

# **Public-Private Partnerships in Advanced Traveler Information System Deployment**

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**NATMEC Conference**

**August 29, 2000  
Madison, Wisconsin**



***TranSmart***

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# Why Public-Private Partnership in ATIS?

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- **Traveler information market is not mature yet**
  - High risk
  - Unproven revenue sources
  - Travelers believe it should be provided free of charge
- **Traveler info is of great value to the society and has commercial value if appropriately packaged**
- **High cost tag in data collection, processing, and dissemination**
  - Extensive infrastructure and investment needed in nationwide data collection
  - New intelligent systems are needed for generating and providing nationwide traveler information via new and traditional media

# How Can Public & Private Work Together?

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- **Data Collection**

- **Nationwide standard of ATIS data collection for both public and private organizations**
- **Partnership in infrastructure deployment**
- **As the current major data collectors, public sector should**
  - **make the data more accurate and reliable**
  - **allow private sector to access data more efficiently**

# How Can Public & Private Work Together?

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- **Data Processing and Value Addition**

- **Public organizations could encourage private organizations to develop intelligent data processing capability and add value to raw traveler information data**
  - **provide seed money**
  - **setup incentive programs**
- **Partnership in region-wide deployment of ATIS systems**

# How Can Public & Private Work Together?

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- **Data Dissemination**

- Incentive programs are needed to encourage private organizations to provide personalized traveler information system via new media
  - web
  - wireless devices
  - in-vehicle devices
- Nationwide standard of ATIS data dissemination for both public and private organizations

# TranSmart/TrafficCast Approach

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- **Partnership in Data Collection**

- **Public organizations provide most of the data for TranSmart/TrafficCast traveler information systems**
  - **historical traffic data: volume, speed, travel time**
  - **real-time traffic data: incident, construction, speed, travel time**
  - **weather**
- **Private partners provide complimentary incident data**

# FleetOnline & TrafficCast

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- **Public-Private Partnerships in Developing & Deploying Customized Real-Time Traveler Information System for CVO - FleetOnline**
  - AZTech Phase II Model Deployment
  - GCM Corridor
  - Other Areas
- **Public-Private Partnerships in Deploying Traffic Forecast System**

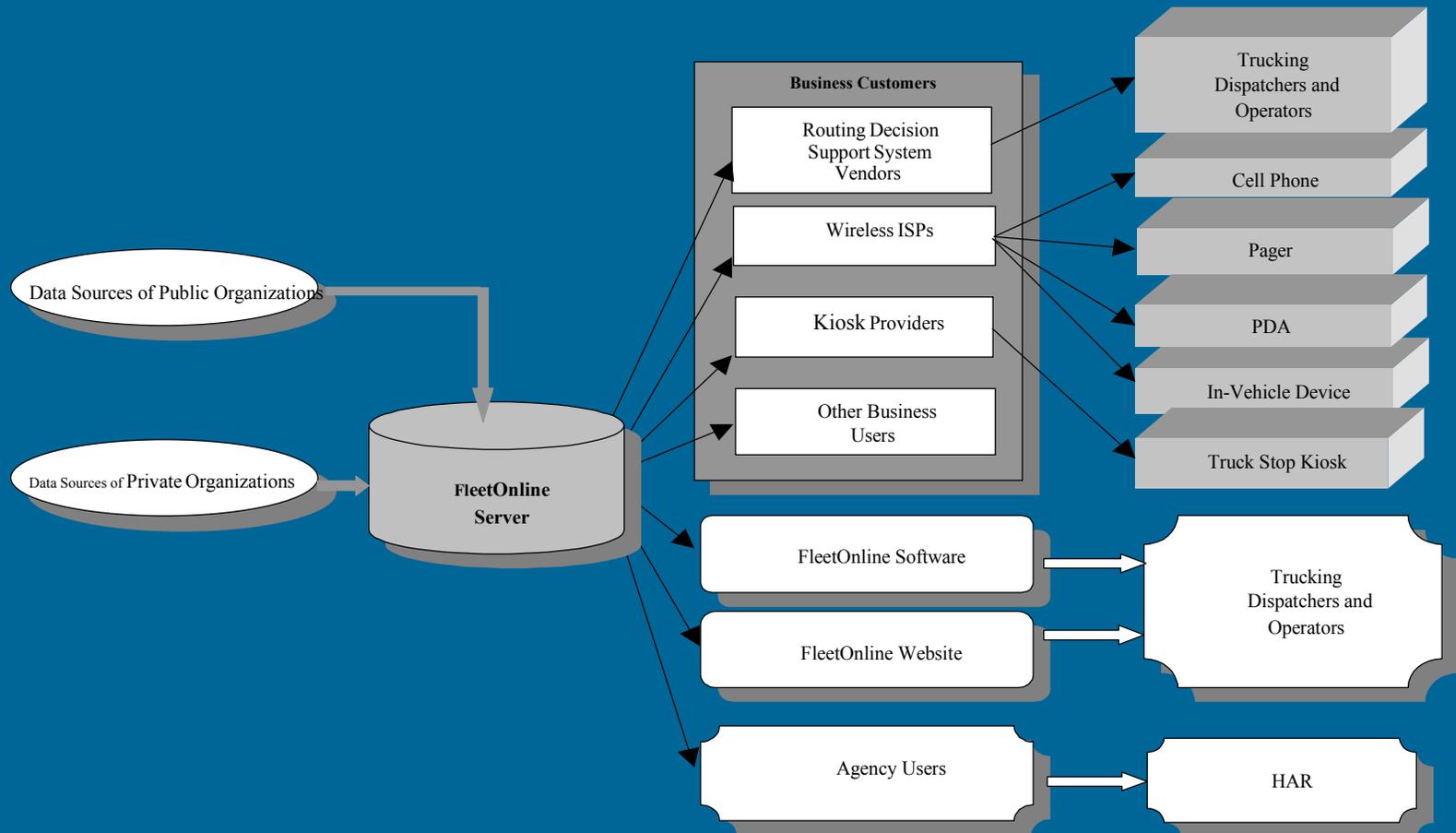
# FleetOnline System Features

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## ✦ Customized Route-Specific Solutions

- Real-Time and Predicted Information
- Driving Restriction Information
- Shortest Path Searching
- Alternative Routing
- Automated Updates and Warning

# FleetOnline System Architecture



# *FleetOnline -- Database*

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## ◆ **Static**

- **Highway Network**
  - Interstate Highway
  - State Highway
  - Major Arterials
  - Minor Arterials

## • **Driving Restrictions**

- Overheight
- Overlength
- Overwidth
- Overweight

## ◆ **Time-Dependant**

## ◆ **Real-Time**

- Traffic
- Construction
- Special Event

# FleetOnline Software System

**Configuration**

Route Restriction Warning

Functions

- Shortest Distance
- Shortest Time
- Minimum Cost
- User Specified
- Alternative Route
- Hub
- Minimum Turns

Truck Info Speed Cost

MPH

Interstate Highways

State Highways

Arterials

Real Time Info:

**Map**

Page Grand Ganado Kingman Flagstaff Springerville Phoenix Parker Yuma Tucson

**Explanation of Symbols**

- ES CORTS REQUIRED FOR 10' WIDE & OVER
- CLASS "C" PERMIT REQUIRED OVER 8' WIDE
- ES CORTS REQUIRED FOR 12' WIDE & OVER
- LENGTH RESTRICTED ROUTE
- \$100.00 BRIDGE
- LEGAL WEIGHT ONLY BRIDGE
- LOW OVERPASS MUST DETOUR
- LOW OVERPASS
- LOW OVERPASS DETOUR ROUTE
- INTERSTATE HIGHWAYS
- U.S. HIGHWAYS / STATE AND PROVINCIAL HIGHWAYS
- AIRPORT

**Report**

**FleetOnLine Route Report**

From Origin:

**Route # 1**

Go through O40B for 1.82 miles. No restriction.

Go through I40 for 189.3 miles. No restriction.

**Distance: 191.12 miles; Time: 2.75 hours; Cost: \$437.22**

**Route # 2**

Go through O40B for 7.56 miles. No restriction.

Zoom In Zoom Out Redraw Run Routing Restriction Warning

Preview



# *TrafficCast*

*A National Traffic Forecast Center*

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## ◆ **Current Function & Features**

Speed and travel time predictions

Historical traffic and weather based estimations

Complete United States coverage

All interstate, state highway, and major arterials

Each state and top 100 metro areas

Personalized reports for different drivers and different vehicles

# Current Function & Features (continued)

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## Dissemination Methods

Internet available time-dependent congestion maps of freeways and arterials

Text reports in WAP and XML

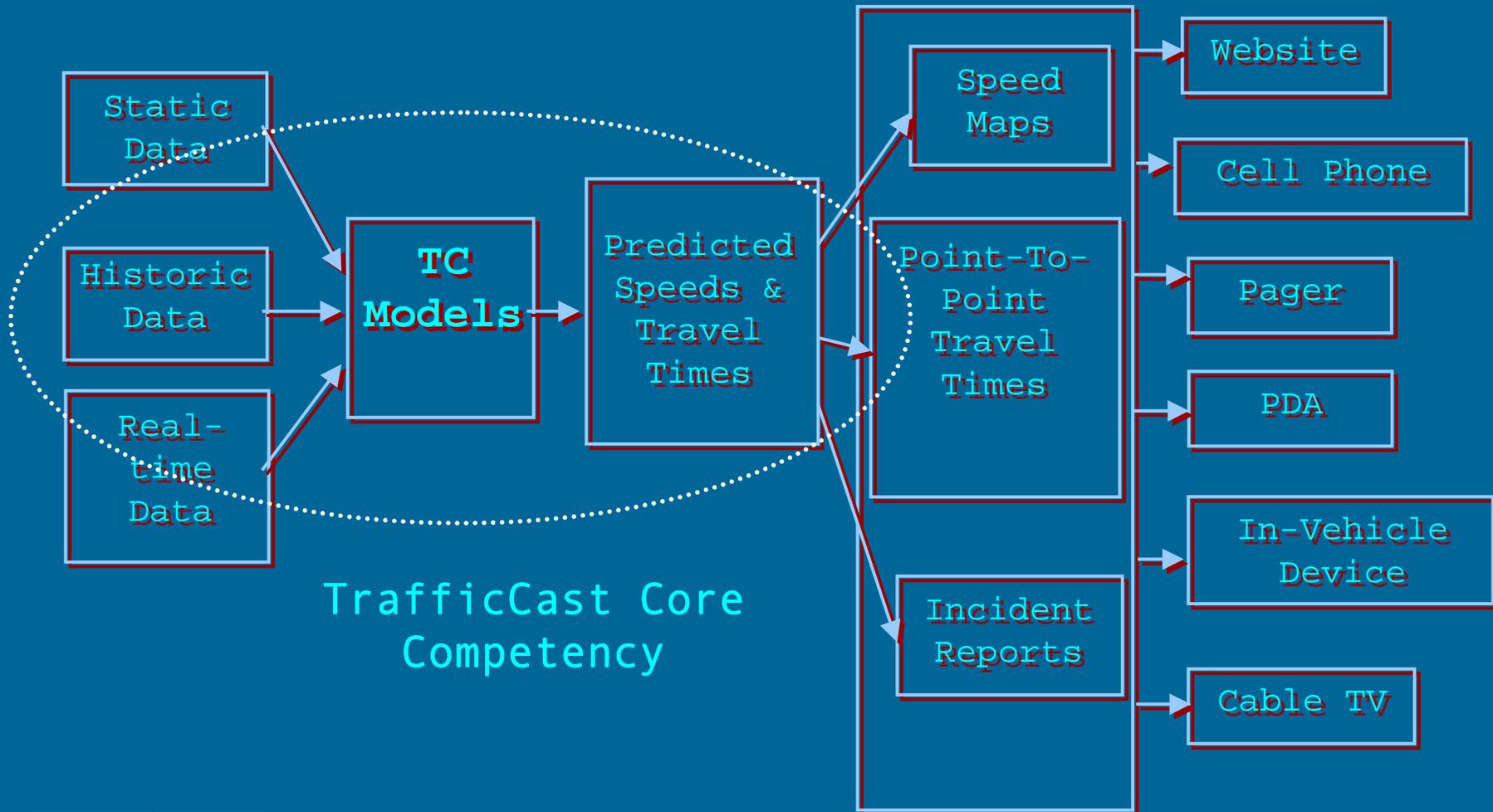
## Traveler Profile and Alert Capability

User profiled route and travel time threshold

Exception notification via e-mail alert

TrafficOnline proven capability for six US cities

# System Architecture



# TrafficCast Website

TRAFFICCAST.COM INC. - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites History Mail Size Print Edit

Address <http://www.trafficcast.com> Go

Links [Best of the Web](#) [Channel Guide](#) [Customize Links](#) [Free Hotmail](#) [http-www.wsu.edu-~yan-news.html](#) [Internet Explorer News](#)

**TrafficCast™**  
The Power of Prediction

A National Traffic Forecast Center

## Welcome to TC

**Predictive Speed Maps**

Illustrate Current estimated traffic speeds and time-dependent speeds for the next few hours and next morning commute traffic.

**Predictive Travel Time Report**

Users can select driver behavior and vehicle type. For a specified route, predicted travel speed and time, along with costs and delays are predicted.

**Real-Time Traffic Data Feed**

Currently, Chicago, Houston, Milwaukee, Phoenix, San Francisco and Seattle are available; links with additional cities with government-generated feeds are being forged.

**Web Resource**

- Airport Info.
- Construction
- Driving Condition
- Real-Time Traffic
- Real-Time Camera
- Transit Info.

**Corporate**

- About
- Corp. Info
- Disclaimer
- FAQ

**Real-Time Traffic**  
TrafficOnline Web Service

**Prediction**

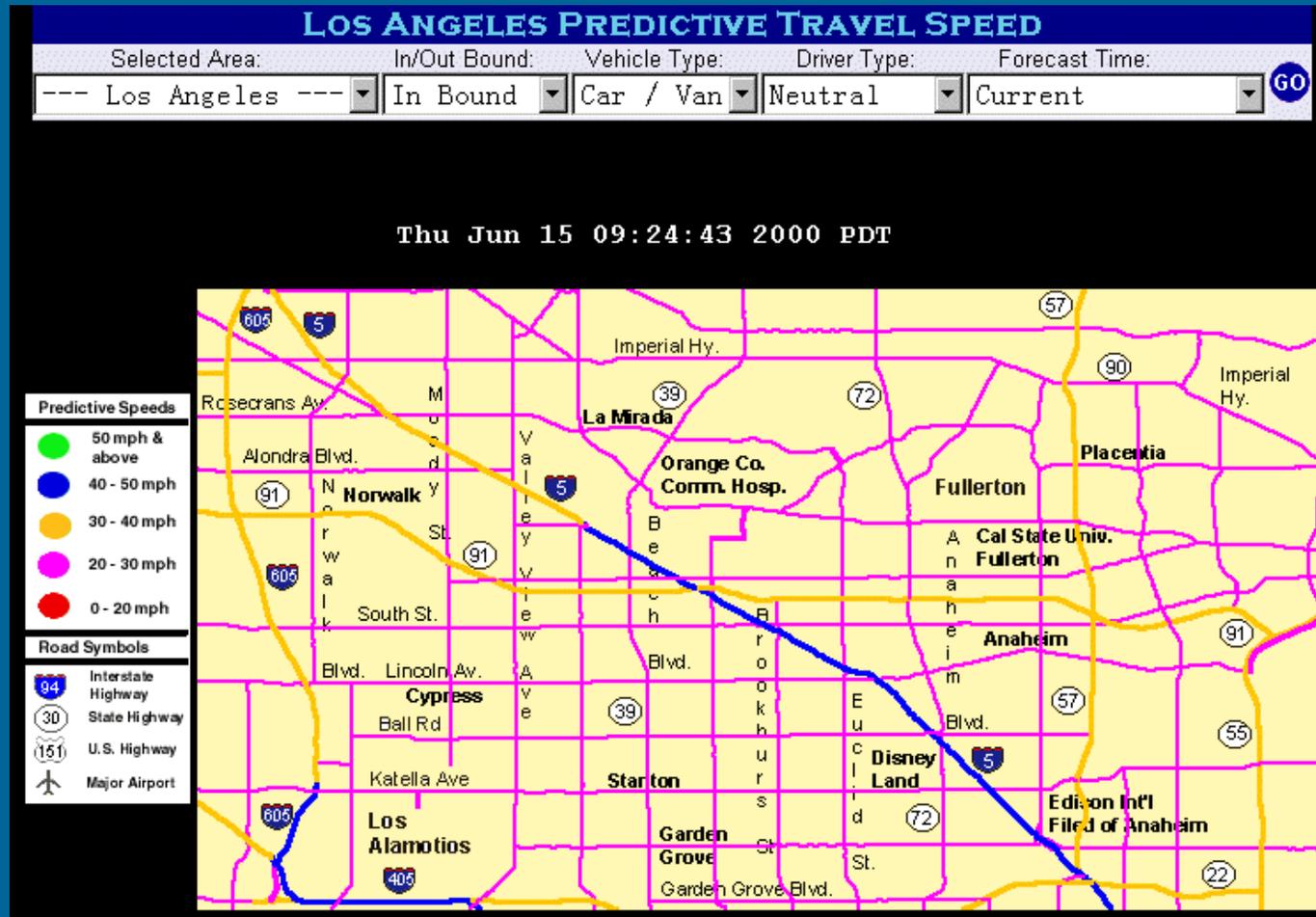
**Travel Speed**  
StateWide  
CityWide

**Travel Time**  
StateWide  
CityWide

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Done Internet

# Speed Maps



# Text Report III

**Traffic Prediction Report**

Generated on : 03/17/2000 17:07:11  
Location : Chicago, IL  
Highway : I-294  
From Cross Street : S68  
To Cross Street : 127TH ST  
Driver Type : Neutral  
Vehicle Type : Car

**Summary for Your Trip**

	Travel Time	: 57 Minutes
	Travel Speed	: 42.8 Mph
	Travel Delay	: 19 Minutes
	Travel Distance	: 40.8 Mile(s)
	Travel Cost :	
	1. Mileage Cost	= \$13.2
	2. Parking Fee	= \$0.00
	3. Toll Fee	= \$0.00
	4. Cost of Travel Time	= \$5.71
	Total	= \$18.9
	Given Arrival time	: Sat Mar 18 11:15:00 CST 2000
	Predictive Start time	: Sat Mar 18 10:17:51 CST 2000
	Select a different city or state?	

# PDA for Receiving Traffic Prediction Report

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# WAP Phone for Receiving Traffic Prediction Report

