



# 4 Steps to Achieving a **State of Good Repair**

Brett Koenig

*Industry Solutions Manager, Enterprise Asset Management*



# Welcome



- Introductions
- **Brett Koenig**  
*Industry Solutions Manager – EAM*





**ONLY ON OUTFRONT**

**TUNNELS USED BY MILLIONS CRACKED AND CRUMBLING**



4:50 PM PT

**OUTFRONT**

# Transit Asset Management “Final Rule” (FR)



**Expected Late 2016**

**3 Months after FR:**

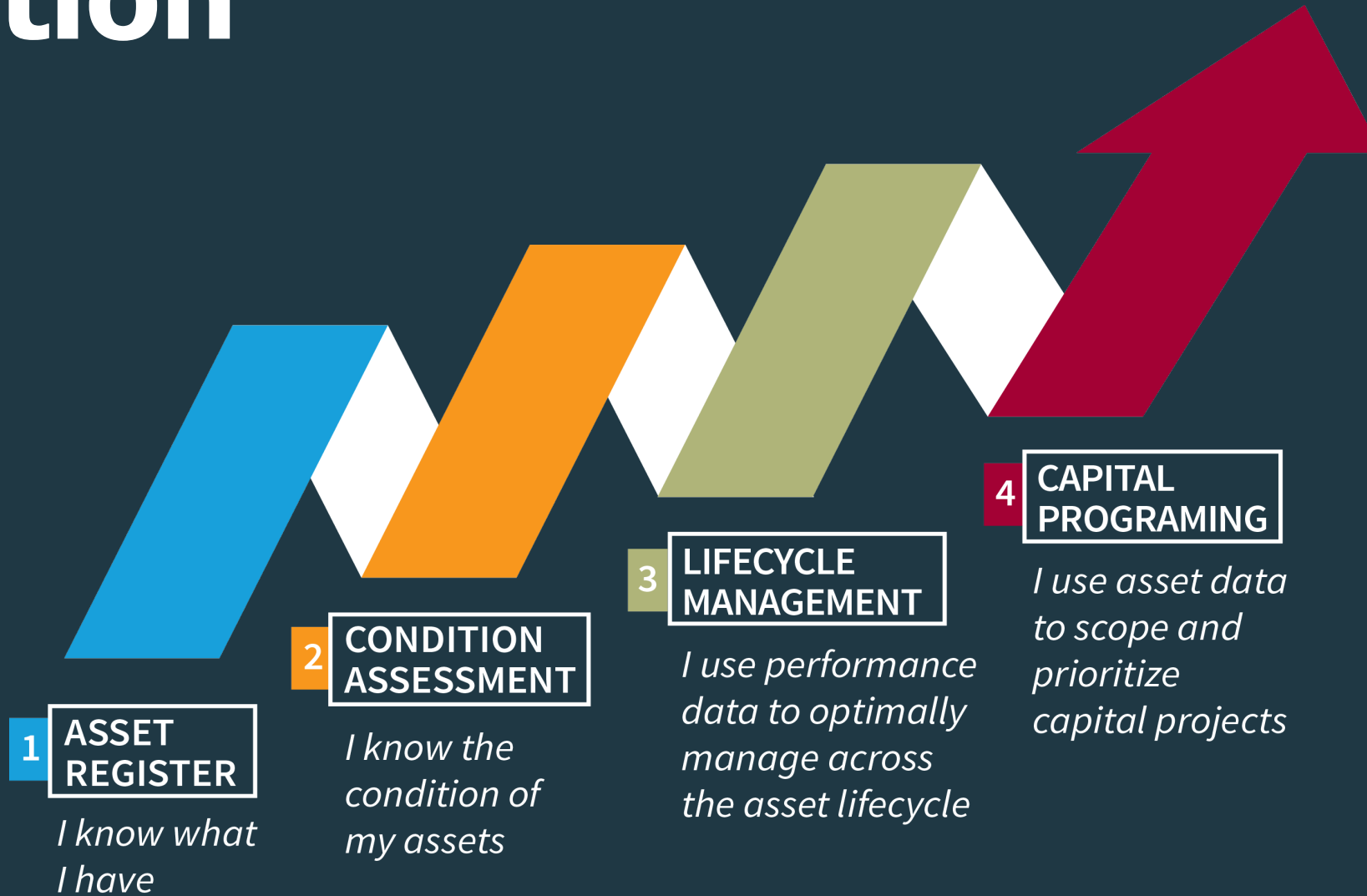
Initial asset Performance  
Targets must be set

**1 year after FR:**

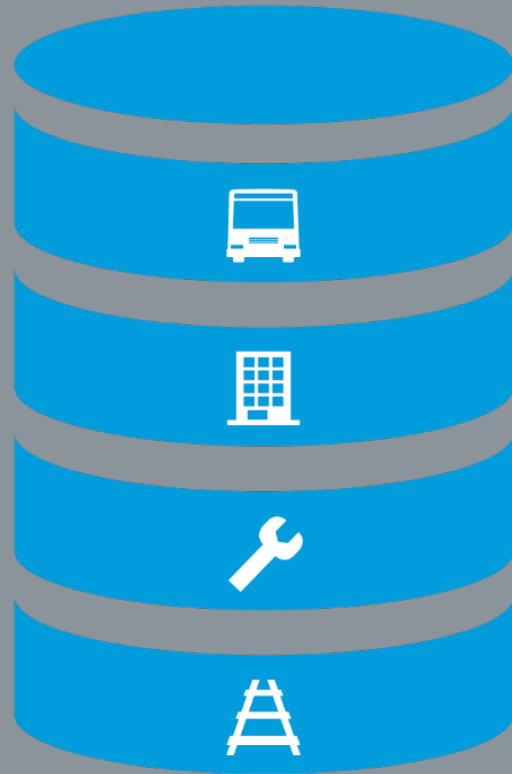
Report asset data to FTA



# Asset Management Evolution



# Step #1: Asset Register



Trapeze SGR



# Step #2: Condition Assessment



**1**

**Poor**



**5**

**Excellent**



# Step #2: Condition Assessment



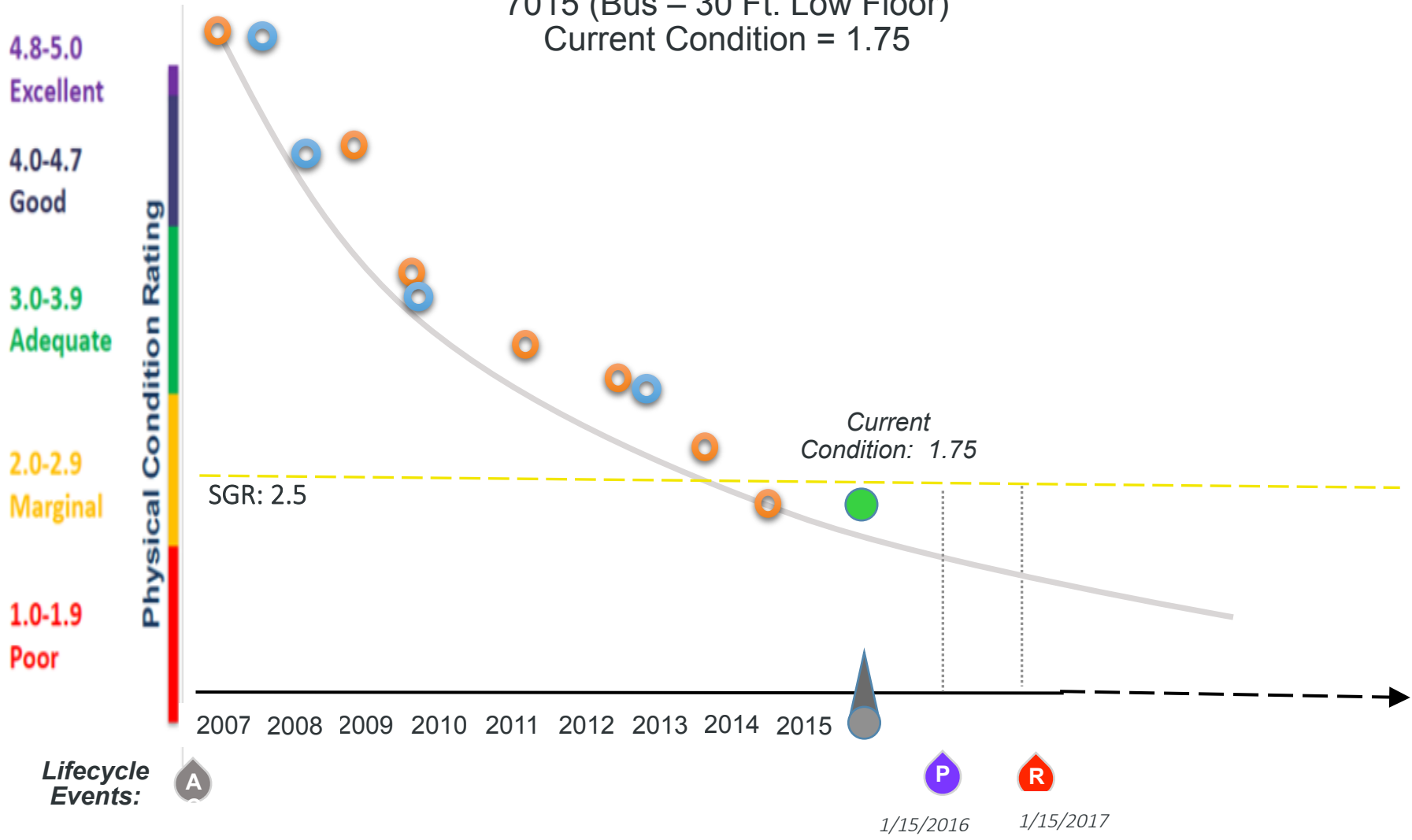
Trapeze SGR supports in 3 ways:

1. Age-based decay curves
2. Physical condition inspections (Mobile app, etc.)
3. Performance-based condition scores





7015 (Bus – 30 Ft. Low Floor)  
Current Condition = 1.75



Condition Assessments supported by:

1. Age-based decay curve
2. Physical inspection
3. Asset performance (calculated) rating



<b>Rolling Stock</b>	Railcars Buses Paratransit Vehicles	Cutaways Cars and Vans Ferries
<b>Facilities</b>	Administration Maintenance	Depots or Terminals Parking Garages
<b>Infrastructure</b>	Rail-Fixed Guideways Signal Systems Structures Catenary	Mechanical Systems Electrical Systems IT Systems
<b>Equipment</b>	Construction Service Vehicles	Maintenance

# Performance Targets



Asset Category	Performance Measure
Equipment	% of assets that have met or exceeded their Useful Life Benchmark (ULB) Data: Asset age
Rolling stock	% of vehicles that have met or exceeded their Useful Life Benchmark (ULB) Data: Asset age
Infrastructure	% of track segments, signal and systems with performance restrictions Date: Asset performance restrictions
Facilities	% of facilities rated below a 3 on TERM scale (1-5) Data: Condition ratings (physical inspections)



# Step #3: Lifecycle Management



Asset Performance Assessment Portal

Prediction Models

Asset Management

	Name	Asset Count	Avg Age	Condition Score	Score - Meeting Target	Est. Replace Cost
	1-ROLLING STOCK	110	11.11	3.40	91.67%	\$ 2,934,270
	2 - EQUIPMENT	401	11.09	3.17	50.00%	\$ 278,043
	3 - FACILITIES	4461	22.92	2.33	14.29%	\$ 2,080,000
	4 - INFRASTRUCTURE	297	18.51	3.25	75.00%	\$ 3,875,200








# Step #3: Lifecycle Management



Asset Performance Assessment Portal

Prediction Models

Asset Management 

	Name	Asset Count	Avg Age	Condition   Score	Score - Meeting Target	Est. Replace Cost
	 1-ROLLING STOCK	110	11.11	3.40	91.67%	\$ 2,934,270
	2004 NEW FLYER D35	56	11.38	3.29	87.50%	\$ 1,835,834
	2005 NEW FLYER D40	54	10.83	3.63	100.00%	\$ 1,098,436



# Step #3: Lifecycle Management



Asset Group Performance						
Asset Group	2004 NEW FLYER D35					
Asset Count	56	Date and Time Last Updated	06/02/2016 06:17			
Replacement Cost	\$1,835,834	Average Age	11.4 years			
Percent of Assets Within Useful Life	12.50 %	Condition Score Target	3.00			
Average Meter 1	368,666.36					

Filters		Quick Filter:
		Condition > 2

Assets						
Group On Capital Project		Add to List		List:	<input type="text"/>	Clear
<input type="checkbox"/>	Asset ID	Description	Last Condition	Est Replace Date	Remaining Meter	% Remaining Life - Meter
<input type="checkbox"/>	2321	BUS NF-D35-04-2300 35' PASSENGER TRANSIT	3.5	01/20/2017	31078	7.29%
<input type="checkbox"/>	2329	BUS NF-D35-04-2300 35' PASSENGER TRANSIT	3.5	01/28/2017	65713	15.42%
<input type="checkbox"/>	2341	BUS NF-D35-04-2300 35' PASSENGER TRANSIT	3.5	01/05/2017	17868	4.19%
<input checked="" type="checkbox"/>	2301	BUS NF-D35-04-2300 35' PASSENGER TRANSIT	3	03/08/2017	21797	5.43%



# Step #4: Capital Project Prioritization



Capital Project Portal

[Customize](#) [New Project](#)

Capital Projects

ID	Description	Type	Status	Approval	Program Category	Program
20130509-00004	BUS MID-LIFE REHAB- 2002 GILLIG LOW-FLOOR	STANDARD PROJECT	OPEN		VEHICLES	BUS PROCUREMENT AND ENHANCEMENT
20130509-00005	BUS WHEEL CHAIR LIFT REPLACEMENT	STANDARD PROJECT	OPEN		VEHICLES	BUS PROCUREMENT AND ENHANCEMENT
20130509-00007	RAILCAR BUY	STANDARD PROJECT	OPEN		VEHICLES	RAIL CAR PROCUREMENT AND ENHANCEMENT
20130509-00008	RED LINE TRACK REPLACEMENT IN SEGMENT 210	STANDARD PROJECT	OPEN		MAINTENANCE OF WAY	TRACK MAINTENANCE AN REPLACEMENT
20130509-00010	MAPLETON STATION IMPROVEMENT PROJECT	STANDARD PROJECT	OPEN		FACILITIES	STATION AND SHELTER ENHANCEMENTS

Showing 1 to 5 of 5 entries



# Step #4: Capital Project Prioritization



Capital Project ID: 20121130-00002  
SERVICE EXPANSION GREEN LINE

Years: 2013 - 2014

basic info  
More Info  
Personnel  
Attributes  
Schedule  
Work Projects  
Funding  
Assets  
Segments  
Risks  
Savings  
Comments  
Notes  
Files  
Approvals  
Work Orders

**Score and Rank**

Your score: 73 Rate this  
01/18/2016 16:40

Average score: 104  
Ratings: 2

**Average rank: 104**

MARKETABILITY  
ACCESSIBILITY

**Rate this project**

**MARKETABILITY** 5  
NO BENEFIT NEWSWORTHY STOP THE PRESSES

**ACCESSIBILITY** 8  
NONE LOTS

**PROFITABILITY** 7  
NONE LOW MEDIUM HIGH

**SAFETY CRITICAL** 6  
NO YES

**EMPLOYEE MORALE** 2  
NO IMPACT MARGINAL IMPROVEMENT SIGNIFICANT IMPROVMT

**Score: 37**  
(5 x 5) + (8 x 1) + (7 x 2.5) + (6 x 3) + (2 x 2)

**Rank: 37**  
(37 x 1.00)

Close Save





# How to learn more



## **Brett Koenig**

Industry Solutions Manager, Enterprise Asset Management

*brett.koenig@trapezegrup.com*

+ 1 510 522 4855



**Thank you**

