

## Financial Boundaries, Gaps and Disconnects or Why Systems Fall Short When it Comes to Sustainment - A Systemic Problem -

Concept / Pre-Award Phase **Design / Development Phase** 

Transitions (Problem Areas)

Manufacturing / Production Phase

Sustainment Phase
Operational & Maintenance Support

**Acquisition Cost** 

**Acquisition Cost** 

Unit Prod. Cost

Sustainment Cost

Team **P** 

Team **D** 

Team **M** 

Team **S** 

Budgetary Boundary phase / Team is successful, efficient, cost effective or sustainable
Accountability & Responsibility End the
End of Each Phase – Team members
move on to other programs

Little or no incentive to ensure next

Diagnostic Design has perhaps the <a href="largest impact">largest impact</a> to the next two phases....but what's the consequence of not doing a good job?

**Design / Development Contract Funded** 

Accountability /Responsibility Gaps

No vested interest; no incentive, no punishment, etc.... From one phase to the next

Manufacturing /
Production Contract
Funded

Different Teams throughout the
Lifecycle
Different Requirements Not directly
related to the End Goal
Different Funding Profiles (buckets)
and Priorities
Different Program Managers

- \* No Accountability Going Forward
- \* Typically Very Little Continuity

End Goal:
Minimize Lifecycle
Costs while
efficiently
meeting all
operational,
maintenance &
logistics

requirements

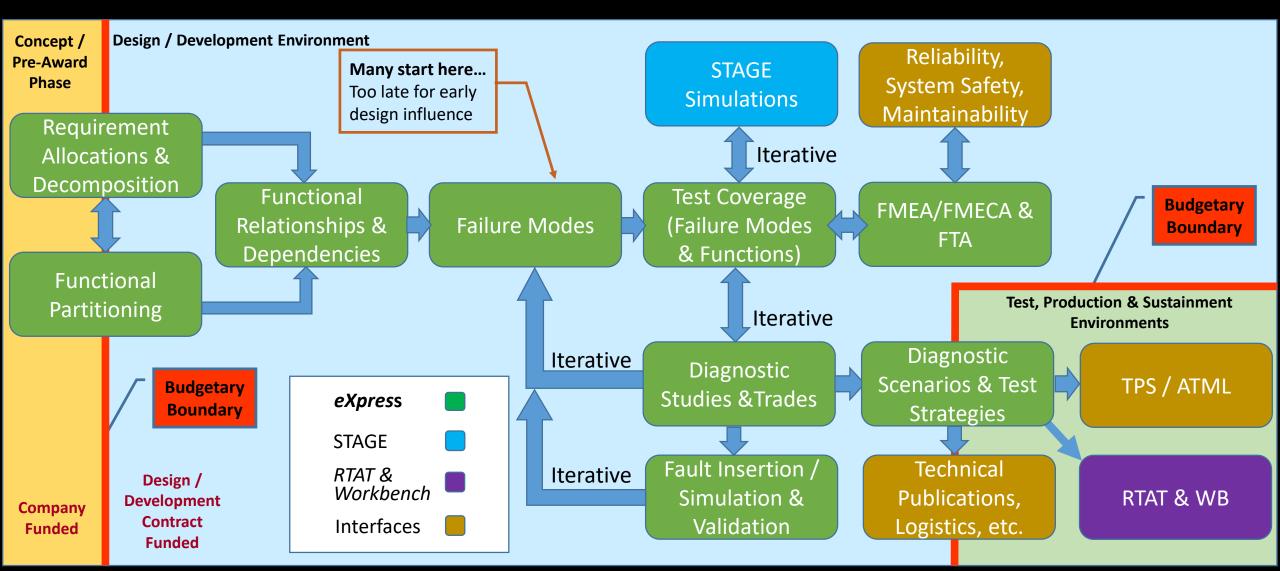
Customer Funded
Though some depot funding may come back to contractor

Typically Company
Funded
Though sometimes CRAD or

Though sometimes CRAD o Down-Select Funding is provided

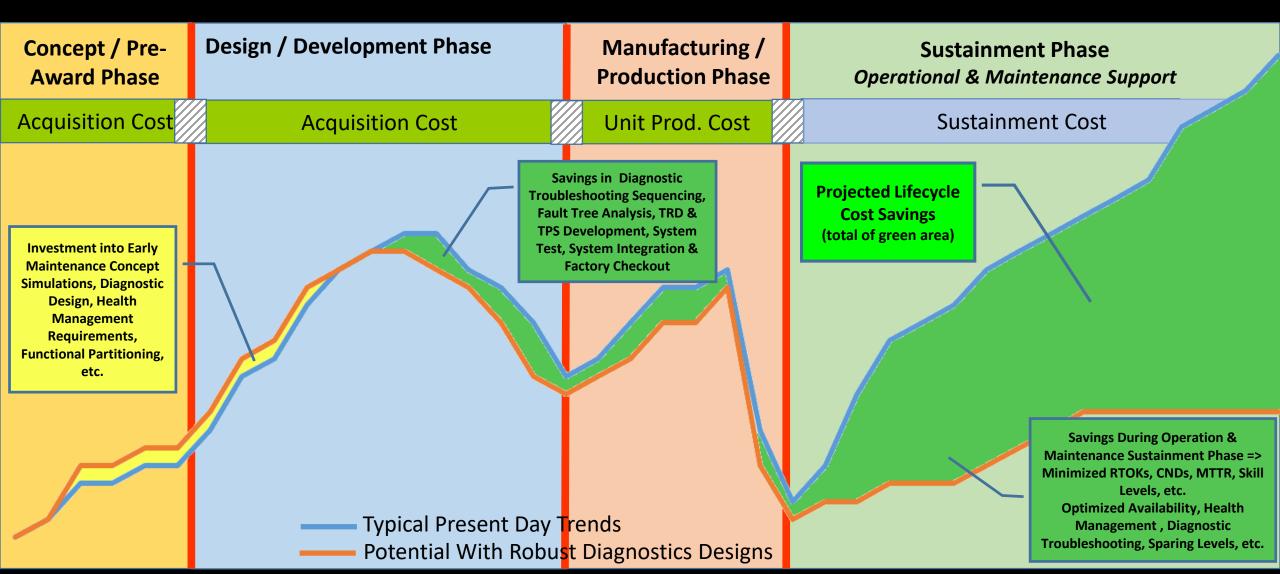


## Diagnostic Design Development Data Flow





## Early Investment = Optimized Designs = Maximized Reuse = Lifecycle Savings





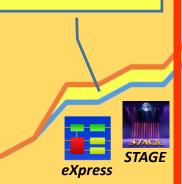
## **DSI ISDD Tool Applications By Phase** to Optimize Total Lifecycle Benefits

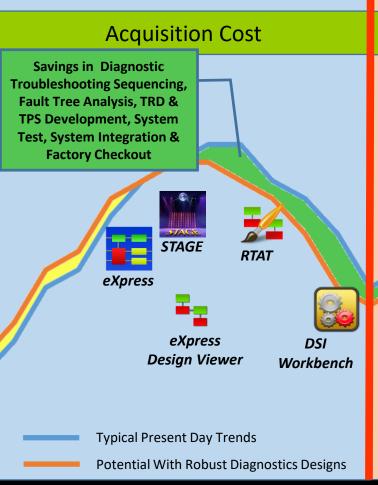


Concept / Pre-Award Phase

**Acquisition Cost** 

Investment into Early
Maintenance Concept
Simulations, Diagnostic
Design, Health
Management
Requirements,
Functional Partitioning,
etc.





**Design / Development Phase** 

Manufacturing / Production Phase

Unit Prod. Cost



Sustainment Phase
Operational & Maintenance Support

**Sustainment Cost** 

Projected Lifecycle
Cost Savings
(total of green area)



Savings During Operation &
Maintenance Sustainment Phase =>
Minimized RTOKs, CNDs, MTTR, Skill
Levels, etc.

Optimized Availability, Health
Management , Diagnostic
Troubleshooting, Sparing Levels, etc.