

Color By the Numbers Enterprise Architecture for For Enterprise Management Success

Featuring the Basic Enterprise
Architecture Methodology (BEAM)

2. What and Why - Enterprise Architecture?

- What is EA:

- Enterprise Architecture is:

- An inventory of the identified “components” of an organization within its environment of customers, suppliers, authorities, and partners
 - A blueprint mapping the component relationships
 - Detailed descriptions of the components and relationships
 - A governance process to control the accuracy, timeliness, and fitness-to-enterprise-purpose of the component inventory and blueprint
 - Reference-to and/or use-of external component standards and categories in the blueprint when appropriate
 - Application of the EA as a top-level map for more detailed organization resource maps of IT, Facilities, Supplies, Services, Skill Sets, Funds, etc.
 - A mental map that everyone works from in their various enterprises – it’s usually not communicated fully or consistently with associates to improve coordination and collaboration

- Why perform EA?

- A formal (i.e., documented, shared, and controlled) EA is a sign of good, mature, and responsible management

- EA is used for engineering of management
 - Management without EA is management as a craft – perhaps creating beautiful results, but not repeatable or easily maintainable
 - Would you build, rebuild, or renovate a house (i.e., your organization’s capabilities) without a blueprint?
 - Would you rather build/rebuild/renovate/maintain your house from common or unique components?
 - Would you rather have your blueprints maintained over time or redrawn from scratch any time a change was needed?

- EA is mandated by OMB to support:

- Clinger-Cohen Act (CCA) for IT resources
 - Federal Investment Budgeting (Exhibits 300 and 53) for any resource initiative
 - President’s Management Agenda (PMA) Enhanced eGovernment Initiative
 - Government Paperwork Elimination act (GPEA)
 - Government Performance and Result Act (GPRA)

3. How Enterprise Architecture?

- How to perform EA
 - Follow OMB Federal EA Guidance where available (only 60% complete as of Sep 03)
 - Follow broad concepts provided by CIO Council extension to Zachman Framework (describing what EA is, but not how to perform it)
 - Fit EA activities within existing operations where possible to reduce duplicative and fragmented efforts to collect and organize EA data
 - Find, buy, or develop a procedure to walk the organization, its managers, and its workforce through the EA process that will consistently produce and maintain a FEA compliant enterprise architecture

4. Basic Enterprise Architecture Methodology – What and Why



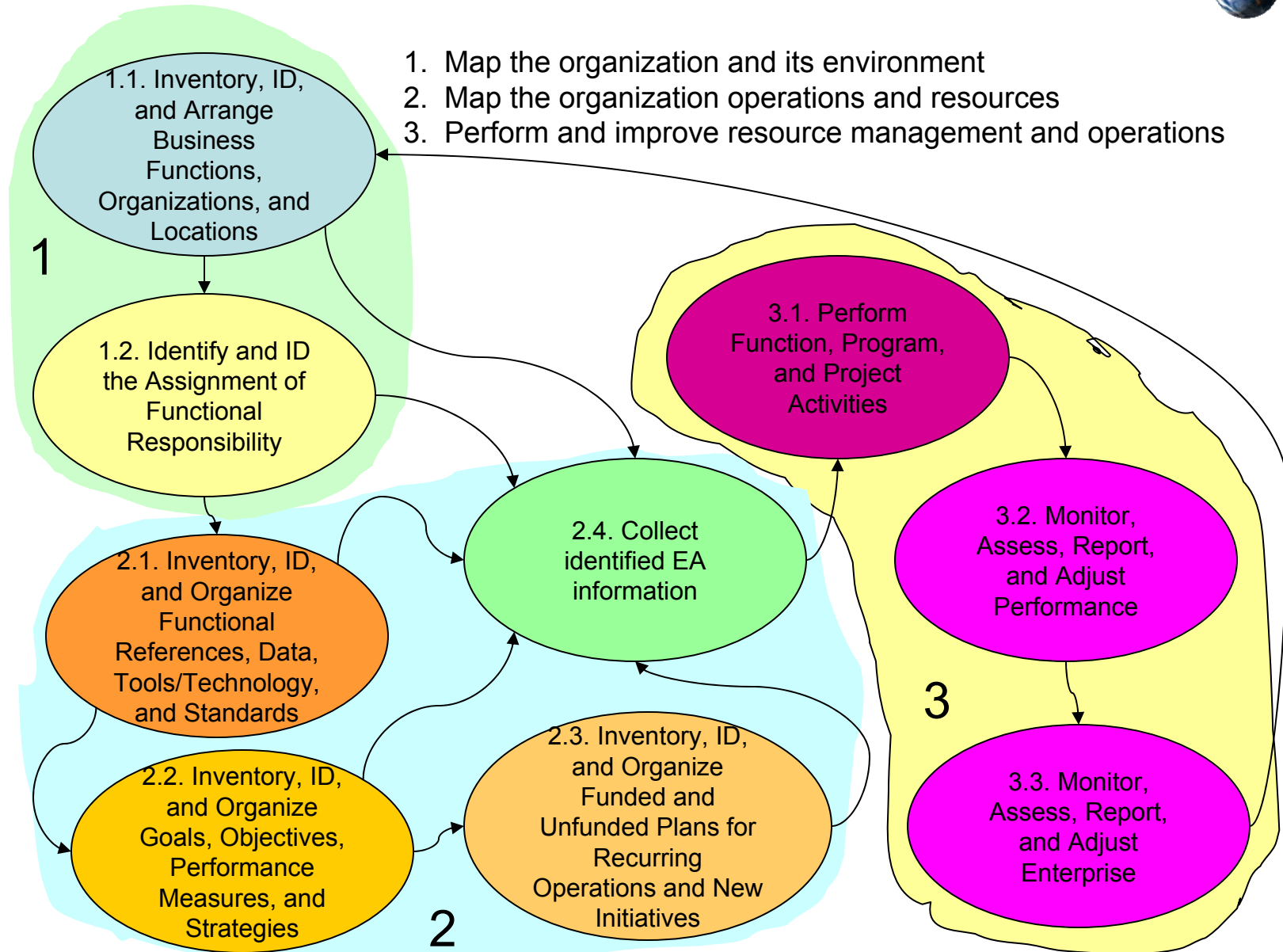
- What is BEAM?
 - BEAM is a detailed workflow procedure to step the organization through a comprehensive EA development, operation, and maintenance process, as part of a larger workflow procedure for whole-organization life cycle management
 - BEAM is released under a public license for noncommercial use (e.g., free for non-outsourced use by government, academic and other organization)
- Why use BEAM?
 - BEAM is the only full EA methodology (i.e., workflow procedure) available, commercially or otherwise
 - BEAM provides the means for simultaneous FEA, CCA, GPRA, GPEA, CMM/CMMI, and ISO-9000 compliance
 - BEAM supports all five government-wide initiatives of the PMA
 - BEAM is based on over two decades of operational research and experience in government and industry
 - Every typical medium to large organization is already performing the activities within the BEAM workflow – BEAM primarily organizes and integrates these activities' operations, controls, and data
 - BEAM can be performed by internal resources and/or by commercial/contracted/outsourced resources

5. Basic Enterprise Architecture Methodology – How?

- How to use BEAM?
 - Register for free BEAM non-commercial use
 - Specify BEAM as your required EA methodology in your EA Contracts and Task Orders
 - Receive authorized training on BEAM or find a licensed commercial BEAM service provider
 - Assign or acquire technology to support BEAM
 - Implement a BEAM project for the first EA cycle (Example Project)
 - **Site Survey Task – 1 month**
 - **Initial Business Architecture and EA Business Case Task – 2 more months**
 - **Full Business Architecture (BRM + PRM) Task – 2 more months**
 - **Full EA (BRM, PRM, SRM, DRM, TRM) Task – 4 more months**
 - Implement recurring BEAM operations workflow for subsequent EA maintenance
 - Extend BEAM for other business function activities and applications
 - A76 sourcing studies
 - Feasibility Studies
 - Impact Analyses
 - Security Management (role-based asset distribution and access control, e.g., to support Sarbanes-Oxley Act, Information Assurance, Privacy Act)
 - Contingency Management
 - Continuity Management
 - Vulnerability/Risk Management
 - Knowledge management
 - Human Capital Improvement (Expertise Management, Expertise On-Call Collaboration, Skills Inventory, Skills Requirements, Training Management)
 - Budget/Performance Integration
 - Improved Financial Management and Reporting (Roll-up and Drill-Down to/from any level, for any subject/expense-element)
 - Enterprise Application Integration (Workflow, Web Services)
 - Enterprise Information Integration (Virtual databases, user-customized views of enterprise data)
 - GEM extensions of BEAM (Commercial Service and Support from licensed GEM Service Providers)
 - **Integrated above BEAM extensions with enterprise Operations workflow based in dynamic enterprise intelligence – 8 more months after BEAM**
 - **Integrated enterprise Value-Chain (e.g., supplier/customer chain) workflow and real-time situational awareness - 8 final months for first GEM iteration**
 - Continuing GEM operations workflow with dynamic intelligence

6. EA as Color By The Numbers – Consistency and Simplicity is Needed!

1. Map the organization and its environment
2. Map the organization operations and resources
3. Perform and improve resource management and operations



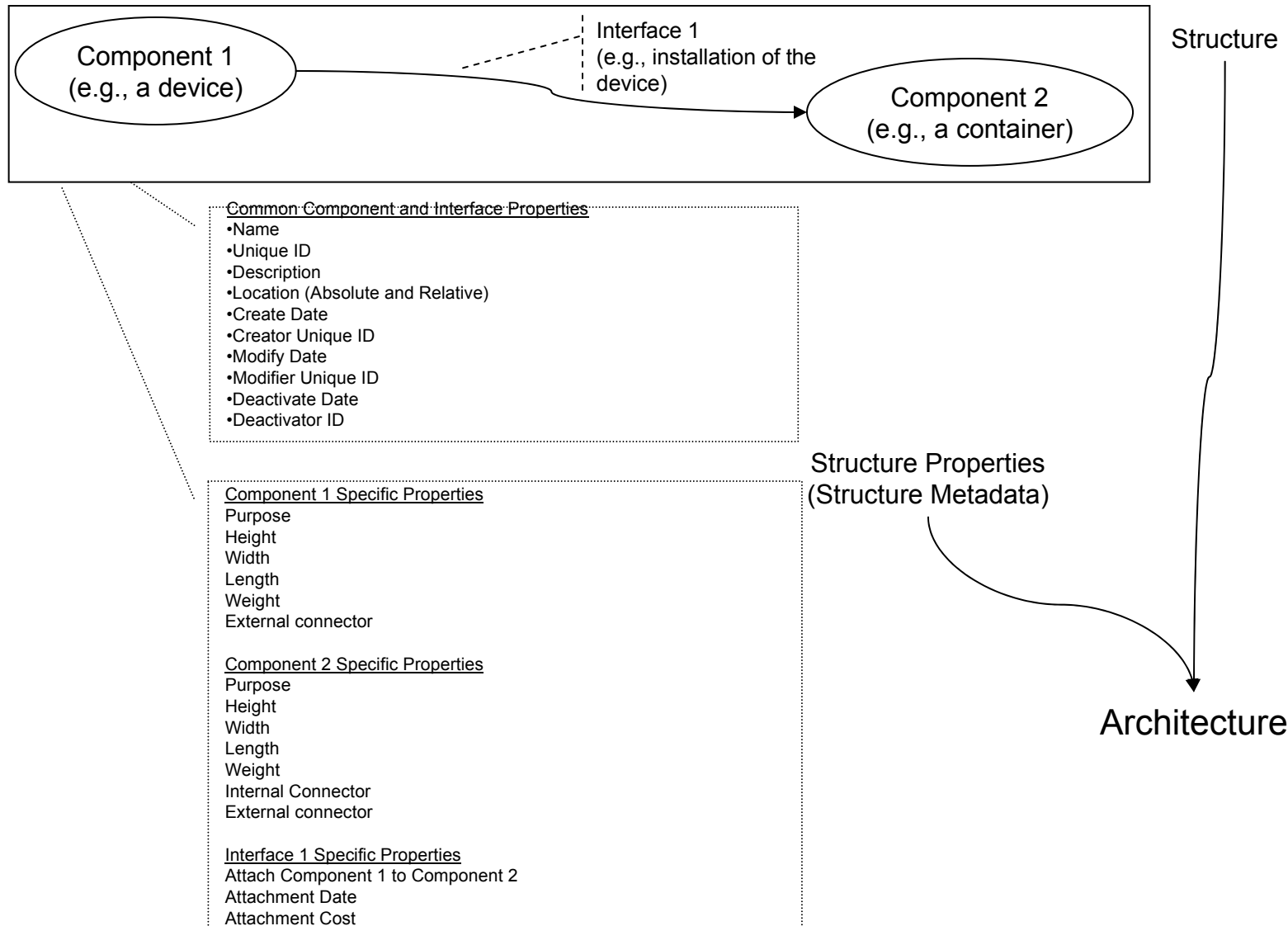
7. What Basic Enterprise Architecture Methodology Integrates and Why

BEAM Activity	Extend and Customize BEAM for:						
	FEA	Strategic Plan	Budget and Performance	IT Architecture	Business Process Analysis	IT Security	Human Capital Improvement
1. Inventory, ID, and Arrange Business Functions, Organizations, and Locations	BRM	Y		Y	Y	Y	Y
2. Identify and ID the Assignment of Functional Responsibility	BRM, SRM, DRM, TRM	Y		Y	Y	Y	Y
3. Inventory, ID, and Organize Functional References, Data, Tools/Technology, and Standards	BRM, TRM			Y	Y	Y	Y
4. Inventory, ID, and Organize Goals, Objectives, Performance Measures, and Strategies	PRM	Y	Y	Y	Y		Y
5. Inventory, ID, and Organize Funded and Unfunded Plans for Recurring Operations and New Initiatives	PRM, TRM	Y	Y	Y	Y		
6. Collect identified EA information	FEA	Y	Y	Y	Y	Y	Y
7. Perform Function, Program, and Project Activities	TRM	Y	Y		Y	Y	Y
8. Monitor, Assess, Report, and Adjust Performance		Y	Y		Y	Y	Y
9. Monitor, Assess, Report, and Adjust Enterprise		Y	Y		Y	Y	Y

Why: BEAM Helps Identify and Reduce Duplicative Efforts, Reduce Inconsistency, Share Awareness/Knowledge/Information/Data, and Perform Parallel Improvements.

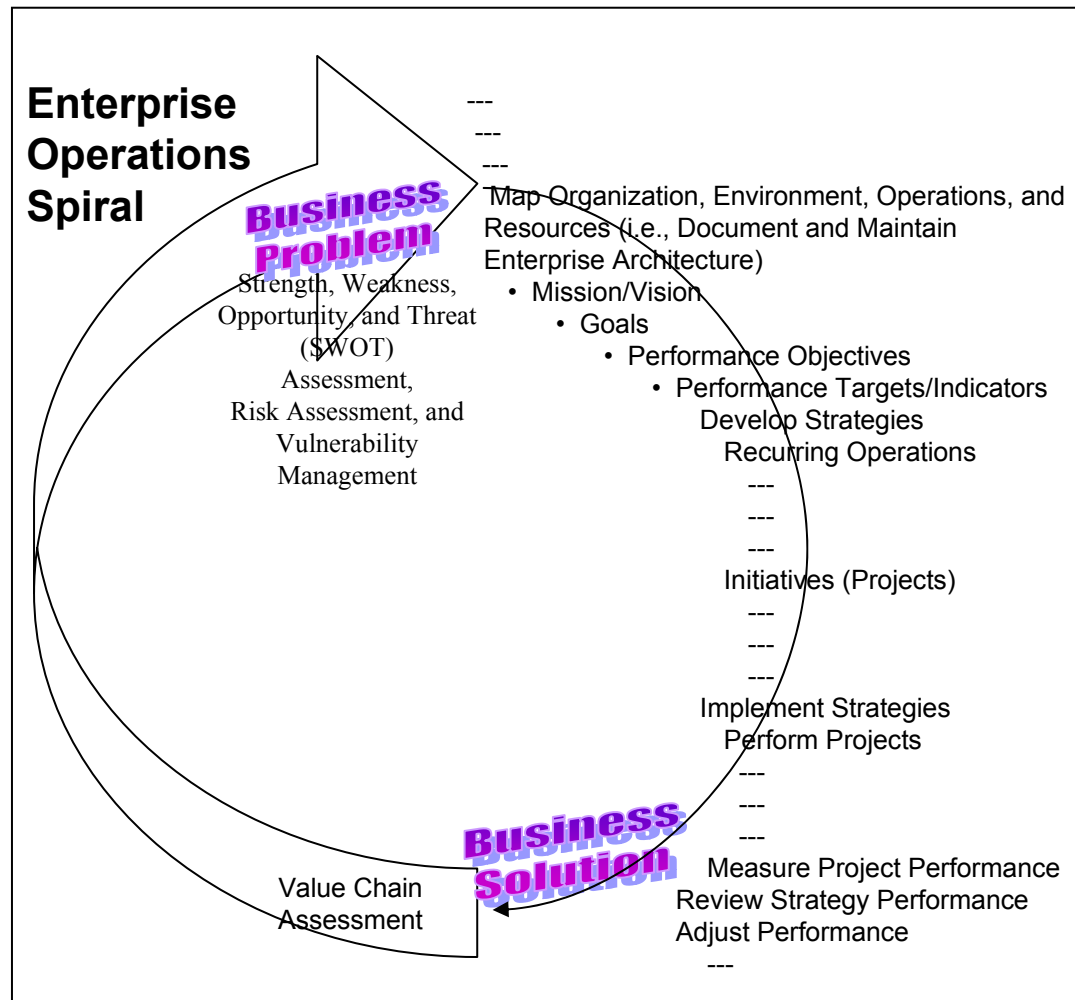
8. Architecture Basics

- **Architecture:** The structure of an endeavor's named components and their interfaces, and the description and diagramming of this structure and its properties.

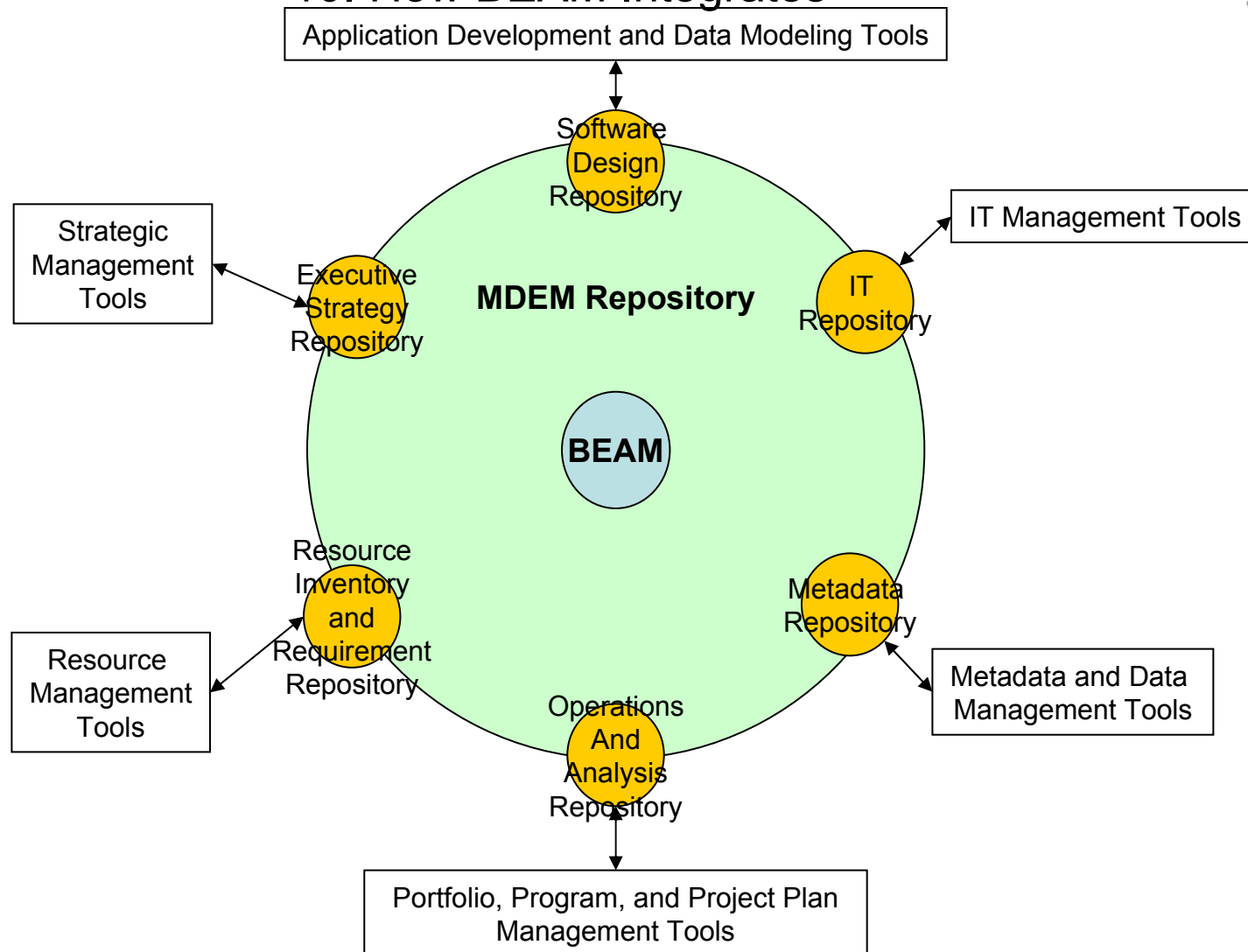


9. BEAM for EA Governance

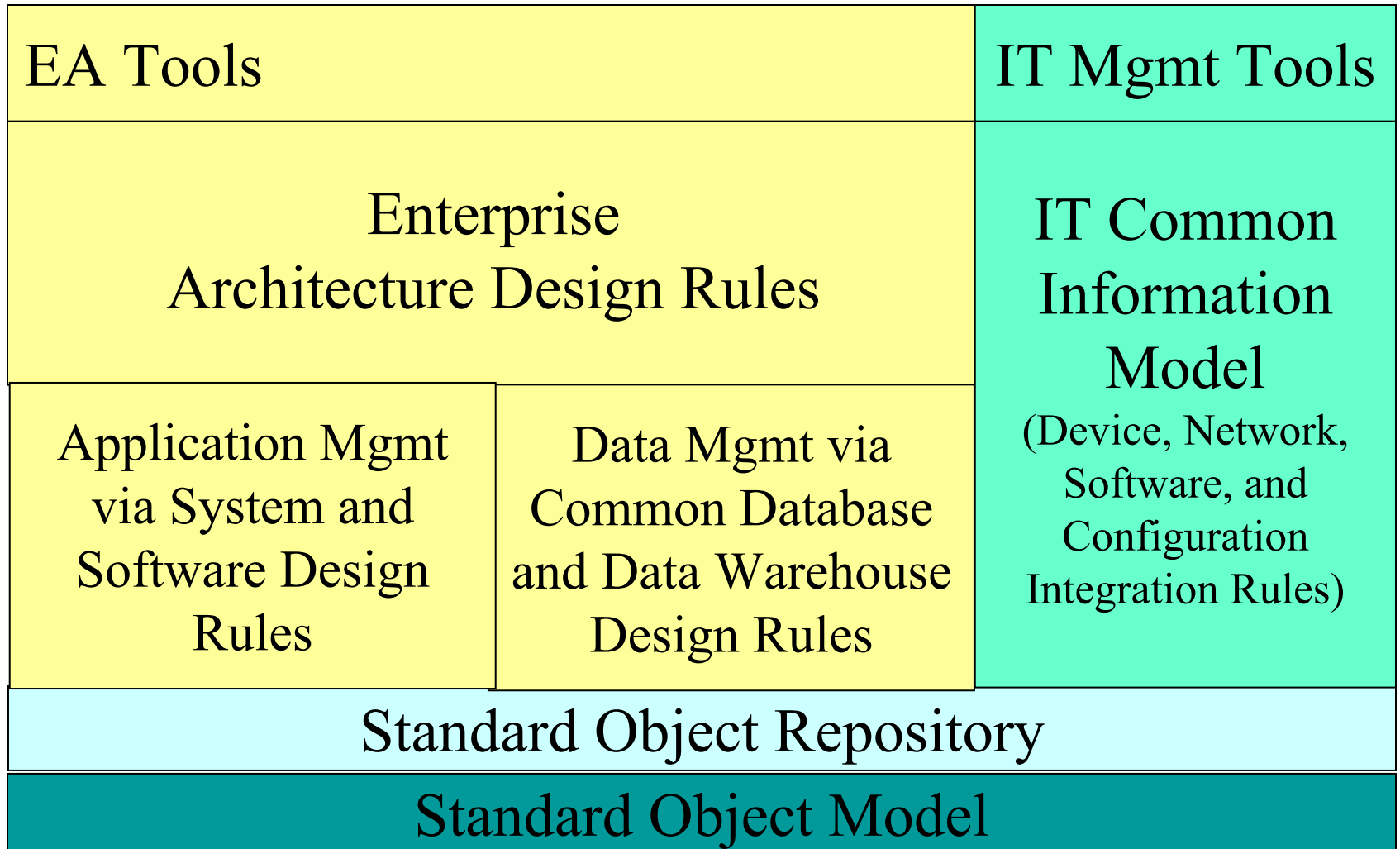
Without EA, You're Navigating Without a Map. (I.e., You're Building, Rebuilding, Renovating, and/or Maintaining Your Capability Without a Blueprint.)



10. How BEAM Integrates

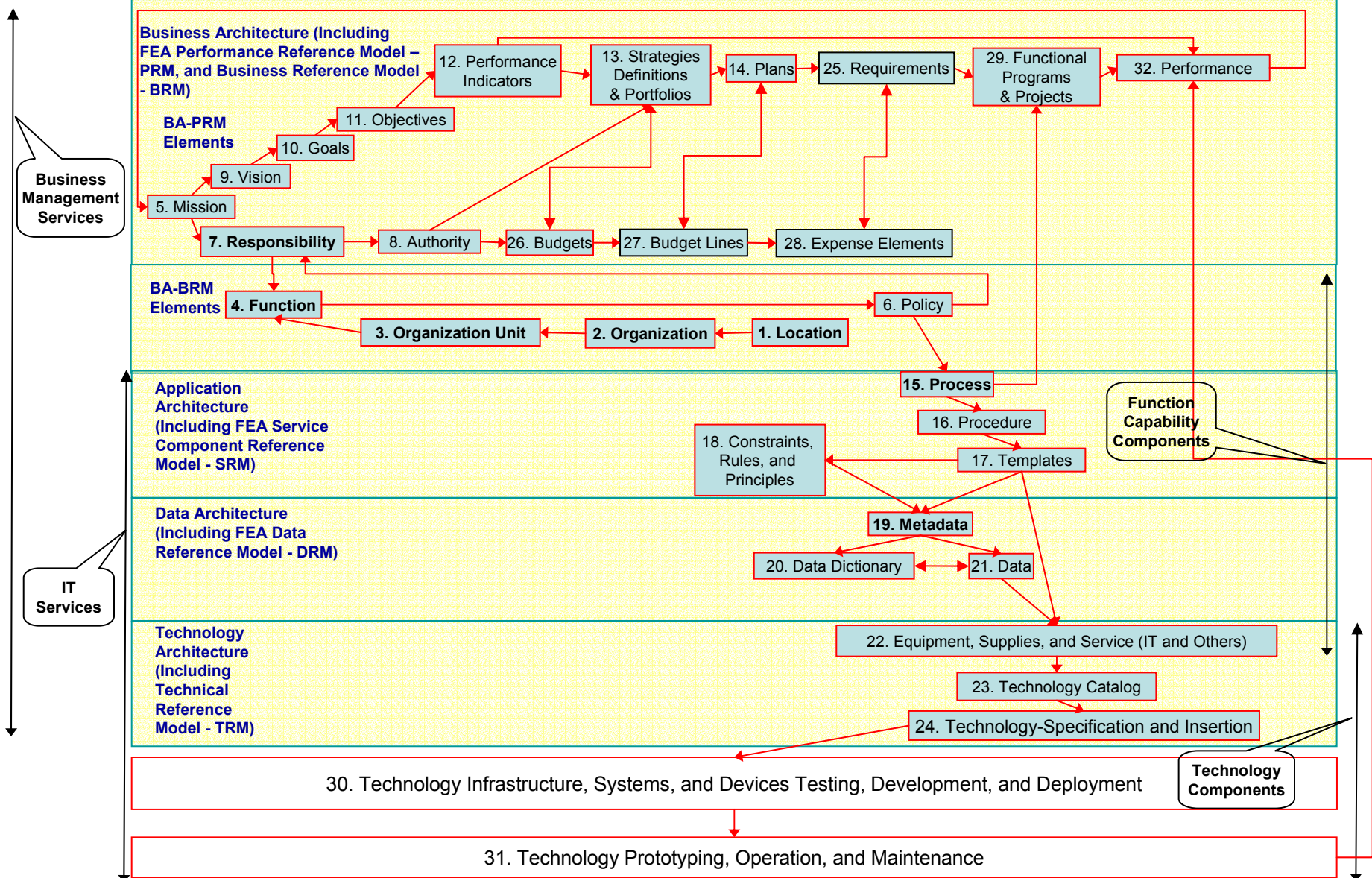


BEAM Uses Model Driven Enterprise Management (MDEM) technology. Using modern open-standard technology, BEAM can provide enterprise users with the information needed to conduct and improve operational activities, reduce costs, and reduce the latency of decisions.

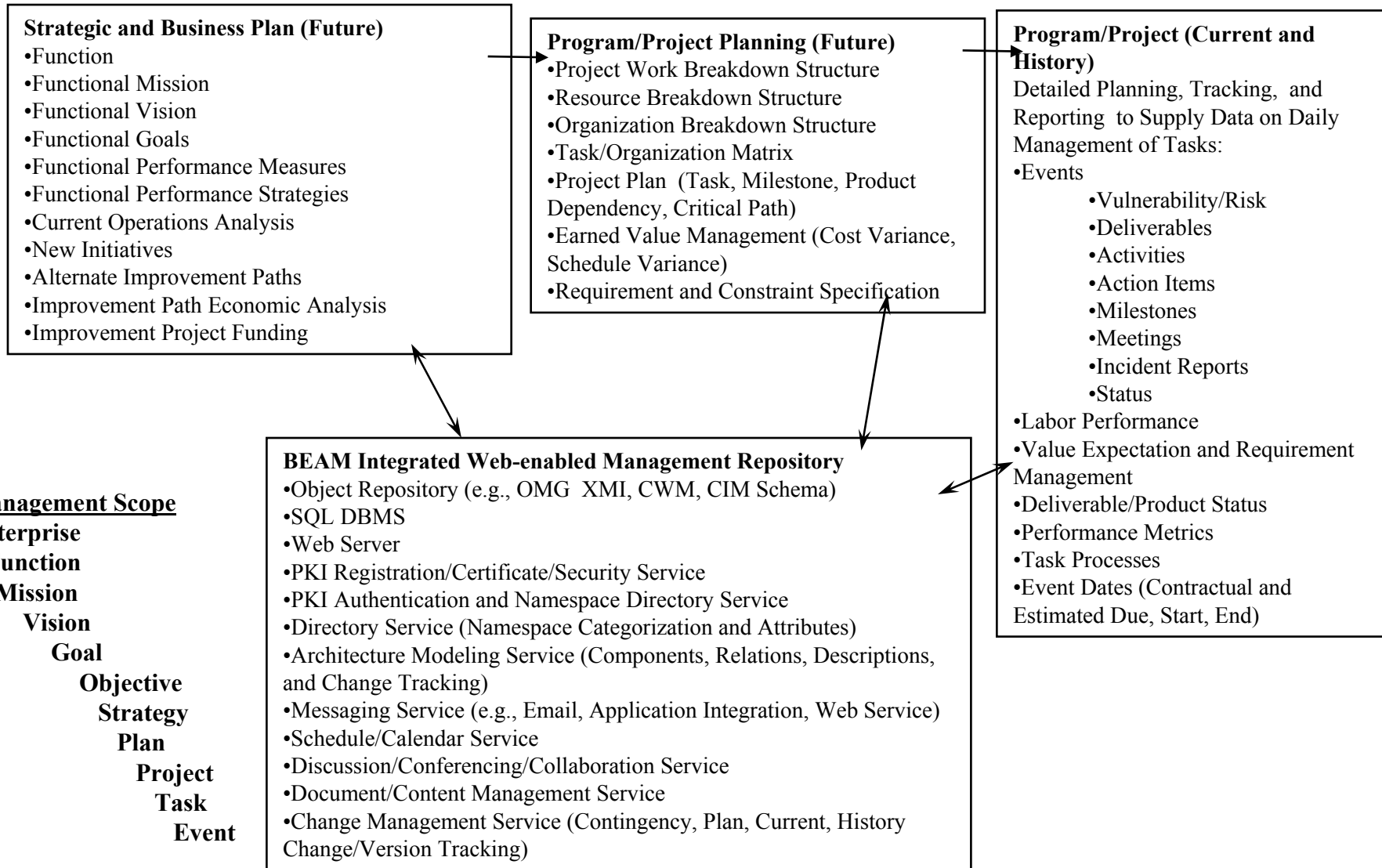


12. BEAM – Procedural Flow

(Concurrently For All Enterprise Organizations, Functions, Programs, and Projects)



13. BEAM Improvement Management Environment



14. Advantages of the BEAM Umbrella

BEAM can be used to support, integrate, merge, or eliminate

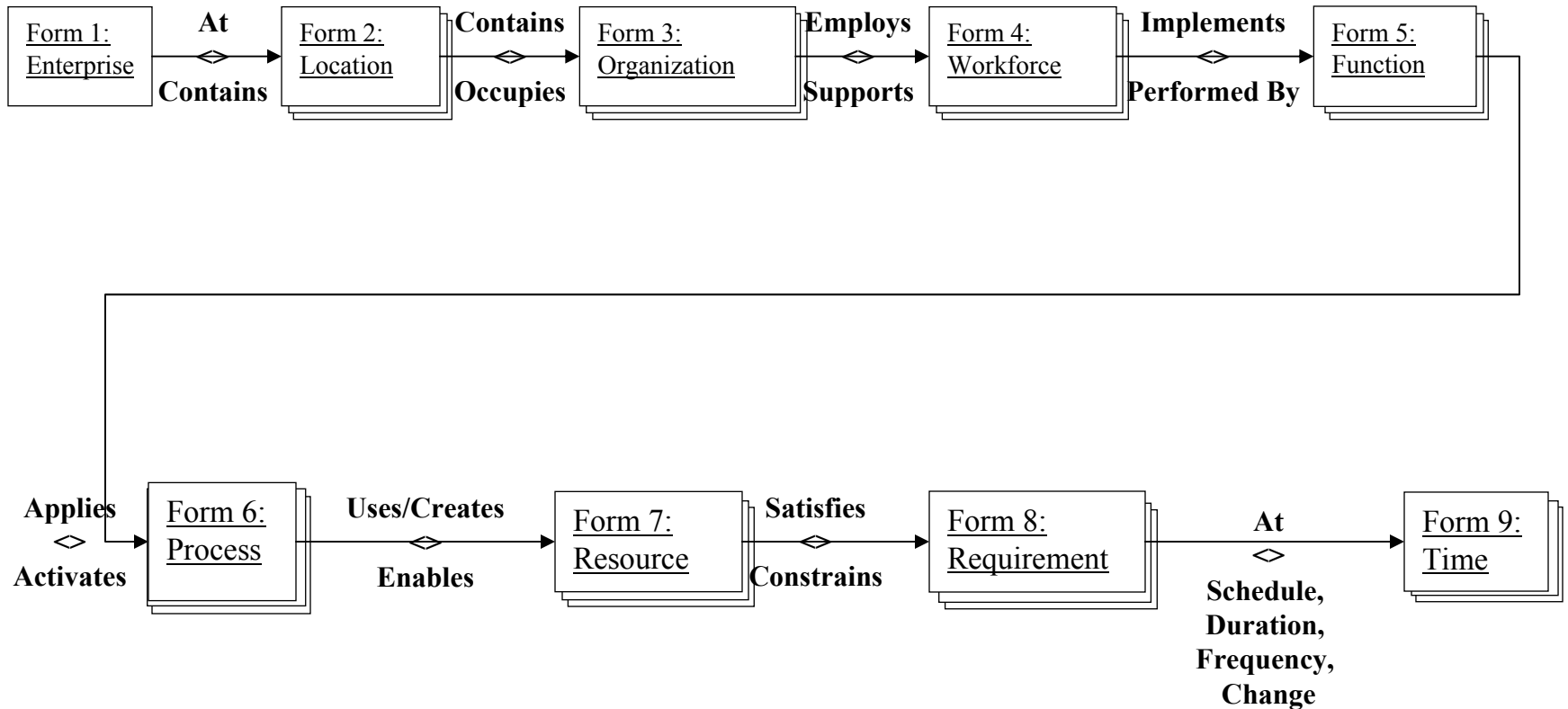
- IT Architecture Management
- IT Program, Project, Task, Event Management
- System and Software Engineering Life Cycle Management
- System/Software Requirement Specification Management
- Requirement Management
- Independent Verification and Validation (IV&V) of Requirements, Design, and Development
- A76 Outsourcing Studies
- Organization And Function Management (Staffing and Structure, Realignment, Reorganization, Relocation, Mergers, Acquisitions, Task Forces, BPR, etc.)
- Quality Management (Six Sigma, TQM, etc.)
- Maturity Management (e.g., ISO-9002, CMM, CMMI)
- Human Capital Knowledge Management (i.e., Building individual and collective knowledge base, identifying skills available, identifying skills required, identifying skills gap, driving training management and recruiting)
- Functional strategies, plans, and budgets tracked through to completion
- Expenditures traced back to driving missions, goals, objectives, and strategies.
- Reference Management (i.e., Policies, Processes, Procedures, Templates, Standards, Tools)

15. BEAM Business Intelligence Capability Uses EA for Drill Down and Roll Up of Budgets, Priorities, Performance, Production Levels

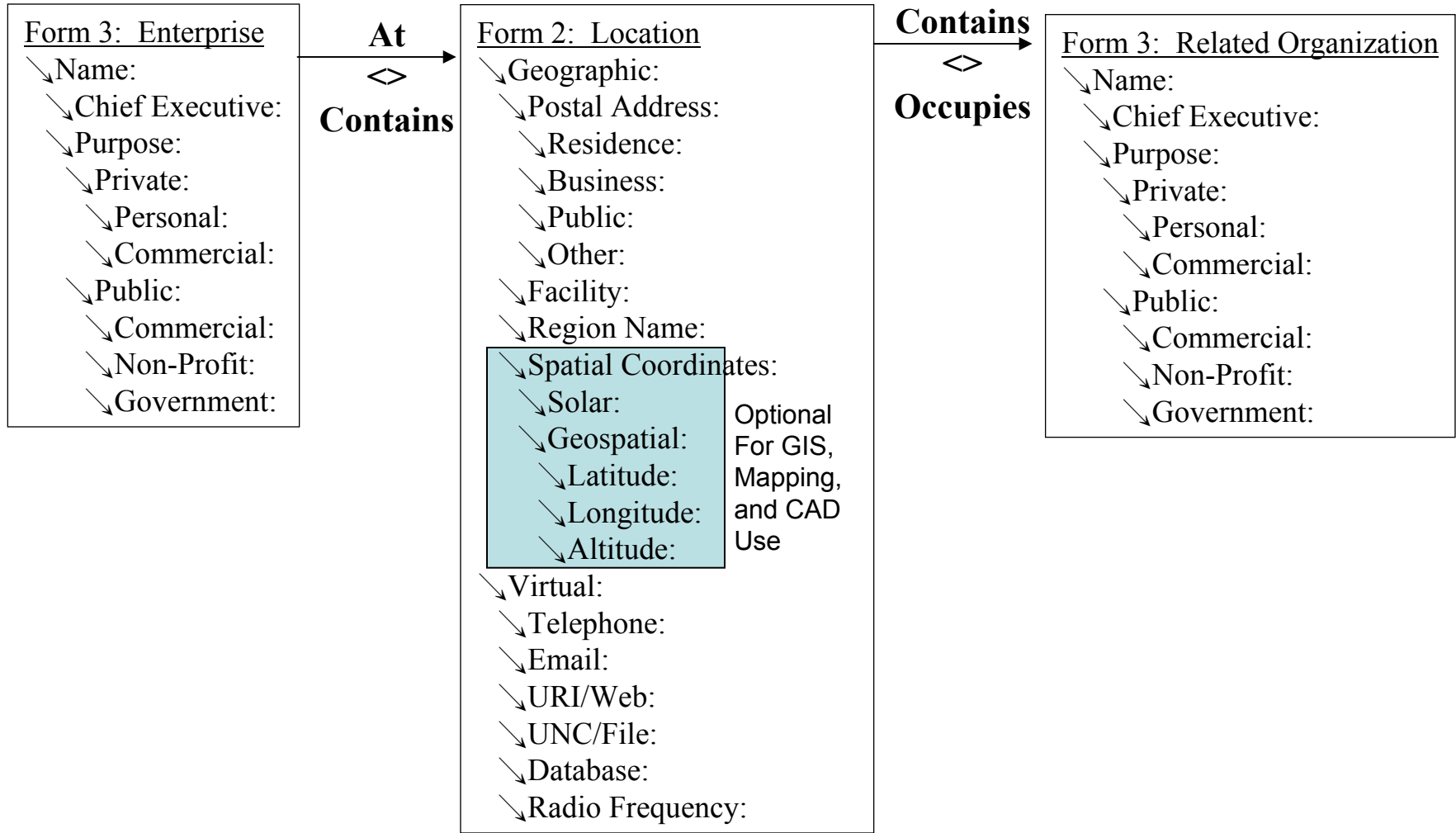
Functions and Uses of the Drill Down and Roll-Up Features of BEAM:

- Asset Distribution Requirements
- Asset Access Control and Information Requirements
- Summaries, aggregations, and details concerning Business Functions, Priorities, Budget
- Gives the ability, as a business intelligence technique, to explain to anyone (e.g., Congress, OMB) the impact of funding changes (e.g., if you budget this agency XXX dollars you will get these outputs from our mission area in these quantities, in these time frames, with these qualities, etc., as in GPRA support.)

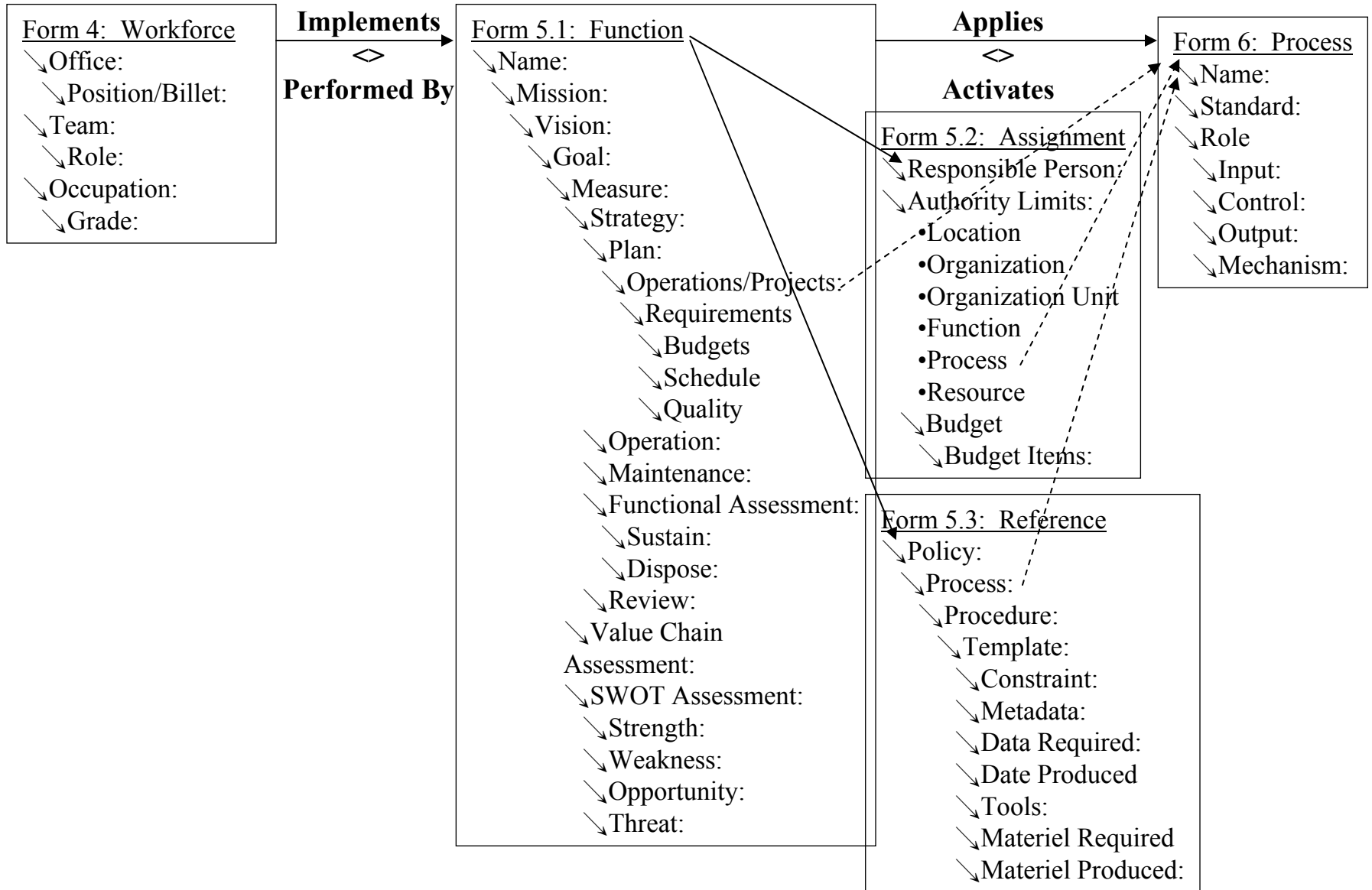
16. Some of the information all business and IT managers would have to supply for BEAM.



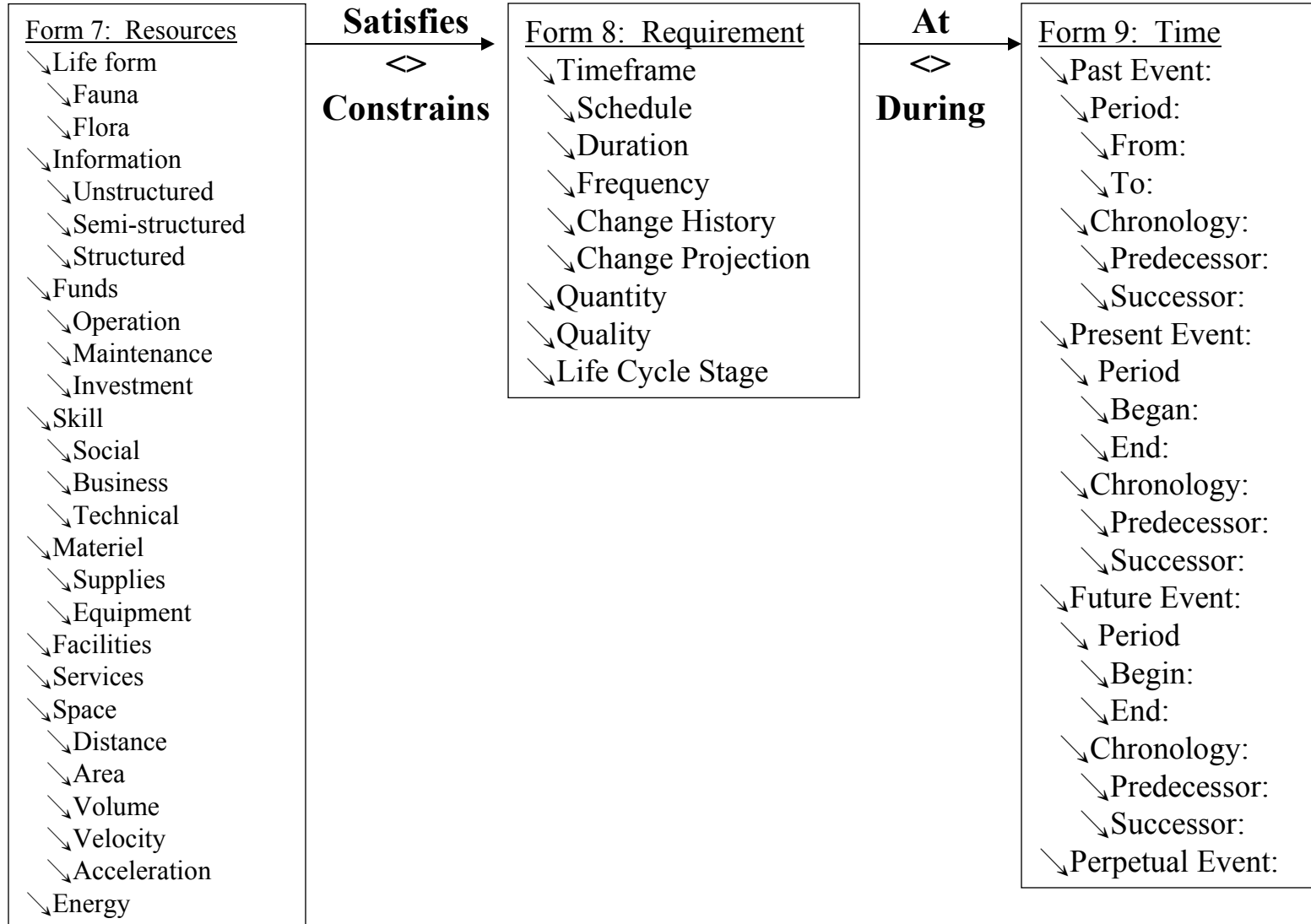
17. BEAM Form Templates, Part 1



18. BEAM Form Templates, Part 2



19. BEAM Form Templates, Part 4



What are the rough costs of BEAM?

- For non-commercial and internal organization use there is no charge to use the BEAM. (Register for BEAM use, including any of your extensions to BEAM, under the same Creative Commons license, by sending an email to BEAM-Use@one-world-is.com). If Contractors without BEAM commercial licenses are used to deploy BEAM internally or in other organization units of a larger organization, then the initially registering organization must purchase appropriate commercial BEAM licenses from BEAM-License@one-world-is.com.
- The BEAM methodology does not introduce significant new work to the typical medium to large organization, but does change the way existing information about the organization and its environs is collected, shared, organized, applied, and maintained. These changes may involve added costs, which would predictably be offset by increases in productivity, responsiveness, and accuracy of the resultant BEAM-supported work.
- BEAM costs for commercial and non-profit licenses are shown in the table below. This would include providing contracted BEAM support to other organizations, and other non-commercial uses.
- To make payment, click on the hyperlinks in the table below, or contact BEAM-License@one-world-is.com or +1 (703) 598-2351, to make other payment arrangements.
- To download BEAM documentation, project plan, and view lists of Licensed BEAM Supporters and VAR, visit <http://one-world-is.com/BEAM>.

BEAM Annual Licenses for Commercial and Non-Profit Organizations

BEAM Service Provider Annual License Cost:					
BEAM Operations Scope and Multiplier		x License Type Multiplier		Qty	Cost
3.1 City, Metro-Area, or County	50	Formal Organization	\$50	1	\$ 2,500.00
3.2 State	100	Formal Organization	\$50	1	\$ 5,000.00
3.3 National	1,000	Formal Organization	\$50	1	\$ 50,000.00
3.4 Global	10,000	Formal Organization	\$50	1	\$ 500,000.00

BEAM Practitioners are available to provide training on the BEAM methodology. Contact BEAM-Use@one-world-is.com for more information.

Contact

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One World Information System (OWIS)

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