



# “Streamlining Assessment and Capital Planning with Standardization, Coordination and New Technologies”

Presented by

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&

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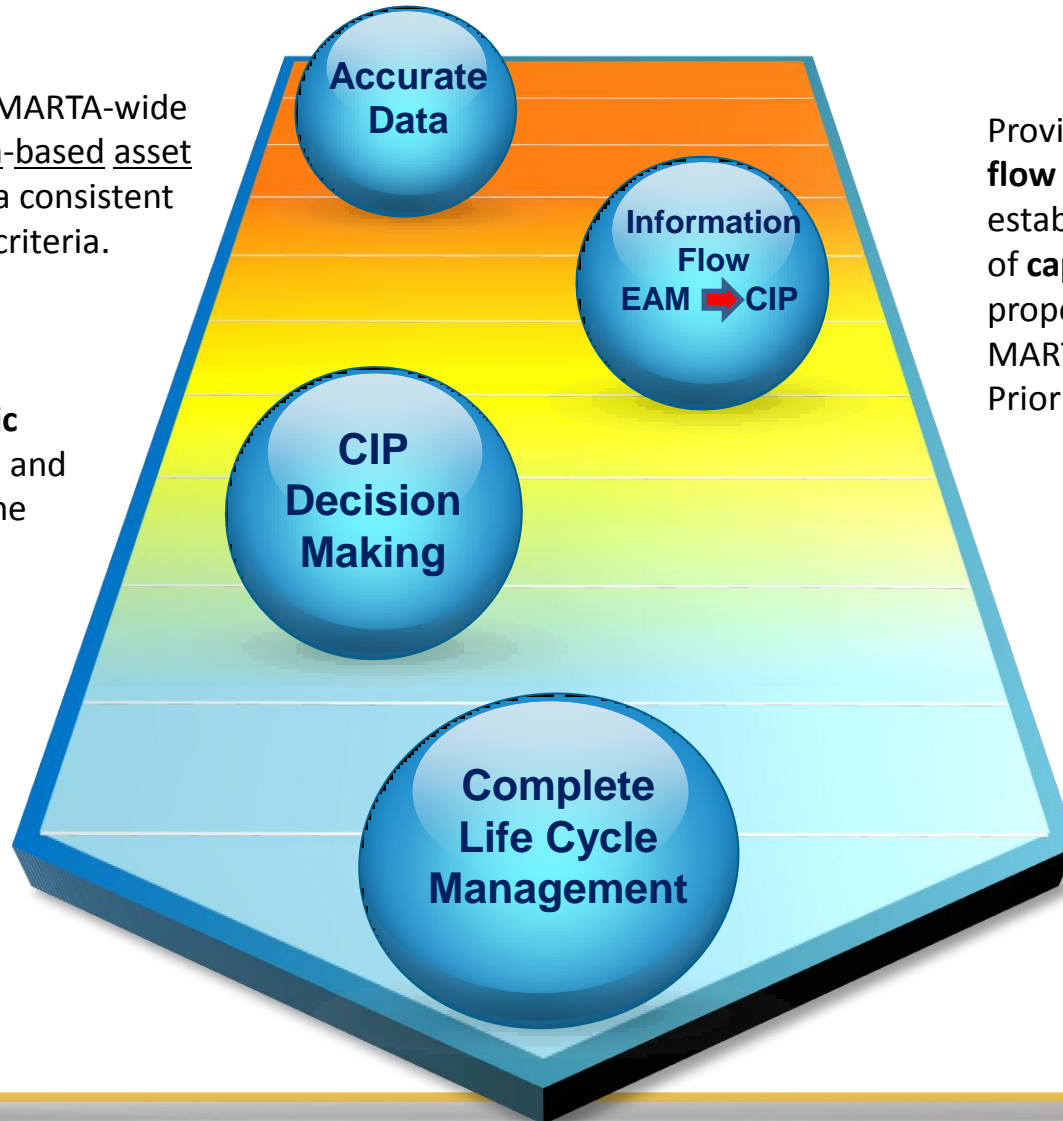
Asset Management/SGR Business Analyst



# Asset Management Vision

Implement a single MARTA-wide system for condition-based asset replacement, using a consistent set of prioritization criteria.

Establish a **systematic program** to prioritize and identify projects in the long-range Capital Improvement Plan.

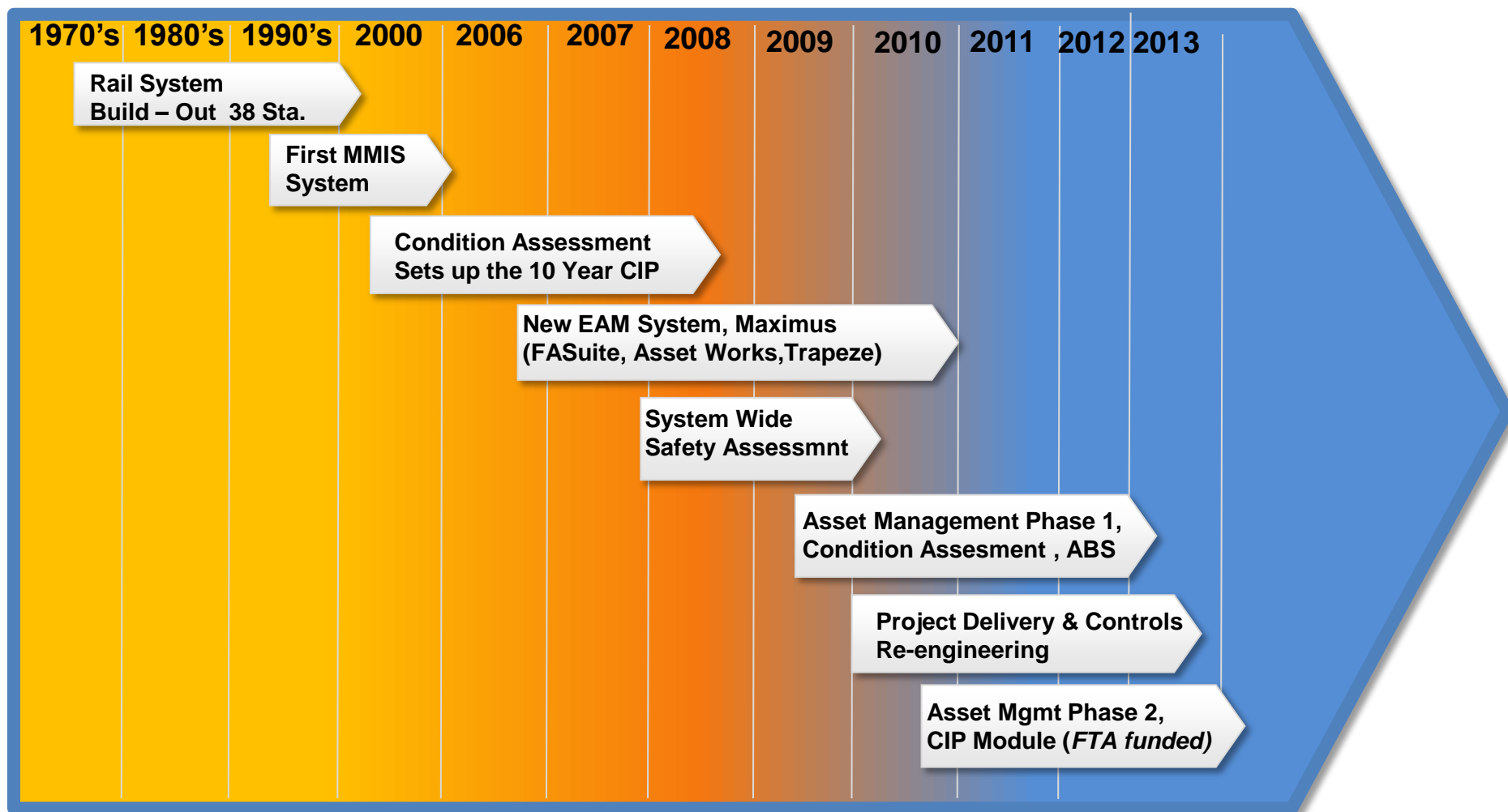


Provide a continual **flow of information** for establishing the priority of **capital initiatives** properly aligned with MARTA's Strategic Priorities.

**Deliver projects** using the most cost effective delivery method for the application; ensure deliverables required to manage the investment over its **complete life cycle** are accounted for.



# AMP Evolution

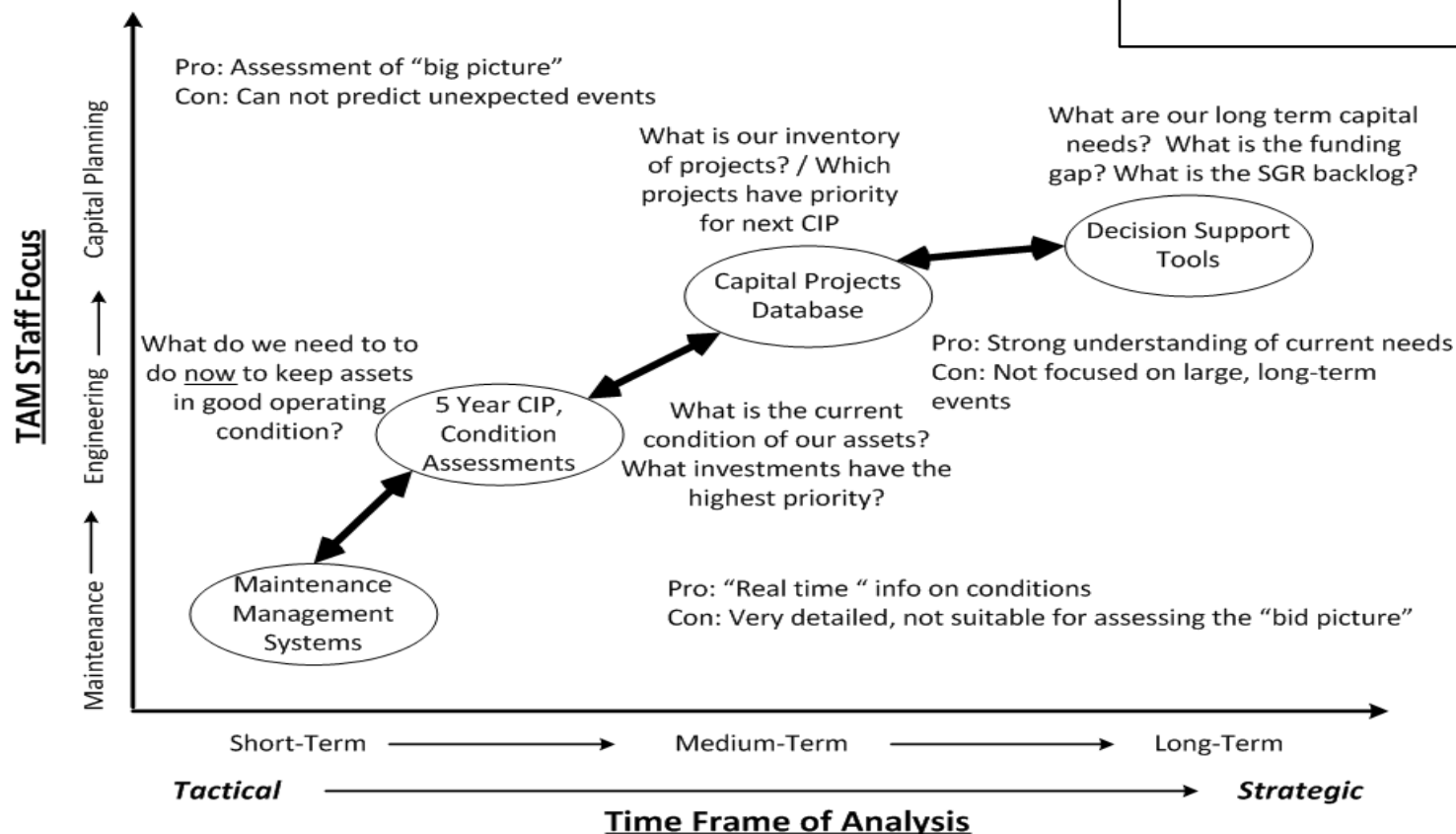




# Transit State of Good Repair Continuum

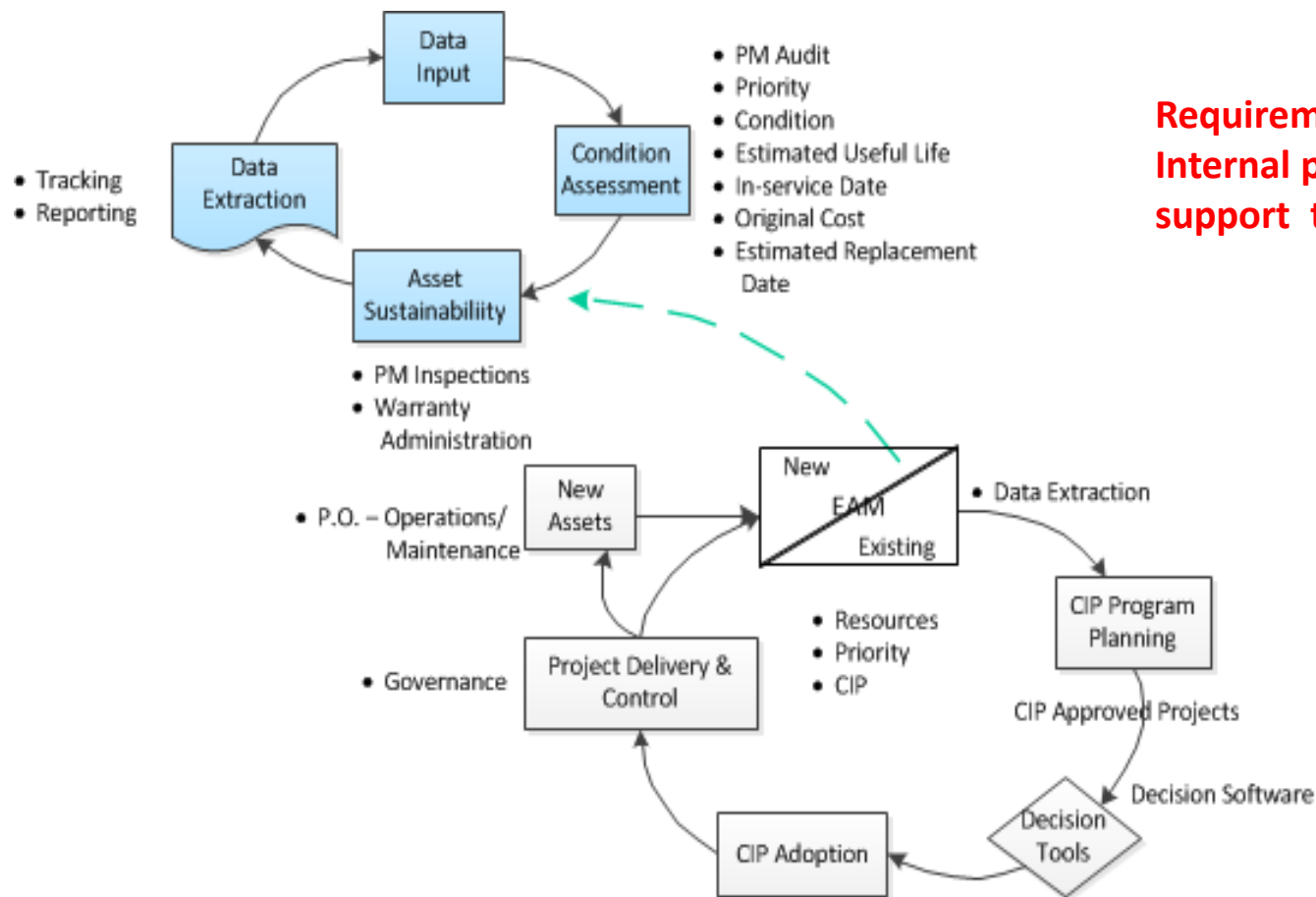
## State of your...

- Asset Data
- Asset Mgmt System
- Capital Program
- Decision Tools
- Project Delivery Program





# MARTA's Systems Approach to AMP



**Requirements driven:  
Internal processes  
support the AMP!**

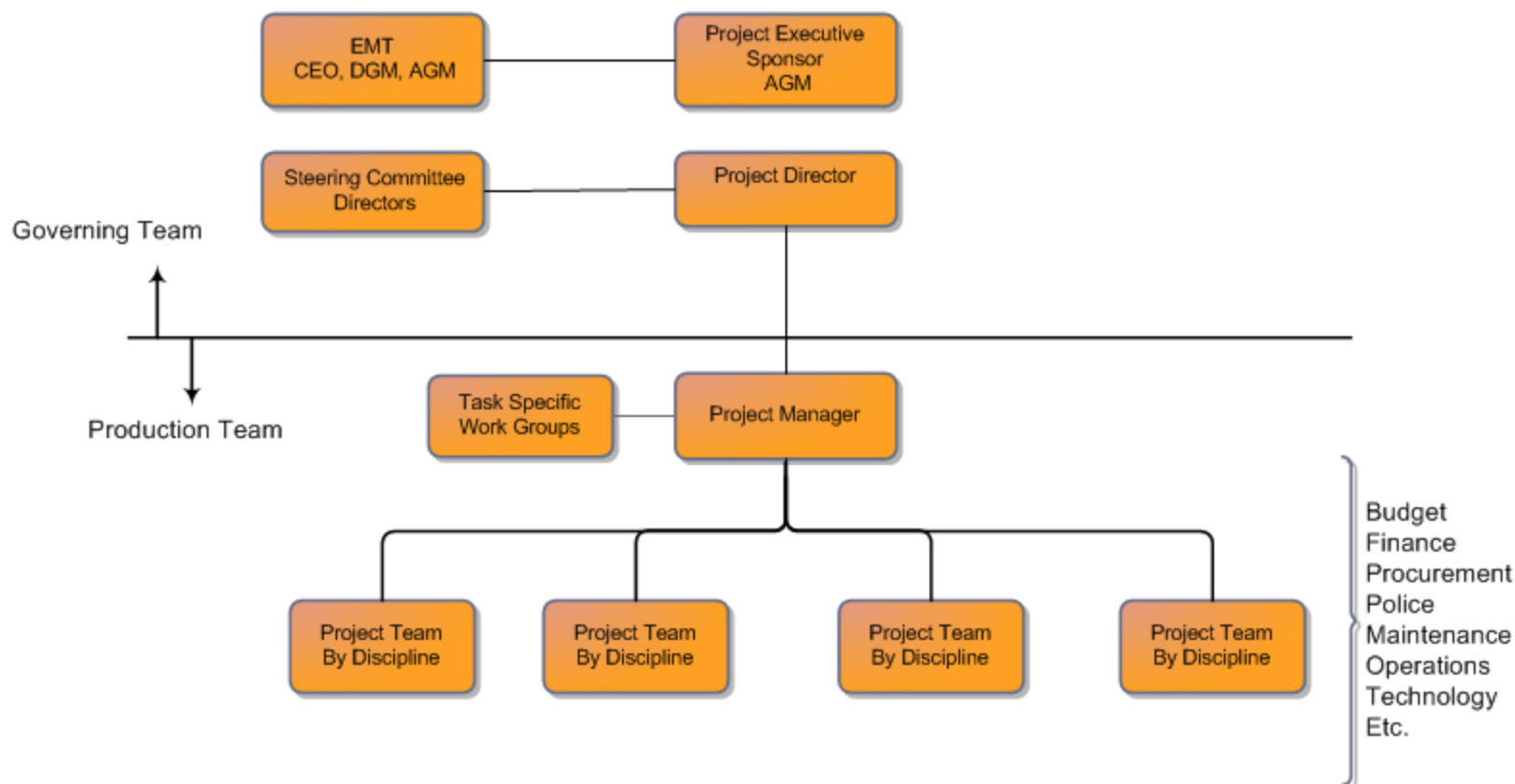
**Executive decision  
making bolstered by  
improved asset  
management intelligence!**



# Project Team Structure

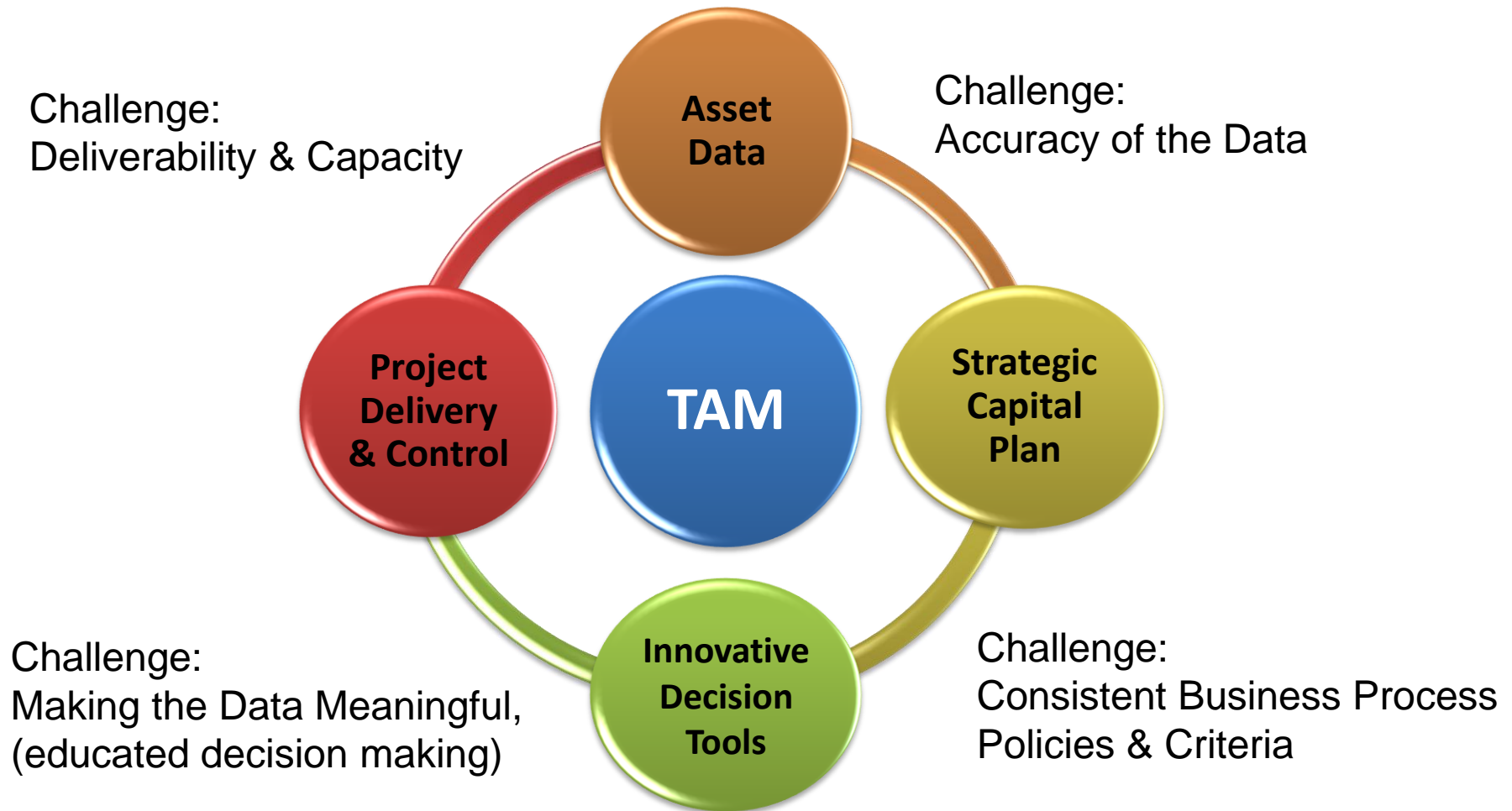


## SGR Asset Management Project Team Structure





# Four Building Blocks of MARTA's TAM Program

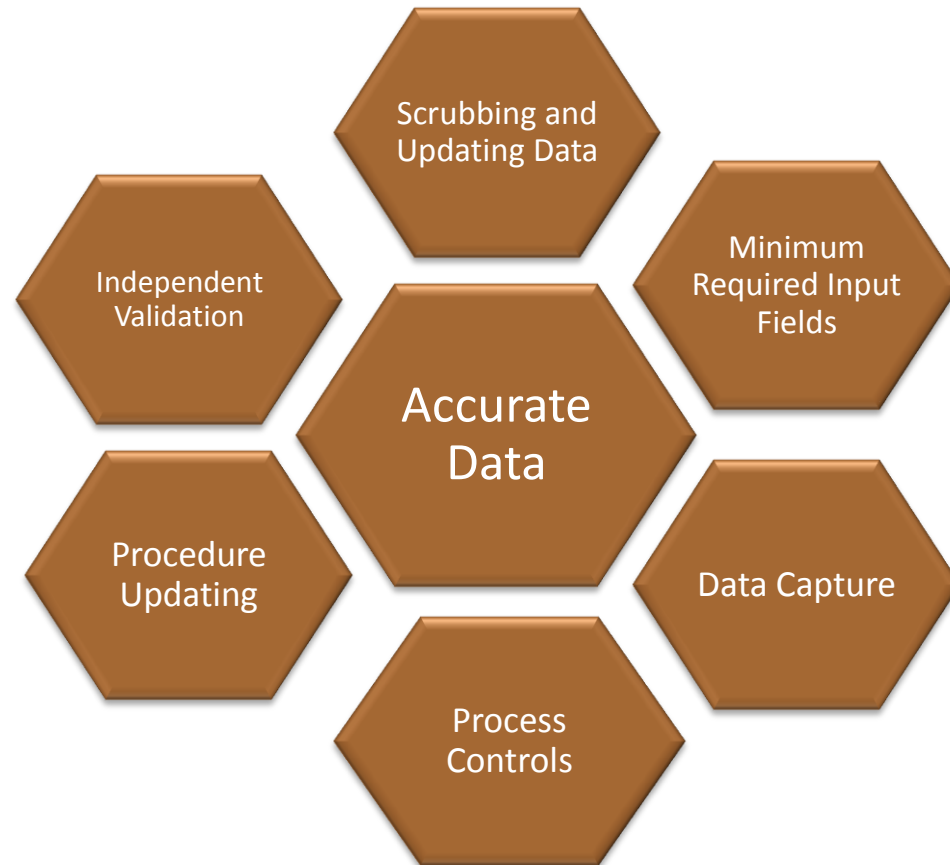
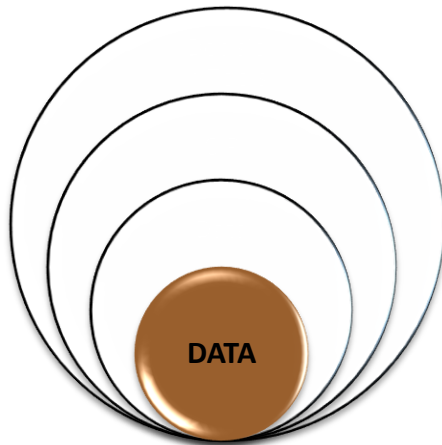






# Solid Accurate Asset Data

Over 53,000 Assets  
Over \$6B in value

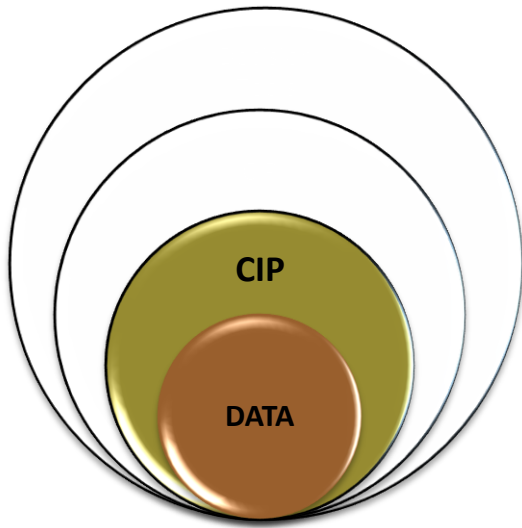






# Strategic Capital Improvement Plan

Annual CIP dropped from \$386M to \$185M over a 4 years period due to tax revenue shortfalls.





# Capital Projects Condition Options: Meeting Critical Needs First

Rail - CIP Proposed FY13-FY22.xlsx [Read-Only] - Microsoft Excel

File Home Insert Page Layout Formulas Data Compare Review View

Cut Copy Paste Format Painter Clipboard Font Wrap Text Merge & Center Alignment Number Conditional Formatting Styles Cell Styles Insert Delete Format Fill Sort & Find & Filter Select

B2 Implementation

Rail - CIP Proposed FY13-FY22.xlsx

	A	B	C	D	E	F	G	H	I	J	K	L	U
	Proj	Category	Project Name	Phase	Program Prior	Condition Rating	Funding Source	Operating Impact	Total Proj	Project Spons	Project Champ	Proj Man	FY18 moy
1	31705	Implementation	Emergency Trip S				Partial Federal	Cost Savings < 10%	8.40	Rich Krisak	Garry Free	Ursula Bradle	
2	31687	Implementation	Repl Impedance E Ph 1				Partial Federal	Cost Savings < 10%	7.80	Rich Krisak	Garry Free	Ursula Bradle	
3	31690	Implementation	Loops Interlockin 2 & 3				Partial Federal	Cost Savings < 10%	7.80	Rich Krisak	Garry Free	Ursula Bradle	
4	31303	Implementation	Replace Facility A Equip				Potential Federal	Cost Savings > 10%	7.70	Rich Krisak	Fred Remen	Lev M...	\$50
6	31707	Implementation	Tunnel Lighting				Partial Federal	Cost Savings > 10%	7.00	Rich Krisak	Garry Free	Ursula Massello	\$1,000
17	31698	Implementation	Fire Protection S Upgrade				Partial Federal	Neutral	6.80	Rich Krisak	David Springstead	Patrick Minnucci	\$3,381
20							Partial Federal	Neutral	6.80	Rich Krisak	Garry Free	Rhonda N. Allen	\$82
21	31810	Implementation	CN915 & CER30 G				100% Local	Neutral	6.80	Rich Krisak	Garry Free	[TBD] o	\$400
30	31305	Implementation	Roofing Rehabilit Program				Partial Federal	Neutral	6.20	Rich Krisak	Garry Free	Stephen Alexander	\$395
31	31683	Implementation	Auxiliary Power S Gear				Partial Federal	Neutral	6.20	Rich Krisak	Garry Free	Stephen Alexander	\$151
37	32060	Implementation	TPSS SSI Equipm Plment				Partial Federal	Neutral	6.20	Rich Krisak	Garry Free	Stephen Alexander	\$151
38	31832	Implementation	Procurement of Fasteners				Potential Federal	Neutral	6.10	Rich Krisak	Garry Free	Ursula Bradley	\$20
40	31691	Implementation	LCAFE CQ312 42 Month Cycle				100% Local	Cost Savings < 10%	6.00	Rich Krisak	Joe Erves	Tesa Gonzales	\$128
41	31726	Implementation	LCAFE CQ311 42 Cycle				100% Local	Cost Savings < 10%	6.00	Rich Krisak	Joe Erves	Tesa Gonzales	\$1,546
42	31738	Implementation	Asset Managem Program				Partial Federal	Cost Savings < 10%	6.00	Rich Krisak	David Springstead	Dave Springstea	\$713
43	31750	Implementation	LCAFE CQ312 60-Month Cycle	Implementation	State of Good Repair	Substandard	100% Local	Cost Savings < 10%	6.00	Rich Krisak	Joe Erves	Tesa Gonzales	\$621
44	31753	Implementation	LCAFE CQ312 84-Month Cycle	Implementation	State of Good Repair	Substandard	100% Local	Cost Savings < 10%	6.00	Rich Krisak	Joe Erves	Tesa Gonzales	\$1,879
49	31724	Implementation	Renovate Operating Facilities	Implementation	State of Good Repair	Substandard	100% Local	Neutral	5.60	Rich Krisak	Garry Free	Stephen Alexander	\$565
50	31811	Implementation	Girder Grout & Seal	Implementation	State of Good Repair	Substandard	100% Local	Neutral	5.60	Rich Krisak	Garry Free	Rhonda N. Allen	\$200
53	31969	Implementation	Lighting Controls Upgrade	Implementation	State of Good Repair	Substandard	100% Local	Neutral	5.60	Rich Krisak	Garry Free	Laura Massello	\$124

OK Cancel

Sort A to Z  
Sort Z to A  
Sort by Color  
Clear Filter From "Condition Rating"  
Filter by Color  
Text Filters  
Search  
☒ (Select All)  
☒ Adequate  
☒ Excellent  
☒ Failed  
☒ Poor  
☒ Substandard  
☒ (Blanks)

Critical needs considered first

# Capital Projects Priority Options: Proper Alignment with Agency Priorities

**Ensures proper alignment**

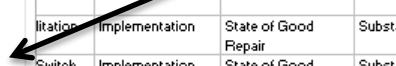
Project ID	Category	Project Name	Phase	Program Priority	Condition Rating	Funding Source	Operating Impact	Total Project Score	Personnel
31705	Implementation				Poor	Partial Federal	Cost Savings < 10%	8.40	Rich
31687	Implementation				Substandard	Partial Federal	Cost Savings < 10%	7.80	Rich
31690	Implementation				Substandard	Partial Federal	Cost Savings < 10%	7.80	Rich
31303	Implementation				Poor	Potential Federal	Cost Savings > 10%	7.70	Rich Krisak, Fred Remen, Lev Mebel
31707	Implementation				Poor	Partial Federal	Cost Savings > 10%	7.00	Rich Krisak, Garry Free, Laura Massello
31698	Implementation				Adequate	Partial Federal	Neutral	6.80	Rich Krisak, David Springstead, Patrick Minnucci
31810	Implementation				Substandard	100% Local	Neutral	6.80	Rich Krisak, Garry Free, Rhonda N. Allen
31305	Implementation				Substandard	Partial Federal	Neutral	6.20	Rich Krisak, Garry Free, [TBD]
31683	Implementation				Substandard	Partial Federal	Neutral	6.20	Rich Krisak, Garry Free, Stephen Alexander
32060	Implementation				Substandard	Partial Federal	Neutral	6.20	Rich Krisak, Garry Free, Stephen Alexander
31832	Implementation				Substandard	Potential Federal	Neutral	6.10	Rich Krisak, Garry Free, Ursula Bradley
31691	Implementation				Substandard	100% Local	Cost Savings < 10%	6.00	Rich Krisak, Joe Erves, Tesa Gonzales
31726	Implementation				Substandard	100% Local	Cost Savings < 10%	6.00	Rich Krisak, Joe Erves, Tesa Gonzales
31738	Implementation				Adequate	Partial Federal	Cost Savings < 10%	6.00	Rich Krisak, David Springstead, Dave Springstead
31758	Implementation	LCARE CQ312 60-Month Cycle	Implementation	State of Good Repair	Substandard	100% Local	Cost Savings < 10%	6.00	Rich Krisak, Joe Erves, Tesa Gonzales
31759	Implementation	LCARE CQ312 84-Month Cycle	Implementation	State of Good Repair	Substandard	100% Local	Cost Savings < 10%	6.00	Rich Krisak, Joe Erves, Tesa Gonzales
31724	Implementation	Renovate Operating Facilities	Implementation	State of Good Repair	Substandard	100% Local	Neutral	5.60	Rich Krisak, Garry Free, Stephen Alexander
31811	Implementation	Girdler Grout & Seal	Implementation	State of Good Repair	Substandard	100% Local	Neutral	5.60	Rich Krisak, Garry Free, Rhonda N. Allen
31969	Implementation	Lighting Controls Upgrade	Implementation	State of Good Repair	Substandard	100% Local	Neutral	5.60	Rich Krisak, Garry Free, Laura Massello



# Capital Projects: Meaningful Categories

	A	B	C	D	E	F	G	H	I	J	K	L	N	O	P
	Project	Category	Project Name	Phase	Program Priority	Condition Rating	Funding Source	Operating Impact	Total Project Score	Project Sponsor	Project Champion	Project Manager	FY12 Yr	FY12 Amount	FY13 Amount
1			Sts Gr 2:	Implementation	Safety Critical	Poor	Partial	Cost Savings < 10%	8.40	Rich Krisak	Garry Free	Ursula Bradley	\$1,886	\$2,275	\$1,886
			Bonds	Implementation	Regulatory	Subst					Garry Free	Ursula Bradley	\$312	\$500	
			ings Phs	Implementation	Safety Critical	Subst					Garry Free	Ursula Bradley	\$69	\$800	\$1,886
			Mech	Implementation	State of Good Repair	Poor					ed Remen	Lev Mebel	\$343	\$500	
				Implementation	Safety Critical	Poor					Garry Free	Laura Massello	\$1,000	\$900	\$1,000
			Systems	Implementation	Safety Critical	Adequ					avid ringstead	Patrick Minnucci	\$3,381	\$8,350	\$1,000
			Girder	Implementation	Safety Critical	Substandard	100% Local	Neutral	6.80	Rich Krisak	Garry Free	Rhonda N. Allen	\$82	\$200	
			litation	Implementation	State of Good Repair	Substandard	Partial Federal	Neutral	6.20	Rich Krisak	Garry Free	[TBD] o	\$400	\$1,500	\$1,500
			Switch	Implementation	State of Good Repair	Substandard	Partial Federal	Neutral	6.20	Rich Krisak	Garry Free	Stephen Alexander	\$915	\$50	
			ment	Implementation	State of Good Repair	Substandard	Partial Federal	Neutral	6.20	Rich Krisak	Garry Free	Stephen Alexander	\$151	\$500	\$1,500
			Add1	Implementation	State of Good Repair	Substandard	Potential Federal	Neutral	6.10	Rich Krisak	Garry Free	Ursula Bradley		\$20	
			12-	Implementation	State of Good Repair	Substandard	100% Local	Cost Savings < 10%	6.00	Rich Krisak	Joe Erves	Tesa Gonzales	\$128		
			2-Month	Implementation	State of Good Repair	Substandard	100% Local	Cost Savings < 10%	6.00	Rich Krisak	Joe Erves	Tesa Gonzales	\$1,546	\$2,354	\$1,546
			ment	Implementation	State of Good Repair	Adequate	Partial Federal	Cost Savings < 10%	6.00	Rich Krisak	David Springstead	Dave Springstead	\$713	\$1,164	
				Implementation	State of Good Repair	Substandard	100% Local	Cost Savings < 10%	6.00	Rich Krisak	Joe Erves	Tesa Gonzales	\$621	\$1,593	
				Implementation	State of Good Repair	Substandard	100% Local	Cost Savings < 10%	6.00	Rich Krisak	Joe Erves	Tesa Gonzales	\$1,879	\$3,569	\$1,879
				Implementation	State of Good Repair	Substandard	100% Local	Neutral	5.60	Rich Krisak	Garry Free	Stephen Alexander	\$585		
				Implementation	State of Good	Substandard	100% Local	Neutral	5.60	Rich Krisak	Garry Free	Stephen Alexander			

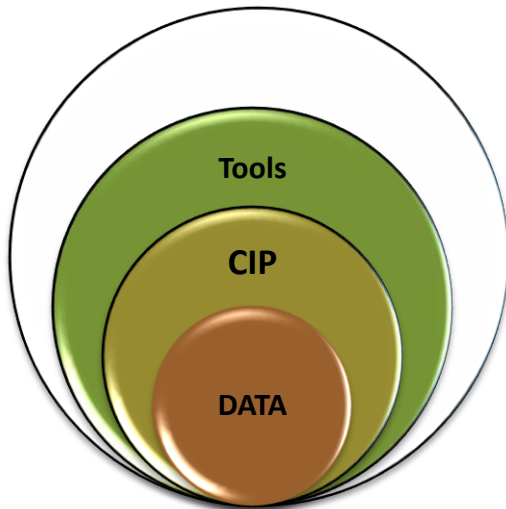
Ensures realistic decision making





# Decision Tools

The Right Tool  
Creates  
Transparency!







# Decision Tool Utility

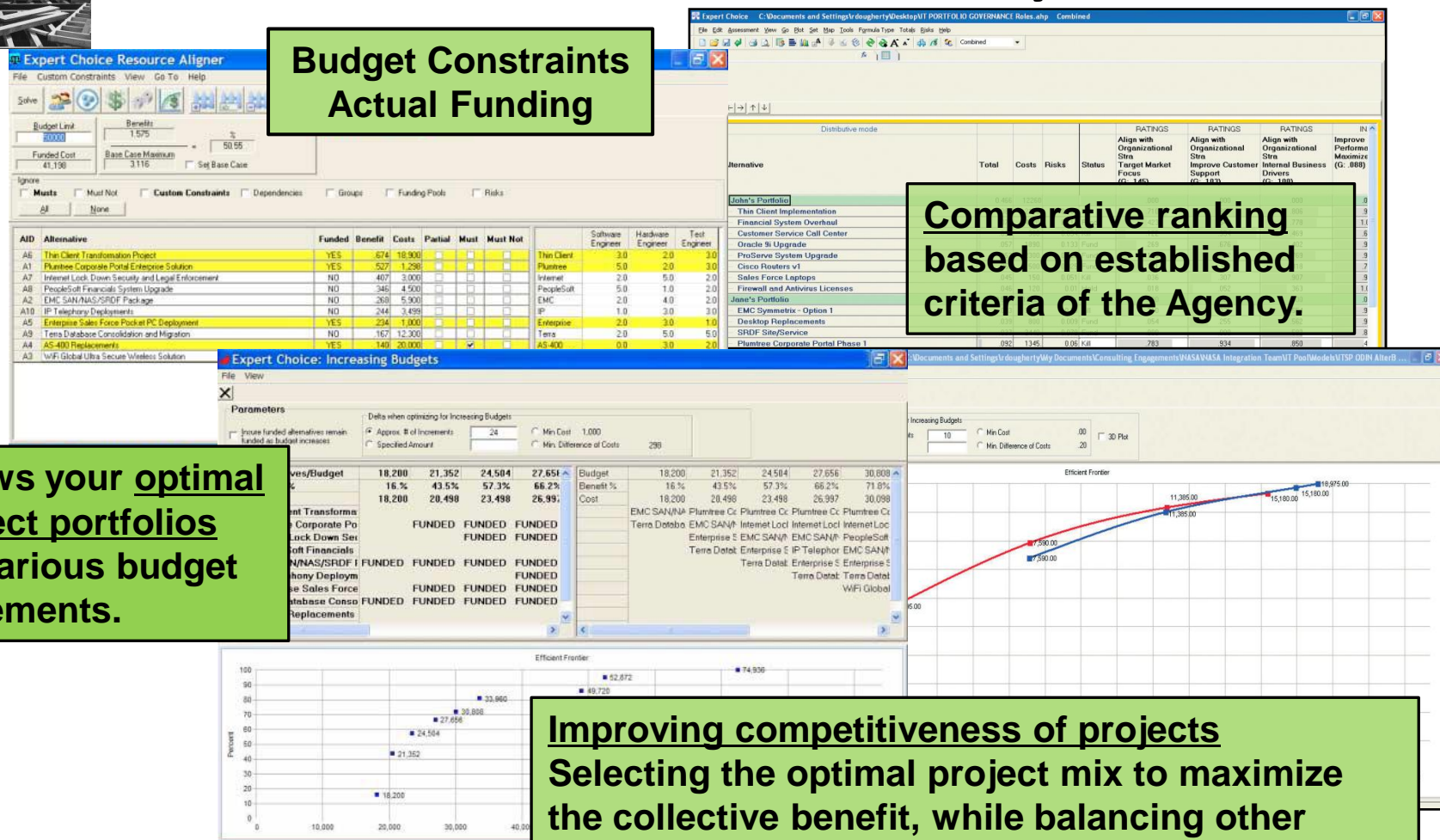
**Budget Constraints  
Actual Funding**

**Comparative ranking  
based on established  
criteria of the Agency.**

**Shows your optimal  
project portfolios  
for various budget  
increments.**

*Expert Choice*

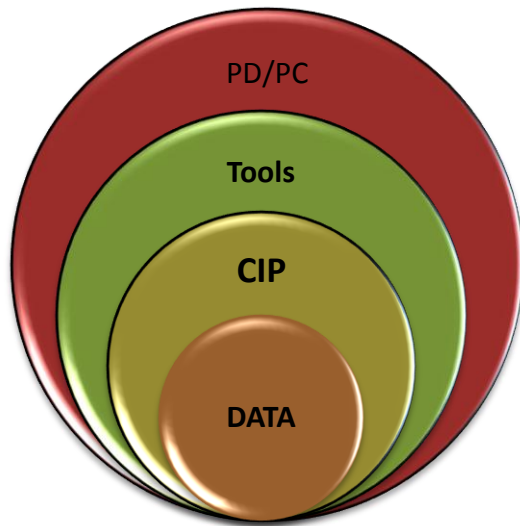
**Improving competitiveness of projects**  
**Selecting the optimal project mix to maximize**  
**the collective benefit, while balancing other**  
**factors such as risk, budget or staffing**  
**constraints and political considerations.**





# Project Delivery and Project Control

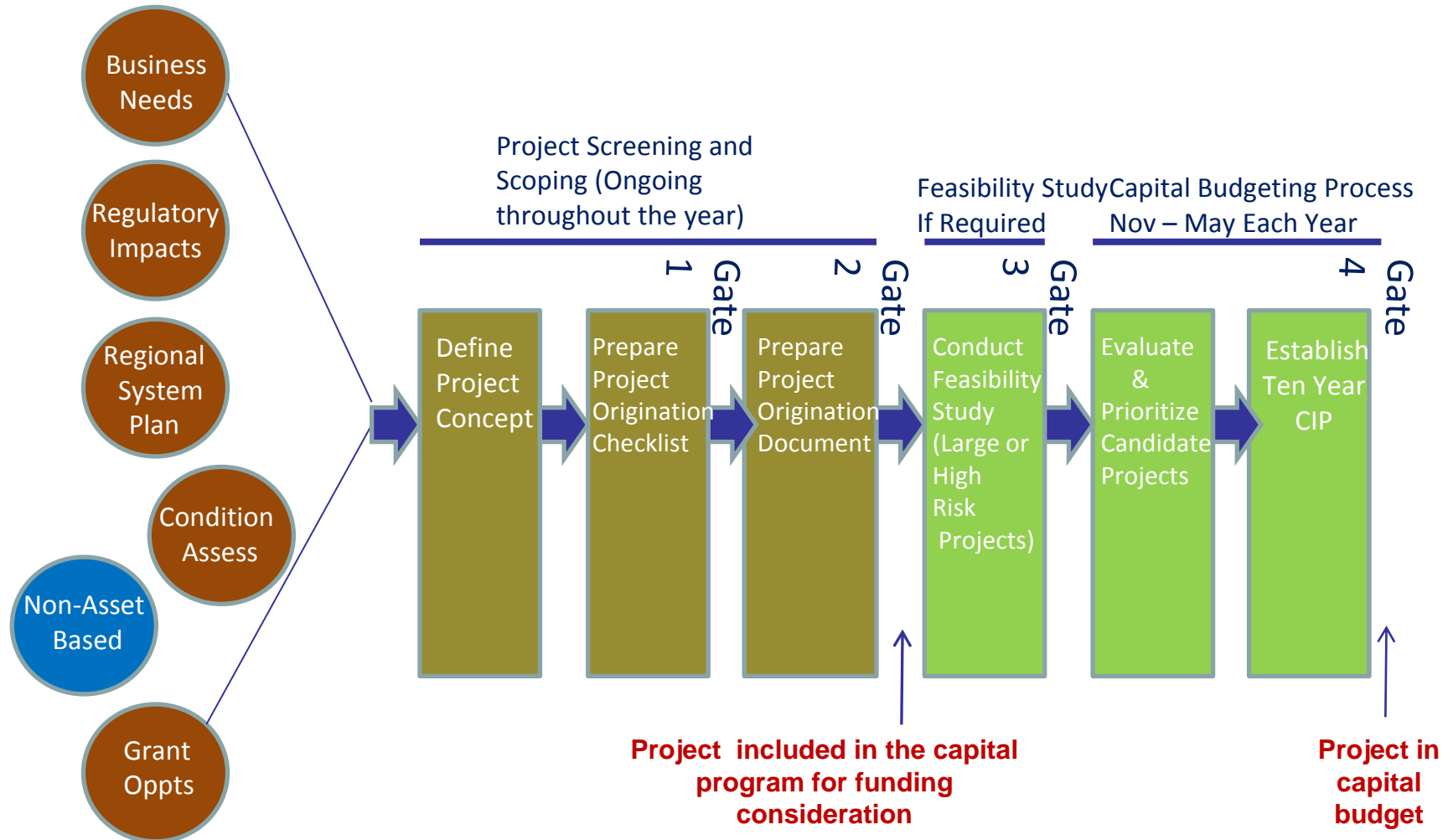
Do you have the processes and capacity in place to deliver the program and projects?







# Project Identification Plan





# Project Delivery Tools

## Project Origination Document

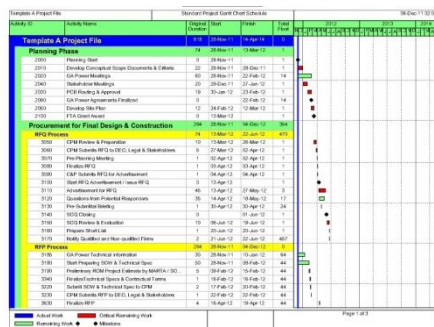
## Project Origination Checklist

Project Initiative			
Is this initiative a new Concept?	Yes	No	<input type="checkbox"/>
• If yes, has this concept been proven through the implementation at other Authorities?	Yes	No	<input type="checkbox"/>
• If no, is this project request based on a mandate or Authority Management directive?	Yes	No	<input type="checkbox"/>
Is this an Urgent Request?	Yes	No	<input type="checkbox"/>
Have you begun implementation of this initiative?	Yes	No	<input type="checkbox"/>
Does the initiative require physical changes to MARTA assets?	Yes	No	<input type="checkbox"/>
If the initiative became a project would you consider implementation of the work scope to be of high risk due to project complexity?	Yes	No	<input type="checkbox"/>
Will the initiative support the current MARTA Strategic Plan and Priorities?	Yes	No	<input type="checkbox"/>



General Project Information			
Project Name		<b>IMPORTANT REMINDER</b> Please make sure you review requirements with your project team, MARTA Contracts and Procurement and other MARTA departments, before finalizing this template. Much of the information required will need to come from a discussion with these MARTA team members.	
AGM			
MARTA Department			
Project Owner/Sponsor			
Project Initiator			
Email Address			
Phone Number			
MARTA Department			
Expected Start Date			
Expected Completion Date			
Estimated Total Project Cost (in K's)		\$0	
Expected Savings		\$0	
Identify Priority, Funding Source and Impact			
Program Urgency & Priority	Assets Condition	Funding Source	Operating Impact
Urgent Request? <input type="checkbox"/> Yes <input type="checkbox"/> No • Explain in Problem Description <input type="checkbox"/> Safety <input type="checkbox"/> Regulatory <input type="checkbox"/> State of Good Repair <input type="checkbox"/> Service Enhancements <input type="checkbox"/> Service Expansion	<input type="checkbox"/> Excellent <input type="checkbox"/> Good <input type="checkbox"/> Adequate <input type="checkbox"/> Substandard <input type="checkbox"/> Poor <input type="checkbox"/> Failed	<input type="checkbox"/> Transfer funding from existing CIP Project CIP Project Number: <input type="checkbox"/> New Federal Grant <input type="checkbox"/> New Funding Request <input type="checkbox"/> Partial Federal <input type="checkbox"/> Potential Federal <input type="checkbox"/> 100% Local <input type="checkbox"/> 100% Federal	<input type="checkbox"/> Cost Savings > 30% <input type="checkbox"/> Cost Savings < 30% <input type="checkbox"/> Neutral <input type="checkbox"/> Cost Increase < 30% <input type="checkbox"/> Cost Increase > 30%

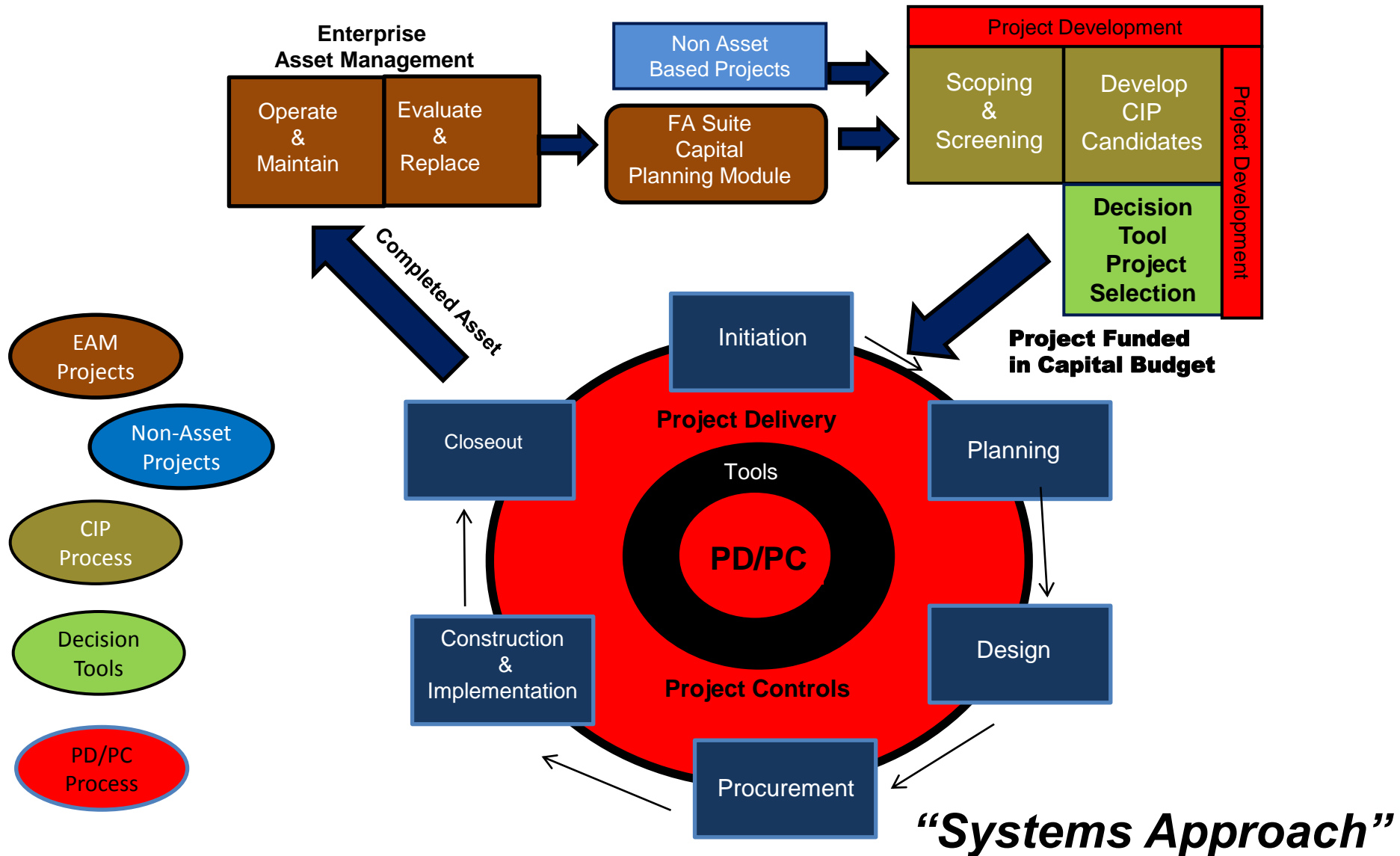
- ❖ Project scope
- ❖ Funding sources
- ❖ Partnering opportunities
- ❖ Required disciplines
- ❖ Resources required
- ❖ Procurement strategy
- ❖ Service impacts
- ❖ Customer impact
- ❖ Regional impact



Activity Name	Start	Finish	Budgeted Cost	FY2012	FY2013	FY2014
Template A Project File	28-Nov-11	14-Apr-14	\$3,512,250	\$1,309,200	\$1,344,639	\$858,411
Template A.1.020 Planning Phase	28-Nov-11	12-Mar-12	\$216,080	\$216,080	\$0	\$0
Template A.2 Procurement for Final Design & Construction	4-Dec-12	\$1,620,170	\$1,093,120	\$527,050	\$0	
Template A.1.040 Design-Build Phase	3-Dec-12	13-Jan-14	\$1,573,600	\$0	\$817,588	\$756,012
Template A.1.105 Commissioning & Close-Out Phase	13-Jan-14	14-Apr-14	\$102,400	\$0	\$0	\$102,400

## Planning Level Full Project Lifecycle Cost Estimate

# MARTA's AMP Framework





# Current Initiatives

- **Partnering with AssetWorks/Trapeze (EAM vendor)**
  - Develop Capital Asset Planning (CAP) Module within EAM system
  - Update Performance Monitoring & KPI/Dashboard portal.
  - Implement Action Map
  - Non-traditional Criteria: *Environmental issues, Climate Adaptation*
- **Partnering with Expert Choice (Decision Software vendor)**
  - Develop decision making criteria
  - Load Project information
  - Implement new CIP planning & selection process



**Goal: Electronically link EAM output to Decision Making software input**

- **Partnering with Intueor Consulting (Project Delivery & Controls)**
  - Evaluate project management /monitoring tools (Microsoft Project, Primavera etc.)
  - Develop new business processes for CIP planning and Project Delivery Methods
  - Implement “best software solution” moving forward with established standards



# Wouldn't it be nice...

*One (1) asset file\* accessible to all business units.*

## **Reduced data redundancy**

*(multiple data systems, processes and exercises in data mining)*

## **Reduced # of software systems**

*(maintenance and license fees, lack of consistency amongst users)*

## **Reduced operating and capital costs**

*(cost effective management over entire life cycle)*

***It's not all about Capital Costs!!!***

## **New opportunities to invest**

- ***reduce backlog***
- ***improve service***
- ***new construction***

*\* one asset file may not be practical for your organization but if you have the opportunity it is worth considering.*



## **WIIFM ?**



# Plenty of models out there... with similar characteristics!

## PAS 55 Prioritization Scheme







Don't forget who we're doing this all for...**the Customer!**

Transit is about moving people!

- safely
- efficiently and
- affordably



We need to be fiscally responsible for the investments that have been made for the public good.





**Thank you for your time!**

**Are there any  
Questions...**

