Principles of Asset Management

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Outline

- Key Takeaways
- What are SDOT's assets?
- What is asset management?
- What will the Transportation Asset Management Plan (TAMP) help SDOT do?
- What is next?



Key Takeaways

- SDOT is responsible for maintaining almost \$40B worth of assets, such as bridges, sidewalks, street surfaces, retaining walls, stairways, and more
- Asset management helps us to make the right investment at the right time to maximize available funding and plan strategically for the future
- The Transportation Asset Management Plan will inform transportation planning and funding- by better informing data driven, risk-based, performance-based decisions

Investing in the future

Spending \$1 to preserve and maintain public assets in a fair or good condition can save \$6 to \$10 in rehabilitation or replacement costs.



What are SDOT's assets?

The City's transportation infrastructure is estimated to be worth approximately **\$40 billion**, including these major system assets:

- 1,548 lane-miles of arterial streets
- 2,396 lane-miles of non-arterial streets
- 2,293 miles of sidewalks
- 126 bridges
- 584 stairways
- 537 retaining walls
- 2.2 miles of seawalls
- 1,132 signalized intersections
- 47.9 miles of multi-purpose trails
- 165 miles of on-street bicycle facilities
- **39,049** street trees
- 1,589 pay stations
- 35,872 curb ramps
- close to 203,000 signs

SDOT Asset Replacement Value



- All Other Assets
- 7 High Value Assets:
- Areaways
- Bridges

Maintenance is funded in part with Levy

dollars on many of these assets

- Retaining Walls
- Traffic Signals
- Sidewalks
- Arterial Pavement
- Non-arterial Pavement

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What is asset management?

- Making the treatment on the right asset at the right time and in the right place
- Assets are very expensive to replace, so maintaining our assets and keeping them in working condition is preferable
- We must focus on preserving these assets to make them safely last for as long as possible
- At the same time, we are carefully planning for when we need to replace critical assets in the future





What is asset management?

Asset management preserves and maintains our existing assets...

- Improving safety
- Increasing reliability and mobility
- Guiding wise investment of taxpayer dollars



What is in the TAMP?



- Equity Commitment
- Transportation Asset Management Goals & Objectives
- Asset Data Management
- Asset Performance Management
- Risk Management
- Asset Management Implementation Plan
- Revenue & Financial Overview
- Asset Lifecycle Planning



What will the TAMP do?

- Guide us to become more proactive, less reactive
- Help us to make data driven, risk-based, performance-based decisions
- Focus our attention and activities in key, critical areas maximize the benefits of our asset-based investments
- Incorporate our asset performance goals into capital planning to think holistically and equitably about what assets we invest in and when



Lower Spokane Street Bridge

All in all, we will use the TAMP to:

- Improve our strategic decision-making
- Align asset management to support our values
- Maintain accountability
- Influence "trade-off" discussions
- Increase transparency
- Adjust and evolve as needed
- Ensure future sustainability

TAMP Example: Asset Lifecycle Planning Scenarios

- Asset needs are assessed for our 7 highest value assets. Consideration of asset performance is based on 10 years of continuous level of investments to reduce risk and/or increase performance.
- Scenarios are "Bookended" by a Status Quo and an "Upper Limit". The Upper Limit may represent an unconfined situation where money is no object, and we have data to support strategic investments OR it may represent the upper limit of what we are comfortable spending which is influenced by our data limitations and unknown performance expectations.





Activity/ Treatment	Scenario A:	Scenario B	Scenario C	Scenario D	Scenario E:
	Status Quo				Unconstrained
Work Type: Maintenance – Routin	e				
Data collection, activities conducted on a set time interval	\$X / year	\$X / year	\$X / year	\$X / year	\$X / year
Maintenance – Preservation					_
Activities conducted to extend service life as long as possible	\$X / year	\$X / year	\$X / year	\$X / year	\$X / year
Maintenance – Reactive					
Activities to minimize risk, increase safety and mobility	\$X / year	\$X / year	\$X / year	\$X / year	\$X / year
Rehabilitation and Reconstruction					
Capital Improvements	\$X / year	\$X /year	\$X / year	\$X / year	\$X /year
Annualized Total Cost (for the next 10 years, in 2023 dollars)	\$X / year	\$X / year	\$X / year	\$X / year	\$X / year
Results			1		1
Scenario A- Status Quo	Network conditions decline by X% with X% going into 'Poor Condition', deferred maintenance increases by X% to \$X in 20 years.				
Scenario B	Network conditions decline by X% with X% going into 'Poor Condition', deferred maintenance increases by X% to \$X in 20 years.				
Scenario C	Network conditions are maintained.				
Scenario D	Asset conditions improve by X%				
Scenario E - Unconstrained	Asset conditions improve by X % and backlog is eliminated in X years.				

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Asset Lifecycle Planning Investment Outcomes

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Where do the BSAMP & TAMP fit in?

SDOT Planning Inputs to the Transportation Funding Plan



Transportation Equity Framework



TAMP - Next Steps

- Use the TAMP to help inform the funding plan in early 2024
- In 2024, we will:
 - Actively manage our risks by implementing strategies to reduce risk and increase performance
 - Establish an impact analysis framework that facilitates performance monitoring and reporting, connecting our work to outcomes in alignment with SDOT values
 - Support and manage key projects and efforts to keep advancing our asset management maturity level and incorporating additional assets into our TAMP through the development of a multi-year asset management implementation plan that identifies key strategies and efforts, such as enterprise asset management system improvements/upgrades, mobile technology implementation, and supporting process improvements







From the entire SDOT Team: Thank you!

