

# Transit Asset Management

Delivering a Compliant Transit Asset Management Plan Andrew C. Choi November  $9^{\text{th}}$  , 2017

### Transit Service, Fleet and Infrastructure



- 100+ square-mile service area
- Service throughout 13 surrounding cities
- 35 fixed routes
- Fleet of 250 buses (40' and 60')

- 10 ADA-compliant vehicles
- 10 Battery-Electric Buses (BEB)
- Four water vessels
  - Two catamarans and two boats

## **TAM Compliance**

- Review
- Evaluate
- Gather
- Analyze
- Produce

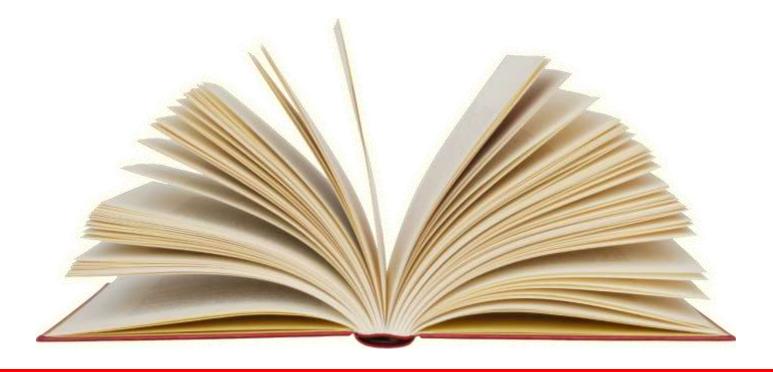


#### **Review FTA Documents**

- Fact Sheets
  - Final Rule Fact Sheet
  - TAM Performance Measures Fact Sheet
  - Default Useful Life Benchmark (ULB) Cheat Sheet
- Webinars
  - TAM Final Rule
  - NTD Asset Inventory
  - Facility Condition Assessment & Guideway Performance Restrictions

#### Review Add'l FTA Documents

- Reading Material
  - Transit Asset Management Guide
  - Facility Performance Measure Guidebook
  - Infrastructure Performance Measure Guidebook



## Evaluate, Gather, and Analyze

- Evaluate existing policies
- Gathered data and analyze





#### **Produce**

#### State of Good Repair

The condition in which a capital asset is able to operate at a **full level of performance**. This means the asset:

- 1. Is able to perform its designed function,
- Does not pose a known unacceptable safety risk, and
- 3. Its lifecycle investments have been met or recovered.



Final Rule: National Transit Asset Management System

# Reliability and Safety

Reliability	Scale 🕶					
Bus	1	2	3	4	5	<b>Grand Total</b>
<b>Diesel</b>	15	9	5	8	12	49
<b>⊞</b> Hybrid	4	3	11	16	55	89
<b>ECNG</b>	67	7	4	4	3	85
<b>Grand Total</b>	86	19	20	28	70	223

Scale	Min	Max
1	6,000	100,000
2	5,000	5,999
3	4,000	4,999
4	3,000	3,999
5	-	2,999

Safety	Scale					
Bus 📭	1	2	3	4	5	<b>Grand Total</b>
<b>Diesel</b>	2	4	10	12	21	49
<b>Hybrid</b>	13	18	22	23	13	89
<b>ECNG</b>	21	29	26	7	2	85
<b>Grand Total</b>	36	51	58	42	36	223

Scale	Min	Max	
1	0	1	
2	2	3	
3	4	5	
4	6	7	
5	8	100	
			_

## Useful Life (Lifecycle Investment)

Fleet Count	Age (y									
Bus	1	3	4	7	9	11	12	14	16 G	rand Total
<b>□</b> Diesel								39	10	49
2000S									10	10
2200S								39		39
∃Hybrid				25	15	22	27			89
2400S							27			27
2500S						22				22
2700S					15					15
2900S				25						25
<b>□ CNG</b>	21	31	33							85
1200S			33							33
1300S		31								31
1500S	8									8
1500SA	13									13
<b>Grand Total</b>	21	31	33	25	15	22	27	39	10	223

# Weight and Priority

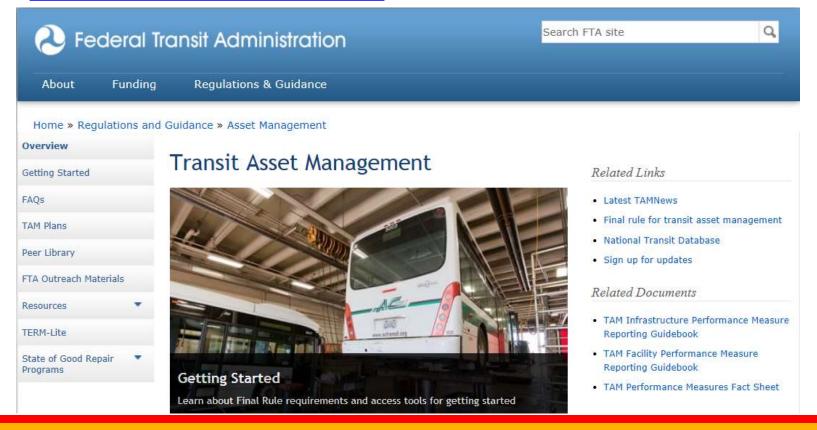
Rating	Weight
Safety	3
Reliability	2
ULB	1

<b>Priority Group</b>	Min	Max	Description
High (35-50)	35	50	Vehicles to be replaces within 1 yr
Med (30-34)	30	34	Vehicles to be replaced within 3 yrs
Low (0-29)	0	29	Vehicles to be replaces 5 + yrs

Priority	▼.													
			Diesel					Hybrid					CNG	Grand
	<b>■</b> Diesel		Total	<b>■</b> Hybrid				Total	<b>□</b> CNG				Total	Total
Type 🚚	2000S	2200S		2400S	<b>2500S</b>	2700S	29005		1200S	1300S	1500S	1500SA		
☐ High (35-50)	6	10	16	7	2			9						25
41	2		2											2
39	1	6	7											7
38	1		1											1
37	1	3	4	7				7						11
36		1	1		2			2						3
35	1		1											1
■ Med (30-34)	4	12	16	13	10	3	1	27						43
34	1	2	3	7		1		8						11
33	3	3	6	1	4			5						11
32						1	1	2						2
31		4	4	5	3	1		9						13
30		3	3		3			3						6
□ Low (0-29)		17	17	7	10	12	24	53	33	31	8	13	85	155
20		17	17	7	9	10	19	45	3	2			5	67
10					1	2	5	8	30	29	8	13	80	88
<b>Grand Total</b>	10	39	49	27	22	15	25	89	33	31	8	13	85	223

## Helpful Links

- FTA Getting Started
- TAM Peer Library
- FTA Outreach Materials



# Thank you!

