

▶ **Zero Base Review Methodology**

**Martha Wells
Peter Meszaros**

**SCEA/ISPA National Conference, Orlando, Florida
June 2012**

- ▶ What are Zero Base Reviews?
 - Definition
 - History of
 - Expected Outcomes
 - ZBRs at DIA
 - Key Terms
- ▶ Methodology Phases and Key Activities
 - Definition
 - Data Collection
 - Analysis
 - Review
 - Prioritization
 - Results
- ▶ Summary
 - Zero Base Review Outcome
 - Constraints and Challenges
 - Keys to a Successful Review

What are Zero Base Reviews?

▶ What are Zero Base Reviews (ZBR)?

- ▶ A management tool for rightsizing the organization and prioritizing mission areas
 - Developed by building the organization's budget from the bottom up based on prioritized mission areas
 - Independent "should cost" estimates are created, rather than relying on past spending results
- ▶ Requires each organization to:
 - Evaluate and review all relevant programs and activities systematically
 - Review activities on a basis of output or performance as well as cost
 - Emphasize managerial decision-making based on mission and governing policy first, and available resources second
- ▶ A Zero Base Review does NOT take into consideration current funding other than as a reference point for decision makers
- ▶ **BLUF: Zero Base Reviews provide greater transparency in resources allocation and better decision making capabilities**

▶ Importance of Zero Based Reviews

- ▶ Increasing budget pressure across the government requires value-added assessments of all programs
- ▶ Continuing to evenly spread budget cuts across all operations is crippling critical mission areas
- ▶ ODNI direction – re-assess missions, avoid salami slice cuts
- ▶ Zero Base Reviews enable leadership to:
 - Prioritize mission capabilities and determine what resources are needed to complete those missions effectively
 - Perform a mission-to-resource comparison of activities
 - Understand resource implications of various scenarios
 - Right-size operations to meet priorities, organizational strategy, and customer demand
 - Better understand organizations or capabilities

▶ History of Zero Base Reviews

- ▶ Concept of Zero Base Budgeting developed at Texas Instruments Inc. in 1969
- ▶ First adopted in government by Governor Jimmy Carter of Georgia in preparation of the fiscal 1973 budget
- ▶ *Government Economy and Spending Reform Act of 1976* required a congressional zero-base review of every government authorization for programs every 5 years
- ▶ Strong opposition by opponents: "a zero-base approach will add heavily to the burdens of budget-making."
- ▶ Use of the ZBB method declined in the 80's and 90's due to improved economic situations where Government agencies would request incremental budget increases instead of justifying their budget
- ▶ After the recession of 2008 many companies and governments instituted some variation of the ZBB method as a way to reduce unnecessary spending and create lean and healthier organizations
- ▶ Used today throughout the private and public sector in many different formats to conduct program evaluations and their alternatives

▶ Expected Outcomes

- ▶ Zero Base Reviews have different outcomes based on the methodology employed, the customer, and the organization/capability under review
- ▶ DIA Zero Base Reviews provide leadership with a prioritized 1 to n list of activities with their associated costs needed for mission success
- ▶ Additionally, DIA Zero Base Reviews :
 - Establish Key Business Activities for each mission area
 - Provide a review of guidance/policy to inform operating models and priorities
 - Identify lower cost alternatives and efficiencies
 - Create service levels and costs for each activity
 - Classify risks associated with funding decisions
 - Determine expected cost savings/shortfalls associated with the implementation of the new plan

▶ Zero Base Reviews at DIA

- ▶ Conducted by DIA's Program Evaluation and Assessment Division
- ▶ Zero Base Review Team comprised of program analysts, cost analysts, financial managers and business process SME's
- ▶ Agency move to develop Spend Plans that align to Directorate capabilities
- ▶ The DIA Team conducted 3 Zero Base Reviews over the past two years
 - First review yielded efficiencies that reduced a Directorate's total operating costs by 3.4% of its total budget
 - Second review provided key information that led to a Directorate re-organization
 - Third review is ongoing

▶ Key Terms

The terms below are used throughout the Zero Based Review Process and are defined here for reference:

▶ Key Business Activity (KBA)

- An activity or process that has maximum impact on the success of a mission area by delivering results that directly impact organizational goals; they are the real value creating processes that typically encompass the majority of manpower and produce key outputs

▶ Resources

- Assets required to perform a mission, i.e. labor (civilians, military and contractors), training, travel, equipment, overhead and facilities

▶ Service levels

- For each KBA, service levels are identified to differentiate the different levels of support to meet varying levels of demand
 - Basic: fundamental level of support provided to the customer; predicated by statutory regulations, customer demand or available resources; often the status quo
 - Enhanced: Basic plus one additional layer of support
 - Premium: Enhanced plus one additional layer of support

▶ Lower cost alternative studies

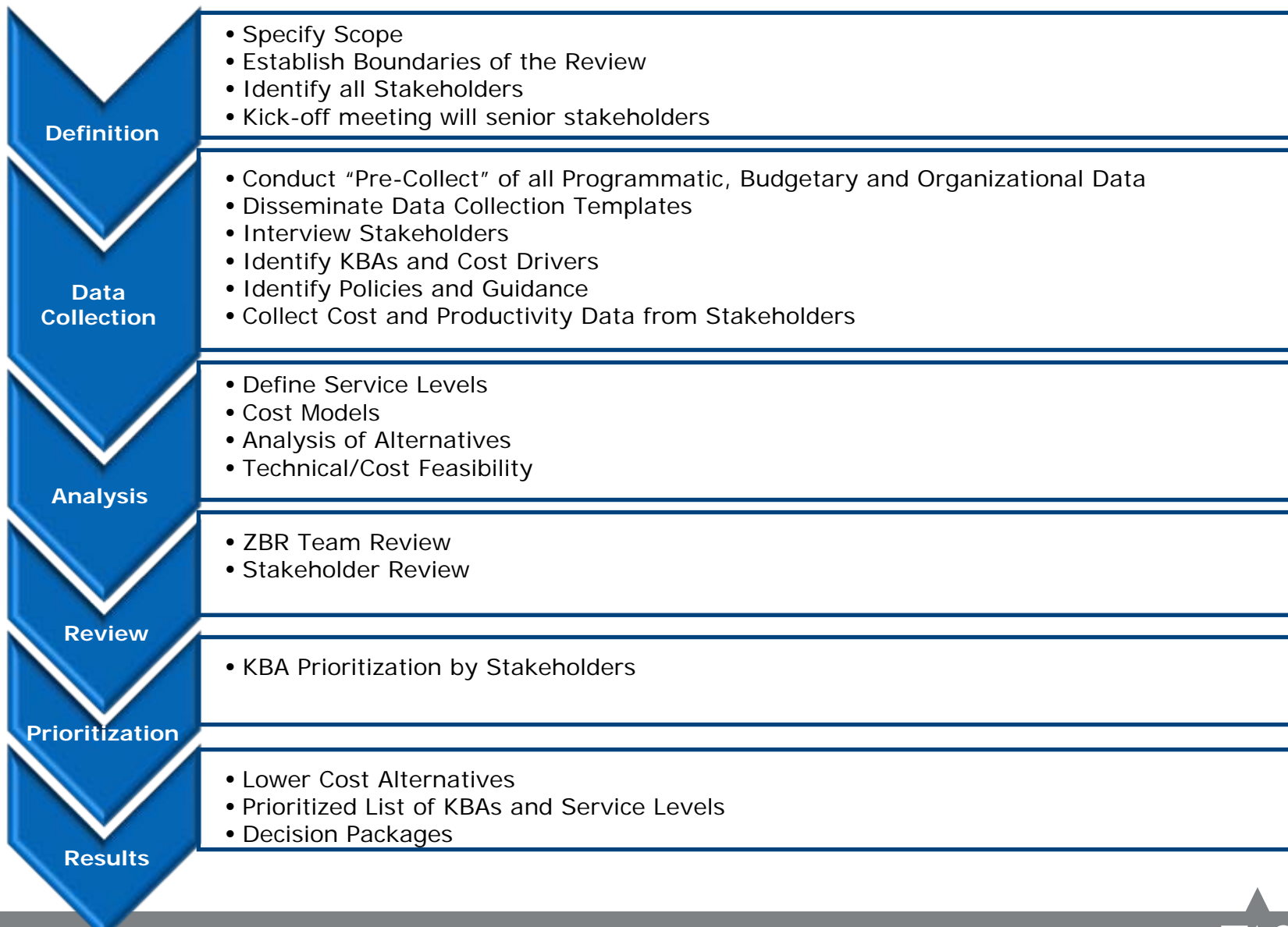
- ZBRs are not process improvement reviews but, if alternative options for each KBA are identified, cost and technical feasibility studies are then performed to determine if they can be cheaper, more efficient options

▶ Decision Package

- A document that summarizes all information pertaining to a KBA, such as costs, demand, capacity, guidance, etc.

Methodology Phases and Key Activities

Methodology Phases and Key Activities



▶ Phase 1 – Project Definition



- ▶ **Specify Scope**
 - Establish the organizational unit or mission capability under review
 - If ZBR is on a capability, firmly define it with subject matter expert reviews
 - A well-defined capability will help *minimize* scope creep

- ▶ **Establish Boundaries of the Review**
 - Organization ZBR
 - Identify all the organizational units (directorates, offices, divisions, etc) that will be included in the review
 - Capability ZBR
 - Identify all the organizational units that perform the capability under review
 - Some level of scope creep is expected as additional stakeholders are identified throughout the data collection and analysis phases

- ▶ **Identify all Stakeholders**
 - All resources that conduct the mission or capability under review, or staff in the organizational unit under review

- ▶ **Kick-off Meeting**
 - Conduct a ZBR Kick-off meeting with all senior stakeholders to outline the ZBR scope, methodology, schedule and dependencies, and achieve buy-in from stakeholders
 - Senior stakeholders to communicate info to relevant personnel to ensure collaboration and communication

▶ Phase 2 – Data Collection



▶ Conduct Data “Pre-Collect”

- Collect all programmatic, budgetary and organizational data from sources other than the stakeholder
 - Financial systems
 - Manpower databases
 - Sharepoint sites
 - Organization charts
 - Intranets
- Familiarize ZBR Team on the organization/capability while minimizing impact to the stakeholder

▶ Disseminate Data Collection Templates

- Develop and disseminate data collection templates to the POCs identified in the kick-off
- Pre-populate templates with data collection during the pre-collect
- Templates should be returned prior to stakeholder interviews to allow analysts time to review
- Template should request data that answers the following questions:
 - What are you doing (activities)?
 - Why are you doing it (guidance)?
 - Who is doing it (resources)?
 - Where are they doing it (locations)?
 - How are they doing it (processes)?

▶ Phase 2 – Data Collection



- ▶ Interview Stakeholders
 - Stakeholders within the organization under review, or within all the organizations that provide the capability under review
 - Interview the person with the knowledge and ability to make decisions for the business unit
 - Acquire a firm understanding of the who, why, where, when and how
 - Additional meetings and communications often necessary throughout the process

- ▶ Identify KBAs and Cost Drivers
 - Determine the Key Business Activities (KBAs) for each office, and the resources allocated to them
 - Identify what drives those resource levels (productivity metrics and cost drivers)
 - Policy, # of reports generated, # facilities maintained, etc.

- ▶ Identify Policies and Guidance
 - Collect all the directives, instructions, and regulations that mandate the activity be done and/or dictate the levels at which it be done

- ▶ Collect Program and Cost Data
 - Cost data – hardware, software, training, travel, manpower, etc.
 - Program data – customers, productivity metrics, inputs/outputs, processes, etc.
 - Utilizes completed data collection templates as a starting point

Phase 3 – Analysis

Definition

Data Collection

Analysis

Review

Prioritization

Results

- ▶ The analysis phase is broken out into the steps outlined below:

Data Analysis

- Examine programmatic data
- Analyze productivity metrics and customer demand
- Cross reference data
- Review Guidance

Define Service Levels

- Develop service levels for each KBA
 - Basic
 - Enhanced
 - Premium
- Service levels can be based on demand, productivity and/or statutory requirements

Cost Models

- Independent cost models created for every KBA and each service level
- Based on resources discussed with stakeholders, not budget

Analysis of Alternatives

- Conduct comprehensive review of all KBAs
- Identify opportunities for greater efficiency and effectiveness

Technical / Cost Feasibility

- Present potential alternatives to stakeholders
- Collect stakeholder input on feasibility
- Determine if alternative is technically feasible, capitalize on efficiencies, achieve costs savings or avoidance, or provides revenue generation

Phase 3 – Analysis: Service Levels



- ▶ Service levels for each KBA are determined by demand, productivity and/or statutory requirements
- ▶ Service level cost is not considered in service level identification
- ▶ Up to three service levels for each KBA: Basic, Enhanced, Premium

Example: Polygraph Examinations

Guidance Type: External Policy			DoDI 5210.91 authorizes and requires the Director, DIA to oversee the DoD Personnel Credibility Assessment Program		
Level of Service: Basic	Annual Cost	Level of Service: Enhanced	Annual Cost	Level of Service: Premium	Annual Cost
Polygraphs for all DIA civilians and military personnel and eliminate backlog by 2017	\$5.0M	Basic + polygraphs for all DIA contractors	\$5.0M Base + \$0.5M incremental = \$5.5M	Enhanced + 10% growth in DIA workforce	\$5.5M Base + \$1.0M incremental = \$6.5M

Note: data is notional

▶ Phase 3 – Analysis: Cost Models



- ▶ Independent cost estimates developed for *every* service level for *every* KBA
- ▶ Estimate based on historical and current operating costs for each KBA's requirement
- ▶ The cost model includes the cost categories below for each KBA's service level
 - Cost categories are adjusted for each ZBR based on the organization/capability under review
 - Costs estimated across the Future Years Defense Program (FYDP)
 - Includes support tail costs for all new billets
- ▶ Cost Categories
 - Government Labor
 - Military Labor
 - Contractor Labor
 - Training
 - Travel
 - Hardware
 - Software
 - Equipment
 - Supplies
 - Overhead
 - Other

▶ Phase 3 – Analysis: Analysis of Alternative



Lower Cost Alternatives (LCAs)

- ▶ The goal of this phase is to identify lower cost alternatives for some KBAs
 - Opportunities to maximize program effectiveness and efficiency
 - Opportunities to increase cost efficiency

- ▶ LCAs are identified by both the ZBR Team and stakeholders independently, and in concert through LCA meetings
 - Ex. Discontinue after-hour support due to low customer demand
 - Ex. Decrease number of couriers, but expand current routes

- ▶ ZBR Team also conducts a comprehensive review of all KBAs to look for redundancy across the organizations
 - Merge, reduce or discontinue groups with similar activities

- ▶ LCAs are subject to a feasibility study and then a cost-benefit analysis and compared to the status quo

- ▶ Alternatives are presented to leadership to decide which ones to pursue if they are technically feasible, even if stakeholders don't "like" alternative

▶ Phase 3 – Analysis: Analysis of Alternative

Definition

Data
Collection

Analysis

Review

Prioritization

Results

Technical / Cost Feasibility of LCAs

▶ Step 1

- Are the alternatives presented technically feasible?
 - Will it negatively effect the mission?
 - What are the associated risks?
 - What are the technical and/or programmatic dependencies?
 - What would prevent the successful implementation of the proposed solution?

▶ Step 2

- Will the alternatives result in cost savings?
 - Short term vs. long term savings?
 - Does it provide cost avoidance?
- Are the alternatives cost feasible?
 - Significant investment costs?
 - Return on investment?
 - Break even analysis

▶ Step 3

- Conduct cost-benefit analysis of each feasible LCA

▶ Phase 4 – Review



- ▶ This phase provides for the complete review of draft materials, service levels, costs and alternatives in preparation for KBA prioritization
- ▶ The ZBR Team conducts internal murder boards to ensure the models are accurate, comprehensive and defensible
- ▶ The ZBR Team also conducts a review with the stakeholders
 - Need consent for KBA descriptions and technical feasibility of alternatives
 - Do NOT need consent for all cost estimates, service levels and final recommendations
- ▶ Phase is complete when each participating office has completed their review

▶ Phase 5 – KBA Prioritization



- ▶ Management is provided a desktop reference guide consisting of the decision package for each KBA
- ▶ Each Directorate/Office prioritizes their KBAs independently and then collectively as a group without knowledge of KBA cost
 - Management prioritization of mission capabilities
 - Management allocation of KBAs into missions areas
 - Determinations of which level of service is acceptable for each KBA
- ▶ After KBAs are prioritized, cost and budget information is provided
 - Allows for determination of which KBAs can be funded and how resources need to be realigned

Phase 5 – KBA Prioritization



ZBR Prioritization Example

- ZBR Team identifies minimum levels that satisfy prescribed levels of guidance
- Stakeholder leadership prioritizes remaining service levels
- ZBR Team delivers final results to Stakeholders

Priority	Key Business Activity	Level of Service	Incremental Cost	Cumulative Cost
1	Cyber Analysis	Basic	\$1.0M	\$1.0M
2	Adjudications	Basic	\$2.3M	\$2.3M
3	Polygraph Examinations	Basic	\$5.0M	\$5.0M
<hr style="border-top: 1px dashed black;"/>				
4	Threat Assessments	Basic	\$100K	\$100K
5	Polygraph Examinations	Enhanced	\$0.5M	\$5.5M
6	Unofficial Foreign Travel	Basic	\$50K	\$50K



Note: data is notional

▶ Phase 6 – Brief Results



- ▶ Mid-level stakeholders are involved in the most phases of the ZBR, organizational leadership briefed at Review milestones
- ▶ Decision Packages
 - Includes:
 - KBA definitions
 - Governing Policy
 - Service Level definitions
 - Lower Cost Alternatives
 - Feasibility Studies
- ▶ Prioritization Tool
 - Allows customer to dynamically re-prioritize KBAs and corresponding Service Levels to assess impact to organization

Phase 6 – Brief Results: Cost Model Output



KBA Summary

Analyst:				Office POC:	
KBA:				Office/Branch/Division:	
Description:	Basic:				
	Enhanced:				
	Premium:				

KBA Service Level Comparison to the Program of Record

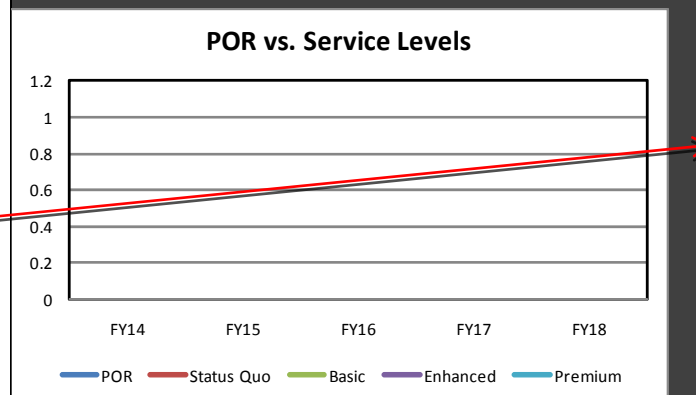
Program of Record vs. Service Levels		FY14	FY15	FY16	FY17	FY18
POR	Civ Pay					
	Mil Pay					
	Non-Pay					
Status Quo	Civ Pay					
	Mil Pay					
	Non-Pay					
Basic	Civ Pay					
	Mil Pay					
	Non-Pay					
Enhanced	Civ Pay					
	Mil Pay					
	Non-Pay					
Premium	Civ Pay					
	Mil Pay					
	Non-Pay					

Current Funding Breakout						
POR	FY11		FY12		FY13	
	Base	OCO	Base	OCO	Base	OCO
GDIP						
FCIP						
MIP						
Other						

Incremental Total Cost (TY\$)						
KBA	Basic					
	Enhanced					
	Premium					

Service Level Manpower Mix						
		FY14	FY15	FY16	FY17	FY18
Basic	Civilians					
	Military					
	Contractors					
Enhanced	Civilians					
	Military					
	Contractors					
Premium	Civilians					
	Military					
	Contractors					

Manpower Analysis



Current Manpower Mix			
	Authorized Filled	Authorized Vacant	Total
Civilians			
Military			
Contractors			
Total			

Summary

▶ Zero Base Review Outcome

- ▶ Senior leadership is provided with the following items at the conclusion of the Zero Base Review:
 - Prioritized 1 to n list of activities with their associated costs needed for mission success
 - KBAs list for each mission area
 - Service levels for each KBA and their costs
 - Regulatory guidance to inform operating models and priorities
 - Lower cost alternatives
 - Risks for each alternative and funding decisions
 - Recommendation that identifies expected cost savings/shortfalls associated with the implementation of the new plan
- ▶ Reviews conducted by a ZBR Team allow for an independent review that provides both a micro and macro level perspective
- ▶ Using KBAs to develop future spend plans and budgets will make it easier to defend the budget and identify impacts to cuts

▶ Challenges and Constraints

- ▶ Dependant on subject matter experts
- ▶ Many interdependencies within DIA and with external agencies
- ▶ Determine the appropriate organization and/or capability level to conduct the review
 - Branch/division level too small, Agency level too big
- ▶ Establish a baseline
 - Do not conduct a review on a capability whose organizations are currently under-going a re-organization
 - Minimize scope creep
- ▶ Most offices do not track productivity and costs at the level required for a Zero Base Review
- ▶ Post-Review challenge to map resources to current budget structure
 - Ongoing effort to develop Spend Plans and out-year budgets that map to organization Capabilities

▶ Keys to a Successful Review

- ▶ Full cooperation and timely participation by all levels of personnel within the participating organization
- ▶ Effective communication to all echelons of the staff regarding level and type of engagement required
- ▶ Participants' ability to provide productivity metrics
- ▶ Scope must be solidly defined at the beginning
- ▶ Must have solid buy-in from SMEs and support from management
- ▶ Accept limitations of the size of the review with the resources dedicated to complete



Questions

TASC