



FEDERAL DEMONSTRATION PARTNERSHIP

Redefining the Government & University Research Partnership

Reporting, Analytics, and Metrics

A Panel Discussion

May 6, 2016

Federal Demonstration Partnership



Presenters

- Kimberly Griffin, Northwestern University
- Andra Sawyer, University of Washington
- David Waldron, Partners Healthcare



FEDERAL DEMONSTRATION PARTNERSHIP
Redefining the Government & University Research Partnership

Sponsored Projects Reporting

At Northwestern University

Kimberly Griffin

Director, Electronic Research Administration

May 6, 2016



Overview

- Background
- Reporting Environment
- Pre-award Reports
- Post-award Reports
- Issues
- Future Plans



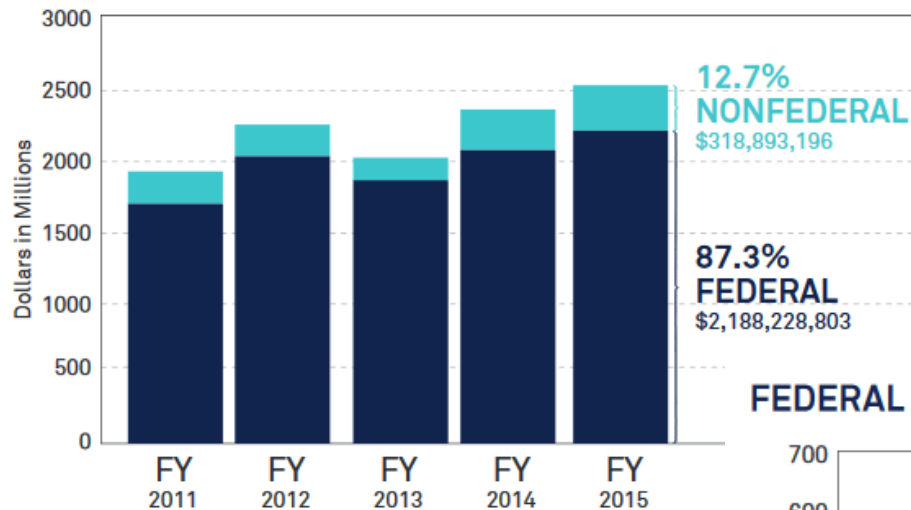
Background

- Two Campuses (Chicago, Evanston)
- Over 3,000 proposals submitted annually totaling about \$2.5 billion
- Nearly 3,000 award increments recorded annually, totaling just over \$600 million
- Around 400 department administrators and 1,000 PIs
- Systems
 - Pre-award: InfoEd, since FY2007
 - Post-award: PeopleSoft, since FY2010
- Offices
 - Pre-award: Office for Sponsored Research
 - Post-award: Accounting Services for Research and Sponsored Projects

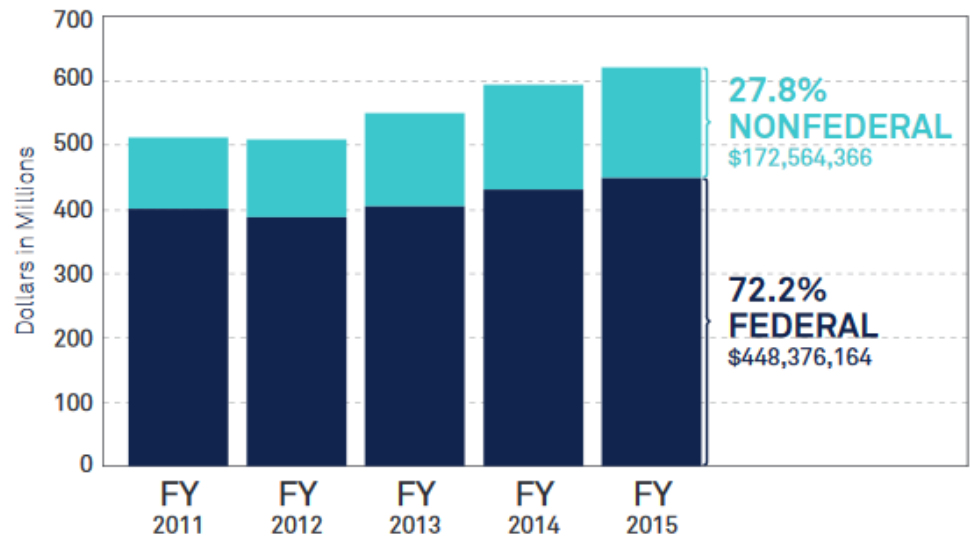


Background

FEDERAL AND NONFEDERAL PROPOSALS



FEDERAL AND NONFEDERAL AWARDS





Reporting Environment


- Cognos reporting tool
- Nightly data warehouse load from PeopleSoft and InfoEd systems
- Separate ad hoc reporting packages for pre-award and post-award
- Almost 100 canned reports for Grants Management (both pre- and post-award)
 - Majority were developed at time of system go-live
- Approximately 2,000 people have access to the canned reports
- Around 100 have access to create ad hoc reports




Reporting Environment

- Canned reports have assigned numbers; all grants reports have prefix 'GM'
- Common report prompts
 - Department tree
 - Fiscal year/month or range of dates
 - Investigator name(s)
 - Sponsor type (federal, foundation, etc)
- Report catalogs on Central IT website
 - <http://ffra.northwestern.edu/reports/>
 - <http://ffra.northwestern.edu/reports/infoed/>

GCO Approval Date - View awards with an approval date that falls within the following date range.

Start Date
* Apr 17, 2016 

End Date
* Apr 17, 2016 

Department Hierarchy - Please choose one or more department nodes in the department hierarchy below.

☐ Department Levels

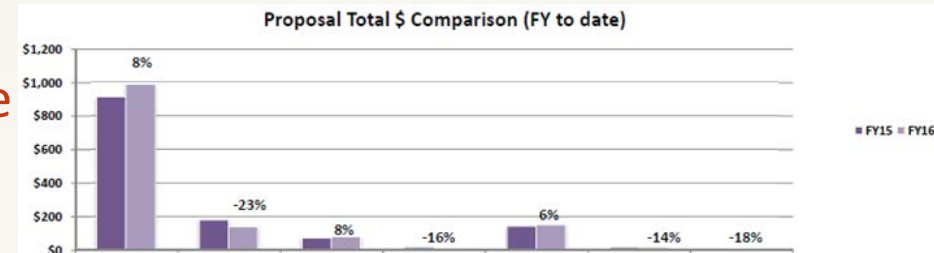
- ☐ Northwestern University
 - ☐ President
 - ☐ Executive Vice President
 - ☐ VP & Chief Technology Officer
 - ☐ Central Resources
 - ☐ Provost
 - ☐ University Press
 - ☐ Northwestern Univ in Qatar
 - ☐ University Library
 - ☐ Athletics
 - ☐ Student Affairs
 - ☐ Univ Housing & Food Service
 - ☐ Weinberg CollegeArts&Sciences
 - ☐ School of Educ & Social Policy
 - ☐ Medill School of Journalism
 - ☐ Media Management Center
 - ☐ School of Music
 - ☐ School of Communication

[Deselect all](#)



Pre-Award Reports

- Annual/Monthly Reports
 - Several are used to generate monthly email to senior leadership across campus



- Cost Sharing
 - Proposals and Awards
- Current, Pending and Completed Support
 - To assist with developing proposal submissions

Investigator: Rex L. Chisholm



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Current, Pending, and Completed Support

Pending Proposals - All Roles
Cost Sharing Not Included

Records where the PI has no effort and no requested salary on the PD budget will display a role of 'N/A'. The PI may actually have requested effort and should be confirmed on the Proposal Routing Form in InfoEd. Records where the selected employee has a role other than PI with no effort and no requested salary on the PD budget will not show on this report.

Institution Number	Subproject Number	Investigator / Role	Main PI	Title	Proposed Project Period	Proposal Status	Sponsor	Originating Sponsor	Academic / Calendar / Summer PD Person Months Charged and Contributed	Total Direct Costs Proposed	Total Costs Proposed
--------------------	-------------------	---------------------	---------	-------	-------------------------	-----------------	---------	---------------------	---	-----------------------------	----------------------



Pre-Award Reports

- Negotiation Status Reports
 - List of negotiations in progress, with status
 - List of completed negotiations, with summary table
- Projected Proposal/Award Trends
 - Including a projected future awards report
- Proposal/Award Trends, including success rate
 - Success rate displays number still pending, but uses funded over submitted to calculate rate



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Proposal Success Rate Between Sep 1, 2013 and Aug 31, 2014

Proposal Type: Competitive Renewal, New,
Resubmission, Revised
Sponsor Type: All
Originating Spon Type: All

	Proposal Success Rate	Total Number Proposed	Total Amount Proposed	Total Number Pending	Total Amount Pending	Total Number Funded	Total Amount Funded
<u>Ctrl Rsrc The Graduate School</u>	100%	3	\$42,000	0	\$0	3	\$8,000
<u>Ctrl Rsrc Undergrad General</u>	100%	1	\$2,500,000	0	\$0	1	\$1,500,000



Pre-Award Reports

- OSR sends out a Cognos report attached as PDF to new award notifications
- OSR Info-Team pushes out reports of aging proposals and awards to OSR staff weekly
 - Excel macros developed years ago
 - Staff sort/filter worksheets

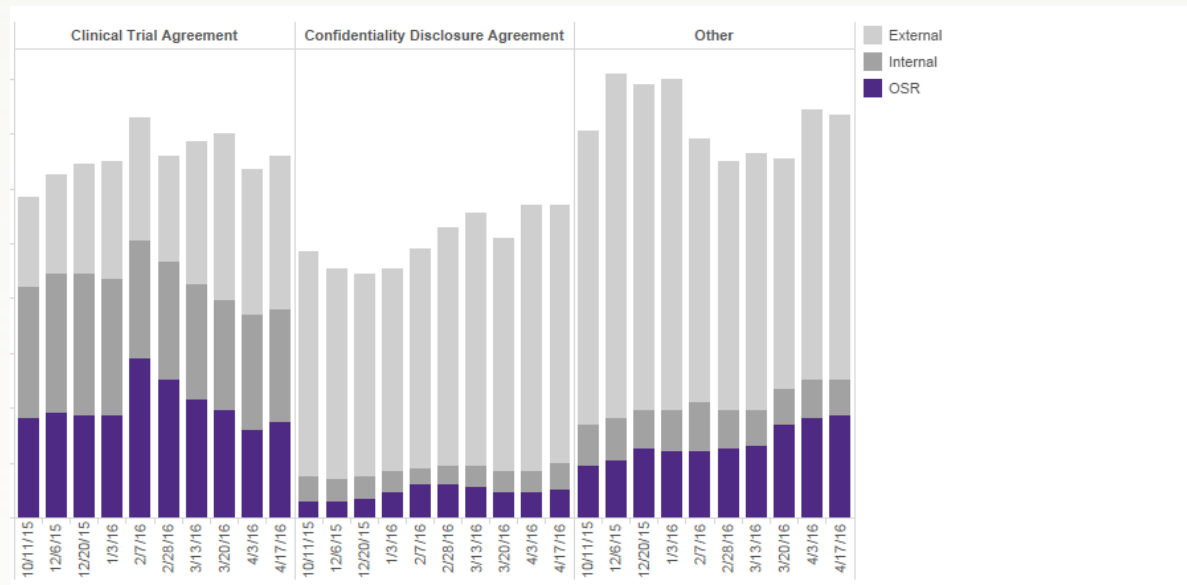
Evanston 1801 Maple Avenue 2nd Floor, Suite 2410 (847) 491-3003		Northwestern University Office for Sponsored Research PROJECT ACCOUNT SUMMARY		Chicago 7th Floor - Rubloff Building 750 N.Lake Shore Drive (312) 503-7955		
Award Information - SP0033176						
Title: PRESPEND Solid Acid Fuel Cell Stack						
Award PI:		New Sponsor Funding:		\$0.00		
Sponsor Ref Award #:		New Cost Share Funding:		\$0.00		
FAIN:		FDP/RTTC:		No		
Sponsor:		Clinical Trial:		No		
Flow Through:		CFDA:		81.135		
Originating Sponsor:		Yes Department of Energy				
Cumulative Award Budget to Date						
Direct Costs Budget	FBA Costs Budget	Total Cost Share Budget	Total Budgeted			
\$0.00	\$0.00	\$0.00	\$0.00			
Chartstring Information						
Type	Project ID	Department	Fund			
Sponsored	60040211	4735000	620			
Project Details - 60040211						
Project Title:		PRESPEND Solid Acid Fuel Cell				
Department Description:		MCC Materials Science				
Department:		4735000				
Project PI:						
Project Dis:		6/15/15 - 5/31/16				
Activity: 01						
FBA Rate:		54.5				
FBA Base:		NOFA				
Chartstring Information						
Sponsored Project Budget Detail - Activity 01 Budget Period Ending 5/31/16						
Description	Department	Fund	Activity	New Funding	Previous Funding	Cumulative Budget to Date
Academic Personnel	4735000	620	01	\$0.00	\$0.00	\$0.00
Fringe Benefits	4735000	620	01	\$0.00	\$0.00	\$0.00
Services	4735000	620	01	\$0.00	\$0.00	\$0.00
Supplies	4735000	620	01	\$0.00	\$0.00	\$0.00
Tuition	4735000	620	01	\$0.00	\$0.00	\$0.00
Subtotal Direct Costs				\$0.00	\$0.00	\$0.00
FBA	4735000	620	01	\$0.00	\$0.00	\$0.00

GM033 - 1 - Run Date: 4/17/16 Run Time: 6:04:51 PM



Pre-Award Reports

- Additional reports/database queries
 - 20+ queries run daily checking for data anomalies within and between systems
 - Workflow/turnaround time (not yet in Cognos)
 - Snapshots of data over time, to analyze trend in pending queue, particularly for contracts/agreements

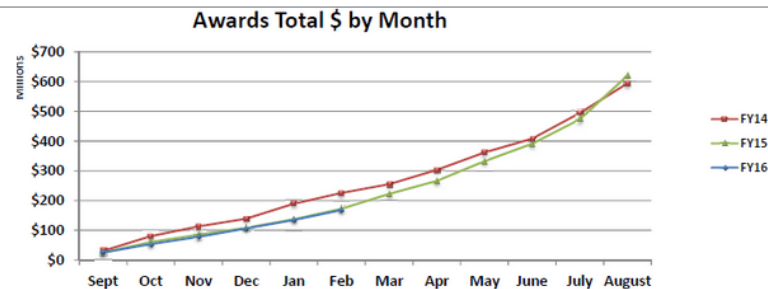




Pre-Award Reports

- Monthly reports of proposal/award activity are available for download to campus from OSR web

REPORTS



MONTHLY AWARD AND PROPOSAL SUMMARIES
(BY MANAGEMENT AREA AND SPONSOR TYPE)

February 2016 (PDF)

MONTHLY AWARD DETAIL LISTING

February 2016 (PDF)

MONTHLY PROPOSAL DETAIL LISTING

February 2016 (PDF)

[Return to OSR home](#)



Pre-Award Reports

- Internal Management Reports
 - Produced monthly; combining data from Cognos and Excel
 - Tableau for visualization; interactive filters
 - Three major business processes:
 - Proposal Review/Submission
 - Award Establishment
 - Contract Negotiation/Execution



Post-Award Reports

[Public Folders](#) > [Finance Facilities and Research Administration](#) > [School](#) > **Sponsored Programs Management**

<input type="checkbox"/>	Name
<input type="checkbox"/>	GL008 - Revenue and Expense Activity Report
<input type="checkbox"/>	GL064 - Project By Attribute/Activity Non-Designated Funds
<input type="checkbox"/>	GL068 - Financial Summary (Excluding Agency and Multi-Year Funds)
<input type="checkbox"/>	GL069 - Financial Summary (Including Multi-Year Funds And Excluding Agency Funds)
<input type="checkbox"/>	GL070 - Financial Summary with Project Purpose (Excluding Agency and Multi-Year Funds)
<input type="checkbox"/>	GL071 - Financial Summary - Historical Comparison (Excluding Agency and Multi-Year Funds)
<input type="checkbox"/>	GL072 - Financial Summary w/ Detail ICR (Excluding Agency and Multi-Year Funds)
<input type="checkbox"/>	GL073 - Financial Summary w/ Detail ICR (Including Multi-Year Funds And Excluding Agency Funds)
<input type="checkbox"/>	GL074 - Financial Summary with Management Level & Project Purpose
<input type="checkbox"/>	GM011 - Sponsored Research Expenditures Report
<input type="checkbox"/>	GM014 - F&A Revenue Offset Setup Report
<input type="checkbox"/>	GM023 - Multi-Project Summary
<input type="checkbox"/>	GM026 - Project Information Lookup Report
<input type="checkbox"/>	GM033 - Project Account Summary
<input type="checkbox"/>	GM035 - Industry Clinical Trial Activity Report
<input type="checkbox"/>	GM044 - Sponsored Project Portfolio
<input type="checkbox"/>	GM045 - Sponsored Project Budget Statement
<input type="checkbox"/>	GM047 - Milestone (Deliverable) Report
<input type="checkbox"/>	GM086 - Projects Balances Report
<input type="checkbox"/>	GM091 - Sponsor Payments Received Report
<input type="checkbox"/>	GM093 - Cost Share Commitment Status
<input type="checkbox"/>	GM094 - Cost Share Journal Details

- Currently 22 reports in Cognos
- Additional queries available in PeopleSoft financials
- Many are being updated to add prompts for pre-award grant number



Post-Award Reports



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Sponsored Project Budget Statement For Fiscal Year 2016 As of Accounting Period 8 - April 2016 (Open)

Fiscal Year: 2016
Accounting Period: 8 - April
Manager/Reviewer: All
Current Department: Student Affairs
Project Status: Active Projects Only
Project: All
Display Certificate: Yes

Account & Description	Fund	Dept	Activity ID	(A) Incep-TD Budget	(B) Current Period Exp	(C) FY-TD Exp	(D) Incep-TD Exp	(E) Open Req Enc	(F) Budget Checked Not Posted	(A-D-E-F) Bal Remaining	(A-D-E-F) % Available
Project: 60039052 - Northwestern University Propos -											
Award ID: SP0027905 FDP/RTC: No Bill Type: LOC Flow Through: No Sponsor: Office on Violence Against Women Originating Sponsor: - Sponsor Reference Award #: 2014-WA-AX-0006 FAIN: 2014-WA-AX-0006 ASRSP GCFA: Colleen Hull Clinical Trial: No											
Project Dates: 10/1/2014 - 9/30/2017 Project PI: Telles-Irvin, Patricia Research Administrator: Currie, Lisa A Project Status: Open Primary Project: 60039052 Northwestern University Propos Primary Project Department: 2144700 Hlth Service-Health Education Project Type: Federal Grants and Contracts Product: GRANTS_REIMBURSABL Total Payments Applied: \$53,131.47											
Activity ID: 01 Budget Period Ending 9/30/16											
F&A Rate and Base: 0.00% NOFA											

- Used by administrators to reconcile projects
- Required by sponsored research office with submissions for post-award modifications
- Current prompt limits to one month at a time; update in progress to change to range of months



Post-Award Reports

- Additional reports in progress:
 - Clinical trial balances, relative to cash received
 - List of outgoing subcontracts, with data combined from InfoEd and PeopleSoft
 - Subcontract detail report, to be drillable from the list
- Research Portal also in progress
 - Phase 1 will focus on post-award data primarily
 - Allows investigators and administrators to see summaries and drill-down for a PI's portfolio
 - Leveraging data sourced from Cognos/data warehouse



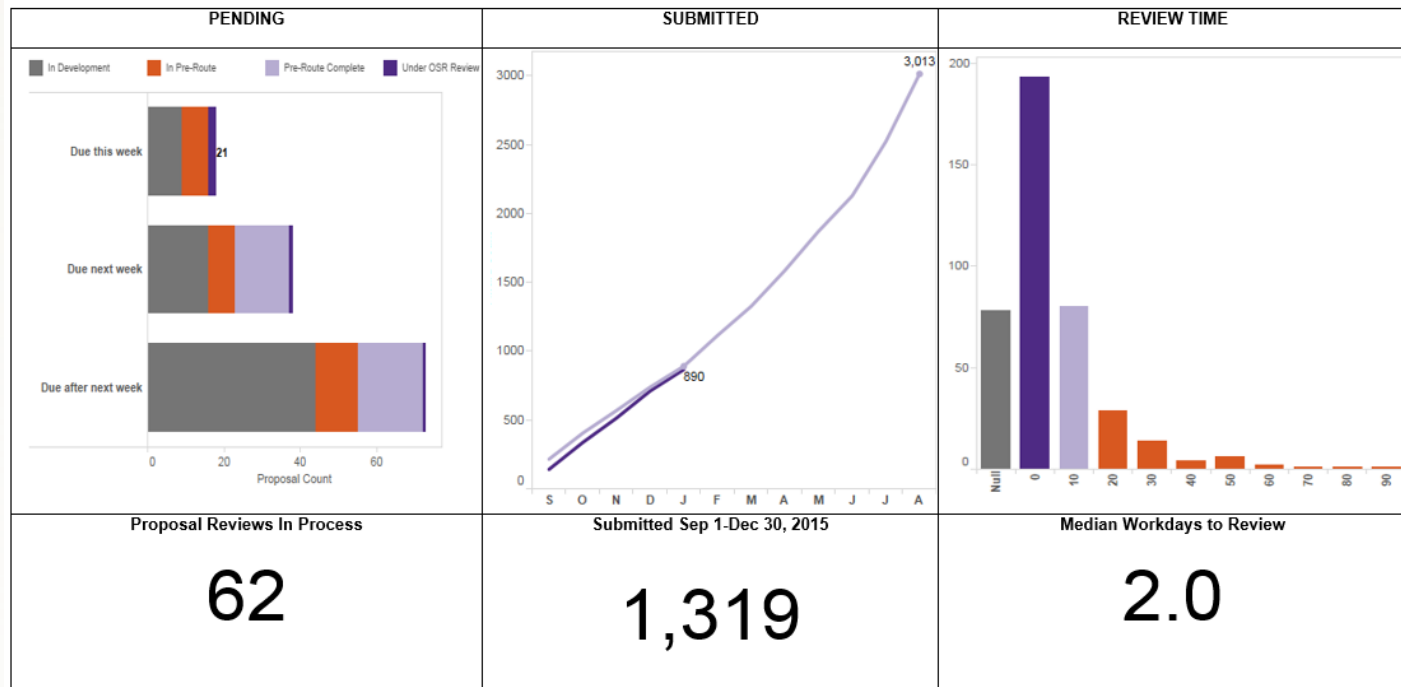
Issues

- Emphasis on canned reports
 - Moving toward more self-service BI in future
- Data marts for pre- and post-award are not combined
 - An effort reporting data mart is being proposed to combine pre-award, payroll, HR and effort certification data
- Shadow system proliferation
 - Age-old challenge of accounting for planned expenses known locally but not stored centrally



Future Plans

- Research portal will be rolling out in three phases over the next 18 months
- OSR is expanding the Reports & Metrics section on the web





Questions?

Kim Griffin

Director for Electronic Research Administration

Office of Sponsored Research

Northwestern University

kimberly.griffin@northwestern.edu



FEDERAL DEMONSTRATION PARTNERSHIP
Redefining the Government & University Research Partnership

Audit Data Analytics

Andra Sawyer, MBA

Assistant Director, Post Award Fiscal Compliance

University of Washington



Audit Data Analytics

A means by which auditors can identify high risk transactions using General Ledger data

- Reviews 100% of expenditure data
- Replaces random sampling
- Increases exposure
- Easy to do



National Science Foundation Data Analytics Audit

- UW is one of 13 comparable institutions to date
- Provided all data on \$296m in NSF expenditures
- Areas of findings (UW & other institutions)
 - End-of-Award purchases
 - Pre-Award purchases
 - Travel
 - NSF 2 month salary limit
- All other findings started from the GL data



Example - Transaction

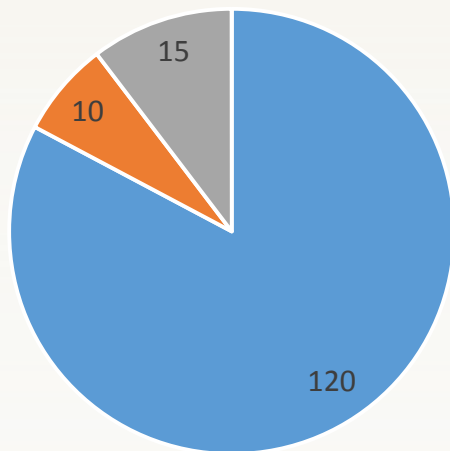
Sample results:

- \$12,000 equipment purchase
- Erroneously coded as Expendable Supplies
- Transferred off the original Award
 - 3 years after purchase
 - 15 days from original Award end date
- Transferred onto new Award
 - Original purchase date more than 90 days before new Award start date



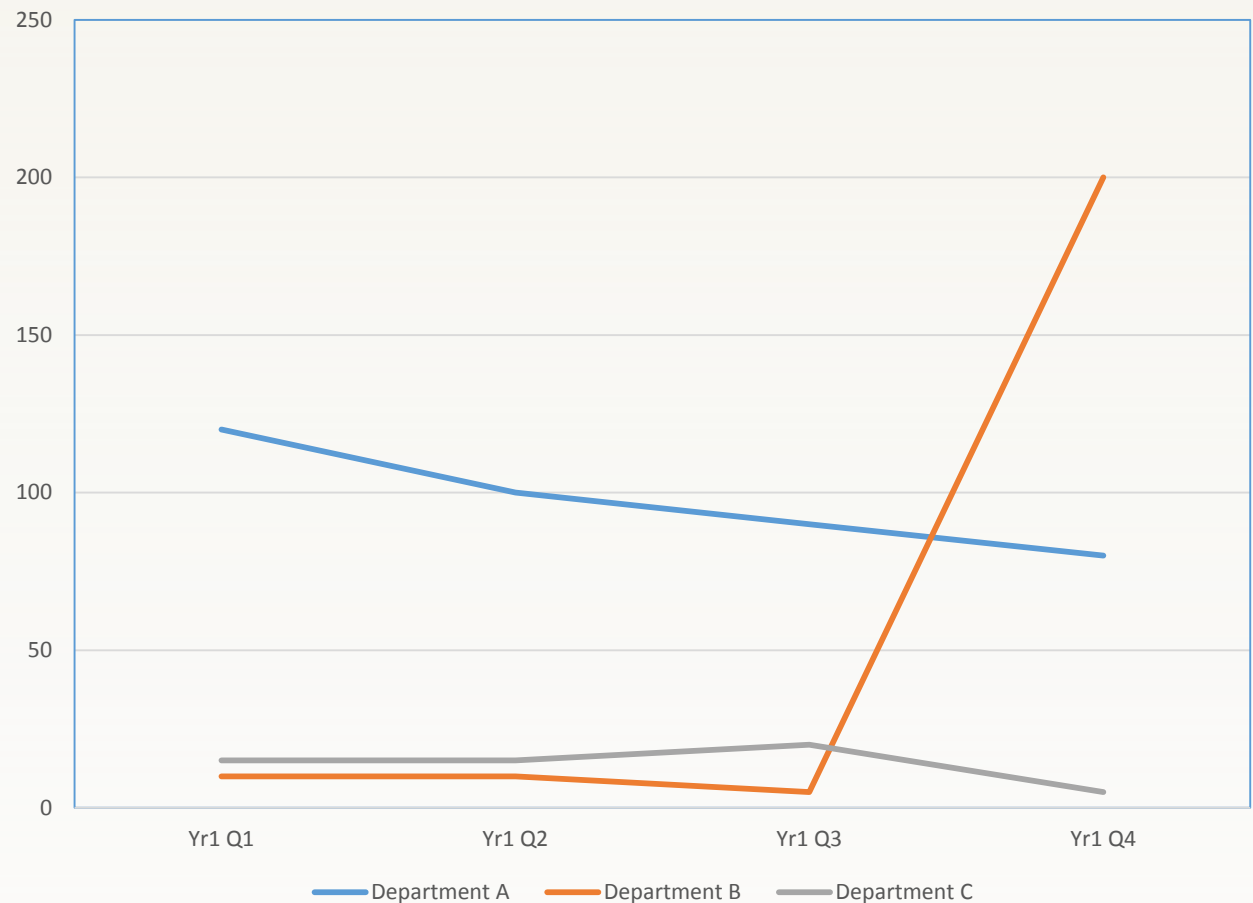
Example – Department Information

Q1 High Risk
Transactions = 145



■ Department A ■ Department B
■ Department C

Department Trends





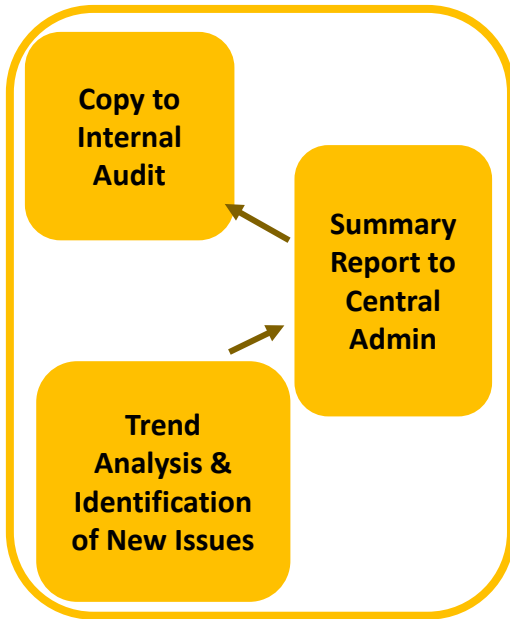
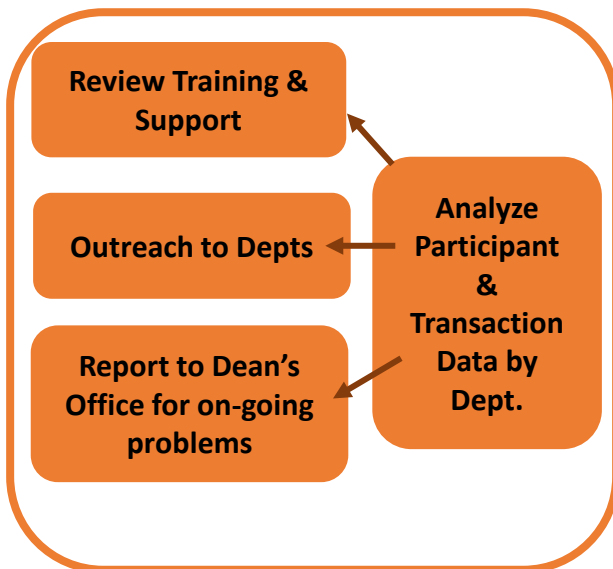
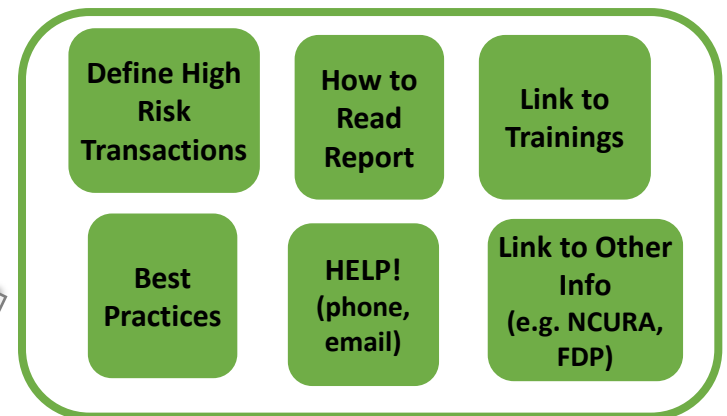
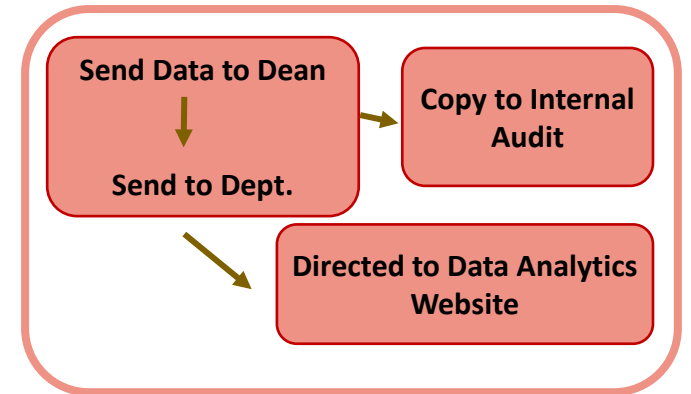
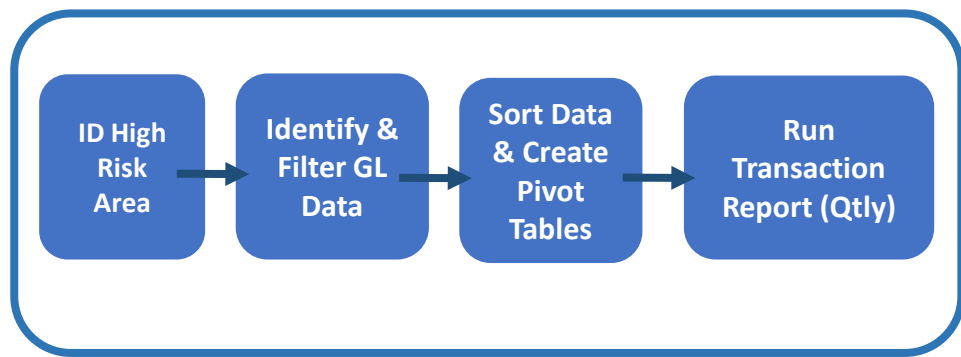
UW Data Analytics Program Goals

- Proactively identify high-risk transactions
- Identify and share best practices
- Target areas of need
- Effective use of limited resources



Program Challenges

- Large & diverse institution
- Distributed management system
- Limited central resources
- Staff experience levels





Summary

- Effective use of limited resources
- Positive feedback from departments
- Training & support are key



FEDERAL DEMONSTRATION PARTNERSHIP
Redefining the Government & University Research Partnership

Metrics Reporting Across Partners Healthcare

FDP - May 6, 2016

David Waldron
Pre Award Manager
Partners Healthcare



Partners HealthCare is...

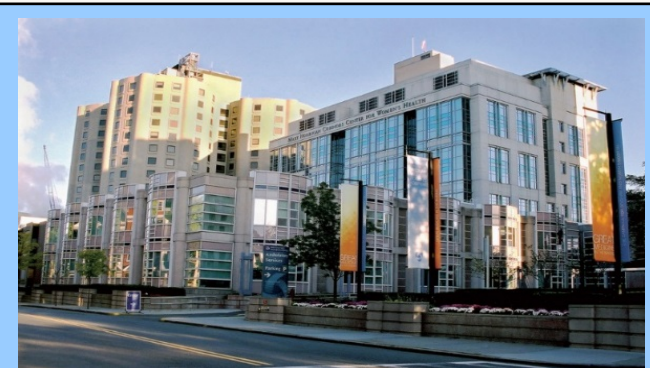
- The largest **integrated academic health care system** in the United States
- A national and global leader in **health care excellence and innovation**
- A partner for **institutions around the globe** that is committed to patient care, research, teaching, and service to the community

Partners HealthCare Founding Members:



Massachusetts General Hospital

Founded 1811

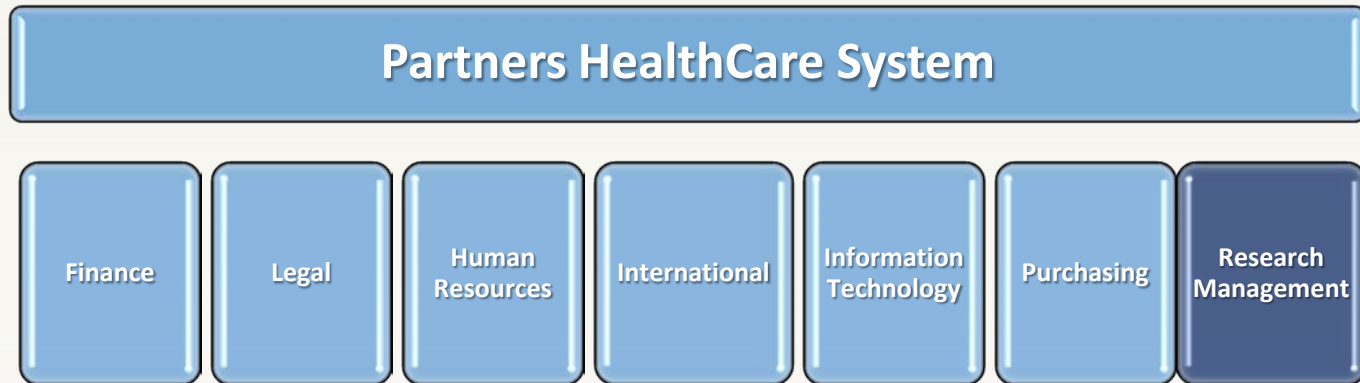


Brigham and Women's Hospital

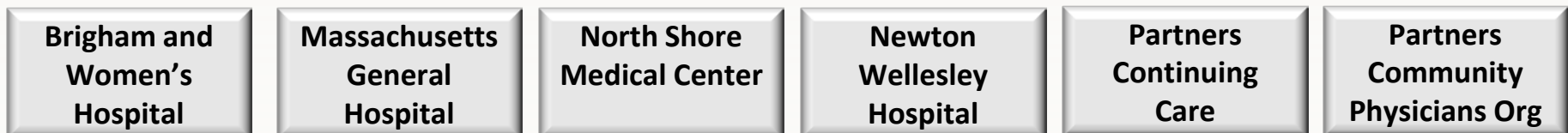
Founded 1832



Centralized Support for Partners Institutions



Partners provides centralized support and coordination to its member hospitals and affiliated organizations





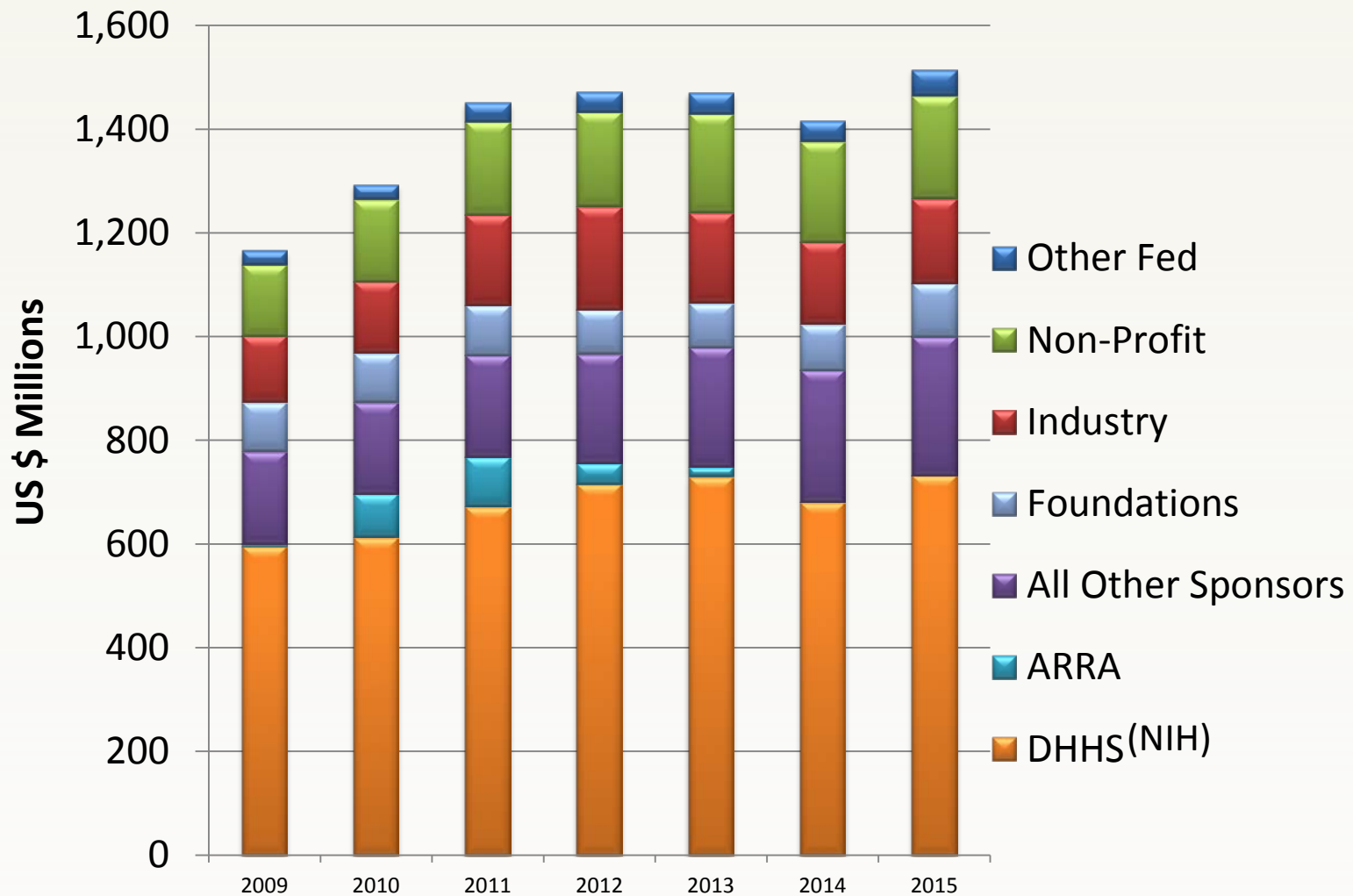
Research at Partners

Partners continues to be an acknowledged leader in the development of an integrated, large-scale organization for [patient care](#), [research](#), and [education](#).

- **\$1.5B research enterprise** consisting of more than **1,600 clinical trials** and **15,000 active awards** from **2,125 sponsors worldwide**
- The Research community consists of more than **2,700 principal investigators** and over **10,000 research employees**
- Combined, the Partners hospitals are the **largest recipients** of National Institutes of Health funding in the United States



Research Revenue Across Partners Hospitals





Matrix Reporting across Partners Healthcare

- **Partnered with MicroStrategy**
 - **Met the needs of our business and IT models**
 - **Helped us make sense of large data volumes**
 - **Scalable on any device**

Overview of Integrated Matrix Reporting Across Partners Healthcare

- **Transparency across Central Office and Hospitals**
 - **Pre/Post Award Administrators**
 - **Finance**
 - **Department Administrators**
- **Summary and detailed reporting at all levels**
 - **Drill down functionality**
 - **Ability to create user views**
- **Reporting driven by transactions (deliverables)**
 - **User defined algorithms for tracking**
 - **Provides insight into all major Business Processes**



Operational Metrics – Reportable Transactions

Advance Accounts

Agreement Renewals

DUA – In/Out

Final Report

GWAs – In

Just In Time

Progress Report

Relinquishing Statement

Sub – Out/Mod

Agreement in Mod

Carryforward

Final Invoice – Out

FSR – Revised

Invention Report

Notice of Award

Proposals Submissions

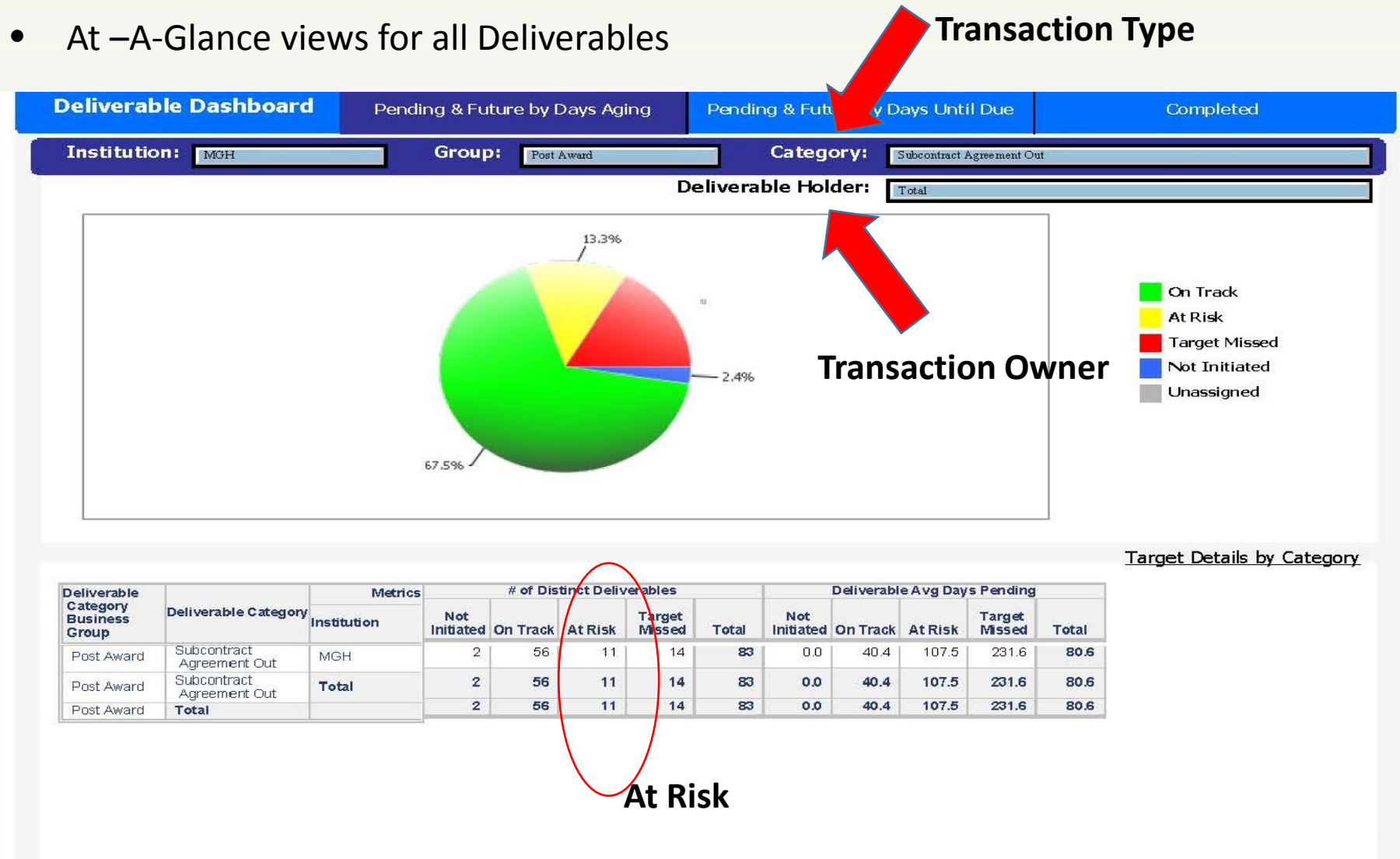
RSA – In/Out

Sub Invoice



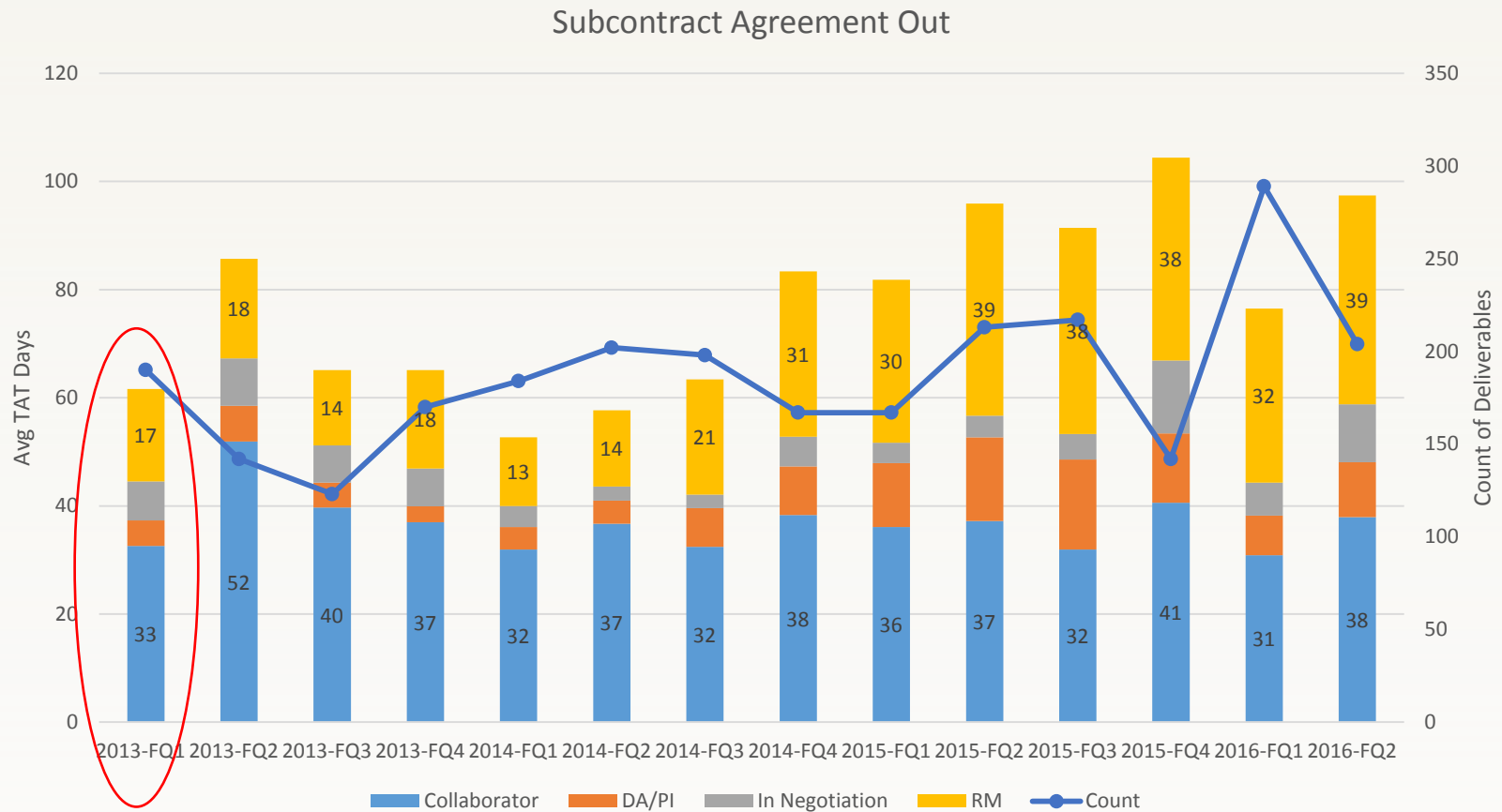
Metrics Reporting Dashboard

- At –A-Glance views for all Deliverables





Operational Metric – Subcontract Out



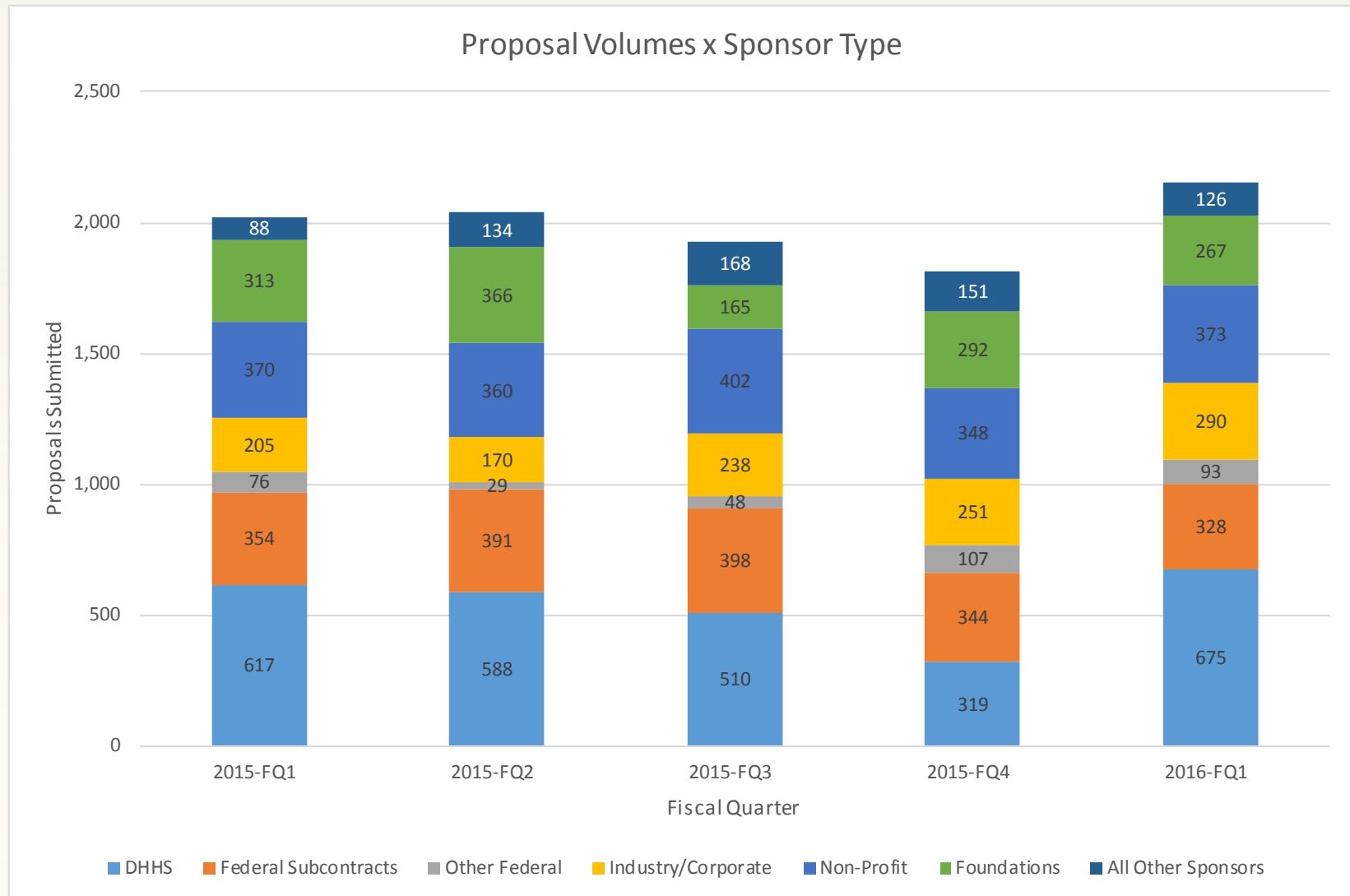


Operational Metric – Subcontract Out

Deliverable Category	Deliverable Complete Fiscal Quarter	Collaborator	DA/PI	In Negotiation	RM	Count
Subcontract Agreement Out	2013-FQ1	33	5	7	17	190
Subcontract Agreement Out	2013-FQ2	52	7	9	18	142
Subcontract Agreement Out	2013-FQ3	40	5	7	14	123
Subcontract Agreement Out	2013-FQ4	37	3	7	18	170
Subcontract Agreement Out	2014-FQ1	32	4	4	13	184
Subcontract Agreement Out	2014-FQ2	37	4	3	14	202
Subcontract Agreement Out	2014-FQ3	32	7	3	21	198
Subcontract Agreement Out	2014-FQ4	38	9	6	31	167
Subcontract Agreement Out	2015-FQ1	36	12	4	30	167
Subcontract Agreement Out	2015-FQ2	37	16	4	39	213
Subcontract Agreement Out	2015-FQ3	32	17	5	38	217
Subcontract Agreement Out	2015-FQ4	41	13	14	38	142
Subcontract Agreement Out	2016-FQ1	31	7	6	32	289
Subcontract Agreement Out	2016-FQ2	38	10	11	39	204



Proposal Volume across Partners





Proposal Submissions Across Partners

– Operational Metrics

Pending Month	Vol	Dept. Days (Goal >= 5)	% Target Met (Goal = 50%)	RM Days (Goal <= 3)	% Target Met (Goal = 95%)	No Major Revisions Rqu'd (Goal = 80%)
March 2016	174	7.6	13.8%	1.1	93.1%	86.8%
Feb. 2016	722	1.5	14.4%	0.8	95.3%	84.6%
Jan. 2016	513	2.9	22.0%	0.9	93.6%	87.7%
Dec. 2015	359	1.0	17.0%	1.1	94.7%	84.1%
Nov. 2015	417	2.6	18.5%	1.2	92.3%	81.8%
Oct. 2015	706	1.9	15.0%	0.9	94.5%	82.2%
Sept. 2015	384	5.4	22.4%	1.4	91.4%	84.9%
August 2015	315	4.2	21.6%	1.2	93.0%	83.5%
July 2015	467	1.1	14.8%	1.2	93.1%	81.4%
June 2015	557	2.4	14.9%	1.1	91.7%	79.0%
May 2015	317	1.6	24.9%	1.2	93.1%	80.8%
April 2015	393	3.0	18.1%	0.8	94.7%	83.7%



PRE Award – Daily Worklist

Deliverables: 1

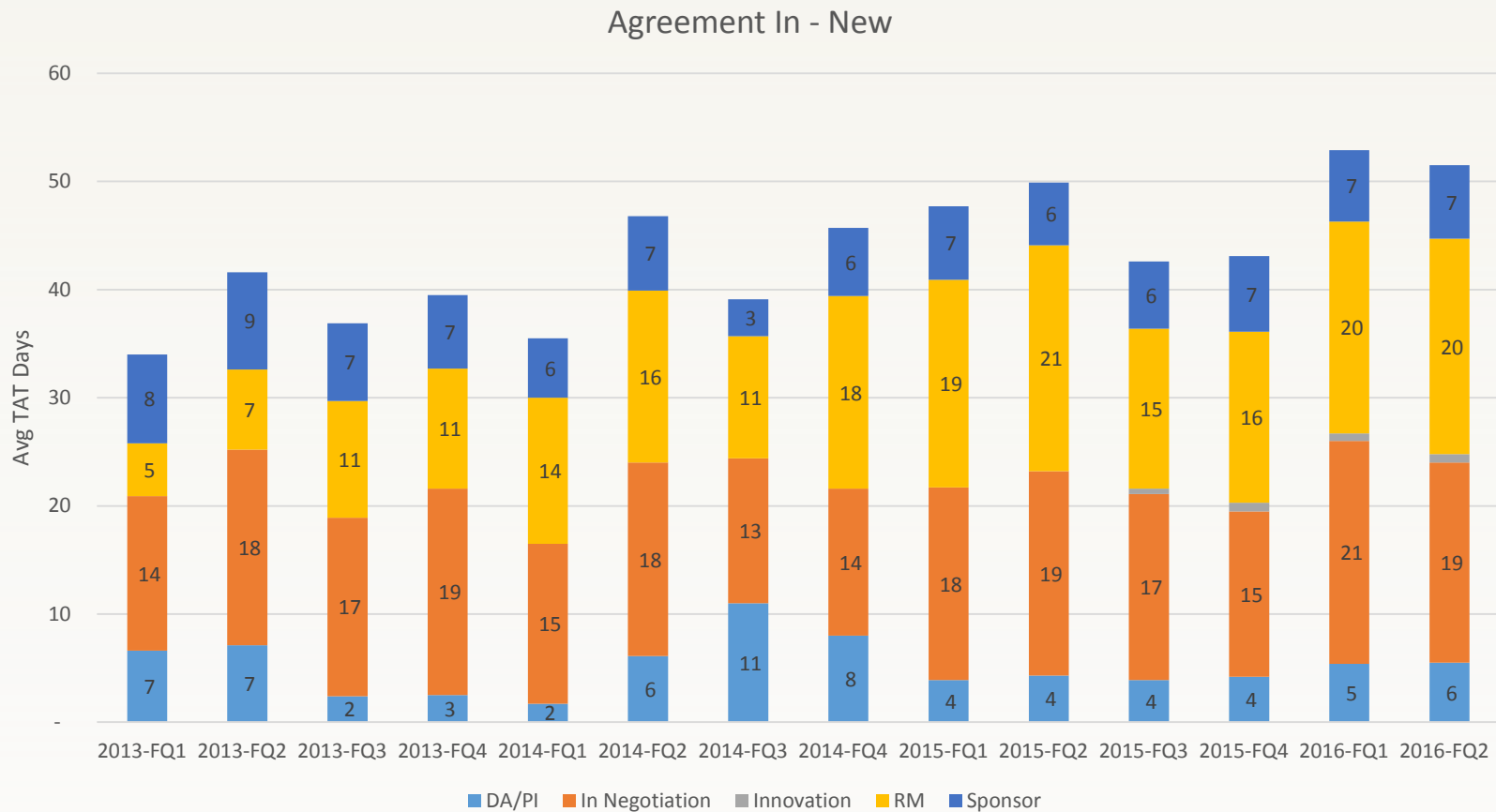
Institution	COS	Proposal	Immediate Sponsor	Pre Award Grant Administrator	Deliverable Category	Deliverable	Deliverable Current Status	Deliverable Due Date	Deliverable Latest Comment	Sum Deliverable TAT Days	Sum Days Until Deliverable Due Date
MGH	54CA - MRI (MGH)	2015D007374	NIH-NIBIB National Institute of Biomedical Imaging and Bioengineering	Singleton, Robert	Just In Time	JIT Request 4-11-2016 InfoEd	JIT - Pending DA/PI	4/18/2016	UNASSIGNED	7	0

Proposals to Submit - Aged by Days Until Sponsor Deadline: 5

Institution	COS	Proposal	Immediate Sponsor	Current Proposal Status	Sponsor Deadline Date	Current Comments	Days Until Due
MGH	54CA - MRI (MGH)	2015D008970 InfoEd	European Commission	In Development - FINAL Edits Required	1/19/2016		-63
MGH	54CA - MRI (MGH)	2016D002806 InfoEd	B*CURD	FINAL Under Review	4/1/2016		-11
MGH	54CA - MRI (MGH)	2016D002827 InfoEd	NIH-National Institutes of Health	In Development - FINAL Edits Required	4/20/2016		2
MGH	54CA - MRI (MGH)	2016D003022 InfoEd	NIH-National Institutes of Health	DRAFT Under Review	6/5/2016		34
MGH	54LA - Radiology/Cardiac Imaging (MGH)	2016D000584 InfoEd	NIH-National Institutes of Health	In Development (Default)	12/31/2016		179



Operational Metric – Agreement In





Operational Metric – Agreement In

Deliverable Category	Deliverable Complete Fiscal Quarter	Avg TAT (Weighted)					# of Deliverables
		DA/PI	In Negotiation	Innovation	RM	Sponsor	Count
Agreement In - New	2013-FQ1	7	14		5	8	259
Agreement In - New	2013-FQ2	7	18		7	9	232
Agreement In - New	2013-FQ3	2	17		11	7	256
Agreement In - New	2013-FQ4	3	19		11	7	306
Agreement In - New	2014-FQ1	2	15		14	6	270
Agreement In - New	2014-FQ2	6	18		16	7	255
Agreement In - New	2014-FQ3	11	13		11	3	281
Agreement In - New	2014-FQ4	8	14		18	6	270
Agreement In - New	2015-FQ1	4	18		19	7	314
Agreement In - New	2015-FQ2	4	19		21	6	261
Agreement In - New	2015-FQ3	4	17	1	15	6	323
Agreement In - New	2015-FQ4	4	15	1	16	7	284
Agreement In - New	2016-FQ1	5	21	1	20	7	314
Agreement In - New	2016-FQ2	6	19	1	20	7	331



Benefits

- **Drives major Business Processes within Partners**
- **Comprehensive/Consistent reporting allows transparency across Partners**
- **Monitor all activities and history – Daily, Monthly, Quarterly and Annually**
- **Multiple reporting levels - summary and detail**
- **Analyze TAT's (Turn Around Times) and Business Processes**
- **Monitor collaborations with other Institutions**
- **Manage workloads at all levels**
- **Ability to download to various formats**