

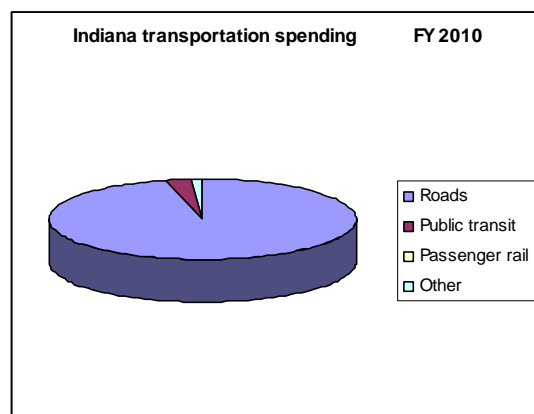


## Transportation Policy Brief July 2010

### **The Opportunity Costs of New-Terrain I-69** **How the high-priced new-terrain highway route is harmful** **to Indiana's transportation infrastructure**

The United States is now entering a third wave of transportation development—towards a goal of a more balanced, sustainable mobility system that emphasizes efficient means of moving people and goods, such as passenger and freight rail, public transit, bicycle and pedestrian facilities. This new wave recognizes that Americans want more transportation choices, and seeks to reduce our reliance on an inefficient highway-focused infrastructure that maintains our dependence on oil.

Unfortunately, Indiana is still stuck in the second wave, promoting a “roads first” policy that emphasizes building new “mega projects” such as I-69. At the same time, the state is not keeping pace with critically-needed road and bridge maintenance throughout the state. A prime example of the state’s misplaced priorities is the I-69 new-terrain highway, which will consume more than \$3 billion of Indiana’s limited transportation dollars, even though a viable, cheaper alternative using U.S. 41 and I-70 is available. Moreover, the current minimal level of state support for public transit and passenger rail is not meeting demand, and reduces the ability of our urban areas to compete economically with metropolitan areas in neighboring states and throughout the United States.



#### **Background**

For the 10 year period 2006 to 2015, Indiana’s transportation plan originally called for spending nearly \$12 billion on roads, with \$6.5 billion to be spent on new highways and \$5.5 billion spent on repairing and maintaining existing highways. INDOT recently reduced its total road spending projection by \$1 billion, due to declining gas tax and investment revenue. Despite this record amount of transportation spending, overdue road improvements throughout the state are delayed, bridges are being closed, and local governments struggle to find money to pave their streets.

### **I-69 spending increases while other transportation demands going unmet**

The Indiana Department of Transportation’s (INDOT) environmental studies for I-69 estimate that the new-terrain route will cost approximately \$3.2 billion. This is nearly twice as much as INDOT’s estimate of \$1.78 billion in 2003. Only \$700 million in funding, less than one-quarter of the project’s cost, has been identified. INDOT assumes the remaining \$2.5 billion will be funded using traditional revenues, which is a combination of state and federal gas tax revenues. These gas tax revenues are also relied upon for funding upgrades, repair and maintenance of all other state and interstate highways, and local roads and bridges. At the same time as demand has increased for road repair and maintenance funding, the state’s gas tax income declined almost 7 percent in fiscal year 2009 compared to 2008.

### ***Local road and bridge repairs and maintenance***

According to the Indiana LTAP Center’s *2009 Local Roads and Streets Needs Assessment*, there is a \$5.4 billion backlog of local road, bridge, and safety improvement needs in Indiana. Annually, the shortfall in funding for these needs is more than \$850 million. More than 4,000 state and local bridges are rated as deficient or obsolete. The backlog and annual shortfall in funding has continued to increase since the annual funding need far exceeds available revenue.

**Table 1: 2009 Needs Assessment for Local Roads and Streets (dollars)**

	<b>Short term (backlog)</b>	<b>Long-term (annual)</b>
Roads and streets	3,504,000,000	715,000,000
Bridges and culverts	1,169,000,000	117,000,000
Safety improvements	706,000,000	26,000,000
Total	5,379,000,000	858,000,000

### ***Local Road and Street Facts and Trends***

- Local roads and streets have experienced a 36 percent decline in funding from FY 1999-2000 to FY 2007-2008 (adjusted for inflation)
- City, town and county roads account for 90 percent of all public road mileage in Indiana (84,000 miles)
- Local roads (city, town and county) serve 46 percent of the total miles traveled on public roads in Indiana (2009)

### ***Bridge Inventory***

- 4,091 of Indiana’s 18,588 bridges (22 percent) are rated as “Structurally Deficient” or “Functionally Obsolete”
- 443 of these deficient bridges are part of state or federal highways in Indiana

Bridges with the above ratings do not meet the needs of individual travelers or businesses that depend on them. According to the Federal Highway Administration, which conducts the National Bridge Inventory, “structurally deficient” and “functionally obsolete” classifications do not necessarily mean bridges are unsafe. Structurally deficient means a bridge is restricted to light vehicles only, is closed, or requires immediate rehabilitation to remain open due to deterioration of

structural components. A bridge designated functionally obsolete is not unsafe for all vehicles; however, it has older design features which prevents it from accommodating current traffic volumes and modern vehicle sizes and weights. The result is that these bridges may be off limits to heavier vehicles, including school buses, farm vehicles, commercial vehicles, and freight carriers.

Bridge maintenance and repair is a pressing need statewide. In December 2009, state officials announced the Cline Ave. (SR 912) Bridge, which serves as a major thoroughfare in Lake County, would be closed permanently due to structural problems. Repair or replacement of the Cline Ave. Bridge was not contained in the original Major Moves construction plan. The state's 2010-2013 Statewide Transportation Improvement Plan now includes funding for replacing the travel capacity of the Cline Ave. Bridge, but an alternative route won't be fully upgraded for several years. Other bridges in Northwest Indiana have recently been identified as in desperate need of repair. Repairs on the Nine-Span Bridge in Hammond have been delayed, and a local road's bridge over I-80/94 in Gary was closed in May due to cracks in the beams.



Nine-Span Bridge  
Hammond

In January 2010, INDOT imposed new lower weight limits on the SR 57 bridges over the White River in Greene County. In Jefferson County, the Madison to Milton Bridge over the Ohio River, a critically important economic link between Indiana and Kentucky, has been in dire need of repair or replacement for years, but reconstruction plans languished until federal stimulus money was received this year.

According to INDOT, Indiana's "Major Moves" plan will repair about 650 bridges by 2012, which is insufficient to reduce this chronic bridge deficiency problem. The number of deficient bridges in Indiana, identified each year by the Federal Highway Administration, has persisted above the 4,000 level with one exception, since 2000.

### ***Where are the deficient bridges?***

Indianapolis (Marion County) has the highest number of deficient bridges—311—about a third of all the city's bridges. Other counties with high percentages of substandard bridges are:

- Clay County (over one-half of the county's 204 bridges)

- Greene County (95 of the county's 202 bridges)
- Knox County (over one-third of the county's 301 bridges)
- Lake County (30% of the county's 494 bridges)
- Putnam County (125 bridges, 43% of total)

Among the bridges rated as **structurally deficient (SD)** or **functionally obsolete (FO)** are:

<b>Community</b>	<b>Bridge</b>	<b>SD/FO</b>	<b>NBI sufficiency rating</b>
<i>Indianapolis (Marion County)</i>	Illinois Street bridge over Fall Creek	SD	481
	Pleasant Run Parkway over Pleasant Run	FO	330
<i>Ft. Wayne (Allen County)</i>	Lima Road over Willow Creek	SD	70
<i>Greene County</i>	State Road 57 over White River	FO	537
<i>Daviess County</i>	County Road 1025 E over the White River	SD	96
<i>Plainfield (Hendricks County)</i>	U.S. 40 over White Lick Creek	SD	354
<i>Gary (Lake County)</i>	Nine-span Bridge (SR 152/Indianapolis Blvd.)	SD	479
<i>Posey County</i>	I-64 over Wabash River	SD	240
<i>Putnam County</i>	County Road 1050 N over Big Raccoon Creek	SD	192
<i>Richmond (Wayne County)</i>	U.S. 40 over Clear Creek	SD	90

See Appendix D for further information on the National Bridge Inventory (NBI) definitions and classifications.

**Indiana's Major Moves Highway Plan emphasizes new projects over preserving existing road and bridge infrastructure.**

- The ten year (2006-2015) plan called for spending \$6.5 billion on building new roads, and \$5.5 billion on maintaining existing roads (new road spending since reduced by \$1 billion due to declining revenue).
- INDOT estimates a 5 percent decline in state transportation revenue for the 2009 to 2011 biennium.
- State gas tax revenues, which provide the majority of Indiana's highway funds, declined almost 7 percent in fiscal year 2009 compared to 2008.
- Declining revenues, increasing construction costs, and high cost projects are forcing delays or cuts in many of the plan's scheduled projects.
- Appendix A contains a list of projects delayed past 2013, for funding or other reasons.

**Because of funding limitations, new-terrain I-69 quality and safety will be reduced.**

INDOT is planning the following changes to I-69:

- *Interstate Access*  
Construction of interchanges at Pike County Road 600 N, Daviess County Road 375S, and US 231, are being deferred or deleted due to cost.
- *Pavement quality and durability*  
Thinner pavement, with less weight-bearing capacity and durability, will be used.
- *Medians and shoulders*  
The space between lanes will be reduced from 84 feet to 60 feet, and shoulders will be narrower.
- *Travel comfort and safety*  
A rest area in Daviess County is being deferred or deleted.

INDOT Deputy Commissioner Sam Sarvis, commenting on INDOT's plan to build I-69 at a lower level of quality and with less access, said in a WFIU radio program, "...it makes sense to build the road to the level of need," and, "...certainly don't need to build it for connectivity of multiple states until we get to that level."

Keith Bucklew, INDOT Director of Freight Mobility, told the Indiana General Assembly's Joint Study Committee on Mass Transit and Transportation Alternatives that the decision to decrease the thickness of I-69 by three inches to expedite the construction will decrease the usable life of the highway.

**Indiana Highway Efficiency Rating Declines in Latest Report**

In the Reason Foundation's 18<sup>th</sup> Annual Highway Report, Indiana's state highway system efficiency rating fell 16 spots. The state is now ranked 31<sup>st</sup> of the 50 states, due to a sharp decline in urban interstate condition (as measured by road roughness) and an increase in spending per mile.

***Public Transit, Passenger and Freight Rail Needs***

The State of Indiana spends more than 96 percent of its transportation dollars on road construction and maintenance, with just a small percentage of state sales tax revenue dedicated to public transit. Transit systems in Indiana are funded by a combination of fares, local taxes, federal transit grants, and the sales tax share mentioned above. Since 1996 the number of transit agencies sharing state funds has nearly doubled, due to the growth in the number of agencies providing demand response services in rural counties and small communities.

From 1998 to 2008, Indiana's share of total transit agency operating expenses, other than for the South Shore railroad, declined by 4 percent. Overall, the state's Public Mass Transportation Fund provides just one-quarter of total revenue available to Indiana transit agencies.

Public transit systems are not meeting demand. According to INDOT's "Indiana Mass Transit Studies, 2008," unmet potential transit demand averages 77 percent statewide. This means there are about four times as many people who want to use transit as there is transit capacity. Transit ridership trends around the state reinforce this finding. Prior to the recession, ridership on IndyGo, the Indianapolis bus system, grew significantly. After a decline in 2009, it is again rising, up 7.5% in the first quarter of 2010. Bus systems in Ft. Wayne and Muncie also recorded ridership growth

in early 2010.



Charlotte, NC, Denver, CO, and St. Louis, MO have all invested in light rail transit

Without state investment in passenger rail, Indiana may miss a once in a generation opportunity to benefit from a dramatic increase in federal funding for high speed passenger trains. Unlike several other Midwest states (table 2), Indiana provides no state funding for Amtrak passenger rail service in the state. Nor has the state invested any state funds on environmental and engineering studies for development of Indiana’s high speed passenger rail corridors. These studies are typically a prerequisite for receiving federal funds to build and operate high speed trains as part of the Midwest Regional Rail Initiative (MWRRI), which is intended to provide fast, convenient and efficient passenger rail service between the major cities of the Midwest. In 2009 Indiana sought federal stimulus funding to study and build the Chicago to Cleveland high speed rail route, but the request was denied by the Federal Railroad Administration. Nearly all of the projects that were funded with the \$8 billion in stimulus dollars for high speed rail were those that had some level of state investment. However, Indiana did receive funding for the Indiana Gateway project to upgrade existing freight tracks in Northwest Indiana which are also used by Amtrak.

**Table 2. State Investment in Passenger Rail – Selected Midwest States  
(dollars)**

State	Amount (FY 08)	Revenue source
Illinois	28 million	General State revenue
Michigan	6.1 million	General State revenue
Missouri	7.4 million	General State revenue
Wisconsin	7.1 million	General State revenue
Indiana	0	



Amtrak's Acela High Speed Passenger Train

Freight railroads in Indiana carried more than 300 million tons of freight in 2007, the ninth highest amount in the U.S. Despite the economic importance of railroad freight capacity, Indiana invests few dollars in freight rail infrastructure. The Industrial Rail Service Fund receives about one quarter of one percent of state sales tax revenue, and grants about \$1.6 million a year to private railroad companies for railroad improvement projects. In recent years the Fund has provided money to short line railroads to upgrade their poorest quality tracks.

**Table 3: Examples of Funding Needs for Public Transit and Passenger Rail Service (dollars)**

	Public Transit	Passenger Rail
Expanded bus service and light rail for central Indiana	143 million annually (capital and operating)	
Environmental studies and preliminary engineering for Chicago to Cleveland and Chicago to Cincinnati high speed rail corridors		71 million total for both corridors
Expand existing Amtrak service in Indiana by adding additional trains		4 to 8 million annually
Commuter rail service <ul style="list-style-type: none"> <li>Indianapolis to Muncie</li> <li>Indianapolis to Bloomington</li> </ul>	<ul style="list-style-type: none"> <li>332 million (capital)</li> <li>419 million (capital)</li> </ul>	
Northwest Indiana Regional Bus System	<ul style="list-style-type: none"> <li>18.7 million/yr (operating)</li> <li>3.7 million/yr (capital)</li> </ul>	
South Shore commuter railroad expansion: Gary to Valparaiso	500-700 million (capital)	

**Conclusion**

Because Indiana's "Major Moves" plan emphasizes building new "mega projects" such as I-69, the record amount of road spending by INDOT is not keeping pace with critically-needed road and bridge repair and maintenance throughout the state. A prime example of the state's misplaced priorities: Indiana plans to spend about \$2 billion more than necessary building the new-terrain

route for I-69, even though a viable, cheaper alternative using U.S. 41 and I-70 is available. Moreover, the current minimal level of state support for public transit and passenger rail is not meeting demand, and reduces the ability of our urban areas to compete economically with metropolitan areas in neighboring states and throughout the United States.

An efficient, 21<sup>st</sup> century transportation system that provides real transportation choices and contributes to sustainable urban and rural development will only come when our state's transportation spending is balanced and cost effective.

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## **Appendix A**

### **Projects listed as funded in 2006-2015 Major Moves Plan that have been delayed or deleted**

#### NE Indiana

SR 930 upgrade (Allen County)

Scheduled to begin in 2015

Delayed, completion date to be determined

SR 5 upgrade (LaGrange County)

Scheduled to begin in 2011

Delayed, schedule to be determined

#### Delaware County

I-69 interchange upgrade at SR 67/SR 32

Scheduled to begin in 2010

Dropped

#### Harrison County

New I-64 interchange at Corydon

Scheduled to begin in 2011

Delayed, schedule to be determined

#### Indianapolis/Central Indiana

SR 135 upgrade: Whiteland Road to Stones Crossing (Johnson County)

Scheduled to begin in 2012

Delayed past 2013, to be completed in 2019

US 421 added travel lanes (Boone County)

Scheduled to begin in 2012

Delayed, schedule to be determined

#### Evansville/SW Indiana

SR 64 upgrade in Princeton (Gibson County)

Scheduled to begin in 2009

Delayed past 2013

U.S. 41 added lanes from SR 66 to SR 57(Vanderburgh County)

Scheduled to begin in 2011

Delayed until 2018

#### NW Indiana

US 20 interchange modification (LaPorte County)

Scheduled to begin in 2011

Delayed, schedule to be determined

SE Indiana

SR 111 added travel lanes (Floyd County)

Scheduled to begin in 2009

Delayed, schedule to be determined

**Appendix B**

**Indiana transportation spending tables**

**Table 4: Annual transportation spending in Indiana by mode of transportation  
FY 2009-2010 (dollars)**

	State Highway Construction & Maintenance Total	Local Roads and Streets Total	Public Transit	Passenger Rail	Freight Rail
Indiana	827,198,723		55,594,355	20,000	2,300,000
Federal	698,200,000*				
Local govt (from Indiana)		396,601,000			
Local govt (from federal)		266,000,000			

*Notes:*

*Public Mass Transportation Fund (PMTF) (IC 8-23-3-8: .67% of state sales tax revenue)*

*Electric Rail Service Fund (ERSF) (IC 8-3-1.5-20.6)*

*Commuter Rail Service Fund (CRSF) (IC 8-3-1.5-20.5 & IC 6-1.1-8-35) (.123% of state sales tax revenue)*

*Industrial Rail Service Fund (IRSF) (IC 8—3-1.7: .25% of state sales tax revenue)*

*\* Figure does not include federal ARRA funds which are a one-time allotment.*

**Table 5: Major Moves Fund Expenditures and I-69 Costs (dollars)**

	State Highways	Local Roads and Streets		I-69 Evansville to Indianapolis	I-69 source of funds
2009	545,000,000	0			
2010	535,000,000	0			
				\$3.2 billion total cost	
<b>Major Moves Plan</b>	(\$1 billion reduction announced- 2010)				
New construction 2006-2015	6,468,000,000			\$700 million	Indiana toll road lease
Preservation/maintenance 2006-2015	5,441,000,000				
Construction/preservation 2006		250,000,000			
After 2015	0	0		\$2.5 billion	undetermined

**Table 6: Public Transit Funding in Indiana FY 2009 (dollars)**

	State	Federal	Local
PMTF	42,300,000		
ERSF	187,589		
CRSF	13,106,766		
		<b>State administered</b>	
Sec 5310		2,812,915	703,229
Sec 5311		13,780,139	12,987,500
Sec 5316		738,604	738,604
Sec 5317		570,034	570,034
		<b>Federally Administered</b>	
Sec. 5307 Urbanized Area Formula Program		[1]	
Sec. 5309 Fixed Guideway Bus/bus facility		[2] 18,544,853	
Sec. 5309 New Starts		4,950,000	

*Notes:*

*[1] & [2] Federal Transit Administration (FTA) statistics for each state include total funding for multi-state urbanized areas and therefore totals do not reflect exact amounts received in Indiana. For example, for the \$278 million appropriated in FY 2009 to the Chicago, IL-Indiana urbanized area, most of this amount will be distributed to Illinois transit providers.*

## Appendix C

### News reports on projects affected by availability of state transportation funds

#### Allen/DeKalb County

SR 930, SR 8, SR 5

“A major move backward”

Ft. Wayne Journal Gazette

April 25, 2010

#### Greene County

SR 57 bridges over White River

“Bridge restrictions cause worries in S Ind. county”

Associated Press

January 4, 2010

#### County roads

“County road superintendent wants to turn Goose Pond FWA roads over to the state”

Greene County Daily World

March 1, 2010

#### Harrison County

I-64 interchange at Corydon

“Indiana pulls funding from planned I-64 interchange at Corydon”

Louisville Courier-Journal

November 27, 2009

#### LaGrange/Steuben Counties

“Back to gravel roads in some Ind. Counties?”

Associated Press

February 6, 2010

#### Lake County

Nine-Span Bridge

“Cline shutdown delays Nine-Span Bridge work”

Gary Post-Tribune

March 23, 2010

#### Martin Luther King Dr. Bridge

“Cracks close I-80/94 bridge in NW Ind.”

Associated Press

May 19, 2010

“Local officials wonder: Is Major Moves out of gas?”

Times of Northwest Indiana

June 6, 2010

### Orange County

SR 37 improvements near Paoli

“Road group hears of cuts”

Bedford Times-Mail

November 19, 2009

### Vanderburgh County

U.S. 41

“Interest sinks road projects”

Evansville Courier Press

May 10, 2010

### Vigo County

SR 63

“INDOT: No funds available to change deadly Indiana 63 curve”

Terre Haute Tribune-Star

January 27, 2010

## **Appendix D**

### **Bridge Definitions**

***Structurally Deficient (SD):*** This classification is given to a bridge that is restricted to light vehicles only, is closed, or requires immediate rehabilitation to remain open due to deterioration of structural components. According to the FHWA, a restricted-use, structurally deficient bridge is not necessarily unsafe, and strict observance of the posted allowable traffic load and vehicle speed will generally provide adequate safeguards for those using the bridge.

***Functionally Obsolete (FO):*** This classification is given to a bridge on which the deck geometry, load carrying capacity (comparison of the original design load to the current state legal load), clearance, or approach road alignment no longer meet criteria for the system of which it is an integral part. According to the FHWA, a bridge designated FO is not unsafe for all vehicles; however, it has older design features which prevents it from accommodating current traffic volumes and modern vehicle sizes and weights.

Any bridge classified as SD is excluded from the FO category. Accordingly, a bridge is first checked for SD designation, and if it is not SD, it is assessed to see if it is FO.

The above bridge definitions are defined in the *Recording and Coding Guide for the Structure Inventory and Appraisal of the Nation's Bridges* (FHWA Office of Highway Policy Information, 1988). Additional resources that provide more detailed information on bridge conditions are also available (FHWA Office of Engineering, Bridge Division, 1995; FHWA, 1997; Dunker and Rabbat, 1995).