis and distribution, drivers are given the information they need, when they need it and where they need it.

WHAT ARE THE SOCIETAL BENEFITS?

- ▶ Improved Mobility
 - ▶ Economic Growth
 - ▶ Improved Fuel Efficiency
 - ▶ Cleaner Environment
 - ▶ Faster Emergency Response
 - ▶ Enhanced Disaster Evacuation
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Improved Mobility

- ▶ Americans spend 4.2 billion hours each year enduring traffic delays.
- ▶ Using real-time traffic technologies, drivers remove themselves from areas of congestion and disperse across the available transportation infrastructure.
- ▶ In Europe and Japan the benefits of real-time traffic technologies have been proven:
 - Tests of the Japanese Vehicle Information and Communication System (VICS) found the amount of time saved using real-time traffic information was approximately 15%.
 - The CLEOPATRA project in Europe found a 10% improvement in travel time.

Economic Growth

- ▶ Our nation's economic health depends upon the free flow of goods and services.
- ▶ Using real-time traffic information, goods and services can be delivered more quickly and more reliably.
- ▶ Just-in-time delivery is made more efficient thereby driving down the costs of expensive inventories.
- ▶ As the internet has improved economic growth by speeding the delivery of information, real-time traffic technologies can foster economic expansion by speeding the delivery of people, goods and services.

Improved Fuel Efficiency

- ▶ Americans burn 2.9 billion gallons of fuel each year sitting in traffic jams.
- ▶ The use of real-time traffic information allows drivers to avoid pockets of congestion and the inefficient fuel usage that otherwise results.
- ▶ An Australian study found the use of traffic information could produce up to 33% fuel economy improvements.
 - In this study, the benefits of real-time traffic technology compared favorably to hybrid vehicles.

Cleaner Environment

- ▶ More efficient fuel consumption results in reduced carbon emissions into the air.
- ▶ By improving fuel efficiency, real-time traffic information can have a direct impact on reducing pollution.



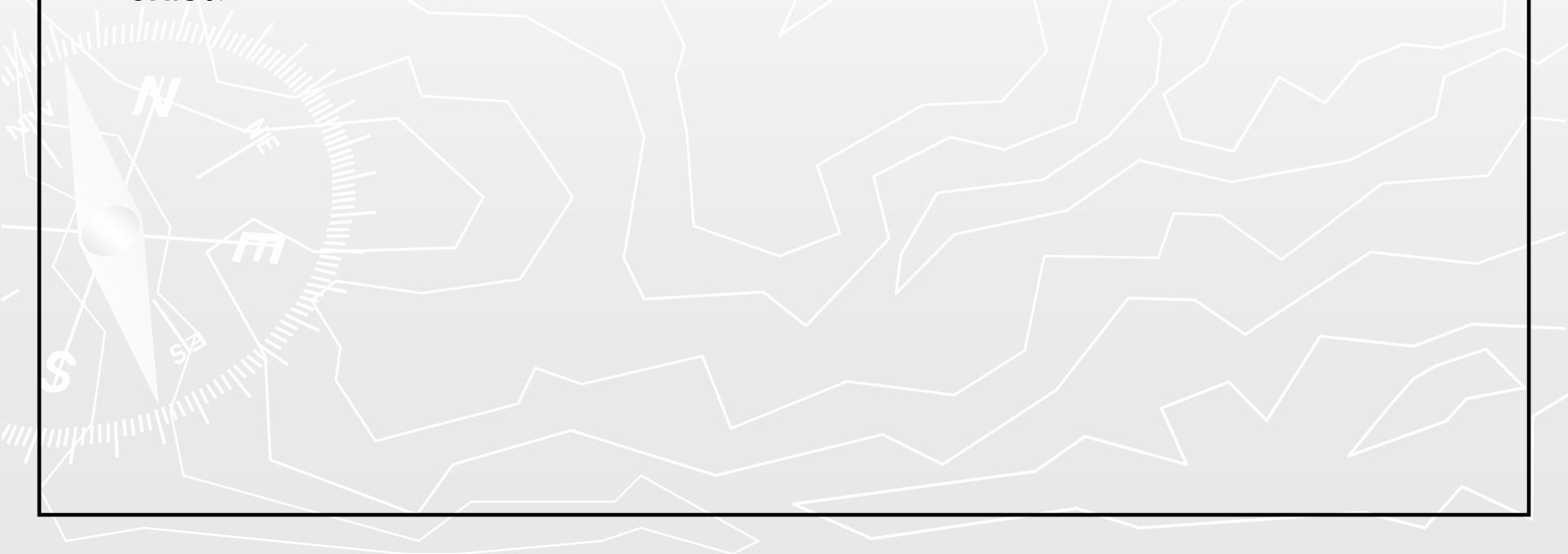
Faster Emergency Response

- ▶ Finding the quickest route to and from an emergency saves lives. When an accident causes serious injury, emergency service response time is absolutely critical.
- ▶ Real-time traffic technologies shorten:
 - the period between departure from an EMS facility and arrival on the scene, and
 - the time period in which the victim is transported from crash scene to a qualified medical facility.



Enhanced Disaster Evacuation

- ▶ Real-time traffic technologies can expedite disaster relief and evacuation activities in cases of large-scale disasters. (e.g. hurricanes; tropical storms; nuclear facilities emergencies; etc).
- ▶ Any emergency plan requiring the expeditious movement of large numbers of families is enhanced by knowing where available routes exist.



CONCLUSION

- ▶ Real-time traffic information allows us to greatly increase the efficiency of our existing transportation system.
- ▶ The benefits of using real-time traffic information extend beyond the immediate roadway to the economy, the environment, public health, public safety and homeland security.
- ▶ Real-time traffic technologies are available right now.
- ▶ Through greater cooperation between the public and private sectors, we can deliver these benefits today.