

Navigation Performance Measures

For CMTS TRB

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Questions 1 and 2

1. What performance metrics do you find to be the most useful or insightful?
2. How are these performance metrics applied in your decision making process?

My goal:

Help you understand where we are and where we want to go.

This group has the talent to figure this out.



Corps Navigation Mission

Provide safe, reliable, efficient, effective and environmentally sustainable waterborne transportation systems for movement of commerce, national security needs, and recreation.



Performance Measures

- Capital Investments - new starts
 - Benefit to Cost Ratio
 - Transportation cost savings
- Operations and Maintenance
 - Budget Development
 - Coastal Nav: Tons
 - Inland Nav: Ton-Miles
- Goal: Economic value of cargo

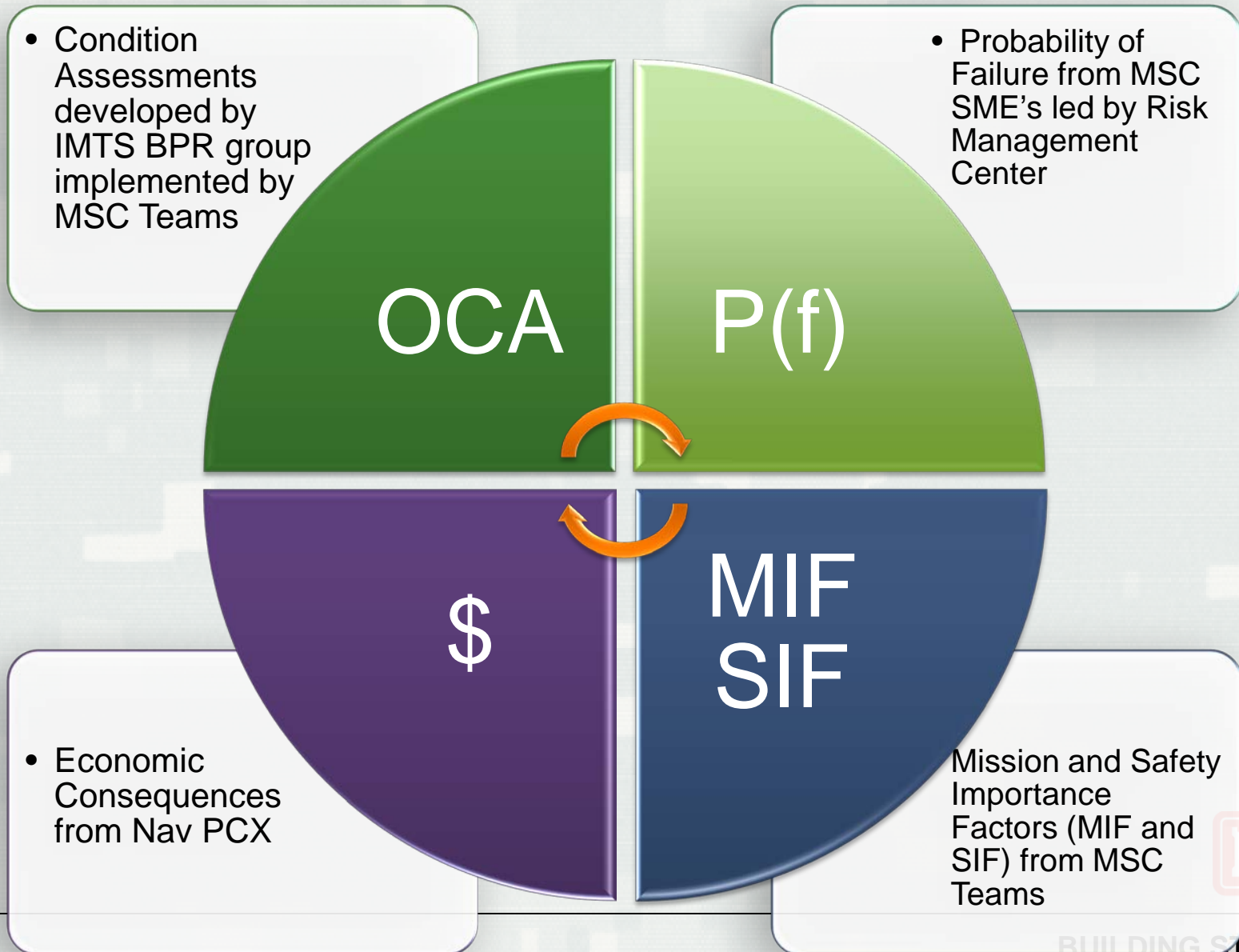


O&M Funding Prioritization Navigation Relative Risk Matrix

Condition		Condition Classification				
		F (Failed)	D (Inadequate)	C (Probably inadequate)	B (Probably Adequate)	A (Adequate)
Consequence Category	I	1	2	4	7	11
	II	3	5	8	12	16
	III	6	9	13	17	20
	IV	10	14	18	21	23
	V	15	19	22	24	25

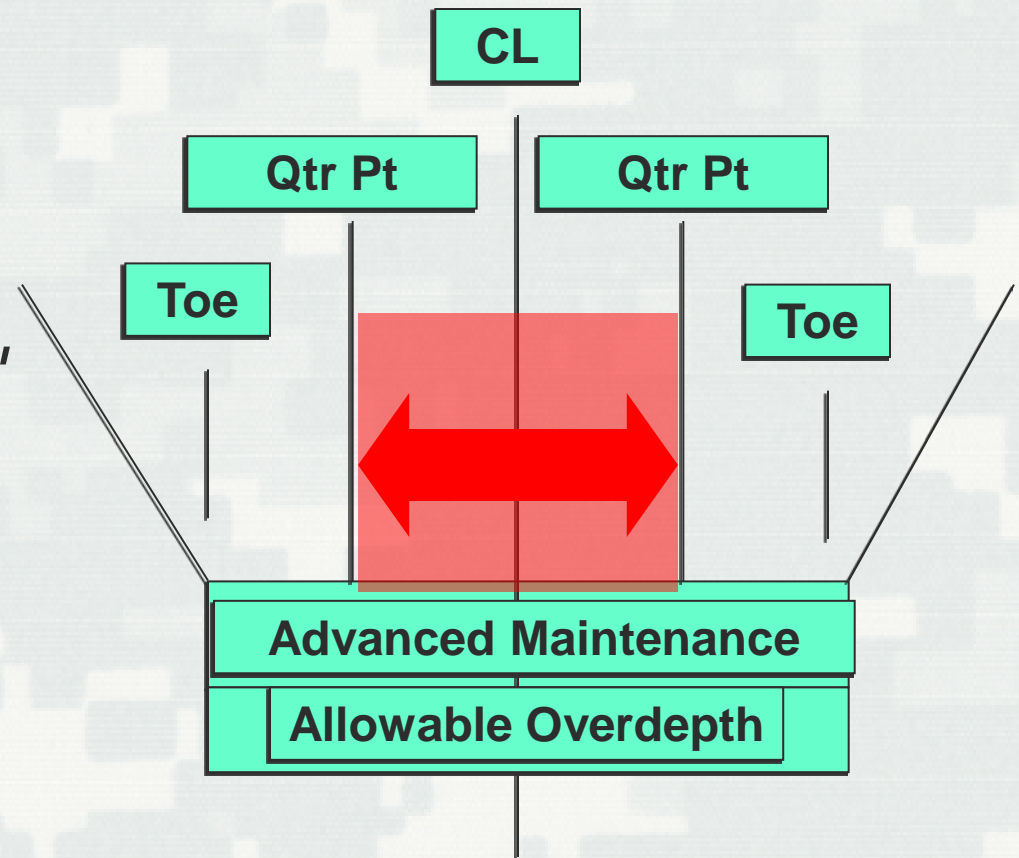


Navigation Budget Process



Coastal Navigation Performance Standard

- *Initial Standard*
 - Full project depth
 - Half project width, 95% of the time
- *Trend*
 - 32%



Future Coastal Navigation

- PRESENT
- 50% channel width based on readily available data
- FUTURE
- Georeferenced navigation channel
- Establish channel width performance measure based on stakeholder input

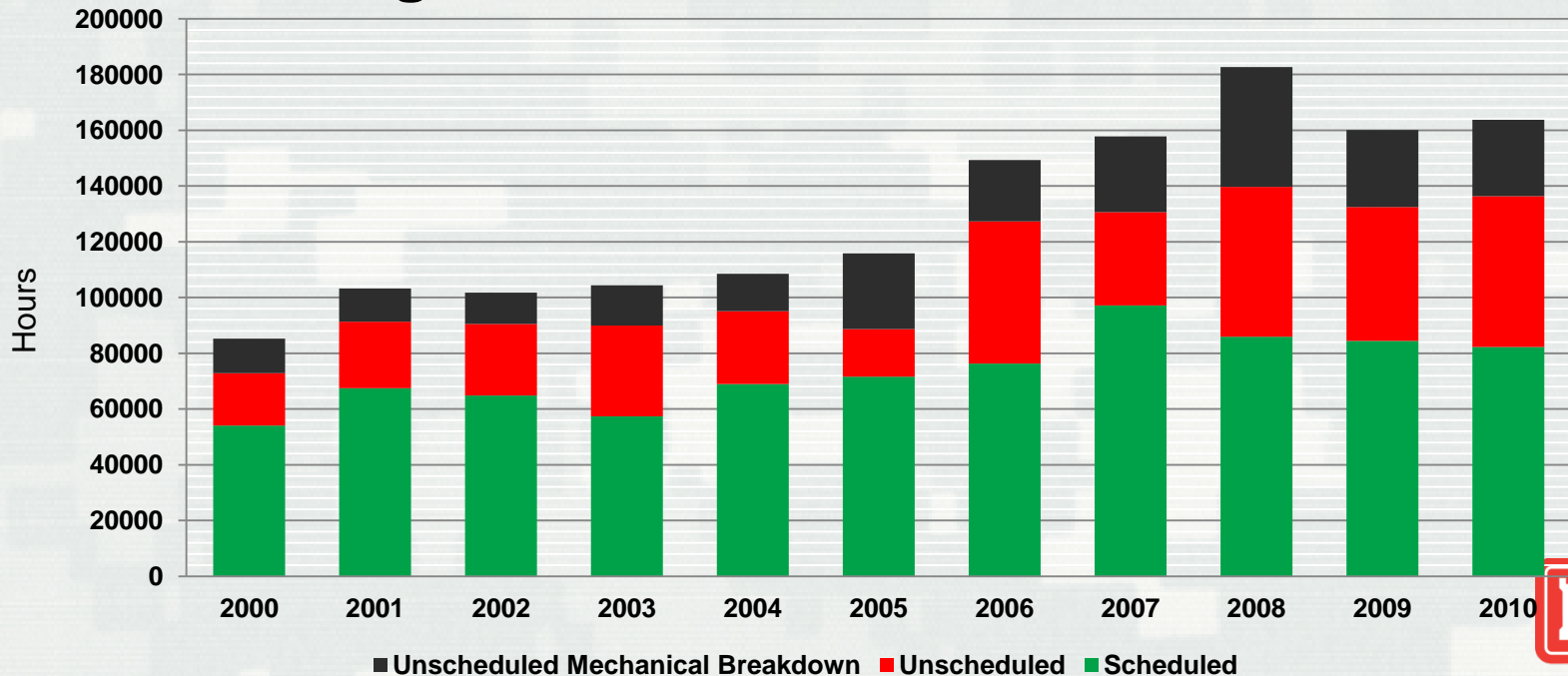


Inland Navigation Performance

High Performing Goal:

Scheduled & Unscheduled lock closures due to mechanical breakdowns

- **Less than 5-yr average**
- **Not achieving**



FY13 O&M Budget Coastal Navigation

Category	Inventory	Commerce	FY13 O&M Projects	FY13 O&M Funds	FY12 O&M Proj.	FY12 O&M Funds
High Use	59	90%	56	66%	54	62%
Moderate Use	100	9%	52	19%	61	25%
Low Use	908	1%	63	5%	41	6%
Other				10%		7%
Total	1067	100%	171	100%	156	100%

- Prior to FY12 we adjusted to budget decreases by minor reductions at almost all nav projects.
- The low use category was proposed as a program for 50% reduction in the FY12 budget development; This was a 50% dollar reduction, not a 50% projects reduction
- 'Other' includes Nav R&D, Project Condition Surveys, Remaining Items, etc.



FY13 O&M Budget Inland Navigation

Category	Rivers/ Waterways	IWTF Locks	Commerce Ton-Miles	FY13 O&M	FY12 O&M	FY11 O&M
High Use	5	79	95%	72%	66%	66%
Moderate Use	6	49	4%	21%	27%	23%
Low Use	16	45	1%	7%	7%	11%
Total	27	173	100%			

- Low commercial use projects took a 50% reduction in FY12 budget.
- FY13 Budget guidance establishes Moderate Use for Inland as 1-3B ton-miles



Question 3

- What metrics related to commercial freight transportation would be useful to you?
- Corps role has been with the channels
- From the sea almost to the dock
- Limited knowledge on intermodal connections and the navigation channels



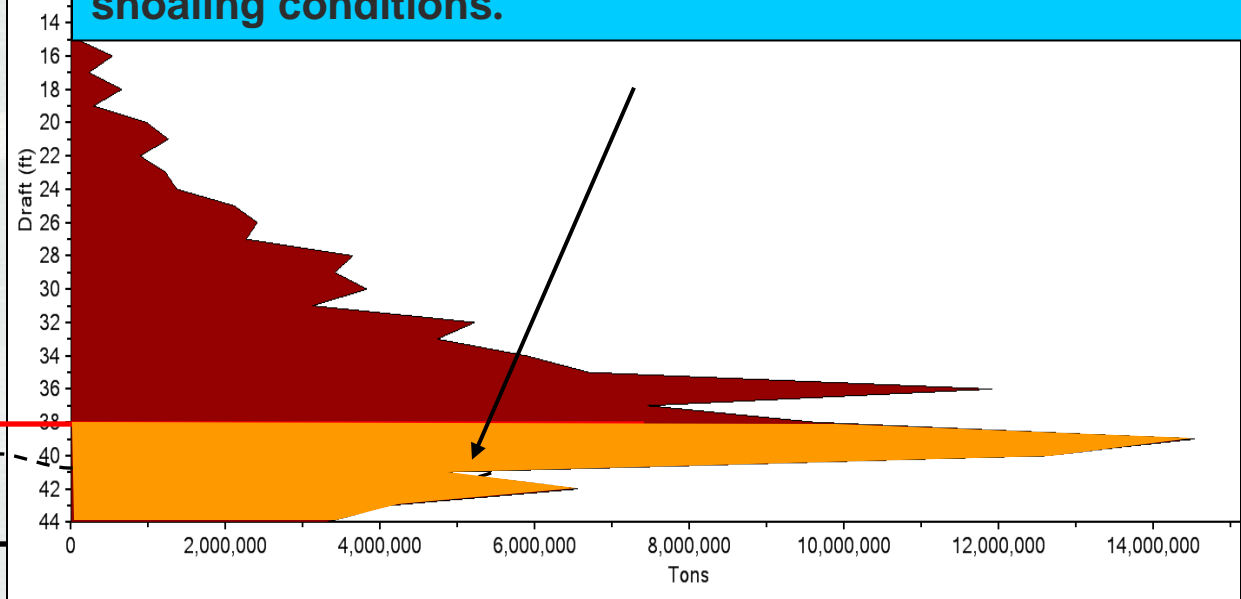
Channel Portfolio Tool

Depth Utilization Analysis



CPT processes the WCSC database and can generate depth-utilization profiles showing the distribution of cargo across the range of maintained depths for any system of navigation channels.

CPT then compares these tonnage-draft profiles to the segment controlling depths resulting from present shoaling conditions.



Why should farmers care about transportation?

Because our international competitiveness depends on it.

Costs of transporting soybeans: U.S. vs. Brazil
(per metric ton; 4th quarter, 2010)

	Davenport to Shanghai	Sioux Falls to Shanghai	N. Mato Grosso to Shanghai
Land: Truck	\$8.94	\$8.94	\$120.12
Land: Barge/Rail	\$31.85 (Barge)	\$50.31 (Rail)	-----
Ocean	\$55.46	\$29.25	\$31.67
Total Transport	\$96.25	\$88.50	\$151.79
Farm Value	\$399.16	\$385.56	\$413.46
Landed Cost	\$495.41	\$474.06	\$566.25
Transport as % of Landed Cost	19.4%	18.7%	26.9%

Source: USDA



Question 4

- What are the knowledge gaps in developing freight performance metrics?
- Stakeholders do not like Tons/Ton-Miles
- Want 'Value to Nation'
- Users tell us Reliability is critical
- Assume most (but not all) freight subject to time value of money
 - Fastest, cheapest transportation: Ships to Shelves



Value to Nation

- Accurate, auditable, transparent data
- Freight movement stakeholder input
- Understand their process
- Develop performance measures
- Inform and educate Public and Congress
- Pursue legislation to implement this approach



Closing

What do we do?
Provide Navigation
infrastructure that is Reliable,
Efficient, Resilient and
Environmentally Sustainable.

Why is it important?
This infrastructure enables
American goods to compete in
the Global marketplace

