



Driving Indiana's Economic Growth

ITS Midwest 2007 Fall Meeting

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History of Traffic Management / ITS in Indiana

- Freeway Management: I-80/94 Borman Expwy
 - AADT 150,000 / 35% trucks (truck AADT 50,000+)



History of Traffic Management / ITS in Indiana

- 1991 - Hoosier Helper Freeway Service Patrol begins in Northwest IN (34 miles)
 - 1996 - 24/7 service begins
- 1997 - Hoosier Helper FSP begins in Indianapolis (95 miles)
- 1999 - Hoosier Helper FSP begins in Southern IN near Louisville (28 miles)
- 325,000+ motorist assists since 1996



History of Traffic Management / ITS in Indiana

- 1999 - After several years of field device testing, NW Indiana ATMS deployment begins (completed in 2001)
- 2000 - Gary TMC opens
- 2000 - Temporary Indpls TMC opens
- 2002 - Indpls ATMS deployment begins
- 2004 - Indpls TMC / ISP Post 52 opens



History of Traffic Management / ITS in Indiana

INDOT Gary TMC



INDOT Indianapolis TMC
/ ISP Post 52



Traffic Management Organizational Structure

- Traffic Management Business Unit
 - Four Divisions
 - ITS Technology Deployment (Troy Boyd)
 - Traffic Management Centers (Jay Wasson)
 - Public Safety Operations (Guy Boruff)
 - Traffic Control Systems (Ryan Gallagher)
 - Report to Deputy Commissioner of District Operations & Traffic Mgmt (Mike Cline)



Greatest Success Story - Indpls TMC / Post 52

- INDOT Indianapolis Traffic Management Center / Indiana State Police Post 52
 - Co-located
 - INDOT System Operators / ISP Dispatch in same room
 - Greater understanding of each agency's role
 - Build upon cooperation in the field (Hoosier Helpers and Troopers); now exists in office, too



Greatest Success Story - Indpls TMC / Post 52



Greatest Challenge - Evansville DMS Deployment

- Evansville metro area (6 counties) = 343,000
 - Vanderburgh County = 172,000 / 1 OH River crossing
- 1998 - 12 DMSs (9 on arterials)
 - Controlled by Indpls TMC; relies on contact from Evansville Central Dispatch
 - Less than cooperative; DMSs underutilized
 - Currently 8 DMSs (5 on arterials)
- Lessons: Need solid local support / put DMSs only where detection & CCTV exists / focus on freeways



What's Next in Indiana

- NW Indiana ATMS technology upgrade
- Upgrade oldest DMSs to full LED
- Complete Indianapolis ATMS
- HAR Flasher installation statewide
- 511 statewide
- ATMS in Southern Indiana near Louisville
- Rural Interstate Deployments
 - INDOT Traffic Management Strategic Deployment Plan



INDOT Traffic Management Strategic Deployment Plan

- Preliminary Draft completed March 2005
- Extensively revised in 2006-2007 in response to INDOT re-engineering / Major Moves and expanded Traffic Management / ITS role at INDOT
- Draft Version 2.2 (October 2007) - currently seeking input from outside INDOT, per Senate Enrolled Act 315



INDOT Traffic Management Strategic Deployment Plan

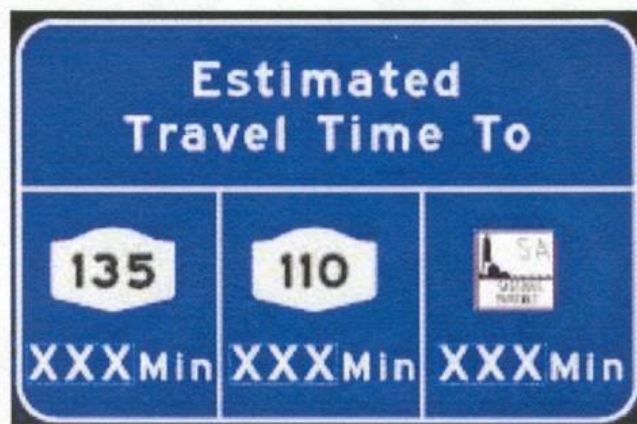
- Data-driven analysis of INDOT system (AADT and LOS) (in-house study)
- ITS field device recommendations for next 10-15 years (primarily freeways)
- Advanced Traffic Management Systems (ATMS) in Indianapolis, Northwest IN, Southern IN near Louisville (338 miles)
 - New & Replace ATMS during road projects



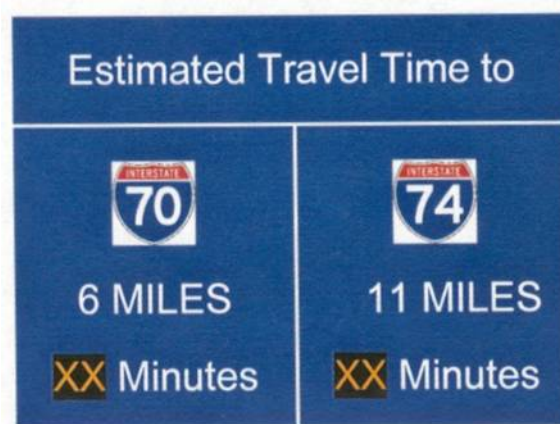
INDOT Traffic Management Strategic Deployment Plan

- Travel Time Signs in Indianapolis & Northwest Indiana (42)

New York State Example



Indiana Example



INDOT Traffic Management Strategic Deployment Plan

- Comprehensive coverage on I-65, I-69 (Bloomington to Michigan), I-70, I-80/94, I-94, I-265, I-465, I-469, I-865, & SR 912
 - CCTV Cameras & Vehicle Detection (293 cameras) (583 total cameras including ATMS areas (837 total miles))
 - 1-3 mile rural spacing (based on LOS)
 - Dynamic Message Signs (135 total (89 new))
 - 20-30 mile rural spacing / before major decision points in urban areas



INDOT Traffic Management Strategic Deployment Plan

| | <u>Traffic Management</u> | <u>Road Project</u> |
|-----------|---------------------------|---------------------|
| 2007-2009 | \$ 30,600,000 | \$ 11,800,000 |
| 2010-2012 | 36,400,000 | 8,600,000 |
| 2013-2015 | 24,900,000 | 28,100,000 |
| 2016-2018 | 0 | 29,100,000 |
| 2019-2021 | <u>0</u> | <u>17,900,000</u> |
| TOTAL | \$ 91,900,000 | \$ 95,500,000 |

GRAND TOTAL = \$187,400,000

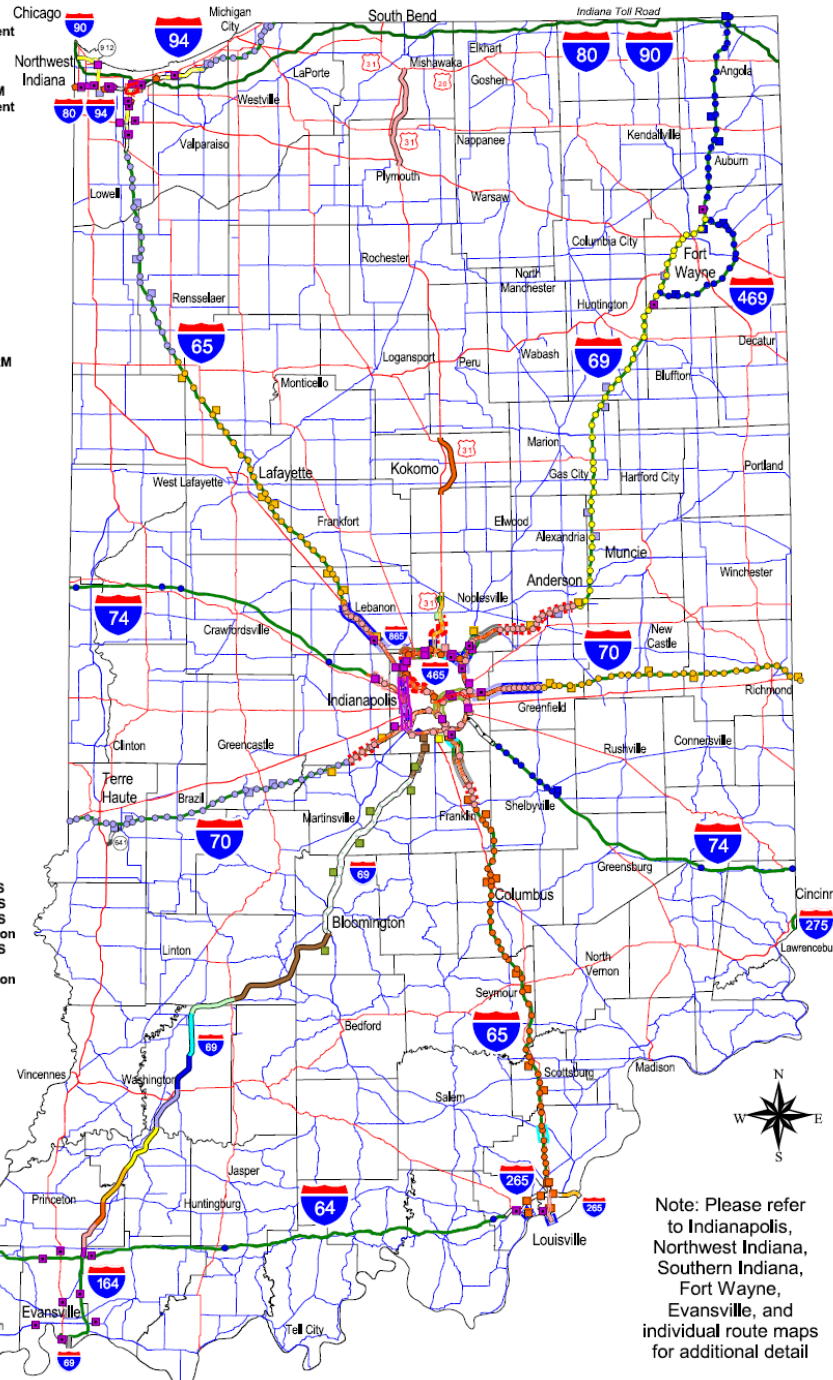


Statewide Deployment Recommendations - Chronological

- 2007 I-70 1/10 Mile RM
- 2007-09 ATMS Replacement
- 2008 DMS Upgrade
- 2008 DMS
- 2008 TTS
- 2008-12 I-465 1/10 Mile RM
- 2008-12 ATMS Replacement
- 2008 I-69 Conduit
- 2009 CCTV
- 2009 DMS
- 2009 TTS
- 2009 1/10 Mile RM
- 2009 I-69 Conduit
- 2009-13 US 31 Conduit
- 2010 CCTV / Detection
- 2010 DMS
- 2010 TTS
- 2010 1/10 Mile RM
- 2010 2/10 Mile RM
- 2010 I-69 Conduit
- 2010-15 US 31 Conduit
- 2011 CCTV / Detection
- 2011 DMS
- 2011-17 US 31 1/10 Mile RM
- 2011 2/10 Mile RM
- 2011 I-69 Conduit
- 2012 CCTV / Detection
- 2012 DMS
- 2012 1/10 Mile RM
- 2012 2/10 Mile RM
- 2012 I-69 Conduit
- 2013 CCTV / Detection
- 2013 DMS
- 2013 ATMS Replacement
- 2013 I-69 Conduit
- 2014 CCTV / Detection *
- 2014 DMS
- 2014 TTS
- 2014 ATMS Replacement
- 2014 I-69 Conduit
- 2015 ATMS Replacement
- 2015 I-69 Conduit
- 2016 DMS
- 2016 ATMS Replacement
- 2016 I-69 Conduit
- 2017 DMS
- 2017 ATMS Replacement
- 2018 TTS
- 2018 ATMS Replacement
- 2019 DMS
- 2019 ATMS Replacement
- 2019 1/10 Mile RM
- 2019 2/10 Mile RM
- 2019 I-69 Conduit
- 2020 TTS
- 2020 ATMS Replacement
- 2020 I-69 Conduit
- 2021 ATMS Replacement
- Existing & Super 70 ATMS
- 2007 Indpls Phase 3 ATMS
- 2007 Indpls Phase 4 ATMS
- 2007 TTID Vehicle Detection
- 2008 Indpls Phase 5 ATMS
- 2009 New ATMS
- 2009 TTID Vehicle Detection
- 2011 New ATMS
- 2012 New ATMS
- 2013 New ATMS
- 2014 New ATMS
- 2015 New ATMS
- 2016 New ATMS
- 2017 New ATMS
- 2019 New ATMS
- Interstate
- Indiana Toll Road
- US Route
- State Road
- Proposed Freeway
- County Line

* Isolated Weigh Station and Rest Area sites on I-64 & I-74 in 2014 are camera-only sites (no detection)

SCW 10-22-07



Note: Please refer to Indianapolis, Northwest Indiana, Southern Indiana, Fort Wayne, Evansville, and individual route maps for additional detail

