

Don't Let Financial Uncertainty Derail Your TAMP: Strategies for Identifying & Managing Financial Risks

Webinar 1 developed from: Identifying & Managing Financial Risks in a Transportation Asset Management Plan (TAMP)



U.S. Department of Transportation
Federal Highway Administration

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Webinar Approach

- **Webinar 1:** Don't Let Financial Uncertainty Derail Your TAMP: Strategies for Identifying & Managing Financial Risks
 - May 29
- **Webinar 2:** Risk Busters: Unleashing the Power of Effective Organizational Risk Management
 - June 25

Learning Outcomes

- Identify the types of financial and organizational risks that impact asset management planning
- Describe the potential impacts that financial & organizational risks can have on TAMP investment strategies
- Compare approaches for managing financial & organizational risks

Webinar 1 Topics

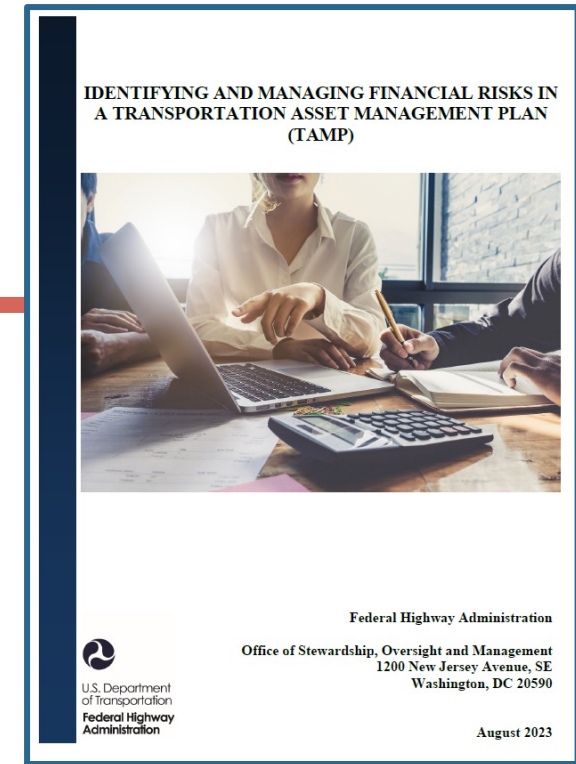
- Project Overview
- Common Financial Risks
- Strategies For Managing Financial Risks
- Managing Financial Risk Examples
 - Michigan DOT
 - Florida DOT
- Question & Answer Session

Project Overview

- **The project focused on:**
 - Producing case studies illustrating strategies State DOTs use to manage major funding uncertainty
 - Identifying analysis inputs & methods that can be used by other State DOTs to manage funding uncertainty
 - Showcasing TAM practices that lead to the successful implementation of TAMPs
- **It involved:**
 - Literature review
 - Case study development
 - Summary report development
 - Webinar development & delivery

Resources Available

- **Case Studies on Financial Risks**
 - Florida DOT
 - Michigan DOT
- **Case Studies on Organizational Risks**
 - Minnesota DOT
 - Indiana DOT
- **Summary Report** – Identifying & Managing Financial Risks in a TAMP
- **Access these resources on FHWA's website under Asset Management Resources:**
<https://www.fhwa.dot.gov/asset/resources.cfm>



Common Financial Risks

- **Uncertainty in Future Revenue**
 - Such as fluctuations in Federal funds & the availability of State matching funds
- **Uncertainty in Agency Costs**
 - Such as fluctuations in the costs of labor & materials
- **Other Financial Risks**
 - Such as an agency's ability to leverage unexpected funding increases or shifts in agency funding priorities

Strategies For Managing Financial Risks

- **Strategy 1:** Monitoring revenue, inflation, costs, or other parameters
- **Strategy 2:** Forecasting & scenario development
- **Strategy 3:** Ensuring a steady investment in asset preservation
- **Strategy 4:** Exploring alternate revenue sources

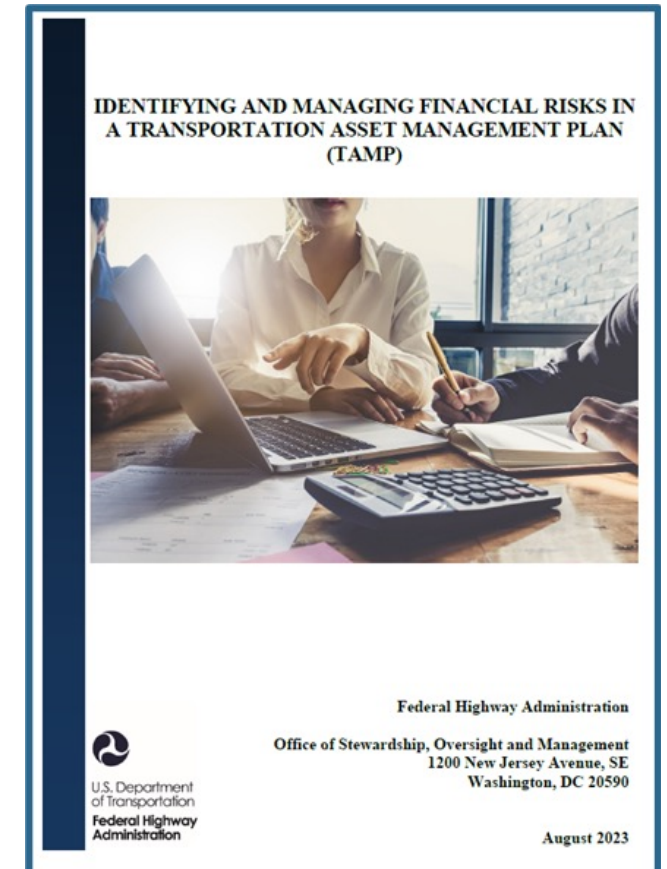


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Strategies For Managing Financial Risks

- **Strategy 1:** Monitoring revenue, inflation, costs, or other parameters
 - **Examples from the Michigan & Florida DOTs**
- **Strategy 2:** Forecasting & scenario development
 - **Examples from the Texas & Connecticut DOTs**
- **Strategy 3:** Ensuring a steady investment in asset preservation
 - **Example from Florida DOT**
- **Strategy 4:** Exploring alternate revenue sources
 - **Example from Pennsylvania DOT**

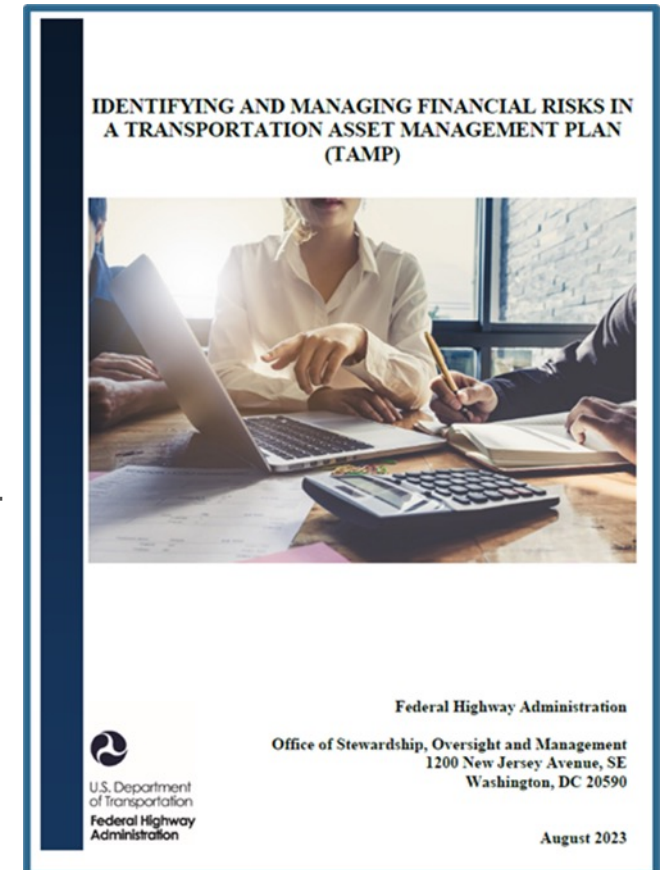


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Managing Financial Risk Examples

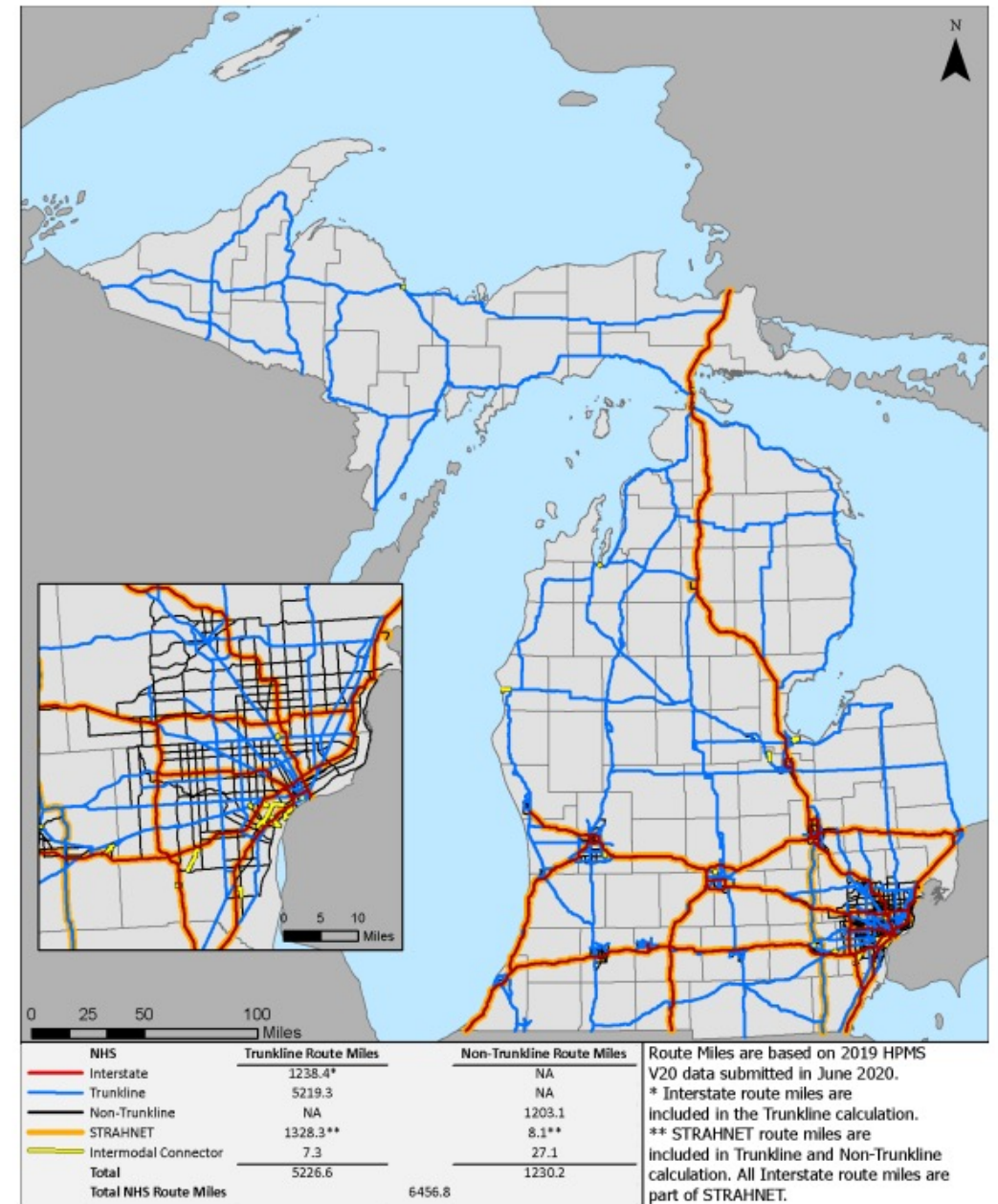
- Lina Chapman & Brad Sharlow, Michigan DOT
- Daniel Cashin, Florida DOT

Michigan DOT: Asset Preservation as a Guiding Principle for Managing Financial Risks

Lina Chapman, Supervisor, Program Development Unit
Brad Sharlow, Manager, Asset Management Section
Bureau of Transportation Planning

Background

- 7 MDOT Regions
- Population: 10 million
- Visitors: 124 million
- State Trunkline System
 - 27,864 Lane Miles
 - 4,492 Bridges



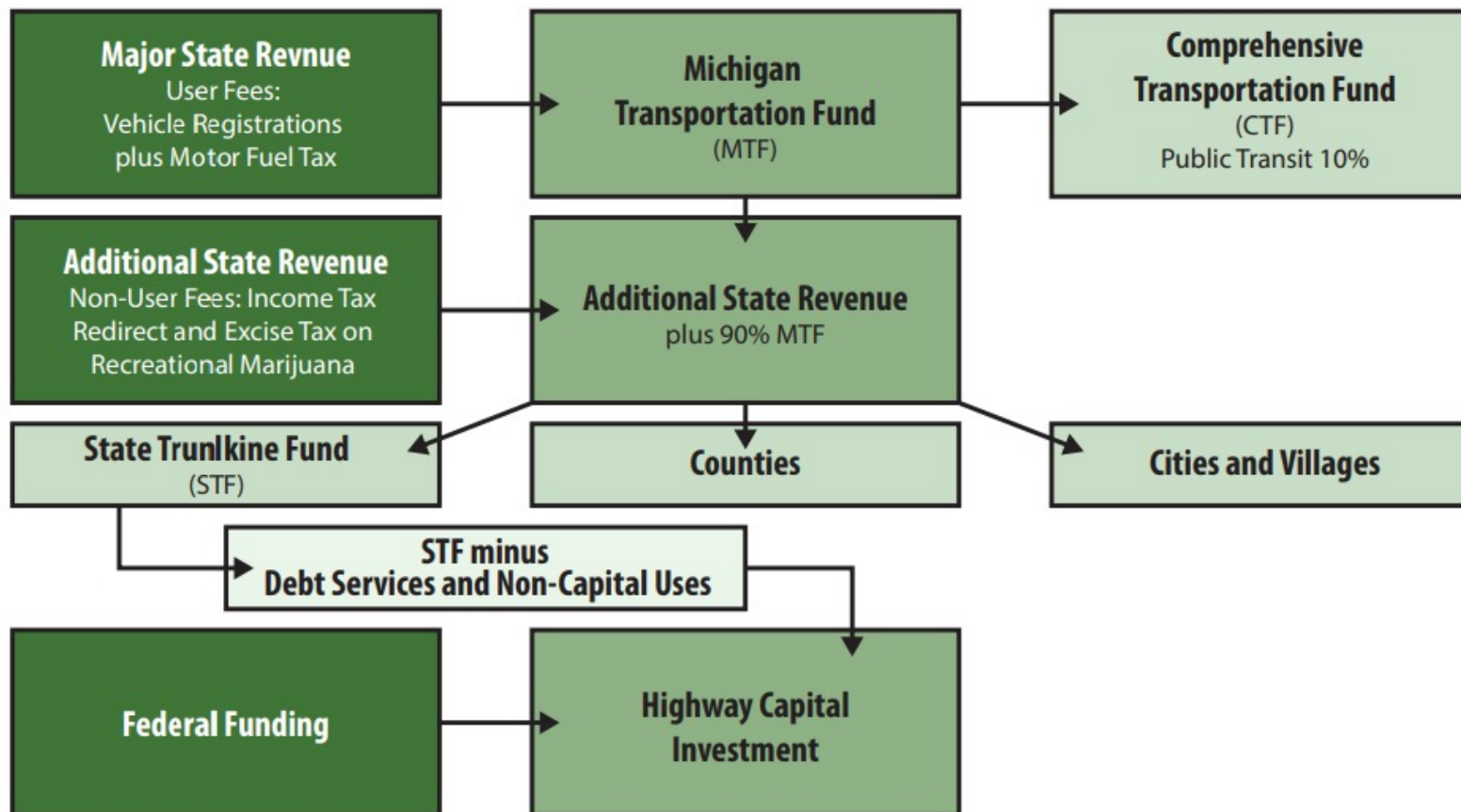
Case Study Focus

- Revenue estimating and cost monitoring
- Investment strategy development process
- Communication approaches

Revenue Estimating: Michigan Transportation Fund

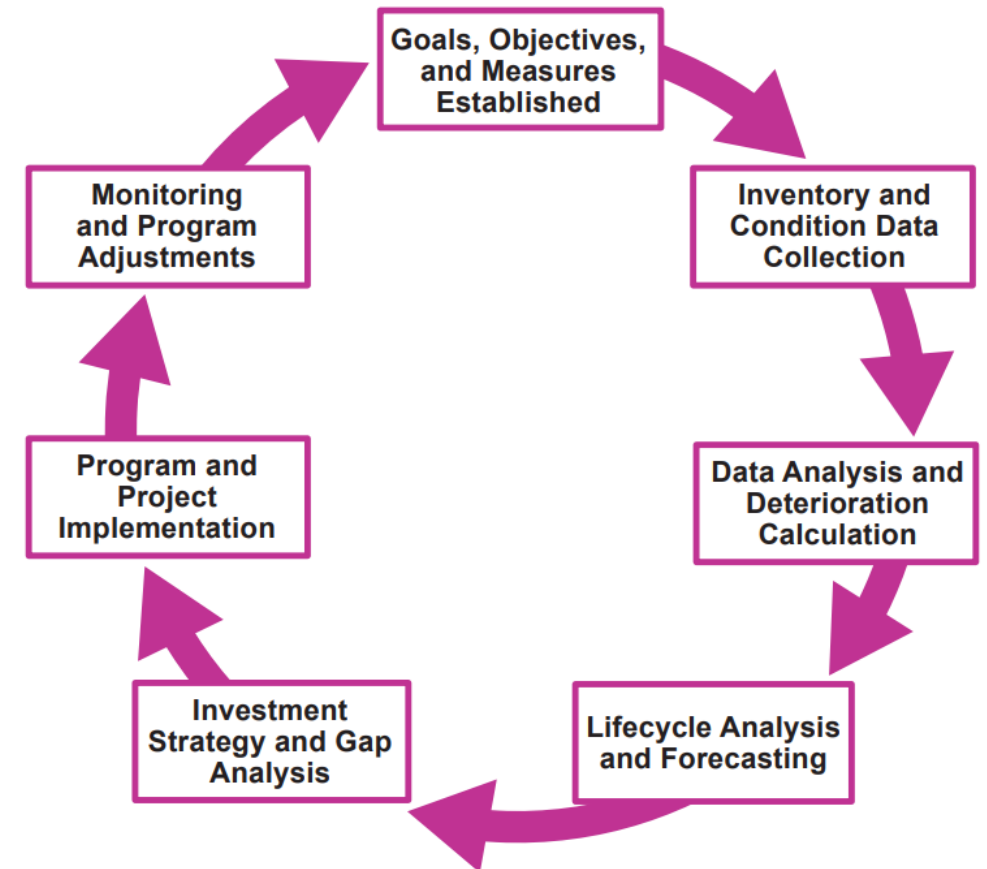
- Vehicle Registration Fees
- Motor Fuel Taxes: Increased by 1.4 cents to 30.0 cents/gal as of Jan 1, 2024.
- Income Tax Redirect: 2019+ at \$600M
- Marijuana Excise Tax: 35% to the MTF

Revenue Estimating: State Trunkline Fund



Investment Strategy Development Process

- Aspirational goals for pavement and bridge set by STC and affirmed in the SLRTP
- Strategic Direction set and implemented through CFP
- Program monitored and adjusted as needed



Asset Condition Forecasting

- Pavement
 - Road Quality Forecasting System (RQFS) - RSL
Remaining Service Life (RSL) deterioration
Programmed Work
Average Cost/Lane Mile
 - Pavement Condition Forecasting System (PCFS) - PASER
- Bridge
 - Bridge Condition Forecasting System (BCFS)

Identification of Alternative Strategies

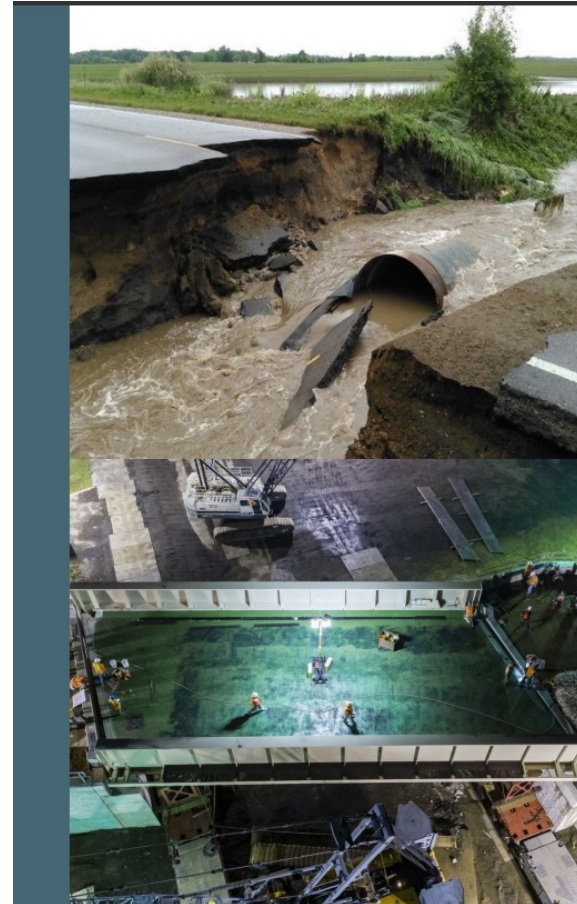
Achieve National Minimum Condition Levels	No more than 5 percent of Interstate pavements are in poor condition, and No more than 10 percent of NHS bridges are in poor condition.
Preserve Condition of Pavement and Bridge Assets	Current conditions are maintained on Interstate and NHS pavements and bridges.
Achieve and Sustain State of Good Repair	Aspirational goals for Interstate and NHS pavements and bridges based on MDOT's desired state of good repair for the freeway/non-freeway network at 95/85 percent good/fair.
Achieve Constrained Targets for Asset Conditions	Where investment of the funds reasonably expected to be available for Interstate and non-Interstate NHS pavement and bridges demonstrates a gap in revenue available to meet established condition and performance goals.

Each Evaluated:

- Asset Condition
- Performance Goals
- Lifecycle Costs
- Investment Needed

Transportation Asset Management Council (TAMC)

- Represents 617 road agencies to promote asset management
- Utilizes PASER for collecting condition data on the federal-aid network
- Requires Local Asset Management Plans (as of 2018)
 - Required for agencies with 100+ miles of certified roads
 - Must be updated every 3 years



MICHIGAN'S 2023 **Roads & Bridges** ANNUAL REPORT

Communication Approaches

- Ongoing Public Engagement
 - Facebook, Instagram
 - *Talking Michigan Transportation* Podcast
- Annual MDOT Communications
 - 5YTP, Accomplishments Report, Fast Facts
- TAMC
 - Road & Bridges Annual Report
 - Investment Reporting Tool (IRT)
- Michigan Mobility 2045 (MM2045) State Long Range Transportation Plan
 - System Performance and Strategic Multimodal Corridors Reports
- Governor's Dashboard – Key Performance Indicators



TAM Systems & Processes

- Transportation Asset Management (TAM) Vision
 - *To integrate asset management practices and systems into everyday business operations and decisions to provide the desired level of service in a sustainable way, while managing risk at the lowest lifecycle cost.*
- Michigan Transportation Asset Management (MiTAM)
 - Strategic effort to bring asset management to all business areas (planning, design, construction, operations, maintenance, etc.)
 - Develop an Enterprise Asset Management System
 - Transportation Asset Steering Committee

Current Activities

- National Best Practices Scan
 - Funding, Planning & Program Development, Performance
- Strategic Plan and new MDOT Mission
- Multi-Objective Decision Analysis (MODA) Research
- Project Identification Tool (PIT)
- Corridor Planning Pilot
- Ancillary Structures Data Collection: Culverts 1st
- TAM Data Assessment

Results



Reduced funding uncertainty through forecasting and monitoring

Revenue forecasting to project future funding

Ongoing monitoring to make adjustments



Improved credibility

Reporting and accountability for results

Trust building with the State Legislature



Focus on State of Good Repair and Asset Management

Sustained through funding shifts

The proof is in the funding

Question & Answer Session

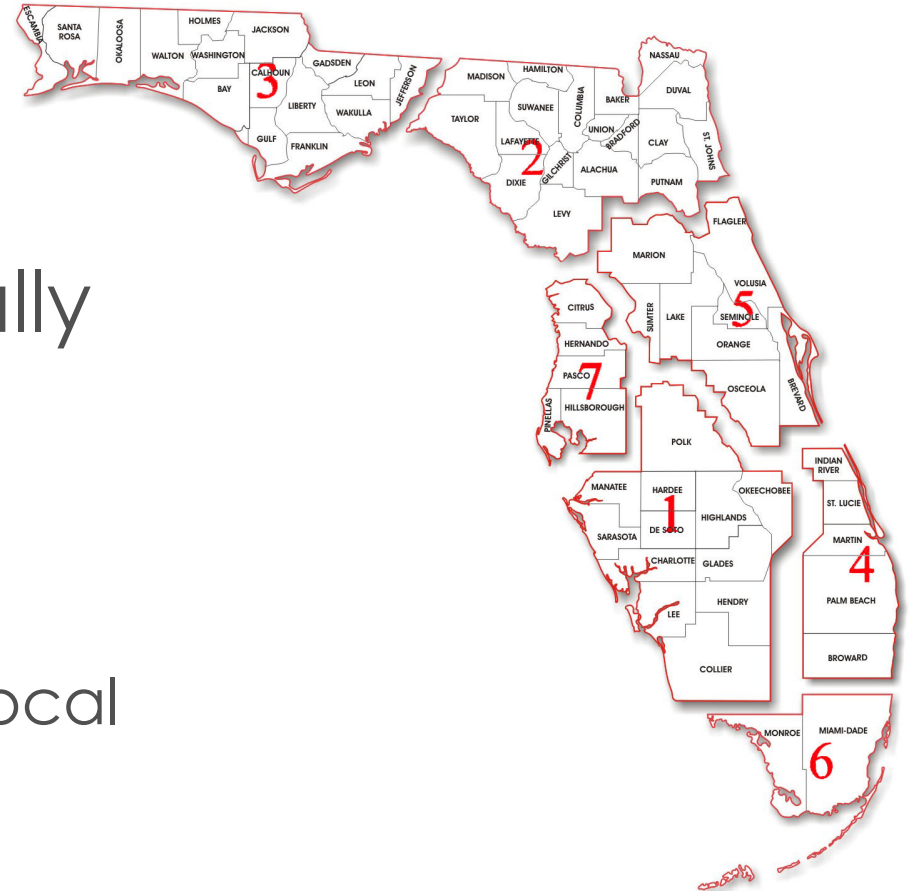


Managing Financial Risks by Monitoring Revenues, Costs, and Managing Investment Streams

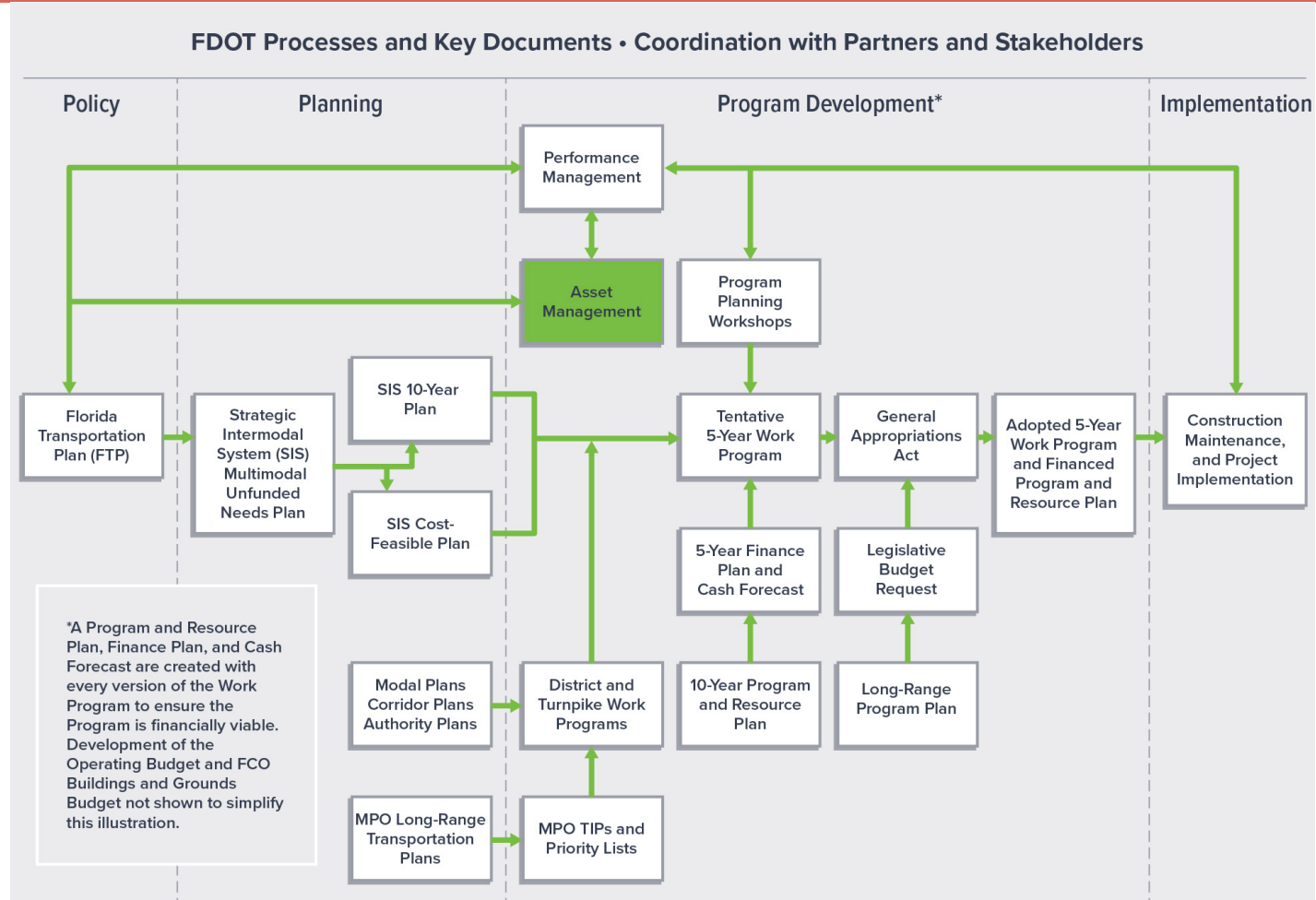
Dan Cashin, Florida DOT

Background

- Seven Districts
 - Population: 22.6 million
 - Visitors: Over 135 million annually
 - State Highway System
 - Over 45,000 lane miles
 - Over 7,000 bridges
- Inspection of an additional 5,000 local bridges



FDOT Planning Processes & Documents



FDOT Funding Priorities

- Safety (all programs)
 - Department's #1 priority and applies to everything the department does
- Preserve the investments – Need Based
 - Bridge, Resurfacing & Maintenance
- Statutorily required allocations
- Capacity

Case Study Focus

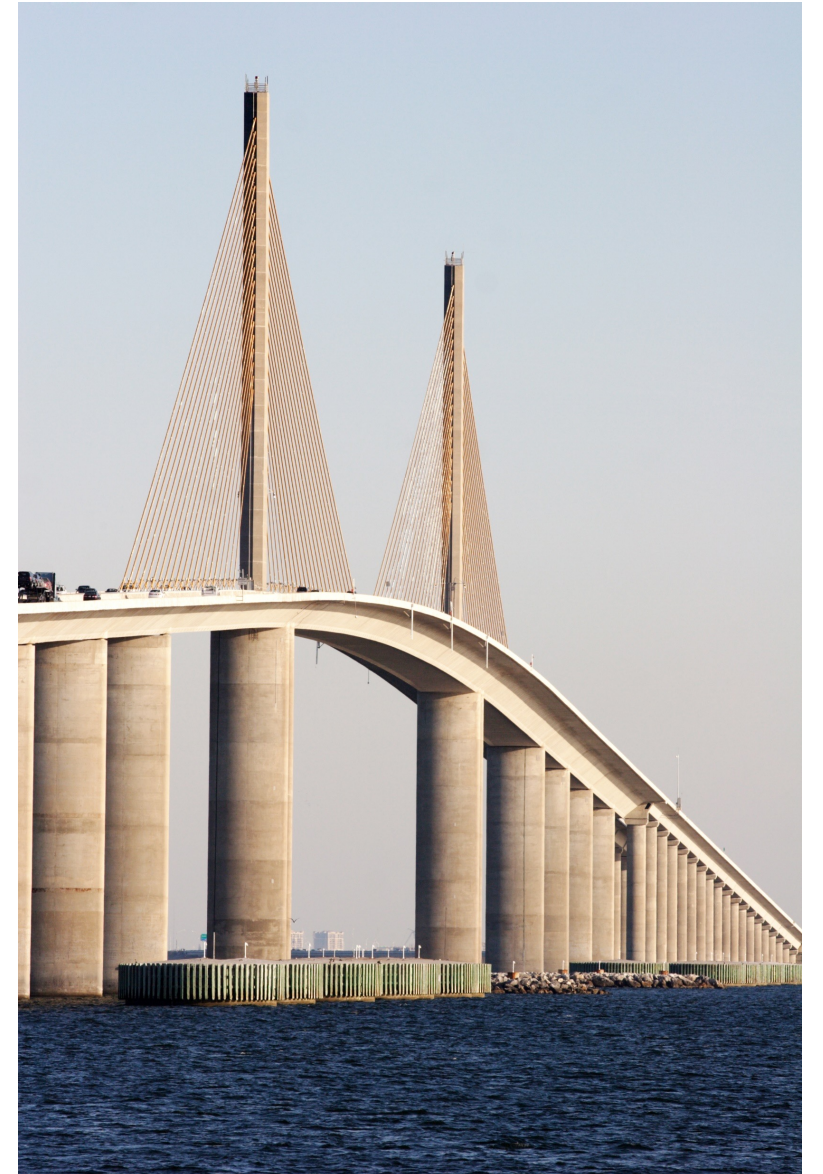
- Formalized asset preservation process
- Commitment to maintaining preservation and safety
- TAMP aligned with legislative requirement to focus on preservation to mitigate funding uncertainty
- Highlight processes for projecting needed and available funding resources
- Ways FDOT is addressing recent funding uncertainty

Funding Challenges

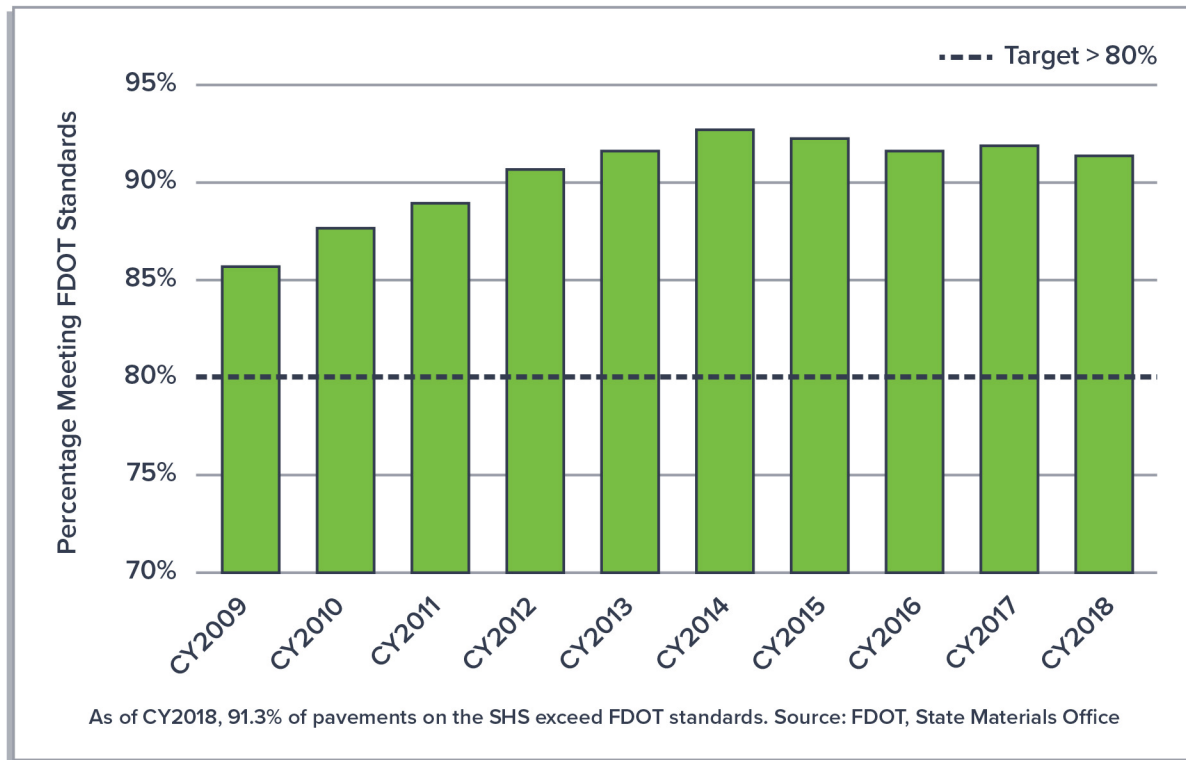
- Revenue losses due to COVID-19
- Impact of IIJA
- Extreme weather events

Approaches for Managing Funding Risk

- Focus on asset preservation
- Processes for projecting needed and available funds
- Addressing funding uncertainty



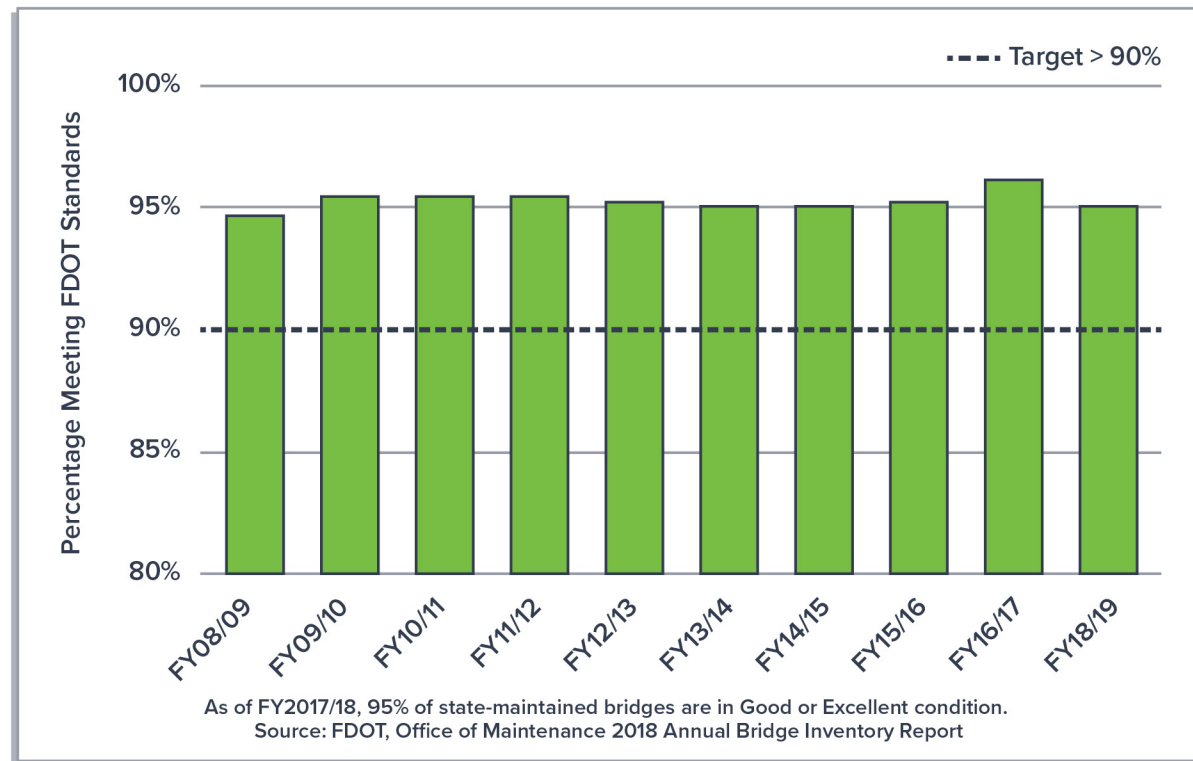
Focus on Asset Preservation - Pavements



- Pavement condition survey
- Pavement condition projections
- Resurfacing lane mile allocations
- Resurfacing fund allocations

Focus on Asset Preservation - Bridges

- Regularly inspect all bridges
- Bridge repair fund allocations
- Bridge replacement policies



Processes for Projecting Needed and Available Funds

- Revenue Estimating Conferences
- Monitoring and adjusting estimates
- Executive Performance Review meetings
- State gas tax is indexed to the CPI
- State Transportation Trust Fund

Recent Uncertainties

- COVID-19
- Reduced revenues
- Emergency response and recovery
- Construction cost increases
- Unfunded mandates
- Supply chain disruptions



Approaches for Addressing Recent Funding Uncertainty

- Ensuring the safety and security of transportation customers.
- Minimizing damage to infrastructure from vehicles.
- Achieving and maintaining a SOGR for transportation assets.
- Reducing the vulnerability and increasing the resilience of critical infrastructure to the impacts of extreme weather and events.

Results



A clear path toward preservation and safety priorities

Codified in law

Formalized in agency practices



Framework for making revenue projections and monitoring funding changes

Centered around REC

Comprehensive forecasting strategy



Reducing the risk of funding uncertainty from various sources

Preservation and safety first

Other projects deferred, as necessary

Next Steps/Future Challenges

- Frontage roads
- Technology and Data
 - Procured 3D Pavement Data Collection Systems
 - Power BI Dashboard
- Bridge economy replacements
- Pavement performance monitoring
- Research – concrete pavement test road

Question & Answer Session

