

West Virginia DOT Planning Conference
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MAP-21 IMPLEMENTATION: WHAT YOU NEED TO KNOW

Presented by

Matthew Hardy, Ph.D.

Program Director for Planning and Policy

**American Association of State Highway
and Transportation Officials (AASHTO)**

mhardy@aaashto.org

@mhh2424

1. All You Can Eat Performance

Implementing MAP-21

AASHTO Response

2. Thinking Beyond MAP-21

Planning in the 21st Century

All You Can Eat Performance:
Implementing MAP-21

NPRM SCHEDULE

Rule	Responsible	Expected
Highway Safety Program Grants	SCOHTS	COMPLETE
FTA ANPRM* (Rule 60)	SCOPT	COMPLETE
CMAQ Program Interim Guidance	SCOE/SCOP	COMPLETE
Safety Performance Measure (Rule 26)	SCOPM	COMPLETE
Highway Safety Improvement Program (Rule 30)* *60 day comment period.	SCOHTS	COMPLETE
FHWA/FTA Metropolitan and Statewide Planning (Rule 26 and 60)	SCOP	COMPLETE
CMAQ Weighting Factors (Rule 33)	SCOE/SCOP	COMPLETE
Pavement/Bridge Performance Measure (Rule 28)	SCOPM	November 2014
Asset Management Plan (Rule 32)* *60 day comment period.	SCOP-TAM	December 2014
System Performance Measure (Rule 29)	SCOPM	January 2015

ASSET MANAGEMENT AND MAP-21

A strategic and systematic process of operating, maintaining, upgrading, and expanding physical assets effectively throughout their lifecycle. It focuses on business and engineering practices for resource allocation and utilization, with the objective of better decision making based upon quality information and well-defined objectives

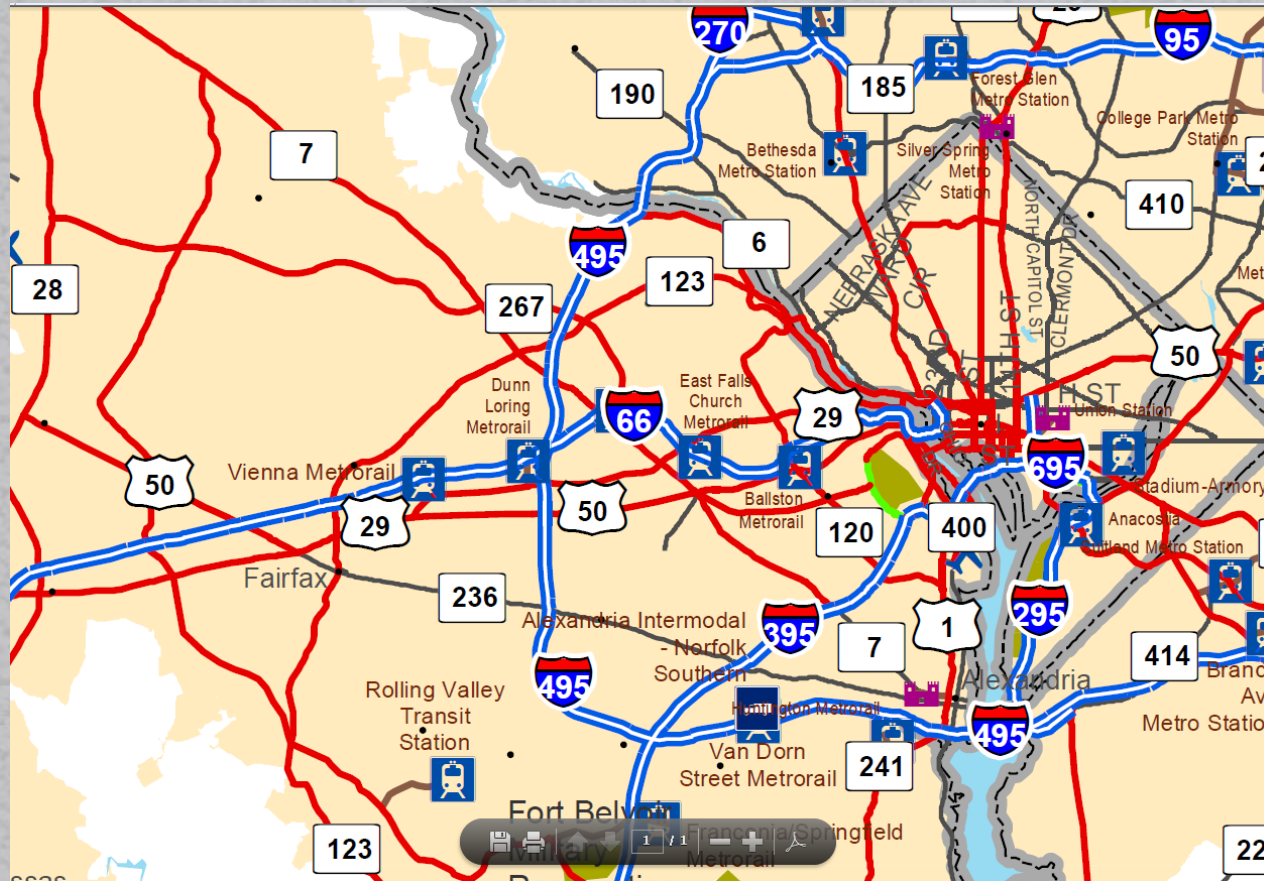
TAMP REQUIREMENTS

- Summary listing of pavement and bridge assets on the NHS in the state
 - Description of the condition of those assets
- Asset management objectives and measures
- Performance gap identification
- Lifecycle cost and risk management analysis
- Financial plan
- Investment strategies

POTENTIAL MEASURES (NHPP)

- Pavement
 - Pavement in Good, Fair and Poor Condition based on the International Roughness Index (IRI)
 - Pavement Structural Health Index
 - Bridges
 - Percent of Deck Area on Structurally Deficient Bridges
 - Encourages States to include other asset classes (though not required to)
- MAP-21 requires minimum condition levels for bridge and pavement which could force a worst-first approach.

SYSTEM PERFORMANCE INTERSTATE AND NHS

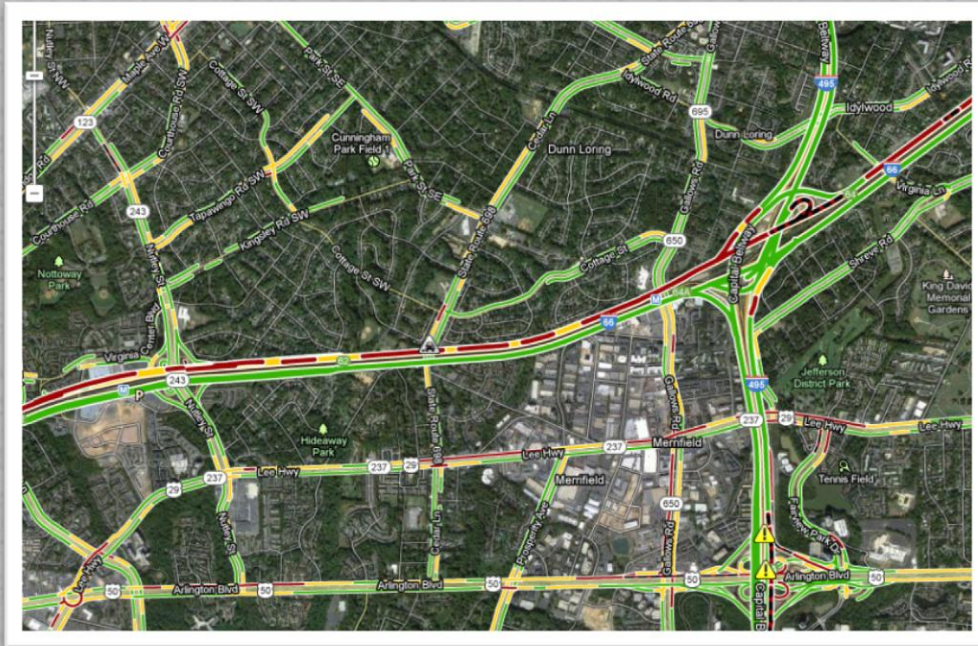


Where must measures be established?

1. Performance of the Interstate System
<double blue line>
2. Performance of the National Highway System (excluding the Interstate System)
<red line>

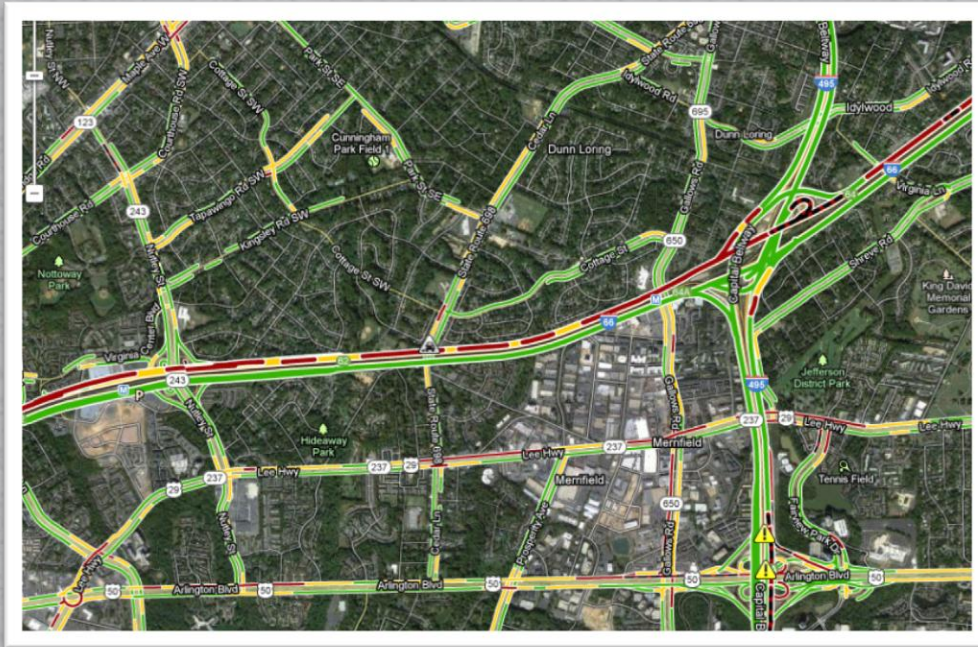
SYSTEM PERFORMANCE

VIRGINIA: INTERSTATES (I-66)



SYSTEM PERFORMANCE

VIRGINIA: NHS (ROUTE 50)



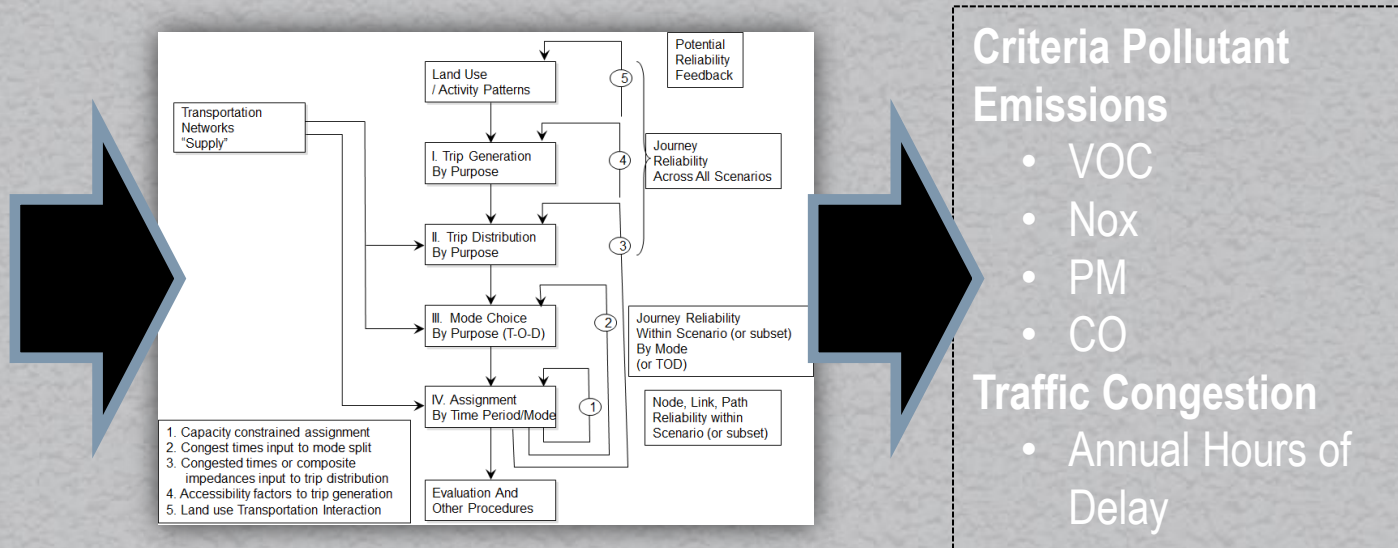
CMAQ

For purposes of carrying out section 149, the Secretary shall establish measures for States to use to assess:

1. Traffic Congestion
2. On-Road Mobile Source Emissions



CMAQ
Programs & Projects



Transportation Model

Performance
Measures

All You Can Eat Performance:
AASHTO Response

OVERARCHING PRINCIPLES

1. There is a Difference
2. Specificity and Simplicity
 - SMART: Specific, Measurable, Attainable, Realistic, Timely
 - KISS: Keep it Short and Simple
3. Possession is 9/10ths of the Law
4. Reduce and Re-use
5. Ever Forward
6. Communicate, Communicate, Communicate

STATEWIDE/NON-METRO/METRO PLANNING

FHWA-2013-0037

1. Working Together to Strengthen a Positive Start in Implementing MAP-21
2. Confirm State Discretion in Target Setting and Reporting
3. Clarify Changes to the Planning Process
4. Clarify and Emphasize Key Terms
5. Clarify the Relationship of Performance Management to the STIP
6. Ensure Flexibility in Metropolitan Planning Agreements and Metropolitan Planning Organizations
7. Keep Proposed Approach to Voluntary Programmatic Mitigation Plans, with Modifications
8. Partner with States and MPOs to Implement “Linking NEPA and Planning”

NATIONAL-LEVEL SAFETY MEASURES

FHWA-2013-0020

1. Target Setting Authority
2. Methodology for Determining Significant Progress
3. Delay in Getting the Data
4. Transition to MMUCC and Linking Medical Records to Crash Reports
5. Coordination of Planning Documents
6. Coordination with MPOs and SHSOs
7. Implication If a State DOT Does Not Meet Targets

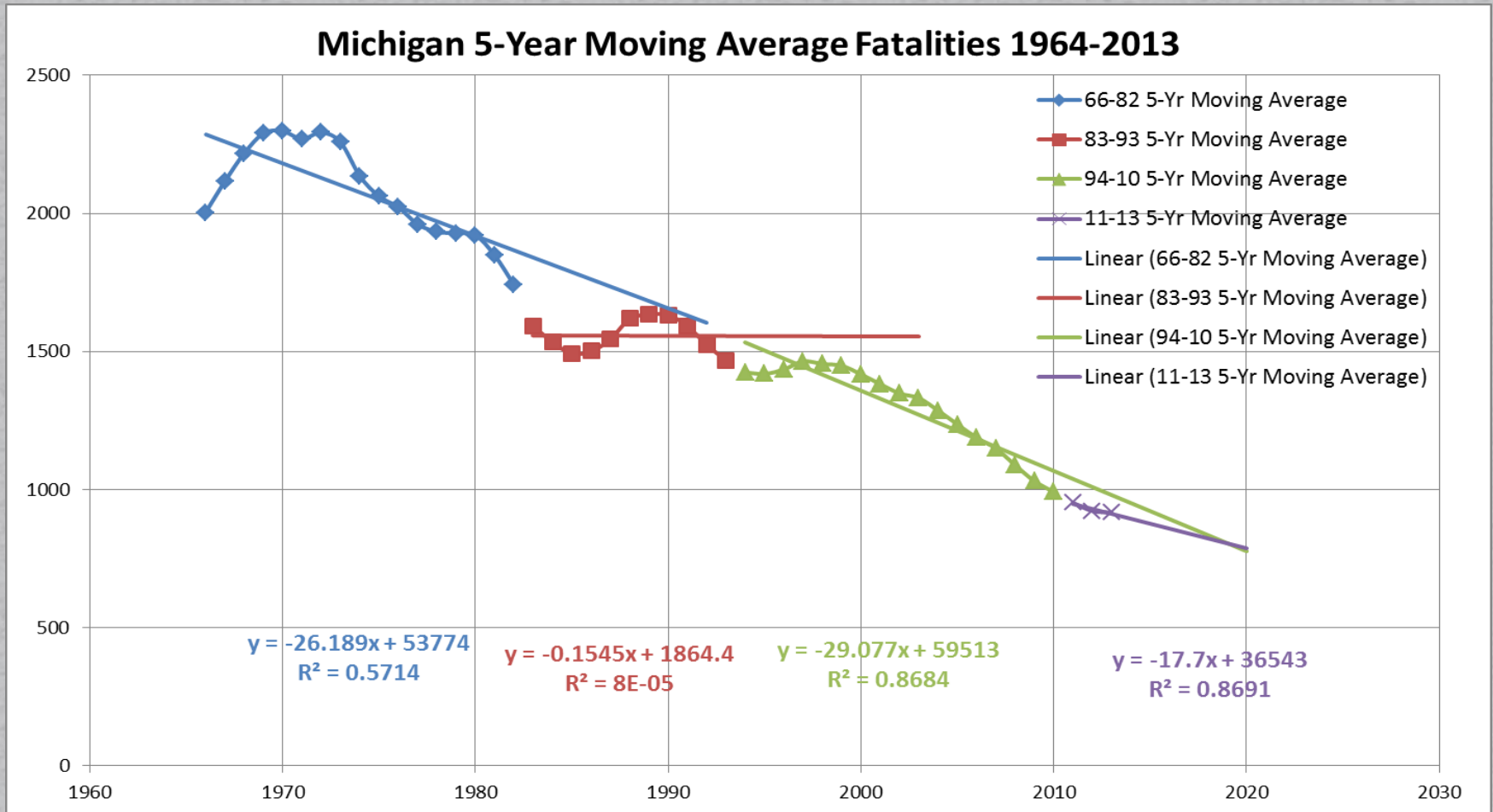
TARGET SETTING AUTHORITY

- AASHTO is concerned about making the targets for the common measures between the HSIP and State HSP identical
 - State HSPs must be “approved” by NHTSA
 - This requires indirect approval of targets by US DOT.
 - MAP-21 clearly states targets are to be established by State DOTs without approval from US DOT.
 - Differences in approach between NHTSA and FHWA
 - There are now consequences if a State DOT does not meet its targets
- Suggested Changes
 1. Ensure State and local discretion in target setting, in accord with MAP-21
 2. Have FHWA build additional capacity within State DOTs to collect, and analyze safety data and set safety targets

METHODOLOGY FOR DETERMINING SIGNIFICANT PROGRESS

- Generally support the two-step approach
 - Step 1: If a State DOT meets 50% of the targets set for safety, they have made significant progress and no penalties apply
 - Step 2: If a State DOT does not 50% of the targets, a more complicated assessment of progress towards target achievement is proposed
- AASHTO is concerned about Step 2
 - Need to include language to account for unforeseen circumstances (extreme weather events, Acts of God)
 - Consider a less complicated approach that does not rely strictly on historical data
 - Include additional types of line fits besides the straight-line methodology

MICHIGAN DOT EXAMPLE



DELAY IN GETTING THE DATA

- The delay created by using FARS and HPMS data creates a significant delay in FHWA determining if significant progress is being made.
 - FHWA will assess 2017 data in 2020 and penalize a State in 2021 if a State DOT had not made progress.
 - The delay is unacceptable and detrimental to the effective use of safety data in the performance-based planning process.
- Suggested Changes
 - Allow States to self-certify FARS and Serious Injury data
 - Base all measures on the most recent HPMS data available.

COORDINATION OF PLANNING DOCUMENTS

- US DOT needs to ensure that all safety plans are coordinated such that a single, comprehensive state-wide safety plan can be established
 - HSP: Annual (July 1)
 - HSP Report: Annual (December 31)
 - HSIP Progress Report: Annual (August 31)
 - SHSP: No longer than every 5 years
 - Others: LRTP, S/TIP, CVSP
- Suggested Changes
 - Ensure that FHWA and NHTSA have common expectations for performance time frames.
 - Provide waiver or delay in planning document deadlines
 - Provide flexibility to establish a coordination structure

Planning in the 21st Century

- 1. Prepare for Today*
- 2. Provide Options*
- 3. Understand the Future*

FIRST...PREPARE FOR TODAY

- Funding is scarce...and spoken for!
 - Debt Service...Existing Assets...Capacity Expansion
- Take care of what you already have!
- Asset Management
 - Make the linear process circular
 - Connect the planners with maintenance and operations personnel

SECOND...PROVIDE OPTIONS



Google Maps

https://www.google.com/maps/dir/2825+Meadow+Ln,+Falls+Church,+VA,+USA/444+North+Capitol+St+NW,+Washington,+DC,+USA/@38.8888009,-77.15851

2825 Meadow Ln, Falls Church, VA, USA

444 North Capitol St NW, Washington, DC, USA

Route options

- 1 h 3 min

Mon-Sun: 7am-11pm · every 12 min

Next trip 4:33 pm - 5:35 pm (1 h 2 min) [Preview steps](#)

Walking > M Orange > M Red > Walking
- 1 h 8 min

Walking > 2A > M Orange > M Red > Walking
- 1 h 9 min

Walking > M Orange > Walking
- 1 h 11 min

Walking > 3A > M Orange > M Red > Walking

[More options and times](#)

Metro Center Metro Station

Work

M 1 h 11 min every 60 min

M 1 h 8 min every 30 min

M 1 h 9 min every 12 min

Map data ©2014 Google Terms Privacy Report a problem 2 mi

Google Maps

https://www.google.com/maps/dir/2825+Meadow+Ln,+Falls+Church,+VA,+USA/444+North+Capitol+St+NW,+Washington,+DC,+USA/@38.8888347,-77.15666

2825 Meadow Ln, Falls Church, VA, USA

444 North Capitol St NW, Washington, DC, USA

Route options

- via Wilson Blvd 3 h 16 min 9.8 miles
 - Show terrain
 - List all steps
- via Wilson Blvd and Constitution Ave NW 3 h 15 min

Home O Work

3 h 16 min 9.8 miles

3 h 15 min 9.9 miles

Map data ©2014 Google

Google Maps

https://www.google.com/maps/dir/2825+Meadow+Ln,+Falls+Church,+VA,+USA/444+North+Capitol+St+NW,+Washington,+DC,+USA/@38.887706,-77.15743C

2825 Meadow Ln, Falls Church, VA, USA

444 North Capitol St NW, Washington, DC, USA

Route options

via Custis Trail 1 h 8 min
 ↑ 141 ft · ↓ 420 ft · Show bike paths

11.5 miles
 335 ft
 7 ft

List all steps Preview steps

1 h 8 min
 11.5 miles

Home Work

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PROVIDE OPTIONS

- Options = \$\$\$
- How do you provide the options?
 - When you have funding for capacity expansion...
 - When you are upgrading a roadway...
 - When you are replacing a structurally deficient bridge...
 - When you are considering transit service...
- Think about the future...

WHAT CAN WE DO?

- Realize that the future is uncertain...
 - ...yet we still have to make decisions today that will significantly affect future options.
 - ...watch out for that Kodak Moment!
 - Is VMT decreasing? Are we traveling less? Do we want mobility or accessibility?
- Use some tools to help...
 - ...Economics (Creative Destruction)
 - *The disruptive process of transformation that accompanies technological innovation.*
 - ...the S-curve for technology deployment

Thank you!