

NGEC - SFTF

Structure and Finance Task Force

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Section 6 Project Update



The NGEC will provide national leadership in standardization, acquisition, financing and management of passenger rail equipment.

Key priorities related to the ownership, maintenance, and management of rail equipment



Efficient and cost-effective utilization of equipment, both in-state and multi-state corridors



Deployment of equipment that allows for adjustments due to demand changes including seasonal adjustments



Standardization of intercity rail passenger equipment, its management, maintenance, and related documentation



Minimization of commercial life-cycle costs (LCC) over the equipment's expected lifetime



Adequate Funding for operations, maintenance, and overhauls (including facilities and tooling) over the equipment's lifecycle



Equitable allocation of costs



Adequate ownership models and structure



Project Tasks

- Project has three tasks:
 - Task 1 – Development of standards and recommendations
 - Task 2 – Development of MW Section 6 Plan
 - Task 3 – Development of guidance/handbook
- Consultant has completed Task 1; next several slides elaborate findings
- No work has been initiated on Tasks 2 and 3

The Task 1 report focusses on 4 main topic areas

1. Equipment Management

2. Equipment Maintenance

3. Equipment Assignment and Deployment

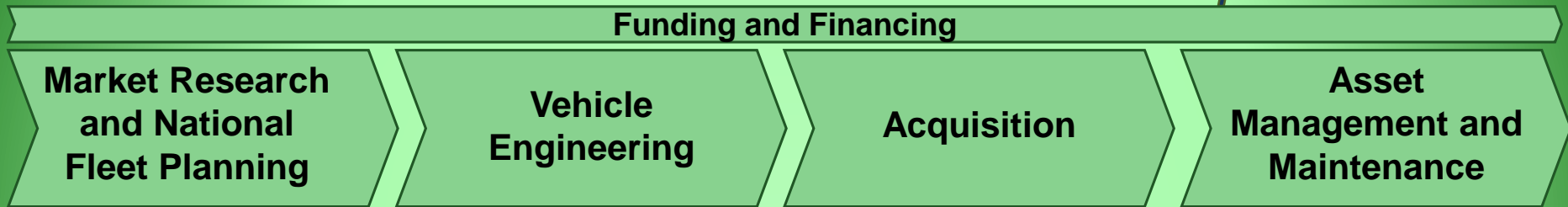
4. Equipment Financing and Cost Sharing



Equipment Management organizes all activities over the equipment's' lifecycle

An entity that owns and manages equipment will have to perform or cause to perform all these functions listed below.

Simplified Illustration



- Planning
- Forecasting
- Market Analysis
- Requirements Analysis
- Deployment

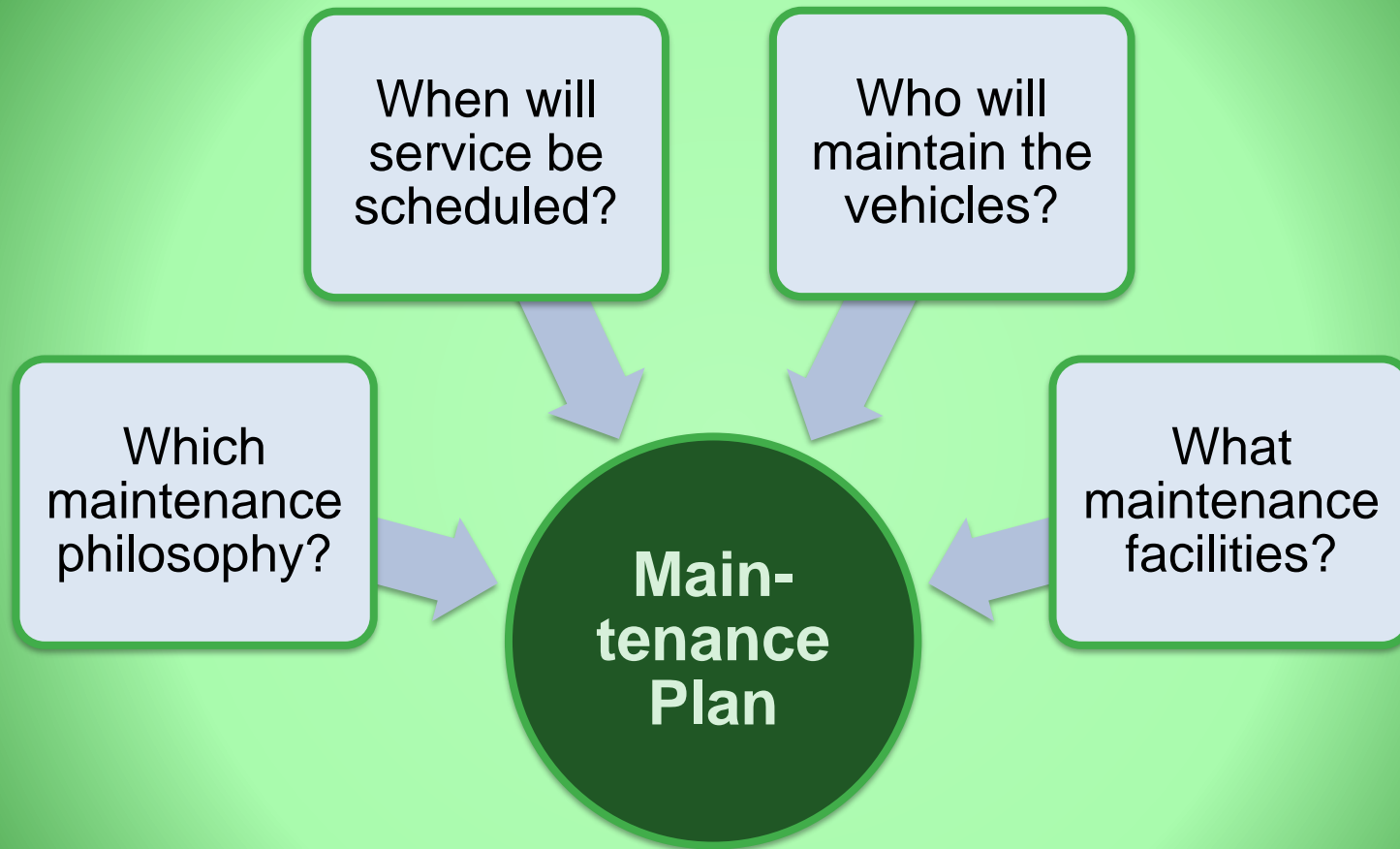
- Specifications
- Processes and Standards
- Configuration Management
- Systems and Tools
- R&D
- Maintenance Strategies and Standards
- Maintenance Procedures

- Procurement regulations and procedures
- Buying
- Testing
- Delivery
- Disposition

- Inventory (asset register)
- Maintenance execution
- Life Cycle Cost model
- Rehabs/overhauls/modifications
- Operations
- Disposal at end of life



Equipment Maintenance is a cost driver in lifecycle cost and needs to be well planned and executed



Ideally, state of the art maintenance practices should be used for the PRIIA equipment

Scheduled Inspection & Preventive Maintenance

OEM Recommendations and Best Practices plus Mid-life Overhaul

Life Cycle Maintenance

"Predictive" program to repair or replace components based on data predicting when failure is likely to occur

Reliability Centered Maintenance

Extension of Life Cycle Maintenance that prioritizes maintenance tasks based on their effects



Preferred maintenance philosophy to ensure low lifecycle cost and high equipment reliability



Maintenance provider options

- In-house maintenance (e.g., NJ Transit, SEPTA, LIRR)
- In-house management contracting maintenance to vendors
 - Short-term maintenance contract
 - Long-term maintenance contract or concession
- Single-source to Amtrak for management and maintenance



Deployment of Equipment can be based on public mobility/benefits or can be purely financially driven

Alternative concepts to deploy equipment:

1. Deliver service preserving minimum service levels and ensuring public mobility and benefits
2. Deploy equipment based on “purely” financial considerations (such as cost-revenue, utilization, and revenue maximization etc.)
3. In reality, actual deployment decisions will involve balancing these considerations based on a trade-off between protecting basic public mobility and financial considerations



Equipment Financials discuss funding and financing of new equipment and how costs are shared

Funding /Financing:

1. Federal funding
2. Federal financing
 - RRIF
 - TIFIA
3. Commercial financing
4. PPP models with private equity
5. Any combination of 1 to 4

Cost Allocation / Pricing:

1. Time based
2. Usage based
3. Combination of 1 and 2
4. Specific to operating and capital cost



Next Steps: Task 2 “MW Section 6 Plan” to transition ownership from NGEN to Midwest states

Actions:

1. Create multi-state project team taking over responsibility for this project – first meeting took place mid January
2. FRA to develop a requirements document for Section 6 Plan and provide continuous support
3. MW Project team to develop scope of work and project schedule, select external support, and initiate work
4. Close continuous collaboration with NGEN and FRA
5. Section 6 plan to be developed in 2014 well ahead of equipment deliveries to allow plan implementation



The Midwest needs to develop its multi-state Section 6 Plan applying the best practices

1. Equipment Ownership

- Who will own the equipment?
- What will the ownership structure be? One entity vs. distributed structure?

2. Equipment Management

- How will the equipment be managed? Who will make management decisions – how do states participate in decision making?
- How will pooled operations be managed?

3. Equipment Maintenance

- How will the equipment be maintained and high maintenance standards sustainably achieved?
- Who will maintain the equipment?
- How will maintenance funded/financed, especially overhaul investments?

4. Equipment Deployment

- How will equipment deployment decisions be made, short-term and long-term?
- Regional and national deployment

5. Equipment Financials

- Operating funds
- Cost sharing of operations and maintenance cost



- Multiple states and services
- Strong ridership growth
- Cross state border corridors

One equipment pool – one solution

