

Will Your Project make the Cut

Road School
March 30, 2005

Making the Cut

- Evaluation and review process for Expansion and Added Capacity Projects
- Evaluation, review and development of various types of Safety Projects

Making the Cut

Added Lanes / Additional Capacity Projects develop through a process

- Public and Stakeholder Involvement – Public / District Meetings
- Policy Guidance
- System Definitions

Making the Cut

- Needs Assessment
- Financial Resources
- Technical Analysis Statewide Travel Demand Model
- Major Corridor Investment Benefit Analysis
- Economic Simulation Model

Making the Cut

The INDOT Long Range Plan

Making the Cut

The INDOT Long Range Plan

- If a project is not in the plan it is not a viable project.

Making the Cut

Added Lanes / Additional Capacity Projects develop through a process

- Must have local planning support from MPO's and must be included in their plan also.
- The appropriate Program Management Group (PMG) reviews the project and programs it into the SPMS
- A scope-of-work is established and a Preliminary Engineering report is completed

Making the Cut

- Environmental Assessment
- Environmental Document Completed and approved
- The project is designed and right-of-way and permits are obtained
- The project is constructed
- The 'NO BUILD' option is viable at any time

Making the Cut

- In 2000 a Statewide Congestion Assessment was completed
- As projects move forward they are checked against this assessment
- Snapshot of Inventory, used static growth factors, and does not account for new projects
- Third iteration

Making the Cut

State of Indiana Level of Service (LOS) for 2005

LOS Criteria for Basic Freeway Sections

LOS	LOS	V/C Ratio
A	A	0.38
B	B	0.44
C	C	0.66
D	D	0.84
E	E	1.00
F	F	>1.00

Free Flow Speed = 65 mph



Making the Cut

State of Indiana Level of Service (LOS) for 2010

LOS Criteria for Basic Freeway Sections



LOS	VIC Ratio
A	0.28
B	0.44
C	0.66
D	0.84
E	1.00
F	>1.00

Free Flow Speed = 65 mph



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Making the Cut

State of Indiana Level of Service (LOS) for 2015

LOS Criteria for Basic Freeway Sections



LOS	VIC Ratio
A	0.28
B	0.44
C	0.66
D	0.84
E	1.00
F	>1.00

Free Flow Speed = 65 mph



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Making the Cut

State of Indiana Level of Service (LOS) for 2020

LOS Criteria for Basic Freeway Sections

LOS	V/C Ratio
A	0.28
B	0.44
C	0.66
D	0.84
E	1.00
F	>1.00

Free Flow Speed = 65 mph



Making the Cut

State of Indiana Level of Service (LOS) for 2025

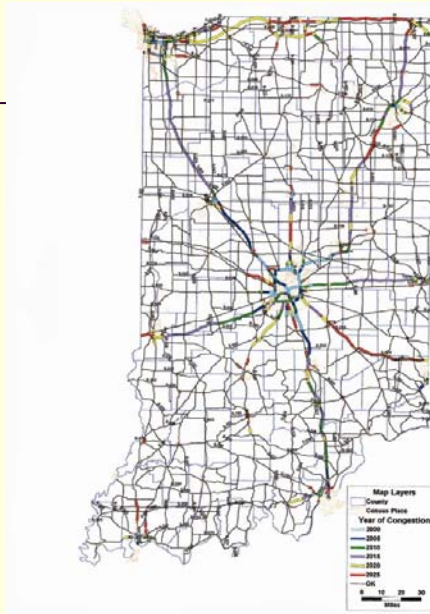
LOS Criteria for Basic Freeway Sections

LOS	V/C Ratio
A	0.28
B	0.44
C	0.66
D	0.84
E	1.00
F	>1.00

Free Flow Speed = 65 mph



Indiana Congestion Assessment 2000 - 2025



Peak Hour Assessment Statewide Summary of INDOT Roads

STATE OF INDIANA CONGESTION DATA

Statewide Summary

STATE ROADS	17,216 Miles					
YEARS	2000	2005	2010	2015	2020	2025
Dist VMT	106,730,241	127,407,353	148,858,919	174,087,459	204,212,430	240,370,316
AM Peak Hour VMT	4,070,866	5,205,411	6,150,636	7,242,323	8,491,021	9,983,348
PM Peak Hour VMT	5,221,052	6,654,459	7,688,232	8,252,211	9,731,370	11,451,064

Congestion Summary

Using Benchmark V/C	Year	2000	2005	2010	2015	2020	2025
Length (mi)		146.18	136.06	179.67	339.09	292.33	340.29
AM PK-HR VMT		482,688	656,300	1,640,828	2,824,040	4,152,333	5,847,350
AM PK-HR VMT (%)		10.50%	10.20%	26.49%	38.99%	48.50%	58.57%
PM PK-HR VMT		583,762	1,117,131	1,916,618	3,293,388	4,843,033	6,817,482
PM PK-HR VMT (%)		10.80%	16.42%	27.04%	39.71%	45.77%	59.54%

VMT=Vehicle Miles Traveled

Using V/C >= 1.00	Year	2000	2005	2010	2015	2020	2025
Length (mi)		54.16	60.44	83.70	150.77	219.51	302.83
AM PK-HR VMT		253,100	551,181	964,768	1,748,300	2,880,987	4,568,093
AM PK-HR VMT (%)		5.54%	10.35%	16.00%	24.14%	33.03%	45.68%
PM PK-HR VMT		297,843	648,453	1,166,117	2,000,075	3,374,026	5,329,519
PM PK-HR VMT (%)		5.70%	10.69%	16.49%	24.72%	34.67%	46.54%

JTRP Classification	Total Miles By Class	Congested Highway Miles by Year (V/C-Benchmark)					
		2000	2005	2010	2015	2020	2025
1	317.52	58.31	37.50	48.54	33.56	57.60	48.65
2	1,343.83	43.22	27.66	28.08	50.56	87.78	7.60
3	852.11	38.98	60.92	91.32	231.08	68.95	148.46
4	3,658.64	3.37	6.81	10.32	14.09	34.49	37.63
5	4,766.29	2.13	0.71	1.20	3.77	3.42	11.75
6	17,215.98	146.18	136.06	179.67	339.09	292.33	340.29
Total							

1=Urban Interstates; 2=Urban Freeways, Principal and Minor Arterials Collectors and Locals; 3=Rural Interstates;
4=Rural Freeways, Principal and Minor Arterials; 5=Rural Major and Minor Collectors and Locals.

NOTE: The Congestion Assessment is based on the 2000 road inventory data and assumes no-added capacity for the year of 2000 thru 2025.

Making the Cut

Safety Improvements

- Intersection Improvements
- New Traffic Signal Installation
- Existing Traffic Signal Upkeep or Upgrade
- Sight Distance Improvement
- Guardrail Installation
- Traffic Sign Installation

Making the Cut

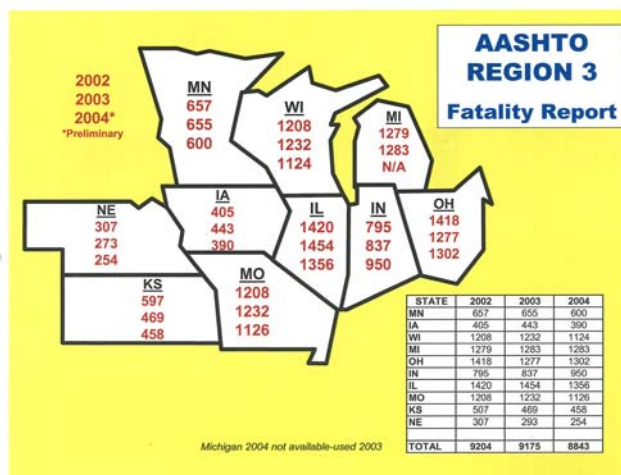
Safety Improvements (cont'd)

- Highway Lighting Installation
- Pavement Markings
- Railroad Crossing Improvements
- New RR/Hwy Grade Separations

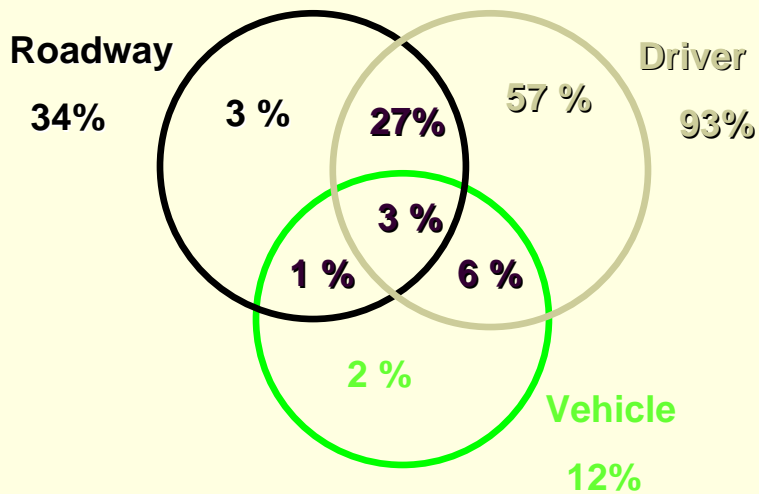
Making the Cut

Roadway Class	Fatal	Number
	Crashes	Killed
COUNTY ROAD	247	266
LOCAL/CITY ROAD	184	192
UNKNOWN	3	5
Total Local	434	463
INTERSTATE	80	97
US ROUTE	145	166
STATE ROAD	201	224
Total Indot Maintained	426	487
Grand Total	860	950

Making the Cut



Making the Cut



Making the Cut

- New Traffic Signal Installation
- Existing Traffic Signal Upkeep or Upgrade
- Guardrail Installation
- Traffic Sign Installation
- Pavement Markings
- Highway Lighting Installation

These projects are driven by standards and warrants. They are reviewed to see if the project would qualify for HES.

Making the Cut

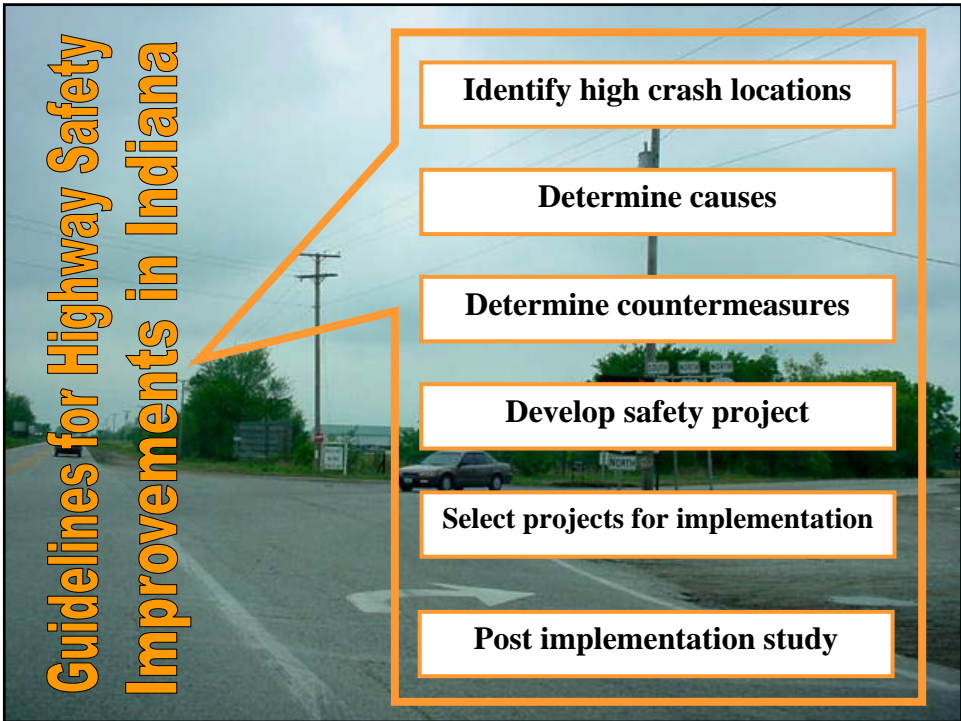
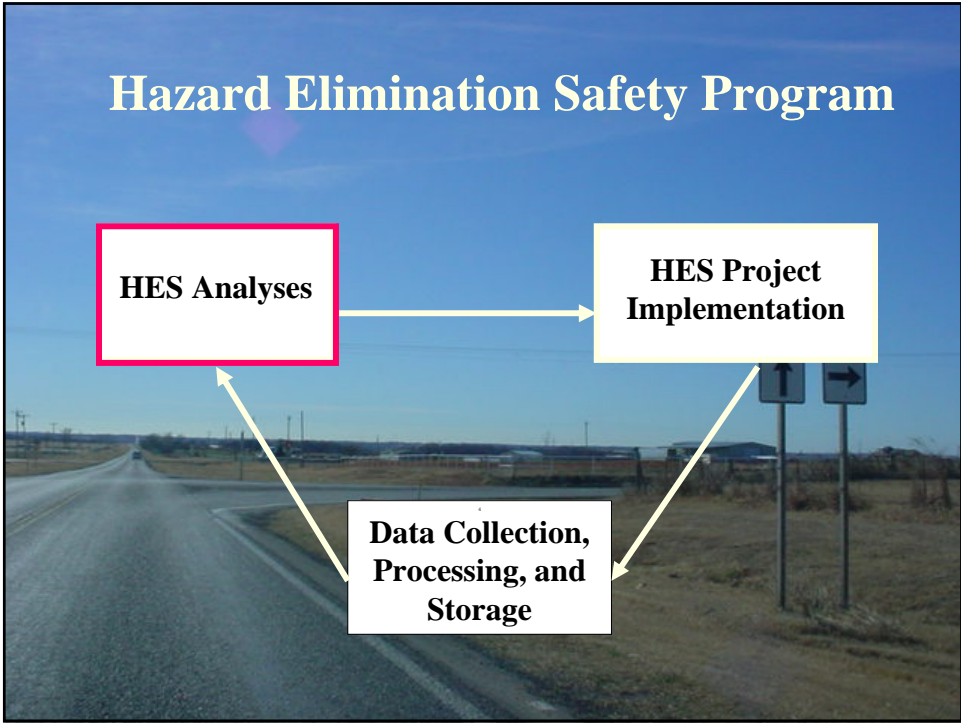
- Railroad Crossing Improvements
- New RR/Hwy Grade Separations

These projects are driven by funding guidelines and the Railroad Crossing Safety Index. There are several projects that are using a combination of RR and HES funds

Making the Cut

- Intersection Improvements
- Sight Distance Corrections

These projects are being actively solicited and reviewed for their potential to qualify for HES funding.



**Manual of Tools
to help prepare
reports to
qualify projects
for HES funding**

**Presentation of
Implementation
was given
earlier**



Making the Cut

- **Looking to implement some innovative projects to Indiana**
- **Especially Low Cost Improvements that can be part of a pooled fund study**

Making the Cut

- Center line and Edge line rumble strips on two lane roads



Making the Cut

- Informational pavement markings placed on the Roadway



Making the Cut

- Median Crossover Protection



Making the Cut

- Corridor Safety Projects
 - US 41 South of I-70
 - US 30 West of I-65
 - US 27 Fort Wayne

Making the Cut

Questions?

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