Addressing the Challenge: Formulating a Definition of SGR for a Federal Program

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Formulating a Definition of SGR: The Challenge

❑ One of the many challenges of the SGR initiative is how to define "state of good repair"

❑ Transit systems abroad have struggled with this issue as well

❑ What is the most feasible approach – given multiple perspectives

- Mode type
- System size
- System age
- Job function

FTA
FEDERAL TRANSIT ADMINISTRATION

Formulating a Definition of SGR: The Approach

❑ FTA has collaborated with the industry through the SGR Industry Work Group

❑ Staff has compiled definitions from research performed by others

❑ Reached out to other Federal offices and FTA staff

Formulating a Definition of SGR: Findings

Forum/Context Discussed	STATE OF GOOD REPAIR MEASURES		
	Asset Condition	System Performance	Backlog
SGR: Beginning the Dialog	• No capital asset exceeds its useful life		• No backlog of capital needs exists • All asset life cycle investment needs have been addressed
Rail Modernization Study	• <u>Asset</u> estimated physical condition is greater than or equal to 2.5 • All <u>system</u> assets have a physical condition rating of 2.5 or greater		

Formulating a Definition of SGR: Findings

Forum/Context Discussed	STATE OF GOOD REPAIR MEASURES		
	Asset Condition	**System Performance**	**Backlog**
SGR Industry Work Group	• Asset in good physical condition	• …and safely accomplishes its performance objectives	
	• Asset condition meets sufficient criteria as determined through field inspections • Age of the asset relative to its design/useful life	• Asset meets certain performance (e.g., service reliability, customer comforts, safety, current industry standards)	• Backlog of maintenance/ deferred maintenance below set threshold
	*Weighted score based on 4 attributes above. **A different measure would be used for obsolescent assets.*		

Formulating a Definition of SGR: Findings - cont.

Forum/Context Discussed	STATE OF GOOD REPAIR MEASURES		
	Asset Condition	**System Performance**	**Backlog**
Other Agencies		• Rail lines free of slow zones and have reliable signals • All capital assets are functioning at their ideal capacity within their design life without limitation	• When established standard for rehabilitation and replacement of assets are met • When components reach useful life targets • No component is beyond its useful life

Formulating a Definition of SGR: Framework for a Federal Program

❑ Definition should be applied at the transit system level (LRT, HRT, Bus, etc.)

❑ Formulate a definition of SGR for the purpose of the FTA Federal initiative

❑ Agency definitions should be more specific and consistent with the Federal definition

Formulating a Definition of SGR: Model (1)

❑ A transit system is in a state of good repair when the following criteria is met:

- Possesses and maintains a comprehensive list of its capital assets and rolling stock

- Possesses an asset management plan which is integrated into the management processes and practices of the agency

- __% of its assets are within their articulated useful life and remaining assets are performing at their designed for function

Formulating a Definition of SGR: Model (2)

❑ A transit system is in a state of good repair when system components are properly maintained or replaced, in accordance with

   a) the owner's approved O&M procedures and schedules, or

   b) the OEM's recommended criteria when owner's procedures do not exist, or

   c) industry standards when (a) or (b) are not available, and

❑ Satisfactorily performs intended design function

Formulating a Definition of SGR: Model (3)

❑ A transit system is considered to be in a state of good repair if it exhibits the following characteristics:

a) <u>Safety</u>: Transit infrastructure and vehicles are well-maintained and replaced before their condition deteriorates to the point of presenting a safety risk

b) <u>Quality Transit</u>: Infrastructure and vehicles meet customer expectations for comport and reliability

Formulating a Definition of SGR: Questions

1. How do we measure SGR at the Federal level?

2. How do we ensure consistency at local level?

3. How should assets be categorized?

4. Others …