THE UNIVERSITY OF ALABAMA IN HUNTSVILLE
Research Institute

RELIABILITY AND FAILURE ANALYSIS LABORATORY

Elements of Cost Modeling:
Lost Opportunity Costs

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RAM VI

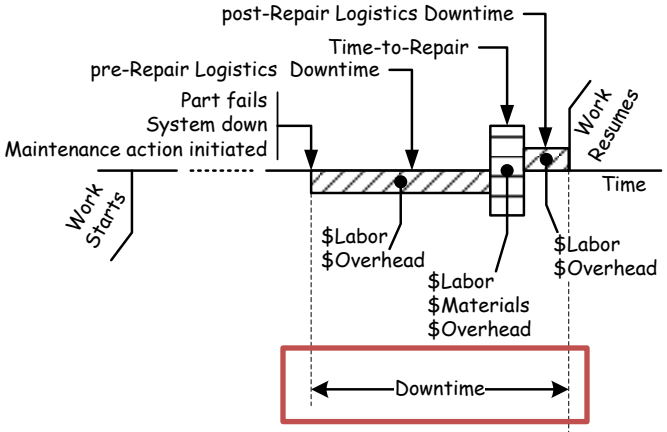
Goal

- The benefits of proactive Maintenance
  - Decreases System Downtime
  - Reduces Repair time
  - Optimize Sparing
  - Fewer unscheduled maintenance operations

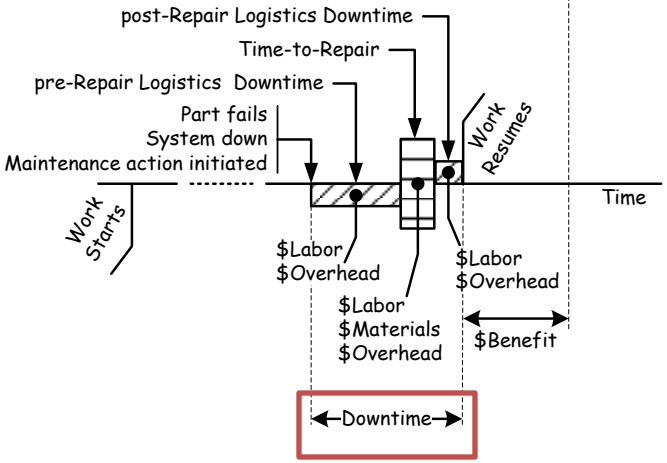
Lost Opportunity Cost

Downtime

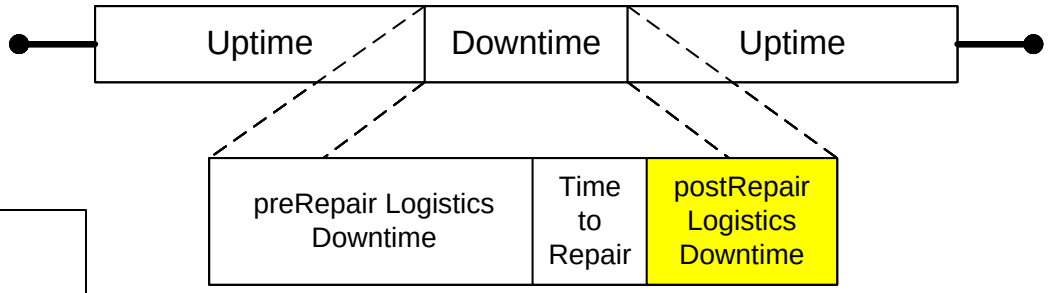
Reactive Maintenance



Proactive Maintenance



Downtime



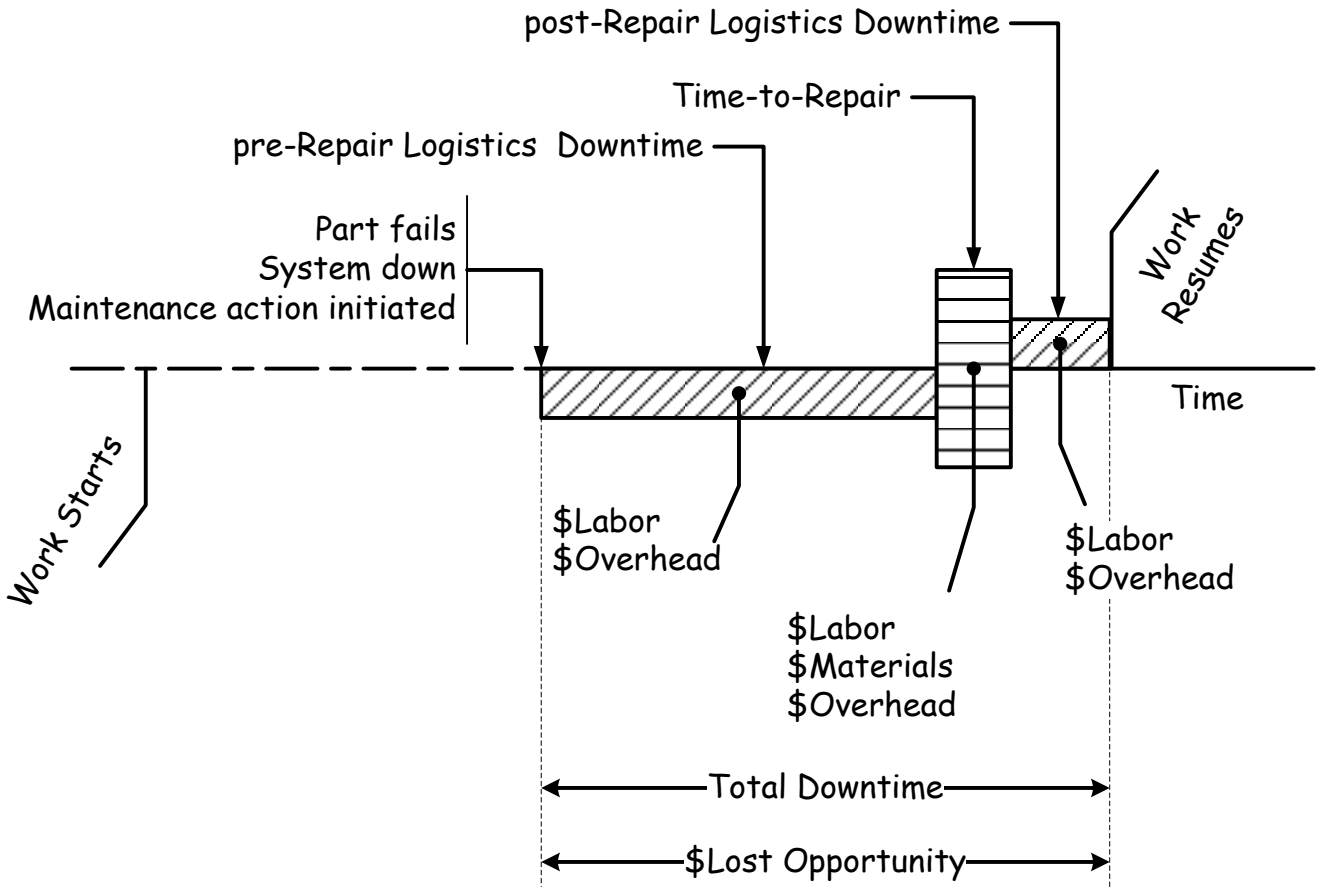
Waiting on…
- Labor
- Facilities
- Tools
- Spare Parts

Administrative Events…
- Scheduling
- Initiate repair documentation
- Spare parts documentation

Direct Repair activities…
- Fault Detection
- Fault Isolation
- Remove failed part
- Install replacement part
- Verify repair

Return to service activities…
- Complete repair documentation
- Transport system to operations or storage site
- Anything else that delays return to service

Lost Opportunity Costs



Proactive Vs Reactive Maintenance

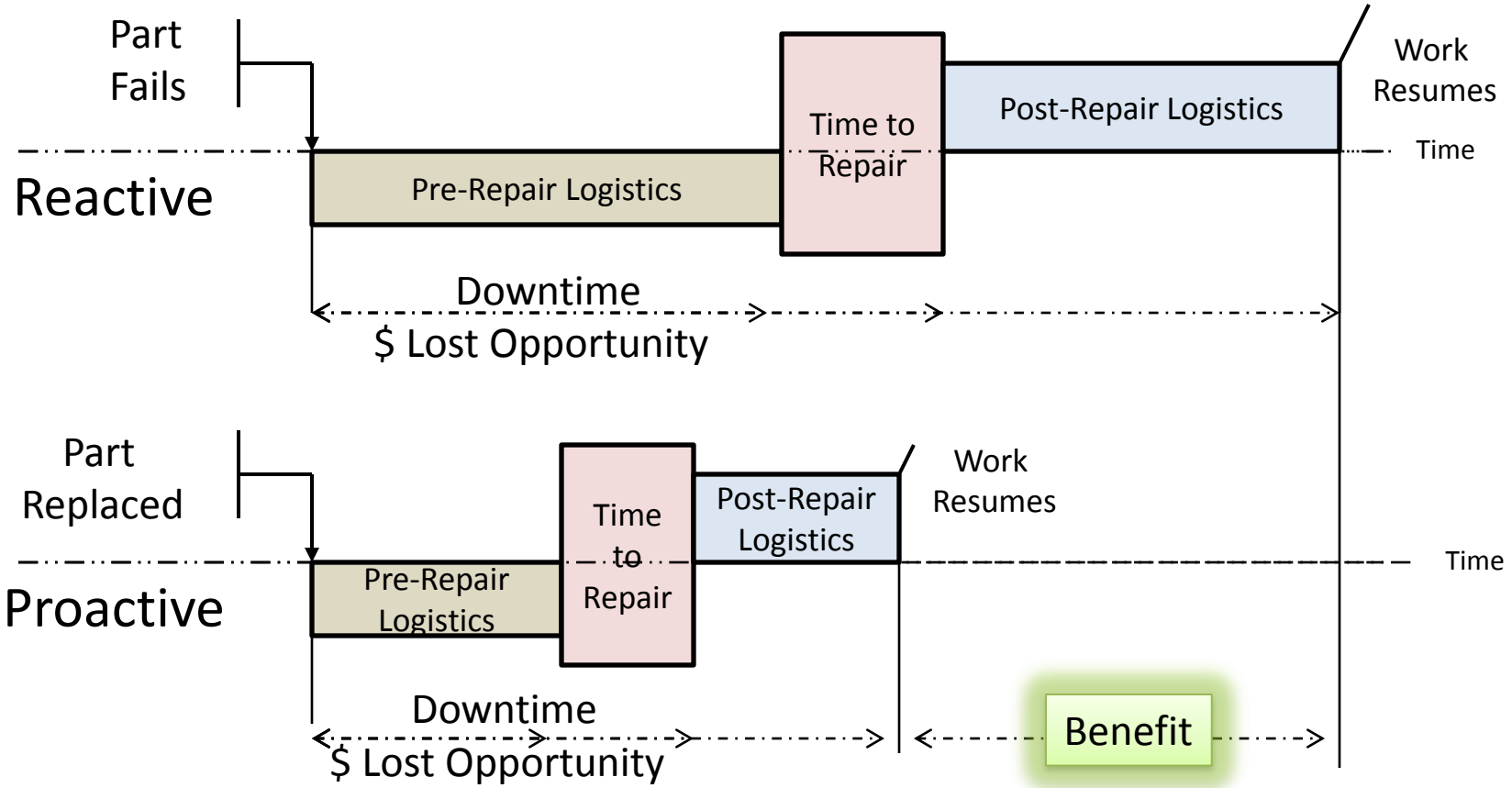
Reactive

- Unscheduled
- Repairs performed in the field
- Long Downtime

Proactive

- Scheduled
- Repairs performed in maintenance facility
- Optimizes Sparing
- Reduces Downtime

Lost Opportunity Proactive Vs Reactive



Questions?