# Performance Measures at CDOT

Conceptual Structure Overview for the Transit & Rail Advisory Committee

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### Performance Measurement Overview

One Recommended Framework



# Performance Measurement Overview How does CDOT strive for and measure its performance?





Aspirational, department-wide, and long term. Cannot be met with anticipated resources.



PD 14 Goals / Objectives



Established by Policy Directive 14.0 in 2008 in conjunction with Long Range Plan.

Specific, measurable, achievable, results-oriented.



Annual Objectives or Targets



Resource-constrained.

Annually established based on Policy Directive 14.0 and budgeted allocations.

## Performance Measurement Overview

# Visions → Goals → Objectives

Program	Vision	Goal	2011 Objective
Pavement	75% G/F	60% G/F	42% G/F
Bridge	100% G/F	95% G/F	94.8% G/F
Maintenance	В	В	С

Compilation from FY12 Budget Development in October, 2010

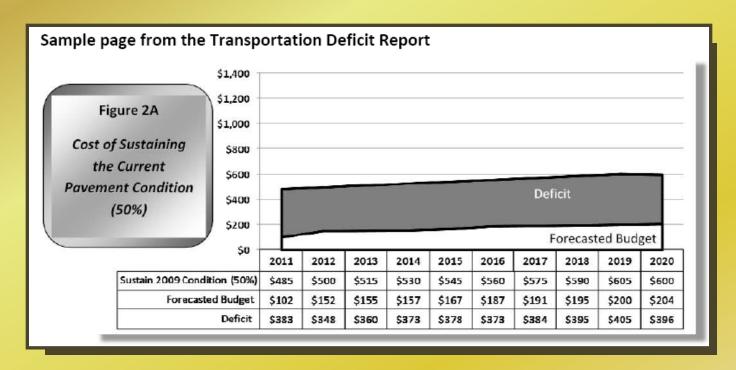
#### **How CDOT Uses PMs**

- Annual
   Performance
   Report,
   November 2009
- Legislated 4-page report beginning next year

2009 PERFORMANCE SUMMARY			
	2009 Objective with Available Revenue	2009 Actual Performance	R Y G
SAFETY			
TOTAL CRASHES PER 100 MILLION VEHICLE MILES TRAVELED <sup>2</sup>	283.7	260.6	•
FATAL CRASHES PER 100 MILLION VEHICLE MILES TRAVELED <sup>3</sup>	1.00	.99	•
INJURY CRASHES PER 100 MILLION VEHICLE MILES TRAVELED <sup>2</sup>	66.6	60.5	•
PERCENT OF DRIVERS AND OCCUPANTS USING SEATBELTS	82.5	81.1	
ALCOHOL-RELATED FATAL CRASHES AS PERCENT OF ALL FATAL CRASHES <sup>2</sup>	38.5	40.0	
NUMBER OF CDOT VEHICLE ACCIDENTS	336	330	•
NUMBER OF WORKERS' COMPENSATION CLAIMS	408	370	•
DOLLAR AMOUNT OF WORKERS' COMPENSATION CLAIMS (MILLIONS)	\$1.8	\$2.6	•
STRIPING, SIGNS, SIGNALS AND GUARDRAIL MAINTENANCE	C	B-	•
SYSTEM QUALITY			
PERCENT BRIDGE DECK AREA IN GOOD AND FAIR CONDITION	92.5	94.4	•
PERCENT PAVEMENT IN GOOD AND FAIR CONDITION	50.0	50.0	•
OVERALL MAINTENANCE LEVEL OF SERVICE	C+	B-	•
ROADWAY SURFACE MAINTENANCE	B-	B+	•
BRIDGE MAINTENANCE	C	C+	•
ROADSIDE MAINTENANCE	B-	A-	•
ROADSIDE LANDSCAPE MAINTENANCE	C	В	•
TUNNEL MAINTENANCE	B-	C+	0

#### **How CDOT Uses PMs**

 Transportation Deficit Report, March 2009 (mandated by state legislature)



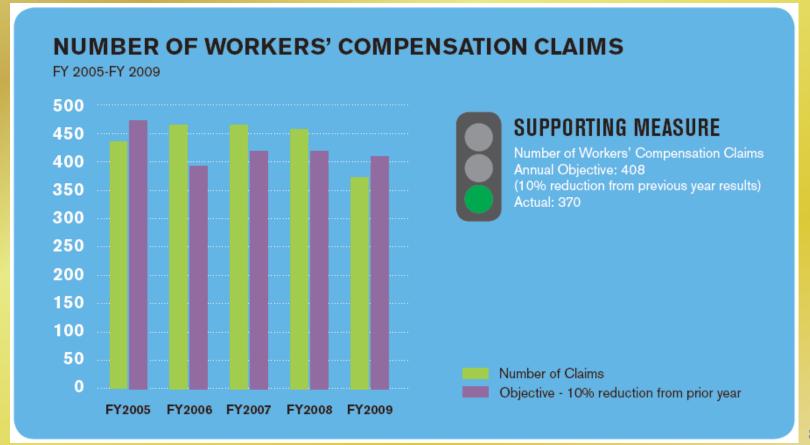
#### **How CDOT Uses PMs**

### Report to FHWA

Indicator	Description	Reporting Instrument	Actual
Bridges in good or fair condition	Percent of major vehicular bridges in good or fair condition based on deck area; Target: 95%	Staff Bridge annual asset management reports	94.52%
Decrease the number of bridges in poor condition	The number of bridges in poor condition per year over the last 5 years	Staff Bridge annual asset management reports	127
Decrease the number of functionally obsolete bridges	The number of functionally obsolete bridges per year over the last 5 years	Staff Bridge annual asset management reports	402
Decrease the number of structurally deficient bridges	The number of structurally deficient bridges per year over the last 5 years	Staff Bridge annual asset management reports	258
Decrease the number of structurally deficient bridges on the NHS	The number of structurally deficient bridges on the NHS per year over the last 5 years	Staff Bridge annual asset management reports	136
Reduce the backlog of essential repair activities recommended by Staff Bridge	Percent of pending essential repairs based on the number of high priority (orange & yellow) repair recommendations pending; Target: 15% or less	Staff Bridge annual asset management reports	26.03%
Reduce the quantity of bridge expansion joints not in condition state 1 on bridges in good or fair condition	The linear feet of bridge expansion joints not in condition state 1, on bridges in good or fair condition, per year over the last 5 years	Staff Bridge annual asset management reports	48,635
Update the scour plan-of-actions (POA's) for all scour critical bridges	The percentage of scour critical bridges (NBI Item 113 code 2 or 3 or U) that have had the plans of actions updated after 2008; Target: 100%	Staff Bridge annual asset management reports	3.20%

#### **How CDOT Uses PMs**

Support Management Decisions



# CDOT Performance Measures How CDOT Uses PMs

### Meetings with Stakeholders

What \$1.5 Billion Buys				
Investment Category	Funding Level	Service Level Outcome		
Surface Treatment	\$222 million	Raise from C to B		
Bridges	\$156 million	Maintain at B		
Maintenance Levels of Service	\$82 million	Raise from C to B		
Shoulders	\$78 million	Raise from F to D		
Mobility	\$562 million total includes:			
Strategic Projects	\$56 million	Accelerate funding obligation by about five years		
Multi-Modal Mobility	\$337 million	Limit decline of Mobility to D+ rather than to F		
Strategic Transit	\$169 million	Raise from D to C-		
Transit - Urban	\$36 million	Raise from C to B		
Transit - Rural	\$36 million	Raise from C to B		
Environmental	\$25 million	Establish at B		
Bicycle & Pedestrian	\$10 million	Establish at B		
Local Transportation	\$293 million	Varies by local jurisdiction		

Questions?

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Some of our favorite state efforts on communication of DOT performance:

- · <u>Virginia DOT</u>, <u>Idaho DOT</u>, and <u>Alaska DOT</u> dashboards.
- Some elements of Washington DOT Gray Notebook are good regarding accountability and transparency, though 700+ pages of annually accumulated monthly performance reports with 4.0 full-time FTE dedicated to that is crazy.
- The <u>Missouri DOT Tracker</u> also has some drawbacks but has helped build some credibility within the state.
- Our Planning folks like the <u>Florida Long Range Plan</u> from a standpoint of community outreach and communication to support the plan.
- Scott's personal favorite performance-based Metropolitan Planning Organization (local, not state DOT) website is Chicago's <a href="http://www.metropulsechicago.org/">http://www.metropulsechicago.org/</a>.

# CDOT Performance Measures Acronyms

ARRA – American Reinvestment and Recovery Act

FHWA – Federal Highway Administration

G/F – Good or Fair Condition

KPI – Key Performance Indicator

PD – Policy Directive

PM - Performance Measure

TC – Transportation Commission