

# Maintaining MomenTAM

## March 31, 2021



TRANSIT  
ASSET  
MANAGEMENT

# TAM Updates

**2021 TAM Roundtable: Save the Date: June 22,  
afternoon EST**

- Executive Panel

## **Updated Narrative Report Template**

- Updated [“NTD Narrative Report Template”](#) is available on the TAM website under “featured resources”

# Speakers



## Denver RTD

- Lou Cripps



## Casco Bay Lines

- Hank Berg
- Paul Pottle

# Did your 2020 feel similar?

## Reduced Service Levels

 The Denver Post

RTD to suspend fares, halt downtown shuttle amid coronavirus pandemic

RTD to suspend fares, halt downtown shuttle amid coronavirus ... Starting Sunday, RTD will stop charging fares for bus or train service, ...  
Apr 3, 2020



## Budget Cuts & Layoffs

 MassTransitMag.com

Denver RTD plans budget, staff reductions to face financial ...

Denver RTD is currently carrying about 40 percent of its pre-COVID-19 level of ridership. Denver RTD. The Denver Regional Transportation ...  
Sep 9, 2020



## Work From Home


 The Denver Post

RTD faces serious headwinds as transit agency begins long crawl out of coronavirus' grip

For the first time since RTD dramatically curtailed service in the face of the ... Street; and the 40, which runs along Colorado Boulevard in east Denver. ... Jaquez said 11 RTD employees have contracted COVID-19 so far, and ...  
May 26, 2020

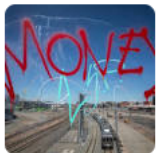


## Continued Pressure to Expand

 Colorado Public Radio

Polis Says RTD Still Must Build Boulder Train In Spite Of ...

Polis Says RTD Still Must Build Boulder Train In Spite Of Coronavirus ... on its promise to build a rail line from Denver to Boulder and Longmont.  
Jun 17, 2020




## Outside Accountability Committee

 MassTransitMag.com

Denver RTD to collaborate with independent accountability ...

Denver RTD needs more regional support and understanding than ever, ... overhaul required by COVID-19 pandemic fallout, said Denver RTD ...  
Jun 19, 2020

## COVID Relief Funding

 Progressive Rail Roading

Rail News - RTD-Denver anticipates \$200 million in COVID ...

RTD-Denver anticipates \$200 million in COVID-19 relief. The Federal Transit Administration announced the federal funding as part of the \$14 ...  
Jan 14, 2021



# Did COVID-19 change Transit Asset Management?

## Constraints

"...the SGR grants alone will not be enough to address the backlog."

"In these financially constrained times, transit agencies will need to be more strategic in the use of all available funds."

FTA 49 CRF Parts 625 and 630  
<https://www.govinfo.gov/content/pkg/FR-2016-07-26/pdf/2016-16883.pdf>

## Stewardship

"MAP-21 fundamentally shifted the focus of Federal investment in transit to emphasize the need to maintain, rehabilitate, and replace existing transit investments."

TAM fundamentals still remain the same.



# MomenTAM Amid Crisis

Lou Cripps – Senior Manager, Asset Management

Regional Transportation District Denver

[Lou.Cripps@RTD-Denver.com](mailto:Lou.Cripps@RTD-Denver.com)

## Setting the Stage

Did your 2020 feel similar?

Did COVID change TAM?

## Trust the Plan

Management System Framework

Continuous Improvement

Generational Approach

## MomenTAM Amid Crisis

Leverage the Plan

Takeaways



# Trust the Plan

Management System Framework

Continuous Improvement

Generational Approach

# Trust the Plan – Management System Framework

1 – Asset Inventory

2 – Condition Assessments

3 – Decision Support Tools

4 – Prioritized List of Investments

5 – TAM & SGR Policy

6 – Implementation Strategy

7 – Key Annual Activities

8 – Identification of Resources

9 – Evaluation Plan

## Coordination of Activities

A management system is the way in which an organization manages the interrelated parts of its business in order to achieve its objectives.

Management system standards help organizations improve their performance by specifying repeatable steps that organizations consciously implement to achieve their goals and objectives, and to create an organizational culture that reflexively engages in a continuous cycle of self-evaluation, correction and improvement of operations and processes through heightened employee awareness and management leadership and commitment.





# Trust the Plan – Continuous Improvement

1 – Asset Inventory

2 – Condition Assessments

3 – Decision Support Tools

4 – Prioritized List of Investments

5 – TAM & SGR Policy

6 – Implementation Strategy

7 – Key Annual Activities

8 – Identification of Resources

9 – Evaluation Plan



Being compliant is committing to continually improving your TAM Plan

# Trust the Plan – Generational Approach

1 – Asset Inventory

2 – Condition Assessments

3 – Decision Support Tools

4 – Prioritized List of Investments

5 – TAM & SGR Policy

6 – Implementation Strategy

7 – Key Annual Activities

8 – Identification of Resources

9 – Evaluation Plan

2018



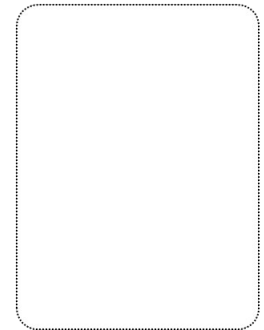
2019



2020



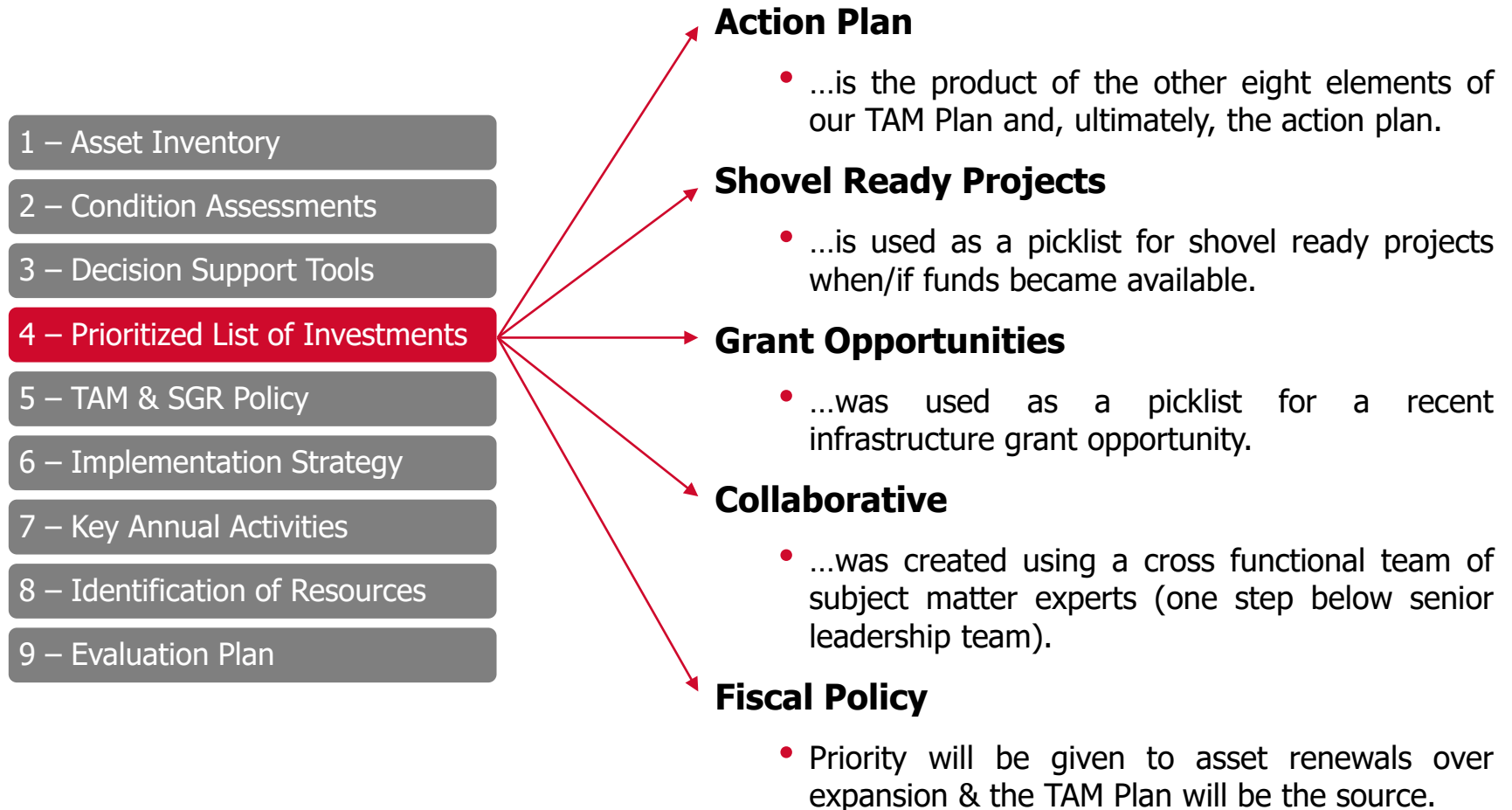
2021

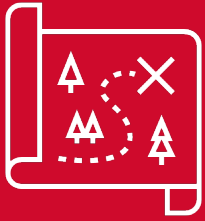


● —————> *Incremental Improvements* ● —————>

Working on the 4<sup>th</sup> iteration of the TAM Plan

# Trust the Plan – Prioritized List of Projects





# MomenTAM Amid Crisis

Trust the Plan

# MomenTAM Amid Crisis – Leverage the Plan

## 2020 in 5 steps

### 1. What do the revenue projections look like?

\$260 Million Dollar Short Fall was identified & the COVID Fiscal Sustainability Taskforce was formed.

### 2. What should be cut from the budget?

Service, asset renewals & administrative overhead.

### 3. Which area has a plan we can trust?

RTD's TAM Plan – [Prioritized List of Investments](#)

### 4. Were adjustments made to the plan?

Absolutely because our plan was not optimized for a pandemic

### 5. On to other matters.

## Why was the plan easy to trust?

### Management System Framework

- Components, process, and systems are transparent

### Continuous Improvement

- More Accurate / Higher Resolution

### Generational Approach

- Sustain MomenTAM

Having a trusted plan was uneventful.

# MomenTAM Amid Crisis – Takeaways

## Fundamentals did not change

- Our needs far outweigh available resources
- We need to be more strategic using available funding
- Systematically managing backlog is mandatory

## Objectives did not change

- Our purpose is to move people

## Work your plan & stay focused

- Everything else is a trap!
- Distraction waits on every corner!





# MomenTAM Amid Crisis

Lou Cripps – Senior Manager, Asset Management

Regional Transportation District Denver

[Lou.Cripps@RTD-Denver.com](mailto:Lou.Cripps@RTD-Denver.com)

## Setting the Stage

Did your 2020 feel similar?

Did COVID change TAM?

## Trust the Plan

Management System Framework

Continuous Improvement

Generational Approach

## MomenTAM Amid Crisis

Leverage the Plan

Takeaways



# Thank you.

[rtd-denver.com](https://www.rtd-denver.com)

March 31, 2021



# Maintaining MomenTAM

Casco Bay Lines

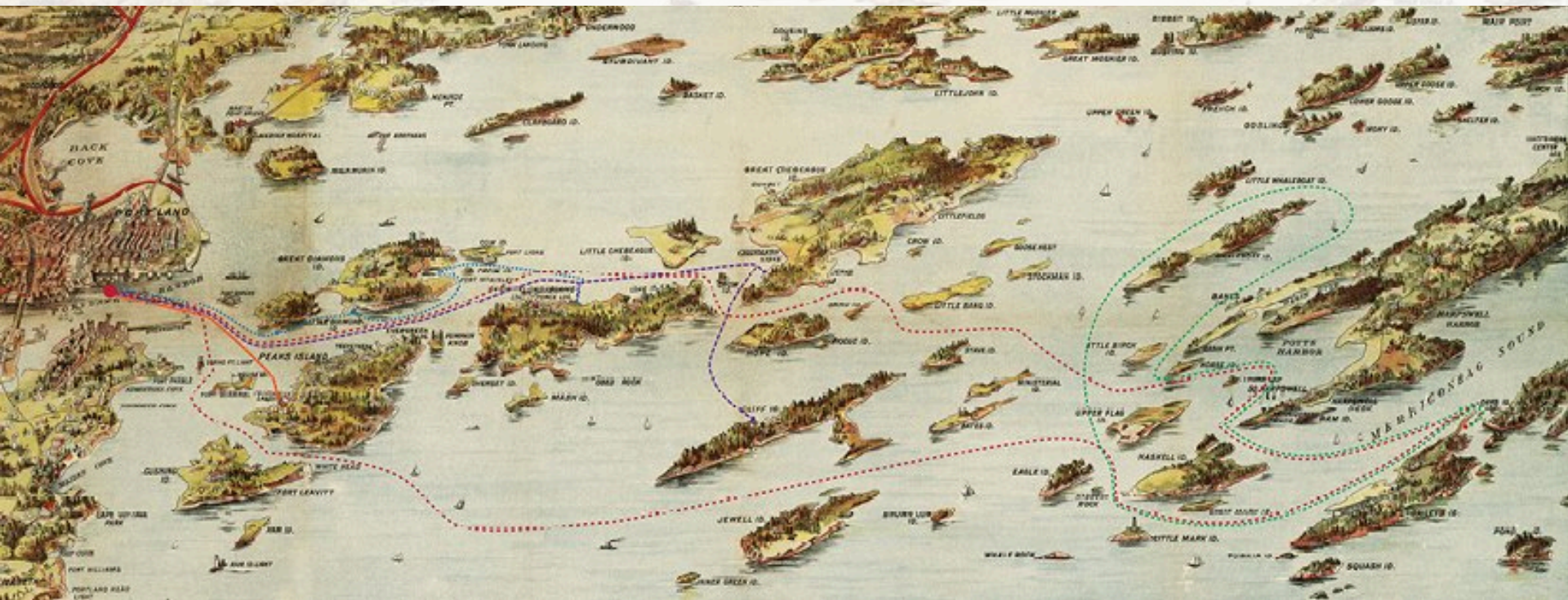
March 31, 2021

Hank Berg, General Manager

Paul Pottle, Director of Projects



# Service Area: Casco Bay, Maine



- Lifeline passenger, freight & vehicle service to six islands in Casco Bay
  - Portland's Peaks, Little Diamond, Great Diamond & Cliff islands
  - Towns of Long & Chebeague islands
- Seasonal service to Bailey Island in Harpswell
- Serving island residents, tourists, visitors, contractors, businesses, mail, school children, commuters, etc.



# Organization

- Have a 12 Member Board of Directors
  - 3-year terms
  - 10 elected from the islands served
  - 2 appointed (1 - State, 1 - City of Portland)
- Oversight from Several Organizations
  - United States Coast Guard
  - Public Utilities Commission
  - Department of Homeland Security
  - Federal Transit Administration

# CBL TAM Plan Assets



- ☐ 5 Primary Vehicles - Ferries
- ☐ Freight Equipment



# CBL TAM Plan Assets



- ☐ Terminal Facility on the Mainland
- ☐ Pier Facilities on Mainland & Each Island

# Asset Breakdown

- Need to break down primary assets in smaller elements
- **Ferries**
  - Main Engines - Gear Boxes - Generators - Radars
  - Radios - Elevators/Lifts - Controls





# Asset Breakdown

- **Piers**
  - Fender Systems - Moveable Gate Ramps - Motors
  - Vehicle Transfer Bridge - Pumps
- **Freight Equipment**
  - Cranes - Forklifts - Cargo Van - Misc. Freight Equipment





# TAM Plan Purpose

- ❖ Needed to be simple and understandable
- ❖ Needed to be useable by different groups/staff
- ❖ Needed to be effective with changing members
- ❖ Needed to help meet various oversight requirements



# MomenTAM – How We Use

- New Staff Familiarity
  - New Maintenance Manager
- Board Member Education & Prioritization
  - At Least 3 Members up for Re-election Every Year
  - Board Sets Direction/Priorities
- Capital Planning
  - Short Range
  - Long Range

| Vessel Name                   | Length                 | Beam                  | Draft          | Gross Tonnage          | Top Speed                      | Year Built |
|-------------------------------|------------------------|-----------------------|----------------|------------------------|--------------------------------|------------|
| Machigonne II                 | 122 feet               | 37 feet               | 8 feet         | 88                     | 10.5 Knots                     | 1987       |
| Vessel Capacity               | Engines (Current Hrs.) | Vessel Classification | Elevator       | Freight Crane          | Last Coast Guard Certification | Generators |
| 399 Passengers<br>12 Vehicles | 2 CAT Diesels          | Sub-Chap K            | Yes            | No                     | 2018                           | 2          |
| # of Restrooms (Heads)        | # of Props             | Size of Props         | ADA Accessible | Engines Rebuilt (Year) | Engines Replaced (Year)        | ULB        |
| 4                             | 2                      | 46 x 41               | Yes            | 2014                   | 2002                           | 30         |



NOTES/COMMENTS:

| Original Cost              | Designed By                 | Built By                    | Scheduled Replacement |              | General Condition |
|----------------------------|-----------------------------|-----------------------------|-----------------------|--------------|-------------------|
| \$1,500,000                | Blount Marine<br>Warren, RI | Blount Marine<br>Warren, RI | Early<br>2018         | Late<br>2020 | I                 |
| Estimated Replacement Cost | Duration to Design          |                             | Duration to Construct |              | DATE              |
| \$9,000,000                | 12 months                   |                             | 18 – 20 months        |              |                   |

# MomenTAM – How We Integrate

- Maintenance
  - Paper Logs/Records
  - Perceived Coast Guard Expectations
- Led to Adoption of a PM Software System
  - Electronic Records
  - Automated Scheduling of Tasks
  - Tracking
  - Tied to Financial System

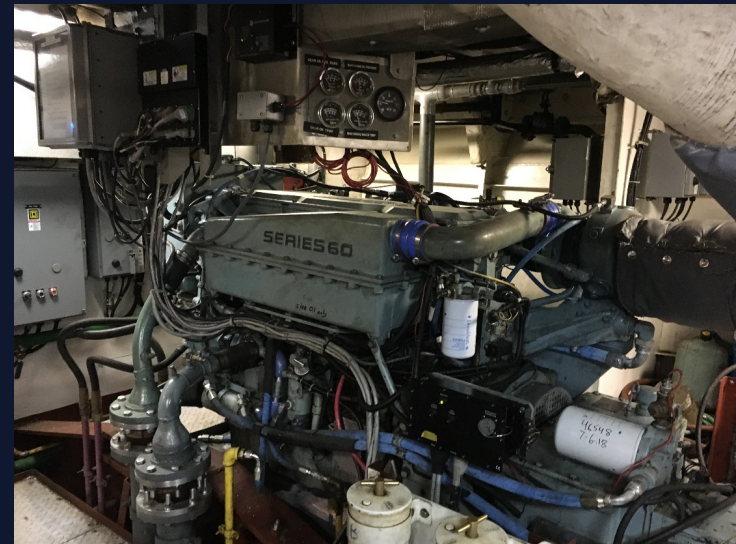


# MomenTAM – How We Integrate

- Historic Performance Records
  - Harsh Marine Environment
  - Predictable Failures
  - Coast Guard Compliance for Certifications

| Asset Category        | Asset Class         | Asset Location | Make/Model               |
|-----------------------|---------------------|----------------|--------------------------|
| Equipment             | Engine (Starboard)  | Aucocisco III  | Detroit Diesel Series 60 |
| Serial #              | Year Put in Service | Purchase Price | Year Re-Built/Overhauled |
| O6R0792508            | 2006                | N/A            | 2013                     |
| Useful Life Benchmark | Condition Rating    |                |                          |
| 15 yrs.               | 4                   |                |                          |

Notes: Should go 20,000 to 25,000 hours and then may need to re-build, not replace. The original should last for the life of the vessel, just needs to be re-built several times to replace worn parts.



| Planned Replacement | Est. Replacement Cost | Year Replaced | Method of Disposition |
|---------------------|-----------------------|---------------|-----------------------|
| 2028                | \$80,000              |               | Discard               |
|                     |                       |               |                       |
|                     |                       |               |                       |

# MomenTAM – How We Integrate

## Preventative Maintenance System

- Task Identification
- Easy Assignments to Staff
- Tracks Work Progress & Completion
- Accountability
- Establish Future Maintenance Intervals
- Electronic Records

| ASSET CATEGORY | ASSET CLASS  | ASSET NAME/ LOCATION | MAKE/ MODEL   | ID NO.            | IN SERVICE YEAR | ULB (Yrs.) | YEAR TO BE REPLACED | CONDITION ASSESSMENT |
|----------------|--------------|----------------------|---------------|-------------------|-----------------|------------|---------------------|----------------------|
| Rolling Stock  | Ferry Vessel | Machigonne II        | Vehicle/Pass  | 122' Ferry        | 1987            | 30         | 2019                | 1                    |
| Rolling Stock  | Ferry Vessel | Bay Mist             | Passenger     | 85' Ferry         | 1985            | 30         | 2025                | 2                    |
| Rolling Stock  | Ferry Vessel | Maquoit II           | Passenger     | 98' Ferry         | 1994            | 30         | 2024                | 2                    |
| Rolling Stock  | Ferry Vessel | Aucocisco III        | Passenger     | 110' Ferry        | 2005            | 30         | 2035                | 4                    |
| Rolling Stock  | Ferry vessel | Wabanaki             | Passenger     | 110' Ferry        | 2013            | 30         | 2043                | 5                    |
| Equipment      | Van          | Cargo                | Dodge         | 3C6TRVBG2HE530300 | 2017            | 7          | 2024                | 5                    |
| Equipment      | Forklift     | Freight Area         | Toyota 8FGU25 | 71871             | 2016            | 10         | 2026                | 5                    |
| Equipment      | Forklift     | Freight Area         | Toyota 8FGU25 | 71845             | 2016            | 10         | 2026                | 5                    |

# MomenTAM – How We Integrate

- TAM Plan Captures Capital Costs
- Assisted with PM Software System Population
- Assist with Yearly Reporting
- Eventually Desire to Connect the Two System to Populate Vital Information.

| ASSET CATEGORY | ASSET NAME                               | YEAR OF REPLACEMENT | REPLACEMENT COST |
|----------------|--|---------------------|------------------|
| Equipment      | Aucocisco Port & Starboard Generators    | 2018                | 80,000           |
| Equipment      | Aucocisco Port & Starboard Radios        | 2018                | 1,300            |
| Equipment      | Machigonne Port Generator                | 2019                | 40,000           |
| Rolling Stock  | MV Machigonne II*                        | 2020                | 9,000,000        |
| Equipment      | Aucocisco Port & Starboard Reverse Gears | 2021                | 100,000          |
| Equipment      | Gate 1 Ramp Winch                        | 2022                | 25,000           |
| Equipment      | Gate 2 Ramp Winch                        | 2022                | 25,000           |
| Equipment      | Pontoon Pumps (both)                     | 2023                | 6,000            |
| Equipment      | Wabanaki Electronic Controls             | 2023                | 45,000           |
| Equipment      | Wabanaki Port & Starboard Radars         | 2023                | 20,000           |
| Equipment      | Wabanaki Port & Starboard Radios         | 2023                | 1,300            |
| Equipment      | Wabanaki Port & Starboard Generators     | 2023                | 80,000           |
| Rolling Stock  | MV Maquoit II*                           | 2024                | 7,500,000        |
| Equipment      | Cargo Van                                | 2024                | 46,000           |
| Equipment      | Machigonne Starboard Generator           | 2024                | 40,000           |



# **MomenTAM – IT WORKS!!**

- TAM Plan is and will be a Work in Progress
- TAM Plan is:
  - A Tool for Tracking
  - A Way of Prioritization
  - A Means of Educating
  - A Way to Maintain a State of Readiness

## **Make Your TAM Plan Work for You!**