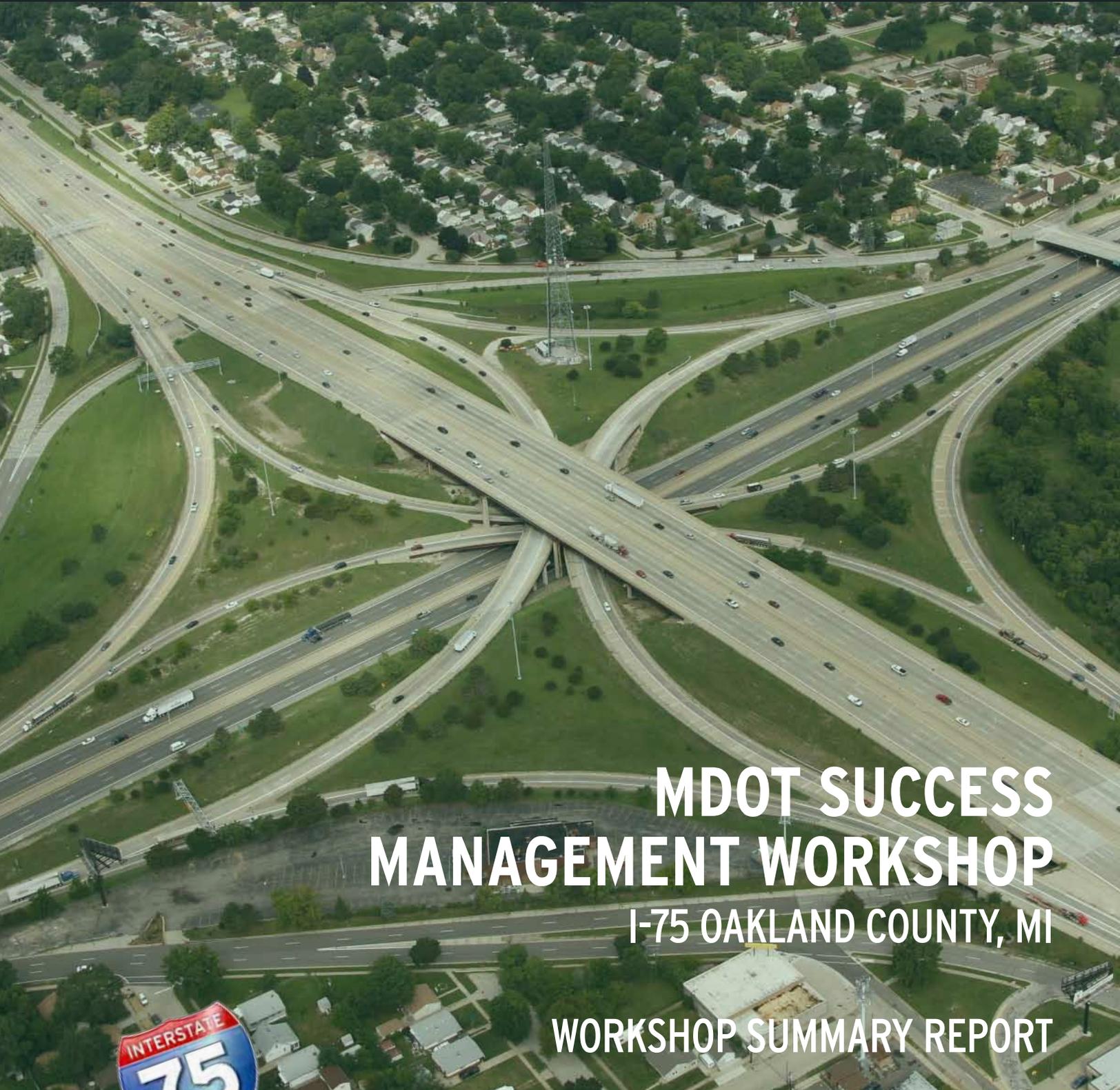


**Evaluation of Proposed Design Modifications for the I-75
Capacity Improvement Project---Oakland County
Requisition Number 908
JN 116123
CS 63174
April 20, 2012**

Q1: Would it be possible to get an electronic copy of the Success Management Workshop Report?

A1: Yes. See copy below of the I-75 Success Management Workshop Report.



MDOT SUCCESS MANAGEMENT WORKSHOP

I-75 OAKLAND COUNTY, MI

WORKSHOP SUMMARY REPORT



DRAFT

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THINK
BOLD.

EXECUTIVE SUMMARY

MDOT I-75 SUCCESS MANAGEMENT WORKSHOP

The I-75 corridor is a critical transportation artery, which serves as the backbone of Oakland County's and Michigan economies. For years, the Michigan Department of Transportation (MDOT) has proposed to increase capacity and modernize the I-75 corridor to meet current and future travel demand for better personal mobility and goods movement. In 2006, MDOT received federal approval to move forward with an 18-mile widening project that would create a new High Occupancy Vehicle (HOV) lane, replace bridges, modernize interchanges, and improve safety along the corridor. Because of funding constraints, MDOT's current plan spreads out the delivery of needed improvements to I-75 over a 20-year period; with construction starting in 2017 and completion anticipated in 2031. This project delivery approach is estimated to cost over \$1.3 billion to implement.

As MDOT continues to reinvent itself, all aspects of its 5-Year Transportation Program are being evaluated to identify opportunities to deliver projects and programs better, faster, cheaper, safer and smarter. The proposed project delivery approach for the I-75 Corridor Project is no exception.

On November 4, 2011, MDOT, FHWA-Michigan Division, and HNTB gathered for a workshop to employ the HNTB Success Management model to the I-75 project. The goal - create a **new plan** to deliver a successful I-75 Oakland County corridor. During the workshop, participants were encouraged to "**think bold**" and look past existing constraints. Throughout the workshop, participants were provided the opportunity to define a new vision of success and explore options to accelerate delivery of the I-75 project providing stakeholders with cost and time savings. In the end, the workshop team developed a **big, bold plan** to deliver the I-75 Oakland County Corridor project, *better, faster, cheaper, safer and smarter*.

WORKSHOP PROCESS & OUTCOMES

The following steps describe the process followed and the key outcomes achieved during the workshop:

Step 1: Define Project Success

Workshop participants were encouraged to think "big and bold", remove existing constraints, and develop a new shared vision for delivering the I-75 project.

Step 2: Develop Goals and Supporting Success Measures

I-75 success measures resulting from the group discussion are listed in order of importance according to workshop participants (see adjacent list).

Step 3: Identify Project Delivery Options

To facilitate the project delivery discussion, HNTB prepared three example project delivery options: "Bold", "Bolder", and "Boldest" (see table on back).

Step 4: Develop and Recommend "Plan for Success"

After the project delivery discussion, MDOT and FHWA representatives developed a new "Plan for Success" (see back).



Greg Johnson, Director of Operations for MDOT, provides opening remarks to the group.

I-75 SUCCESS MEASURES

1. I-75 Project Done in Record Time! - Open to Traffic **October 2015**.
2. Project delivered for **\$800 million** in year of expenditure dollars.
3. When complete (absent incidents) users will be able to **travel at the posted speed at all times**.
4. Users never experience more than **five minutes** of additional delay during construction.
5. Federal, State and Local Agencies, and local communities **collaborate** with MDOT to achieve goals for the I-75 project.
6. Oakland County residents and I-75 users give MDOT a **90% approval rating** for performance on the I-75 project during and after construction.
7. The I-75 corridor design and construction will be a national model in highway **sustainability**.

These success measures were determined by MDOT and FHWA participants during Step 2 of the Success Management Workshop.

Step 5: Identify Risks

Workshop participants took the first step in addressing program risks through a discussion of potential threats and opportunities associated with implementing the new "Plan For Success."

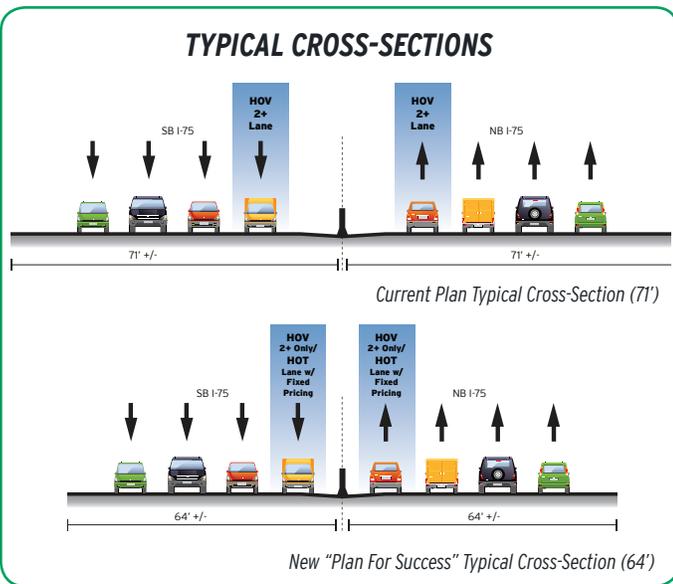
Step 6: Develop Action Plan(s)

Preliminary action plans were discussed while detailed actions plans are being prepared by MDOT.

MDOT I-75 SUCCESS MANAGEMENT WORKSHOP

“PLAN FOR SUCCESS”

MDOT’s “Plan for Success” shown in the delivery options table below draws from components of the “Bold”, “Bolder”, and “Boldest” delivery options to define a unique “Plan for Success” to best support achievement of the I-75 success measures. The plan also considered the top identified risks from workshop participants in the support of the developed success measures. MDOT’s plan utilizes the scope of the “Bolder” delivery option applying sustainability principles to reuse existing infrastructure assets, provides for continuous usable



TOP I-75 RISKS

Associated With Implementing The New “Plan For Success”

1. Funding (T)
2. Reopening environmental document (T)
3. Act 431 limitations (T)
4. Lack of alignment and support by participating agencies and stakeholder communities (T)
5. Not being able to separate I-75 and I-94 projects (T)
6. Implementation of Practical Design to manage overall system improvements and service life (O)
7. Unequal distribution of funds statewide (T)

Threats (T) and Opportunities (O)

The top seven risks (threats/opportunities) associated with the successful delivery of the I-75 project as determined by MDOT and FHWA workshop participants.

shoulders, and adds an HOV travel lane in each direction to support traffic mobility at posted speeds.

The plan’s delivery method is consistent with the “Boldest” delivery option, a large single design/build package with flexible specifications and Practical Design concepts, to encourage design/build contractor innovation, time, and cost savings. Estimated time savings of the plan establishes an **October 2015** project completion deadline, **16 years** ahead of the current plan. Cost savings of MDOT’s plan are estimated at **\$669 million** (YOE) which significantly reduces the project’s cost to well under the \$800 million (YOE) budget goal!

PROJECT DELIVERY OPTIONS AND MDOT’S NEW I-75 “PLAN FOR SUCCESS”

	RANGE OF OPTIONS DEVELOPED BY HNTB				MDOT'S PLAN FOR SUCCESS
	CURRENT PLAN	BOLD	BOLDER	BOLDEST	
SCOPE	18 Mile Full Reconstruct with widening to 4X4	18 Mile Full Reconstruct with widening to 4X4	Widen to 4X4. Reconstruct 4 southern miles and inlay 14 northern miles. 6' median shoulder & 10' outside shoulder	Widen to 4X4. Reconstruct 4 southern miles and inlay 14 northern miles. 2' median and outside shoulders. Close NB exit to 11 Mile.	Widen to 4X4. Reconstruct southern 4 miles and inlay 14 northern miles. 6' median shoulder & 10' outside shoulder. Revisit braided ramp area.
DELIVERY METHOD	Design/Bid/Build (7 Packages)	Design/Build (2 Packages)	Design/Build (with Practical Design) (1 Package)	Design/Build (with Flexible Specifications) (1 Package)	Design/Build (with Practical Design + Flexible Specifications) (1 Package)
OPERATIONS	HOV 2+ Only	HOV 2+ Only	HOV 3+/HOT Lane with Fixed Pricing	BRT Lane Dynamically Priced	HOV 2+ Only with flexibility to convert to future HOT Lane
YEAR COMPLETED	2031	2019	2018	2016	October, 2015
COST (YOE)	\$1.3B	\$802M	\$675M	\$504M	\$636M
PRESENT VALUE	\$768M	\$638M	\$548M	\$420M	\$548M

Along with the current plan, three project delivery options were prepared by HNTB in advance of the workshop to help facilitate the project delivery discussion conducted in Step 3. The resulting I-75 “Plan For Success” was selected by participants and represents a combination of these four options.



WORKSHOP SUMMARY REPORT



WORKSHOP SUMMARY

MDOT I-75 SUCCESS MANAGEMENT WORKSHOP

I-75 CORRIDOR CURRENT PLAN

Overview

As planned, the I-75 Corridor Project through Oakland County, Michigan is intended to relieve traffic congestion currently experienced during peak travel periods, ease increased traffic demands expected in the future, and improve existing geometry and safety. The project will reconstruct I-75 adding a fourth travel lane through Oakland County. The additional lane is currently planned as a High Occupancy Vehicle (HOV) during peak periods (four hours per day) and will be used as a general purpose lane for the remaining 20 hours. The project also includes several improvements to I-75 interchanges along the 18 mile corridor.

Scope

The I-75 Corridor Study in Oakland County, completed in November 2000, recommended providing four through lanes travel lanes in each direction through Oakland County. The study also recommended improvements to several I-75 interchanges located throughout the corridor. The Preferred Alternative as documented in the Final Environmental Impact Statement (FEIS) and subsequent Record of Decision (ROD) includes the addition of a fourth travel lane from M-102 (Exit 59, 8 Mile Road) to south of M-59 (Exit 77) in Oakland County. The additional travel lane will be used as a HOV lane (signing and striping) during peak periods and general purpose lane for off peak periods. The selected alternative also includes construction of a new drainage system and several improvements to interchanges including the I-696/I-75/11 Mile Road area, 12 Mile Road, and 14 Mile Road reconstruction, realignment of I-75 BL at Square Lake Road, and spacing upgrades to the existing M-102 ramps. The project will be constructed in stages and follow the existing freeway alignment.

The following summarizes details of the selected improvements as documented in the 2006 Record of Decision:

- Replacing all bridges in the depressed section from north of M-102 to south of 12 Mile Road, as all need to be lengthened to accommodate the lane addition.



I-75 CORRIDOR PURPOSE AND NEED

"The purpose of the proposed project is to increase the capacity of the transportation infrastructure in the I-75 corridor to meet travel demand for personal mobility and goods movement."

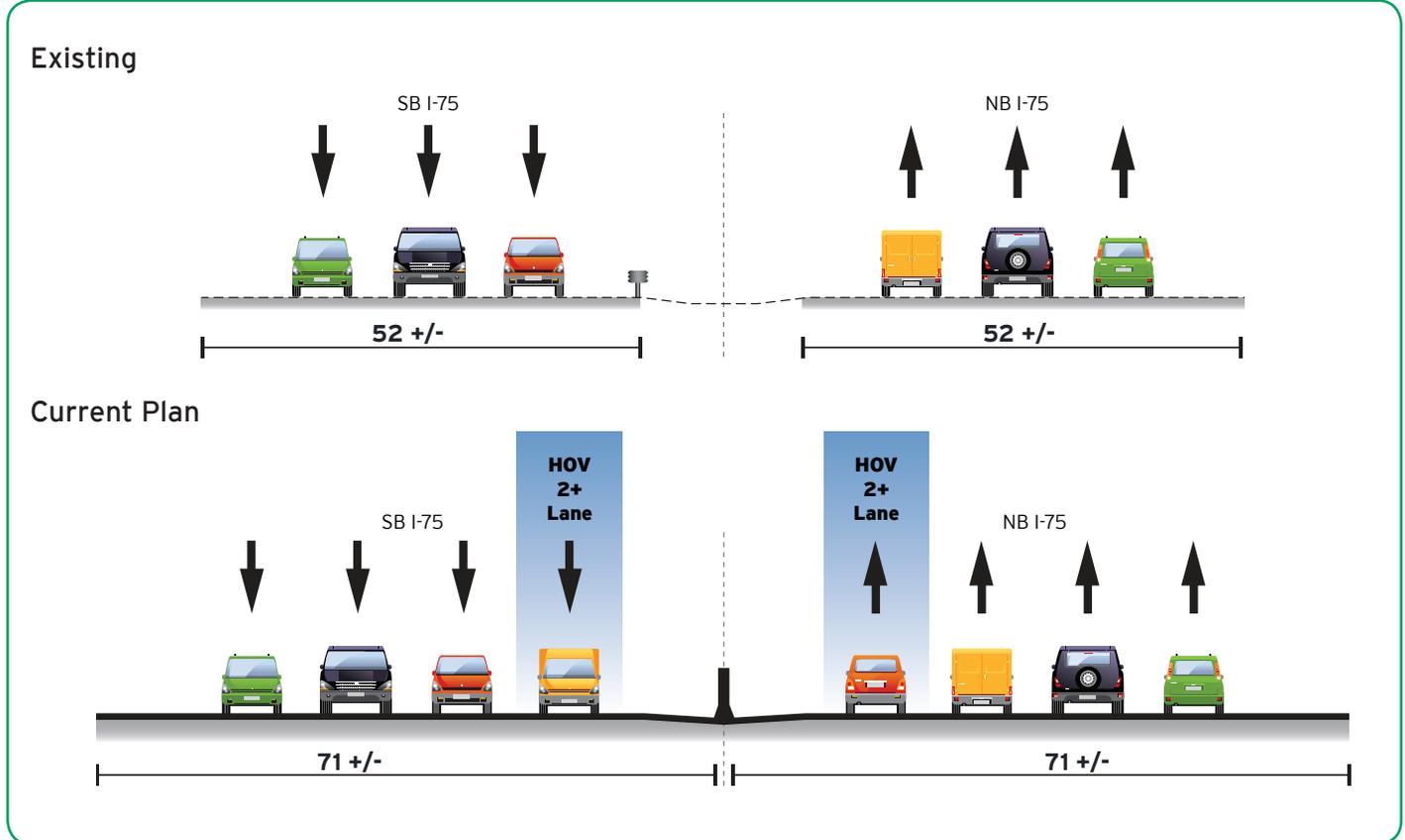
"Meeting the purpose of the project will improve motorist safety, travel efficiency, and reliability. These are essential both to personal mobility and to the movement of freight."

*Proposed Widening and Reconstruction,
I-75 from M-102 to M-59, Oakland County, Michigan
Final Environmental Impact Statement*

- Shifting the northbound on and southbound off ramps serving M-102 (8-Mile Road) to improve safety.
- Widening I-75 bridges north of 14 Mile Road (plus the I-75 bridge over 13 Mile Road) to accommodate the lane addition.
- Improving the 12 Mile Road interchange (ramp modifications) and 14 Mile Road interchange (ramp modifications and widening 14 Mile Road under I-75).
- Maintaining 10-foot inside median shoulders, consistent with the remaining corridor.
- Braiding the ramp north of I-696 (with the relocation of the Dallas Avenue crossover bridge to south of Lincoln Avenue).
- Reconstructing the pedestrian bridges over the depressed section of the freeway, plus a sidewalk addition to the service drive under I-696 on the east side of I-75.
- Constructing a new storm water system in the southern section of the corridor.
- Developing new storm water retention in the northern section of the corridor.

WORKSHOP SUMMARY

Typical I-75 Cross-Sections - Existing and Current Plan



Source: HNTB

Schedule

As currently planned, the project is divided into five northerly rural freeway segments and two southerly urban freeway segments. The project is to be delivered using seven separate construction packages using the design/bid/build project delivery method with construction beginning at the north end in 2017 and completed at the south end by 2031 (see next page for details).

Cost

As currently planned, MDOT estimates the total project cost to be \$768 million (2009 dollars) or \$1.3 billion (YOE) which includes design, right-of-way, and all construction related costs (see next page for the project cost distribution in 2009 dollars).



Photo of existing I-75 cross-section just south of 14 Mile Road.

MDOT I-75 SUCCESS MANAGEMENT WORKSHOP

Current Plan I-75 Cost and Construction Schedule

Construction Schedule

Design-Bid-Build Project Schedule (7 Packages - 7 Sections)	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	
North Segment 5 Package #1 North of Adams Rd to South of M-59					DESIGN \$3.0		CONST \$55.0															
North Segment 4 Package #2 North of Wattles Rd to North of Adams Rd										DESIGN \$4.3		CONST \$79.3										
North Segment 3 Package #3 North of Rochester Rd to North of Wattles Rd													DESIGN \$4.1		CONST \$75.8							
North Segment 1 Package #4 South of 12 Mile Rd to North of 13 Mile Rd														DESIGN \$4.6 ROW \$0.5		CONST \$83.7						
North Segment 2 Package #5 North of 13 Mile Rd to North of Rochester Rd														DESIGN \$4.3		CONST \$78.1						
South Segment 2 Package #6 M-102 (8 Mile Rd) to I-696																	DESIGN \$8.5 ROW \$1.0				CONST \$194.0	
South Segment 1 Package #7 I-696 to South of 12 Mile Rd (2013 Design for Ramp Braid)			DESIGN \$10.3															DESIGN				CONST \$154.1

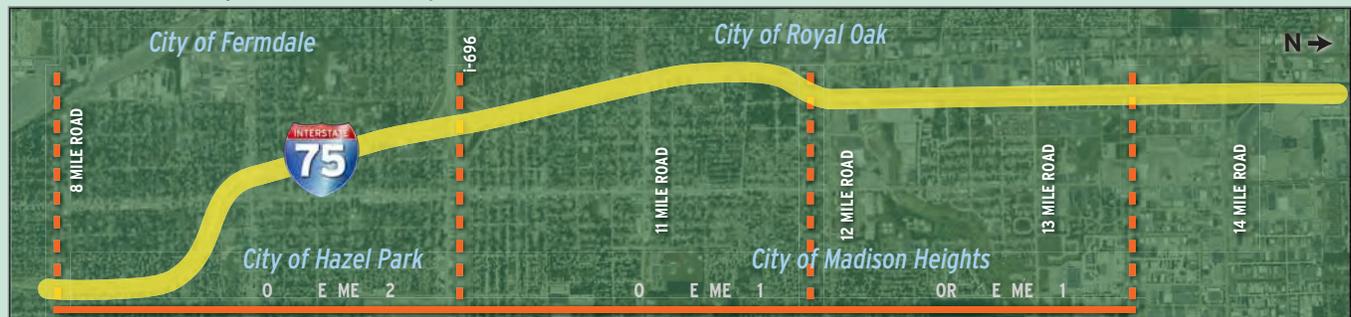
Source: SEMCOG Long-Range Plan

I-75 Oakland County Construction Segments - 14 Mile Road to M-59



Source: HNTB

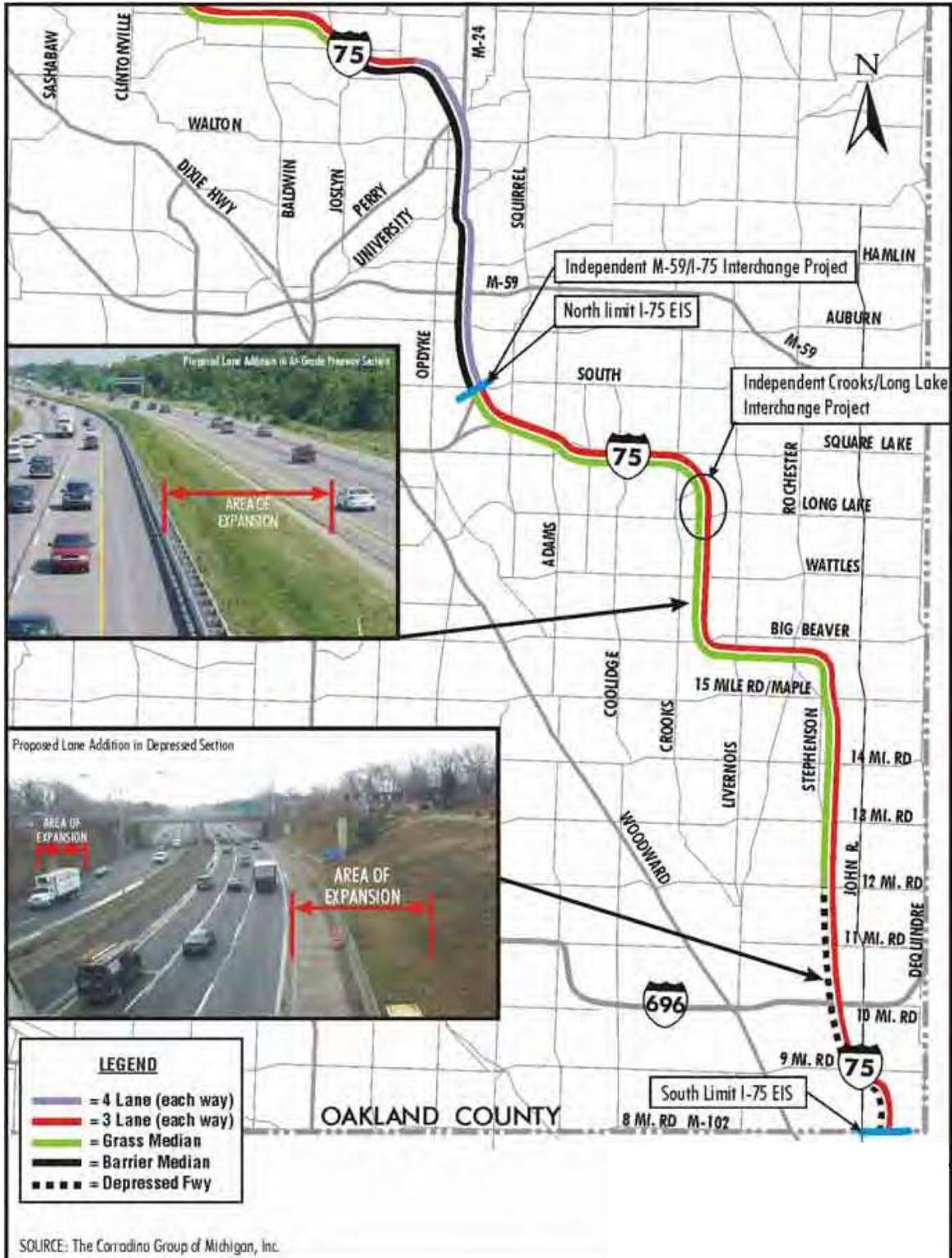
I-75 Oakland County Construction Segments - 8 Mile Road to 14 Mile Road



Source: HNTB

WORKSHOP SUMMARY

I-75 Oakland County - Location and Existing Conditions



Source: Proposed Widening and Reconstruction, I-75 from M-102 to M-59, Oakland County, Michigan
Final Environmental Impact Statement

MDOT I-75 SUCCESS MANAGEMENT WORKSHOP



The MDOT I-75 Success Management Workshop was held on November 4, 2011 in Novi, MI.

WORKSHOP PURPOSE & INTRODUCTION

On November 4, 2011, MDOT staff, FHWA-Michigan Division, and HNTB program delivery experts met in Novi, Michigan to discuss the I-75 Corridor Oakland County project. Workshop participants were charged by Greg Johnson, MDOT Chief Operating Officer, to rethink the project's current plan, and with the help of HNTB experts, develop new and innovative ideas to deliver the I-75 project. The HNTB Success Management model served as the foundation for discussion and provided the framework for developing a shared vision of success and a new approach to delivering this important project to stakeholders in a timely and cost effective manner.

Workshop Participants

MDOT

- Brenda Chapman
- Kurt Coduti
- Sue Datta
- Myron Frierson
- Greg Johnson
- Tony Kratofil
- Mark Vanportfleet
- Brad Wieferich
- Dave Wresinski

HNTB

- Leonard Becker
- Matthew Click
- David Downs
- Pete Rahn
- Scott Smith
- Matt Webb
- David Wenzel
- Tom Weston

FHWA

- Ryan Rizzo

WORKSHOP SUMMARY

Workshop Agenda

- **Introduction:**
Overview of Success Management
- **Step 1:** Define Success
- **Step 2:** Develop Goals and Supporting Success Measures
- **Step 3:** Identify Project Delivery Options
- **Step 4:** Develop A Plan For Success
- **Step 5:** Identify Risks - Threats & Opportunities
- **Step 6:** Develop Action Plan

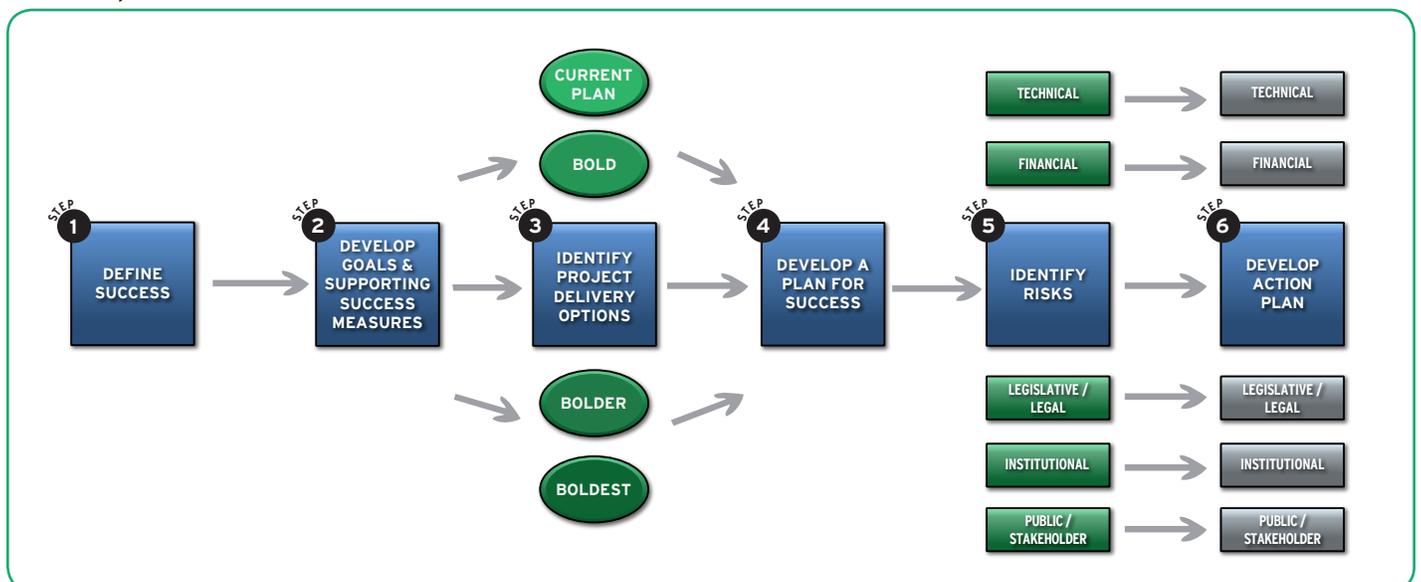
Workshop Process

The MDOT I-75 Success Management Workshop is a first step in the HNTB Success Management Model. During the workshop, participants developed a shared vision of success and the resulting success measures for the I-75 project. The group reviewed project delivery options, and selected a new approach for consideration in completing the I-75 project. Risks were identified and preliminary action plans were developed for further review and refinement. The following flowchart represents the steps in the Success Management process covered during the one day workshop.



Brenda Chapman and Myron Frierson, MDOT, discuss their vision for the I-75 corridor during the future headline exercise.

Workshop Flowchart



MDOT I-75 SUCCESS MANAGEMENT WORKSHOP

WHY HOLD A SUCCESS MANAGEMENT WORKSHOP?

Every project has a distinct life cycle evolving from an early idea or concept brainstormed to address an existing problem or simply seeking to improve one's quality of life. Transportation projects are no different; evolving from an early feasibility study to evaluate the merits of proceeding forward with a capital investment, completing necessary environmental clearance analysis to secure federal funding, proceeding through a more detail design phase and ultimately if successful ending up in construction. The I-75 Corridor Project in Oakland County has followed this same delivery approach.

To date, The Michigan Department of Transportation (MDOT) has completed several studies, dating back to 1990, evaluating options to increase capacity and modernize the corridor to meet mobility and freight demands. In 2006, MDOT received a Record of Decision clearing the project to advance into the design phase and clearing the way for use of federal transportation funds. In 2010, MDOT completed detailed engineering reports for the 18-mile corridor. These reports identified a preferred alternative that will widen I-75 to four lanes in each direction from 8 Mile Road to just south of M-59, accommodate a new High Occupancy Vehicle (HOV) lane, replace bridges, modernize interchanges, and improve safety by separating conflicting movements along the corridor. MDOT estimates the total project cost to be \$768 million in 2009 dollars.

As is the case with most transportation agencies across the U.S., MDOT operates in a very fiscally constrained environment. As a result, MDOT's current plan spreads out the I-75 corridor improvements over a period of 20 years, with the last segment of the project being scheduled to be completed in 2031 at a grand total cost of \$1.3 billion. Further, MDOT's current plan does not have funding in place to begin construction of the first phase until 2017.

Fast-forward to 2011, working in a new environment under the Governor Snyder Administration, MDOT has reinvented itself by seeking ways to deliver its programs and projects, better, faster, cheaper, safer and smarter. On November 4, 2011, the MDOT I-75 Success



David Downs, HNTB, provides an overview of the HNTB Success Management during the I-75 workshop.

Management Workshop employed the HNTB Success Management model with the goal of creating a new plan to deliver the I-75 Oakland County Corridor. During the day long workshop, participants were encouraged to **“think bold”** and look past existing constraints. Throughout the workshop, participants were provided the opportunity to define a new vision of success and explore options to accelerate delivery of the I-75 project providing stakeholders with cost and time savings. In the end, the workshop team developed a **big, bold** plan to reinvent the delivery of the I-75 Oakland County Corridor project.

WORKSHOP SUMMARY

The HNTB Success Management Model

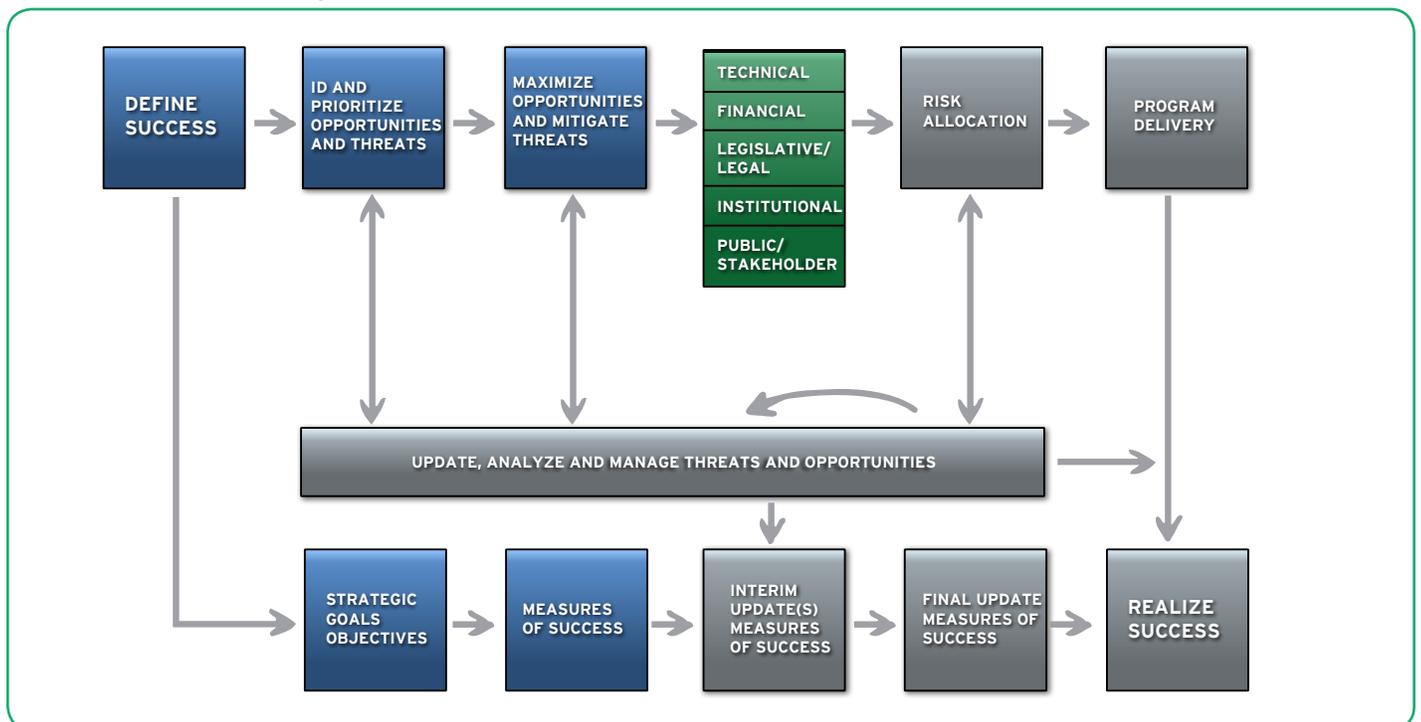
No individual or organization begins a significant venture, such as a large scale infrastructure project or improvement program, thinking it will not get out of the starting blocks or end in disappointment, public criticism or even worse, failure. On the contrary, every major infrastructure initiative begins with a degree of optimism and the belief the program will be successful. However, what is often overlooked or not well understood is the importance of supporting a program development and delivery process on the foundation of a strategic, well-executed management plan.

The HNTB Success Management approach puts in motion a plan that defines success, manages uncertainty, provides value and delivers results. Success management starts by developing a shared vision of success, a list of strategic goals, and the resulting success measures. Program vision and goals are best developed and prioritized during a facilitated workshop. The Success Management Model recognizes that every project is unique and has unique goals.



David Downs, HNTB, leads the group through an exercise to prioritize success measures.

The HNTB Success Management Process



The Success Management process extends throughout the life cycle of a project. The steps shaded in blue and green in the above flowchart were those completed during the day long MDOT I-94 workshop.

MDOT I-75 SUCCESS MANAGEMENT WORKSHOP

WHAT ARE THE BENEFITS OF SUCCESS MANAGEMENT?

- Defines what success looks like for a program, a vision of success.
- Aligns program goals and objectives with key stakeholders and establishes and communicates expectations.
- Provides a better image and reputation.
- Develops more efficient internal business practices.
- Uses staff experts who are more connected to the community/industry.
- Achieves less media attention/scrutiny.
- Gains more support from elected officials and other stakeholders.
- Provides more improvements for less money.
- Identifies risks that could impact program success.
- Establishes buy-in and support through a collaborative approach.
- Develops risk mitigation strategies.
- Identifies program and project delivery strategies that are best suited to accomplish program goals.
- Thoughtfully assigns risk to parties best equipped to manage risk.
- Delivers and measures cost and time savings.
- Increases the confidence in program schedule and cost forecasts.
- Significantly increases the likelihood of delivering on the promises made on any project or program.



Kurt Coduti, MDOT, considers what future newspaper headlines should read for the I-75 Oakland County project during Step 1 of the workshop.

In order to reach program goals and realize success, a strategy to maximize opportunities and mitigate threats should be developed. Risks are most commonly viewed as having a negative impact to program goals. But, these risks may also include positive opportunities which may improve the likelihood of success. Risk management strategies begin by identifying all threats and opportunities that may affect successful program completion. As risks are identified, they are analyzed to determine the probability of occurrence and the severity of impact, resulting in a risk rating. This rating is used to prioritize risk planning efforts and facilitate the efficient use of risk management resources. Risk mitigation or action plans are developed in response to each identified.

CREATING THE I-75 “PLAN FOR SUCCESS”

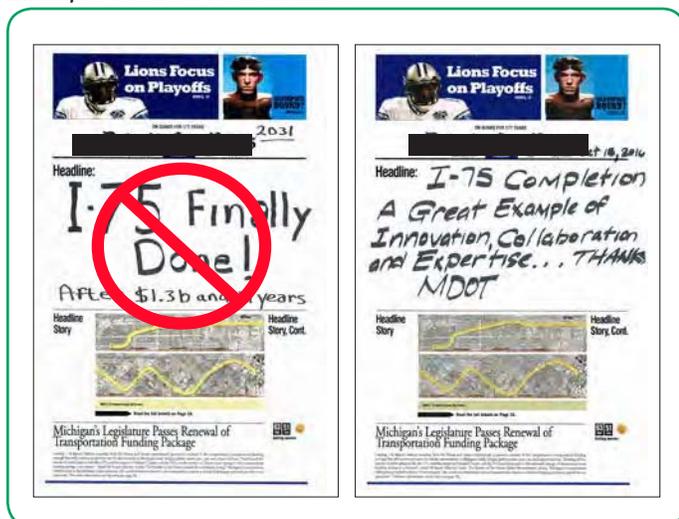
Step 1: Define Project Success

The Success Management process begins by developing a shared vision of success and a list of strategic program goals and objectives which clearly communicate desired outcomes. This step is typically completed very early in the program development process. An important step for MDOT in advancing the I-75 project is developing this vision for success. Pete Rahn of HNTB, and former Director of the New Mexico and Missouri Departments of Transportation, led workshop participants through this important step sharing his experience in delivering successful projects. Pete provided example success stories of two projects in which he led, the “Big I” (I-25/I-40) Interchange in Albuquerque, New Mexico and the I-64 Reconstruction Project in Saint Louis, Missouri. For each project, Pete provided goals and supporting success measures and the resulting outcome of reaching each goal. These examples served as the foundation for workshop participants to think differently about the I-75 project. Workshop participants were encouraged to

think “**Big and Bold**” and remove existing constraints associated with delivering the I-75 project as planned.

In order to facilitate the visioning process, workshop participants were asked to consider what they would like newspaper headlines to read at the completion of the I-75 project. Participants were each given a mock newspaper with a blank headline and were asked to enter their desired I-75 headline and completion date (see table). As each participant shared their headline, the group was asked to consider the important success measures necessary to accomplish this each headline.

Example Future I-75 Headlines



During the headline exercise conducted in Step 1, workshop participants were asked to envision what they would like future I-75 headlines to read. The example headline on the left is associated with the Current Plan while the headline on the right represents a new vision for success created by workshop participants.

HEADLINE	DATE
Armageddon Avoided I-75 done in 75...Christmas comes early	Dec. 25, 2017
I-75 Project Completed Ahead of Schedule and Within Budget - Great Job MDOT	2020
I-75: A Community Freeway Completed	2015
Miracles from MDOT; I-75 HOV Drives Oakland County's Future in Just 3 Years	2015
2020 "I's Wide Open	Nov. 28, 2020
I-75: MDOT Proves The Impossible Is Possible	Dec., 2018
I-75: All Lanes Open!	Oct. 1, 2015
I-75 Open for Business Thank you MDOT	Oct. 2, 2020
I-75 Completion A Great Example of Innovation, Collaboration and Expertise....Thanks MDOT	Oct. 15, 2016
Michigan Legislature Approves Contractor Financing of Infrastructure Projects	April 12, 2012
MDOT Delivers...Again	Oct. 1, 2017

Future I-75 headlines as envisioned by workshop participants.

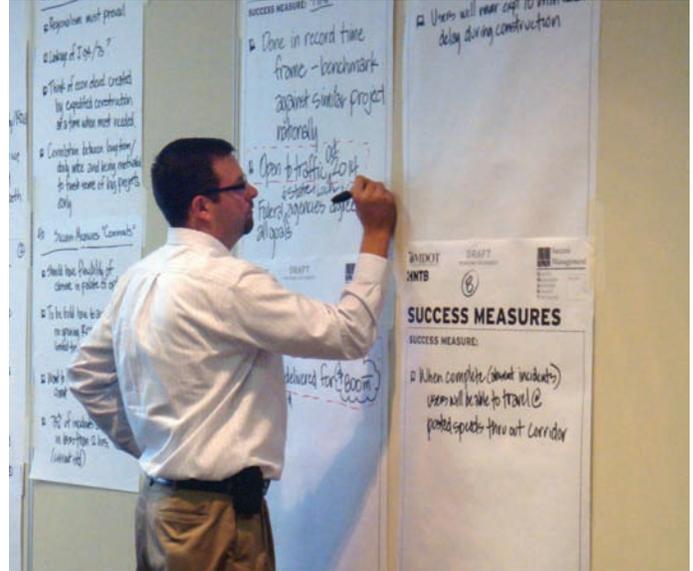
MDOT I-75 SUCCESS MANAGEMENT WORKSHOP

Step 2: Develop Goals and Supporting Success Measures

Following the development of the aforementioned headlines and a better definition of desired success, HNTB's David Wenzel and David Downs walked the group through a discussion of identifying common themes. These themes were used as the foundation on which success measures were developed by MDOT and FHWA. Each developed success measure was evaluated to assess whether it was:

- ✓ **S**pecific
- ✓ **M**easurable
- ✓ **A**ttainable
- ✓ **R**elevant
- ✓ **T**ime-bound

Each measure was documented and prioritized by MDOT and FHWA participants. I-75 success measures resulting from this discussion are listed in the following column in order of importance according to workshop participants.



Matt Webb, HNTB, documents success measures provided by the workshop team.

I-75 SUCCESS MEASURES

1. I-75 Project Done in Record Time! - Open to Traffic **October 2015**.
2. Project delivered for **\$800 million** in year of expenditure dollars.
3. When complete (absent incidents) users will be able to travel at the **posted speed at all times**.
4. Users never experience more than **five minutes** of additional delay during construction.
5. Federal, State and Local Agencies, and local communities **collaborate** with MDOT to achieve goals for the I-75 project.
6. Oakland County residents and I-75 users give MDOT a **90% approval rating** for performance on the I-75 project during and after construction.
7. The I-75 corridor design and construction will be a national model in highway **sustainability**.

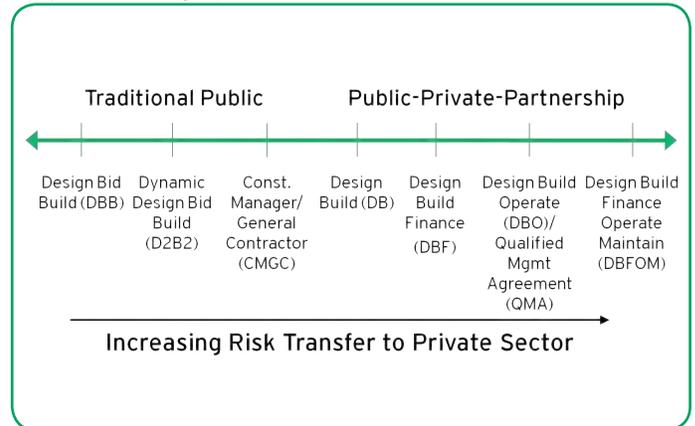
Success measures were determined by MDOT and FHWA participants during Step 2 of the Success Management Workshop.

WORKSHOP SUMMARY

Step 3: Identify Project Delivery Options

To help facilitate the project delivery discussion, HNTB prepared three example project delivery options. These options were “Bold”, “Bolder”, and “Boldest.” Along with the Current Plan, these options illustrated a range of delivery options which MDOT could utilize to expedite the completion of the project and reduce project cost. Understanding, that at the present time, there are multiple legislative and regulatory hurdles that would need to be overcome; Scott Smith, Matthew Click, Tom Weston, and David Downs of HNTB led workshop participants through a discussion on each of the project delivery options. These options served as talking points as workshop participants discussed the merits of each alternative. Ultimately, plan elements were combined to form a new I-75 “Plan for Success.”

Project Delivery Spectrum



Source: HNTB

The following table summarizes components of each project delivery option and the approximate savings attributed to each plan.

	RANGE OF OPTIONS DEVELOPED BY HNTB			
	CURRENT PLAN	BOLD	BOLDER	BOLDEST
SCOPE	18 Mile Full Reconstruct with widening to 4X4	18 Mile Full Reconstruct with widening to 4X4	Widen to 4X4. Reconstruct 4 southern miles and inlay 14 northern miles. 6' median shoulder & 10' outside shoulder	Widen to 4X4. Reconstruct 4 southern miles and inlay 14 northern miles. 2' median and outside shoulders. Close NB exit to 11 Mile.
DELIVERY METHOD	Design/Bid/Build (7 Packages)	Design/Build (2 Packages)	Design/Build (with Practical Design) (1 Package)	Design/Build (with Flexible Specifications) (1 Package)
OPERATIONS	HOV 2+ Only	HOV 2+ Only	HOV 3+/HOT Lane with Fixed Pricing	BRT Lane Dynamically Priced
YEAR COMPLETED	2031	2019	2018	2016
COST (YOE)	\$1.3B	\$802M	\$675M	\$504M
PRESENT VALUE	\$768M	\$638M	\$548M	\$420M

Blue shading indicates the new I-75 project delivery options selected by workshop participants.
Source: HNTB

MDOT I-75 SUCCESS MANAGEMENT WORKSHOP

“Bold” Delivery Option

Scope:

Same as Current Plan - 18 mile full reconstruct with widening to four lanes each direction.

Delivery Method:

The design/build project delivery method is used to expedite construction by 12 years based on two bid packages. The packages are divided into rural and urban freeway sections split at logical drainage boundaries. Package #1 includes the rural section of I-75 from North of 13 Mile Road to South of M-59 (North Segments 2-5) and is constructed first. Package #2 includes the urban section of I-75 from M-102 (8 Mile Road) to North of 13 Mile Road (South Segments 1-2 & North Segment 1) and is constructed last to allow MDOT time to acquire the right-of-way to build this section of freeway.

Operations:

HOV 2+ (Same as Current Plan)

Year Completed/Time Savings:

2019 - 12 years ahead of Current Plan.

Cost:

\$802M (YOE), \$638M (Present Value)

Estimated Cost Savings:

\$502M (YOE), \$130M (Present Value) Savings

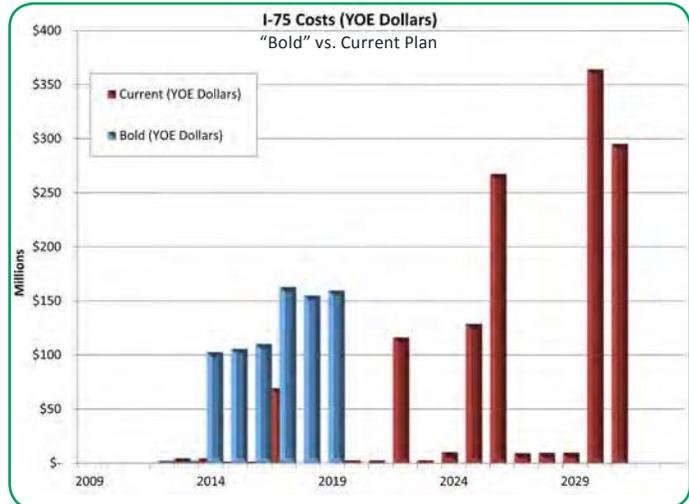
The estimated cost savings for the “Bold” Delivery Option include five cost categories with escalation savings as the largest single item due to accelerating the project schedule by 12 years. Economies of scale savings assume major roadway items of work will be discounted up to 20% and bridge fabrication items up to 10% due to design/build contractor efficiencies. Maintaining traffic savings account for reduced mobilizations, fewer traffic control stages, and less interim connection work than the Current Plan. Design/build Team innovation assumes alternative technical concepts (ATCs) will be proposed by the design/build team resulting in at least a 10% reduction in overall costs with the savings. Contracting and administrative efficiencies are also realized with the expedited construction schedule.

Cost Savings Matrix - “Bold” Plan

COST CATEGORY	SAVINGS
Construction Cost Escalation	\$373 Million
Economies of Scale	\$24 Million
Maintenance of Traffic (including Temp Work)	\$6 Million
Design/Build Team Innovation (including Practical Design)	\$77 Million
Contracting & Administrative Efficiencies (includes PE/CE savings)	\$22 Million
Right-of-Way Reduction	-
TOTAL SAVINGS (\$YOE)	\$502 Million

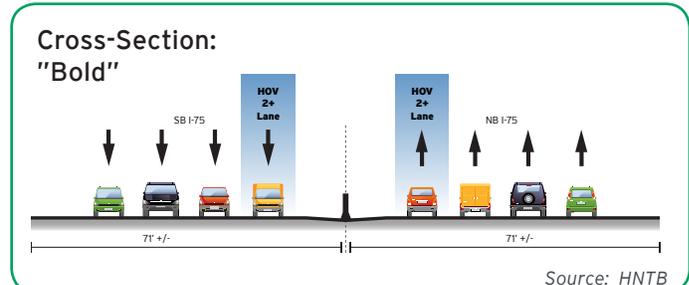
Source: HNTB

Cash Flow Chart - “Bold” Plan



Source: HNTB

Typical Cross-Section: “Bold”



Source: HNTB

WORKSHOP SUMMARY

“Bolder” Delivery Option

Scope:

The “Bolder” option widens the entire corridor and adds an HOV lane in each direction between 8 Mile Road and just south of M-59. As part of this solution, MDOT will seek to maximize the value of the existing infrastructure assets in the corridor utilizing a strong asset management approach. The “Bolder” option applies sustainability principles to only replace those parts of the system in poor condition. For example, instead of completely reconstructing the corridor, MDOT would seek to reuse the base material and replace only the pavement. Another example of this approach would be to only replace the bridges in poor condition. This requires that Practical Design solutions be implemented such as reducing the roadway cross-section throughout the corridor to reduce the pavement section and to reuse numerous existing bridges where four through lanes of I-75 traffic in each direction can be maintained under and across existing bridges. Additionally, this option will evaluate interchange operations and the potential to modernize existing interchanges.

Delivery Method:

The design/build project delivery method is used to expedite construction by 13 years based on one large bid package. The package includes both the rural freeway section from I-75 North of 13 Mile Road to South of M-59 (North Segments 2-5) and is constructed first, and the urban section of I-75 from M-102 (8 Mile Road) to North of 13 Mile Road (South Segments 1-2 & North Segment 1) and is constructed last to allow MDOT time to acquire the right-of-way to build this section of freeway.

Operations:

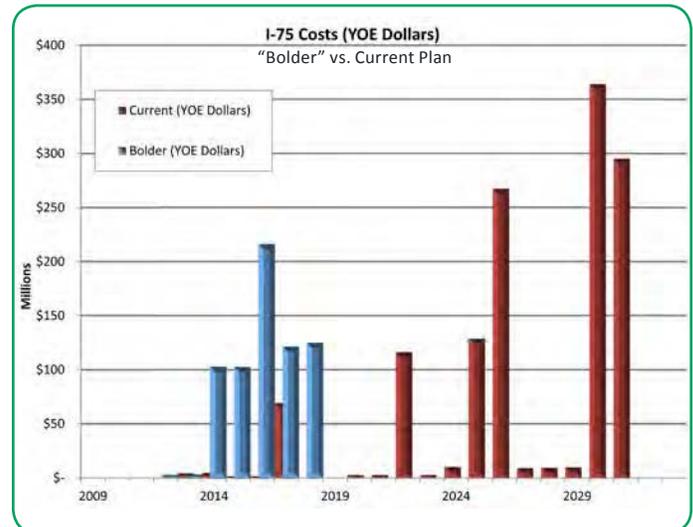
Under this alternative, two options were evaluated to maximize the use of the new capacity in the HOV lane. The first is increasing the HOV requirement from 2+ to 3+ meaning that in order for a vehicle to enter this lane, three people would need to be in that vehicle. This requirement increases the total throughput capacity of the corridor. The other option evaluated in this scenario is the implementation of a High Occupancy Toll (HOT) lane. The HOT lane envisioned under this scenario would utilize a fixed pricing approach where monthly tags would be sold to vehicle owners who wished to utilize the lane.

Cost Savings Matrix - “Bolder” Plan

COST CATEGORY	SAVINGS
Construction Cost Escalation	\$410 Million
Economies of Scale	\$23 Million
Maintenance of Traffic (including Temp Work)	\$12 Million
Design/Build Team Innovation (including Practical Design)	\$150 Million
Contracting & Administrative Efficiencies (includes PE/CE savings)	\$35 Million
Right-of-Way Reduction	-
TOTAL SAVINGS (\$YOE)	\$630 Million

Source: HNTB

Cash Flow Chart - “Bolder” Plan



Source: HNTB

MDOT I-75 SUCCESS MANAGEMENT WORKSHOP

The attractiveness of a monthly tag approach versus implementing a full HOT lane system complete with electronic tolling equipment is that the tag approach requires much less up-front capital costs to implement and the on-going monthly operations cost is much cheaper.

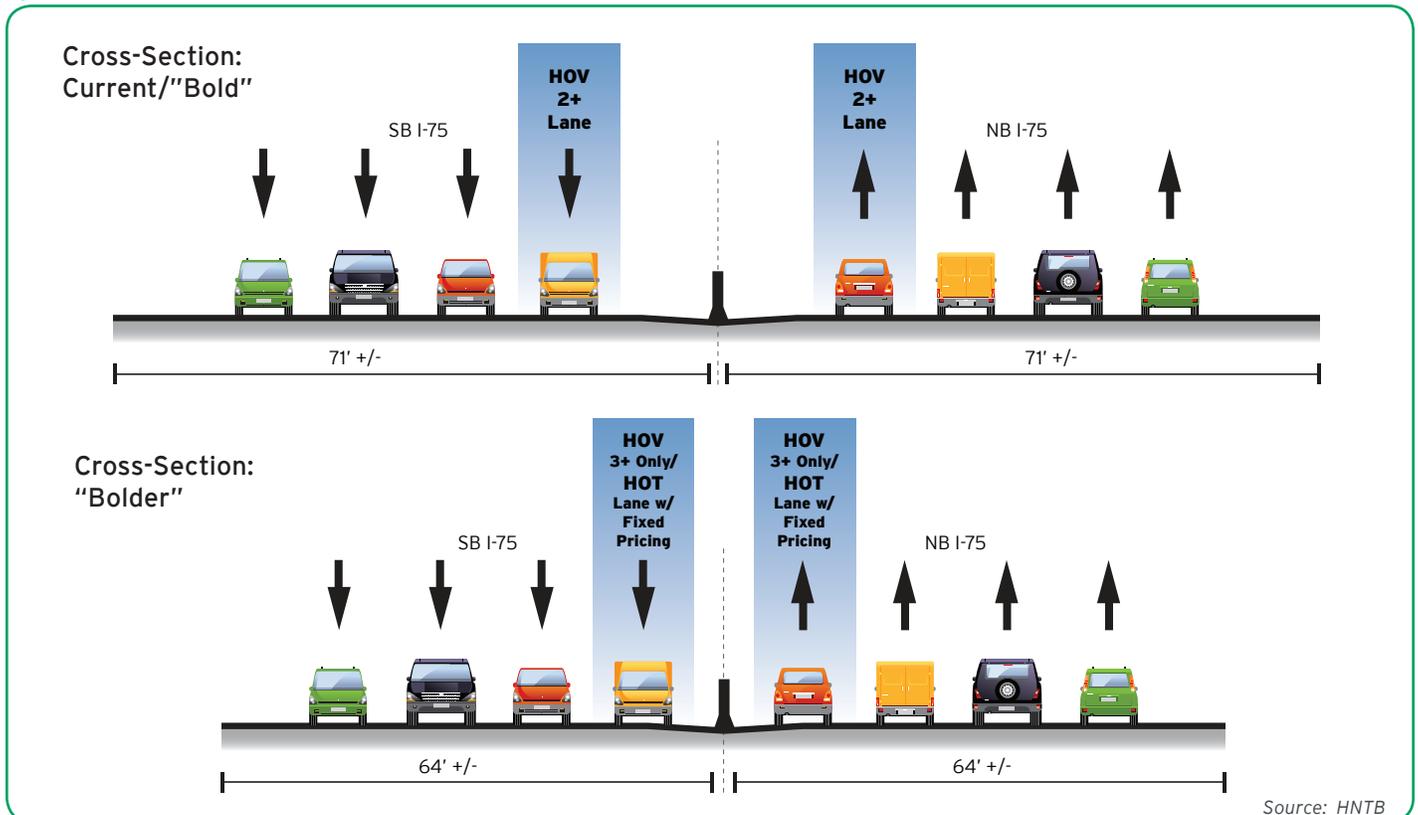
Year Completed/Time Savings:
2018 - 13 years ahead of Current Plan.

Cost:
\$675M (YOE), \$548M (Present Value)

Estimated Savings:
\$630M (YOE), \$220M (Present Value) Savings

The estimated cost savings for the “Bolder” Delivery Option include five cost categories with escalation savings as the largest single item due to accelerating the project schedule by 13 years. Economies of scale savings assume major roadway items of work will be discounted up to 20% and bridge fabrication items up to 10% due to design/build contractor efficiencies. Maintaining traffic savings account for reduced mobilizations, fewer traffic control stages, partial freeway closure at one of the southerly segments, and less interim connection work than the Current Plan. Design/build team innovation assumes ATCs will be proposed by the design/build team resulting in at least a 10% reduction in overall costs with the savings. Practical design concepts applied to the proposed roadway cross section reduce the pavement width by 10%, reduce proposed retaining wall limits, and support saving up to 50% of the existing bridges. Contracting and administrative efficiencies are also realized with the expedited construction schedule.

Typical I-75 Cross-Sections - Current/“Bold” and “Bolder” Plans



WORKSHOP SUMMARY

“Boldest” Delivery Option

Scope:

The “Boldest” option improves capacity throughout the entire corridor and adds a Bus Rapid Transit (BRT) Free/dynamically priced HOT lane in each direction between 8 Mile Road and just south of M-59. As part of this solution, MDOT will seek to maximize to the greatest extent the value of the infrastructure assets in the corridor utilizing a strong asset management approach. The “Boldest” option applies sustainability principles to only replace those parts of the system in poor condition. For example, instead of completely reconstructing the corridor, MDOT would seek to reuse the base material and replace only the pavement. For the bridges this option reuses nearly all of the existing bridges which are still in good condition. This option utilizes the greatest number Practical Design solutions throughout the corridor to reduce the pavement section by significantly narrowing the width of the shoulders, reduce right-of-way impacts, and eliminate proposed retaining walls. Interchange operations and the potential to modernize existing interchanges will also be evaluated with this option along with the potential elimination of the proposed NB I-75/11 Mile braided ramp included in the Current Plan. As shown in the table to the right, Practical Design solutions are maximized to reduce the overall cost of the project.

Delivery Method:

The design/build project delivery method is used to expedite construction by 15 years based on one large bid package. The package includes both the rural freeway section from I-75 North of 13 Mile Road to South of M-59 (North Segments 2-5), and the urban section of I-75 from M-102 (8 Mile Road) to North of 13 Mile Road (South Segments 1-2 & North Segment 1). The construction of I-75 is compressed to three construction seasons due in large part to the extent of reuse of the existing infrastructure assets. Contractor innovation will be enhanced through the use of flexible specifications to meet performance requirements.

Operations:

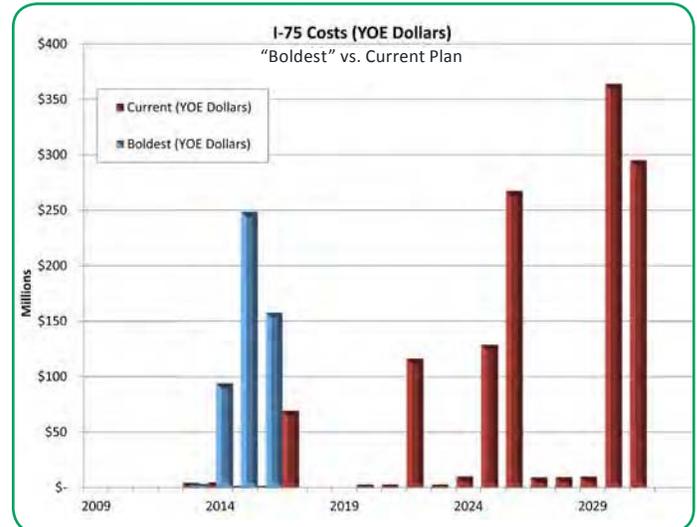
Under this alternative a dynamically priced HOT lane is utilized and everybody who uses the lane pays a toll, except for passengers utilizing BRT. The HOT lane envisioned

Cost Savings Matrix - “Boldest” Plan

COST CATEGORY	SAVINGS
Construction Cost Escalation	\$455 Million
Economies of Scale	\$22 Million
Maintenance of Traffic (including Temp Work)	\$17 Million
Design/Build Team Innovation (including Practical Design)	\$250 Million
Contracting & Administrative Efficiencies (includes PE/CE savings)	\$53 Million
Right-of-Way Reduction	\$4 Million
TOTAL SAVINGS (\$YOE)	\$801 Million

Source: HNTB

Cash Flow Chart - “Boldest” Plan



Source: HNTB

MDOT I-75 SUCCESS MANAGEMENT WORKSHOP

under this scenario would require an electronic tolling system to be implemented and a comprehensive toll collection system be implemented. The attractiveness of this approach is that the capacity during peak periods of the new lane would be maximized and speeds could be guaranteed to users of the HOT lane.

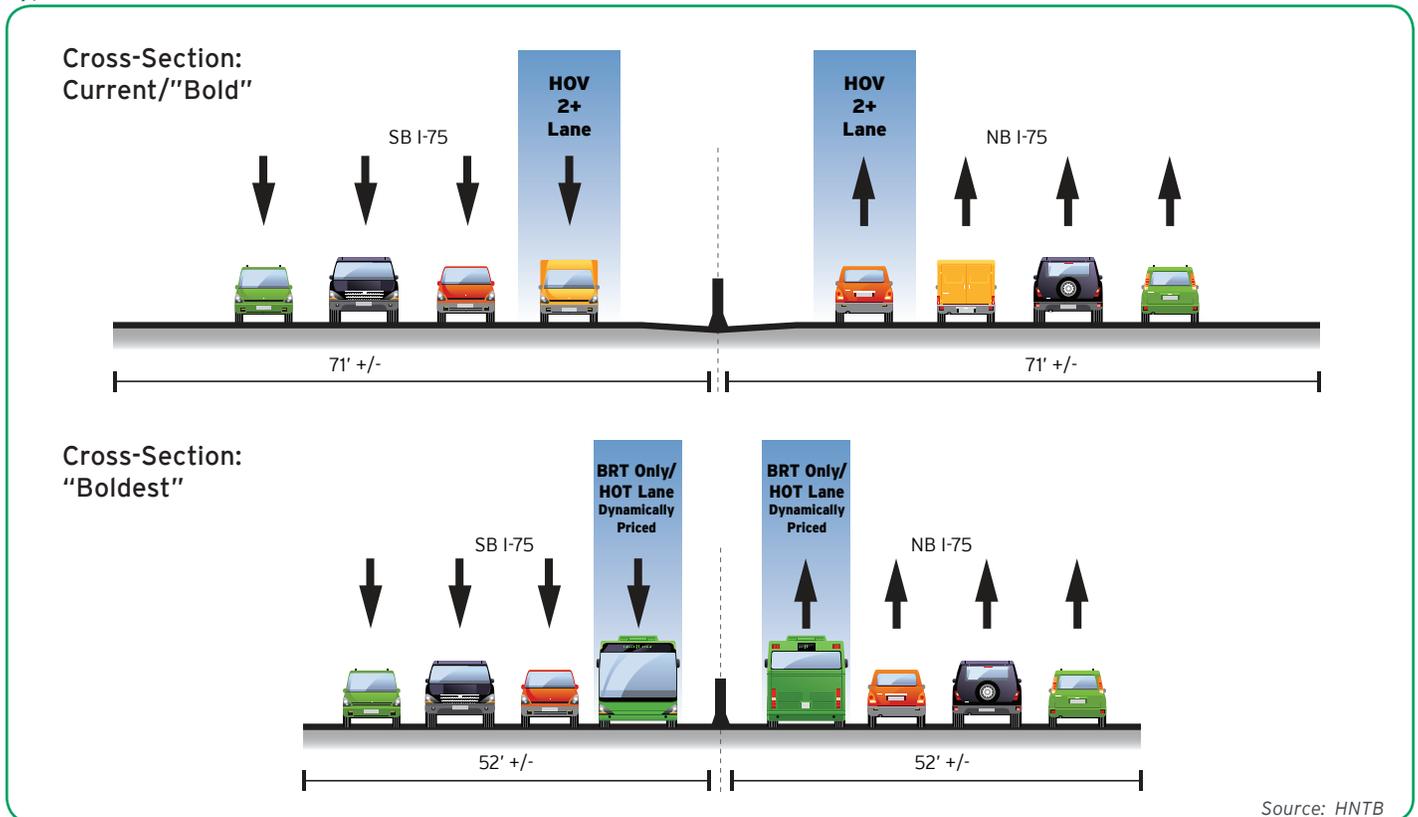
Year Completed/Time Savings:
2016 - 15 years ahead of Current Plan.

Cost:
\$504M (YOE), \$420M (Present Value)

Estimated Savings:
\$801M (YOE), \$348M (Present Value) Savings

The estimated cost savings for the “Boldest” Delivery Option include six cost categories with escalation savings as the largest single item due to accelerating the project schedule by 15 years. Economies of scale savings assume major roadway items of work will be discounted up to 20% due to design/build contractor efficiencies. Maintaining traffic savings account for reduced mobilizations, fewer traffic control stages, partial freeway closure at the two southerly segments, and less interim connection work than the Current Plan. Design/build team innovation assumes ATCs will be proposed by the design/build team resulting in at least a 10% reduction in overall costs with the savings. Practical design concepts applied to the proposed roadway cross section reduce pavement width by 25%, proposed retaining wall limits by at least 50%, right-of-way needs, and support savings up to 90% of existing bridges. Contracting and administrative efficiencies are also realized with the expedited construction schedule.

Typical I-75 Cross-Sections - Current/“Bold” and “Boldest” Plans



WORKSHOP SUMMARY

Step 4: Develop and Recommend "Plan For Success"

At the conclusion of the discussion on project delivery options, MDOT and FHWA representatives developed a new "Plan for Success." This plan includes several of the options above including design/build procurement (one construction package), which allows Practical Design and Flexible Design Specifications, and a revised operational plan which includes the potential conversion of the planned HOV lane to a HOT Lane. The plan calls for project completion by October 2015 at a cost of approximately \$548 million.

The following, as prepared by workshop participants, summarizes the new MDOT I-75 Corridor, Oakland County, "Plan For Success":

Scope:

MDOT's "Plan for Success" for the project scope is based on the "Bolder" Delivery option with provisions to re-evaluate the proposed NB I-75/11 Mile braided ramp included in the Current Plan.

Delivery Method:

The design/build project delivery method is used to expedite construction by 15 years based on one large bid package. The package includes both the rural freeway section from I-75 North of 13 Mile Road to South of M-59 (North Segments 2-5), and the urban section of I-75 from M-102 (8 Mile Road) to North of 13 Mile Road (South Segments 1-2 & North Segment 1). The construction of I-75 is compressed to three construction seasons due in large part to the extent of reuse of the existing infrastructure assets. Contractor innovation will be enhanced through the use of flexible specifications to meet performance requirements.

Operations:

HOV 2+ (Same as Current Plan) with provisions to convert to a future HOT lane to take advantage of unused capacity.

Year Completed/Time Savings:

2015 - 16 years ahead of Current Plan.



Workshop participants consider a project delivery options for I-75 Oakland County - a new "Plan For Success."

 MDOT'S "PLAN FOR SUCCESS"	
SCOPE	Widen to 4X4. Reconstruct southern 4 miles and inlay 14 northern miles. 6' median shoulder & 10' outside shoulder. Revisit braided ramp area.
DELIVERY METHOD	Design/Build (with Practical Design + Flexible Specifications) (1 Package)
OPERATIONS	HOV 2+ Only with flexibility to convert to future HOT Lane
YEAR COMPLETED	October, 2015
COST (YOE)	\$636M
PRESENT VALUE	\$548M

"Plan For Success" developed by workshop participants.

MDOT I-75 SUCCESS MANAGEMENT WORKSHOP

Cost:

\$636M (YOE), \$548M (Present Value)

Estimated Savings:

\$669M (YOE), \$220M (Present Value) Savings

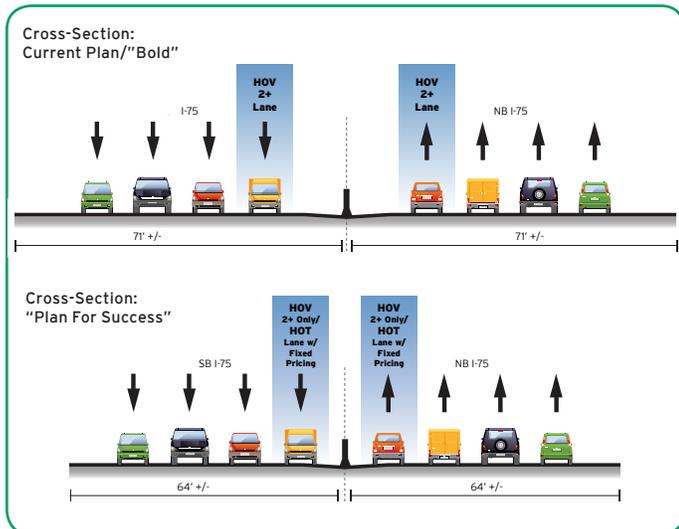
MDOT's "Plan for Success" estimated cost savings is based on the "Bolder" Delivery Option with additional escalation savings due to accelerating the project schedule 16 years ahead of the current plan. Economies of scale savings assume major roadway items of work will be discounted up to 20% and bridge fabrication items up to 10% due to design/build contractor efficiencies. Maintaining traffic savings account for reduced mobilizations, fewer traffic control stages, partial freeway closure at one of the southerly segments, and less interim connection work than the Current Plan. Design/build team innovation assumes ATCs will be proposed by the design/build team resulting in at least a 10% reduction in overall costs with the savings. Practical design concepts applied to the proposed roadway cross section reduce the pavement width by 10%, proposed retaining wall limits, and support reusing up to 50% of the existing bridges. Contracting and administrative efficiencies are also realized with the expedited construction schedule.

Cost Savings Matrix - "Plan For Success"

COST CATEGORY	SAVINGS
Construction Cost Escalation	\$449 Million
Economies of Scale	\$23 Million
Maintenance of Traffic (including Temp Work)	\$12 Million
Design/Build Team Innovation (including Practical Design)	\$150 Million
Contracting & Administrative Efficiencies (includes PE/CE savings)	\$35 Million
Right-of-Way Reduction	-
TOTAL SAVINGS (\$YOE)	\$669 Million

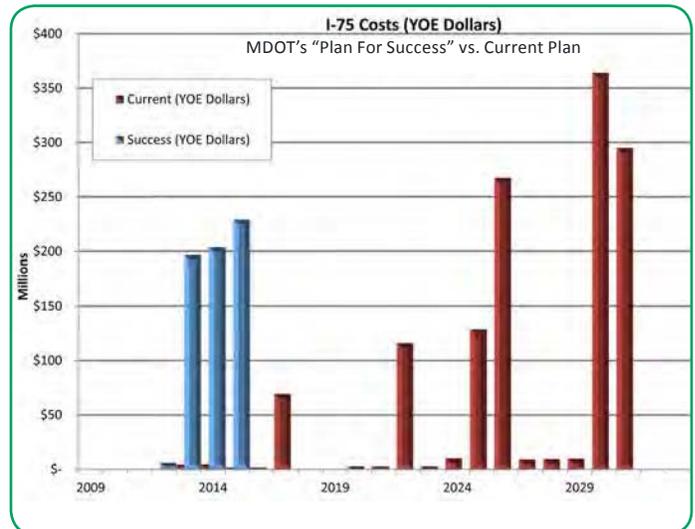
Source: HNTB

Typical I-75 Cross-Sections - Current Plan/"Bold" and "Plan For Success"



Source: HNTB

Cash Flow Chart - "Plan For Success"



Source: HNTB

WORKSHOP SUMMARY



MDOT and FHWA participants utilize priority dots to rank threats and opportunities identified in Step 5.

Step 5: Identify Risks

With all plans, there are risks associated with the delivery of a successful program or strategy. These risks are most commonly viewed as having a potential negative impact to program goals, but may also be considered opportunities as they have the potential to improve the likelihood of success. The Success Management Process acknowledges these risks and seeks to manage uncertainty by analyzing the probability of occurrence and the severity of impacts to program goals.

I-75 workshop participants took the first step in addressing these risks through a discussion of potential threats and opportunities associated with the "Plan For Success." HNTB led participants through the identification of these risks and a risk allocation exercise which gave a preliminary ranking of their significance in affecting the successful delivery of the I-75 project.

The following list represents risks (threats and opportunities) associated with implementing the Plan For Success as discerned by workshop participants. After the discussion period, these risks were listed on large flip charts and participants were provided five priority dots to allocate (individually or in total) to the risks. Based on the resulting distribution, the importance of each risk to the

project was reflected in the allocation and a preliminary risk register is provided below.

TOP I-75 PROGRAM RISKS

Associated With Implementing The New "Plan For Success"

1. Funding (T)
2. Reopening environmental document (T)
3. Act 431 limitations (T)
4. Lack of alignment and support by participating agencies and stakeholder communities (T)
5. Not being able to separate I-75 and I-94 projects (T)
6. Implementation of Practical Design to manage overall system improvements and service life (O)
7. Unequal distribution of funds statewide (T)

Threats (T) and Opportunities (O)

Project risks listed in order of importance as identified by workshop participants.

MDOT I-75 SUCCESS MANAGEMENT WORKSHOP

Step 6: Develop Action Plan(s)

The last step in the I-75 Success Management Workshop process included a discussion on what were the appropriate mitigation measures or actions plans necessary to address program threats and opportunities. These action plans aim to avoid, eliminate, or reduce the risks that may have a negative impact to the I-75 program and also look to capitalize on opportunities that could improve the likelihood of a successful program. HNTB led workshop participants through a brief exercise as MDOT and FHWA participants identified measures to address the top seven project risks listed in Step 5.

These initial action plans represent preliminary thoughts and ideas as a result of the workshop discussion. Further analysis, refinement, and specificity (timing and owner) will need to be developed by MDOT to advance the I-75 "Plan For Success" further.

1

Funding (T)

- Obtain high level support (Governor, Legislature, Director, and Commission).
- Review funding template to assess impact.
- Showcase possibility of "bold" strategies for both I-75 and I-94 to Governor.
- Engage Governor's strategy team in working with Oakland County officials. (Government Relations strategy)
- Solicit project funding support from Oakland County and other community agencies.

Responsible Person - Dave Wresinski

2

Reopening Environmental Document (T)

- Assess level of change.
- Determine ability to constrict how much of document is reopened.
- Procure communications resource for messaging.
- Initiate analysis of detail to ascertain if sufficient change requires Supplemental Environmental Impact Statement (SEIS).

Responsible Person - Sue Datta

3

Existing Act 431 Limitations (T)

- Assess administration's appetite to make change and timing of change.
- Draft appropriate language and determine appropriate statutory vehicle.
- Highlight example projects to use as method of educating.
- Pursue legislative change.

Responsible Person - Myron Frierson

4

Lack of Support by Participating Agencies and Stakeholder Communities (T)

- Develop written "streamlining" cooperation agreement by participating agencies (pattern after NITC).
- Re-engage community groups in cooperation agreement via steering committee.

Responsible Person - Sue Datta

5

Not being able to separate I-75 and I-94 projects

- Due to time limitations, a preliminary action plan was not covered during the workshop.

6

Implementation of Practical Design (O)

- Provide Practical Design education of what it may or may not mean to MDOT on this project.
- Develop strategy for MDOT Practical Design on mega corridor projects.

Responsible Person - Brad Wieferich

7

Unequal Distribution of Funds Statewide (T)

- Due to time limitations, a preliminary action plan was not covered during the workshop.

WORKSHOP SUMMARY



Pete Rahn, HNTB, challenges MDOT to rethink I-75 and take this opportunity to deliver a signature project to the people of Michigan.

NEXT STEPS

Despite challenges, MDOT is prepared to deliver a bold new vision for the I-75 project in Oakland County. The I-75 Success Management Workshop represented the first step in formalizing this bold new “Plan For Success.” As a result, MDOT has developed specific next steps and a detailed action plan to deliver the I-75 project to the people of Michigan - **better, faster, cheaper, safer, smarter.**



With the group's preliminary action plans in the background, Greg Johnson closes the workshop challenging MDOT to deliver a new plan for the I-75 Oakland County project.

THINK
BOLD.



WORKSHOP SUMMARY REPORT



APPENDIX A

WORKSHOP MATERIALS

MDOT I-75 SUCCESS MANAGEMENT WORKSHOP

WORKSHOP AGENDA: PAGE 1



MDOT SUCCESS MANAGEMENT WORKSHOP I-75 OAKLAND COUNTY, MI

ABOUT THE WORKSHOP

The HNTB success management approach puts in motion a plan that defines success, manages uncertainty, provides value and delivers results. Success management starts by developing a shared vision of success – a list of strategic goals and objectives to clearly communicate the desired outcome, so that when achieved, the majority of internal and external stakeholders will celebrate the accomplishment.

This workshop will be used to develop a shared project vision for the I-75 capacity improvement project through Oakland County, by exploring opportunities to accelerate project delivery while providing cost and time savings, yet still honoring previously made commitments. Workshop participants will strive to develop a big bold plan to deliver this mega project, better, faster, cheaper, safer and smarter, while maintaining stakeholder confidence and trust.

HNTB PRESENTERS

- **David Downs**, Vice President, HNTB Program Management Consulting National Practice Leader
- **Pete Rahn**, Senior Vice President, HNTB Transportation Practice Chairman, Past President of the American Association of State Highway and Transportation Officials (AASHTO), Former Director of the New Mexico and Missouri Departments of Transportation
- **Scott Smith**, Senior Vice President, HNTB Director of Strategic Initiatives

MDOT INVITEES

Kurt Coduti
Brenda Chapman
Sue Datta
Myron Frierson
Greg Johnson
Tony Kratofil
Mark Vanportfleet
Brad Wieferich
Dave Wresinski

FHWA INVITEES

Ryan Rizzo

ATTIRE: BUSINESS CASUAL

HNTB PARTICIPANTS

Leonard Becker
Matthew Click
Matt Webb
Tom Weston

FACILITATED BY:

David Wenzel, HNTB Corporation

WORKSHOP LOCATION

Novi DoubleTree Inn
Room: Salon BC
42100 Crescent Boulevard
Novi, MI

CONTACT

Leonard Becker
HNTB Michigan Office Leader
719 Griswold Street, Suite 620
Detroit, MI
(313) 961-3330

MDOT SUCCESS MANAGEMENT WORKSHOP | NOVEMBER 4, 2011

DRAFT WORKING DOCUMENT

APPENDIX A: WORKSHOP MATERIALS

WORKSHOP AGENDA: PAGE 2



I-75 OAKLAND COUNTY, MI

WORKSHOP INTRODUCTION: OVERVIEW OF SUCCESS MANAGEMENT

8:00 AM

Presented By:
Leonard Becker, HNTB
Greg Johnson, MDOT
David Downs, HNTB
Sue Datta, MDOT

Topic:

- Welcome and Introductions
- Purpose of Workshop
- Philosophy of Success Management/Workshop Process
- Overview of I-75 Project

STEP 1: DEFINE SUCCESS

Presented By:
Pete Rahn, HNTB

Topic:

- Time to "Think Big" and Let Go of Constraints
- Example Success Stories

Exercise:

1. Headline Exercise

STEP 2: DEVELOP GOALS AND SUPPORTING SUCCESS MEASURES

Presented By:
David Downs, HNTB

Group Discussion:

- Define "SMART" Success Measures
- Refine to Manageable Set of Success Measures

Exercise:

1. Brainstorm Success Measures
2. Prioritize Success Measures

10:20 AM (approx.)

BREAK

STEP 3: IDENTIFY PROJECT DELIVERY OPTIONS

Presented By:
Scott Smith, HNTB
Tom Weston, HNTB

Group Discussion:

- Review MDOT's Baseline Approach
- Project Delivery Options

Exercise:

1. Review Project Delivery Options

12:00 PM

LUNCH (TO BE PROVIDED)

I-75 OAKLAND COUNTY, MI

DRAFT WORKING DOCUMENT

MDOT I-75 SUCCESS MANAGEMENT WORKSHOP

WORKSHOP AGENDA: PAGE 3



STEP 4: DEVELOP A PLAN FOR SUCCESS

Presented By:
Scott Smith, HNTB

Group Discussion:

- Consider Combination of Approaches
- Think "Big and Bold"

Exercise:

1. Identify Most Promising Approach(es)

STEP 5: IDENTIFY RISKS - THREATS & OPPORTUNITIES

Presented By:
David Downs, HNTB

Topic:

- Overview of Risk Management

Exercise:

1. Discuss Categories of Risk
2. Identify Major Threats/Opportunities for Specific Plan Approach

2:45 PM (approx.)

BREAK

STEP 6: DEVELOP ACTION PLAN

Presented By:
David Downs, HNTB

Group Discussion:

- Generate Action Plan That Is Realistic, Time-bound and Actionable

Exercise:

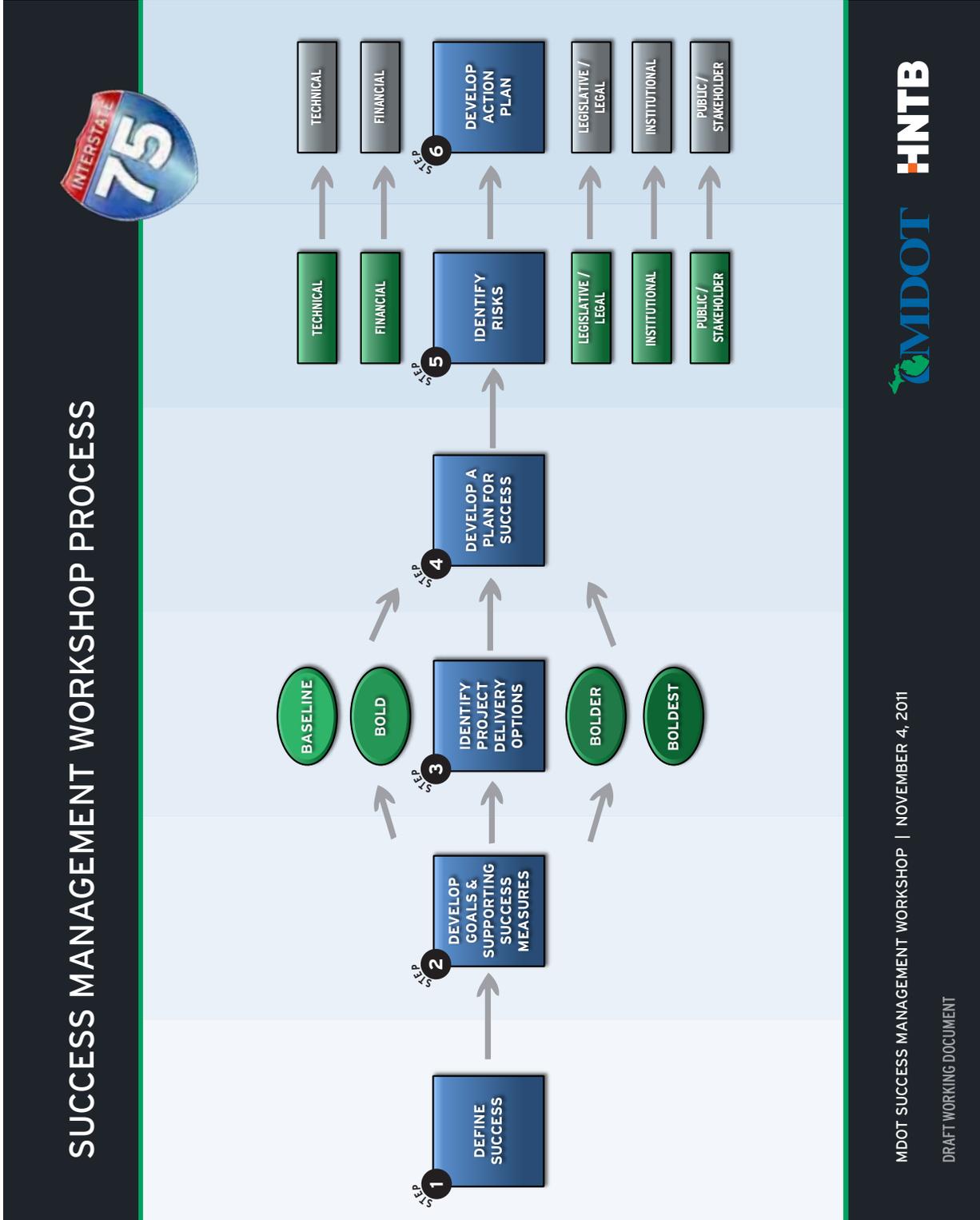
1. Discuss Action Plans to Address Key Risks
2. MDOT to Assign Champion Responsibilities and Deadlines

4:00 PM (approx.)

NEXT STEPS

APPENDIX A: WORKSHOP MATERIALS

WORKSHOP FLOWCHART



SUCCESS MANAGEMENT WORKSHOP PROCESS



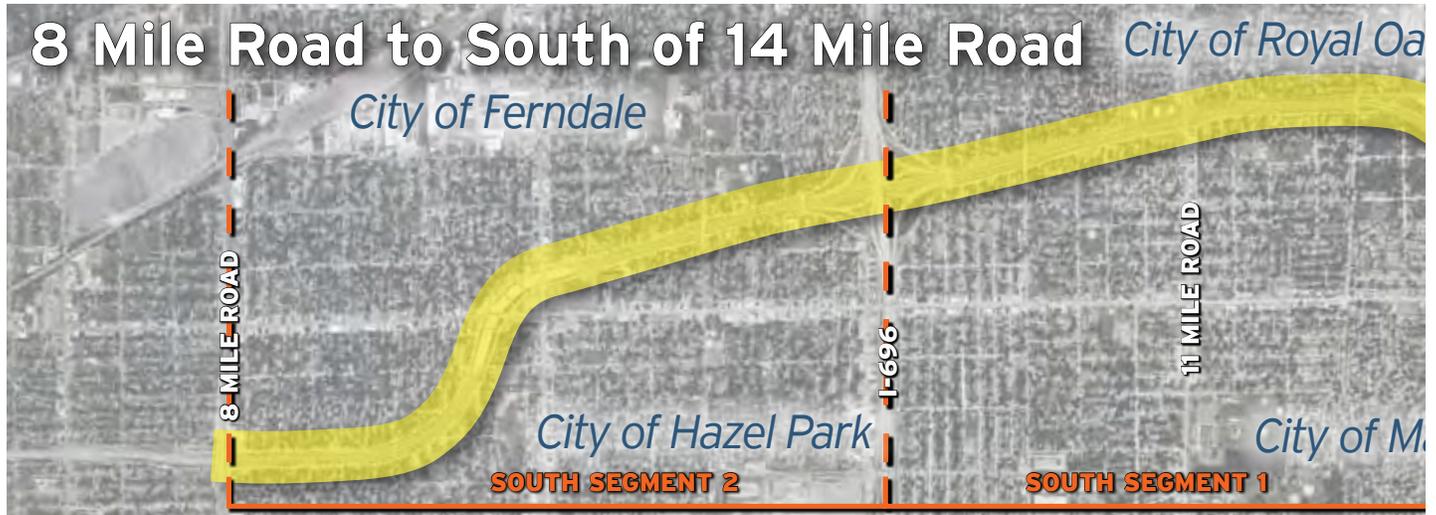
MDOT SUCCESS MANAGEMENT WORKSHOP | NOVEMBER 4, 2011

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MDOT I-75 SUCCESS MANAGEMENT WORKSHOP

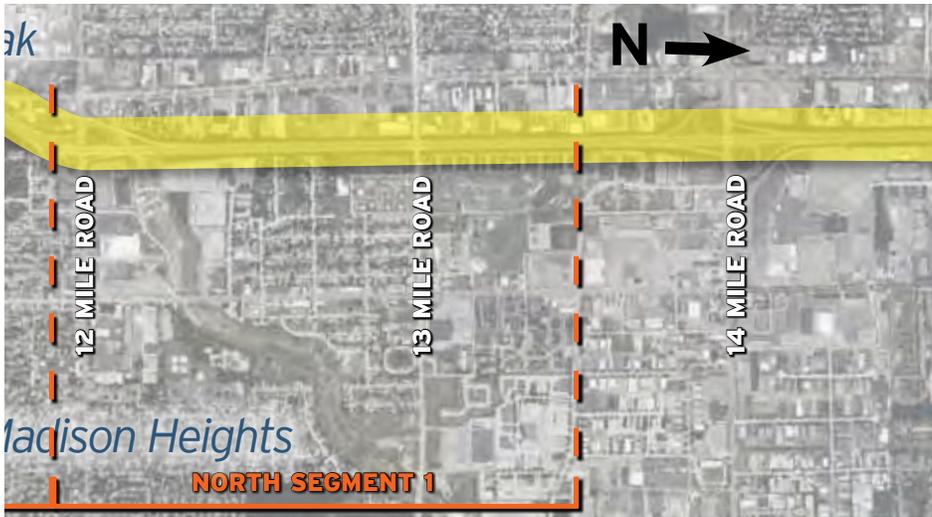
CURRENT PLAN SUMMARY HANDOUT: PAGE 1

"The purpose of the proposed project is to increase the capacity of the transportation infrastructure in the I-75 corridor. Meeting the purpose of the project will improve motorist safety, travel efficiency, and reliability. These are essential Purpose of Proposed Action taken from the I-75 Final Environmental Impact Statement, April, 2005



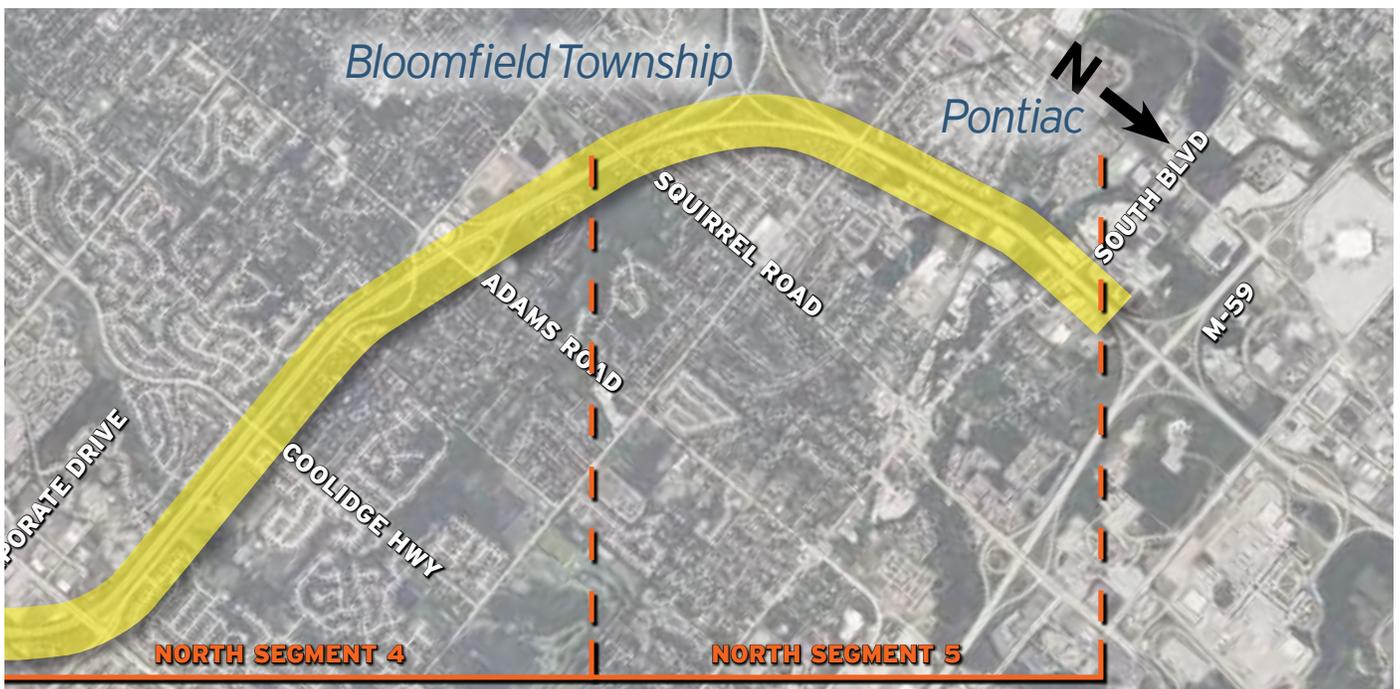
APPENDIX A: WORKSHOP MATERIALS

corridor to meet travel demand for personal mobility and goods movement.
al both to personal mobility and to the movement of freight.”



Project Highlights:

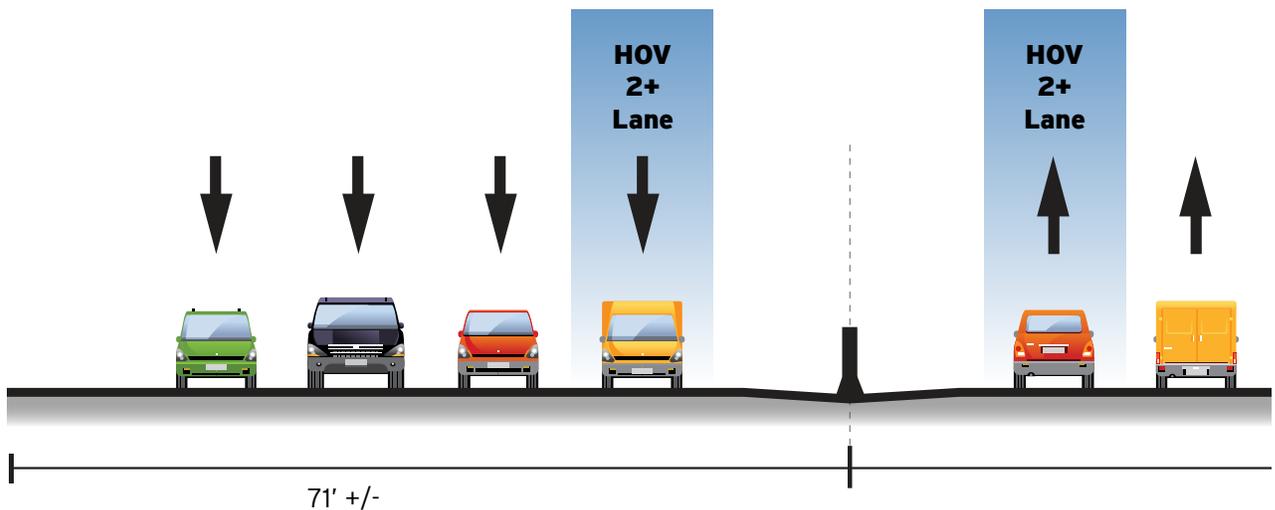
- 18-mile reconstruction and widening
- Addition of a HOV lane
- 11 interchanges
- 16 local road crossings
- Estimated right-of-way impacts include 26 homes, 2 businesses, and 1 church
- \$768 million cost (2009 dollars)



MDOT I-75 SUCCESS MANAGEMENT WORKSHOP

CURRENT PLAN SUMMARY HANDOUT: PAGE 2

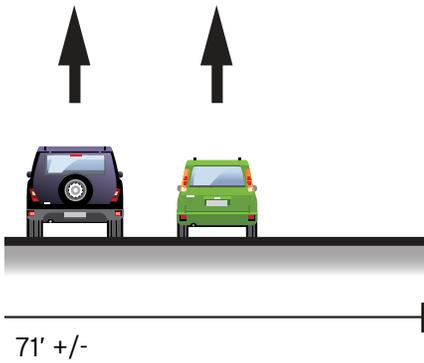
CROSS-SECTION



PROJECT SCHEDULE

Design-Bid-Build Project Schedule (7 Packages)	2011	2012	2013	2014	2015	2016	2017	2018
North Segment 5 (\$71.3M) N. of Adams Rd. to S. of M-59					Design			
							Const.	
North Segment 4 (\$119.3M) N. of Wattles Rd. to N. of Adams Rd.								
North Segment 3 (\$124.2M) N. of Rochester Rd. to N. of Wattles Rd.								
North Segment 1 (\$142.5M) S. of 12 Mile Rd. to N. of 13 Mile Rd.								
North Segment 2 (\$132.0M) N. of 13 Mile Rd. to N. of Rochester Rd.								
South Segment 2 (\$278.3M) M-102 (8 Mile Rd.) to I-696								
South Segment 1 (\$360.9M) I-696 to S. of 12 Mile Rd.			Design					

APPENDIX A: WORKSHOP MATERIALS



CONSTRUCTION COSTS



(Year of Expenditure)

2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
	Design											
			Const.									
				Design								
						Const.						
					Design							
					ROW		Const.					
					Design							
							Const.					
								Design				
								ROW			Const.	
								Design				
								ROW				Const.

THINK
BOLD.



WORKSHOP SUMMARY REPORT



APPENDIX B

WORKSHOP PRESENTATION

MDOT I-75 SUCCESS MANAGEMENT WORKSHOP

INTERSTATE 75 Michigan Department of Transportation
MDOT SUCCESS MANAGEMENT WORKSHOP

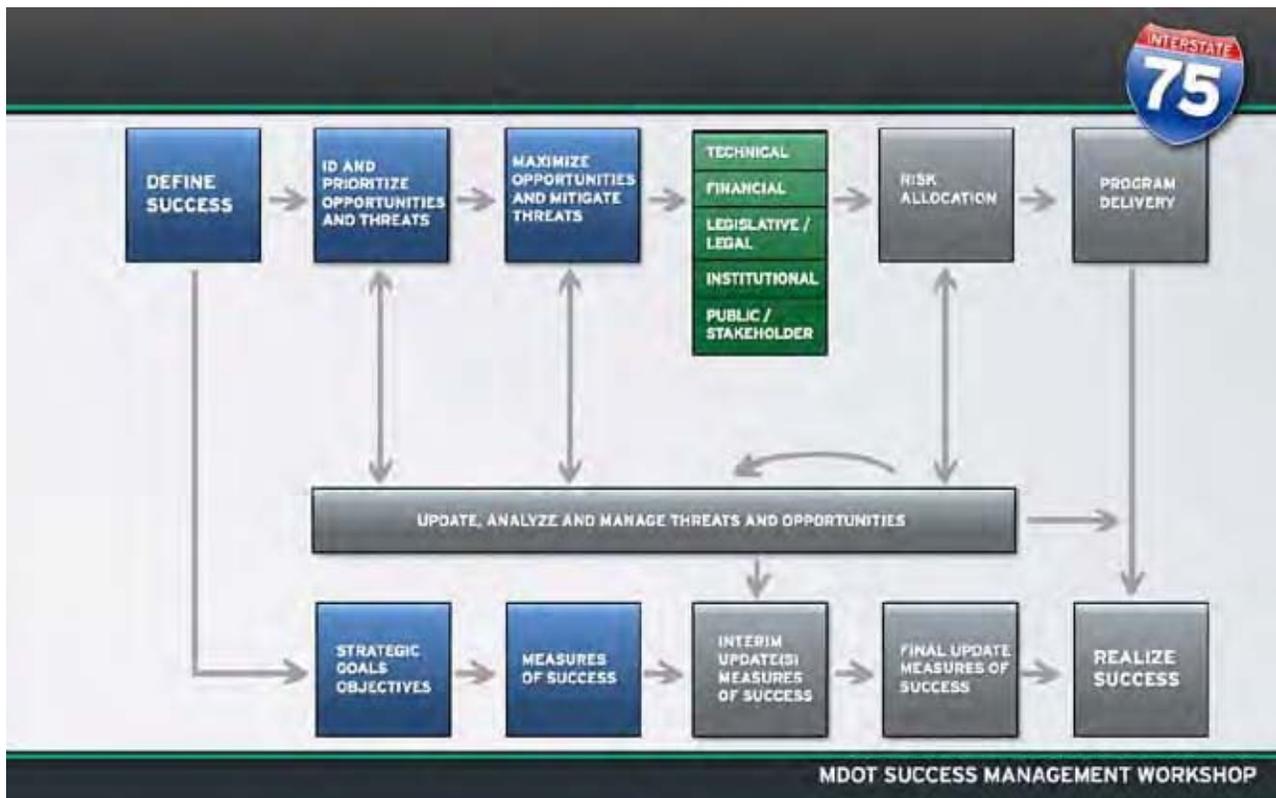
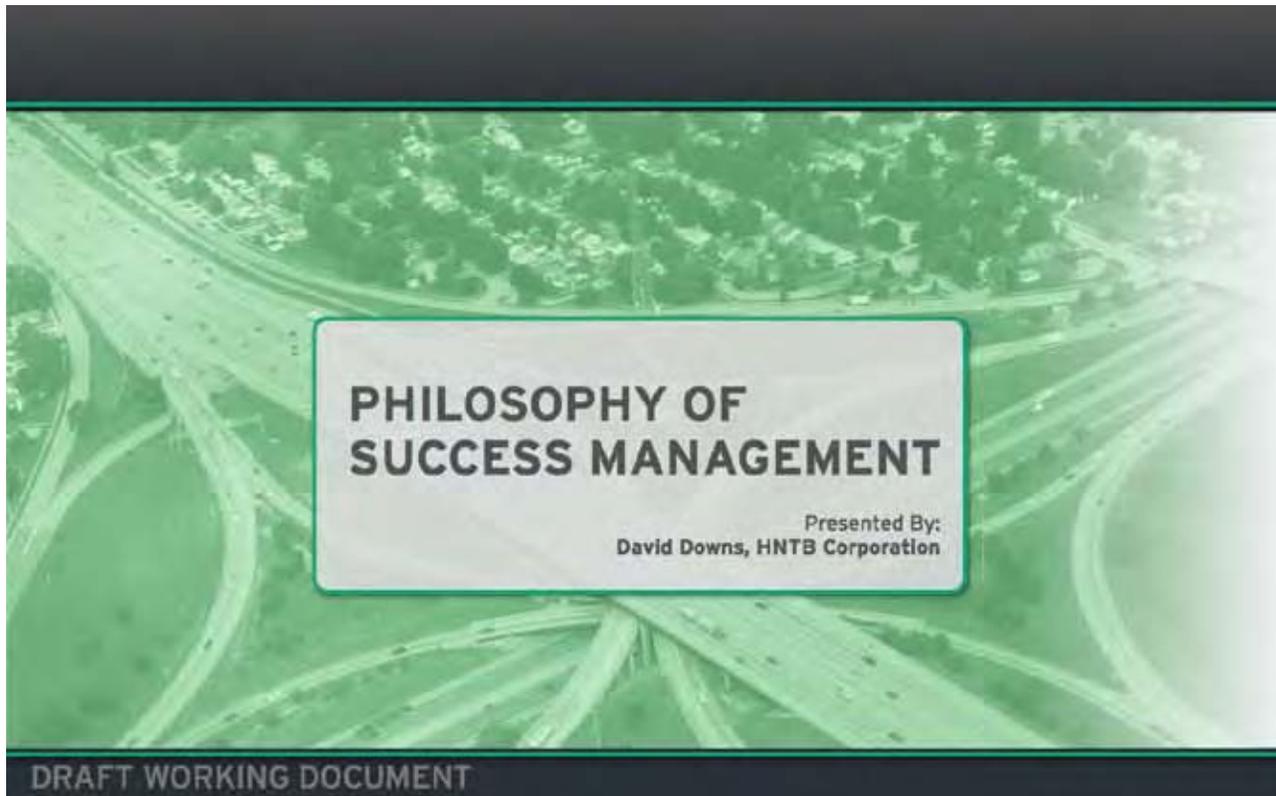
MDOT
HNTB

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**WELCOME / INTRODUCTIONS
& PURPOSE OF THE WORKSHOP**

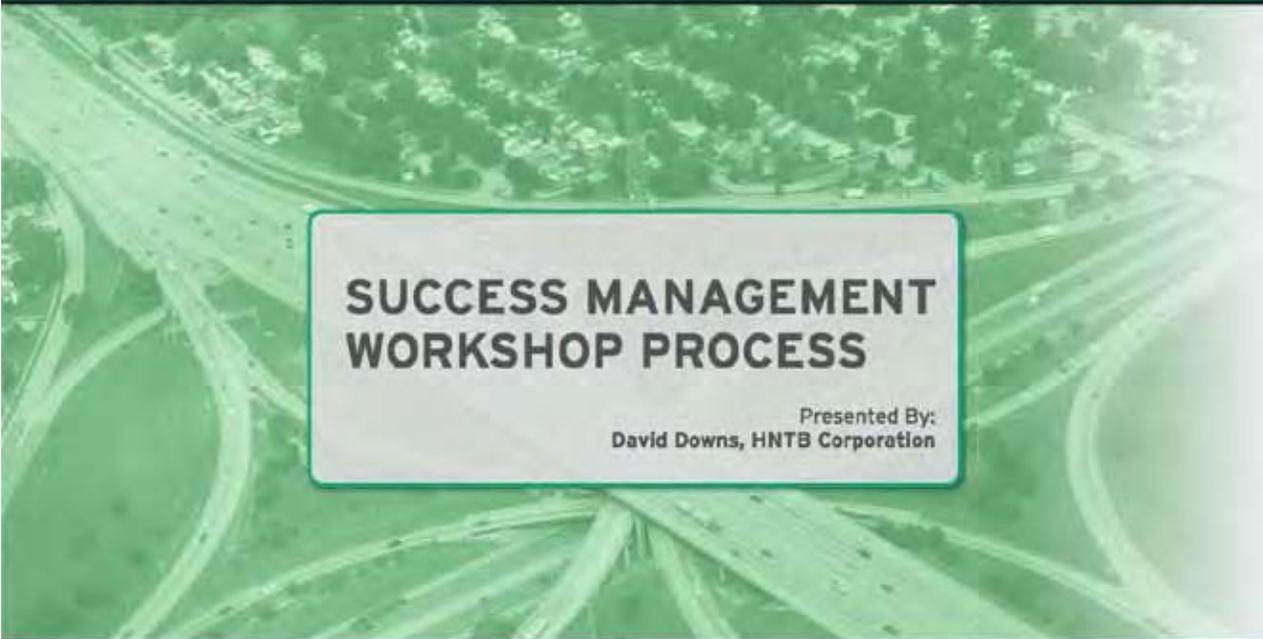
Presented By:
Greg Johnson, MDOT
Len Becker, HNTB Corporation

APPENDIX B: WORKSHOP PRESENTATION



MDOT I-75 SUCCESS MANAGEMENT WORKSHOP

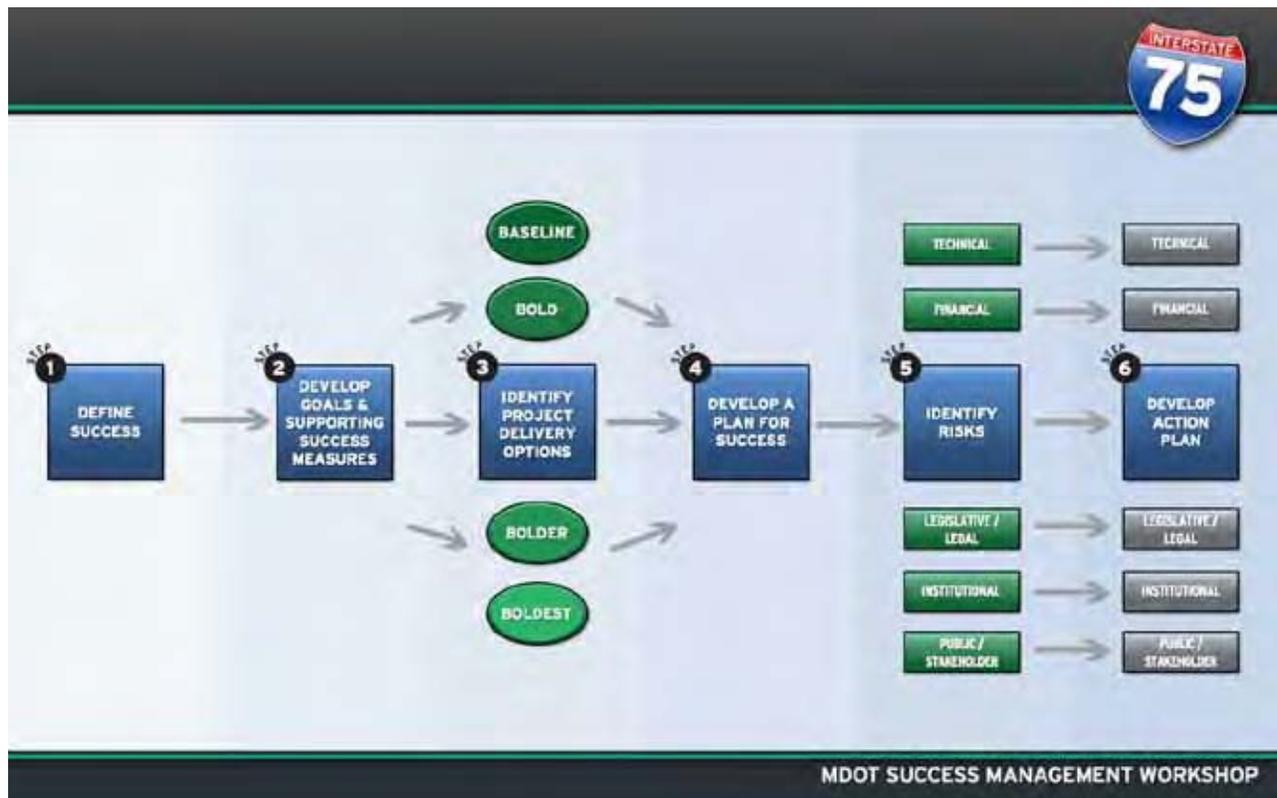
SUCCESS MANAGEMENT WORKSHOP PROCESS OVERVIEW



SUCCESS MANAGEMENT WORKSHOP PROCESS

Presented By:
David Downs, HNTB Corporation

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APPENDIX B: WORKSHOP PRESENTATION

SUCCESS MANAGEMENT WORKSHOP PROCESS

STEP 1 : DEFINE SUCCESS

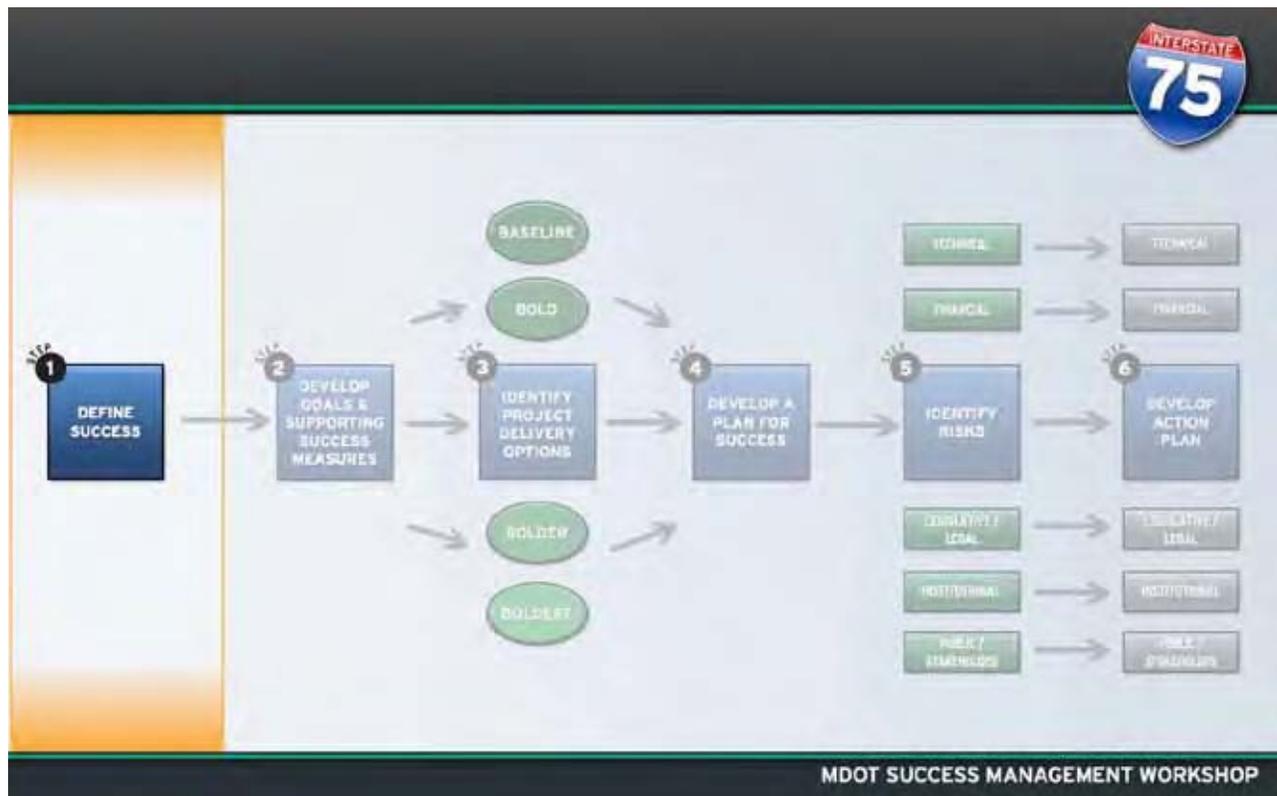
▶ Key Elements

- What could success look like?
- Consider stakeholder interests
- Thinking big and bold

▶ Output

- Future headlines
- Foundation of goals and success measures

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MDOT SUCCESS MANAGEMENT WORKSHOP

MDOT I-75 SUCCESS MANAGEMENT WORKSHOP

SUCCESS MANAGEMENT WORKSHOP PROCESS STEP 2: DEVELOP GOALS AND SUPPORTING SUCCESS MEASURES

Key Elements

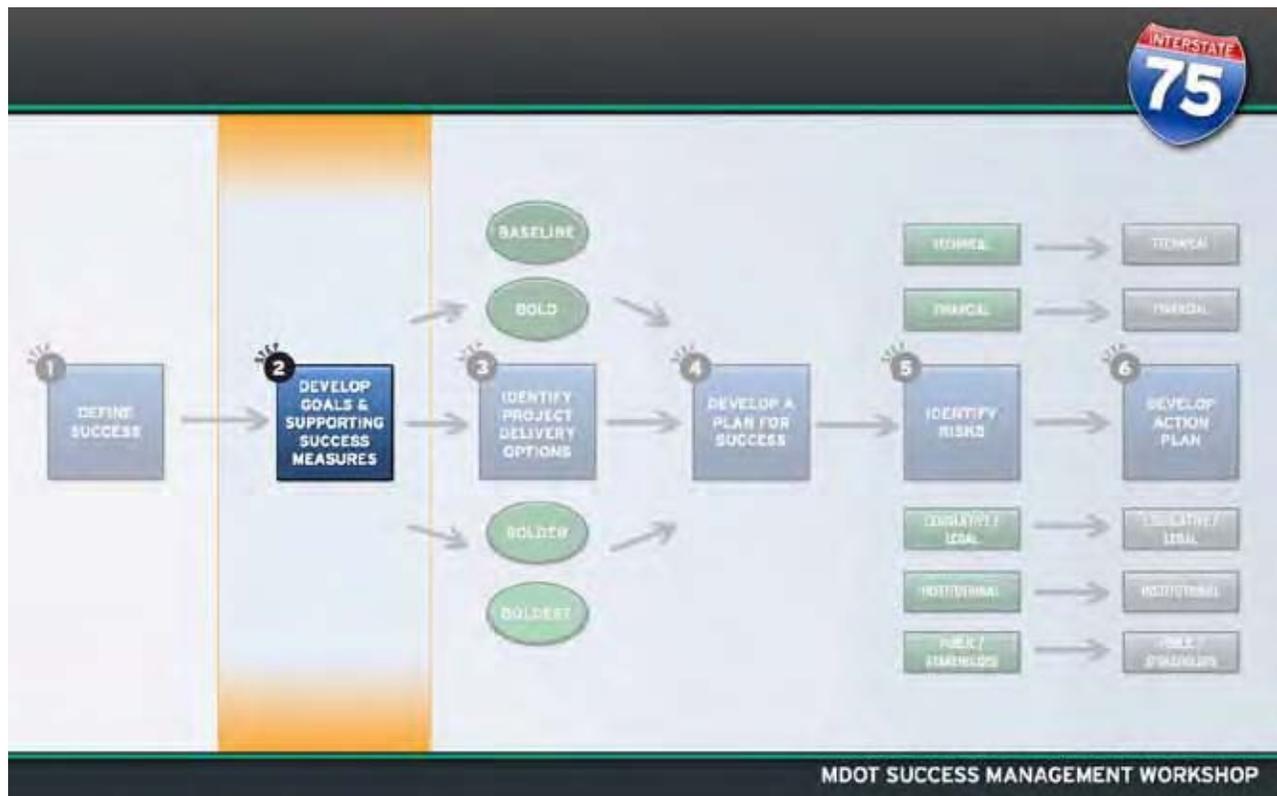
- Identify project goals (5 to 7)
- Success measures are SMART
- Accounts for stakeholders interests

Output

- Measurable goals defined
- Goals prioritized
- Expectations established

SMART

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APPENDIX B: WORKSHOP PRESENTATION

SUCCESS MANAGEMENT WORKSHOP PROCESS

STEP 2: DEVELOP GOALS AND SUPPORTING SUCCESS MEASURES

- ▶ **Key Elements**
 - Identify project goals (5 to 7)
 - Success measures are SMART
 - Accounts for stakeholders interests
- ▶ **Output**
 - Measurable goals defined
 - Goals prioritized
 - Expectations established

Specific

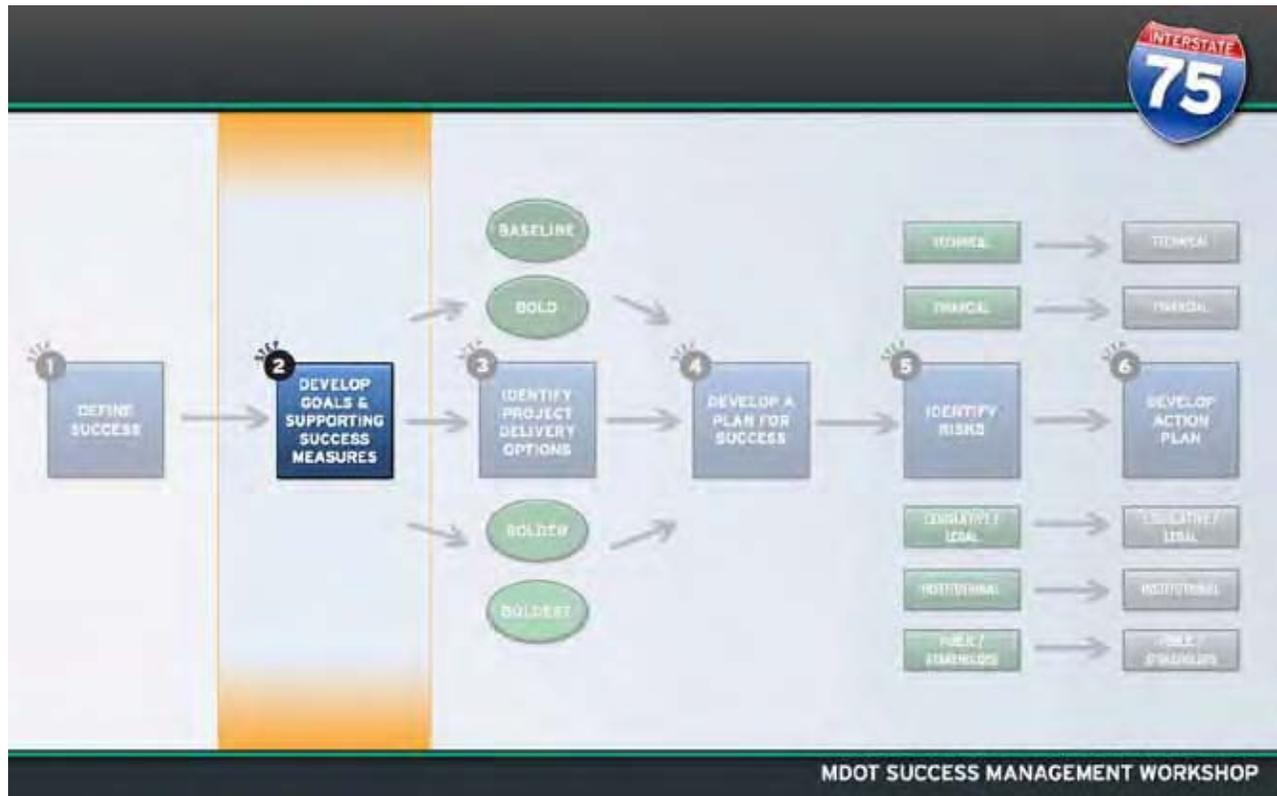
Measurable

Attainable

Relevant

Time-Bound

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MDOT I-75 SUCCESS MANAGEMENT WORKSHOP

SUCCESS MANAGEMENT WORKSHOP PROCESS

STEP 3: IDENTIFY PROJECT DELIVERY OPTIONS

Key Elements

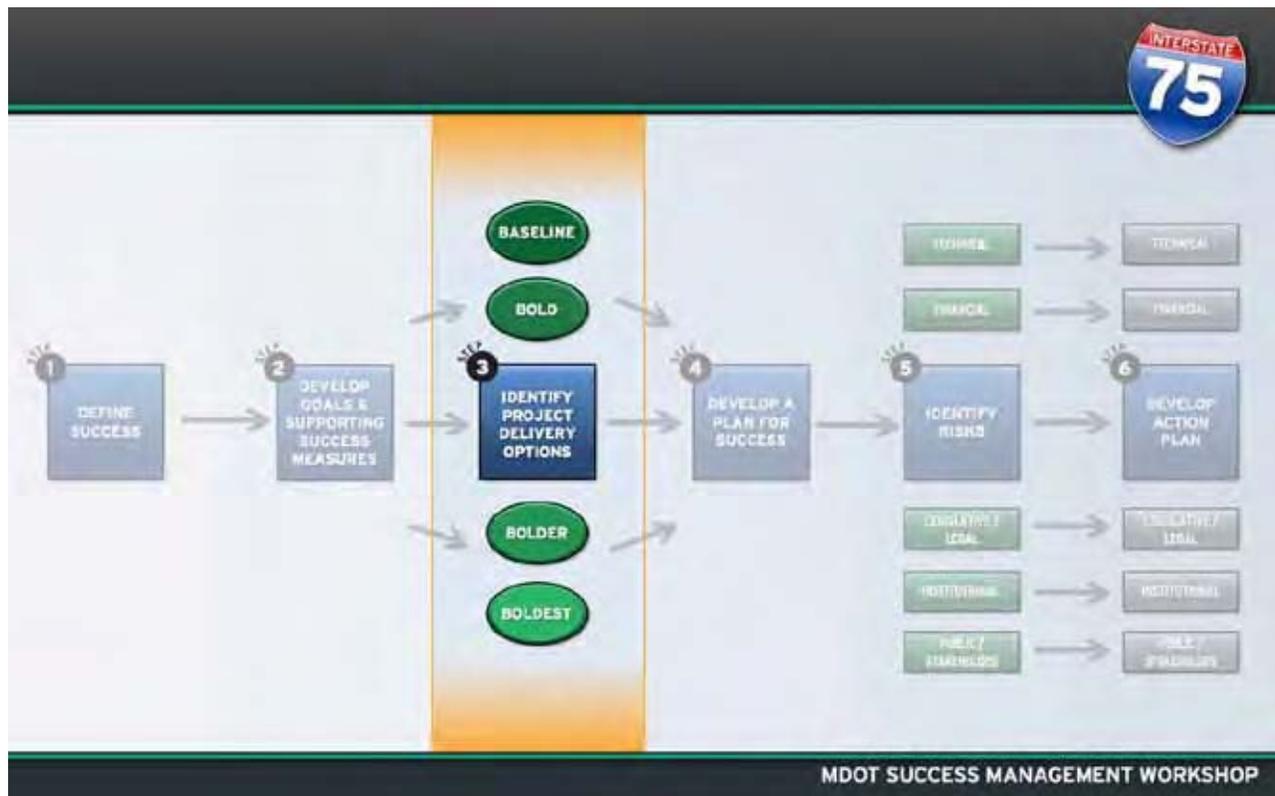
- Review MDOT's Current Plan
- Identify and evaluate other delivery options
- Evaluate options against success measures

Output

- Options identified which best achieve success measures
- Potential cost and time savings identified
- Provides foundation for Plan for Success



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APPENDIX B: WORKSHOP PRESENTATION

SUCCESS MANAGEMENT WORKSHOP PROCESS

STEP 4: DEVELOP A PLAN FOR SUCCESS

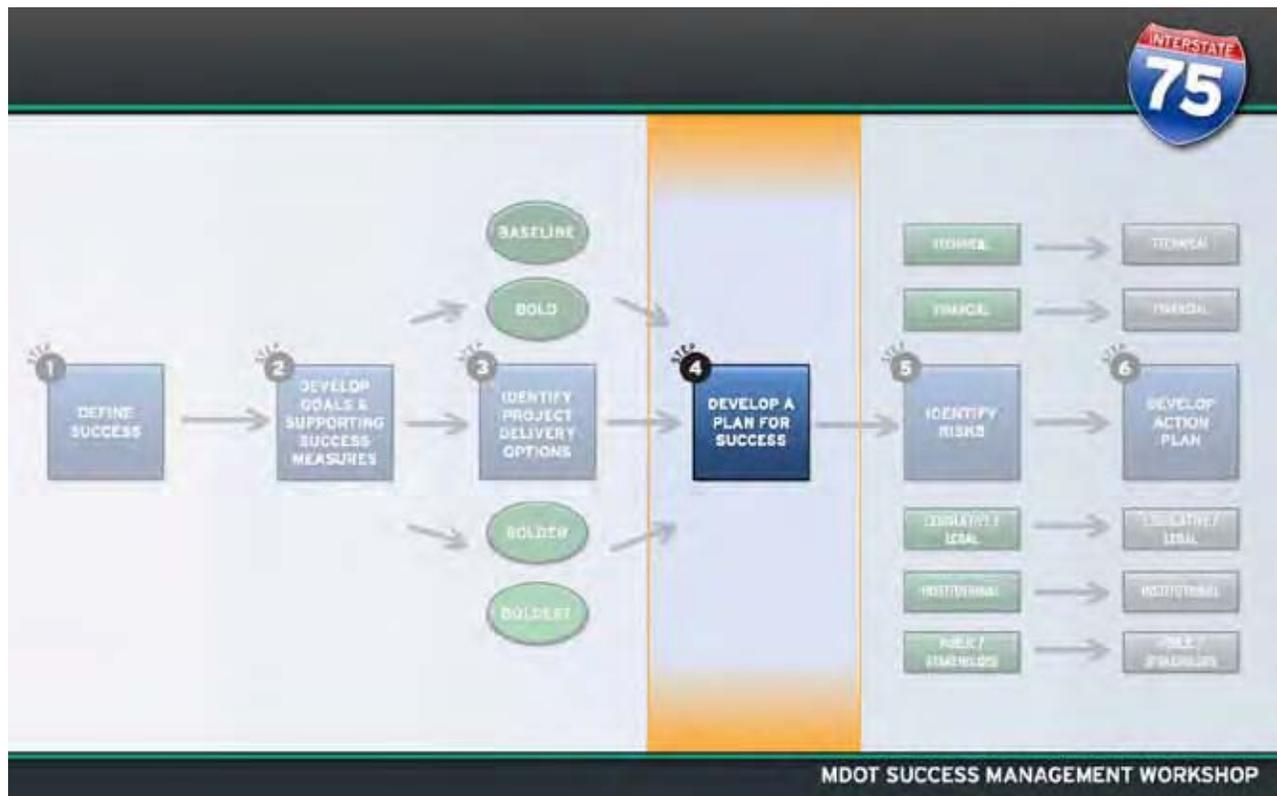
Key Elements

- Think **Big and Bold**
- Refine delivery options
- Select most promising approach

Output

- Plan for **Success**

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MDOT SUCCESS MANAGEMENT WORKSHOP

MDOT I-75 SUCCESS MANAGEMENT WORKSHOP

SUCCESS MANAGEMENT WORKSHOP PROCESS

STEP 5: IDENTIFY RISKS (THREATS AND OPPORTUNITIES)

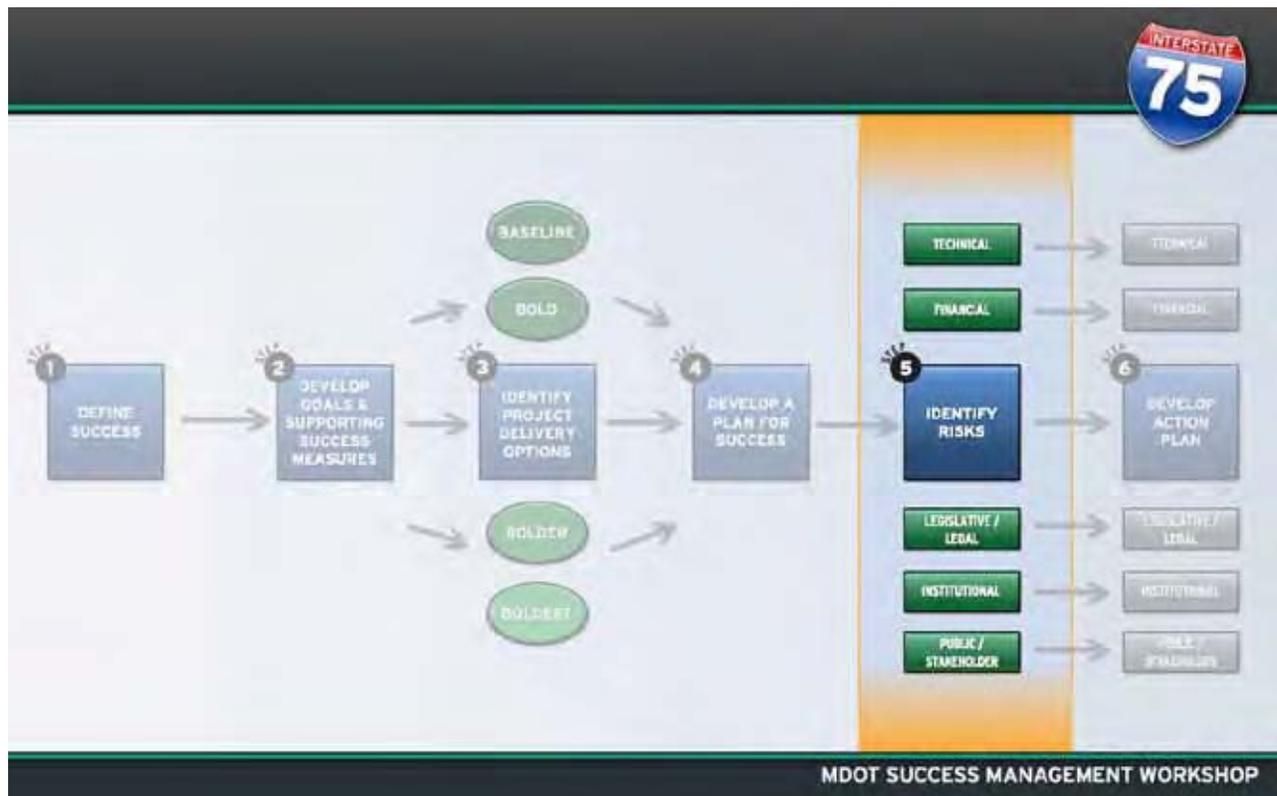
Key Elements

- Identify risks by category (threats and opportunities)
- Prioritize risks

Output

- Risks are documented and prioritized
- Provides foundation for development of Action Plan

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MDOT SUCCESS MANAGEMENT WORKSHOP

APPENDIX B: WORKSHOP PRESENTATION

SUCCESS MANAGEMENT WORKSHOP PROCESS

STEP 6: DEVELOP ACTION PLAN

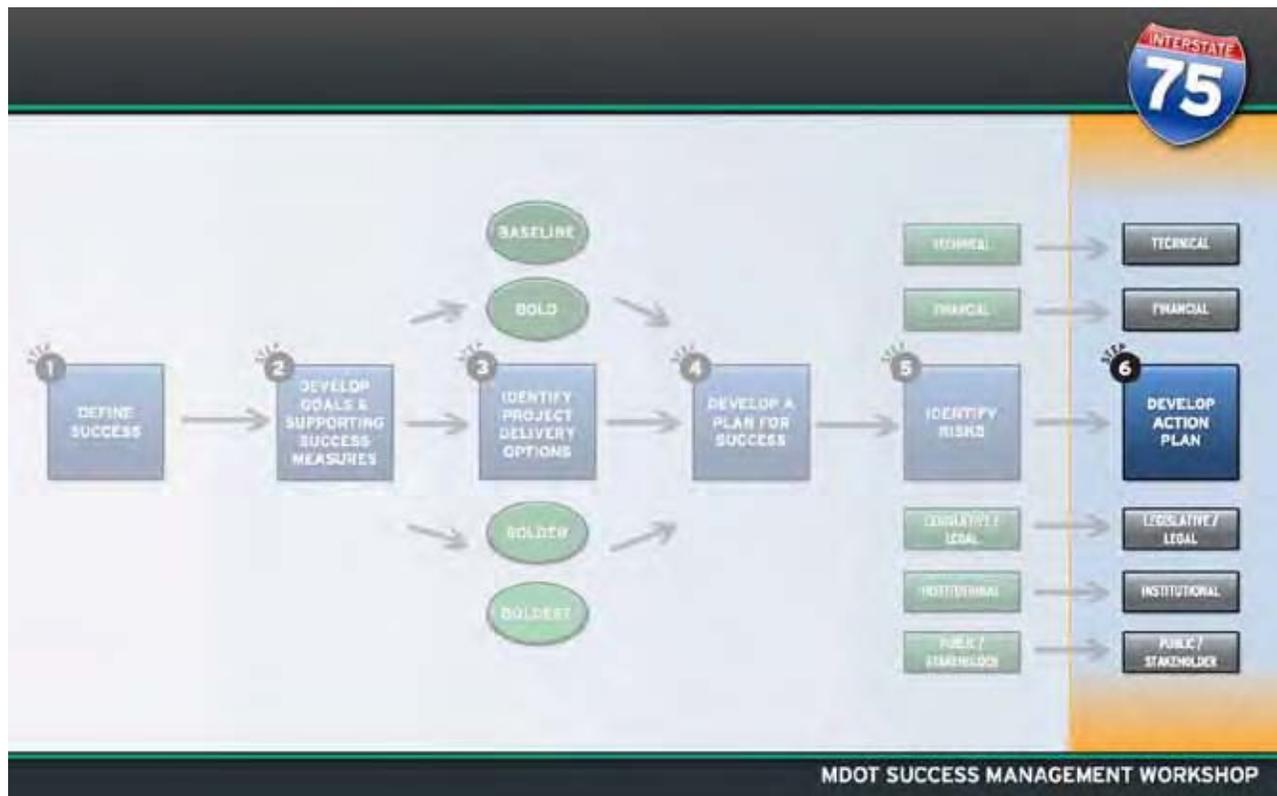
Key Elements

- Develop strategies to mitigate threats and maximize opportunities
- Assign owner
- Set timetable to complete action

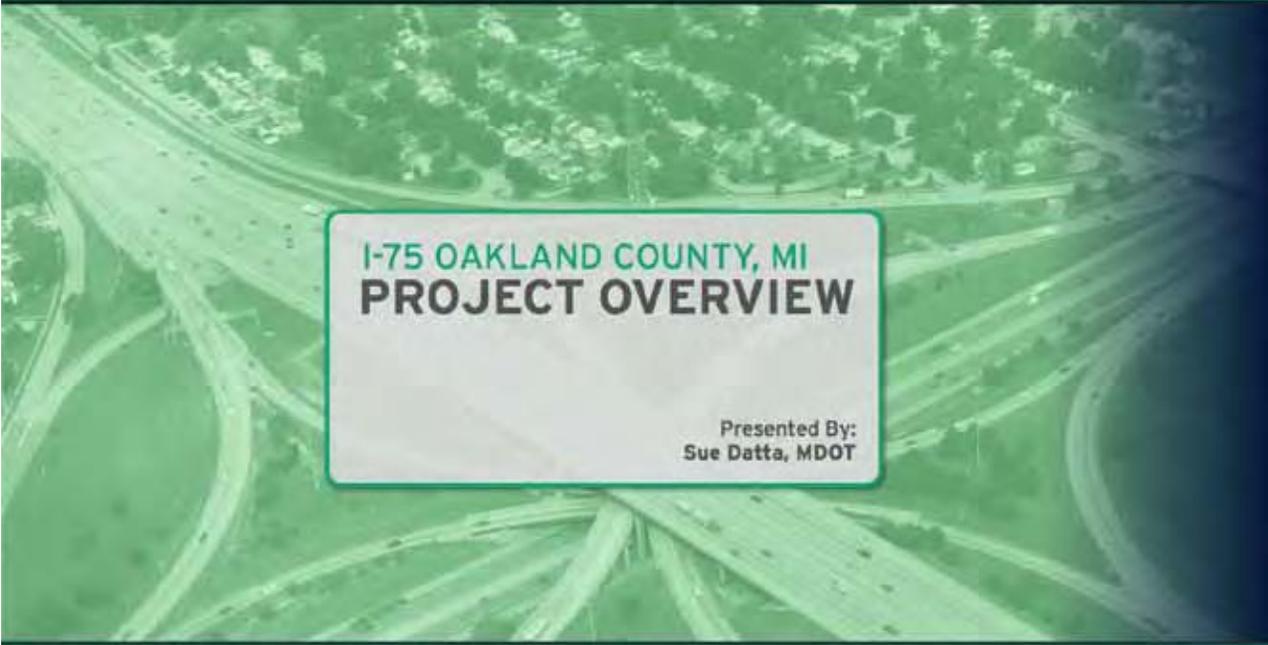
Output

- Action Plans
- Plan for Success

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MDOT I-75 SUCCESS MANAGEMENT WORKSHOP



**I-75 OAKLAND COUNTY, MI
PROJECT OVERVIEW**

Presented By:
Sue Datta, MDOT

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MDOT SUCCESS MANAGEMENT WORKSHOP

APPENDIX B: WORKSHOP PRESENTATION

PROJECT OVERVIEW I-75 OAKLAND COUNTY, MI

8 MILE ROAD TO SOUTH OF 14 MILE ROAD



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SOUTH OF 14 MILE ROAD TO SOUTH OF M-59



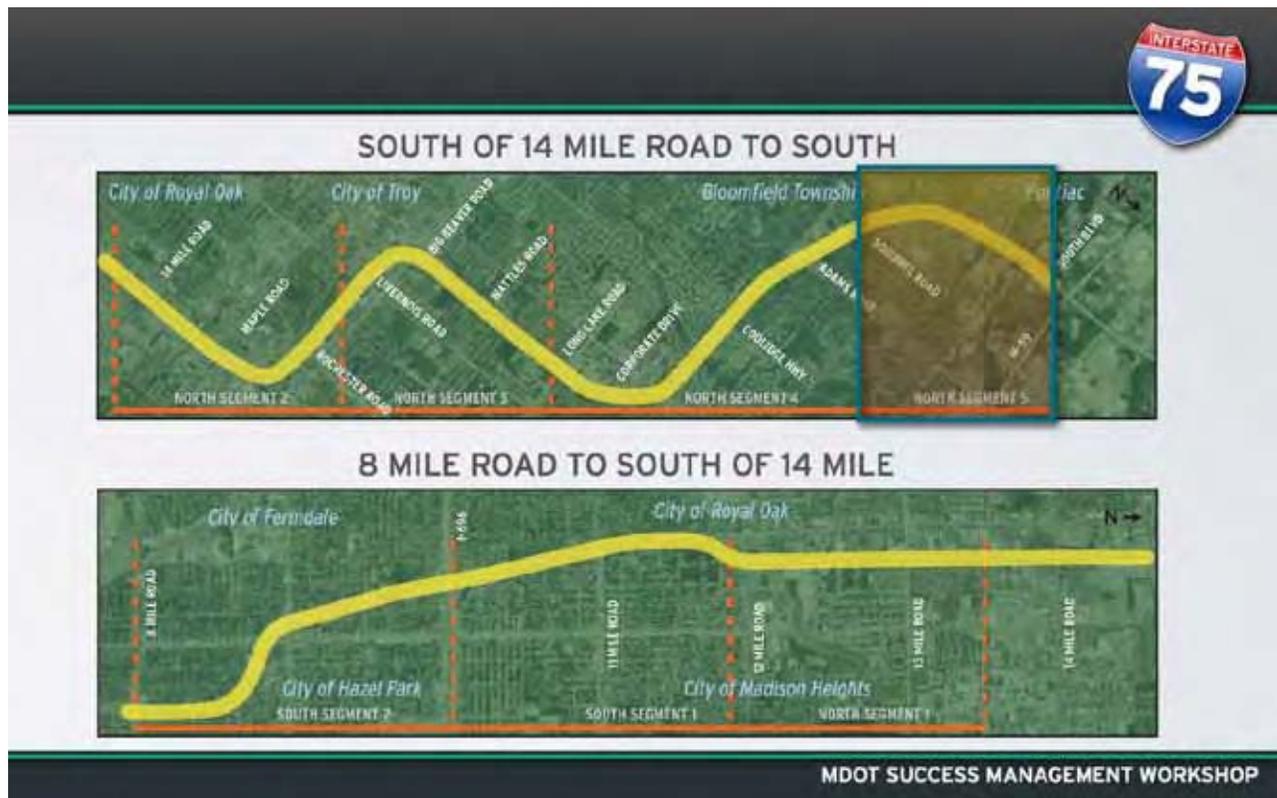
MDOT SUCCESS MANAGEMENT WORKSHOP

MDOT I-75 SUCCESS MANAGEMENT WORKSHOP

PROJECT OVERVIEW I-75, OAKLAND COUNTY, MI

Design-Bid-Build Project Schedule (7 Packages - 7 Segments)	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	
North Segment 5 Package #1 <small>North of Adams Rd. to South of H-28</small>					DESIGN \$1.0		CONST \$88.0															
North Segment 4 Package #2 <small>North of Adams Rd. to North of Adams Rd.</small>								DESIGN \$4.3				CONST \$79.3										
North Segment 3 Package #3 <small>North of Rochester Rd. to North of Adams Rd.</small>												DESIGN \$4.1				CONST \$75.4						
North Segment 1 Package #4 <small>South of 12 Mile Rd. to North of 13 Mile Rd.</small>														DESIGN \$4.4								
North Segment 2 Package #5 <small>North of 13 Mile Rd. to North of Rochester Rd.</small>														CONST \$6.5								
North Segment 2 Package #5 <small>North of 13 Mile Rd. to North of Rochester Rd.</small>													DESIGN \$4.3				CONST \$78.1					
South Segment 2 Package #6 <small>M-102 (3 Mile Rd.) to I-496</small>																		DESIGN \$4.5				
South Segment 2 Package #6 <small>M-102 (3 Mile Rd.) to I-496</small>																					CONST \$184.4	
South Segment 1 Package #7 <small>I-496 to South of 13 Mile Rd. (2012 Design for Early Works Range Award)</small>			DESIGN \$13.3																DESIGN \$1.0			
South Segment 1 Package #7 <small>I-496 to South of 13 Mile Rd. (2012 Design for Early Works Range Award)</small>																					CONST \$134.1	

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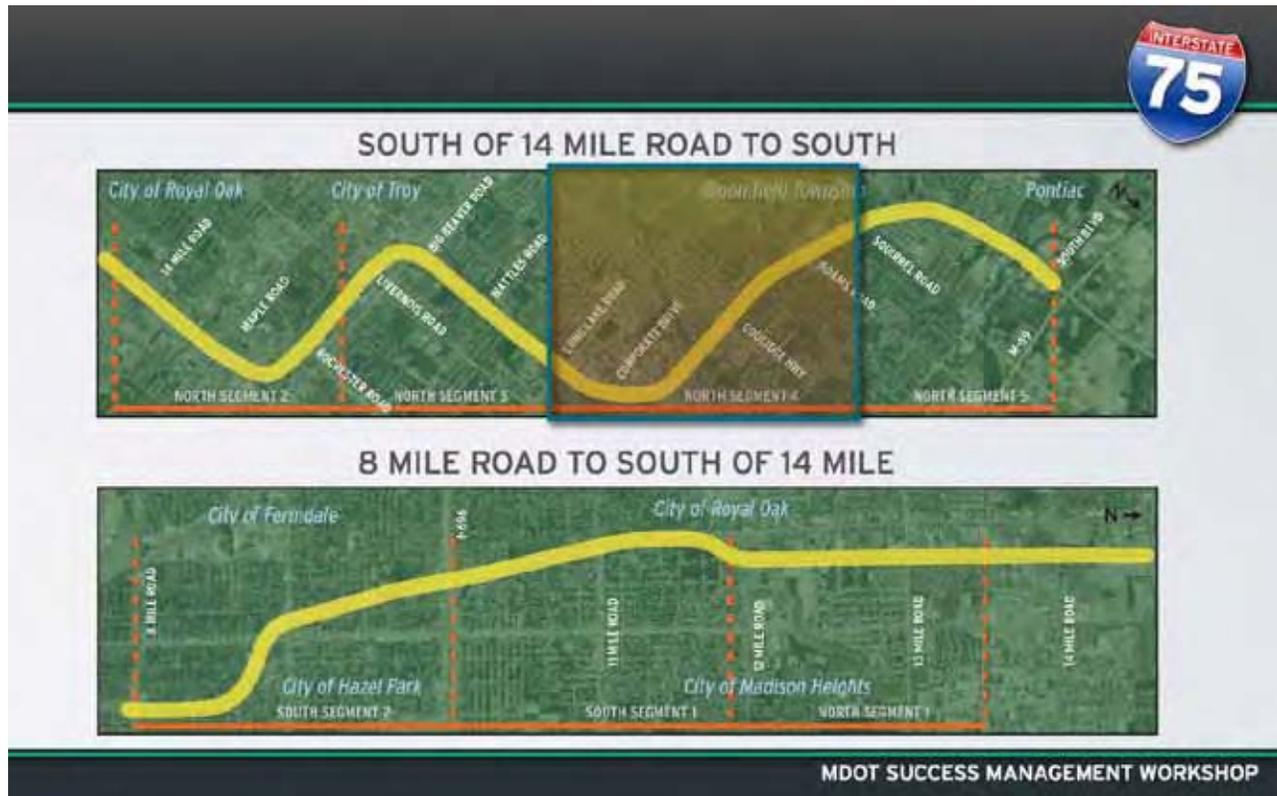


APPENDIX B: WORKSHOP PRESENTATION

PROJECT OVERVIEW I-75, OAKLAND COUNTY, MI

Design-Bid-Build Project Schedule (7 Packages - 7 Segments)	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	
North Segment 5 Package #1 North of Adams Rd to South of 14 Mile					DESIGN \$1.0		CONST \$84.0															
North Segment 4 Package #2 North of Adams Rd to North of Adams Rd								DESIGN \$4.1				CONST \$79.3										
North Segment 3 Package #3 North of Rochester Rd to North of Rochester Rd													DESIGN \$4.1				CONST \$75.4					
North Segment 1 Package #4 South of 12 Mile Rd to North of 13 Mile Rd														DESIGN \$4.4								
North Segment 2 Package #5 North of 13 Mile Rd to North of Rochester Rd														CONSTR \$6.5								
South Segment 2 Package #6 M-102 (3 Mile Rd) to I-496																		DESIGN \$8.5				
South Segment 1 Package #7 I-496 to South of 12 Mile Rd (2012 Design for Early Works Phase Award)			DESIGN \$13.3																DESIGN \$1.0			
																				CONSTR \$184.4		
																					CONSTR \$134.1	

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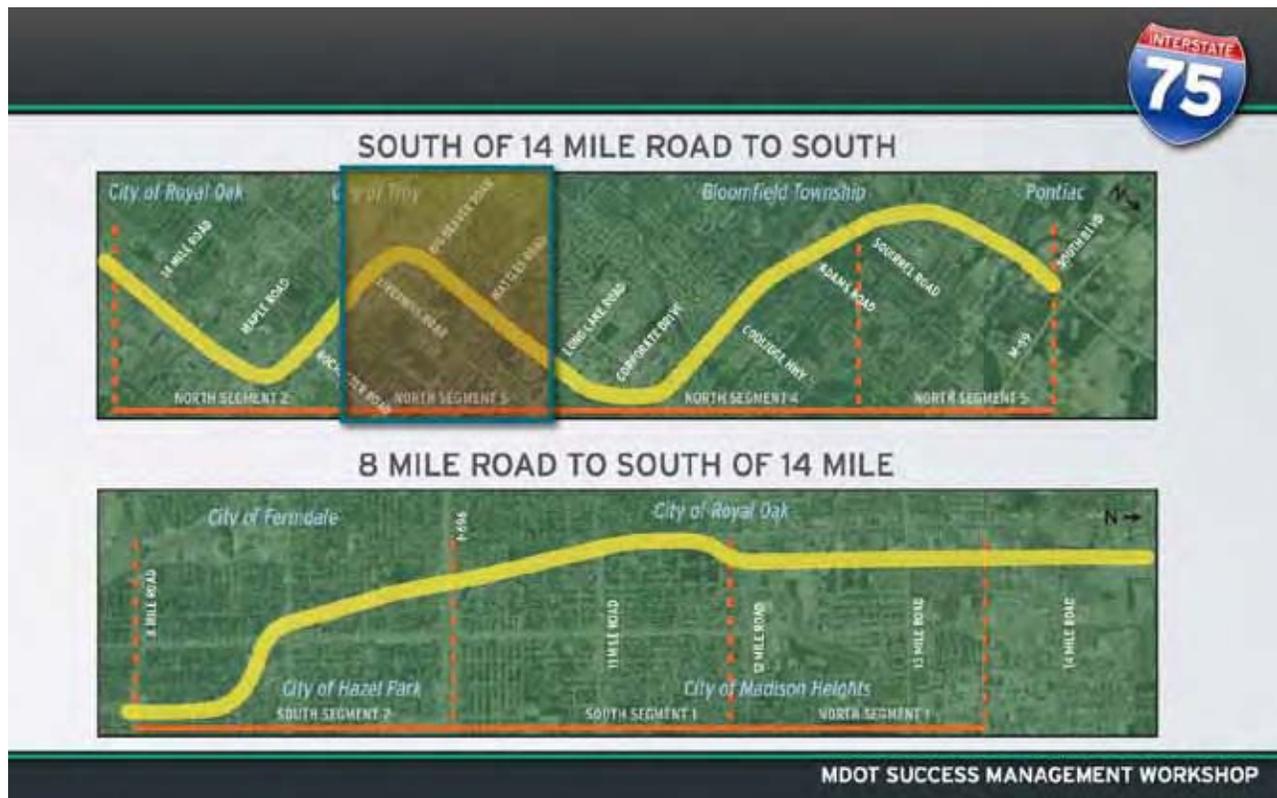


MDOT I-75 SUCCESS MANAGEMENT WORKSHOP

PROJECT OVERVIEW I-75, OAKLAND COUNTY, MI

Design-Bid-Build Project Schedule (7 Packages - 7 Segments)	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	
North Segment 5 Package #1 North of Adams Rd to South of 14 Mile					DESIGN \$1.0		CONST \$88.0															
North Segment 4 Package #2 North of Washtenaw Rd to North of Adams Rd								DESIGN \$4.3			CONST \$79.3											
North Segment 3 Package #3 North of Rochester Rd to North of Washtenaw Rd													DESIGN \$4.1		CONST \$75.4							
North Segment 1 Package #4 South of 12 Mile Rd to North of 13 Mile Rd														DESIGN \$4.6	ROW \$0.5		CONST \$63.1					
North Segment 2 Package #5 North of 13 Mile Rd to North of Rochester Rd													DESIGN \$4.3		CONST \$78.1							
South Segment 2 Package #6 M-102 (3 Mile Rd) to I-496																		DESIGN \$8.5	ROW \$1.0			CONST \$184.4
South Segment 1 Package #7 I-496 to South of 12 Mile Rd (2012 Design for Early Works Ramp Build)			DESIGN \$15.3																	DESIGN \$1.1		CONST \$134.1

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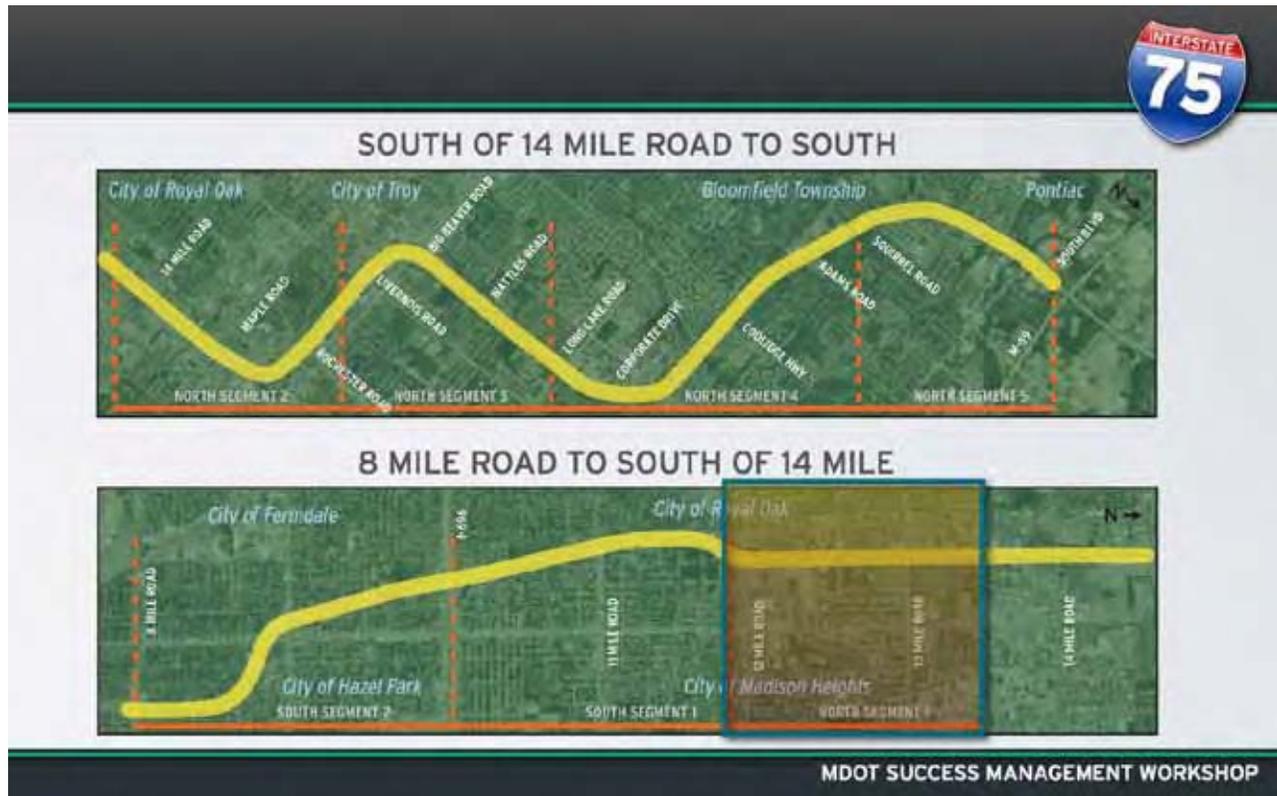


APPENDIX B: WORKSHOP PRESENTATION

PROJECT OVERVIEW I-75, OAKLAND COUNTY, MI

Design-Bid-Build Project Schedule (7 Packages - 7 Segments)	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	
North Segment 5 Package #1 North of Adams Rd to South of 14 Mile					DESIGN \$1.0		CONST \$88.0															
North Segment 4 Package #2 North of Adams Rd to North of Adams Rd								DESIGN \$4.3				CONST \$79.3										
North Segment 3 Package #3 North of Rochester Rd to North of Washtenaw Rd												DESIGN \$4.1			CONST \$75.6							
North Segment 1 Package #4 South of 12 Mile Rd to North of 12 Mile Rd														DESIGN \$4.6 ROW \$1.1				CONST \$63.1				
North Segment 2 Package #5 North of 12 Mile Rd to North of Rochester Rd												DESIGN \$4.3				CONST \$78.1						
South Segment 2 Package #6 M-152 (3 Mile Rd) to I-496																		DESIGN \$4.5 ROW \$1.0				CONST \$184.2
South Segment 1 Package #7 I-496 to South of 12 Mile Rd (2012 Design for Early Works Ramp Build)			DESIGN \$13.3																DESIGN			CONST \$134.1

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MDOT I-75 SUCCESS MANAGEMENT WORKSHOP

PROJECT OVERVIEW

I-75, OAKLAND COUNTY, MI

Design-Bid-Build Project Schedule (7 Packages - 7 Segments)	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	
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North Segment 4 Package #2 West of Wyandale Rd to North of Adams Rd								DESIGN \$4.3				CONST \$79.3										
North Segment 3 Package #3 North of Packard Rd to North of Wyandale Rd													DESIGN \$4.1				CONST \$75.4					
North Segment 1 Package #4 South of 12 Mile Rd to North of 13 Mile Rd														DESIGN \$4.4								
North Segment 2 Package #5 North of 11 Mile Rd to North of Farmdale Rd														CONC \$3.5								
South Segment 2 Package #6 M-100 (3 Mile Rd) to I-496																		DESIGN \$8.5				
South Segment 1 Package #7 I-496 to South of 12 Mile Rd (2012 Design for I-496, Work to Ramp Down)																			DESIGN \$1.0			
																					CONC \$134.1	

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SOUTH OF 14 MILE ROAD TO SOUTH



8 MILE ROAD TO SOUTH OF 14 MILE



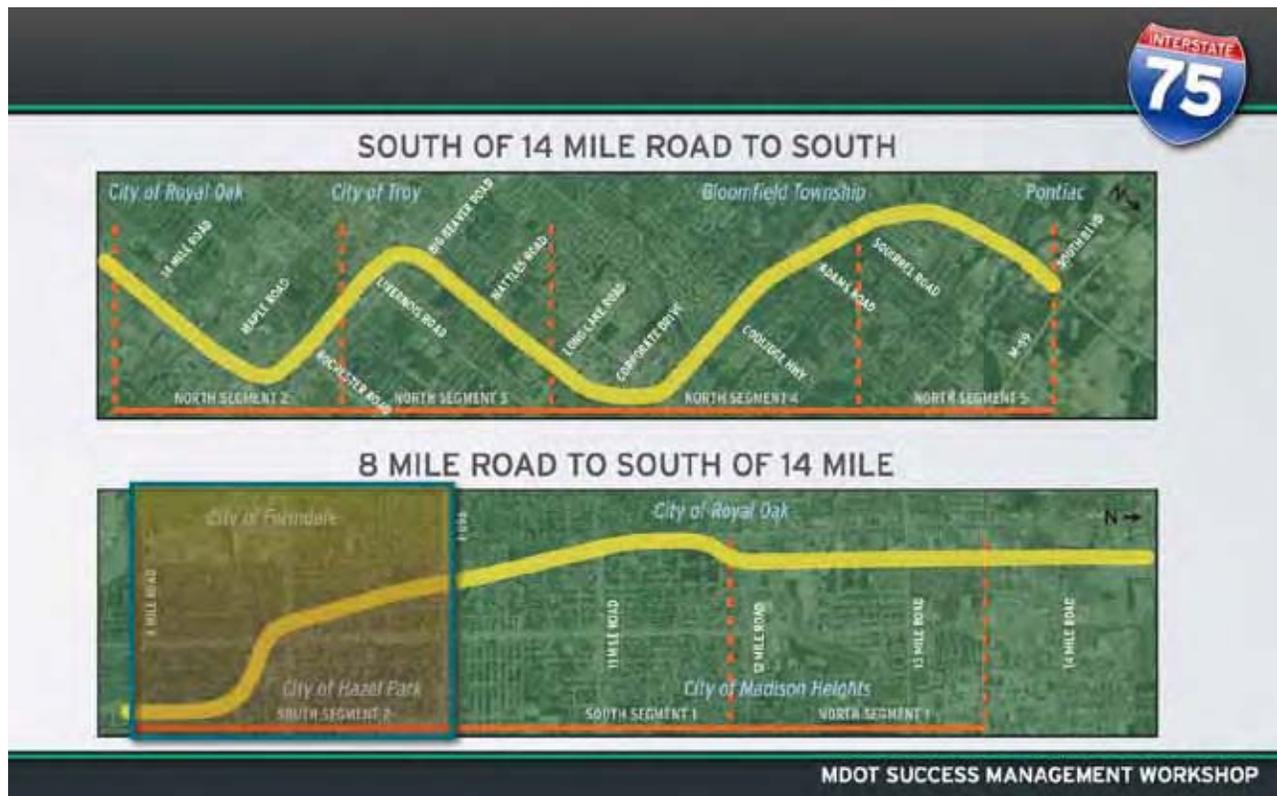
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APPENDIX B: WORKSHOP PRESENTATION

PROJECT OVERVIEW I-75, OAKLAND COUNTY, MI

Design-Bid-Build Project Schedule (7 Packages - 7 Sections)	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	
North Segment 5 Package #1 North of Adams Rd to South of 14 Mile					DESIGN \$1.0		CONST \$84.0															
North Segment 4 Package #2 North of Adams Rd to North of Adams Rd								DESIGN \$4.3				CONST \$79.3										
North Segment 3 Package #3 North of Rochester Rd to North of Rochester Rd													DESIGN \$4.1			CONST \$75.4						
North Segment 1 Package #4 South of 12 Mile Rd to North of 13 Mile Rd														DESIGN \$4.4								
North Segment 2 Package #5 North of 13 Mile Rd to North of Rochester Rd														CONSTR \$6.5								
South Segment 2 Package #6 M-102 to 14 Mile Rd to I-75																			DESIGN \$1.0			
South Segment 1 Package #7 I-75 to South of 12 Mile Rd (2012 Design for Early Works Ramp Small)			DESIGN \$13.3																	DESIGN \$1.0		
																					CONSTR \$184.0	
																						CONSTR \$134.1

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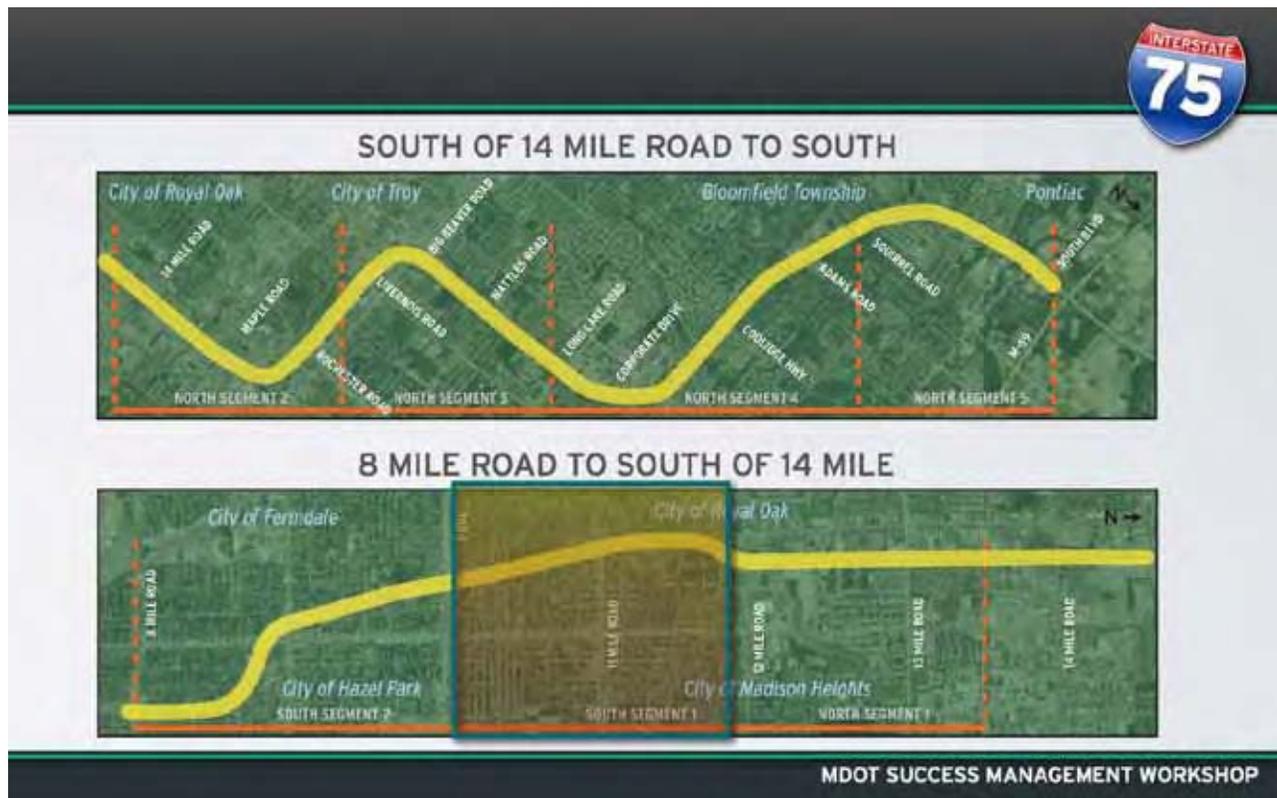


MDOT I-75 SUCCESS MANAGEMENT WORKSHOP

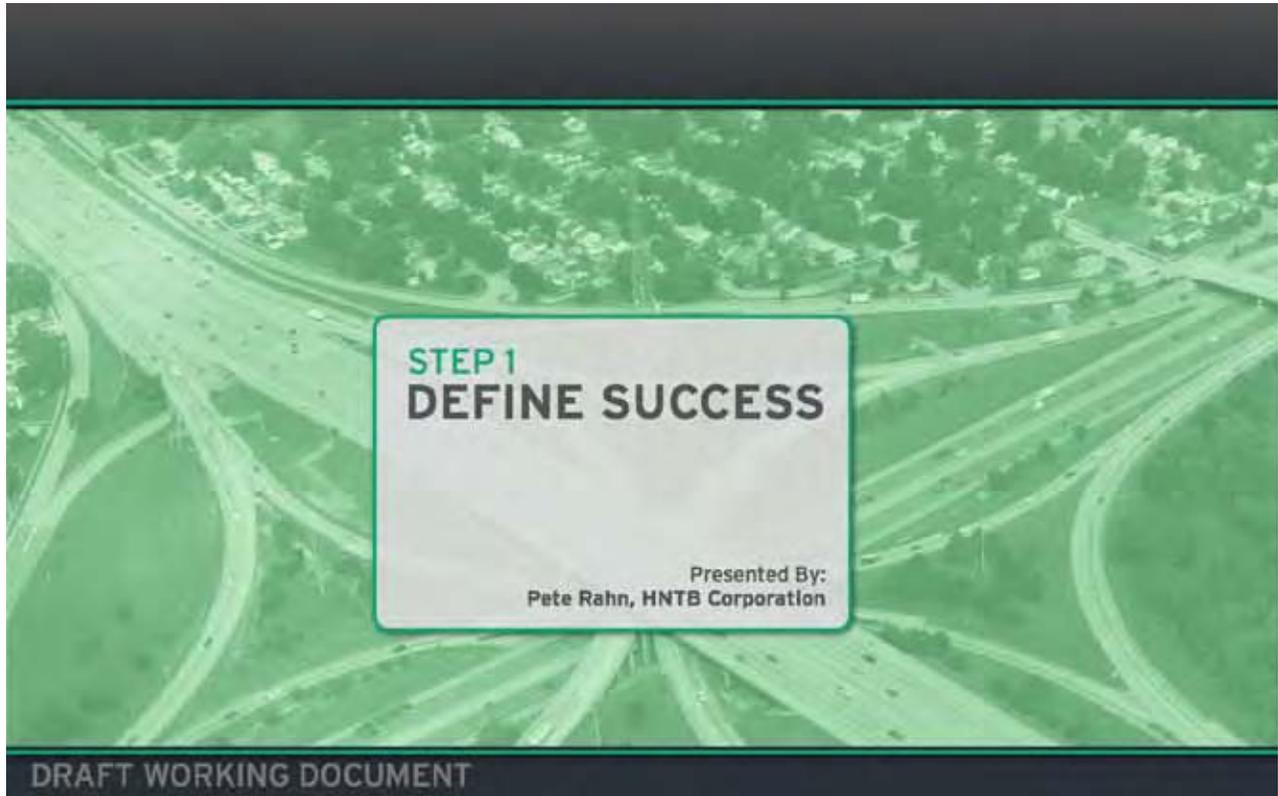
PROJECT OVERVIEW I-75, OAKLAND COUNTY, MI

Design-Bid-Build Project Schedule (7 Packages - 7 Segments)	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	
North Segment 5 Package #1 North of Adams Rd to South of 14 Mile					DESIGN \$1.0		CONST \$88.0															
North Segment 4 Package #2 North of Adams Rd to North of Adams Rd								DESIGN \$4.3				CONST \$79.3										
North Segment 3 Package #3 North of Rochester Rd to North of Rochester Rd												DESIGN \$4.1			CONST \$75.4							
North Segment 1 Package #4 South of 12 Mile Rd to North of 13 Mile Rd														DESIGN \$4.4								
North Segment 2 Package #5 North of 13 Mile Rd to North of Rochester Rd														CONSTR \$6.5								
South Segment 2 Package #6 M-101 (3 Mile Rd) to I-496																		DESIGN \$4.5				
South Segment 1 Package #7 North to South of 12 Mile Rd (2012 Design for Early Work Items Build)				DESIGN \$11.3															DESIGN \$1.1			
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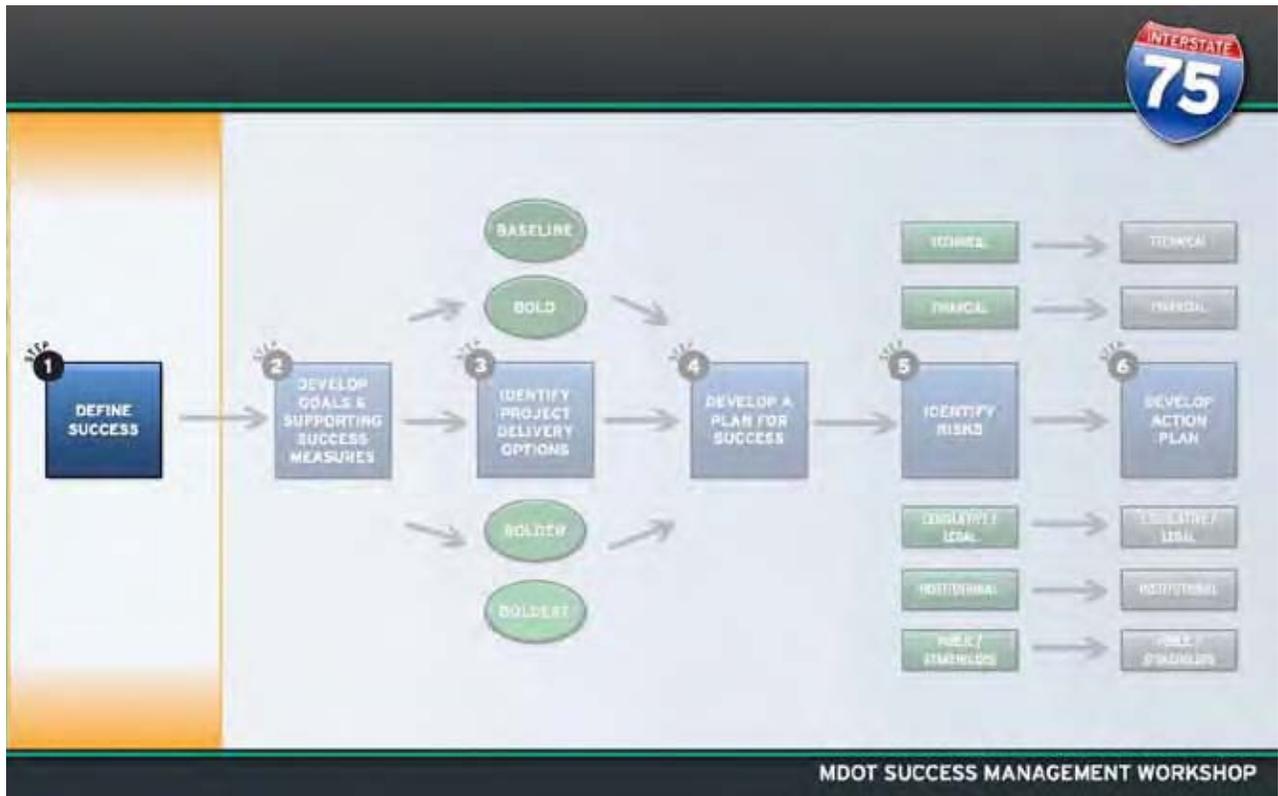
APPENDIX B: WORKSHOP PRESENTATION



**STEP 1
DEFINE SUCCESS**

Presented By:
Pete Rahn, HNTB Corporation

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MDOT I-75 SUCCESS MANAGEMENT WORKSHOP

DEFINE SUCCESS

SUCCESS STORY: "BIG I" INTERCHANGE, ALBUQUERQUE, NM

▶ Project Features

- Largest transportation project constructed in New Mexico
- 55 bridges
- 1.7 crashes per day
- Ranked #10 in the nations most congested interchanges
- Juncture of 2 major interstates (I-25 & I-40)
- 400,000+ average daily traffic

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Steve Harris, NMDOT



MDOT SUCCESS MANAGEMENT WORKSHOP

APPENDIX B: WORKSHOP PRESENTATION

DEFINE SUCCESS

SUCCESS STORY: "BIG I" INTERCHANGE, ALBUQUERQUE, NM

GOALS/SUCCESS MEASURES	RESULTS/ACCOMPLISHMENTS
Remain within budget of \$300 million.	Final cost was \$270 million.
Deliver within 24 months.	Rapid completion in 22 months and 3 weeks.
Maintain two traffic lanes from 5:30am to 9:00pm.	Maintained a good traffic flow on both sides of the freeways.
Improve safety.	Provided quick response to accidents within 5 minutes. Reduced the accident rate.
Provide job opportunities and economic benefits.	Added 1,200 jobs. Reap more than \$10 billion in economic benefits from the improvement over 20 years.
Reduce congestion.	Enhanced the level of service.

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Steve Harris, NMDOT



MDOT SUCCESS MANAGEMENT WORKSHOP

MDOT I-75 SUCCESS MANAGEMENT WORKSHOP

DEFINE SUCCESS

SUCCESS STORY: I-64, ST. LOUIS, MO

► Features List

- St. Louis' metro "Main Street"
- Pieces dated back to 1922
- Was MPO highest priority
- St. Louis had no confidence that big projects could be delivered on-time or in-budget
- Minority community felt excluded from highway industry
- Project envisioned as 10.5 miles, 32 bridges, 1 interstate-to-interstate interchange, 11 interchanges, \$702 million price tag and 7-8 years construction time

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MDOT SUCCESS MANAGEMENT WORKSHOP

APPENDIX B: WORKSHOP PRESENTATION

DEFINE SUCCESS

SUCCESS STORY: I-64, ST. LOUIS, MO

GOALS/SUCCESS MEASURES	RESULTS/ACCOMPLISHMENTS
Deliver the project within the program budget of \$535 million.	Delivered for \$524 million.
Complete the project no later than July 30, 2010.	Project opened to traffic December 2009.
Maximize the mobility and capacity improvements in the corridor when construction is complete.	Enhanced the level of service: standardized interchange designs added acceleration and deceleration lanes.
Minimize and mitigate construction impacts to customers through construction staging and communication efforts.	95% public satisfaction rating while I-64 was completely closed during construction.
Maximize workforce development for minority/disadvantaged businesses.	Created a new model for workforce diversity and minority business outreach.

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MDOT I-75 SUCCESS MANAGEMENT WORKSHOP



APPENDIX B: WORKSHOP PRESENTATION

DEFINE SUCCESS HEADLINE EXERCISE

- ▶ It is your turn to create headlines for I-75!

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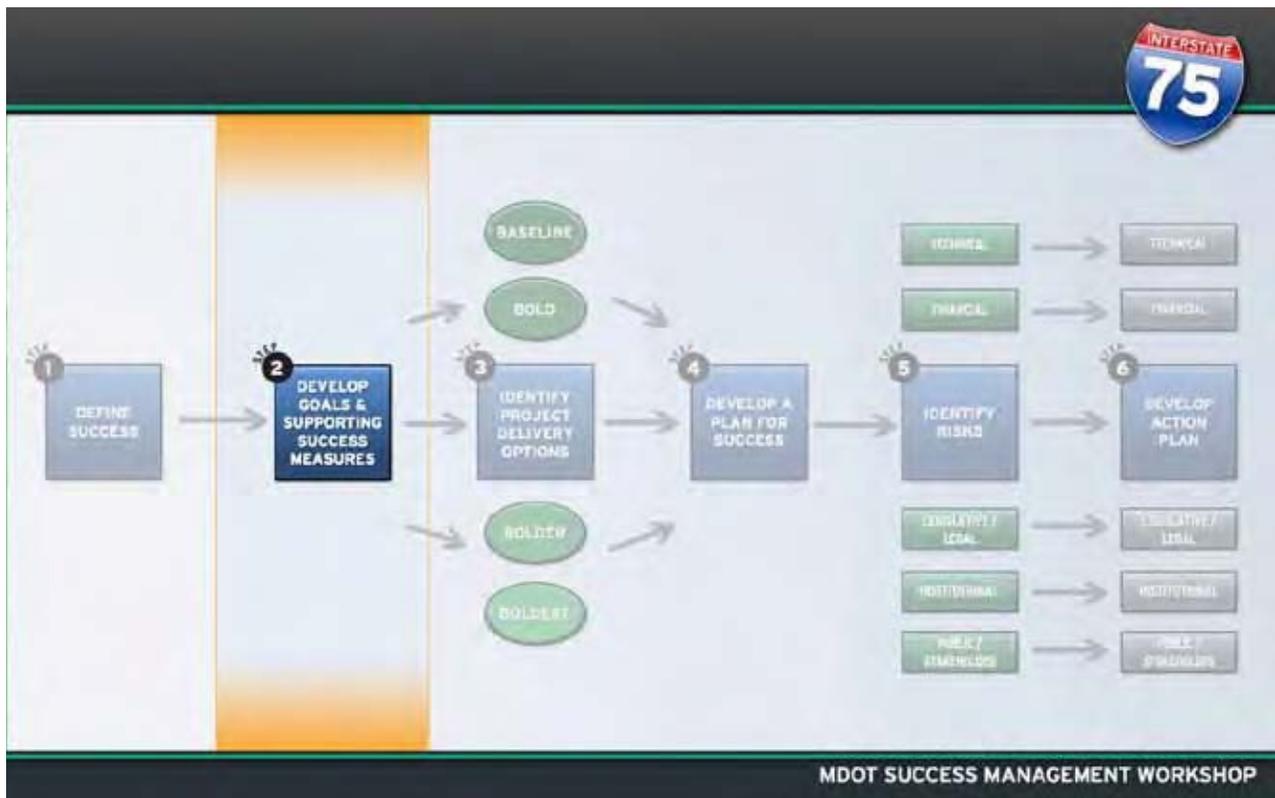
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STEP 2
DEVELOP GOALS & SUPPORTING SUCCESS MEASURES

Presented By:
David Downs, HNTB Corporation

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APPENDIX B: WORKSHOP PRESENTATION

DEVELOP GOALS & SUPPORTING SUCCESS MEASURES
SMART GOALS

SMART

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The form template includes the following text:

MIDOT
MNTB

GRIP

Success Management

SUCCESS MEASURES

SUCCESS MEASURE:

MDOT SUCCESS MANAGEMENT WORKSHOP

MDOT I-75 SUCCESS MANAGEMENT WORKSHOP

DEVELOP GOALS & SUPPORTING SUCCESS MEASURES SMART GOALS

Specific
Measurable
Attainable
Relevant
Time-Bound

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MDOT
MNTB

GRIFT

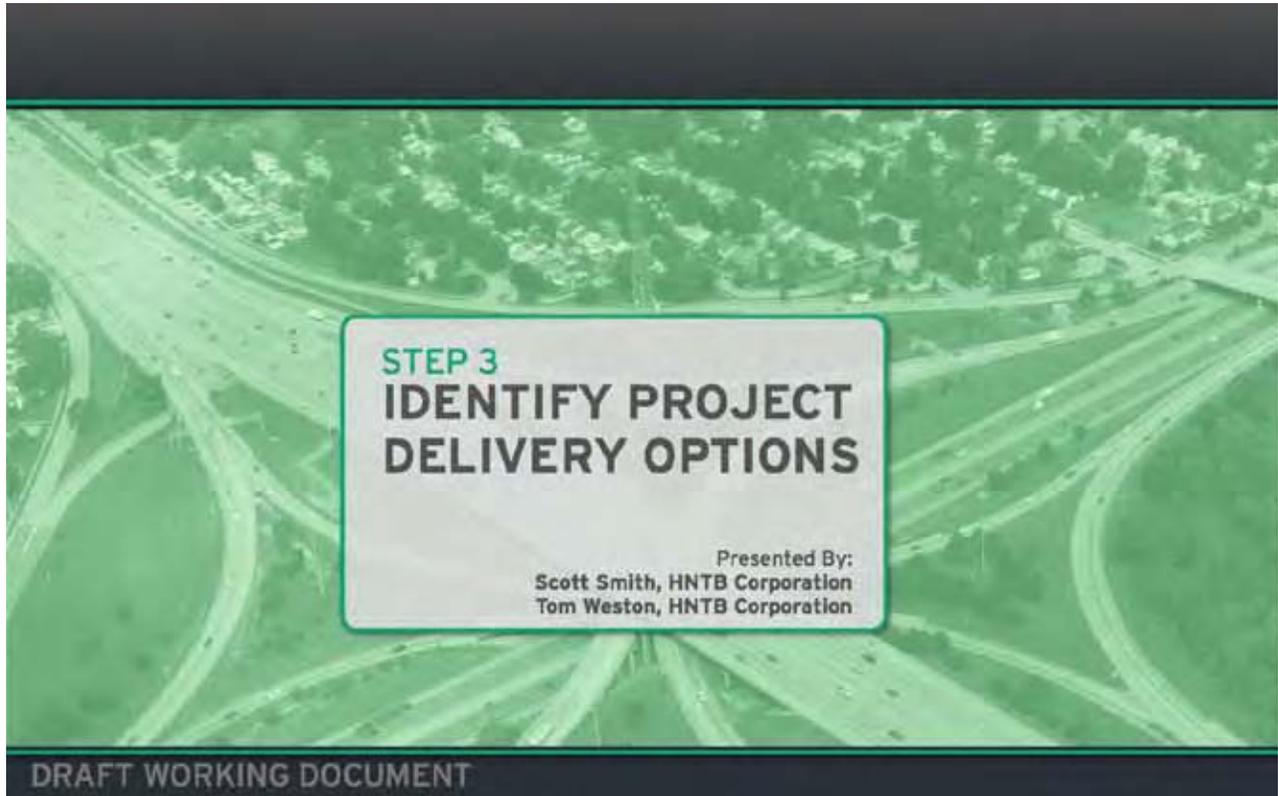
Success Management

SUCCESS MEASURES

SUCCESS MEASURE:

MDOT SUCCESS MANAGEMENT WORKSHOP

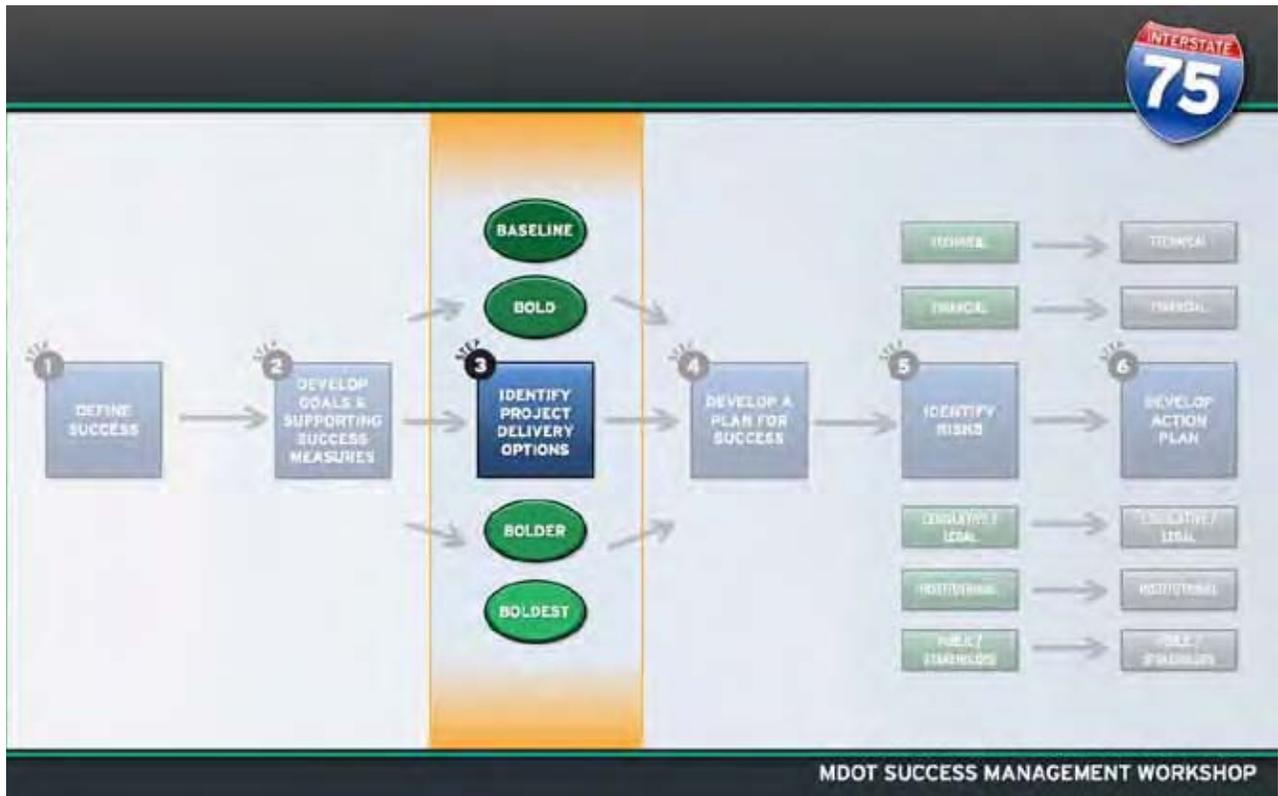
APPENDIX B: WORKSHOP PRESENTATION



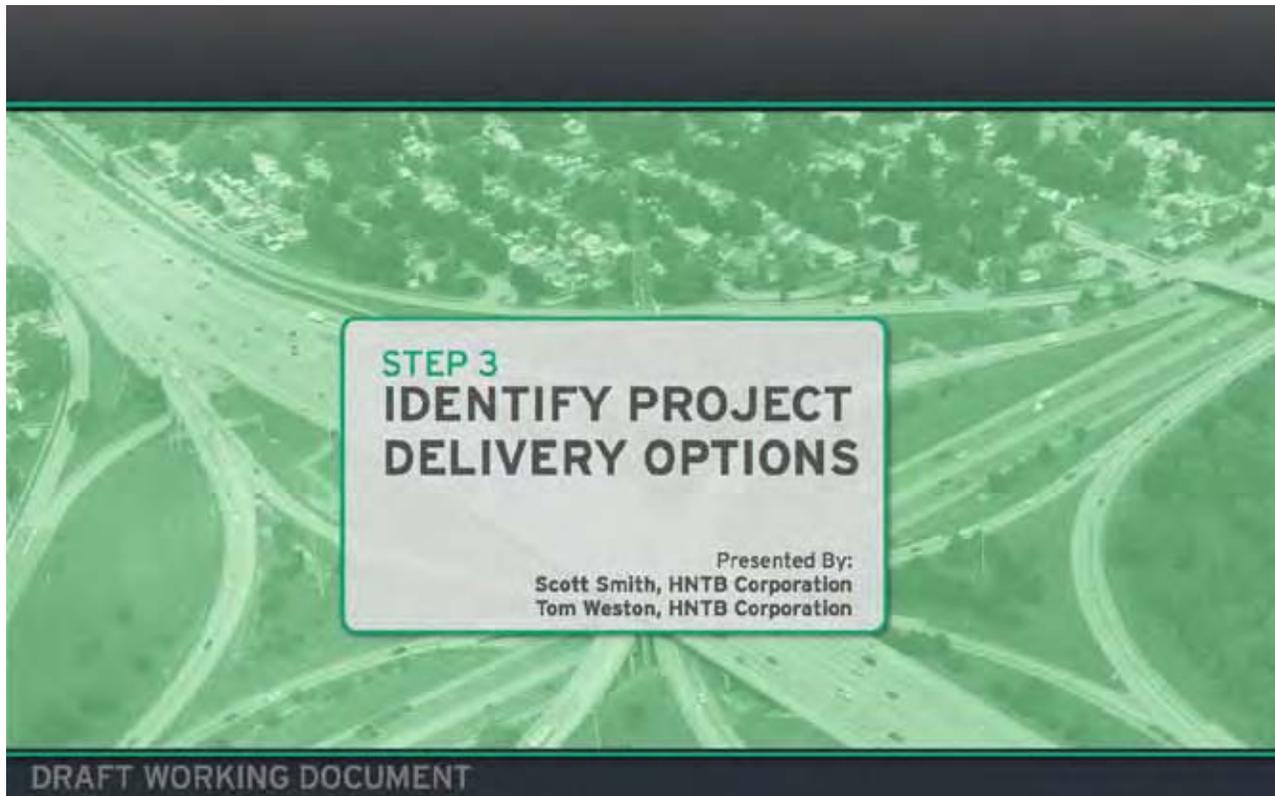
STEP 3
IDENTIFY PROJECT DELIVERY OPTIONS

Presented By:
Scott Smith, HNTB Corporation
Tom Weston, HNTB Corporation

DRAFT WORKING DOCUMENT



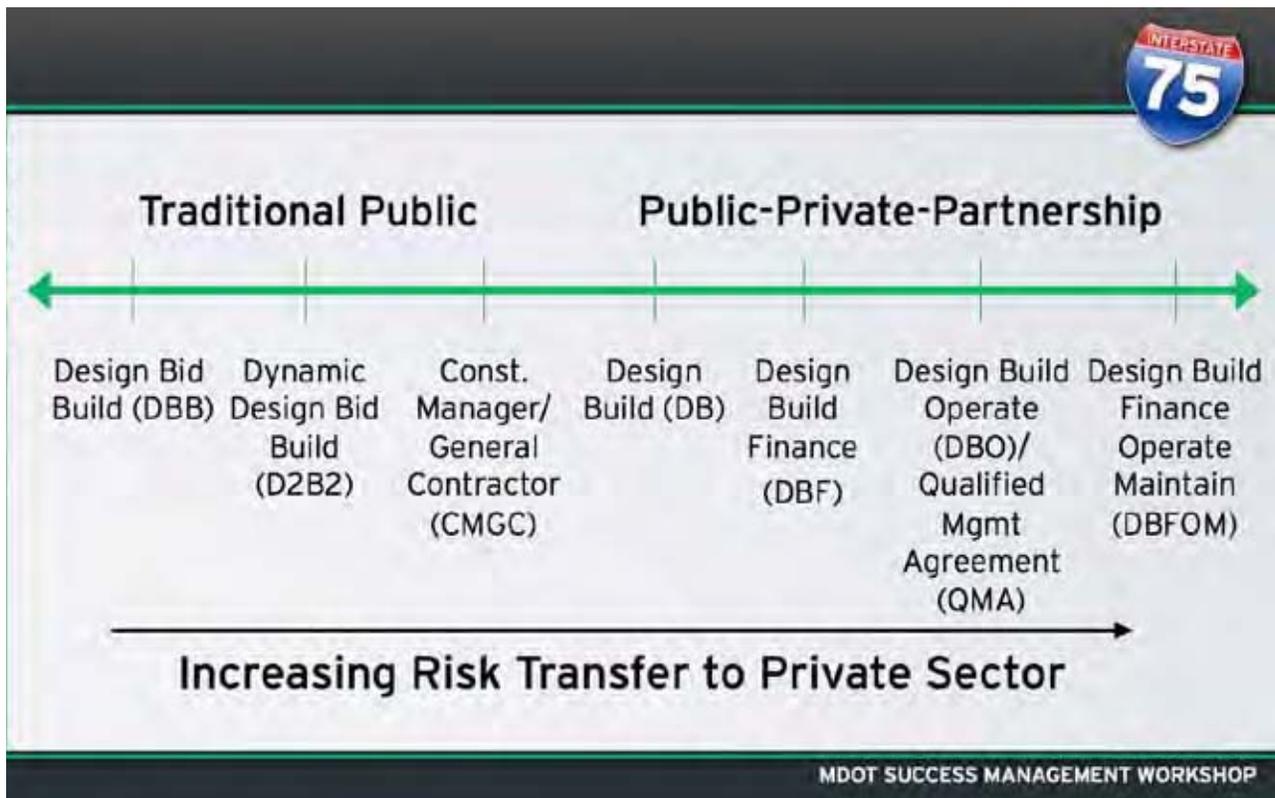
MDOT I-75 SUCCESS MANAGEMENT WORKSHOP



STEP 3
IDENTIFY PROJECT DELIVERY OPTIONS

Presented By:
 Scott Smith, HNTB Corporation
 Tom Weston, HNTB Corporation

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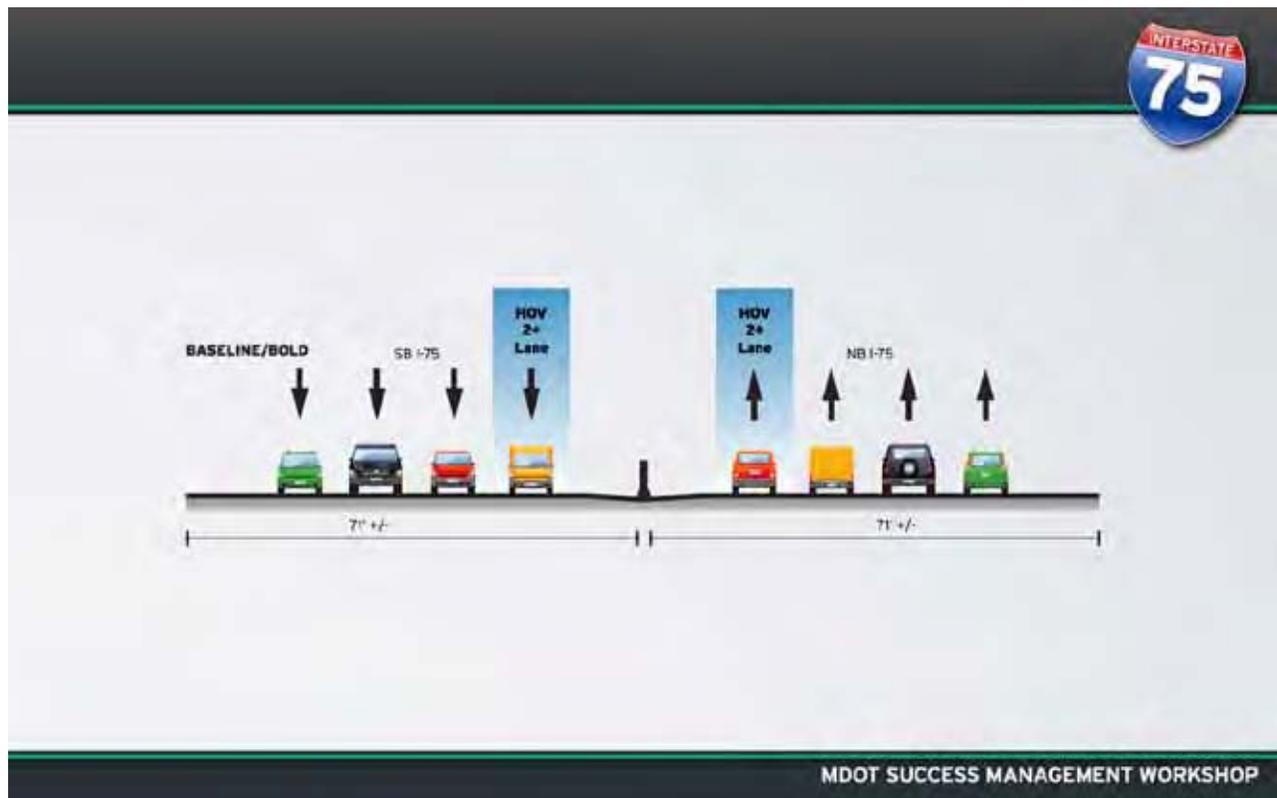
APPENDIX B: WORKSHOP PRESENTATION

IDENTIFY PROJECT DELIVERY OPTIONS

OPTIONS

	Baseline	Bold	Bolder	Boldest
Scope	18-mile full reconstruct with widening to 4x4 to standards			
Delivery Method	Design/Bid/Build (7 Packages)			
Operations	HOV 2+ Only			
Year Completed	2031			
Cost (YOE)	\$1.3B			
Present Value	\$768M			

DRAFT WORKING DOCUMENT



MDOT I-75 SUCCESS MANAGEMENT WORKSHOP

IDENTIFY PROJECT DELIVERY OPTIONS

OPTIONS

	Baseline	Bold	Bolder	Boldest
Scope	18-mile full reconstruct with widening to 4x4 to standards			
Delivery Method	Design/Bid/Build (7 Packages)			
Operations	HOV 2+ Only			
Year Completed	2031			
Cost (YOE)	\$1.3B			
Present Value	\$768M			

DRAFT WORKING DOCUMENT



Design-Bid-Build Project Schedule (7 Packages - 7 Sections)	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	
North Segment 5 Package #1 <small>North of Adams Rd to South of M-99</small>					DESIGN		CONST															
North Segment 4 Package #2 <small>North of Wabbe Rd to North of Adams Rd</small>										DESIGN		CONST										
North Segment 3 Package #3 <small>North of Rochester Rd to North of Wabbe Rd</small>														DESIGN		CONST						
North Segment 1 Package #4 <small>South of 12 Mile Rd to North of 13 Mile Rd</small>															DESIGN							
North Segment 2 Package #5 <small>North of 13 Mile Rd to North of Rochester Rd</small>															DESIGN							
South Segment 2 Package #6 <small>M-102 (8 Mile Rd) to I-695</small>																		DESIGN				
South Segment 1 Package #7 <small>I-695 to South of 12 Mile Rd (2012 Design for Early Work Ramp (West))</small>				DESIGN															DESIGN			

MDOT SUCCESS MANAGEMENT WORKSHOP

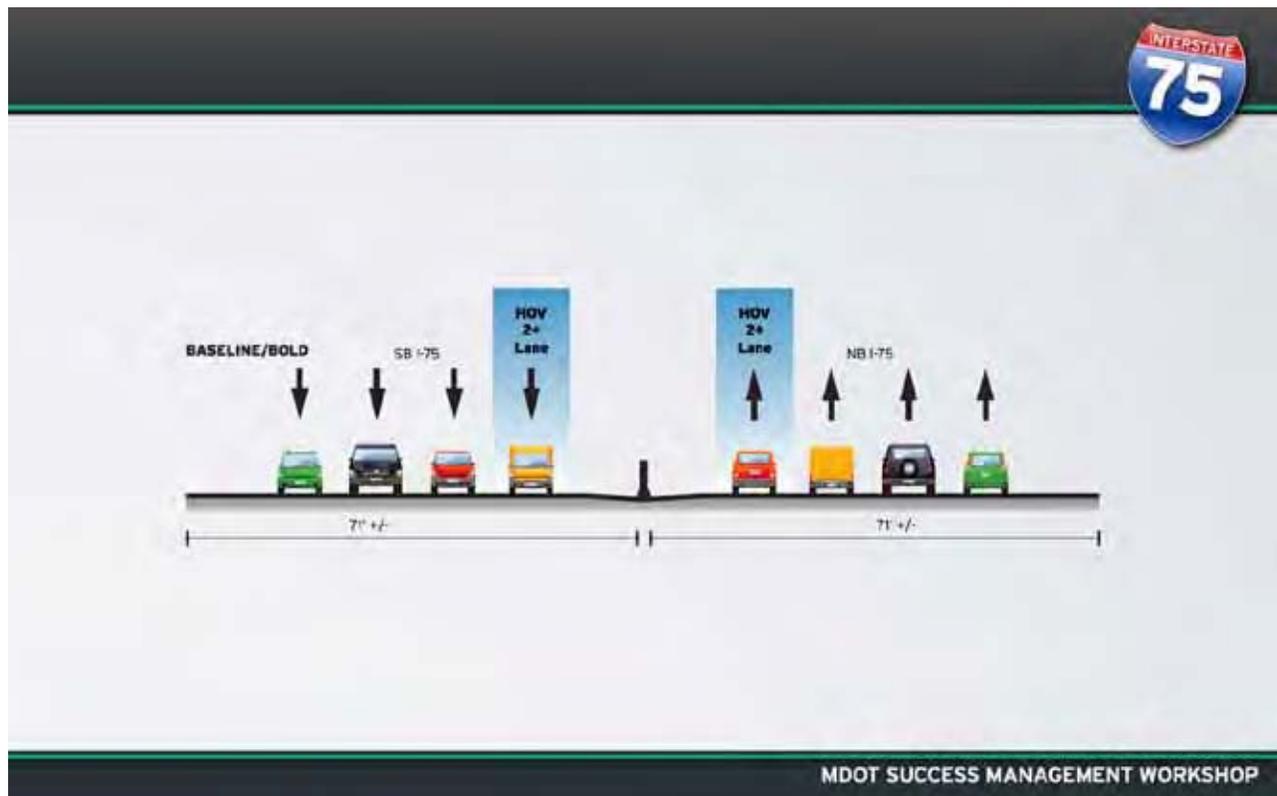
APPENDIX B: WORKSHOP PRESENTATION

IDENTIFY PROJECT DELIVERY OPTIONS

OPTIONS

	Baseline	Bold	Bolder	Boldest
Scope	18-mile full reconstruct with widening to 4x4 to standards	16-mile full reconstruct with widening to 4x4		
Delivery Method	Design/Bid/Build (7 Packages)	Design/Build (2 Packages)		
Operations	HOV 2+ Only	HOV 2+ Only		
Year Completed	2031	2019		
Cost (YOE)	\$1.3B	\$802M		
Present Value	\$768M	\$638M		

DRAFT WORKING DOCUMENT



MDOT I-75 SUCCESS MANAGEMENT WORKSHOP

IDENTIFY PROJECT DELIVERY OPTIONS

OPTIONS

	Baseline	Bold	Bolder	Boldest
Scope	18-mile full reconstruct with widening to 4x4 to standards	16-mile full reconstruct with widening to 4x4		
Delivery Method	Design/Bid/Build (7 Packages)	Design/Build (2 Packages)		
Operations	HOV 2+ Only	HOV 2+ Only		
Year Completed	2031	2019		
Cost (YOE)	\$1.3B	\$802M		
Present Value	\$768M	\$638M		

DRAFT WORKING DOCUMENT



Design-Build Project Schedule (Two Packages - Two Sections)	2011	2012	2013	2014	2015	2016	2017	2018	2019
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			ROW Acquisition						
			CONST.						
				Design & Construction Oversight					
DESIGN-BUILD DESIGN/CONSTRUCTION Design in 2013 pre-award work by processors									
RURAL SECTION PACKAGE #1 Includes North Segments 2 - 5 North of 13 Mile Road to South of M-59				DESIGN					
				CONSTRUCTION					
DESIGN-BUILD DESIGN/CONSTRUCTION Design in 2013 pre-award work by processors									
URBAN SECTION PACKAGE #2 Includes South Segments 1 - 2 & North Segment 1 M-102 (B Mile) to North of 13 Mile Road			ROW						
						DESIGN			
							CONSTRUCTION		



MDOT SUCCESS MANAGEMENT WORKSHOP

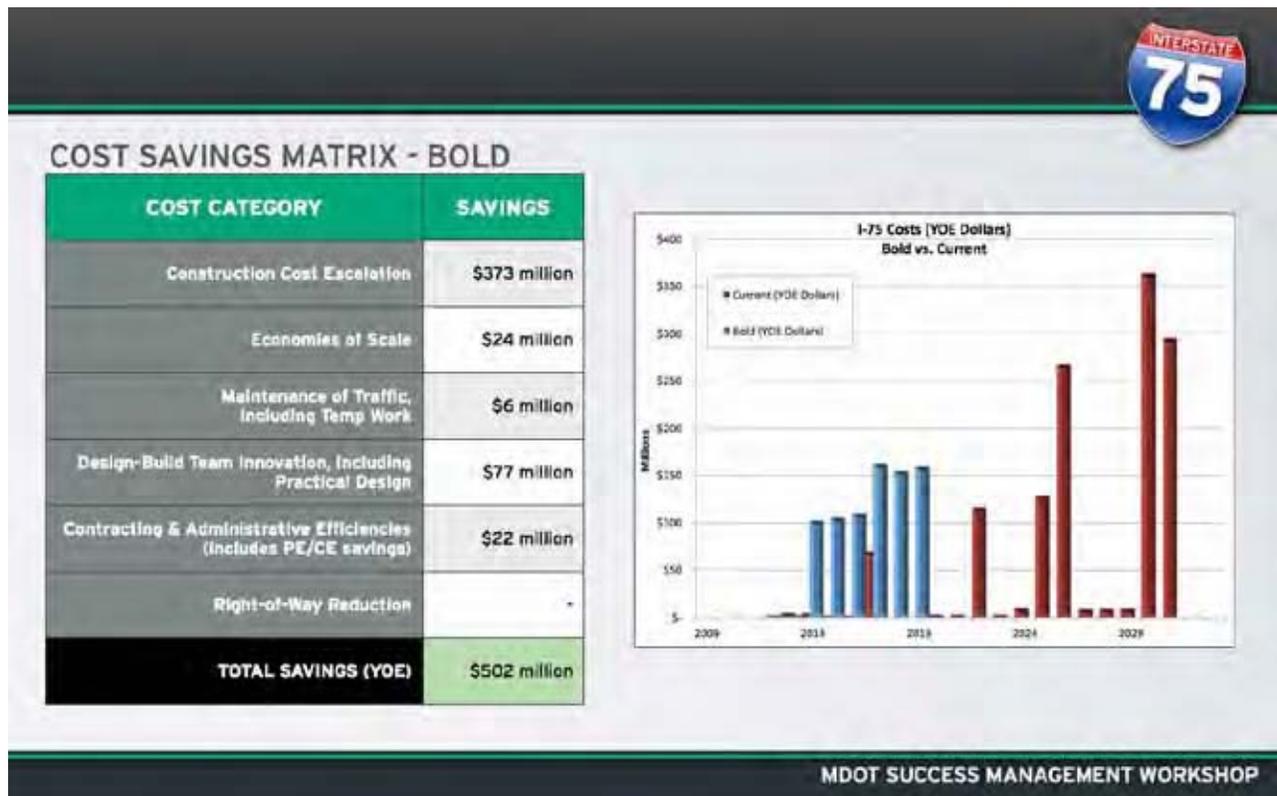
APPENDIX B: WORKSHOP PRESENTATION

IDENTIFY PROJECT DELIVERY OPTIONS

OPTIONS

	Baseline	Bold	Bolder	Boldest
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Operations	HOV 2+ Only	HOV 2+ Only		
Year Completed	2031	2019		
Cost (YOE)	\$1.3B	\$802M		
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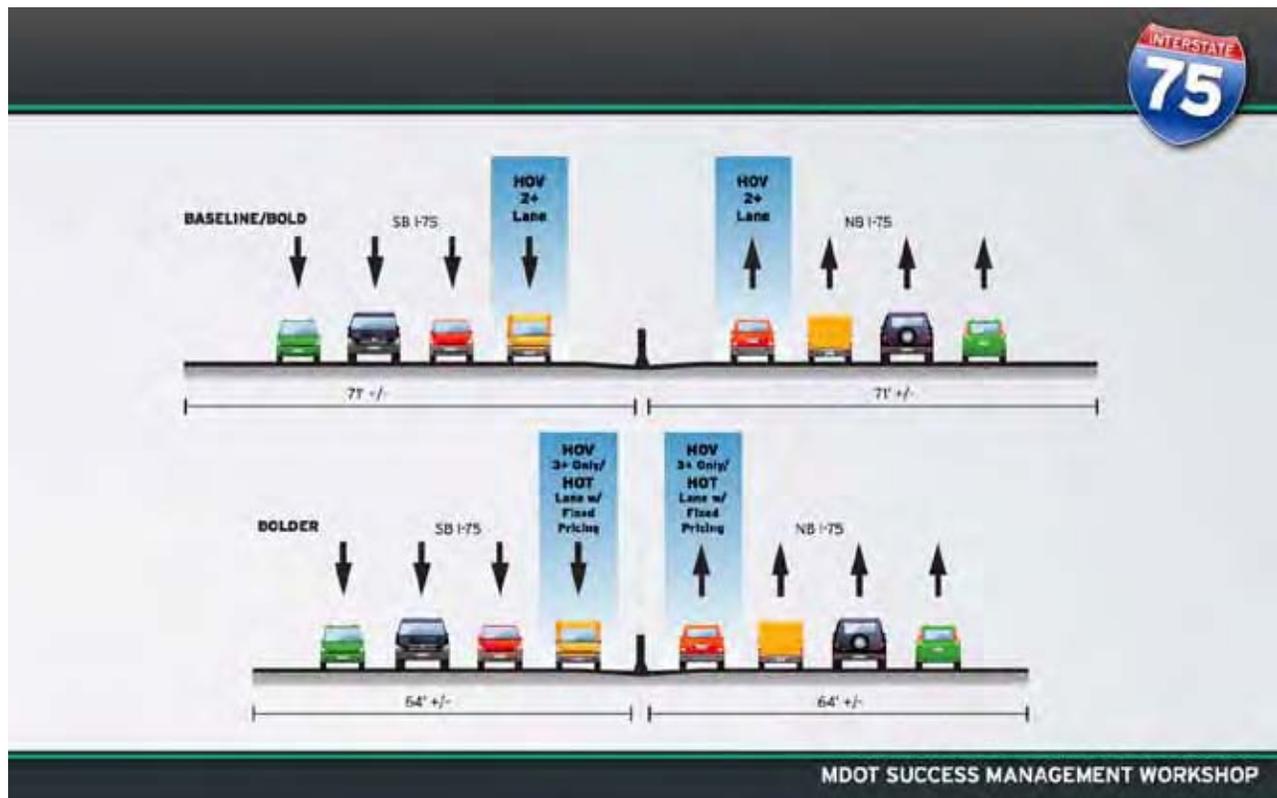
MDOT I-75 SUCCESS MANAGEMENT WORKSHOP

IDENTIFY PROJECT DELIVERY OPTIONS

OPTIONS

	Baseline	Bold	Bolder	Boldest
Scope	18-mile full reconstruct with widening to 4x4 to standards	18-mile full reconstruct with widening to 4x4	Add one lane, 2-mile reconstruct, revisit braiding, 14-mile overlay with practical design solutions	
Delivery Method	Design/Bid/Build (7 Packages)	Design/Build (2 Packages)	Design/Build (1 Package)	
Operations	HOV 2+ Only	HOV 2+ Only	HOV 3+ /HOT Lane with Fixed Pricing	
Year Completed	2031	2019	2018	
Cost (YOE)	\$1.3B	\$802M	\$675M	
Present Value	\$768M	\$638M	\$548M	

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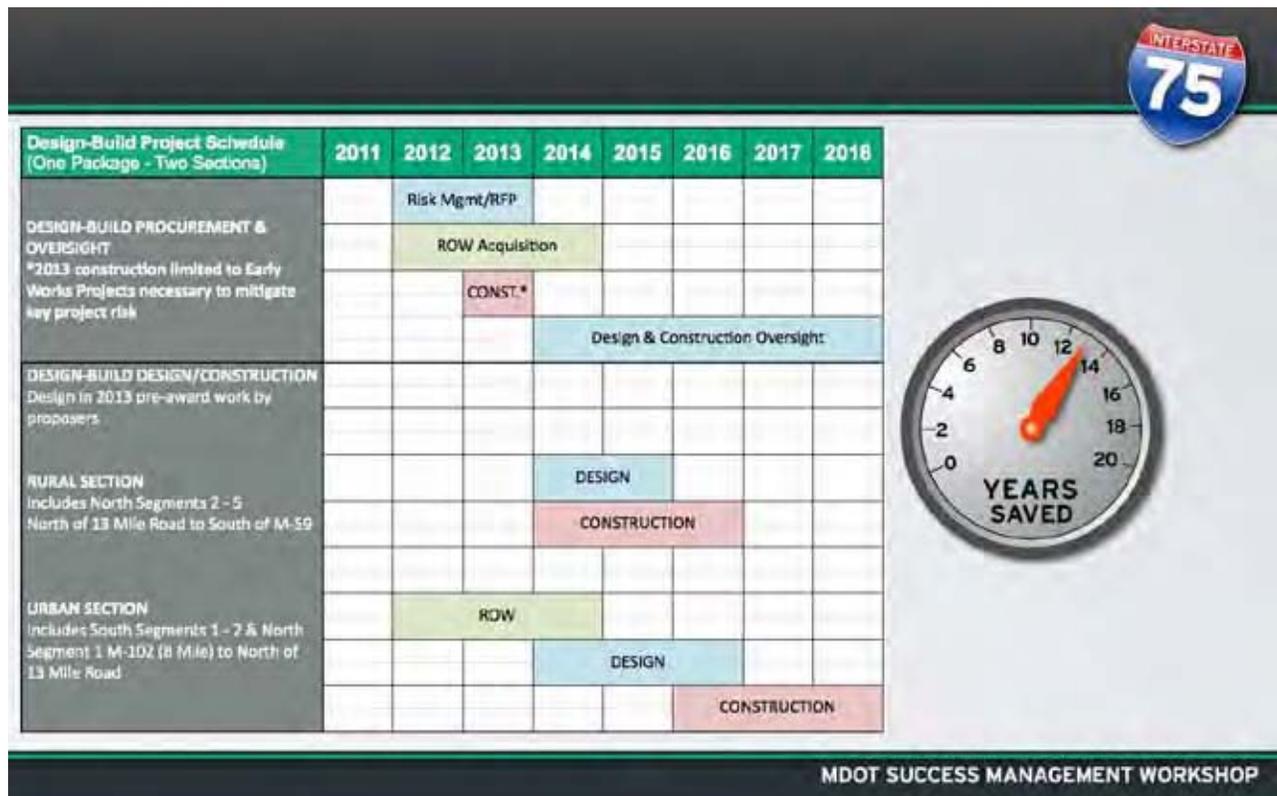
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MDOT I-75 SUCCESS MANAGEMENT WORKSHOP

IDENTIFY PROJECT DELIVERY OPTIONS

OPTIONS

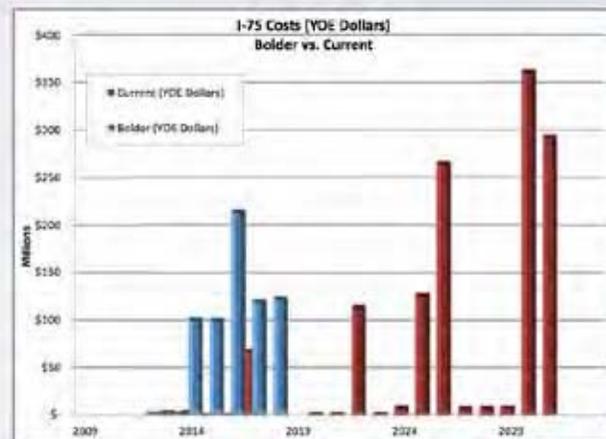
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COST SAVINGS MATRIX - BOLDER

COST CATEGORY	SAVINGS
Construction Cost Escalation	\$410 million
Economies of Scale	\$23 million
Maintenance of Traffic, Including Temp Work	\$12 million
Design-Build Team Innovation, Including Practical Design	\$150 million
Contracting & Administrative Efficiencies (Includes PE/CE savings)	\$35 million
Right-of-Way Reduction	-
TOTAL SAVINGS (YOE)	\$630 million



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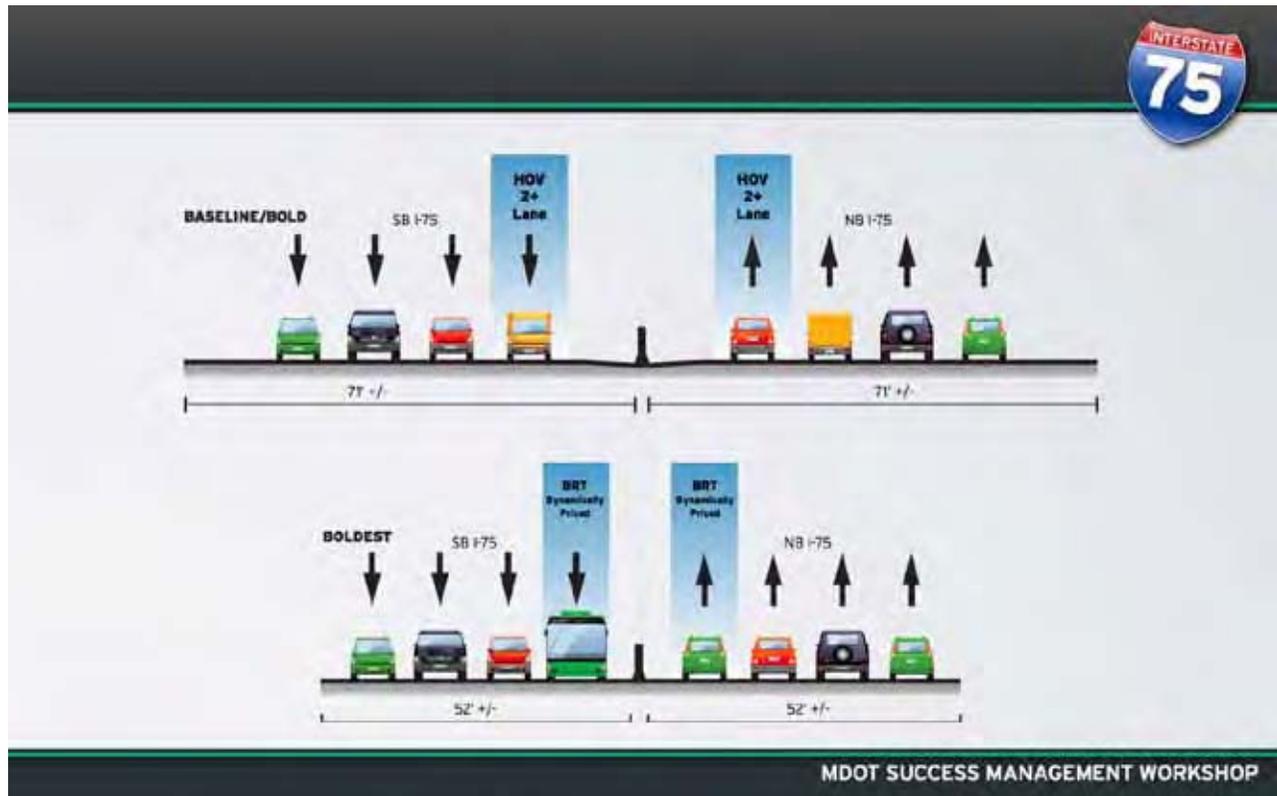
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MDOT I-75 SUCCESS MANAGEMENT WORKSHOP

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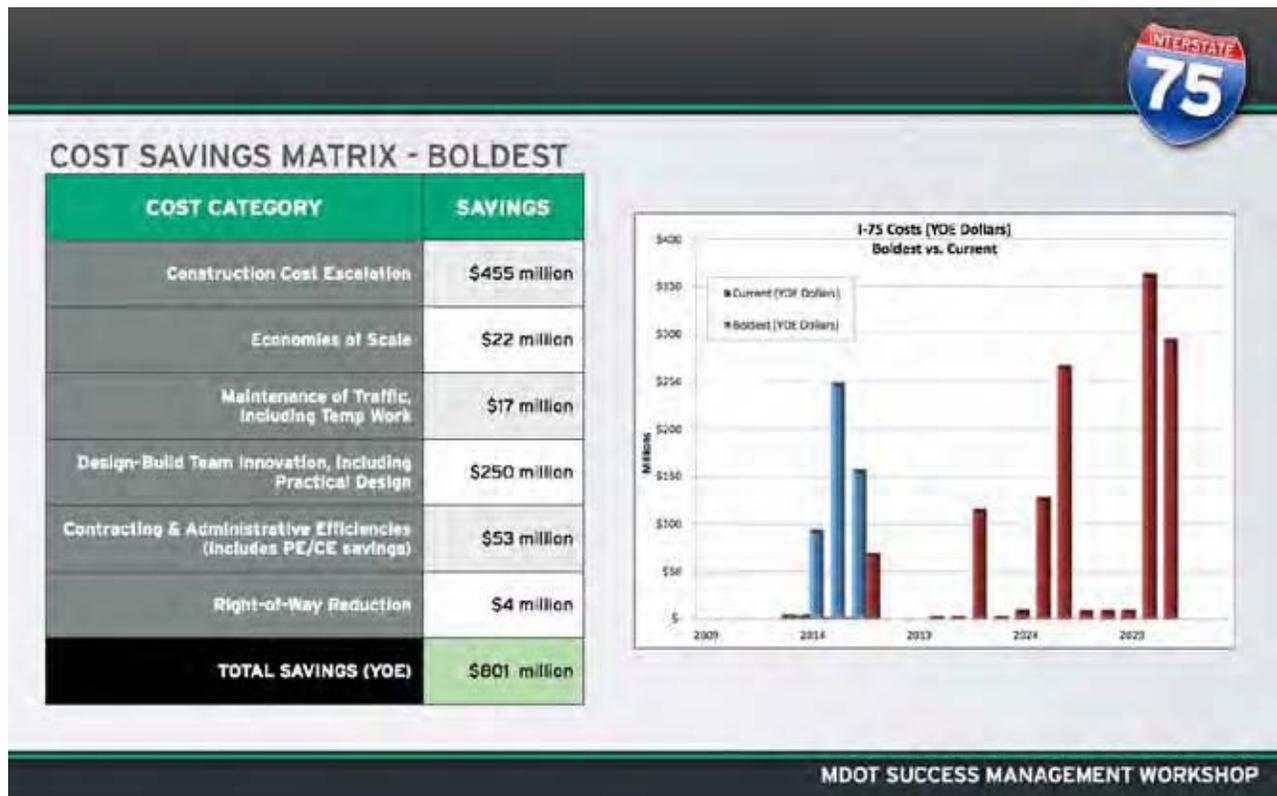
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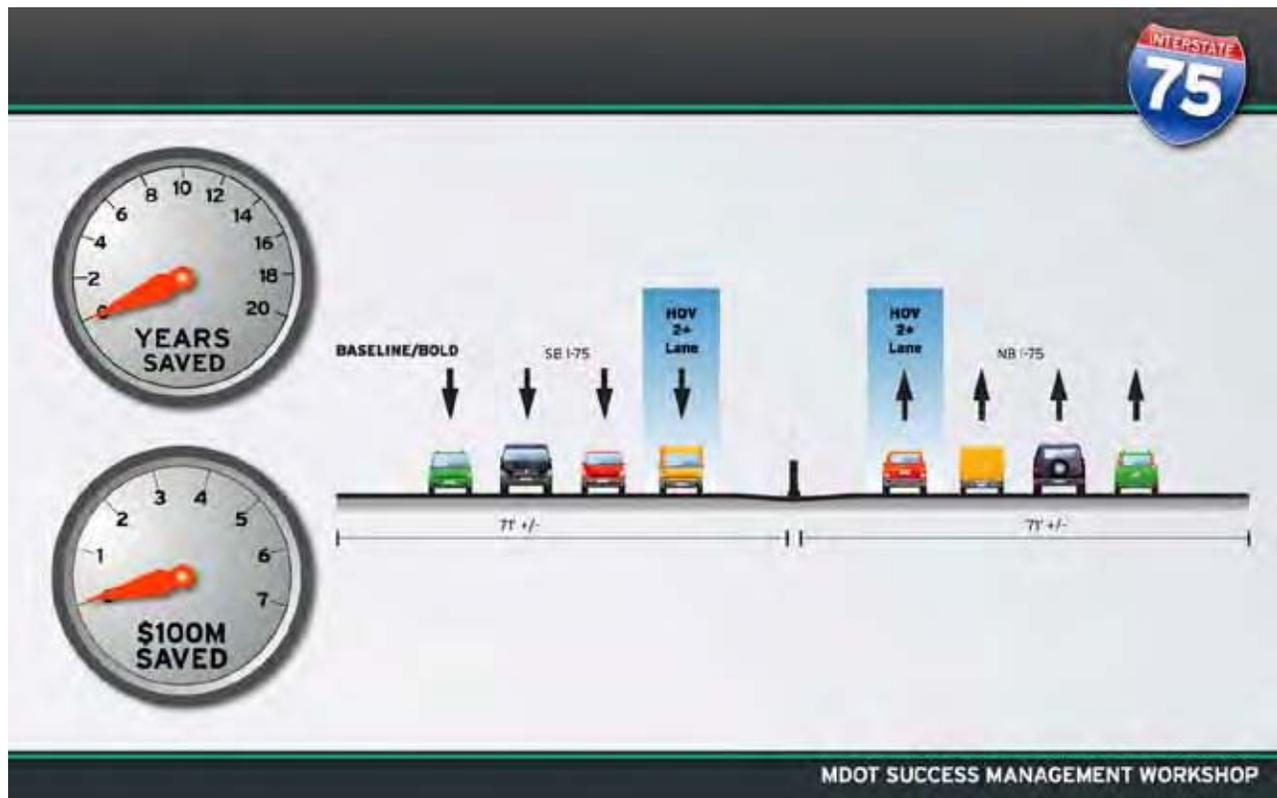
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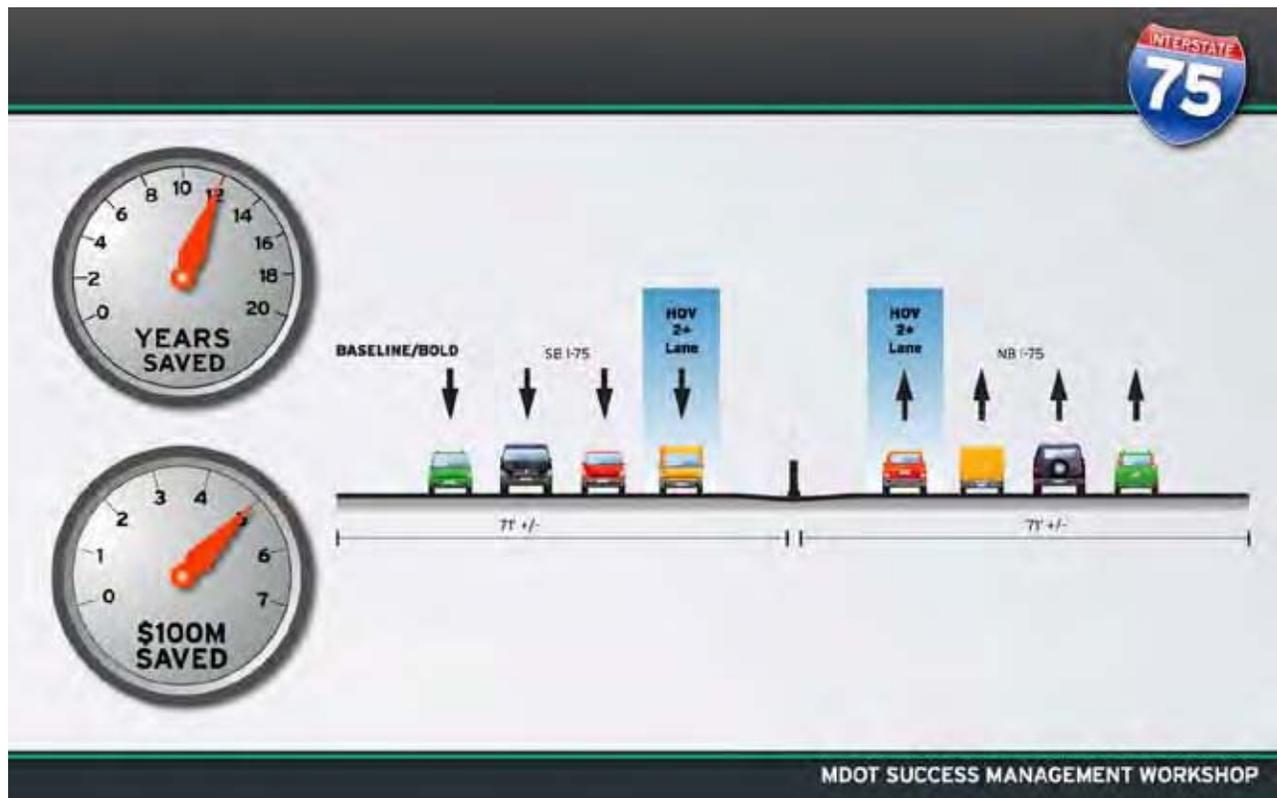
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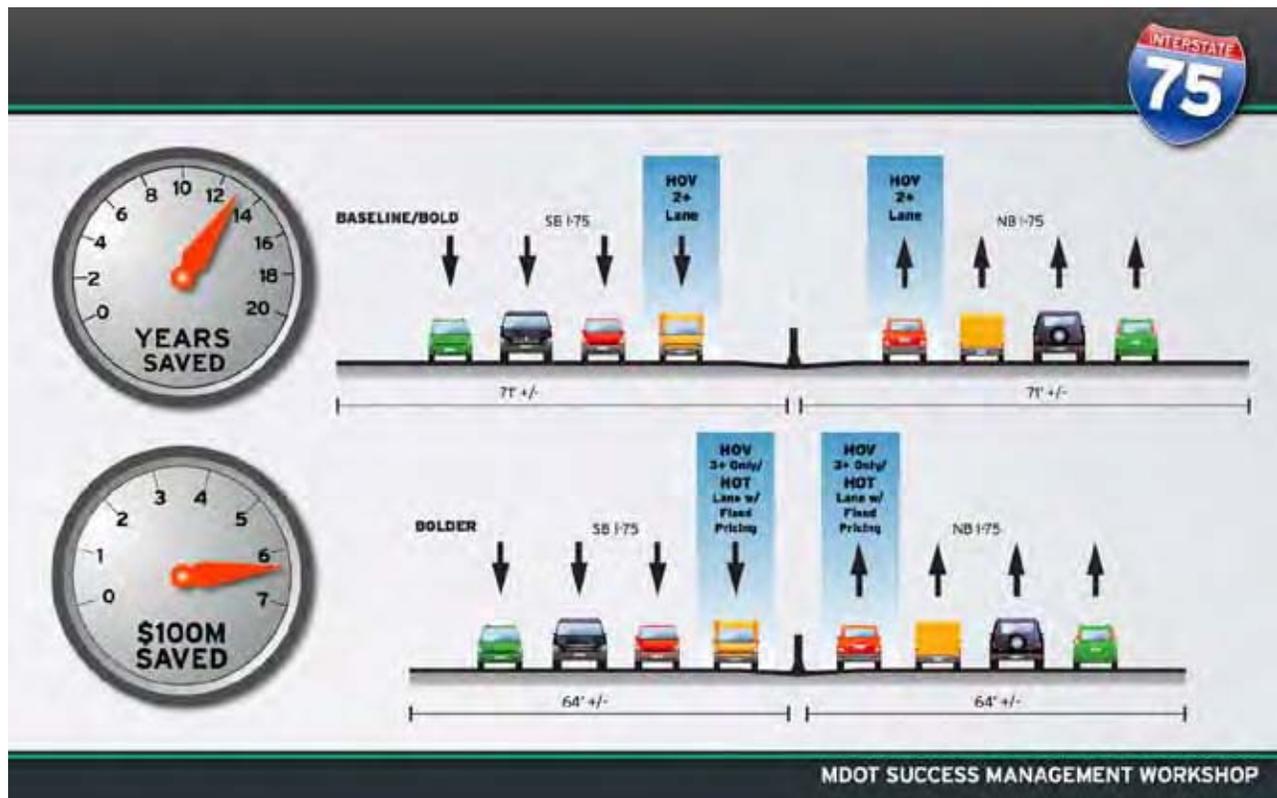
MDOT I-75 SUCCESS MANAGEMENT WORKSHOP

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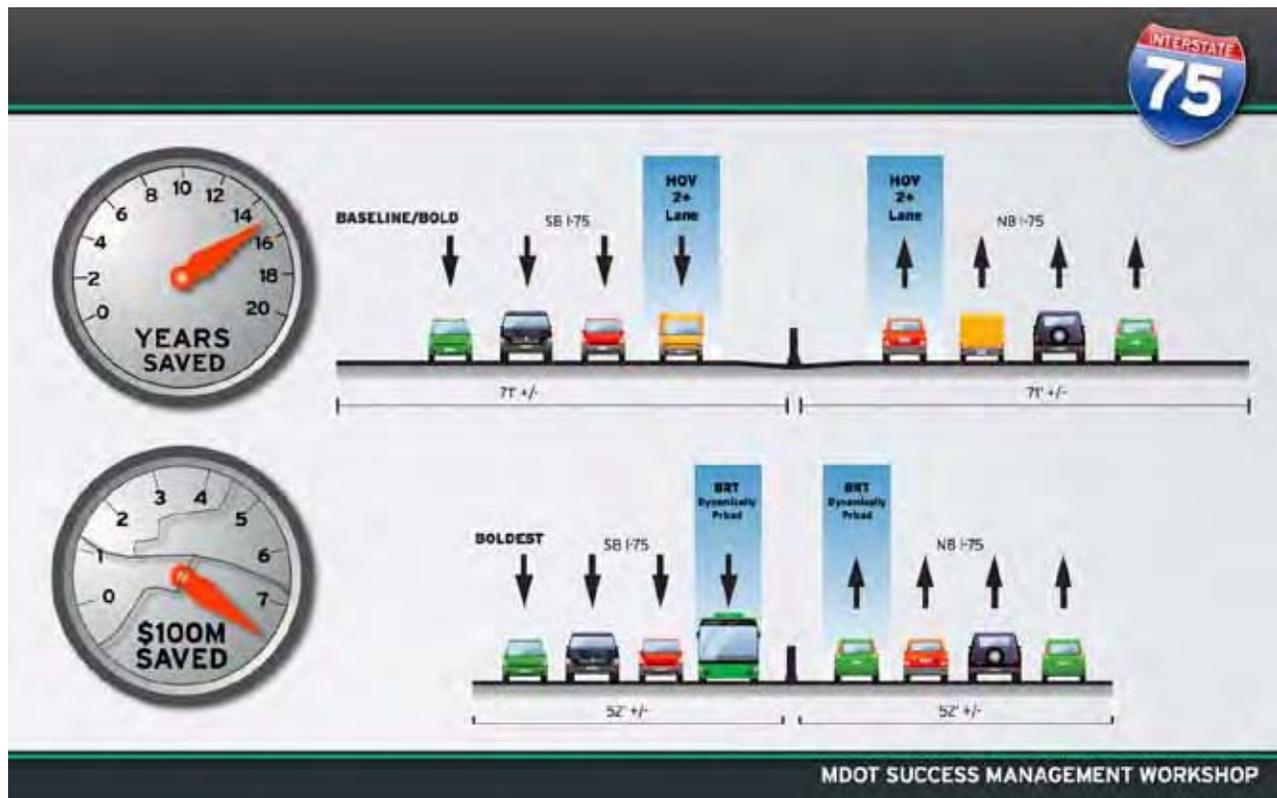
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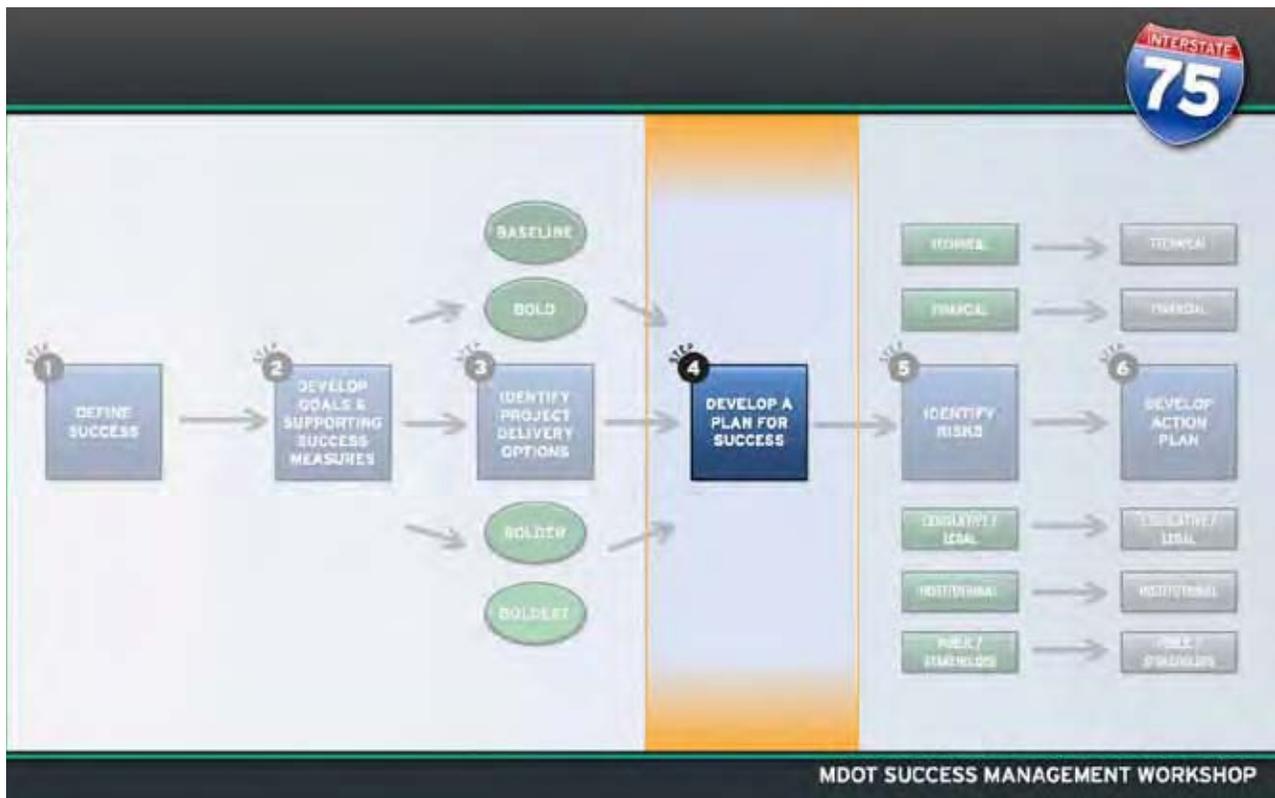
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STEP 4
DEVELOP A PLAN FOR SUCCESS

Presented By:
Scott Smith, HNTB Corporation

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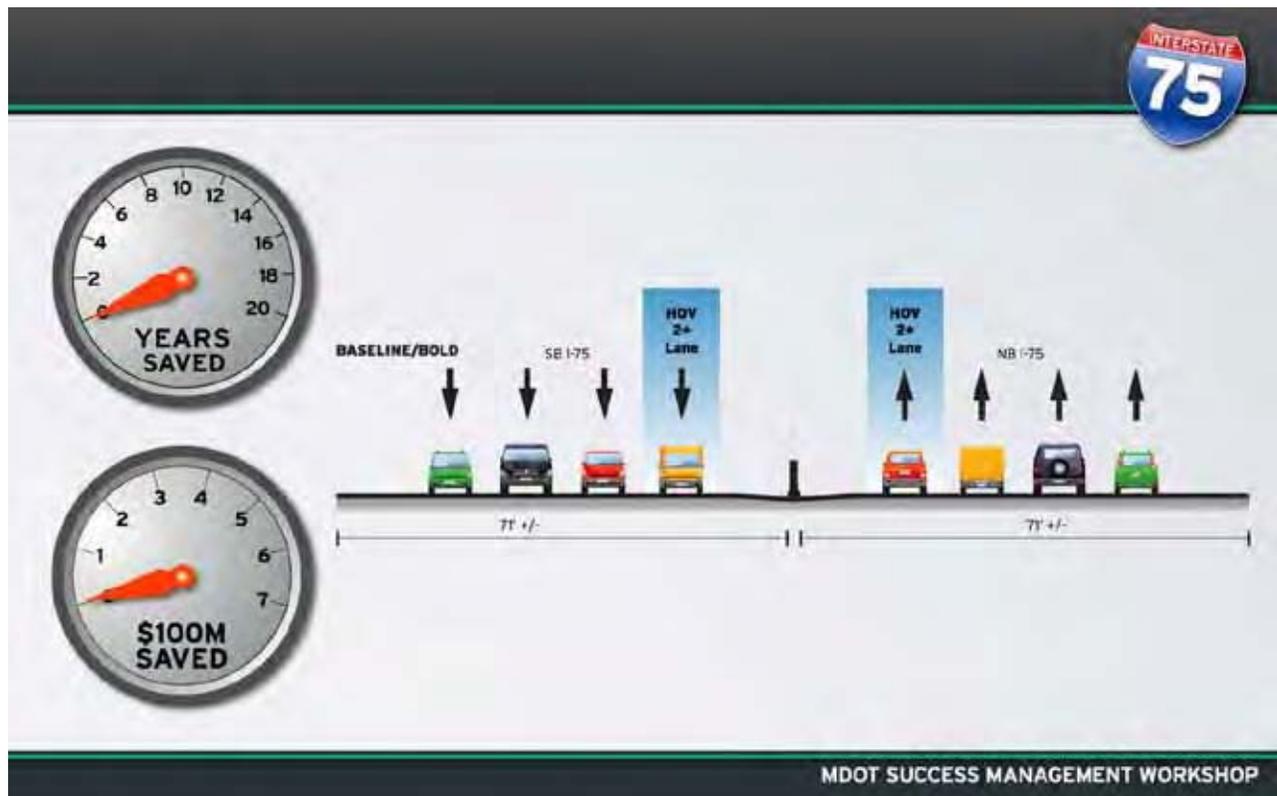
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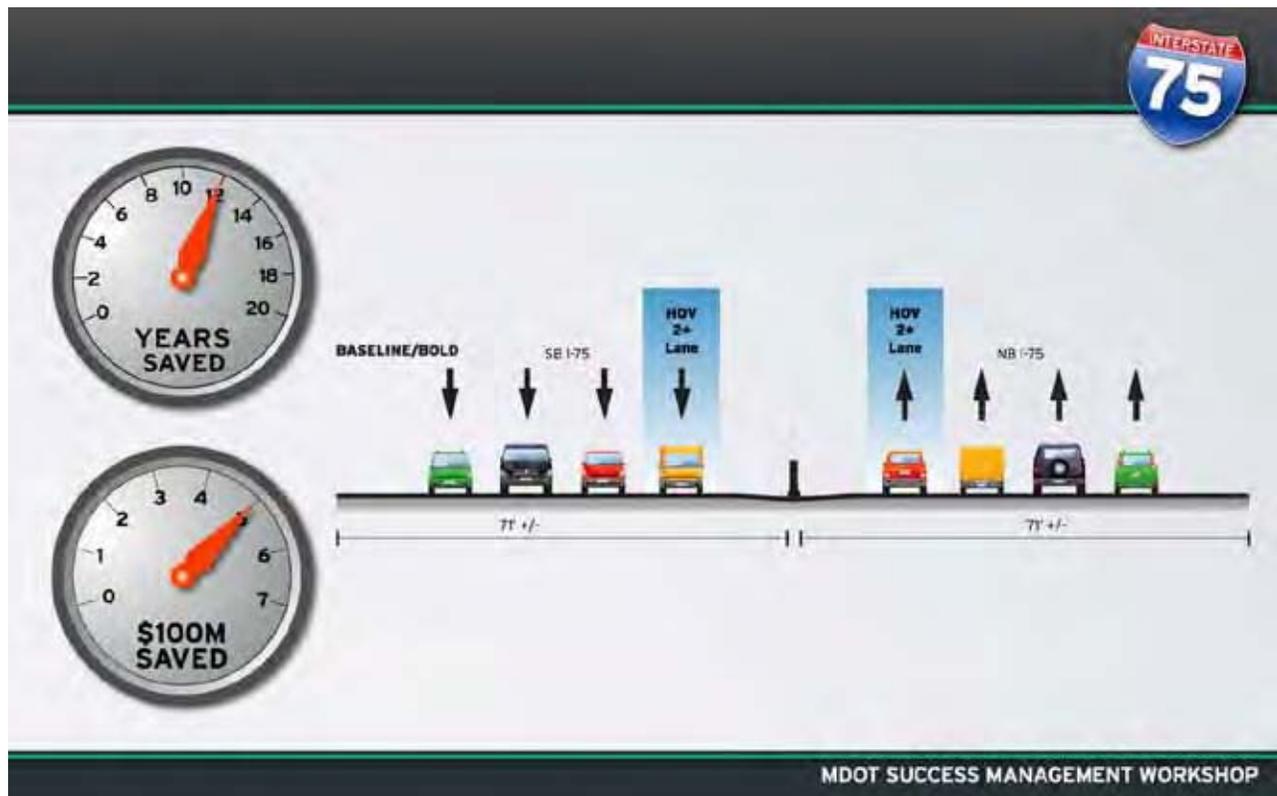
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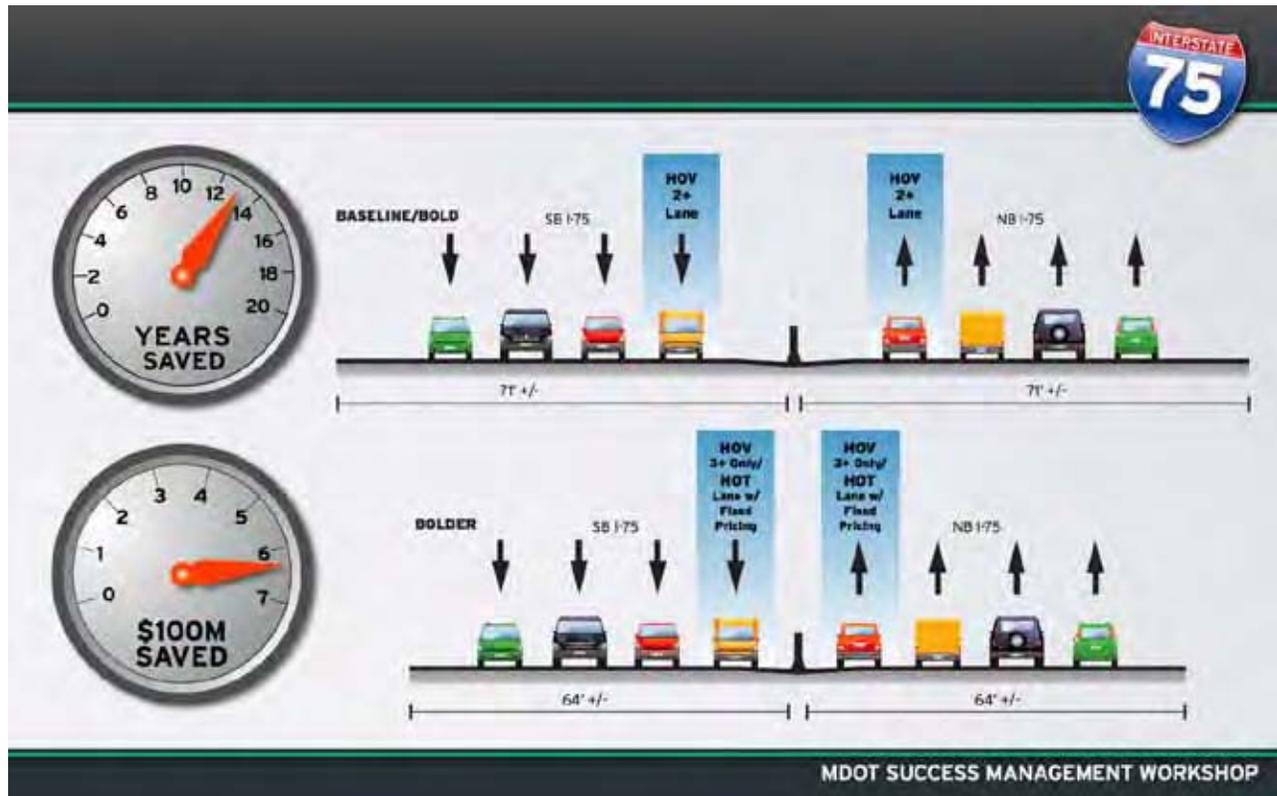
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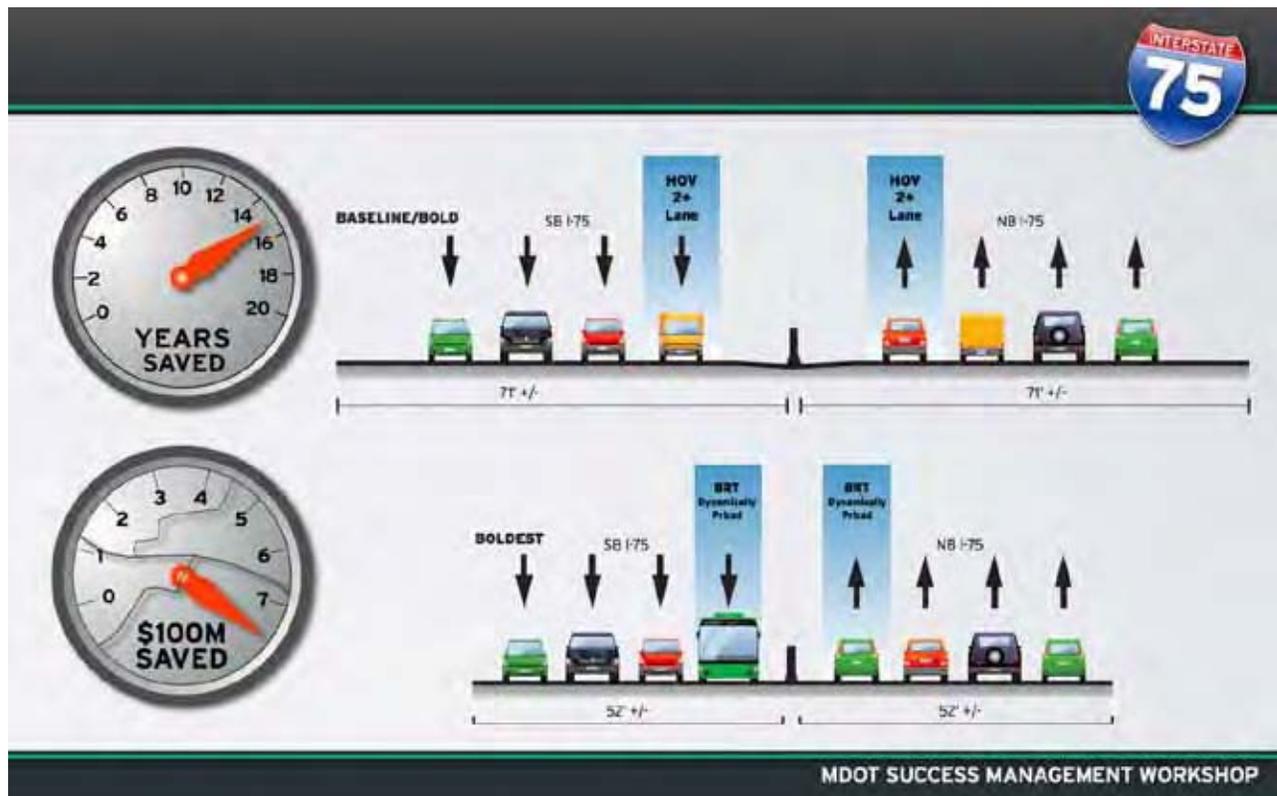
MDOT I-75 SUCCESS MANAGEMENT WORKSHOP

IDENTIFY PROJECT DELIVERY OPTIONS

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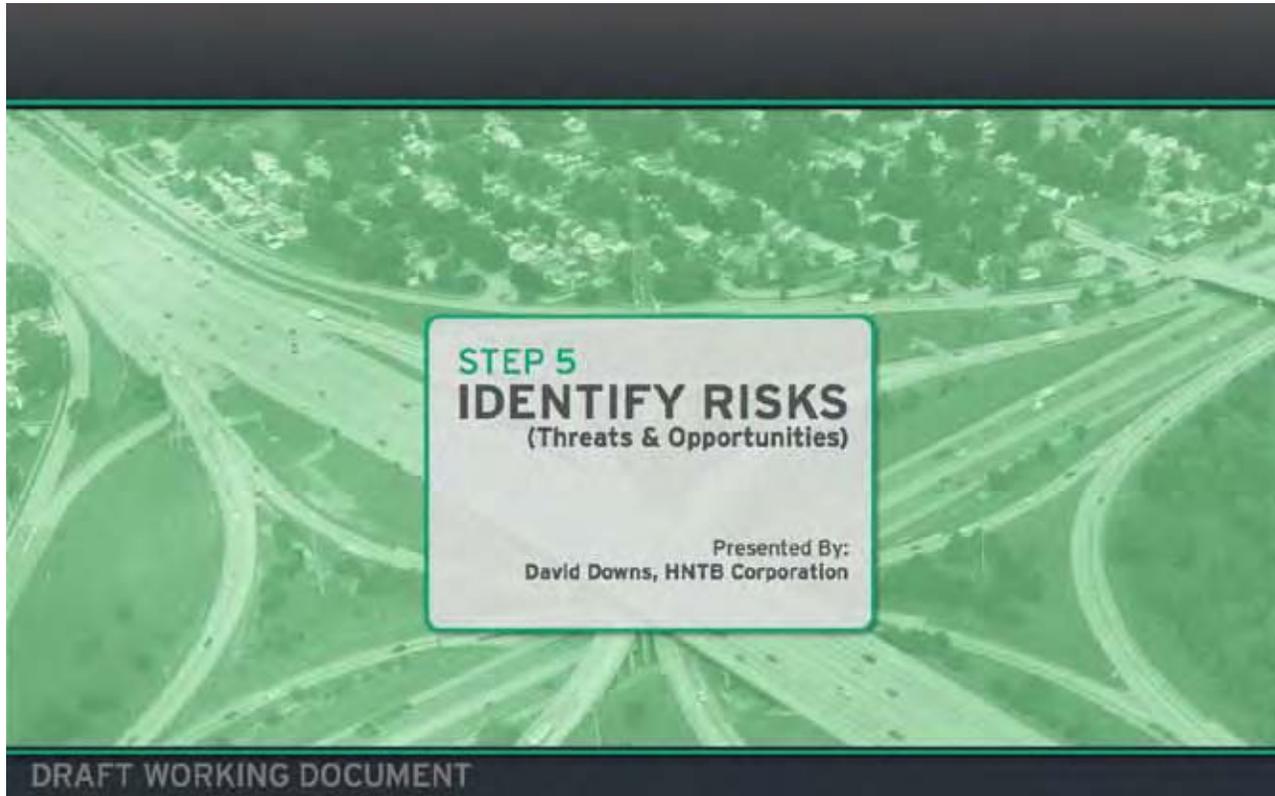
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MDOT SUCCESS MANAGEMENT WORKSHOP

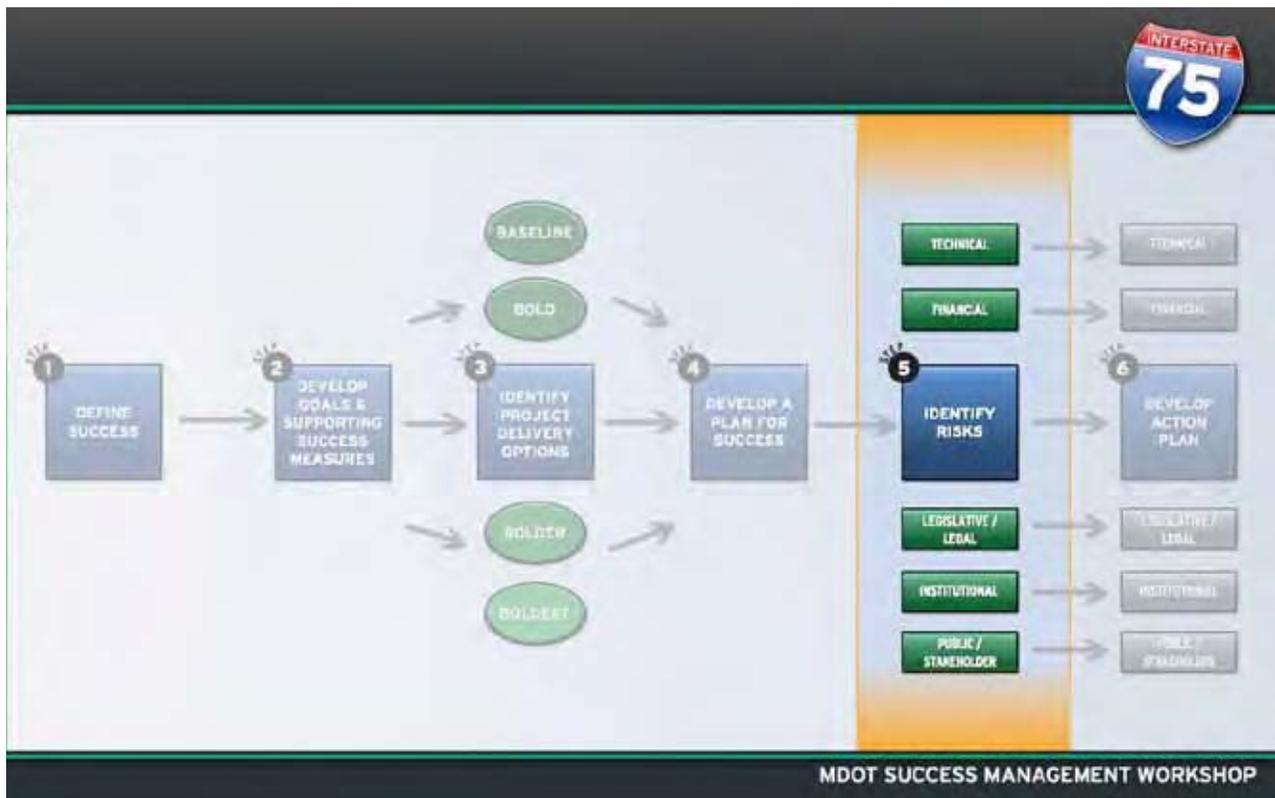
APPENDIX B: WORKSHOP PRESENTATION



STEP 5
IDENTIFY RISKS
(Threats & Opportunities)

Presented By:
David Downs, HNTB Corporation

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MDOT I-75 SUCCESS MANAGEMENT WORKSHOP

STEP 5: IDENTIFY RISKS (THREATS & OPPORTUNITIES)

GROUP DISCUSSION

► **Identify risks and categorize them as:**

- Financial
- Legislative/legal
- Public/stakeholder
- Technical
- Institutional

► **Vote to prioritize**

- Majority Rules

The image shows a single worksheet titled "IDENTIFY RISKS" with the "RISK CATEGORY: FINANCIAL" selected. The worksheet includes a header with the MDOT logo and a large empty box labeled "RISKS:" for group discussion.

DRAFT WORKING DOCUMENT



The image displays four worksheets side-by-side, each titled "IDENTIFY RISKS" and corresponding to a different risk category: "LEGISLATIVE/LEGAL", "PUBLIC/STAKEHOLDER", "TECHNICAL", and "INSTITUTIONAL". Each worksheet has a header with the MDOT logo and a large empty box labeled "RISKS:" for group discussion.

MDOT SUCCESS MANAGEMENT WORKSHOP

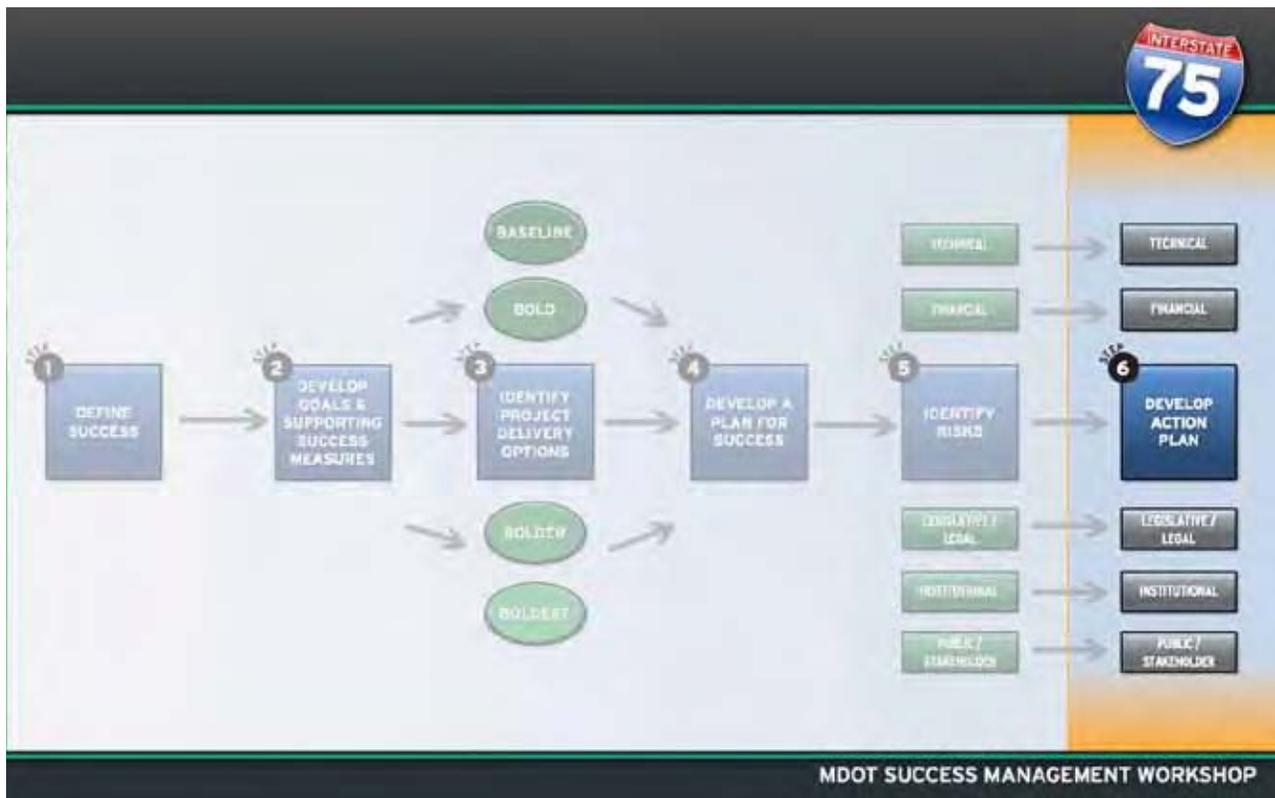
APPENDIX B: WORKSHOP PRESENTATION



STEP 6
DEVELOP ACTION PLAN

Presented By:
David Downs, HNTB Corporation

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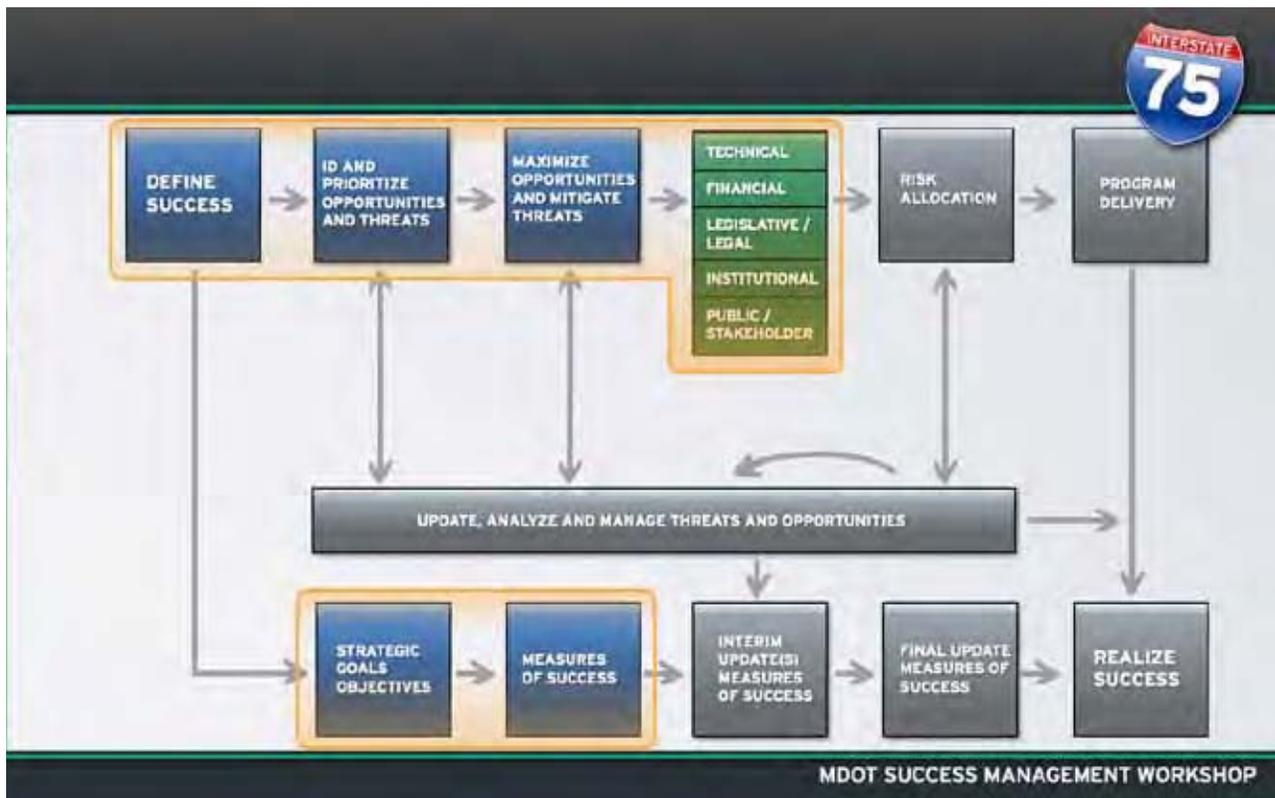
MDOT I-75 SUCCESS MANAGEMENT WORKSHOP



WORKSHOP RECAP

Presented By:
David Downs, HNTB Corporation

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APPENDIX B: WORKSHOP PRESENTATION



THINK
BOLD.

