



Grand Coulee Power Office

Review of Staffing and Processes

Briefing to the Pacific Northwest Regional Director

March 13, 2012



Today's Agenda

- Introductions
- Study Purpose and Objective
- Study Methodology
- Results Overview
 - Current Organization
 - Solution 1: Increase Staffing Levels
 - Solution 2: Optimize the Organization
- Implementation Planning
- Questions and Open Discussion

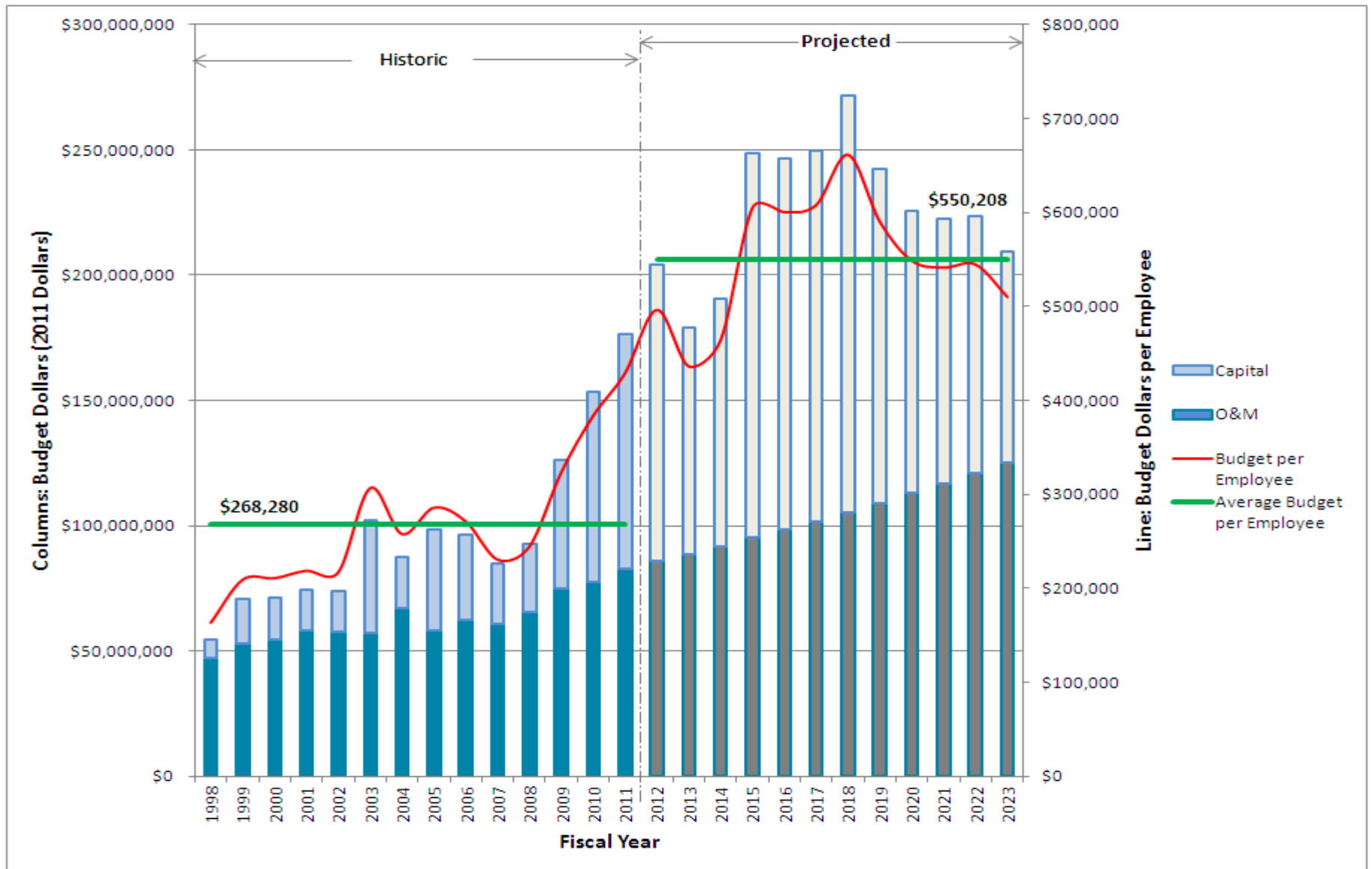
INTRODUCTIONS

STUDY PURPOSE AND OBJECTIVE

Known Challenges entering Study Phase

- Inconsistent compliance with FIST requirements and best practices
- Increasing ratio of corrective to preventive maintenance, well beyond FIST specifications
- Identified resource-driven bottlenecks in delivery of routine activities
- Increasing routine workload due to newly-imposed requirements (e.g., NERC/WECC compliance)
- Growing backlog of routine work
- Historical trend of under-running budgets due to staff limitations and vacancies

GCPO is also on the cusp of a major capital program



Study Purpose and Objective

- Provide independent review of GCPO organization
 - Staffing
 - Organization Structure
 - Processes
 - Tools
- Recommend appropriate staffing levels and resource mix
- Recommend improvements to business and technical processes



Prepare the GCPO for near-term and long-term success

STUDY METHODOLOGY

Overview of Study Methodology

Task 1	Task 2	Task 3
<p style="text-align: center;">Assessment of Current Organization</p>	<p style="text-align: center;">Staffing Analysis under Current Organization</p>	<p style="text-align: center;">Analysis of Optimized Organization</p>
<ul style="list-style-type: none"> • Review the current GCPO organization and business processes • Understand current and future workload • Collect quantitative data to support future-task analysis • Identify preliminary hypothesized recommendations for future-task verification 	<ul style="list-style-type: none"> • Analyze quantitative data from Task 1 • Recommend staffing to meet current and future workload under current organization and processes • Analyze risks of no action 	<ul style="list-style-type: none"> • Facilitate management-level discussions with peer projects to benchmark organization, performance, and practices • Analyze quantitative data from Task 1 • Recommend optimized organization (structure, staffing, processes)
<p style="text-align: center;">6 months</p>	<p style="text-align: center;">3 months</p>	<p style="text-align: center;">3 months</p>

Task 1 Qualitative Methodology

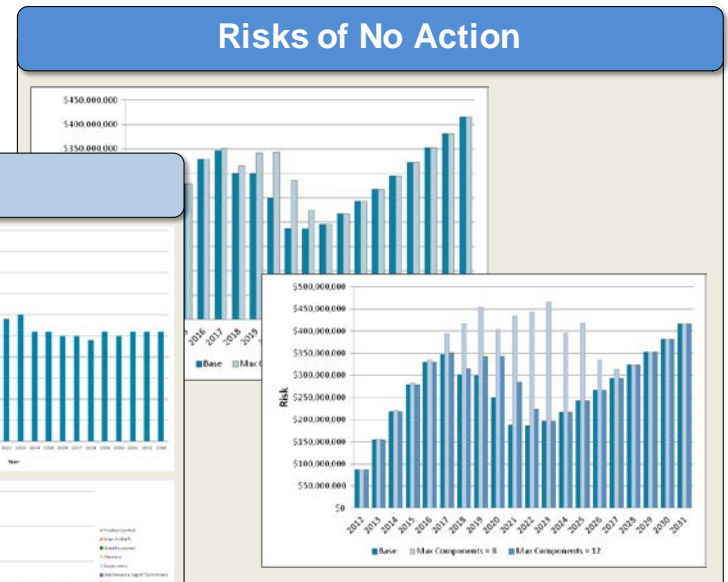
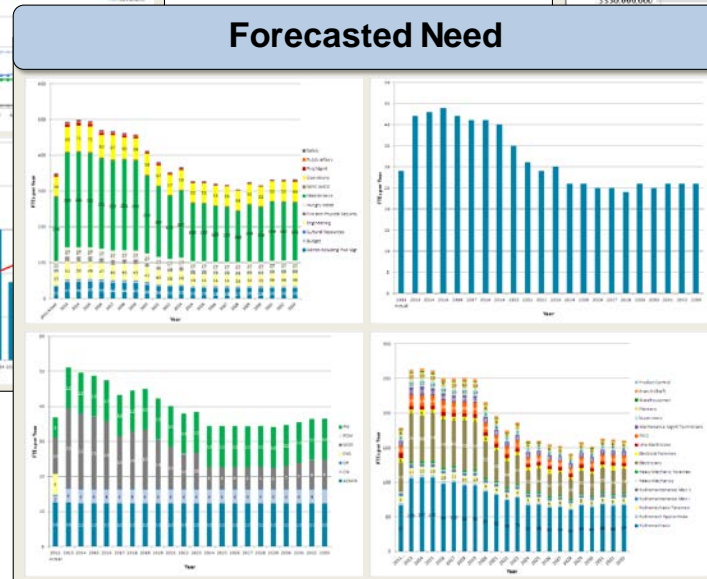
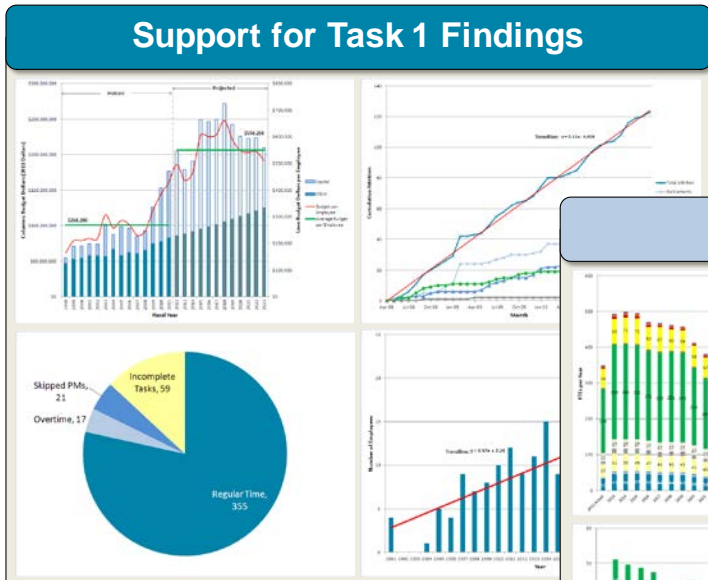
- Reviewed over 900 documents (processes, checklists, performance data, FIST requirements, etc.)
- Conducted nearly 30 workshops with various cross sections of GCPO staff

Maintenance Work Planning	Operations	Budget	Customer Coordination
Facility Services	Safety	Maintenance Superintendents	Exercises
Controls & Tech Work	NERC/WECC Compliance	Administration	Personnel Management
Security & Emergency	Maintenance Electricians	Engineering & Capital Planning	Training
Procurement & Warehousing	Project Management	Safety Clearances	Hungry Horse Maintenance
Environmental & Flow Requirements	Maintenance Mechanics	Contracting	Hungry Horse Operations
Stakeholder Relations	Maintenance PSCCs	Facility Reviews	Hungry Horse Administration

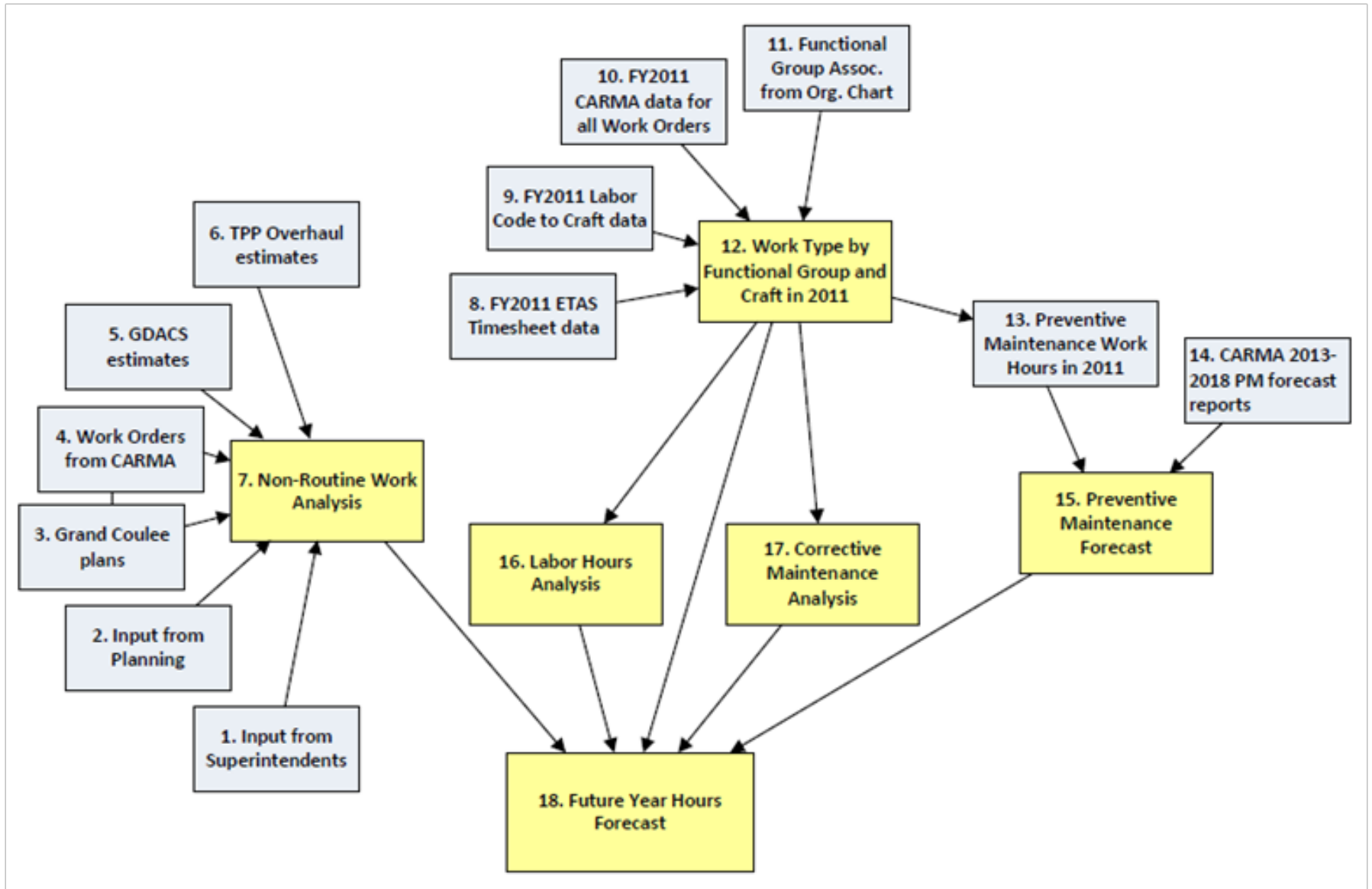
- Distributed 20-question survey to plant staff
- Synthesized qualitative data to develop assessment of each GCPO functional group and the overall enterprise

Task 2 Quantitative Methodology

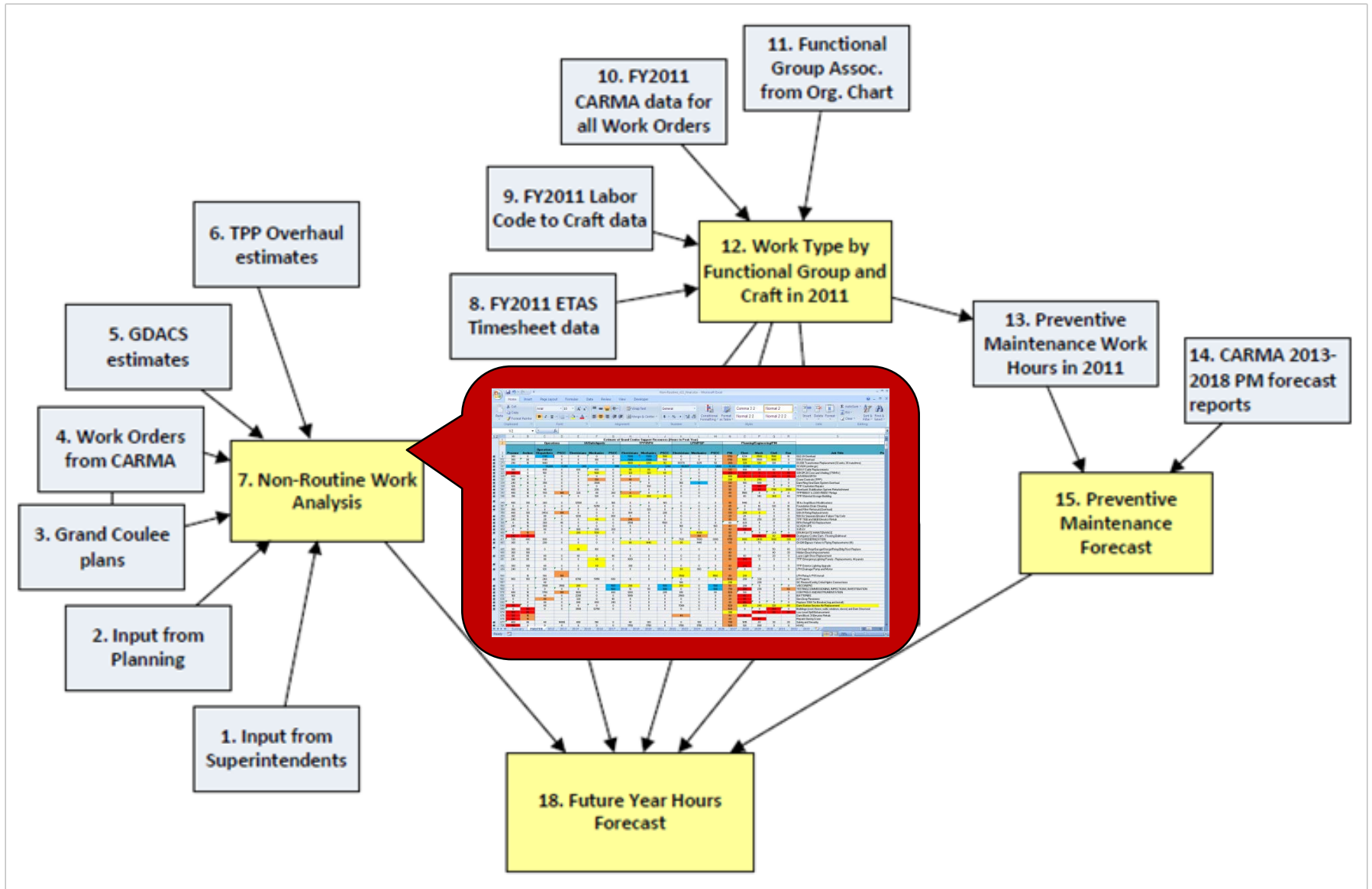
- Provided data-driven, quantitative support for some of the Task 1 findings
- Utilized actual data to forecast staffing needs assuming no changes to organization structure or business process
- Added credibility to the need and case for additional staff



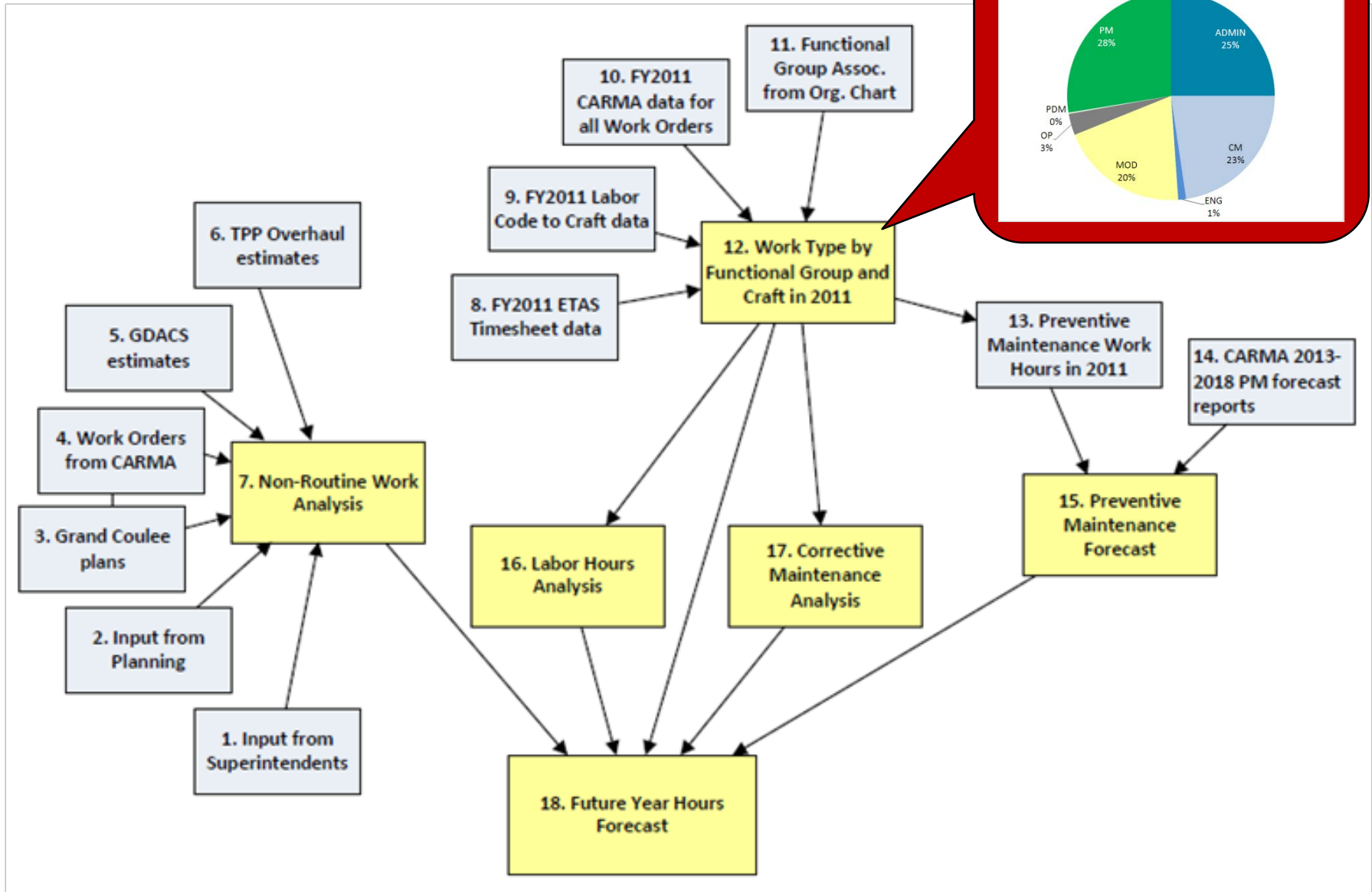
Task 2 Data Analysis Methodology



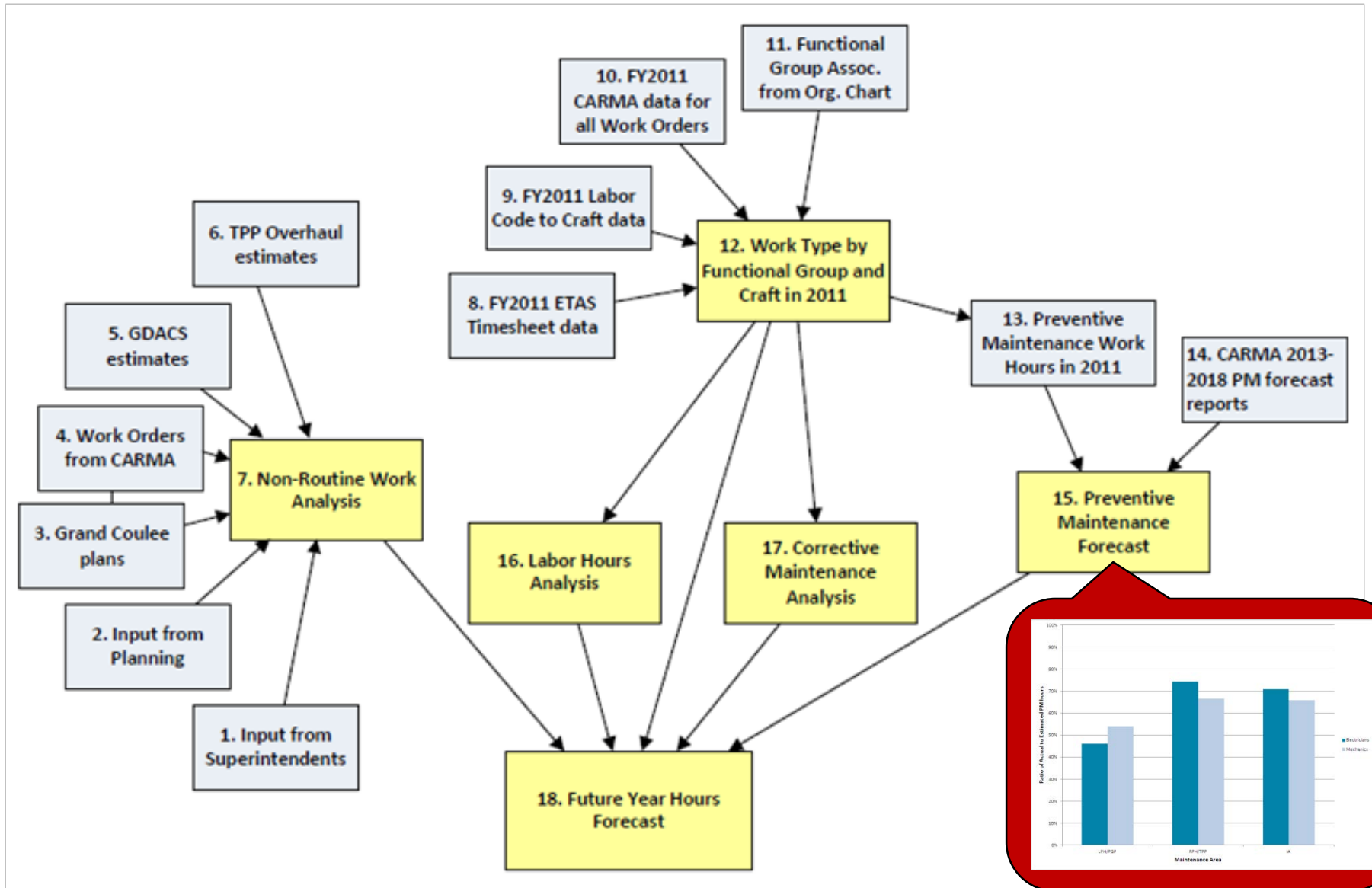
Task 2 Data Analysis Methodology



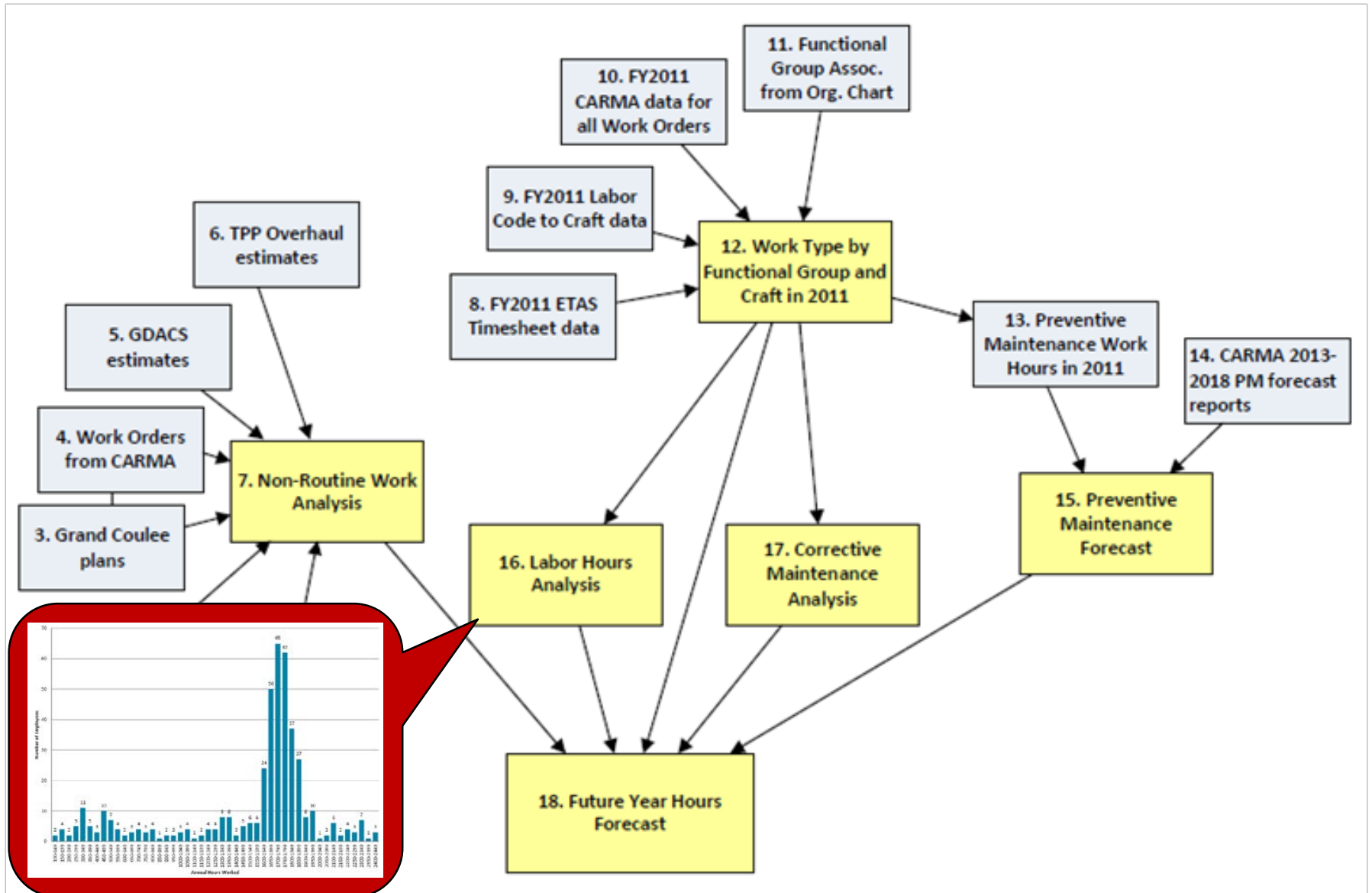
Task 2 Data Analysis Methodology



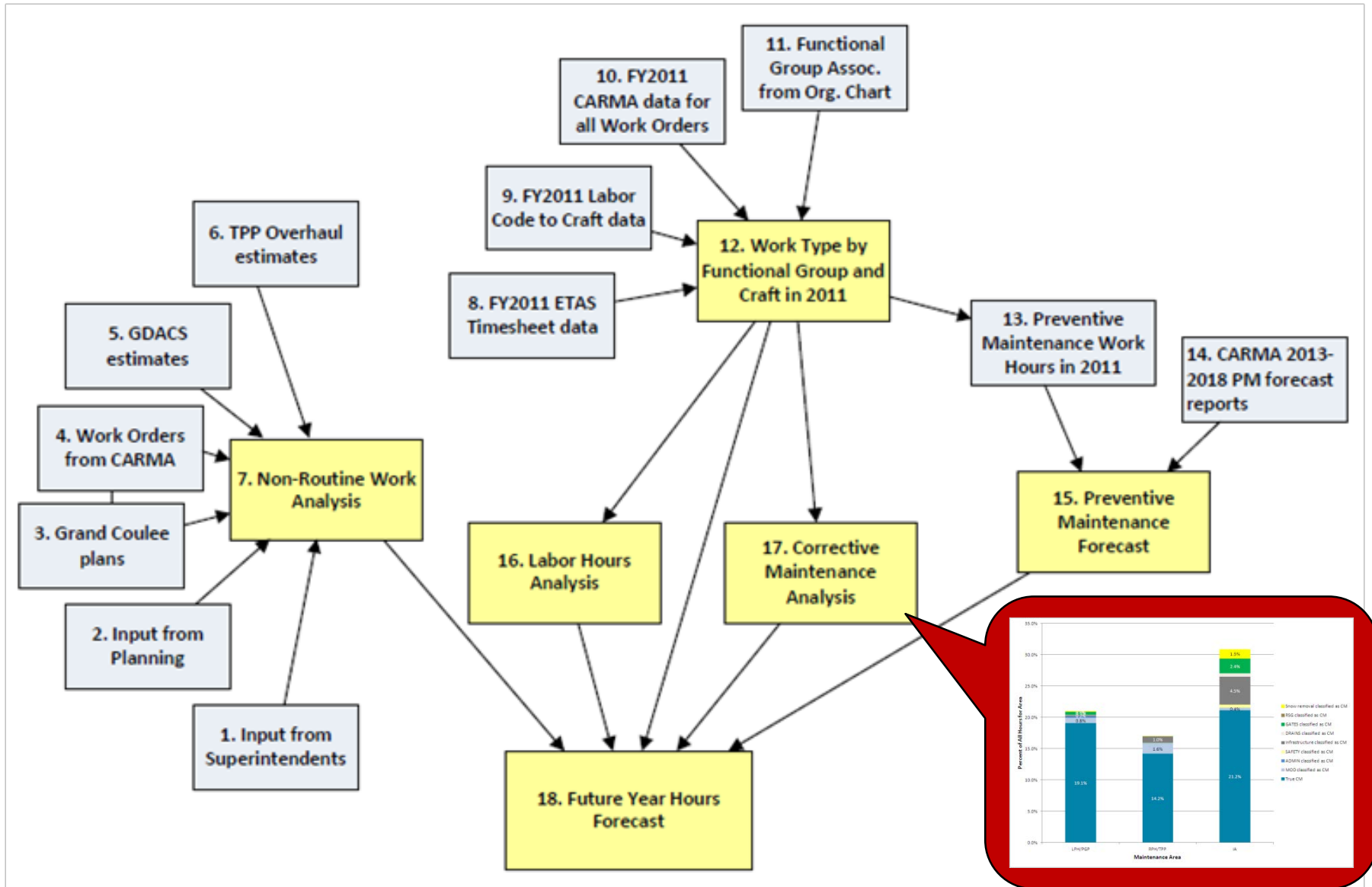
Task 2 Data Analysis Methodology



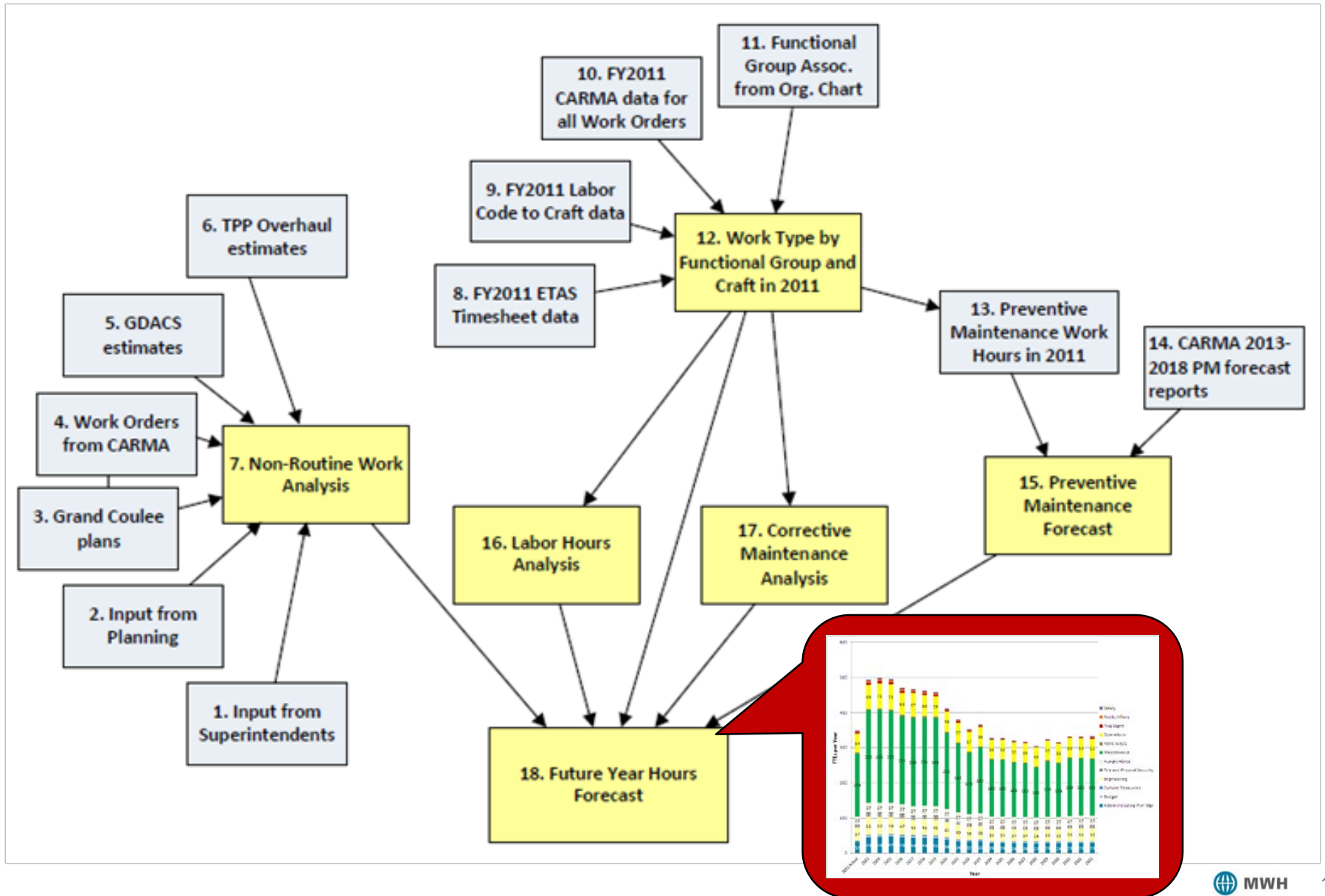
Task 2 Data Analysis Methodology



Task 2 Data Analysis Methodology

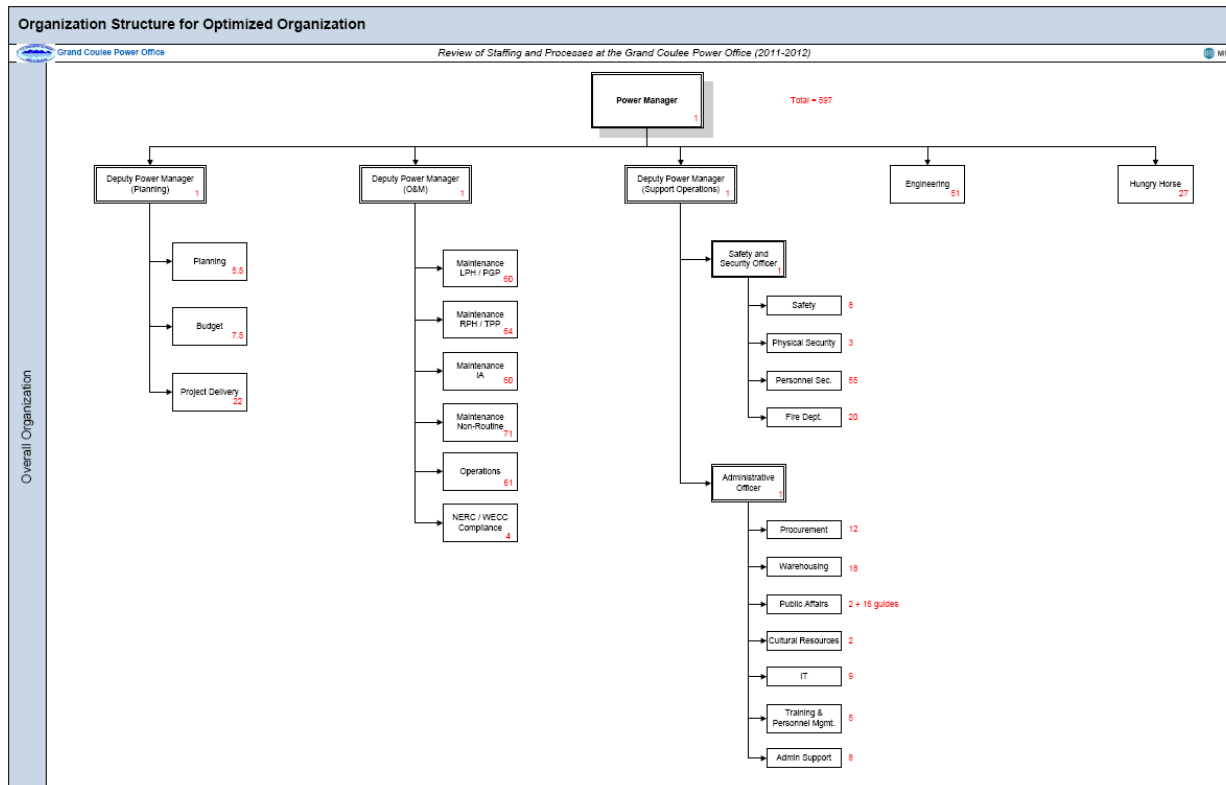


Task 2 Data Analysis Methodology



Task 3 Methodology

- Facilitated benchmarking conversations with peer organizations
- Synthesized Task 1 qualitative findings with Task 2 quantitative findings
- Outlined optimized organization – staffing, structure, process, tools



RESULTS

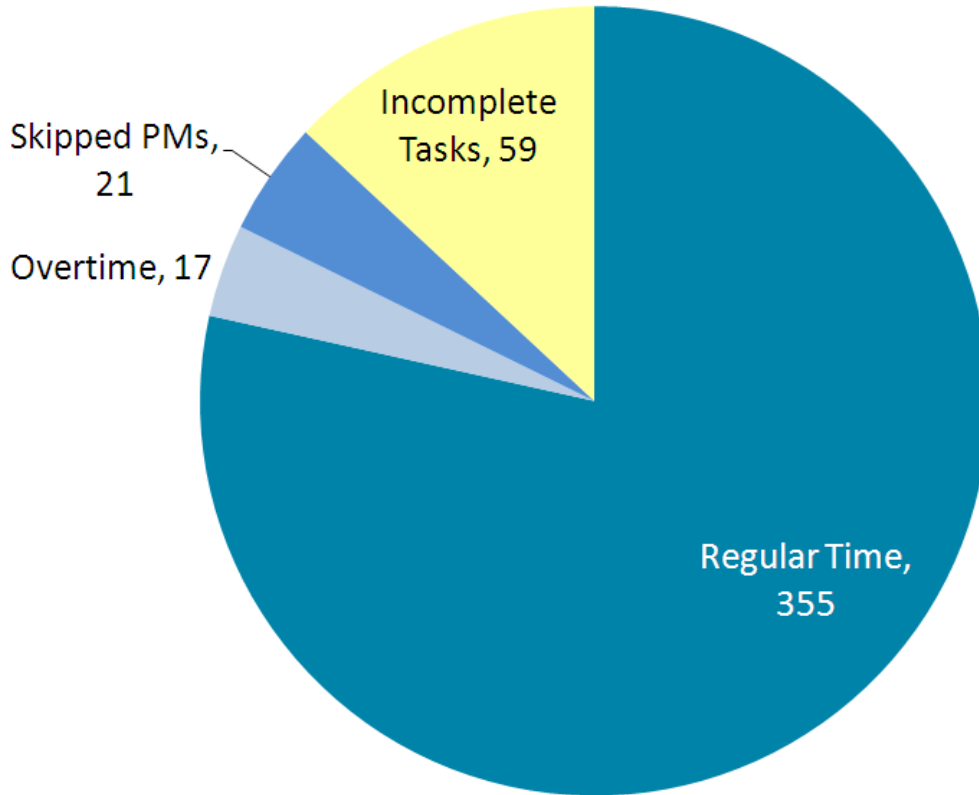
Results Overview

- Current Organization
 - Key findings and challenges
 - Baseline risks of no action

- Solution 1: Increase Staffing Levels
 - Overview of resulting staffing levels
 - Residual risks vs. Baseline

- Solution 2: Optimize the Organization
 - Overview of resulting organization
 - Residual risks vs. Baseline

Current Organization – Gap in FY2011 Actuals



➤ Regular Time

- **355 FTEs** account for the regular or straight time actually logged by GCPO employees in FY2011

➤ Overtime

- **17 FTEs** account for the overtime logged by GCPO employees in FY2011

➤ Skipped PMs

- **21 FTEs** account for the hours associated with PM work orders skipped plus the difference between the estimated and the actual PM work order hours in the CARMA system in FY2011

➤ Incomplete Tasks

- **59 FTEs** account for the estimated hours associated with tasks identified as “Not Getting Done” or “Borderline” in the report task tables

Work actually accomplished in FY2011 = **372 FTEs**

Work intended to be performed in FY2011 = **452 (Additional 80 FTEs)**

Budgeted / Authorized Positions in FY2011 = **411**

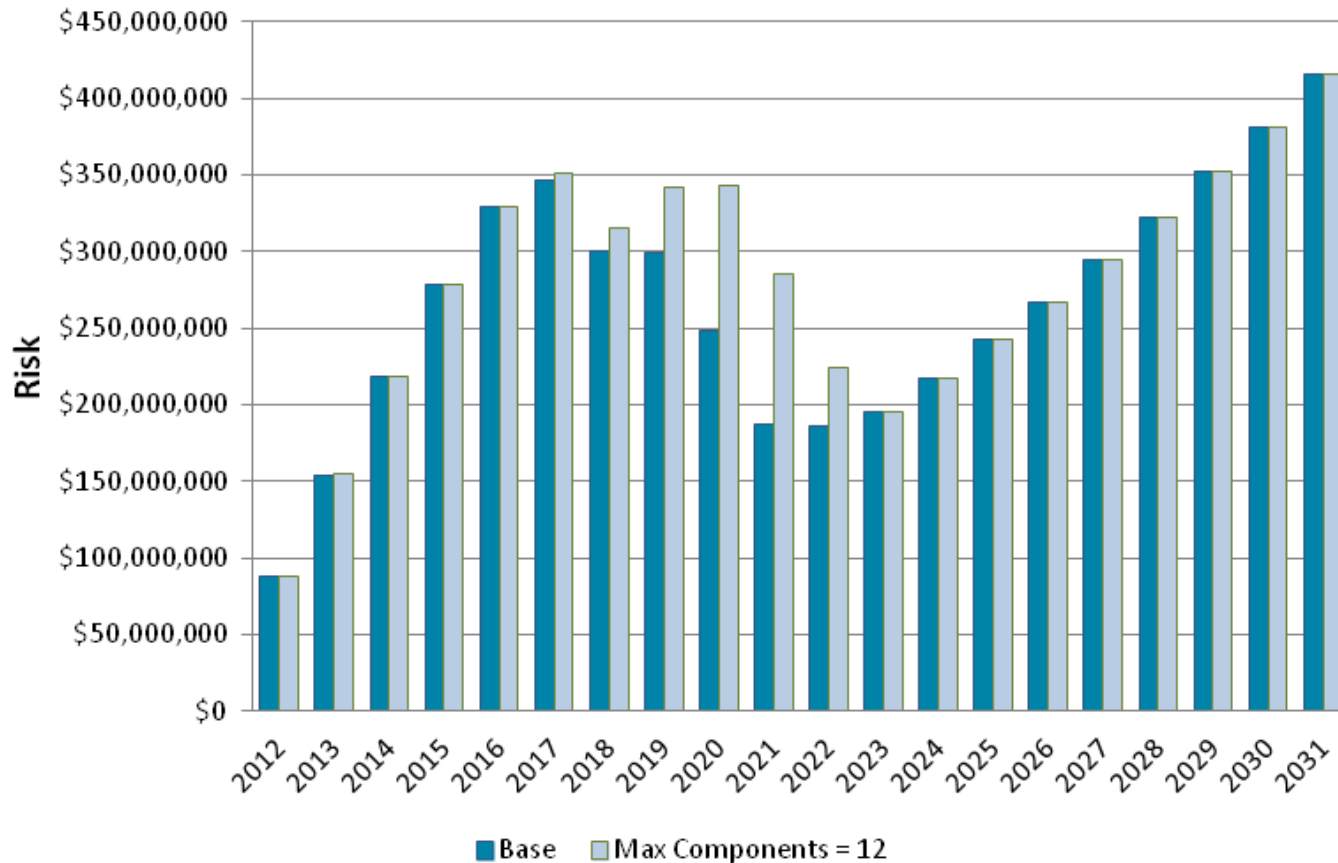
Current Organization – Key Findings and Challenges

Key Findings and Challenges
1. Large backlog of work
2. Lack of organizational alignment
3. Challenges in attracting and retaining staff
4. Insufficient organizational-level planning
5. Limited ownership of projects from start to finish
6. Inconsistent and insufficient use of CARMA
7. Limited transition planning and knowledge transfer
8. Ineffective and uncoordinated training
9. Insufficient or ineffective coordination with external partners

Baseline Risks of No Action

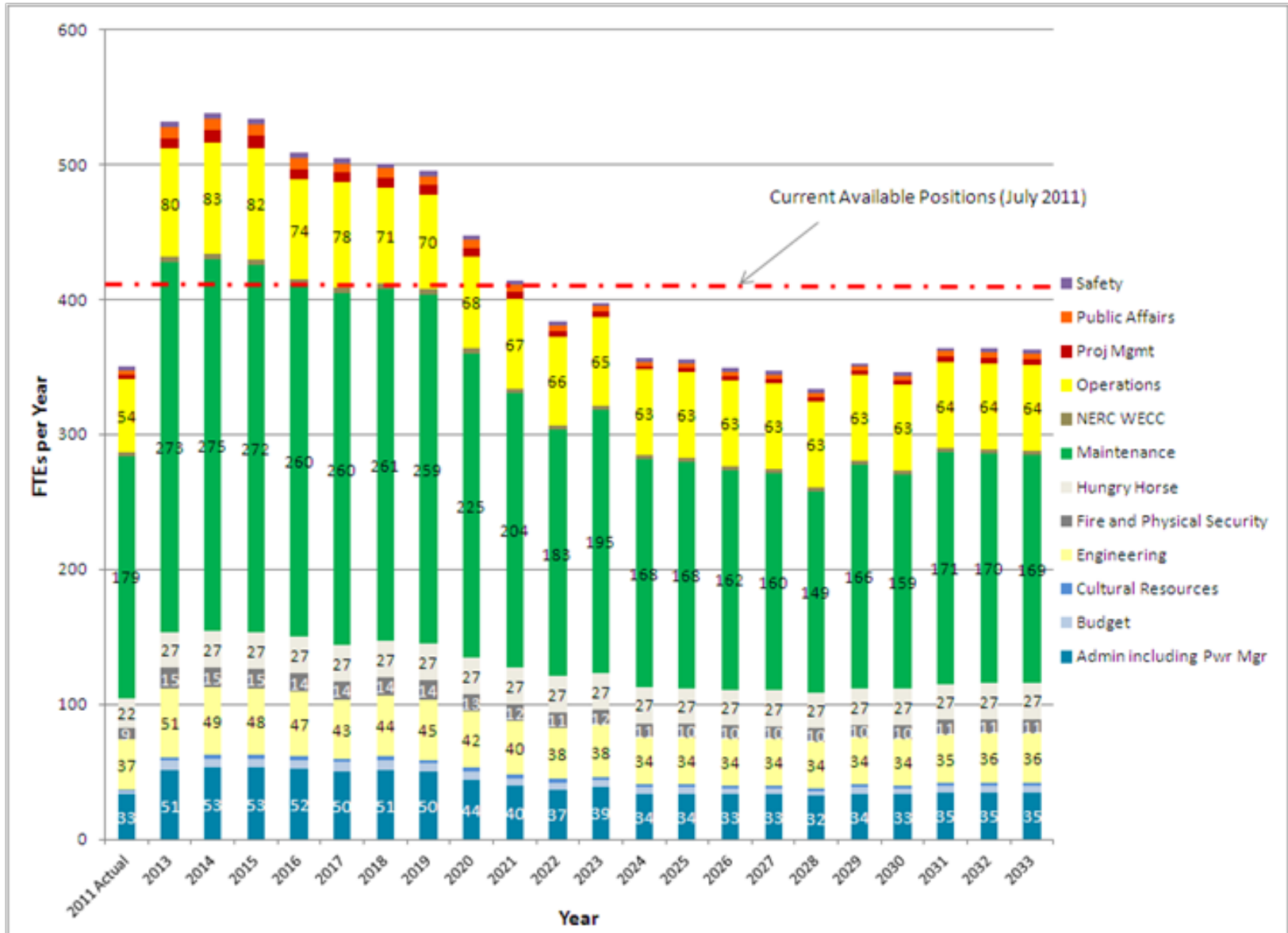
Risk of No Action						
Risk Area	Risks	Cause	Impact	Probability	Risk Score	Area Risk Score
Planned Outage Extensions	Lost generation and capacity from extended maintenance outages	Insufficient resources and planning	3	4	12	14
	Lost generation and capacity from extended project rehabilitation outages	Insufficient project management, planning, and support resources	4	4	16	
Equipment Reliability	Lost generation and capacity from forced outages	Deteriorating condition of equipment and inadequate maintenance	3	4	12	12
	Major equipment damage due to failure	Inadequate maintenance/aging equipment	4	3	12	
Safety	USBR personnel injury, accident, disability, or fatality	Inadequate safety monitoring and training	4	3	12	14
	Contractor personnel injury, accident, disability, or fatality	Inadequate construction management	4	4	16	
Environmental	Environmental incident - on project	Inadequate maintenance oversight or construction management	3	2	6	9.3
	Water control incident	Equipment Failure/operational error	5	2	10	
	Bi-Op violation	Operational error/inadequate planning	4	3	12	
Institutional Knowledge Loss	Operations Error	Improper Operational Actions	4	3	12	12
	Maintenance Re-Work	Inadequate maintenance training or planning	3	4	12	

Annual Risk Profile: Current Plan vs. Resource-Constrained



➔ Risk for Year 2021 grows by approximately \$100M








Solution 1: Increase Staffing Levels



Residual Risks vs. Baseline

Risk Mitigation under Current Organization with Task 2 Staffing Recommendations						
Risk Area	Risks	Staffing Recommendation Effect on Cause	Impact *	Probability *	Risk Score *	Area Risk Score *
Planned Outage Extensions	Lost generation and capacity from extended maintenance outages	Increased resources reduces probability	3 (0)	3 (-1)	9 (-3)	10.5 (-2.5)
	Lost generation and capacity from extended project rehabilitation outages	Increased support resources reduces probability	4 (0)	3 (-1)	12 (-3)	
Equipment Reliability	Lost generation and capacity from forced outages	Increase maintenance resources reduces probability	3 (0)	4 (-1)	12 (-3)	10 (-2)
	Major equipment damage due to failure	Increase maintenance resources reduces probability	4 (0)	2 (-1)	8 (-3)	
Safety	USBR personnel injury, accident, disability, or fatality	Adding inexperienced staff without increased supervision increased risk	4 (0)	4 (+1)	16 (+4)	16 (+2)
	Contractor personnel injury, accident, disability, or fatality	No effect	4 (0)	4 (0)	16 (0)	
Environmental	Environmental incident - on project	No effect	3 (0)	2 (0)	6 (0)	7.7 (-1.6)
	Water control incident	Increase maintenance resources reduces probability	5 (0)	1 (-1)	5 (-5)	
	Bi-Op violation	No effect	4 (0)	3 (0)	12 (0)	
Institutional Knowledge Loss	Operations Error	No effect	4 (0)	3 (0)	12 (0)	12 (0)
	Maintenance Re-Work	Increased maintenance without adequate training and supervision results in no change in probability	3 (0)	4 (0)	12 (0)	
			* Change from No Action in parenthesis			

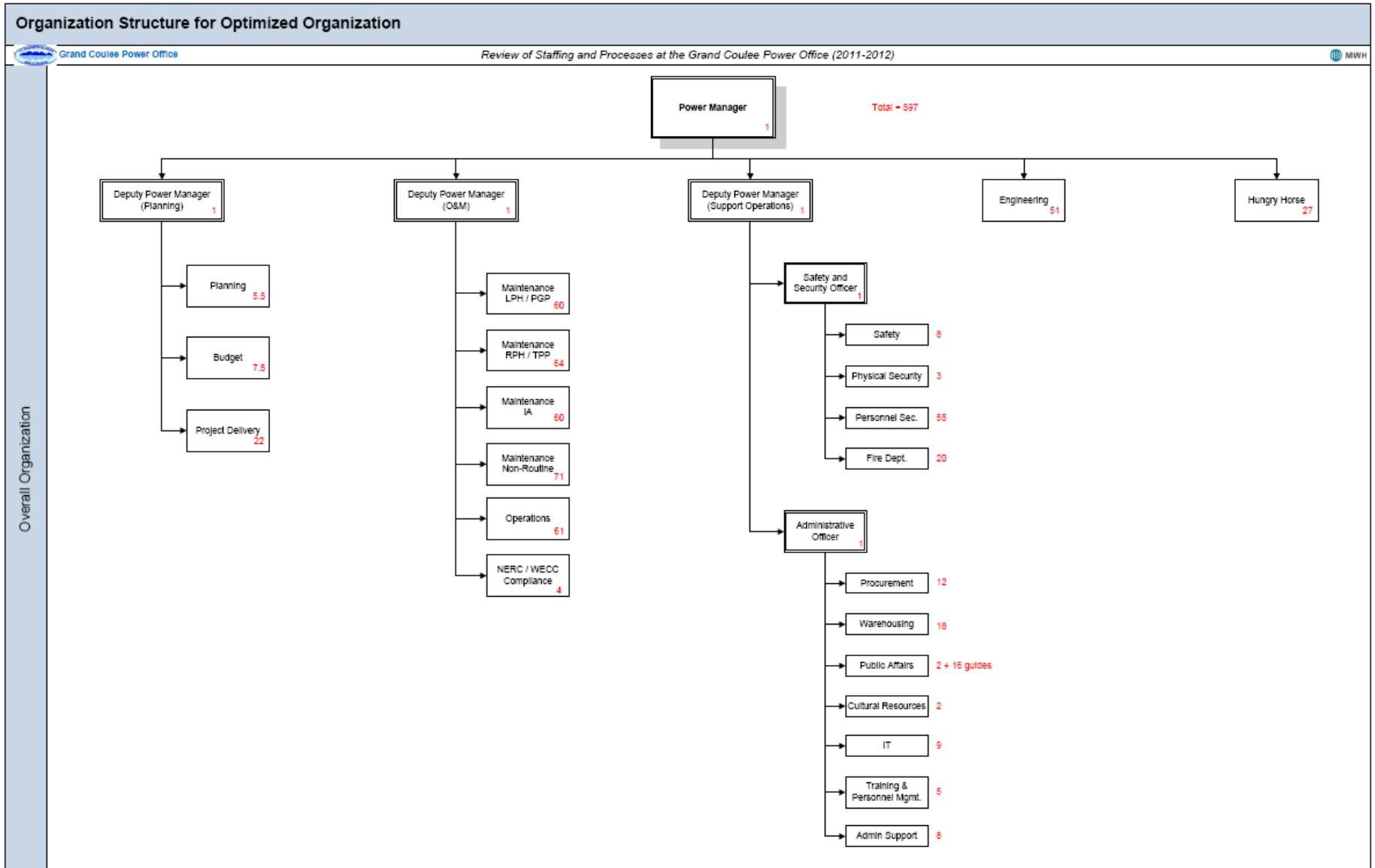
Residual Risks vs. Baseline

Risk Under Current Staffing - Task 1	
Risk Area	Risk Score
Planned Outage Extensions	
Equipment Reliability	
Safety	
Environmental	
Institutional Knowledge Loss	
Risk Under Current Organization with Recommended Staffing - Task 2	
Risk Area	Risk Score
Planned Outage Extensions	
Equipment Reliability	
Safety	
Environmental	
Institutional Knowledge Loss	

Solution 2: Optimize the Organization

Key Findings and Challenges	Recommendations
1. Large backlog of work	1. Quantify the work, estimate the effort, and increase staff accordingly
2. Lack of organizational alignment	2. Establish priorities of organization and implement revised organizational structure
3. Challenges in attracting and retaining staff	3. Adjust the hiring strategies
4. Insufficient organizational-level planning	4. Establish centralized planning and scheduling group
5. Limited ownership of projects from start to finish	5. Establish Project Management organization integrated with Engineering with defined governance, life cycle, and standard practices
6. Inconsistent and insufficient use of CARMA	6. Leverage full capabilities of CARMA system for all work, all functional groups
7. Limited transition planning and knowledge transfer	7. Develop a knowledge strategy and information capture approach
8. Ineffective and uncoordinated training	8. Improve training program under a centralized Training Officer
9. Insufficient or ineffective coordination with external partners	9. Set expectations, track performance, and implement a document management system

Solution 2: Optimize the Organization



Residual Risks vs. Baseline

Risk Under Current Staffing - Task 1	
Risk Area	Risk Score
466 Planned Outage Extensions	
Equipment Reliability	
466 Safety	
Environmental	
Institutional Knowledge Loss	
Risk Under Current Organization with Recommended Staffing - Task 2	
Risk Area	Risk Score
601 Planned Outage Extensions	
Equipment Reliability	
601 Safety	
Environmental	
Institutional Knowledge Loss	
Risk Under Optimized Organization - Task 3	
Risk Area	Risk Score
597 Planned Outage Extensions	
Equipment Reliability	
597 Safety	
Environmental	
Institutional Knowledge Loss	

IMPLEMENTATION PLANNING

Implementation Planning

- Project Management Coordination Support
- Hiring Strategies
- Improved New-Employee Onboarding
- Broader Implementation Planning Support
 - Prioritization of recommendations
 - Prioritization of resource adjustments

QUESTIONS AND OPEN DISCUSSION

APPENDIX

ORGANIZATION-WIDE FINDINGS AND RECOMMENDATIONS

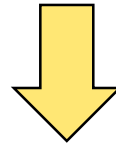
Matt Crane

Organization-wide Findings and Recommendations

Key Finding #1

Large backlog of work

- Routine O&M (PMs)
- Non-routine (Mods, CMs, Small Cap, RAX)
- Large capital support



Preliminary Recommendation #1

Quantify the work, estimate the effort, and increase staff accordingly

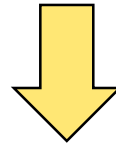
- Primary focus of Tasks 2 and 3

Organization-wide Findings and Recommendations

Key Finding #2

Lack of organizational alignment

- Self-inflicted silos (“fiefdoms”)
- Competing objectives
- Individual priorities rule over facility needs
- Limited transparency



Preliminary Recommendation #2

Establish priorities of organization and implement revised organizational structure

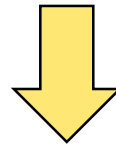
- Define enterprise-wide priorities
- Break down silos between and within groups
- Improve cross-group transparency

Organization-wide Findings and Recommendations

Key Finding #3

Challenges in attracting and retaining staff

- Limited by location, compensation structure, perceived obstacles in the hiring process
- No incentive for term employees to stay



Preliminary Recommendation #3

Adjust hiring strategies

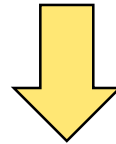
- Better leverage Regional Office Human Resources
- Dedicate an on-site resource to manage the recruitment process and coordination with Regional Office Human Resources
- Utilize targeted recruiting (publications, organizations, etc.)
- Decrease use of term employee positions

Organization-wide Findings and Recommendations

Key Finding #4

Insufficient organization-level planning

- Missing enterprise-wide work and outage planning and scheduling function
- Existing schedules do not account for contingencies
- Limited coordination between plant and construction activities



Preliminary Recommendation #4

Establish centralized planning and scheduling group

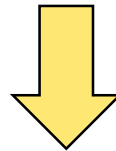
- Improve work order planning
- Integrate work scheduling across all areas and functional groups
- Align plant activities with organizational priorities and operational constraints
- Integrate realistic float into schedules

Organization-wide Findings and Recommendations

Key Finding #5

Limited ownership of projects from start to finish

- Projects of all sizes and varieties generally lack a single leader to shepherd project through entire process
- Potential for rework, schedule delays, budget overruns, quality issues, etc.



Preliminary Recommendation #5

Establish Project Management organization integrated with Engineering with defined governance, life cycle, & processes

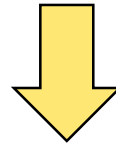
- PMs serve role on large projects; Engineers serve as PMs on smaller O&M projects
- PMs are task driven, accountable, and granted authority to manage across the entire life cycle (including construction)

Organization-wide Findings and Recommendations

Key Finding #6

Inconsistent and insufficient use of CARMA

- Varying degree of work order granularity across groups
- Incomplete definition of work orders and job plans
- Work orders not updates based on actual labor



Preliminary Recommendation #6

Leverage full capabilities of system for all work, all groups

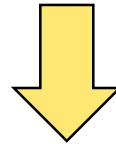
- Define specific work orders for all functional groups
- Increase job planning efforts
- Integrate review of actuals into work order updates
- Implement automated workflows to push work orders
- Use to support efficient budgeting process

Organization-wide Findings and Recommendations

Key Finding #7

Limited transition planning and knowledge transfer

- Large turnover and retirements
- Little overlap between departing and arriving employee
- Limited capture of plant-specific knowledge



Preliminary Recommendation #7

Develop knowledge strategy & information capture approach

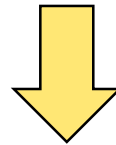
- Ensure overlap between departing & arriving employee where feasible
- Implement proactive succession planning
- Document project procedures (text, photos, videos, etc.)

Organization-wide Findings and Recommendations

Key Finding #8

Ineffective and uncoordinated training

- “One size fits all, check the box” approach
- Not always aligned with organizational priorities, prof. development goals
- Limited coordination across enterprise
- Varying views of apprenticeship program
- Limited orientation for new employees



Preliminary Recommendation #8

Improve training program under a centralized Training Officer

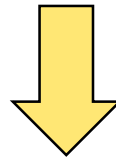
- Assess effectiveness of all training delivered
- Improve content and delivery methods
- Align training with organizational priorities, professional development
- Leverage apprenticeship program (GCPO as Reclamation training “hub”)
- Improve and standardize new employee orientation

Organization-wide Findings and Recommendations

Key Finding #9

Insufficient & ineffective coordination with external partners

- Unclear definition of expectations
- Limited performance tracking capabilities
- Limited understanding of others' procedures and requirements



Preliminary Recommendation #9

Set expectations, track performance, and implement a document management system

- Improve definition of expectations in service agreements
- Practice routine coordination, check points
- Improve shared understanding of internal procedures
- Leverage a doc mgmt. system for workflow integration, perf. tracking

Engineering

Sam Nott

Task Status & Summary Staffing Assessment – Engineering

Task <i>(Italics indicate new tasks within last 3-5 years)</i>	Primary Responsibility	Status		
		Keeping Up	Borderline	Not Getting Done
Provide engineering design services to support O&M needs	Engineer			X
Provide engineering design services to support capital projects	Engineer		X	
Provide drafting services	Drafter		X	
Provide input into procurement specifications (market research, spec drafting, review)	Engineer		X	
Provide construction-phase technical reviews	Engineer	X		
Provide environmental support	Env. Spec.	X		
Manage hazardous waste program	Env. Spec.	X		
Monitor downstream slope stability	Hydrologic Tech.	X		
Review SOP updates	Engineer			X
Analyze HydroAmp condition assessment data to proactively identify trends, foresee problems	Engineer			X
Provide testing and commissioning engineering services	Engineer			X

Current staffing levels appear:
Adequate
Borderline
X Insufficient

Engineering

Key Findings and Challenges	[Preliminary] Recommendations
1. Unable to keep up with as-builts	1. Increase staff (craft, engineering, drafting) where bottlenecked; integrate as-built process into standard project closeout procedures
2. Inefficiencies in initiating, prioritizing, assigning, and tracking work	2. Leverage Planning Group to understand work prioritization in support of O&M and capital projects
3. Limited understanding of plant specifics	3. Rotate engineers through plants to ensure pipeline of engineers with plant knowledge

Project Management

Sam Nott

Task Status & Summary Staffing Assessment – Project Management

Task <i>(Italics indicate new tasks within last 3-5 years)</i>	Primary Responsibility	Status		
		Keeping Up	Borderline	Not Getting Done
Coordinate project activities	Project Manager		X	
Develop project plan	Project Manager			X
Lead communication/ coordination with stakeholders	Project Manager		X	
Develop service agreements with Regional Office and TSC	Project Manager		X	
Oversight/management of project delivery	Project Manager		X	
Establish and implement standards for project management (e.g. appoint PMs; resolve problems; establish and enforce overarching PM processes/ policies)	Deputy Power Manager (current PM group leader)			X

Current staffing levels appear:
Adequate
Borderline
X Insufficient

Project Management

Key Findings and Challenges	[Preliminary] Recommendations
1. Lacking sufficient project management resources and capabilities to match backlog of work	1. Continue with ongoing formation of GCPO project management organization
2. Limited authority to truly manage projects from start to finish	2. Transfer COR authority from Construction to GCPO Project Management across the entire project life cycle
3. Lack of up-front planning negatively impacts delivery success	3. Engage in up-front project planning

Regional Construction Office at Grand Coulee

Sam Nott

Task Status & Summary Staffing Assessment – Construction

Task <i>(Italics indicate new tasks within last 3-5 years)</i>	Status		
	Keeping Up	Borderline	Not Getting Done
Authority over contract after award	X		
Submittal response (drawings, RFIs, procedures, etc.)		X	
On-site inspections any time a contractor is on site		X	
Daily inspection reports		X	
Schedule monitoring according to the specs		X	
Contractor orientation (security, safety, material handling)	X		
Contractor safety monitoring	X		
Site record sheet checks		X	
Change order preparation	X		
Special work permits	X		
Punch list maintenance and resolution	X		
Coordination with project managers			X
Turnover of as-builts		X	
Contract document management			X
Pre-bid conferences and tours	X		
Specification review		X	
Value engineering studies		X	
Warranty claims	X		

Current staffing levels appear:
 Adequate
X Borderline
Insufficient

Regional Construction Office

Key Findings and Challenges	[Preliminary] Recommendations
1. Unable to keep up with capital demands of GCPO and highly-technical large capital projects	1. Temporarily integrate construction management into GCPO PM/ENG organization
2. No standardization in document management and review of submittals, RFIs, etc.	2. Implement standard document and correspondence management system, particularly on major capital work
3. Limited schedule coordination with plant O&M activities and constraints	3. Coordinate the schedule with all other activities at Grand Coulee
4. Construction group, as now staffed, cannot effectively cover numerous projects at once	4. Assign dedicated inspectors with the appropriate skills to the larger capital jobs

Administration

Bryan Oldham

Task Status & Summary Staffing Assessment – Administration, IT

Task <i>(Italics indicate new tasks within last 3-5 years)</i>	Primary Responsibility	Status		
		Keeping Up	Borderline	Not Getting Done
Provide general IT support and help desk activities	IT Specialist		X	
Acquire PCs and associated equipment	Supv IT Specialist	X		
Develop and implement IT support for NERC CIP	All		X	
Perform systems accreditation	IT Specialist	X		
Control VPN access	IT Specialist	X		
Help GCPO identify commercial IT solutions as opposed to creating solutions	All	X		
Monitor copiers, printers, and vides conference room contracts	IT Specialist	X		
Current staffing levels appear:		Adequate X Borderline Insufficient		

Task Status & Summary Staffing Assessment – Administration, Contracts

Task <i>(Italics indicate new tasks within last 3-5 years)</i>	Primary Responsibility	Status		
		Keeping Up	Borderline	Not Getting Done
Review specifications to ensure conformance to regulations	All			X
Control the purchasing process	All		X	
Expedite delivery	All		X	
Review invoices	All			X
Review P-card purchases	All		X	
Process 4,000+ obligations	All			X
Current staffing levels appear:		Adequate Borderline X Insufficient		

Task Status & Summary Staffing Assessment – Administration, Supply Mgmt.

Task <i>(Italics indicate new tasks within last 3-5 years)</i>	Primary Responsibility	Status		
		Keeping Up	Borderline	Not Getting Done
Receive material	Warehouse III	X		
Provide warehouse function	Warehouse III	X		
Perform fleet management	Supply Tech	X		
Develop greenhouse gas emissions data per federal directive	Supv Supply Mgmt Specialist	X		
Perform property disposal	Supply Tech	X		
Perform building inspections	Supply Tech	X		

Current staffing levels appear:

X Adequate
Borderline
Insufficient

Task Status & Summary Staffing Assessment – Administration, Personnel Mgmt.

Task <i>(Italics indicate new tasks within last 3-5 years)</i>	Primary Responsibility	Status		
		Keeping Up	Borderline	Not Getting Done
Union coordination	Administrative Officer	X		
Staff on-boarding/exit	Support Services Supervisor	X		
Support staff inquiries for benefits, etc.	Support Services Supervisor	X		
Address conduct and performance issues, oversee awards and incentives	Administrative Officer (with others outside Admin. Office)		X	
Support managers and supervisors to effectively manage staff performance	All			X
Current staffing levels appear:		Adequate X Borderline Insufficient		

Task Status & Summary Staffing Assessment – Administration, Training

Task <i>(Italics indicate new tasks within last 3-5 years)</i>	Primary Responsibility	Status		
		Keeping Up	Borderline	Not Getting Done
Deliver mandatory training (Safety, HR)	Administrative Officer, Support Services Supervisor	X		
Coordinate development training	Administrative Officer		X	
Update and improve curriculum for training program	Administrative Officer, Support Services Supervisor			X
Analyze training needs	Administrative Officer			X
Coordinate training across organization	Administrative Officer			X
Assess effectiveness of training Program	Administrative Officer			X
Current staffing levels appear:		Adequate Borderline X Insufficient		

Task Status & Summary Staffing Assessment – Administration, General Support

Task <i>(Italics indicate new tasks within last 3-5 years)</i>	Primary Responsibility	Status		
		Keeping Up	Borderline	Not Getting Done
Provide clerical support	Support Services Supervisor, Office Aide		X	
Oversight and management of timekeeping system	Administrative Officer, Support Services Supervisor, Office Aide		X	
Manage document management materials/systems, project/photographic archives, etc.	Mail and File Clerk, Photographic Technician			X
Serve as point-of-contact for Emergency Action Plan	Administrative Officer		X	
Administer reimbursement and expense programs (bankcards, relocation, vouchers, travel)	Facility Services Specialist, Administrative Officer		X	
Current staffing levels appear:		Adequate X Borderline Insufficient		

Administration

Key Findings and Challenges	[Preliminary] Recommendations
1. Limited understanding of specification requirements by non-Contracts staff	1. Create standard specification templates
2. Insufficient Contracts involvement early in the acquisition process	2. Include Contracts in major purchase acquisitions at the beginning of project planning
3. Inefficient use of plant personnel time with respect to specification development	3. Create and staff technical purchasing writer position

Public Affairs

Bryan Oldham

Task Status & Summary Staffing Assessment – Public Affairs

Task <i>(Italics indicate new tasks within last 3-5 years)</i>	Primary Responsibility	Status		
		Keeping Up	Borderline	Not Getting Done
Manage the Visitor Centers at Grand Coulee & Hungry Horse (resources, exhibits, public tours, etc.)	Public Affairs Officer	X		
Public Affairs including VIP/special tours, information requests (FOIA and non-FOIA), etc.	Public Affairs Officer	X		
Public Relations and Community Outreach including special events permits, media relations, chamber meetings, website information, trade groups, water information notices, etc.	Public Affairs Officer		X	
Management of Tribal Relations including coordinating agreements, addressing/reporting on instances/issues	Public Affairs Officer		X	
Management/Coordination of Plans (e.g., Museum Property Mgmt., Stakeholder Involvement, Visitors Center Succession)	Public Affairs Officer			X

Current staffing levels appear:
 Adequate
X Borderline
Insufficient

Public Affairs

Key Findings and Challenges	[Preliminary] Recommendations
1. Work is primarily reactionary in nature	1. Implement a Request Monitoring System and increasing staffing
2. Plans are out of date	2. Add a resource to update plans
3. Support and response requirements to outside agencies are increasing	3. Proactively maintain communication with the outside entities and increase staffing to support

Budget

Pat Lytle

Task Status & Summary Staffing Assessment – Budget

Task <i>(Italics indicate new tasks within last 3-5 years)</i>	Primary Responsibility	Status		
		Keeping Up	Borderline	Not Getting Done
Monthly funds status reports	Officer, Analyst		X	
Regional Office requests	All		X	
Budget development & updating	Officer, Analyst		X	
Day-to-day activities (such as voucher reviews, diversion rates, etc.)	All		X	
Accruals/obligations review & reporting	All		X	
<i>Benchmarking activities</i>	Analyst		X	
CARMA cleanup/tracking/analysis	All			X
Program analysis	Analyst, Tech			X

Current staffing levels appear:

Adequate
Borderline
X Insufficient

Budget

Key Findings and Challenges	[Preliminary] Recommendations
1. Insufficient analysis, validation, and verification of budget performance	1. Increase budget analyst staffing to track and analyze performance, both historical and forward-looking
2. Reactive approach in budgeting versus proactive	2. Customize systems/procedures to facilitate consistently developed risk-based proactive budgets; staff accordingly to support associated effort
3. Unrealistic budget status tracking for longer-term projects	3. Leverage project managers to consistently report actual project performance

Cultural Resources

Pat Lytle

Task Status & Summary Staffing Assessment – Cultural Resources (Archaeologist)

Task <i>(Italics indicate new tasks within last 3-5 years)</i>	Primary Responsibility	Status		
		Keeping Up	Borderline	Not Getting Done
Support of O&M and capital projects	Archaeologist		x	
Tracking and maintaining historical preservation	Archaeologist		x	
Tribal entity coordination (coordinated with Public Affairs)	Archaeologist	x		
Reporting and plan updates including Historic Properties Management Plan	Archaeologist			x
Current staffing levels appear:		Adequate X Borderline Insufficient		

Cultural Resources

Key Findings and Challenges	[Preliminary] Recommendations
1. Inconsistent involvement of cultural resources in project planning and delivery	1. Integrate regulatory approvals into standardized project life cycle
2. Increase in requirements, reporting and Plan updates	2. Add junior archeologist role to support manager with associated reporting and Plan updates

Operations

Sam Nott

Task Status & Summary Staffing Assessment – Operations

Task <i>(Italics indicate new tasks within last 3-5 years)</i>	Status		
	Keeping Up	Borderline	Not Getting Done
Coordination with external agencies to meet flow, level, BiOp, and power constraints	X		
Routine operations to meet load, voltage, and flow demands	X		
Operator rounds and routine inspections	X		
Scheduling of generation, pumping, transmission and distribution outages		X	
HECP preparation, switching and placement and JHA review		X	
Operational logs, check-sheets, and document maintenance	X		
<i>WECC-required testing, training, and reporting</i>	X		
Response to alarms and preparing trouble reports	X		
SOP preparation and review, nameplates, and directories		X	
Internal communications and shift turnover		X	
Testing of alarms, gates, valves, black-start, and lockout relays		X	
PO&M monthly, annual, and incident reporting and review	X		
Operator training, certification, reading assignments, and reviews	X		
Testing of new or returning-to-service equipment		X	
<i>Review of design criteria and submittals for capital projects</i>			X

Adequate
Current staffing levels appear: X Borderline
Insufficient

Operations

Key Findings and Challenges	[Preliminary] Recommendations
1. Struggling to keep up with increasing amount of switching orders	1. Improve enterprise-wide work planning, including clearances, to better coordinate advanced placement
2. Limited communication from Maintenance to Operations at completion of work	2. Adjust procedures to require Operations to sign off on complete work order after being briefed by Maintenance crew
3. SOP shop cannot keep up with workload	3. Set policies for SOP shop requirements and staff accordingly
4. Insufficient review and participation on capital projects	4. Integrate Operations into review of capital project design requirements and submittals

Maintenance

Sam Nott

Task Status & Summary Staffing Assessment – Maintenance

Task <i>(Italics indicate new tasks within last 3-5 years)</i>	Status		
	Keeping Up	Borderline	Not Getting Done
Preventative maintenance – high priority <i>including NERC/WECC/CIP</i>	X		
Preventive maintenance – low priority			X
Corrective maintenance		X	
Modification work orders		X	
Operations work orders – trouble reports	X		
Major CM – ring seal gates	X		
Major Mod - GDACS	X		
PFR/CRF recommendation work orders		X	
Predictive maintenance			X
Miscellaneous standing work orders	X		
Specifications for procurement		X	
Work planning		X	
Work scheduling	X		
Apprenticeship training	Mechanics	PSCC	Electricians
Specialized and orientation training		X	
Job hazard analysis	X		
Dam infrastructure maintenance			X
<i>Capital projects support</i>		X	
Job closeout including as-builts		X	
PO&M annual, CFR, and PFR reviews	X		
<i>Condition assessments</i>	X		
Review of design criteria and submittals for capital projects			X
<i>HECP/SWP clearance holder for contractors</i>		X	
Testing and commissioning		X	
<i>PSCC ops vulnerability assessments</i>		X	
Data gathering for designers		X	
<i>Crane operations and inspections for contractors</i>		X	
Current staffing levels appear:			Adequate X Borderline Insufficient

Maintenance

Key Findings and Challenges	[Preliminary] Recommendations
1. “Fiefdoms” exist within crews	1. Rotate craftsmen on each crew on a regular basis; rotate across areas as well
2. Insufficient job closeout documentation (limited time, resources)	2. Build time and resources into every job plan for closeout documentation
3. Incomplete performance on PM work orders	3. Increase staffing levels to keep up with routine PMs
4. Procurement is currently using 50% of planner’s time	4. Assign dedicated procurement support staff
5. Unit outages run longer than scheduled due to lack of resources	5. Estimate the cost of extended outages to justify adding resources

NERC/WECC/CIP

Sam Nott

Task Status & Summary Staffing Assessment – NERC/WECC Compliance

Task <i>(Italics indicate new tasks within last 3-5 years)</i>	Primary Responsibility	Status		
		Keeping Up	Borderline	Not Getting Done
<i>Collect and process required NERC/WECC compliance data</i>	All	X		
<i>Provide internal "enforcement"</i>	All	X		
<i>Coordinate externally on NERC/WECC matters</i>	All	X		
Current staffing levels appear:		X Adequate Borderline Insufficient		

Hungry Horse

Pat Lytle

Task Status & Summary Staffing Assessment – Hungry Horse

Task <i>(Italics indicate new tasks within last 3-5 years)</i>	Primary Responsibility	Status		
		Keeping Up	Borderline	Not Getting Done
TECHNICAL				
Routine operations	Operations	X		
Routine maintenance – CARMA work order generation, closeout	Maintenance		X	
Safety – HECP, JHAs, clearances, <i>FIST recommendations becoming requirements</i>	Various		X	
Power and water scheduling	Operations	X		
RAX and capital work/contract support	Various	X		
Engineering – drawing conversion	Engineer Tech			X
<i>WECC/NERC compliance</i>	Various	X		
<i>Janitorial</i>	All		X	
ADMINISTRATIVE				
Contracting/purchasing up to \$25k	Admin Assistant		X	
CARMA support	Maintenance Specialist		X	
Compliance (NERC/WECC, safety, environmental, etc.)	Maintenance Specialist		X	
Inspection/audit tracking, <i>especially PFR and CFR reviews</i>	Facility Manager		X	
Various reporting (greenhouse gas, property reviews, NHPA, space utilization, Government Performance and Results Act)	Admin Assistant		X	

Current staffing levels appear:
X Adequate
X Borderline
X Insufficient

Hungry Horse

Key Findings and Challenges	[Preliminary] Recommendations
1. Growing backlog of preventive maintenance (PM) work orders	1. Increase staff levels and degree of self-direction
2. Unable to keep up with as-builts	2. Temp/contractor support for conversion and consolidation of as-builts
3. Limited input into design documents and contract requirements	3. Assign a project manager to Hungry Horse

Safety

Matt Crane

Task Status & Summary Staffing Assessment – Safety

Task <i>(Italics indicate new tasks within last 3-5 years)</i>	Primary Responsibility	Status		
		Keeping Up	Borderline	Not Getting Done
Health and Safety Programs and Policies	Safety Office Group Leader	X		
Equipment Replacement (Assessing, Testing/Monitoring)	Safety & Occupational Health Specialists	X		
Safety Training (New Employee Training, Block Training)	Safety & Occupational Health Specialists	X		
Incident Reporting	GCPO Staff		X	
Reviews/Inspections (O&M Safety Committee)	Safety Office Group Leader	X		
MSDS Tracking	Safety Office Group Leader	X		
Current staffing levels appear:		X Adequate Borderline Insufficient		

Safety

Key Findings and Challenges	[Preliminary] Recommendations
1. Limited safety presence in plants	1. Assign safety officer to each plant (rather than leveraging craftsmen as CDSOs)
2. Inconsistency between GCPO safety requirements and contractor safety requirements	2. Evaluate and align contractor safety and GCPO safety policies
3. Inconsistent or incomplete incident reporting	3. Encourage cultural shift toward acceptance

Fire and Physical Security

Matt Crane

Task Status & Summary Staffing Assessment – Fire & Physical Security

Task <i>(Italics indicate new tasks within last 3-5 years)</i>	Primary Responsibility	Status		
		Keeping Up	Borderline	Not Getting Done
FIRE				
Emergency response (fire, medical, hazmat, rope rescue)	Firefighters		X	
System inspections, testing, and maintenance, incl. CO2 systems	Fire Protection Inspectors		X	
<i>Support regional Reclamation facilities with studies, services</i>	Firefighters	X		
Hot work permits	All	X		
Emergency training and exercises	All			X
<i>Support planning activities and contract preparation</i>	All			X
PHYSICAL SECURITY				
POV card activation	Security Assistant		X	
Order all HECP locks	Security Assistant		X	
Order all door locks, keys, etc.	Security Assistant		X	
Manage key-card access systems	Security Assistant		X	
<i>Support NERC reporting with respect to security systems</i>	Security Assistant		X	
Adequate X Borderline Insufficient				
Current staffing levels appear:				

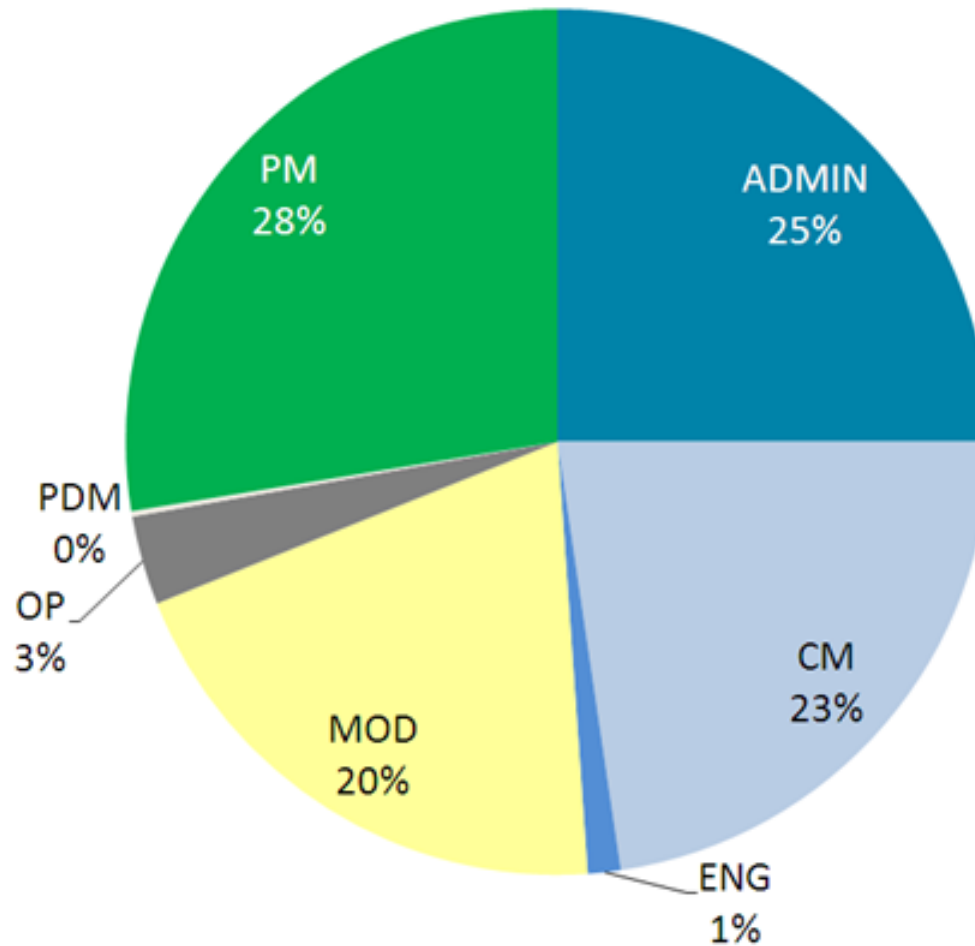
Fire and Physical Security

Key Findings and Challenges	[Preliminary] Recommendations
1. Concerned the Fire Department is not meeting NFPA requirements of four firefighters per truck, 24/7	1. Explore staffing through new positions and/or transfer of inspectors to firefighters to reduce OT, meet NFPA
2. Current Fire Chief also serves as head of Physical Security	2. Separate existing role of Fire Chief; split Fire and Physical Security into two functional groups
3. Current processes do not engage a medically-trained dispatch officer	3. Investigate optimal solution to increase safety precautions
4. Overloaded Physical Security staff	4. Add staff to address resource issue

Maintenance

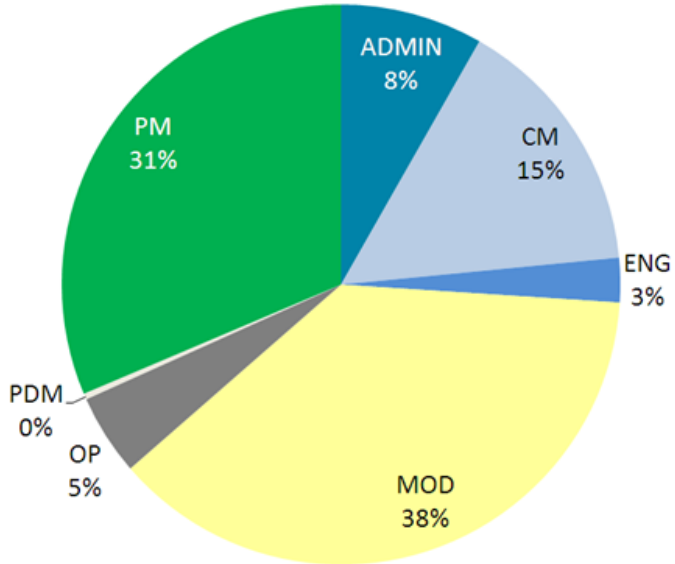
Sam Nott

FY2011 Actuals by Work Order Type, Maintenance

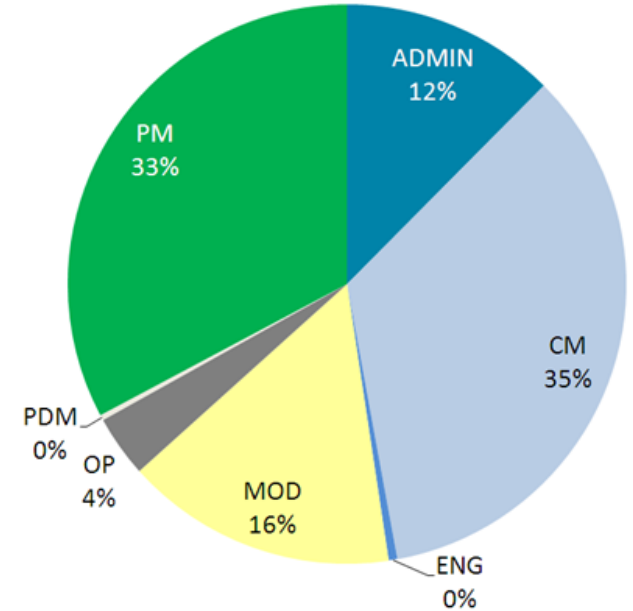


FY2011 Actuals by Work Order Type, Maintenance Crafts

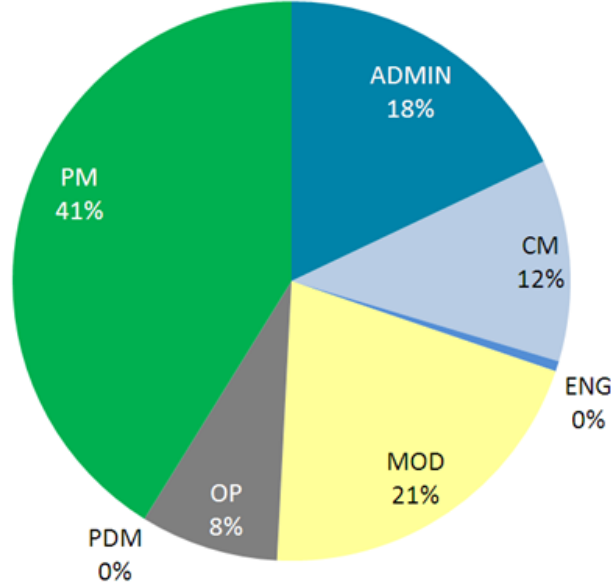
Electricians



Mechanics

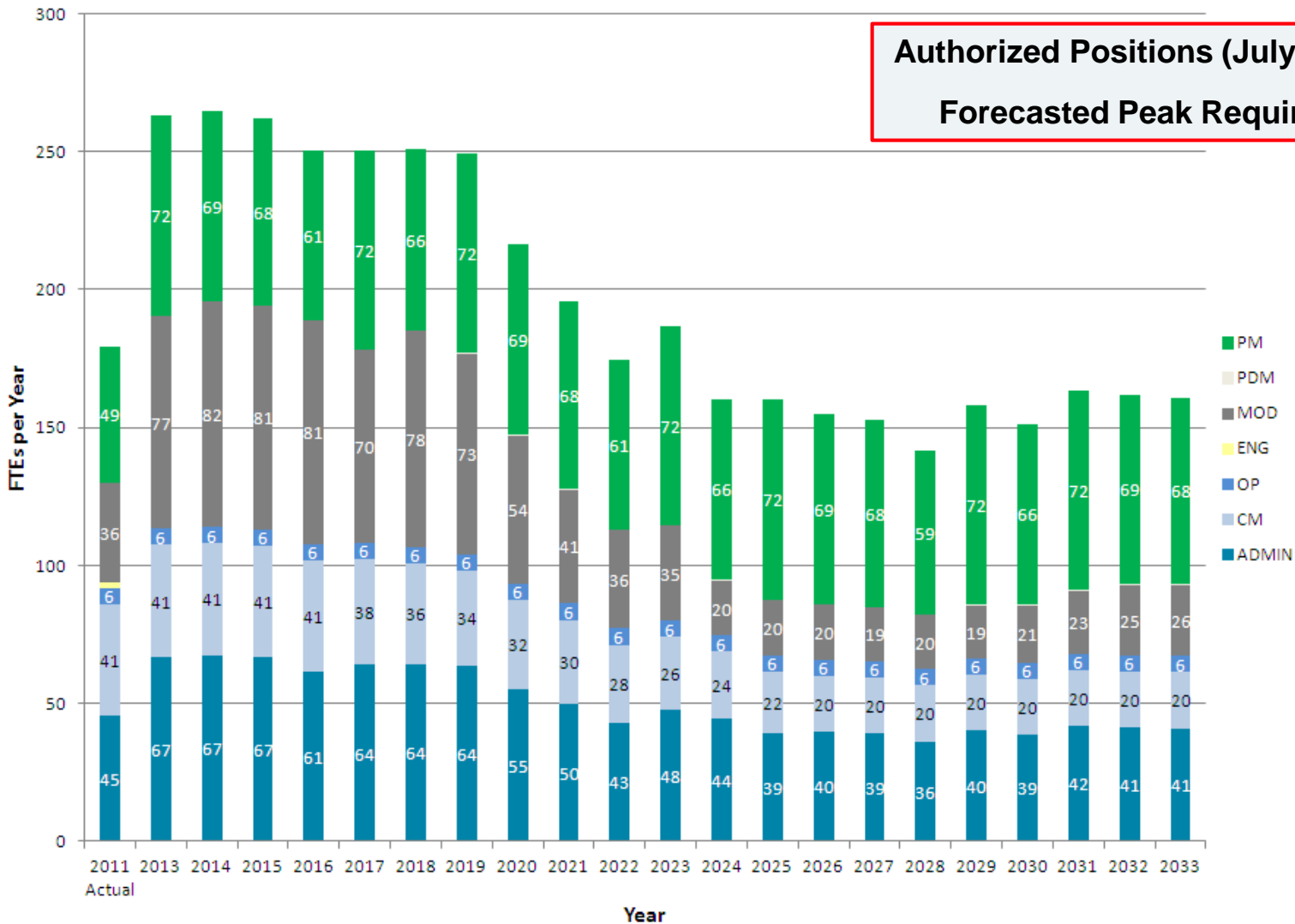


PSCCs

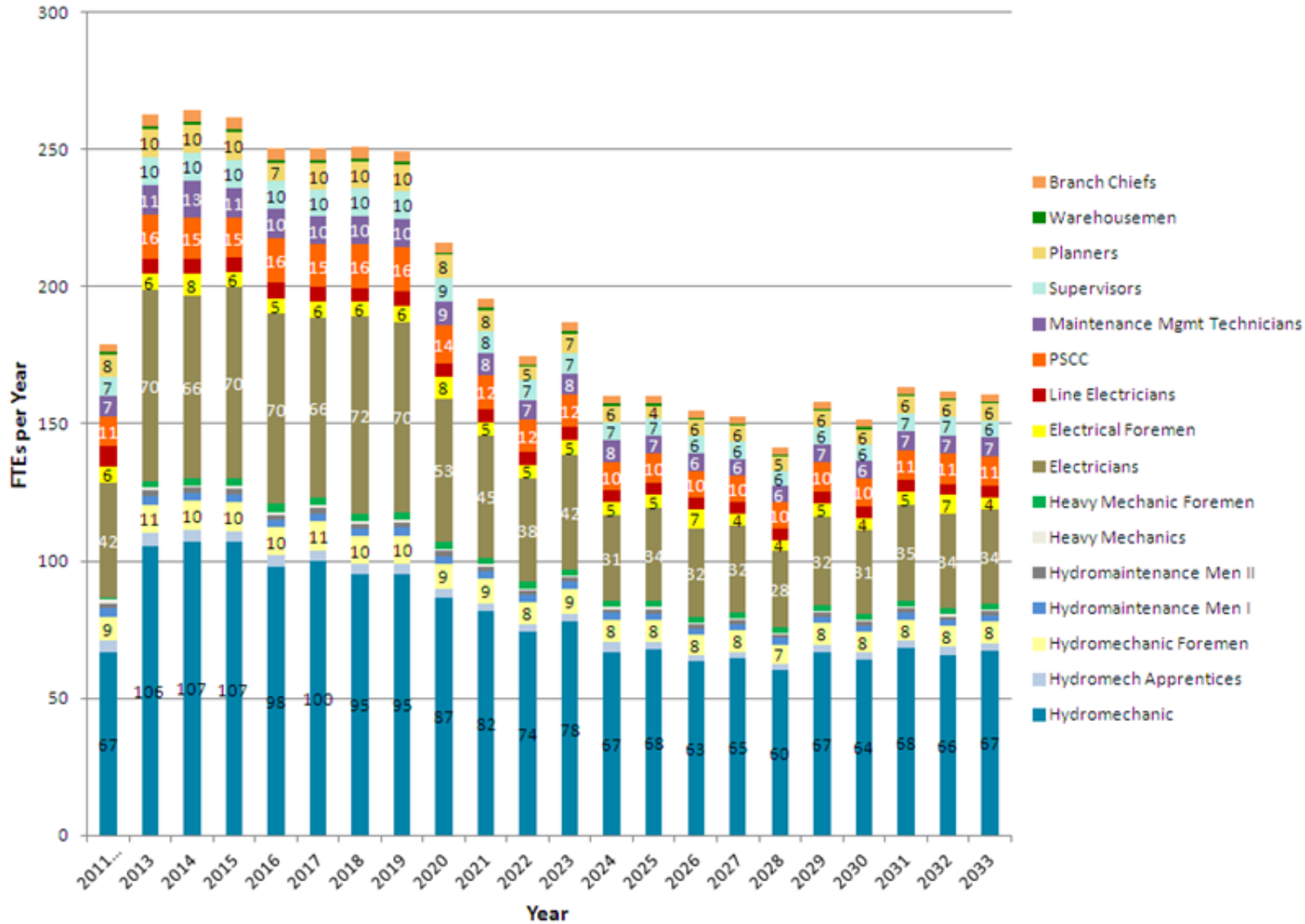


FTEs Required per Year by Work Order Type, Maintenance

Authorized Positions (July 2011): 200
 Forecasted Peak Required: **265**



FTEs Required per Year by Job Title/Position, Maintenance



Max per Craft

Electricians
71 → 88

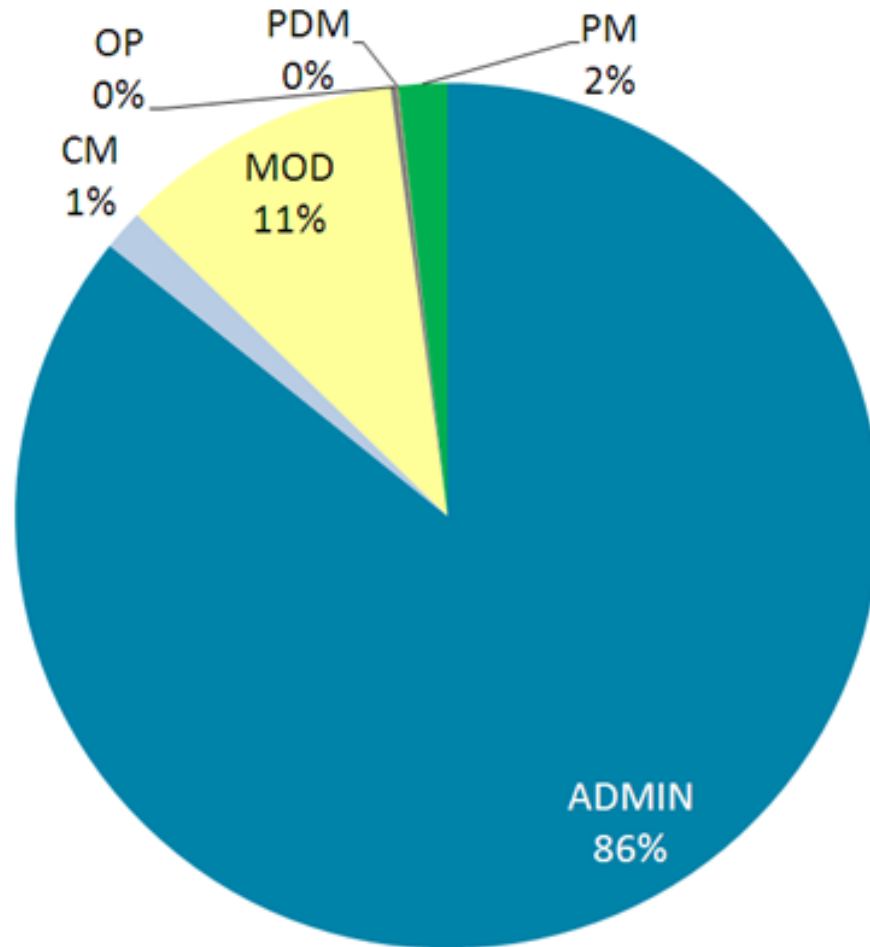
Mechanics
82 → 120

PSCCs
11 → 16

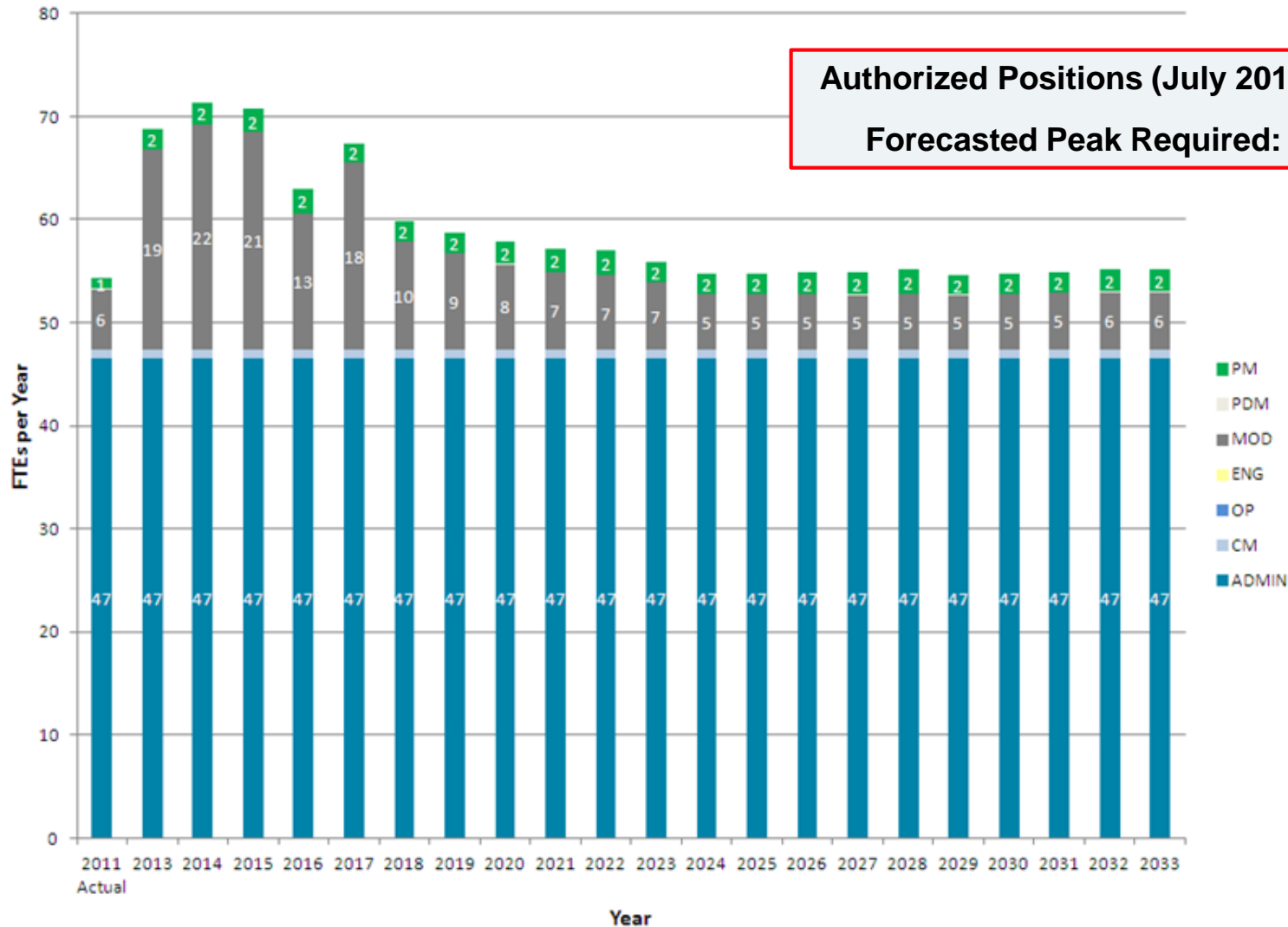
Operations

Sam Nott

FY2011 Actuals by Work Order Type, Operations



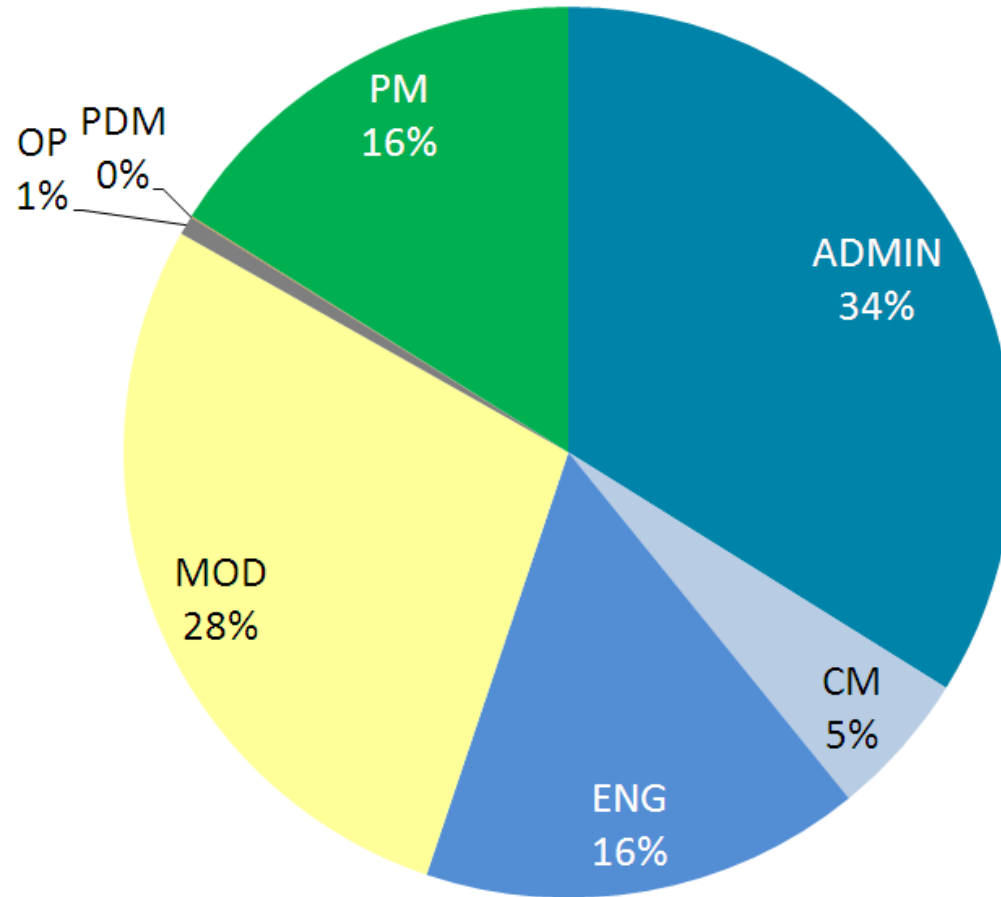
FTEs Required per Year by Work Order Type, Operations



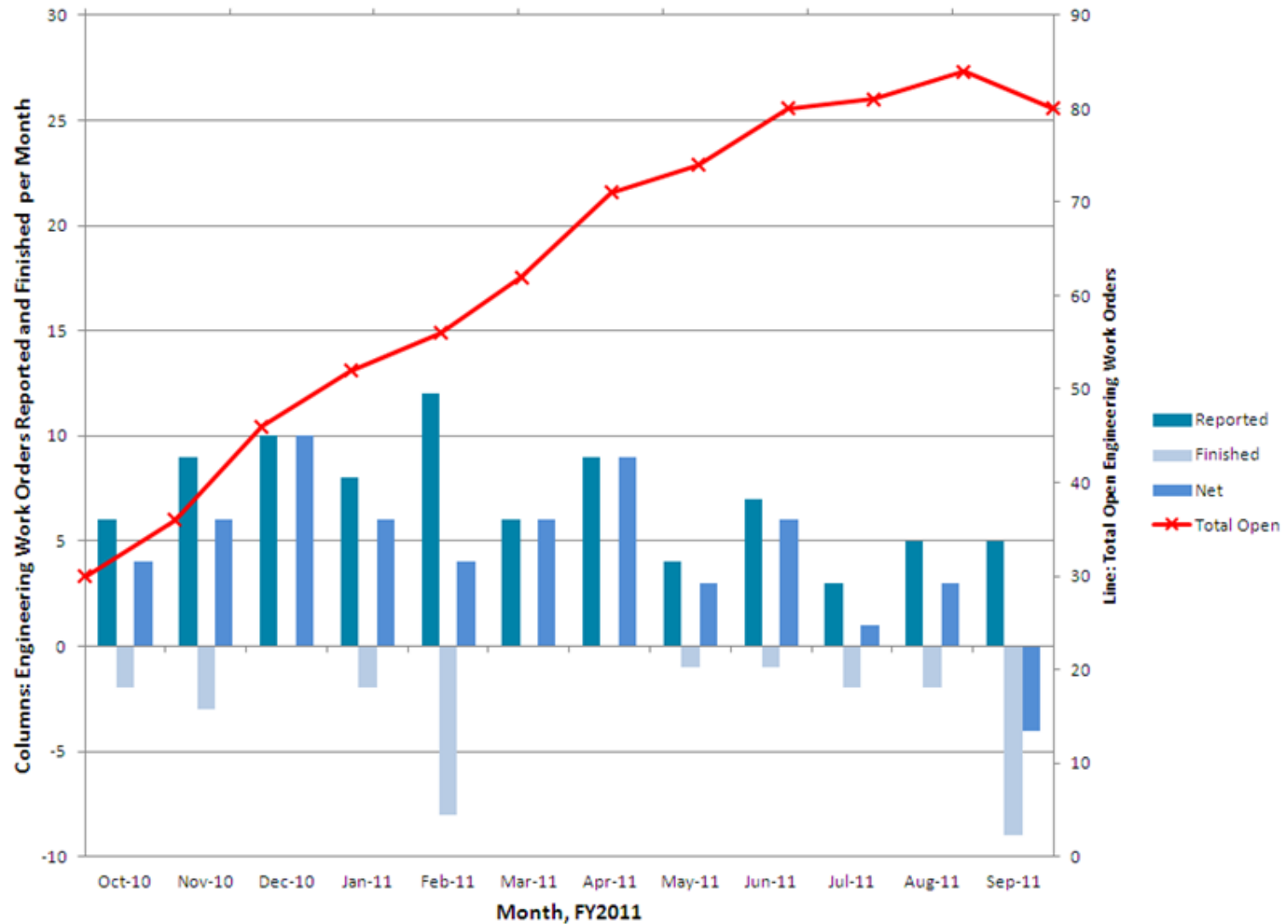
Engineering

Sam Nott

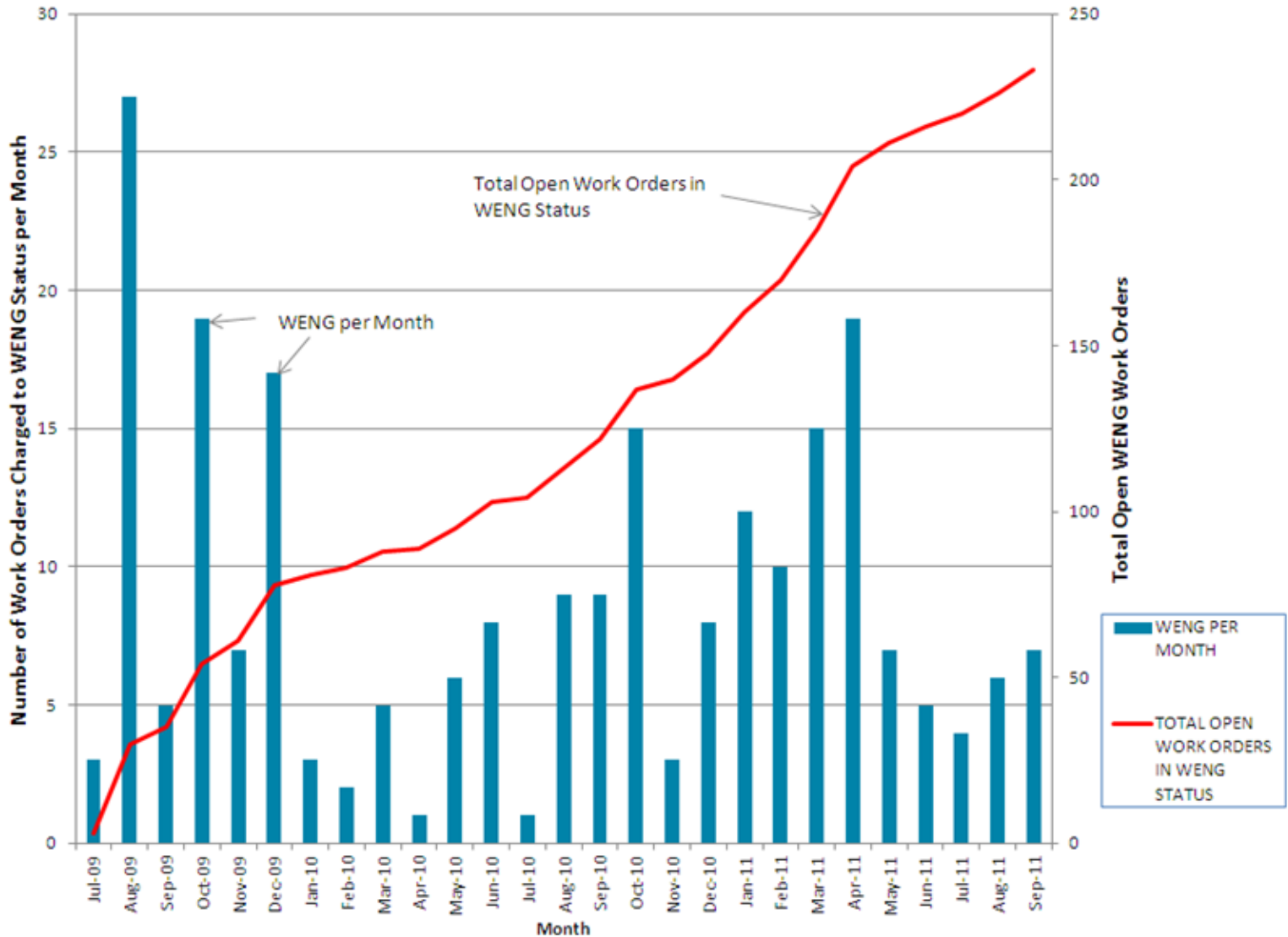
FY2011 Actuals by Work Order Type, Engineering



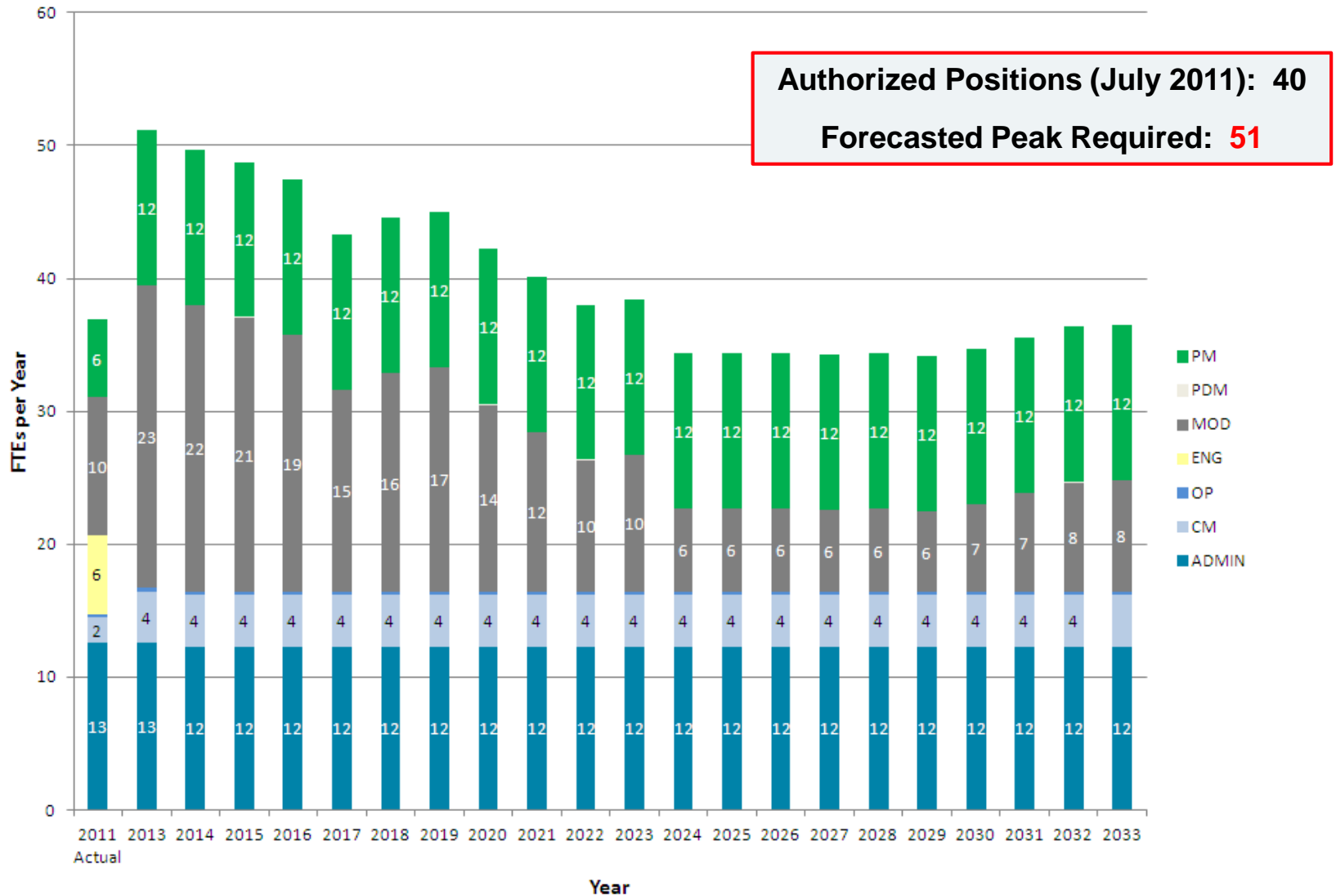
Engineering Backlog, ENG Work Orders



Engineering Backlog, WENG Work Order Status



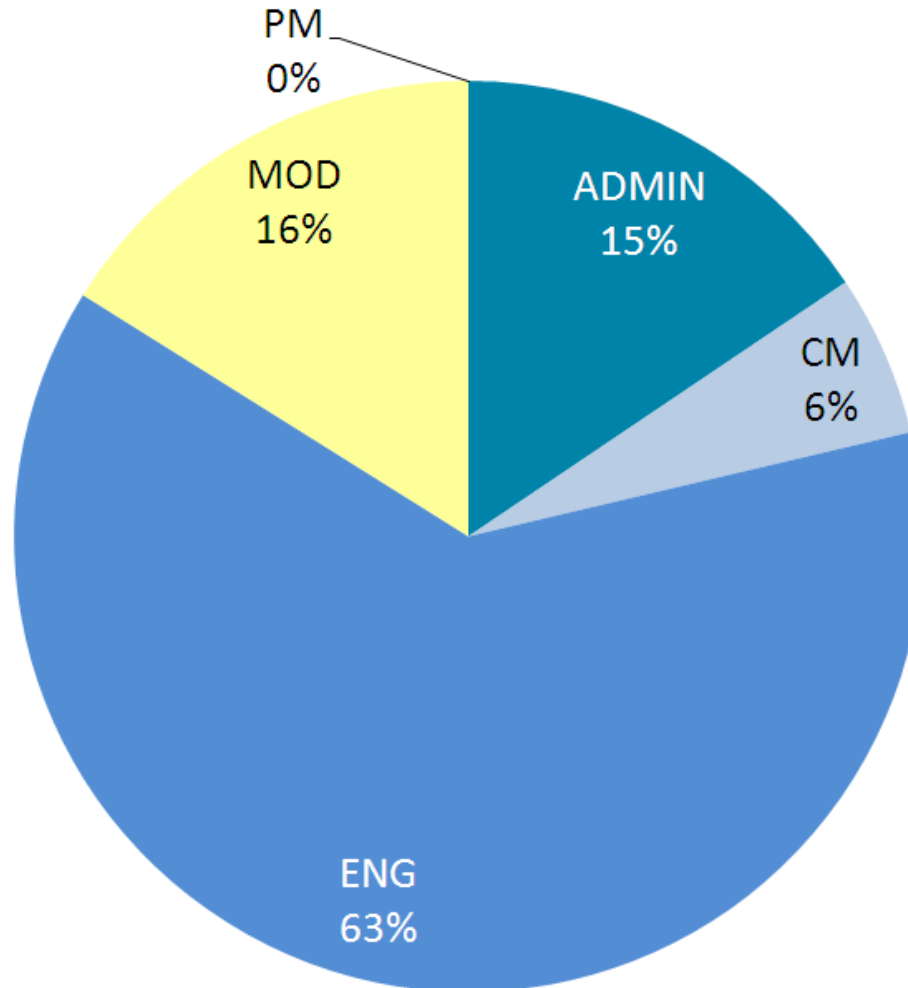
FTEs Required per Year by Work Order Type, Engineering



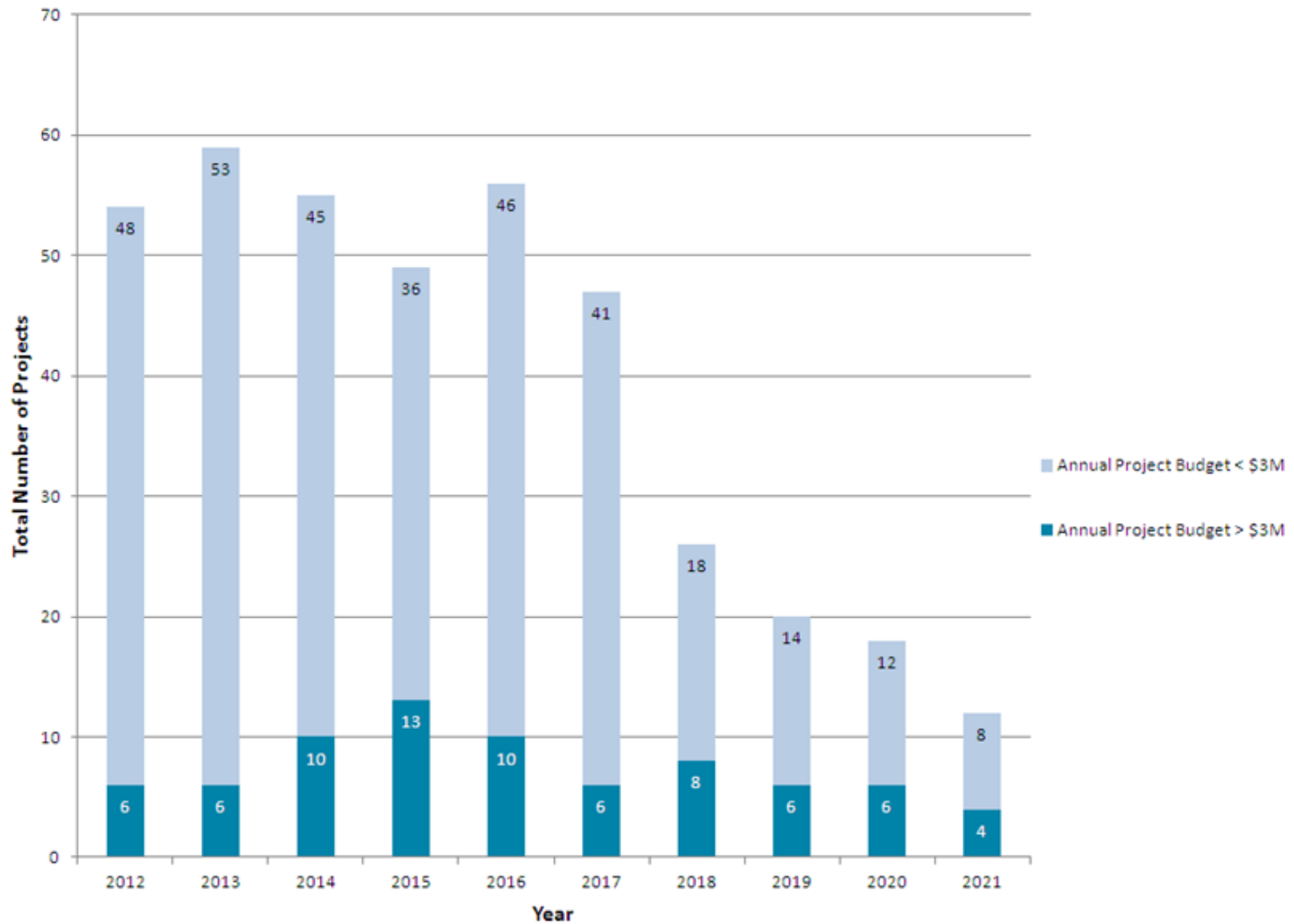
Project Management

Matt Crane

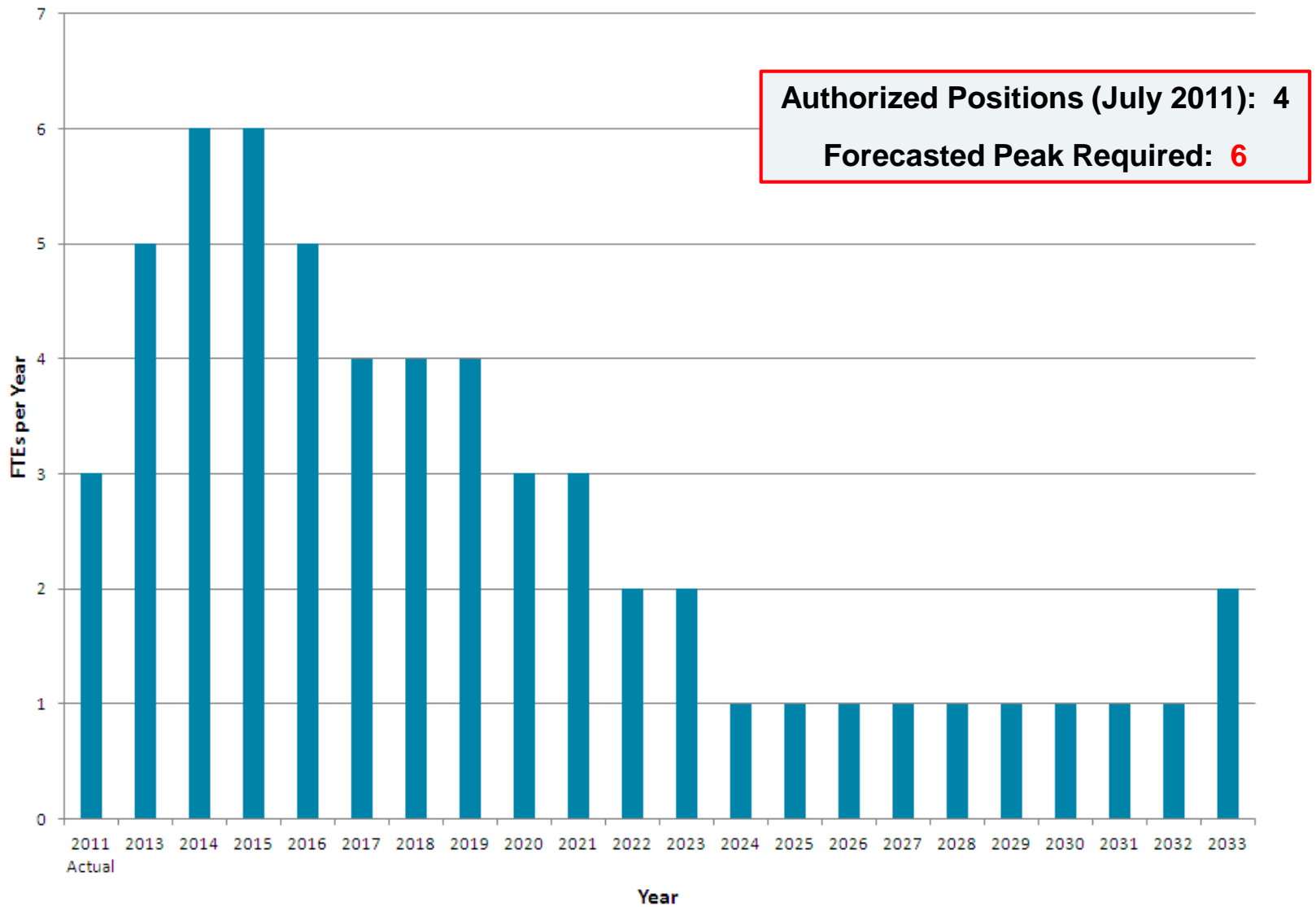
FY2011 Actuals by Work Order Type, Project Management



Non-Routine Projects in Progress per Year



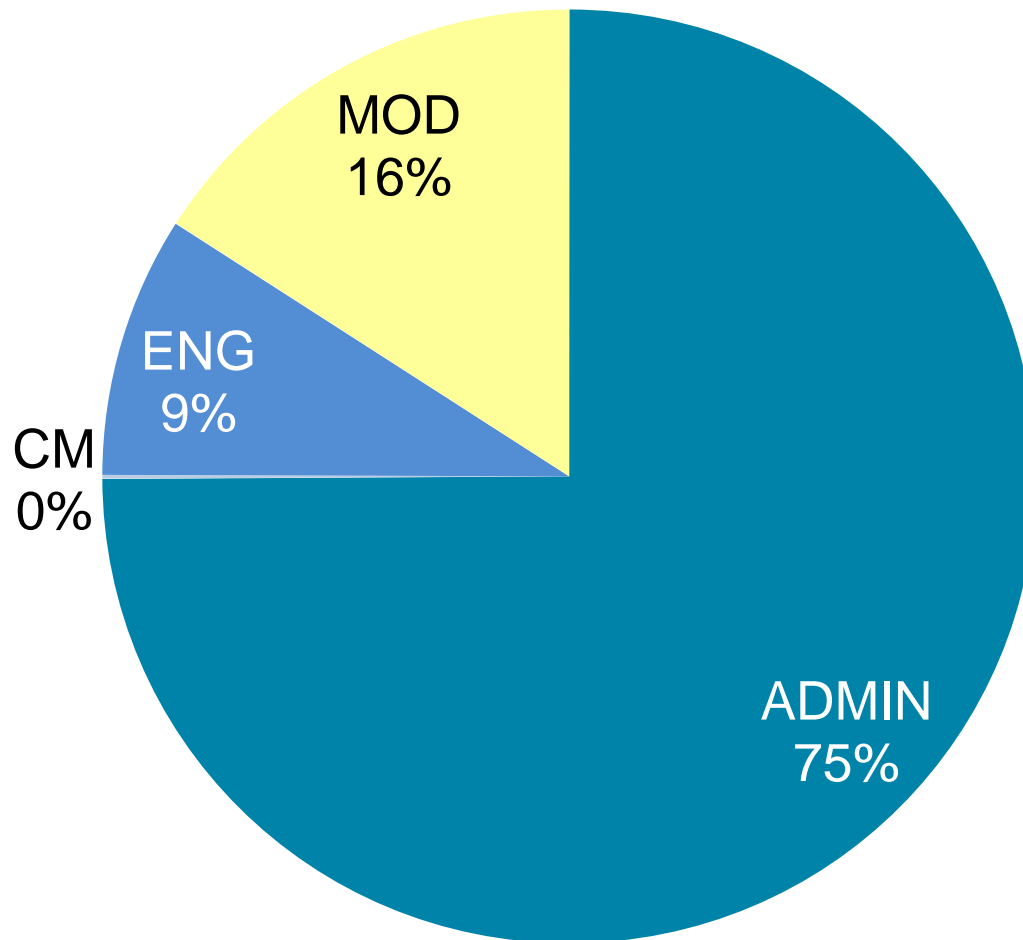
FTEs Required per Year, Project Management



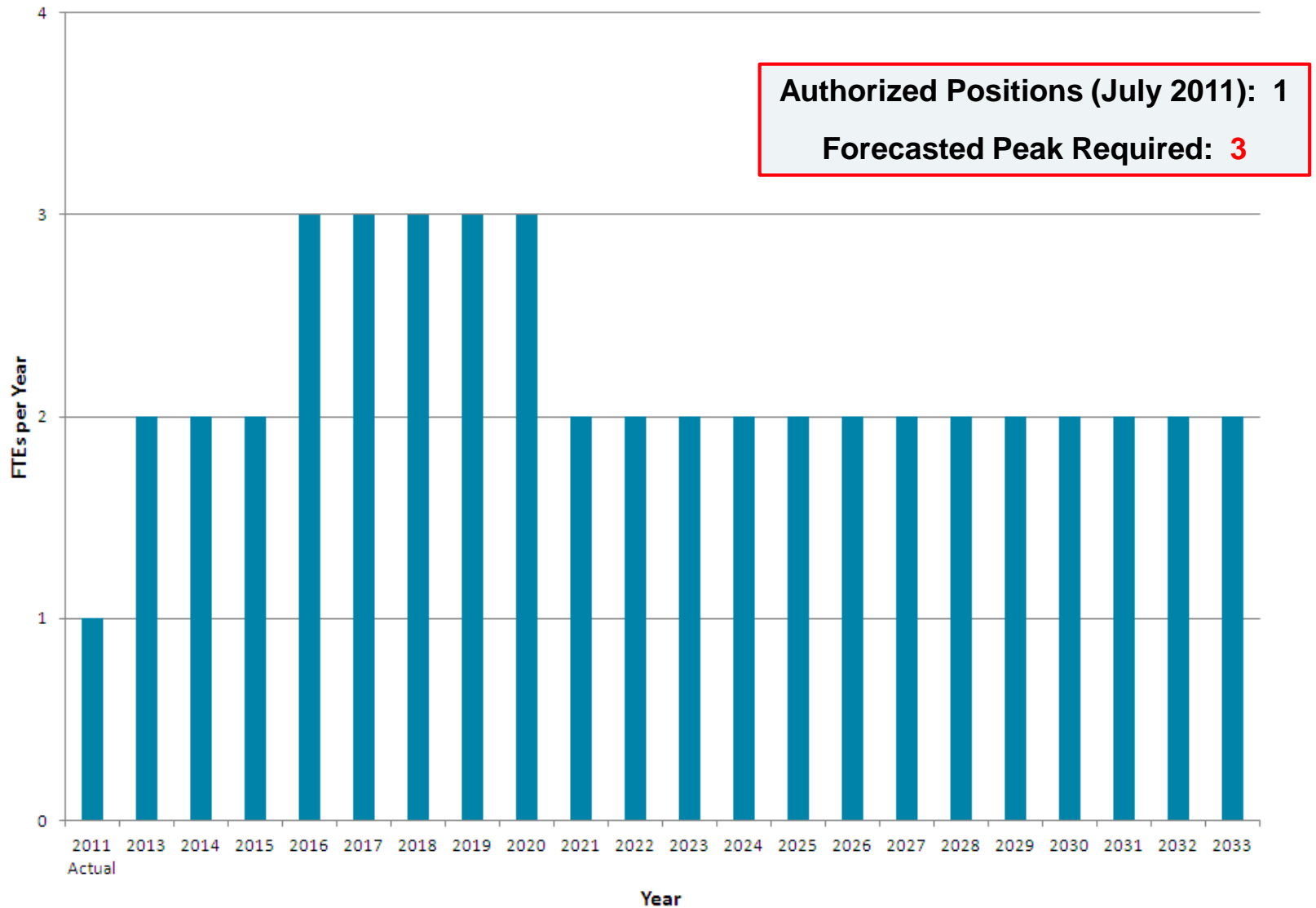
Cultural Resources

Matt Crane

FY2011 Actuals by Work Order Type, Cultural Resources



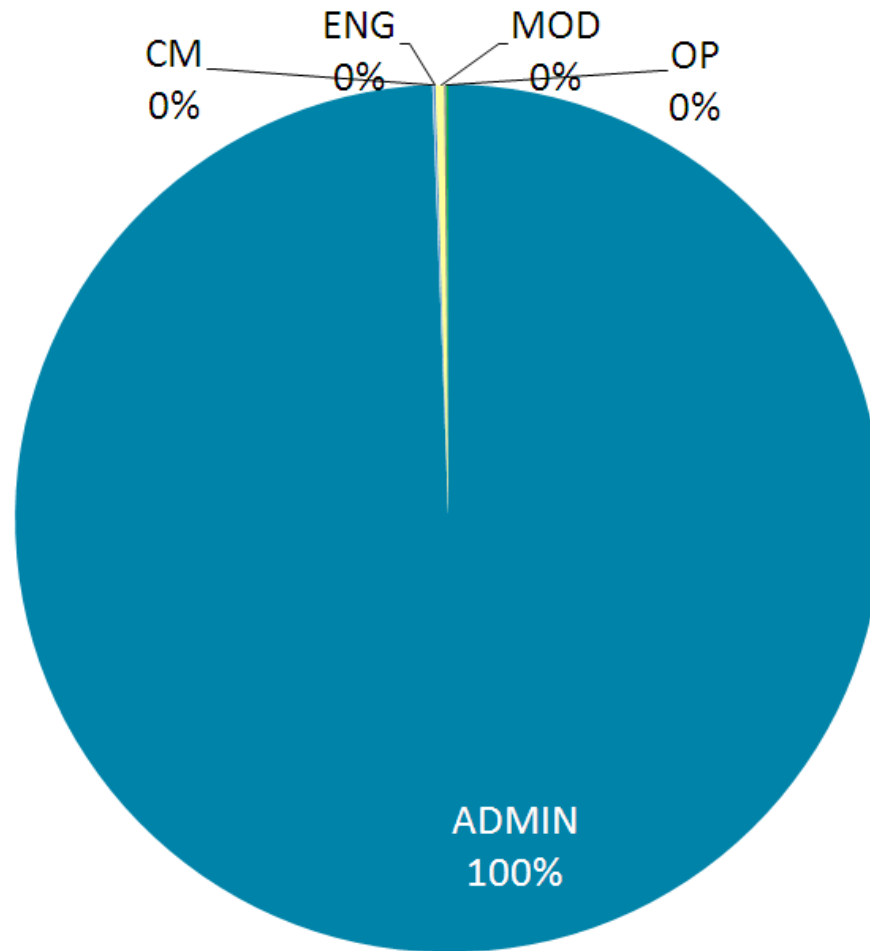
FTEs Required per Year, Cultural Resources



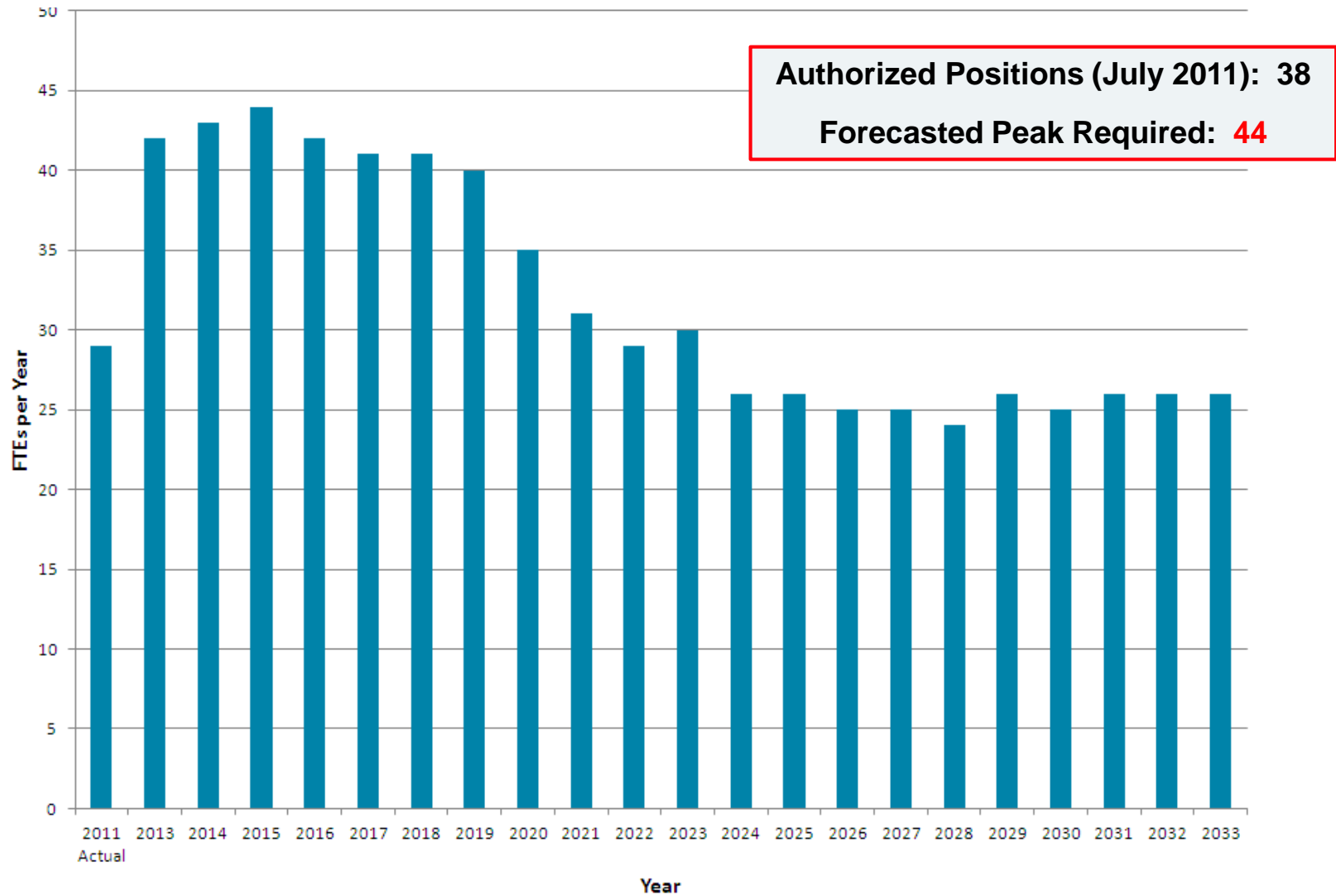
Administration

Matt Crane

FY2011 Actuals by Work Order Type, Administration



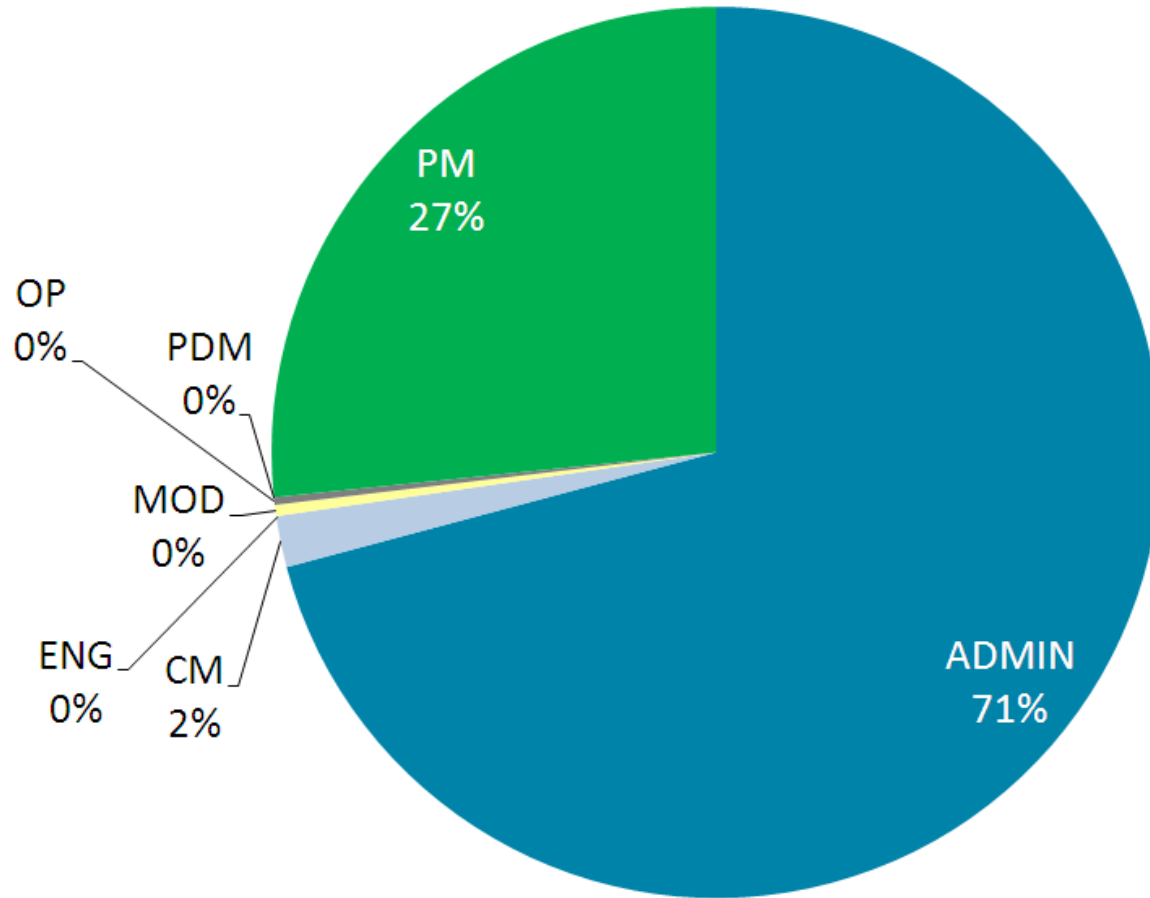
FTEs Required per Year, Administration



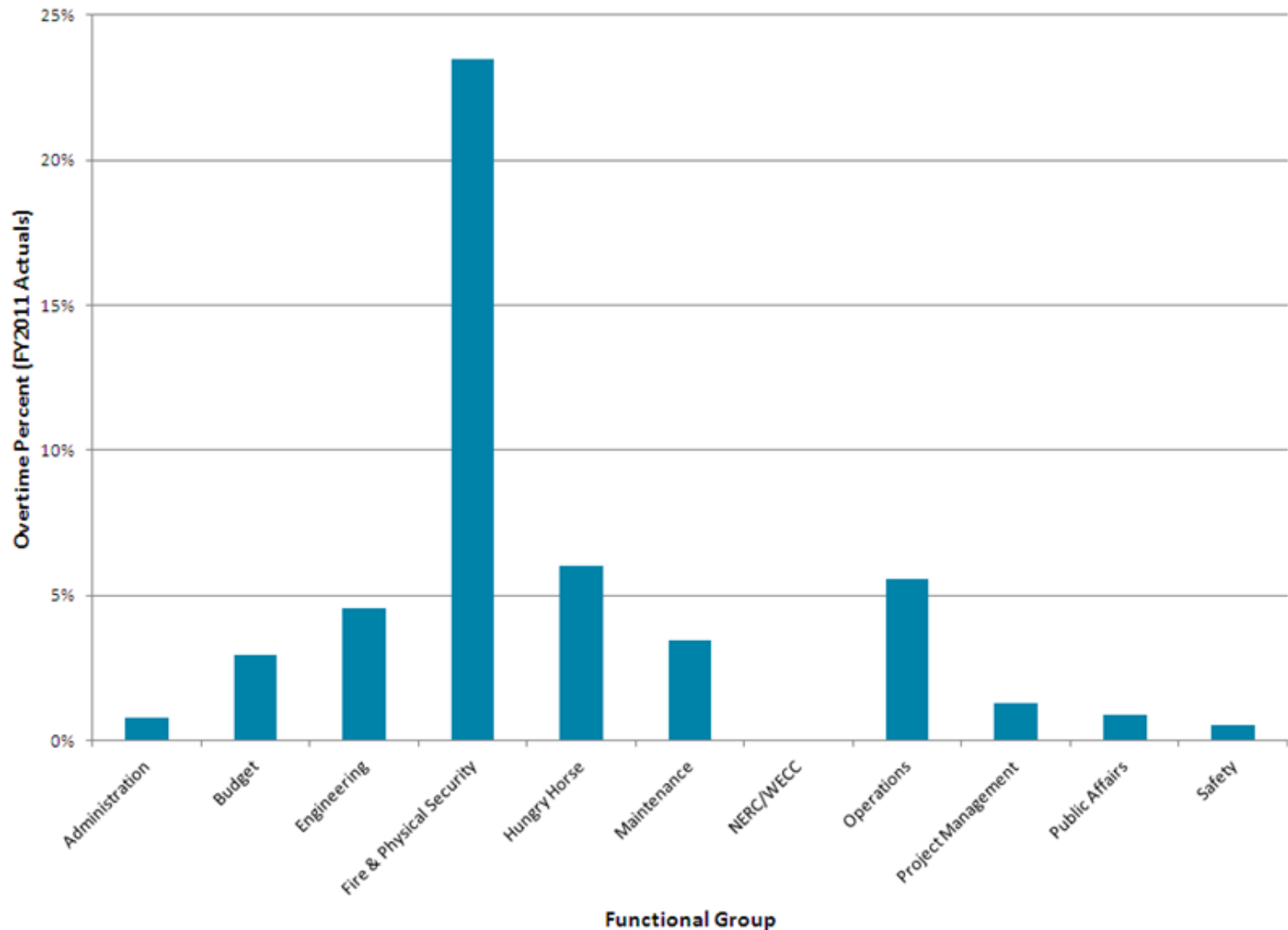
Fire & Physical Security

Matt Crane

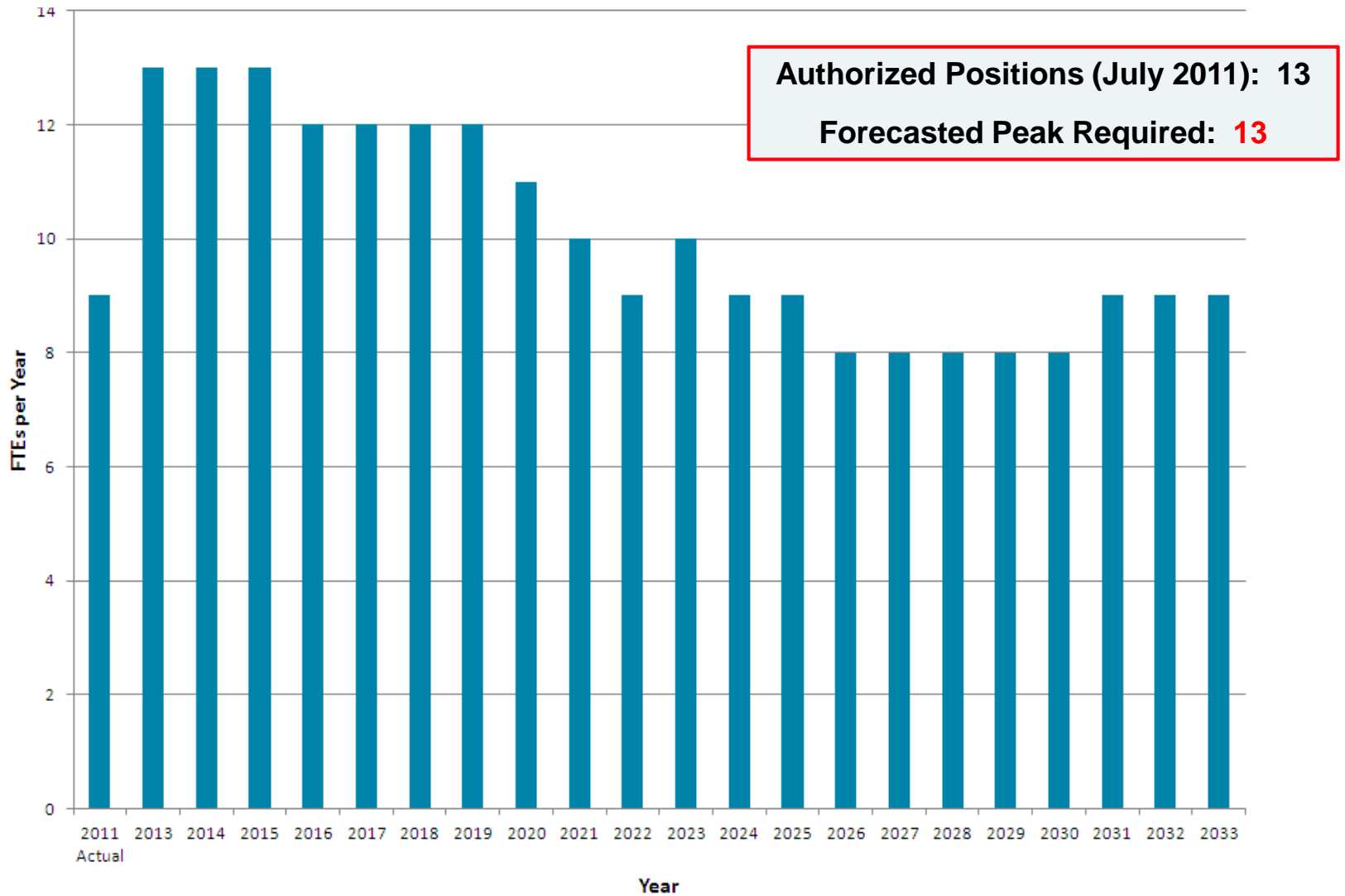
FY2011 Actuals by Work Order Type, Fire & Phys. Security



FY2011 Overtime by Functional Group



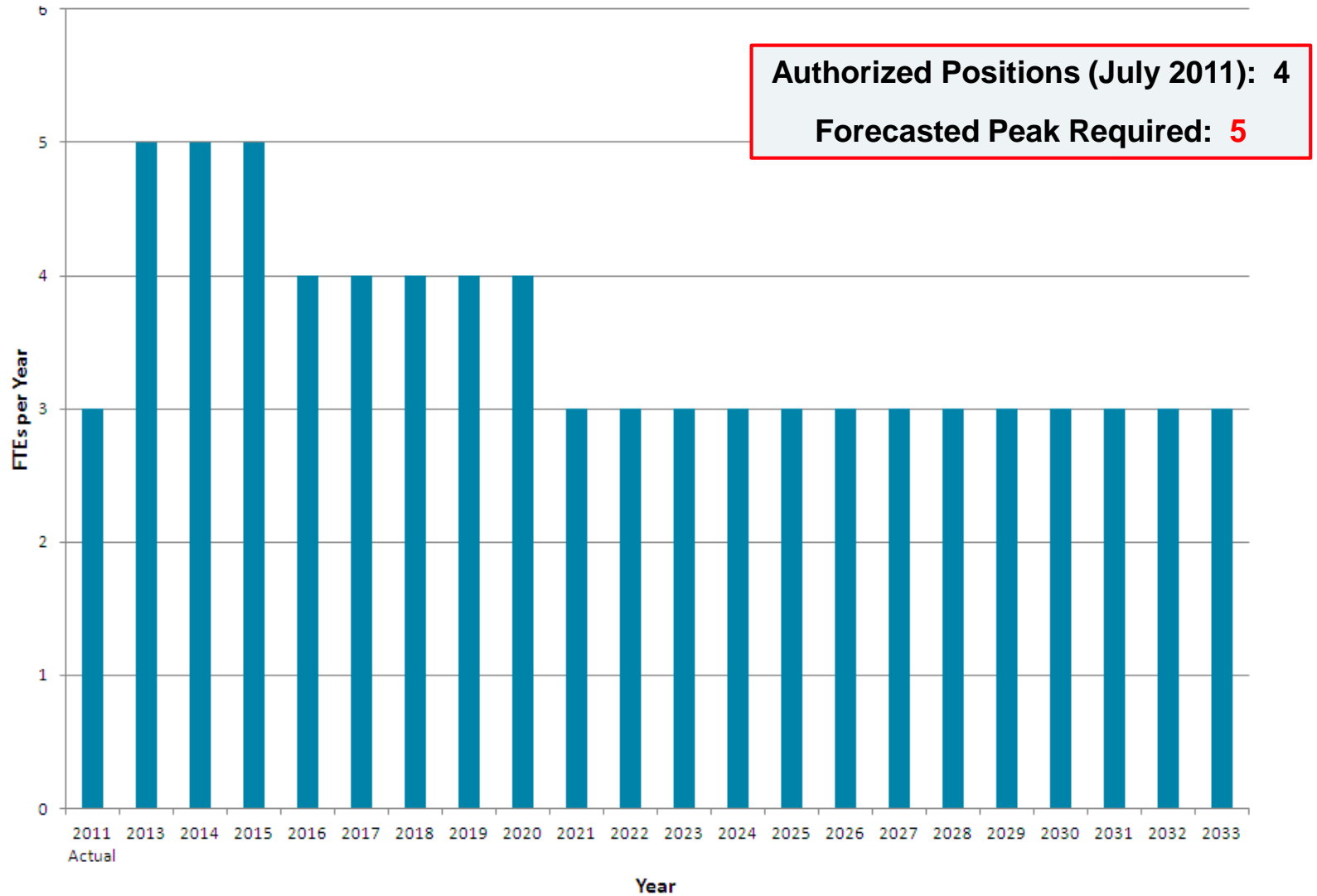
FTEs Required per Year, Fire & Physical Security



Budget

Pat Lytle

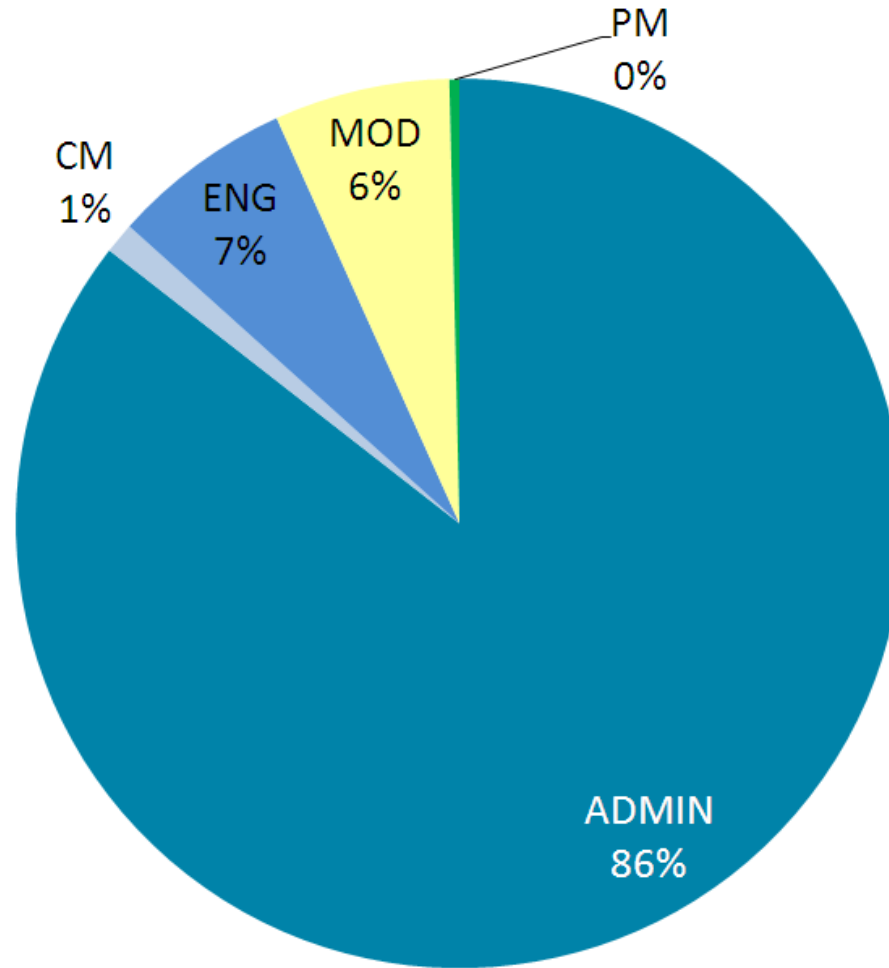
FTEs Required per Year, Budget



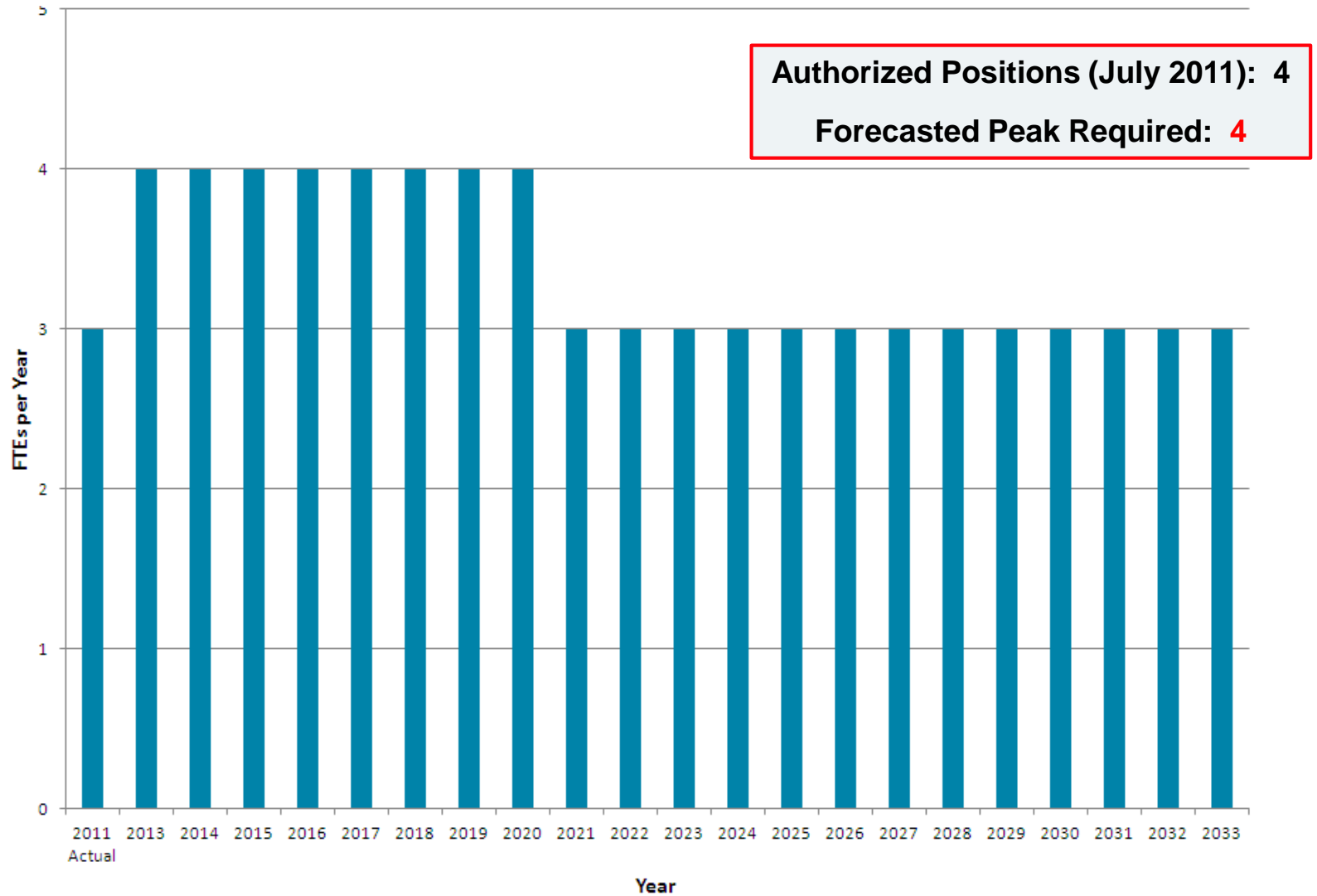
NERC/WECC Compliance

Pat Lytle

FY2011 Actuals by Work Order Type, NERC/WECC Comp.



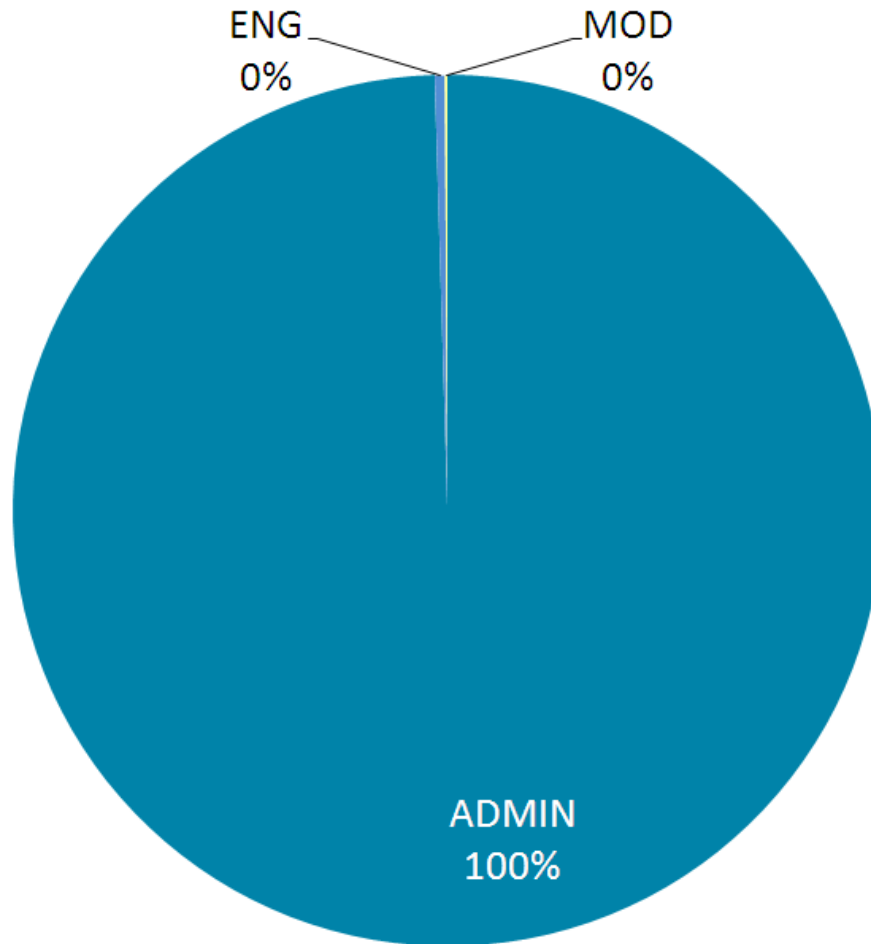
FTEs Required per Year, NERC/WECC Compliance



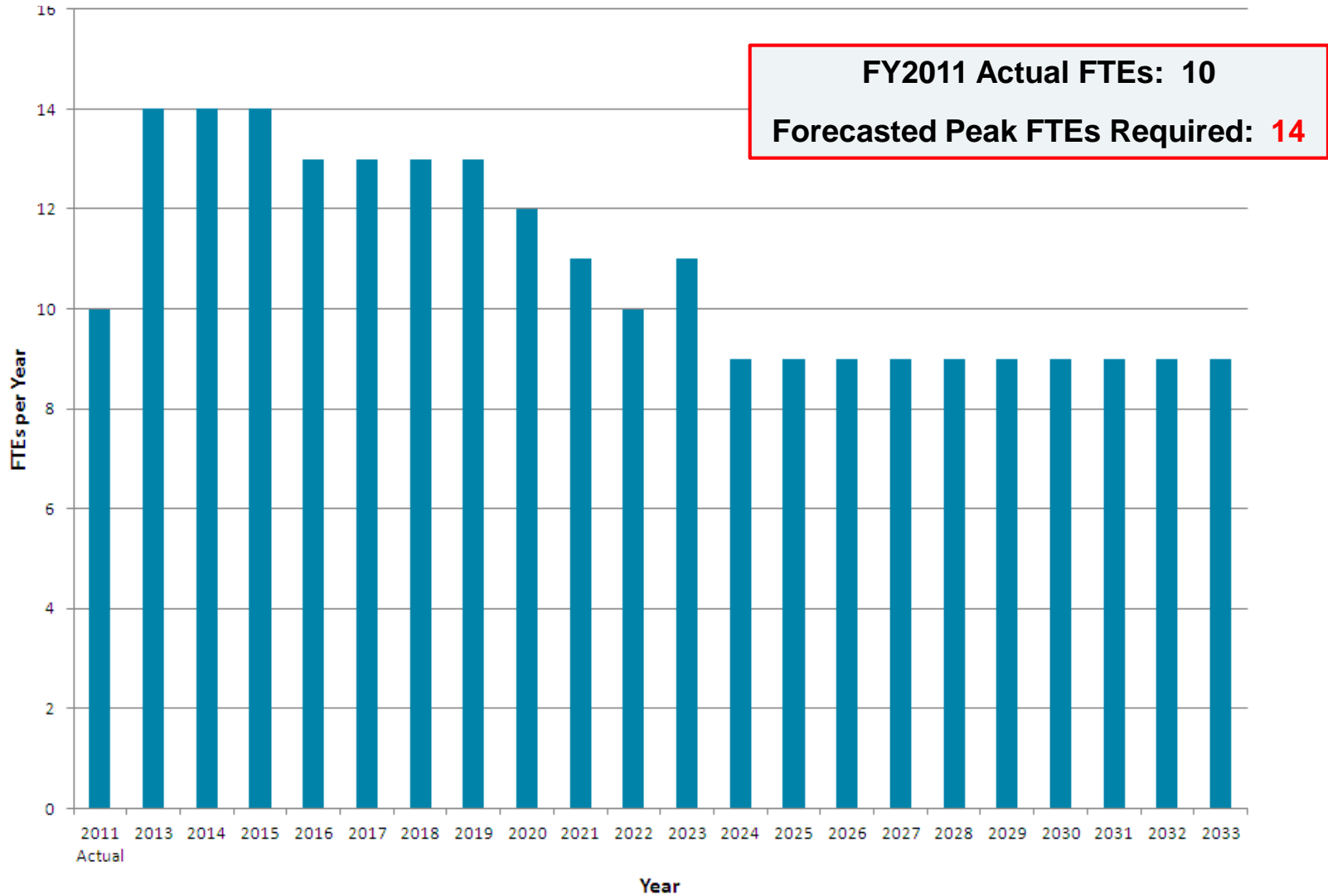
Public Affairs

Pat Lytle

FY2011 Actuals by Work Order Type, Public Affairs



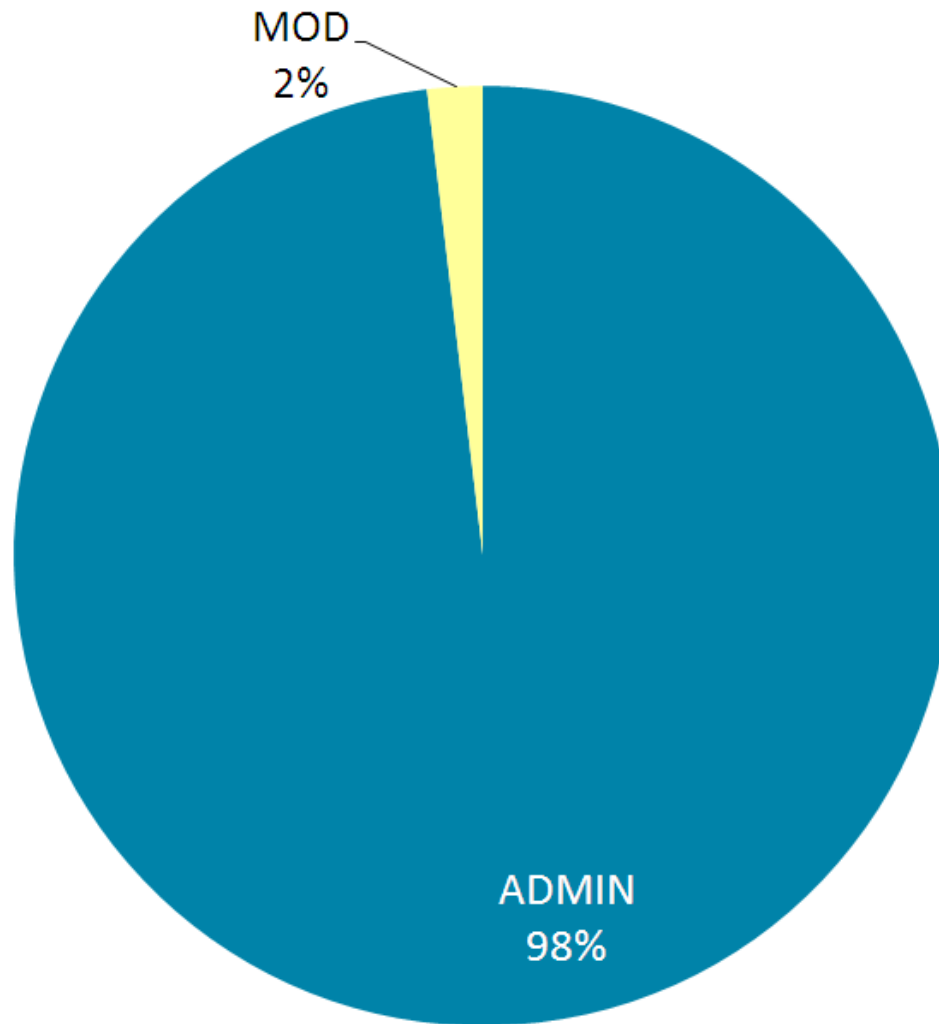
FTEs Required per Year, Public Affairs



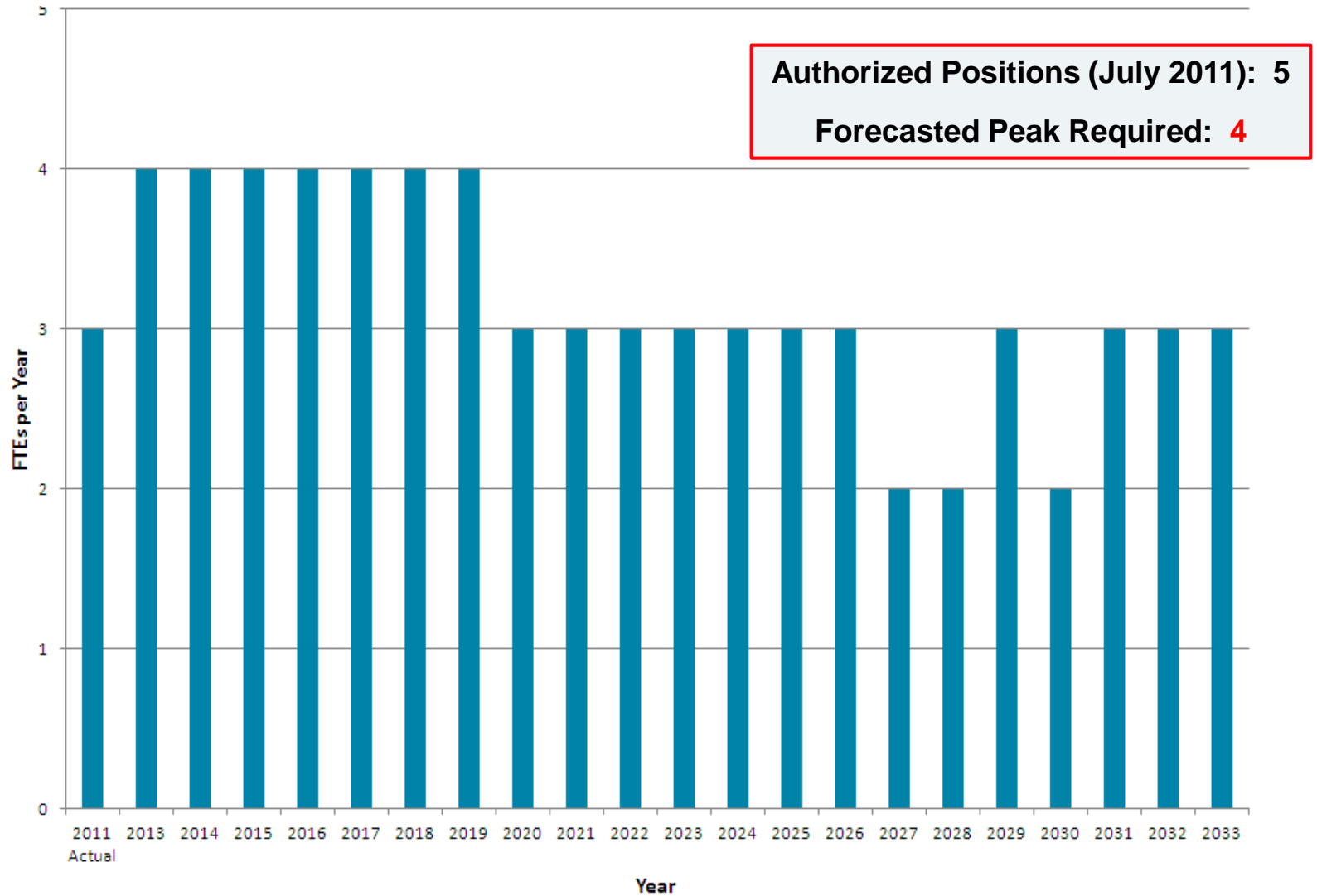
Safety

Pat Lytle

FY2011 Actuals by Work Order Type, Safety



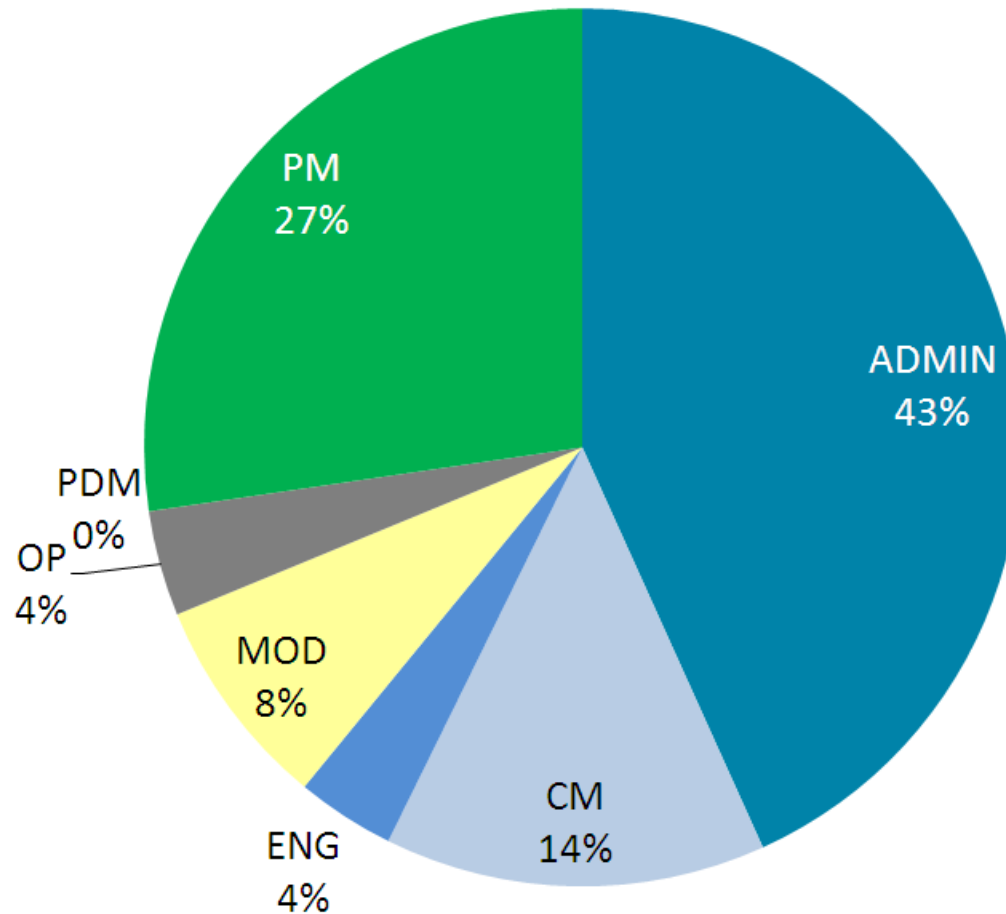
FTEs Required per Year, Safety



Hungry Horse

Pat Lytle

FY2011 Actuals by Work Order Type, Hungry Horse



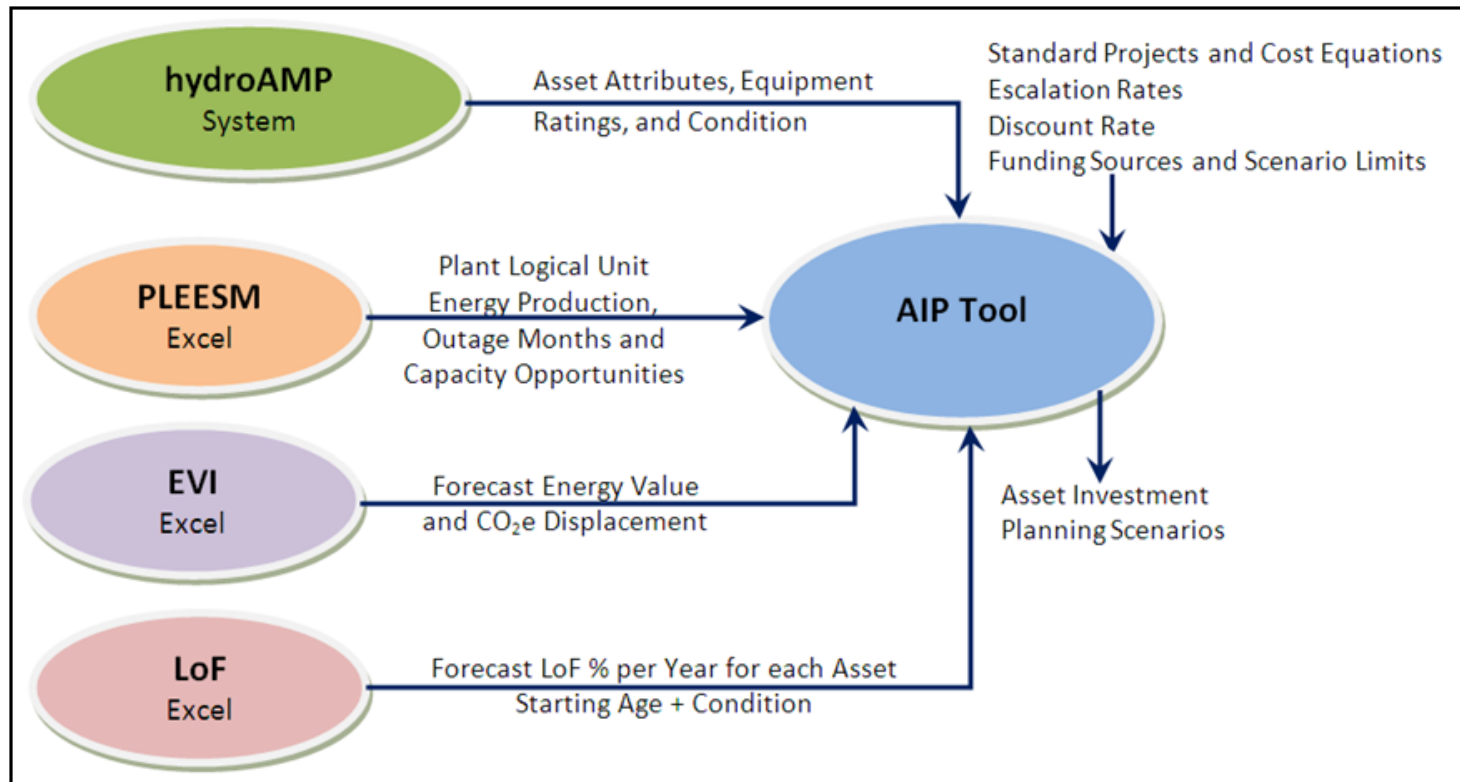
Authorized Positions (July 2011): 23

Forecasted Peak Required: **27**

Risks of No Action

Sam Nott

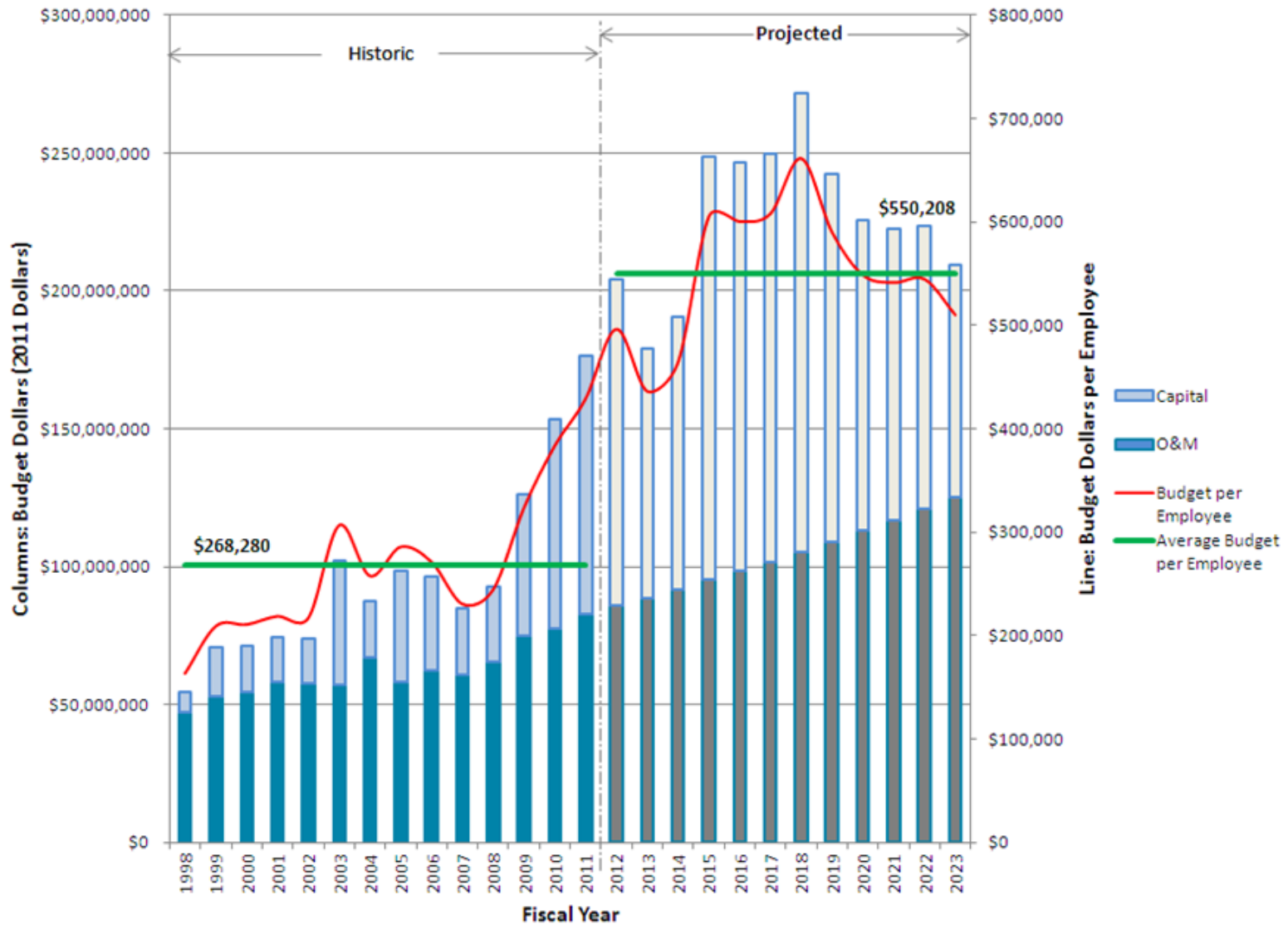
Overview of HMI Asset Investment Planning Tool



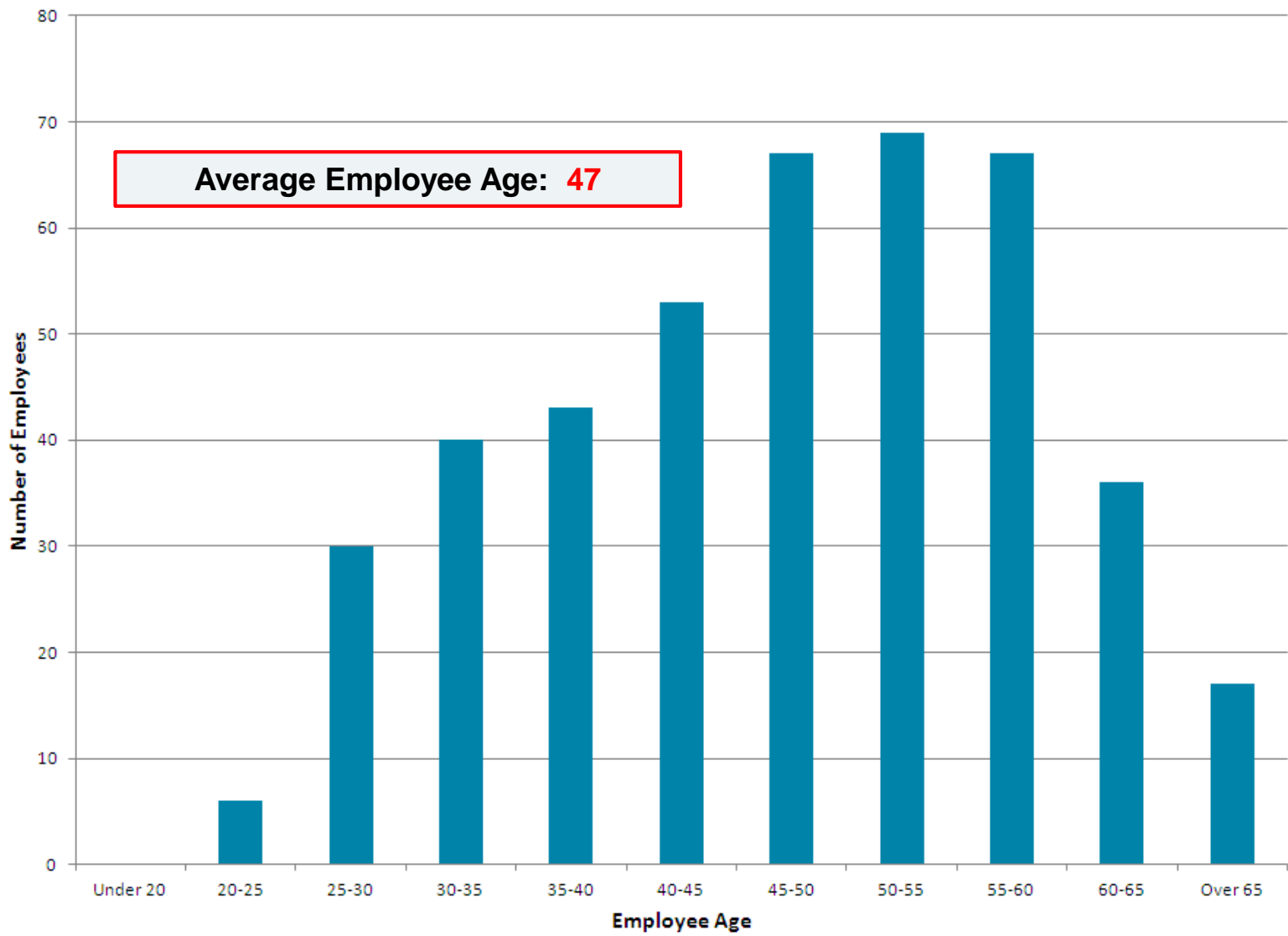
Other Miscellaneous Analyses

Pat Lytle

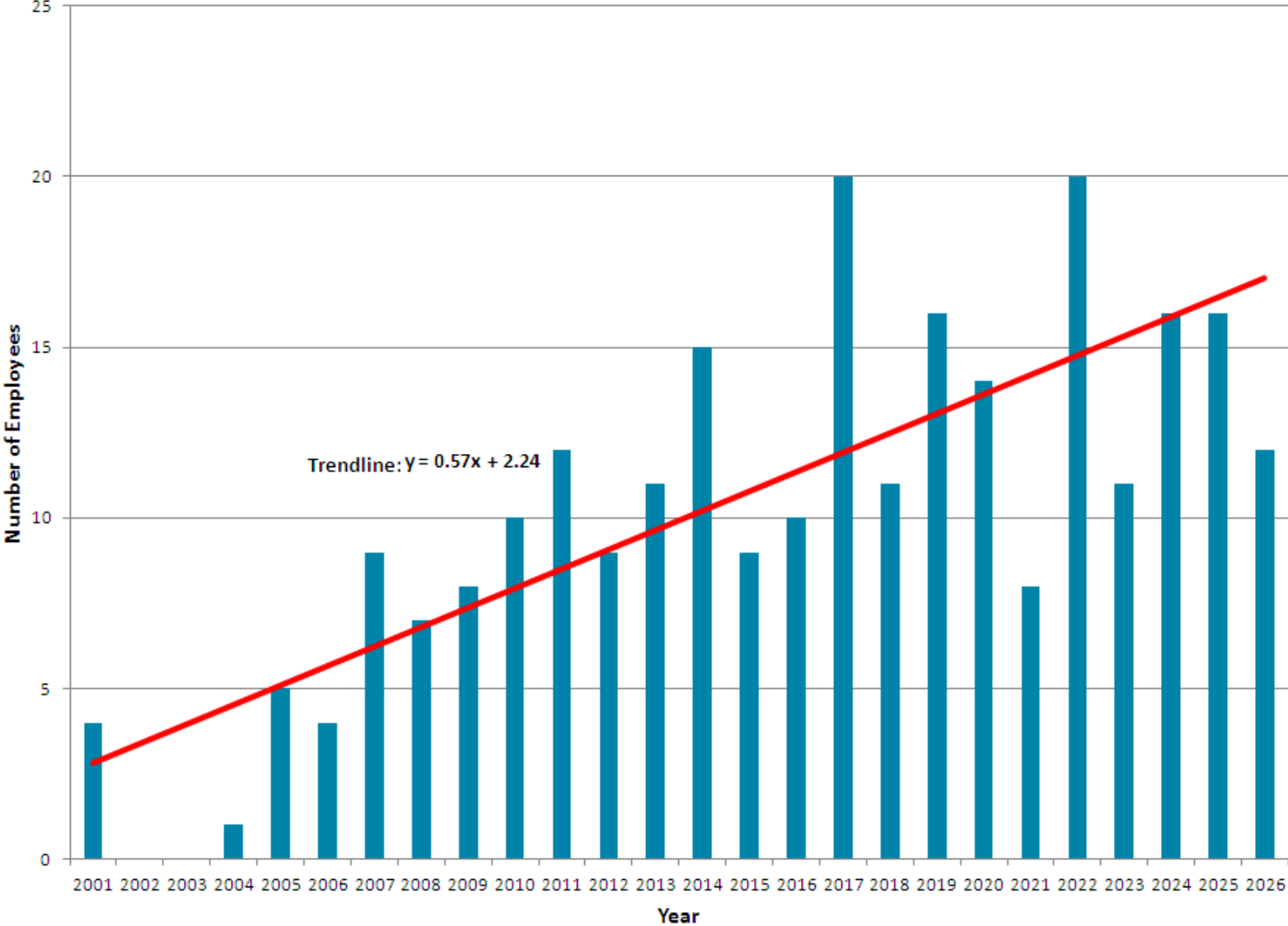
Dollars Managed per Employee



Age Profile



Retirement Risk



Attrition Analysis

