### Three Potential Enumerations...

- 1. I 43 Milwaukee and Ozaukee Counties
- 2. I 94 St. Croix County
- 3. Wis. 50 Kenosha County

## I 43 Silver Spring Drive to Wis. 60

- 14 Miles
- Originally
   Constructed
   In Mid-1960's
- \$448 Million (2014 Dollars)

## I 94 USH 12 to Wis. 65 (130th Street)

- 7.5 Miles
- Originally
   Constructed
   In Late 1950's
- \$129 Million (2014 Dollars)

**Project Limits** 

### Wis. 50 I 94 to 43rd Avenue

- 4.4 Miles
- Pavement Originally Constructed In 1960's
- \$93 Million (2014 Dollars)

# Role Of The TPC In Enumerating Major Projects

- 1. Report Enumeration Recommendations By December 15<sup>th</sup> Of Even Numbered Years
  - ✓ Does Not Apply To Wis. 50 Project
- 2. Approve, Modify, Or Disapprove All DOT Requests For Enumeration

Limiting Factors (I 43 And I 94 Projects Only):

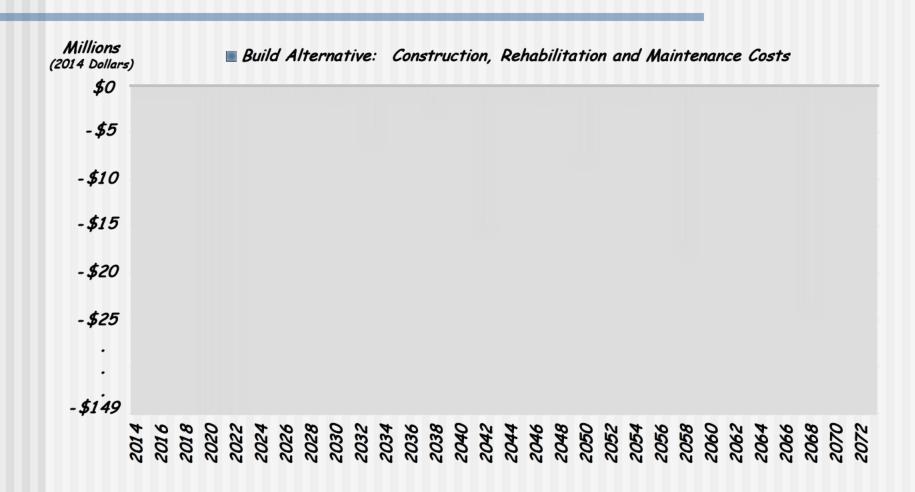
- ✓ Funding To Begin Projects Within 6 Years
- ✓ Projects Have Approved Environmental Documents

# Analysis Of Recommended Enumerations

## Cost Considerations For Potential Enumerations

- In Evaluating The Costs Of Potential Major Projects We Consider <u>All</u> Public Costs:
  - ✓ Initial Construction
  - ✓ Periodic Rehabilitation
  - √ Annual Maintenance

# Cost Considerations For Potential Enumerations - I 43 Example



## Cost Considerations For Potential Enumerations

- In Evaluating The Costs Of Potential Major Projects We Consider <u>All</u> Public Costs:
  - ✓ Initial Construction
  - √ Periodic Rehabilitation
  - √ Annual Maintenance
- We Calculate The <u>Increase</u> In Public Costs Caused By Each Potential Project
  - ✓ That Is, Costs Above And Beyond What The Public Would Need
    To Spend In The Absence Of The Potential Major Project
  - Key Question: "Do The Increased Benefits Of A Potential Major Outweigh Its Increased Public Costs?"

# Cost Considerations For Potential Enumerations - I 43 Example

Alt. 1 - Costs If The I 43 Project Is Enumerated:

Construction, Maintenance

And Rehabilitation \$568 Million (2014 Dollars)

Alt 2. - Costs If The I 43 Project Is Not Enumerated:

Maintenance, Rehabilitation

And Reconstruction \$489 Million (2014 Dollars)

The Increased Public Cost Is \$79 Million, But This
 Ignores Differences In The Timing Of Costs Between
 The Alternatives

## Cost Considerations For Potential Enumerations - I 43 Example

- The Timing Of Costs Is Important Because Of The Time Value Of Money
- Expressing Public Costs In Terms Of Their Equivalent Present Value Addresses The Timing Issue
  - ✓ The Concept Of Present Value Is Drawn From The Field Of Economic And Financial Analysis
- For I 43, The Present Value Of The Increased Public Costs Due To Enumeration Is \$140.3 Million
  - ✓ Greater Than \$79 Million Because Large Public Costs Will Occur Sooner If I 43 Is Enumerated

# Public Costs Associated With Potential Enumerations

#### Millions Of 2014 Dollars

Project	PV Of Costs <u>With</u> The Project	PV Of Costs <u>Without</u> The Project	PV Of Increased Costs Of The Project
I 43	<i>\$342.1</i>	\$201.8	<i>\$140.3</i>
		•	•

Preservation

Expansion

# Public Costs Associated With Potential Enumerations

#### Millions Of 2014 Dollars

Project	PV Of Costs <u>With</u> The Project	PV Of Costs <u>Without</u> The Project	PV Of Increased Costs Of The Project
I 43	\$342.1	\$201.8	\$140.3
I 94	<i>\$105.5</i>	\$ 20.1	\$ 85.4
Wis. 50	<i>\$ 74.5</i>	\$ 40.9	<i>\$ 33.6</i>

Preservation

Expansion

# Public Costs Associated With Potential Enumerations

#### Millions Of 2014 Dollars

Project	PV Of Costs <u>With</u> The Project	PV Of Costs <u>Without</u> The Project	PV Of Increased Costs Of The Project
I 43	\$342.1	\$201.8/	59% <i>\$140.3</i> / 41%
I 94	\$105.5	\$ 20.1/	19% <b>\$ 85.4</b> / 81%
Wis. 50	<i>\$ 74.5</i>	\$ 40.9/	55% <i>\$ 33.6</i> / 45%

Preservation

*50%* 

Expansion

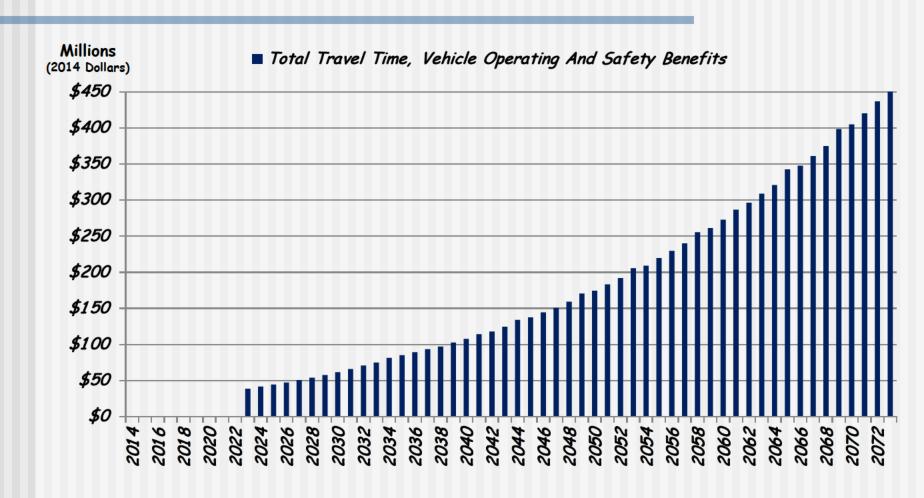
*50%* 

# Critical Problems Are Addressed By Potential Enumerations

- Slower Speeds Caused By Congestion
- Safety Concerns

Unexpected Traffic Delays Due To
 Crashes, Vehicle Breakdowns, and Weather

# Use Benefits Due To Enumeration - I 43 Example



## Benefits And Costs Of Potential Enumerations

### Millions Of 2014 Dollars

Project	Benefits Of The Project (PV)	
I 43	\$1,398.6	
I 94	\$ 482.5	
Wis. 50	\$ 285.0	

## Benefits And Costs Of Potential Enumerations

#### Millions Of 2014 Dollars

Project	Benefits Of The Project (PV)	Increased Public Costs Of The Project (PV)	
I 43	\$1,398.6	\$140.3	
I 94	<i>\$ 482.5</i>	\$ 85.4	
Wis. 50	<i>\$ 285.0</i>	\$ 33.6	

## Benefits And Costs Of Potential Enumerations

#### Millions Of 2014 Dollars

Project	Benefits Of The Project (PV)	Increased Public Costs Of The Project (PV)	Benefits/ Costs
I 43	\$1,398.6	\$140.3	10.0
I 94	<i>\$ 482.5</i>	\$ 85.4	5.6
Wis. 50	\$ 285.0	\$ 33.6	8.5

