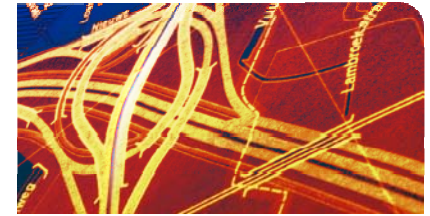




INNOVATION. COMMITMENT. VALUE. EXPERIENCE.



" No Mickey Mouse Operation ! "

Case Study Work Zone ITS

Polk County, FL ITS - "PITS"

Presented by:

Michael P. Klatt

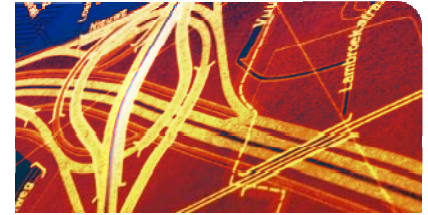
ADDSCO Director, Business Development

August 14th, 2006

NATIONAL RURAL ITS CONFERENCE 2006 - BIG SKY MONTANA

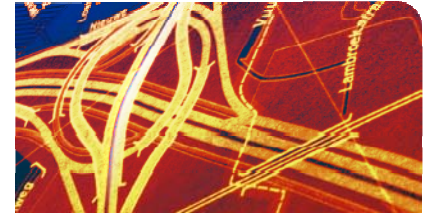
Fostering regional cooperation through technology application





Background

- I-4 primary roadway Florida's Gulf & Atlantic Coasts
- Heavily Traveled: Tourists, Commercial Truck, Commuters, Disney World
- Rural Segment of I-4, Expansion of 1 lane E/W
- 29.5 mile Construction Area
- Total Project Expansion Cost: \$224m
- Project Start: Sept 2003, On-going

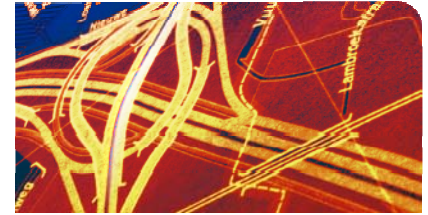


Objectives

- Provide Real-Time Information to the Public
 1. Pre-Trip Real-time Info to Public “at-large”
 2. Roadway Real-time Info to Motorists
 - Alerts to Const Activity, Alerts to backups & delay times, Alerts to incidents, Special Events, Alternate Routes, Travel Times*
- Wireless communication **flexibility** & maintain **integrity**
- Coordinate w/FDOT PIO w/o Burden on FDOT or Contractor
- Turnkey Solution Provider: Design, Deploy, Maint, Service & Operation of system & web sites, with coordinated & Centralized WZ Control
- Flexible system for construction phasing & incident mgmt
- Cost-Efficient, Flexible yet Reliable ITS Solution
- Support DOT and Free Contractors to do their primary job

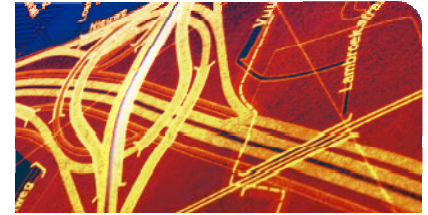


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Primary Elements

- Smart Zone Portable Traffic Mgmt Systems - 10
 - PTZ CCTV
 - Mini, Full Matrix DMS
 - Traffic Detection & Sensing
- VTOC Central Software System – 1 Primary w/Back-up
- Custom FLEX-RTMS Sensor Units - 18
- LED Portable Changeable Message Signs (PCMS) – networked -11
- Highway Advisory Radios (HAR), networked - 2
- Wireless Communications Network – Complete, 4
- Web Interface and Dissemination - 2
- Qualified professional service provider -1
(Facilities, Operations & Maintenance)

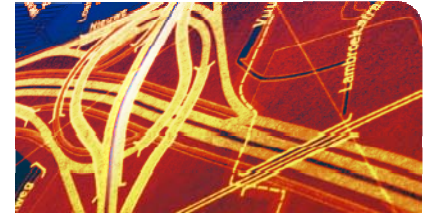


Requirements for Success

Intelligent Design for the Specific Project

Strategic Location of Devices

- Traffic Detection: At Critical Points of Queuing
- Cameras: Field of View to Queue Points & Decision Points
- PCMS: In Advance of Decision Points & Crossroads
- Smart Zones: Detection & Travel Times Prior to Decision Pts
- HAR: Outer-limits, Detailed information
- Network: Inclusive, plus safety coverage

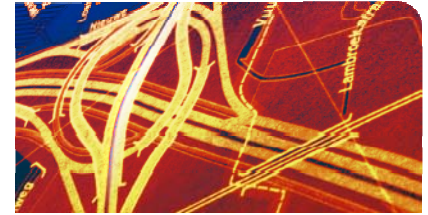


Requirements for Success

Experienced Planning & Execution

Operations & Maintenance

- Trained TOC and Traffic Mgmt Operators
- Intimately familiar with the project and stakeholders
- Dedicated personnel for routine maintenance and emergency services (24/7/365)
- Automate common & repetitive tasks for real-time info
- Coordination & Communication with Stakeholders
 - e.g. Contractor, Traffic Control, Road Rangers, FDOT, Consultant PIO
- Experienced Network Technical Services - Reliability
- Maintain Credibility with the Public & Motorists

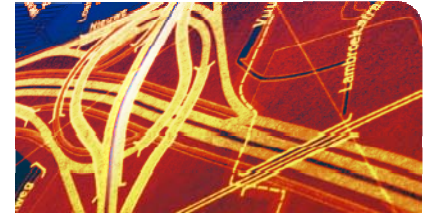


Requirements for Success

System Information (automated or manual)

Must be

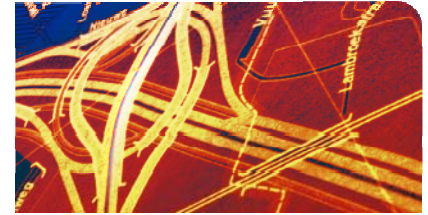
- Accurate
 - *real-world, right now, right here*
- Timely
 - *up to date, “real-time”*
- Pertinent
 - *informative, useful, improve the quality of life/drive of motorist*



WHAT Was The Outcome..?

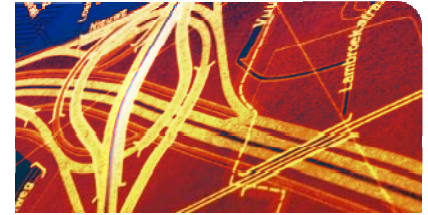
Professional Services Results

- Fully-functional Work Zone system that is truly *solutions* specific to the project's needs.
- A “team member” and stakeholder in the project that has a vested interest beyond monthly payments.
 - Takes complete ownership in the system and the solution
 - Takes responsibility for achieving the system's objectives and overall desired results



WHAT is the end result for taxpayers..?

- A better informed motoring public
(our end customer)
 - Greater satisfaction in the service/improvements provided (I-4 Expansion)
 - Better Information = Better Decisions
- Increased traffic flow, less accidents, quicker clearance, less congestion
- Safer Work Zones for all parties
 - Workers & Motorists



OVERVIEW Of Work Zone ITS Professional Services Solutions

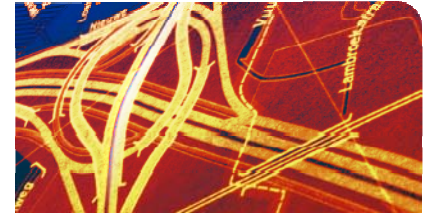
- Project/System Design & Consultation
- Complete System Deployment
 - Devices, Wireless Communications, Testing & Acceptance
- Maintenance & Service
 - All devices, wireless network, routine & emergency
- Operations
 - WZ System, Web Site, Coordination & Communication

Turnkey SOLUTION

- One Point of Contact, Full Responsibility



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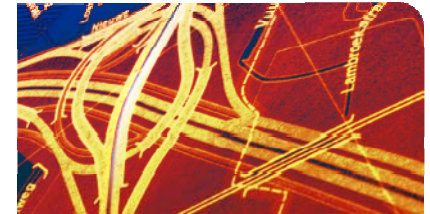


SUMMARY OF OPERATIONS ITS Work Zone and Incident Management Professional Services

- Work Zone Monitored 24/7/365
- Trained, Work Zone Traffic Management, Duty Officers provide accurate & up to date information
- ADDSCO TOC (ATOC) is dedicated to Work Zone ITS and Incident Mgmt for each specific project
- Serve as Information Clearinghouse
- Manage & Address ALL service & maint *proactively*
- Allow Contractor & DOT to do their jobs more efficiently & safely



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Project Web Site

www.i4polk.com

Microsoft Internet Explorer window showing the Polk County Construction website.

Address: <http://www.i4polk.com/content/>

Navigation menu (left sidebar):

- First Time User
- Links
- Current Conditions
- Project Information
- Glossary
- Press Releases
- Publications
- Speakers' Bureau
- Take Our Survey
- Contact Us
- FAQ
- Work Zone Safety

Main content area:

CENTRAL FLORIDA'S 4 CROSSROAD

POLK COUNTY

The map shows Interstate 4 running through Polk County. Contract 1 is highlighted in green, showing a new ramp at the Memorial Boulevard interchange. Contract 2 is highlighted in purple, showing a new off-ramp at the same interchange. Contract 3 is highlighted in orange, showing a new ramp further east. Various landmarks and roads are labeled, including US 98, Lake Wales, and Lake Alfred.

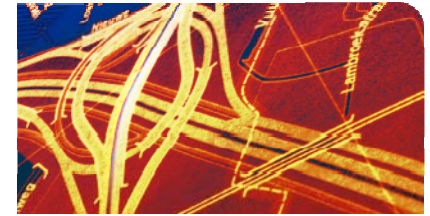
PROGRESS REPORTS

CONTRACT 1 NEW RAMP PROVIDING DIRECT ACCESS TO EASTBOUND INTERSTATE 4 FROM MEMORIAL BOULEVARD (EXIT 28) NOW OPEN
POLK COUNTY, FL (Dec. 12, 2005) ? A new ramp giving motorists direct access for the first time to eastbound Interstate 4 from Memorial Boulevard is now open. The ramp opened on schedule on Sunday, Dec. 11. We are excited to have this ramp ... [More >>](#)

CONTRACT 1 COMPLETELY NEW INTERSTATE 4 WESTBOUND OFFRAMP AT MEMORIAL BOULEVARD (EXIT 28) NOW OPEN; NEW RAMP GIVES MOTORISTS DIRECT ACCESS TO MEMORIAL BOULEVARD FROM WESTBOUND I-4 FOR FIRST TIME EVER
POLK COUNTY, FL (Feb. 15, 2006) ? The completely new westbound Interstate 4 off-ramp at the Memorial Boulevard Interchange (Exit 28) is now open. The opening of this ramp in early February marked a major milestone in the Polk



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Segment Specific Information

14 :: Polk County Construction - Microsoft Internet Explorer

Address: <http://www.i4polk.com/content/interior.asp?section=curconditions&body=main.asp>

Google Search

14 :: Polk County Co...

Home
First Time User
Current Conditions
Links
Project Information
Glossary
Press Releases
Publications
Speakers' Bureau
Take Our Survey
Contact Us
FAQ
Work Zone Safety

Construction Update:
Signup!
E-mail:

Name

OR

CURRENT CONDITIONS

Current Conditions

Click on a segment below to see a current view of any of the ten segments of I4 listed below.

View all Current Conditions

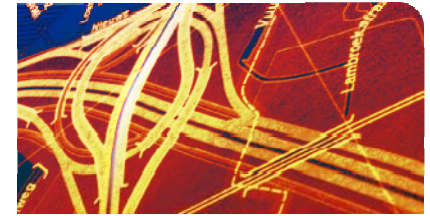
- Galloway Road
- Kathleen Rd.
- Hwy 98
- Hwy 582
- Hwy 33
- Hwy 570
- Hwy 559
- West Ground Rest Area
- Hwy 27
- Champions Gate

Internet

7:46 PM



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Specific Exit/Crossroad Information

14 :: Polk County Construction - Microsoft Internet Explorer

Address: <http://www.i4polk.com/content/interior.asp?section=curconditions&body=seg3.asp>

Google Search

14 :: Polk County Co...


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Work Zone Safety

CENTRAL FLORIDA'S 4 CROSSROAD
POLK COUNTY

CURRENT CONDITIONS

U.S. 98 (Exit 32)

WEST Sat Aug 12 19:36:23 2006



Construction Update:
Signup!
E-mail:

Name

OR

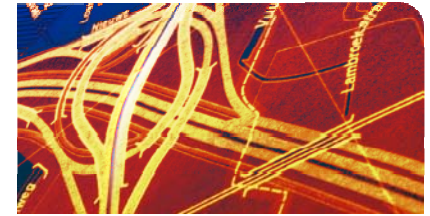
	Avg. Speed	Occupancy	
East Bound	66	1.0	Outside Lane
	62	1.7	Center Lane
	62	1.3	Inside Lane
West Bound	76	1.5	Inside Lane
	75	1.2	Center Lane
	63	1.2	Outside Lane

Done

start Microsoft Office Pict... Microsoft PowerPoint ... PITS I4 :: Polk County Con... Search Desktop Internet 7:47 PM



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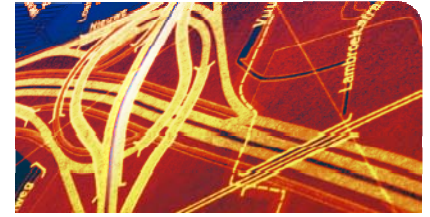


PITS Networked PCMS





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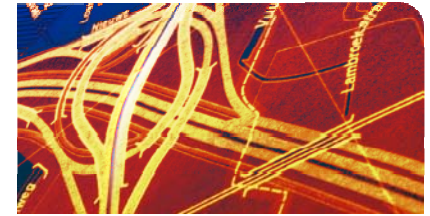


PITS FLEX-RTMS Sensor Platform





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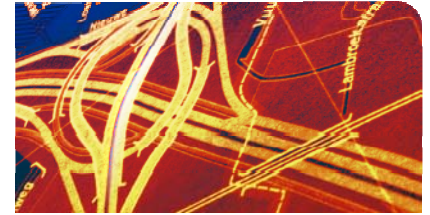


PITS
Smart Zone
PTMS





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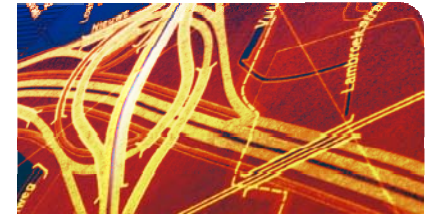


Smart Zone PTMS w/HAR





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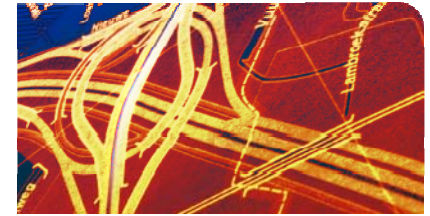
Professional Solutions & Standards for ITS Work Zone Performance



Questions...?



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Contact Information

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