PERFORMANCE TARGETS FOR LOCAL AGENCIES

Going Beyond MAP-21 and FAST Act

Sui Tan, Metropolitan Transportation Commission

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SAN FRANCISCO BAY AREA REGION

7.4 MILLION POPULATION
9 COUNTIES
100 CITIES
43,000 LANE-MILES OF LOCAL STREETS & ROADS
6,850 LANE-MILES OF STATE HIGHWAY (CALTRANS)
23 TRANSIT AGENCIES
7 TOLL BRIDGES

One MPO - Metropolitan Transportation Commission

Overview

- Factors influencing performance measure and target selection
- Examples of performance target (KPI)
- Success story
- Call for action

“One Size Fits All” ?

Depends on asset maturity, politics, resources, urban vs rural

No Two Alike

"You must define and interpret your KPIs based on your goals and objectives."

Performance Management

Leading Indicator	Lagging Indicator
Activities you must undertake to achieve the desired outcome	**"Output" oriented, easy to measure but hard to improve**

Performance Management – Weight Loss

My Daily Food Plan

SAMPLE

Based on the information you provided, this is your daily recommended amount for each food group.

GRAINS 9 ounces	VEGETABLES 3 1/2 cups	FRUITS 2 cups	DAIRY 3 cups	PROTEIN FOODS 6 1/2 ounces
Make half your grains whole Aim for at least **4 1/2 ounces** of whole grains a day	**Vary your veggies** Aim for these amounts **each week:** **Dark green veggies** = 2 1/2 cups **Red & orange veggies** = 7 cups **Beans & peas** = 2 1/2 cups **Starchy veggies** = 7 cups **Other veggies** = 5 1/2 cups	**Focus on fruits** Eat a variety of fruit Choose whole or cut-up fruits more often than fruit juice	**Get your calcium-rich foods** Drink fat-free or low-fat (1%) milk, for the same amount of calcium and other nutrients as whole milk, but less fat and Calories Select fat-free or low-fat yogurt and cheese, or try calcium-fortified soy products	**Go lean with protein** Twice a week, make seafood the protein on your plate Vary your protein routine—choose beans, peas, nuts, and seeds more often Keep meat and poultry portions small and lean

Find your balance between food and physical activity

Be physically active for at least **150 minutes** each week.

Know your limits on fats, sugars, and sodium

Your allowance for oils is **8 teaspoons** a day.
Limit Calories from solid fats and added sugars to **360 Calories** a day.
Reduce sodium intake to less than **2300 mg** a day.

Your results are based on a 2600 Calorie pattern.

Name: _____

This Calorie level is only an estimate of your needs. Monitor your body weight to see if you need to adjust your Calorie intake.

VS

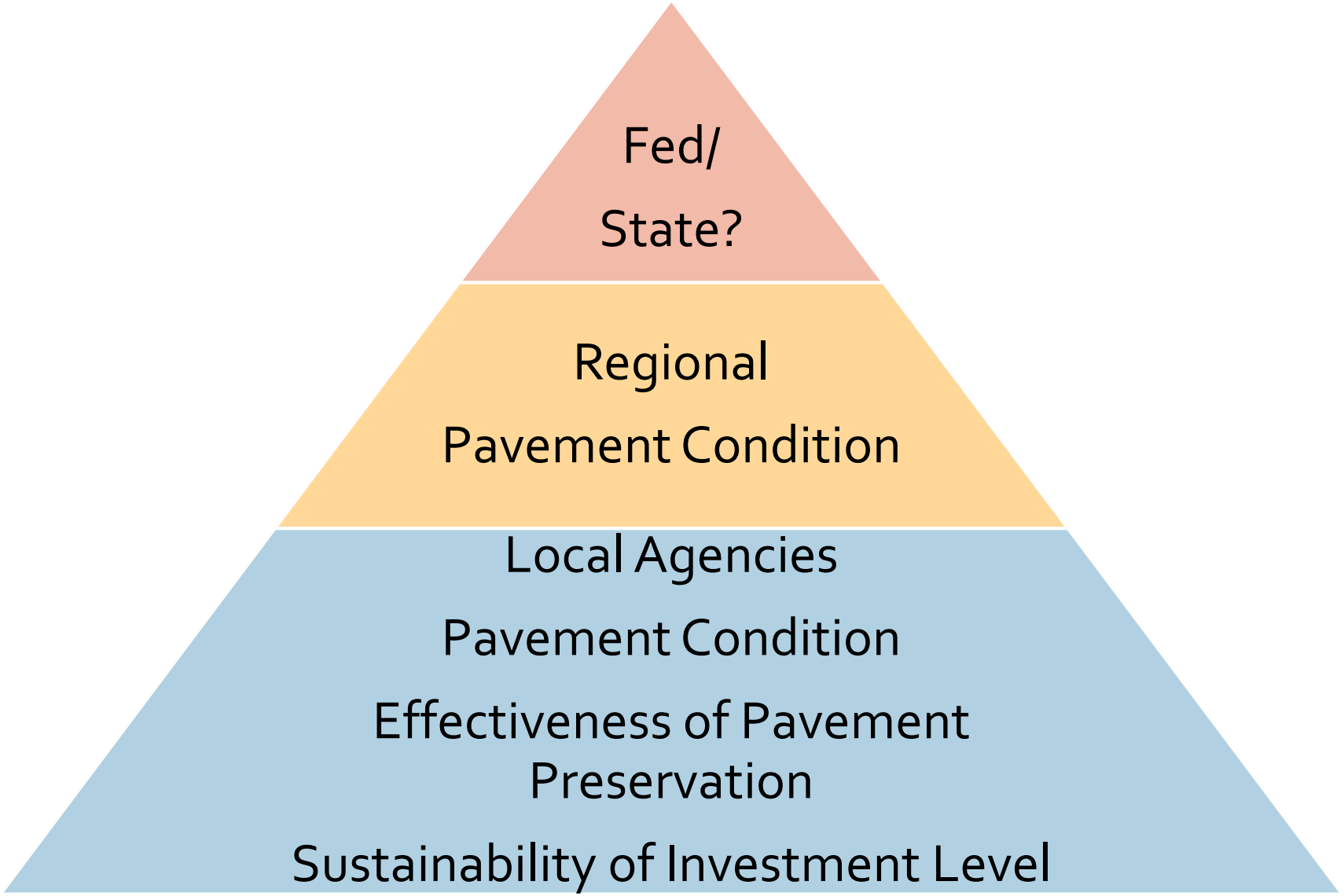
2,000 calories/day

265 lb

Proposed Performance Metrics

Metric	Surface Type	Condition	Range
IRI	All	Good	< 95 in/mi
		Fair	95-170 (Pop <1 million)
			95-220 (Pop >1 million)
		Poor	> 170 (Pop <1 million)
			> 220 (Pop >1 million)
Cracking %	All	Good	< 5%
		Fair	5-10%
		Poor	> 10%
Rutting	Flexible	Good	< 0.20 in
		Fair	0.20-0.40 in
		Poor	> 0.40 in
Faulting	Rigid	Good	< 0.05 in
		Fair	0.05-0.15 in
		Poor	> 0.15 in

Level of Performance Metrics



Guiding Principles

- Measurable
- As objective as possible
- Can be fairly applied
- Utilize data widely available
- Meaningful

Promotes pavement preservation

Key Performance Indicators (KPI)

Keys Questions on Asset Management Plan:

- Existing condition?
- Maintenance $ currently invested?
- Maintenance $ for State of Good Repair?
- Effectiveness of pavement preservation?

KPI:

- % Poor or Failed
- % of Very Good or Better
- 3-yr Moving Avg Network PCI

Current Level of Service												
						2012 PCI				3-yr Moving Average		
County	Jurisdiction	Total Lane Miles	Total CL Miles	% Poor or Failed	% Very Good or Better	Art	Coll	Res	NET	2010	2011	2012
	Regional Benchmarks *(weighted)*	**42,788**	**20,634**	**24%**	**31%**	**73**	**66**	**63**	**66**	**66**	**66**	**66**
ALA	ALAMEDA	303.9	137.8	22%	29%	70	72	62	66	66	67	68
	ALAMEDA CO.	990.3	471.8	9%	16%	71	73	71	71	72	73	71
	ALBANY	59.1	29.4	36%	20%	64	60	54	58	60	58	57
	BERKELEY	452.8	216.2	38%	28%	70	50	58	58	60	59	59
	DUBLIN	254.0	116.0	0%	84%	88	85	88	87	82	84	86
	EMERYVILLE	47.1	19.8	5%	51%	77	75	70	75	77	78	78
	FREMONT	1064.9	496.9	30%	31%	73	61	57	63	64	63	63

KPI: Pavement Preservation Index (PPI) = $\frac{\text{Actual PM \%}}{\text{Recommended PM\%}}$

County	Jurisdiction	Network PCI	$PM/ Lane Mile	% Actual PM	% PM Needs	Pavement Preservation Index
	Regional Benchmarks	**66**	**$ 1,336**	**17%**	**16%**	**1.06**
Alameda	ALAMEDA	66	$ 1,271	13%	15%	0.88
	ALAMEDA CO.	71	$ 671	18%	28%	0.67
	ALBANY	58	$ 1,247	10%	13%	0.78
	BERKELEY	58	$ 263	2%	11%	0.20
	DUBLIN	87	$ 3,124	50%	79%	0.62
	EMERYVILLE	75	$ 48	100%	35%	2.87
	FREMONT	63	$ 5,140	43%	16%	2.76

KPI: Asset Sustainability Index =

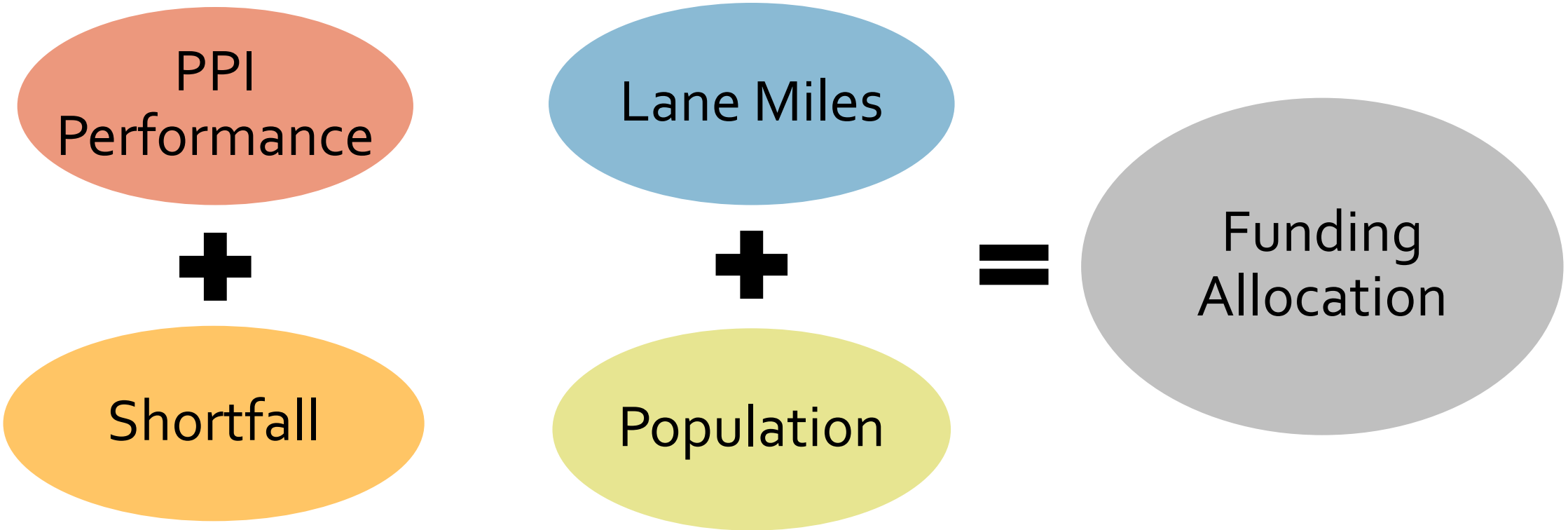
$$\frac{\text{Actual M\&R}}{\text{Annualized 10-Year Needs}}$$

County	Jurisdiction	Network PCI	Actual M&R /Lane Mile	Needs/ Lane Mile	Asset Sustainability Index
	Regional Benchmarks	**66**	**$10,400**	**$27,000**	**39%**
Alameda	ALAMEDA	66	$9,800	$26,900	36%
	ALAMEDA CO.	71	$3,600	$16,200	22%
	ALBANY	58	$12,700	$29,800	43%
	BERKELEY	58	$11,600	$32,400	36%
	DUBLIN	87	$6,300	$5,600	113%
	EMERYVILLE	75	$0	$16,100	0%
	FREMONT	63	$11,900	$29,100	41%
	HAYWARD	69	$14,000	$22,600	62%

KPI: Backlog over Asset Value = $\frac{\text{Current Backlog}}{\text{Network Asset Value}}$

County	Jurisdiction	Network PCI	Current Backlog (millions)	Network Asset Value (millions)	Backlog/ Asset Value
	Regional Benchmarks	**66**	**$5,645**	**$38,814**	**15%**
Alameda	ALAMEDA	66	$32	$229	14%
	ALAMEDA CO.	71	$55	$647	8%
	ALBANY	58	$9	$41	22%
	BERKELEY	58	$77	$298	26%
	DUBLIN	87	$4	$180	2%
	EMERYVILLE	75	$3	$37	7%
	FREMONT	63	$131	$805	16%
	HAYWARD	69	$59	$473	12%

Success Story - MTC



Outcome-Driven Performance Measure

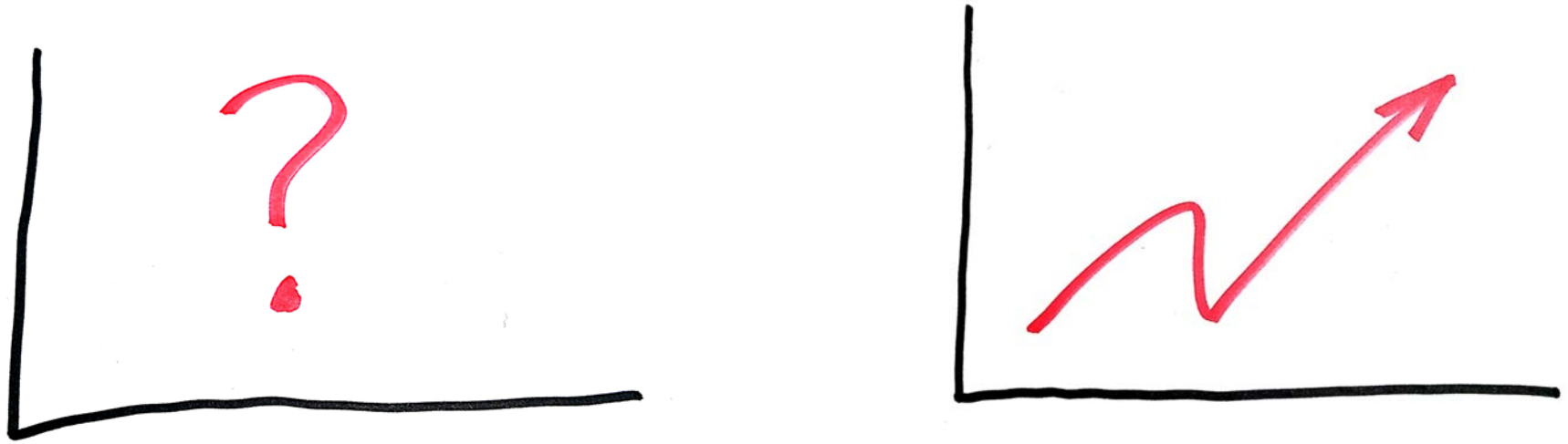
Funding Allocation Formula:

- No advantage or disadvantage
- Data from StreetSaver PMS
- Promotes pavement preservation principles
- Replaces "Maintenance of Effort"

Behavior Change: Shifts practice from "worst first" to preventive maintenance

TAKE ACTION!

1. Look beyond pavement condition
2. Opt for leading KPIs
3. Focus on data-driven, outcome-based performance
4. Implement incentive-based approach to award performance



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