National Science Foundation Higher Education Research & Development Survey
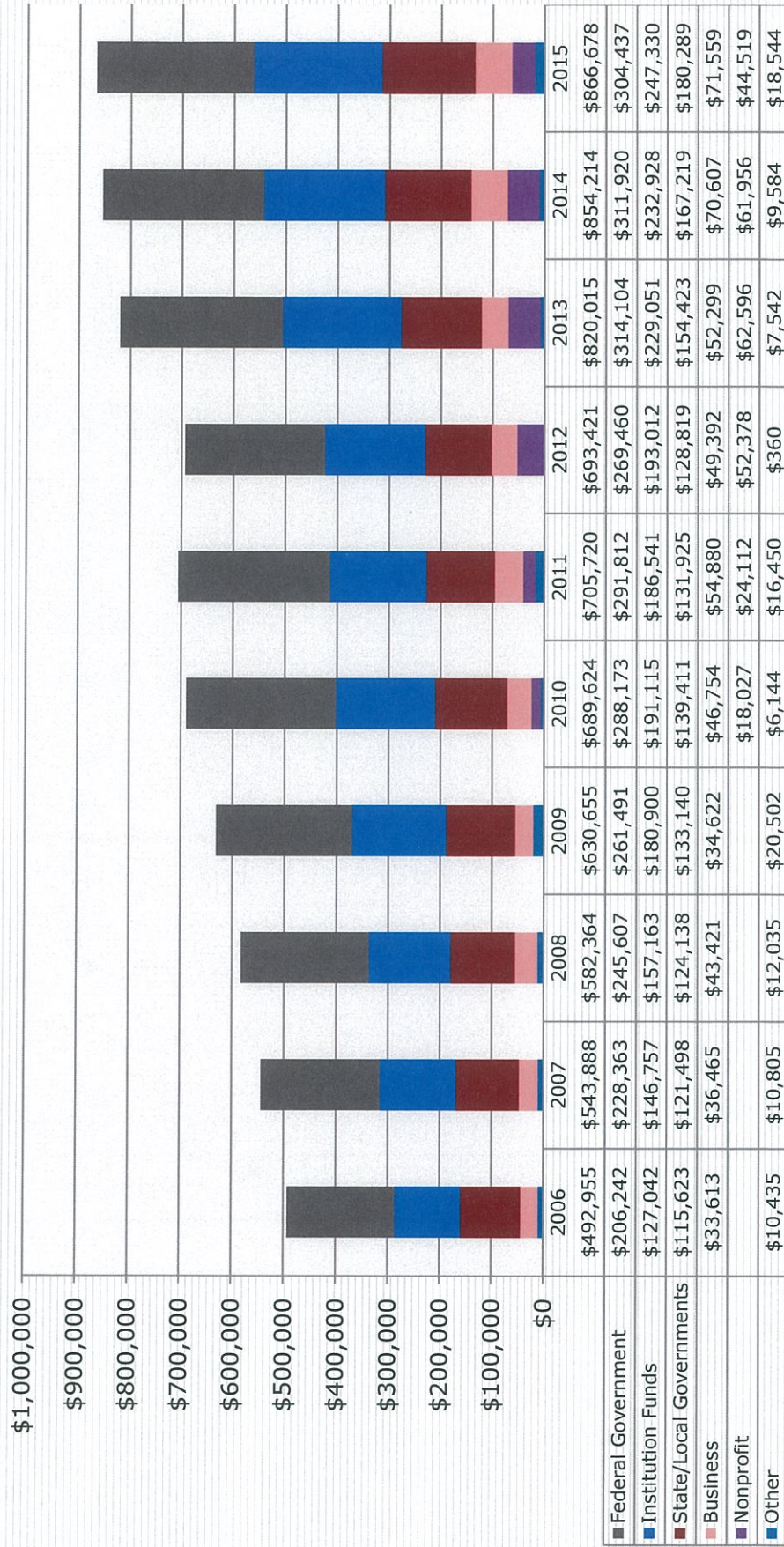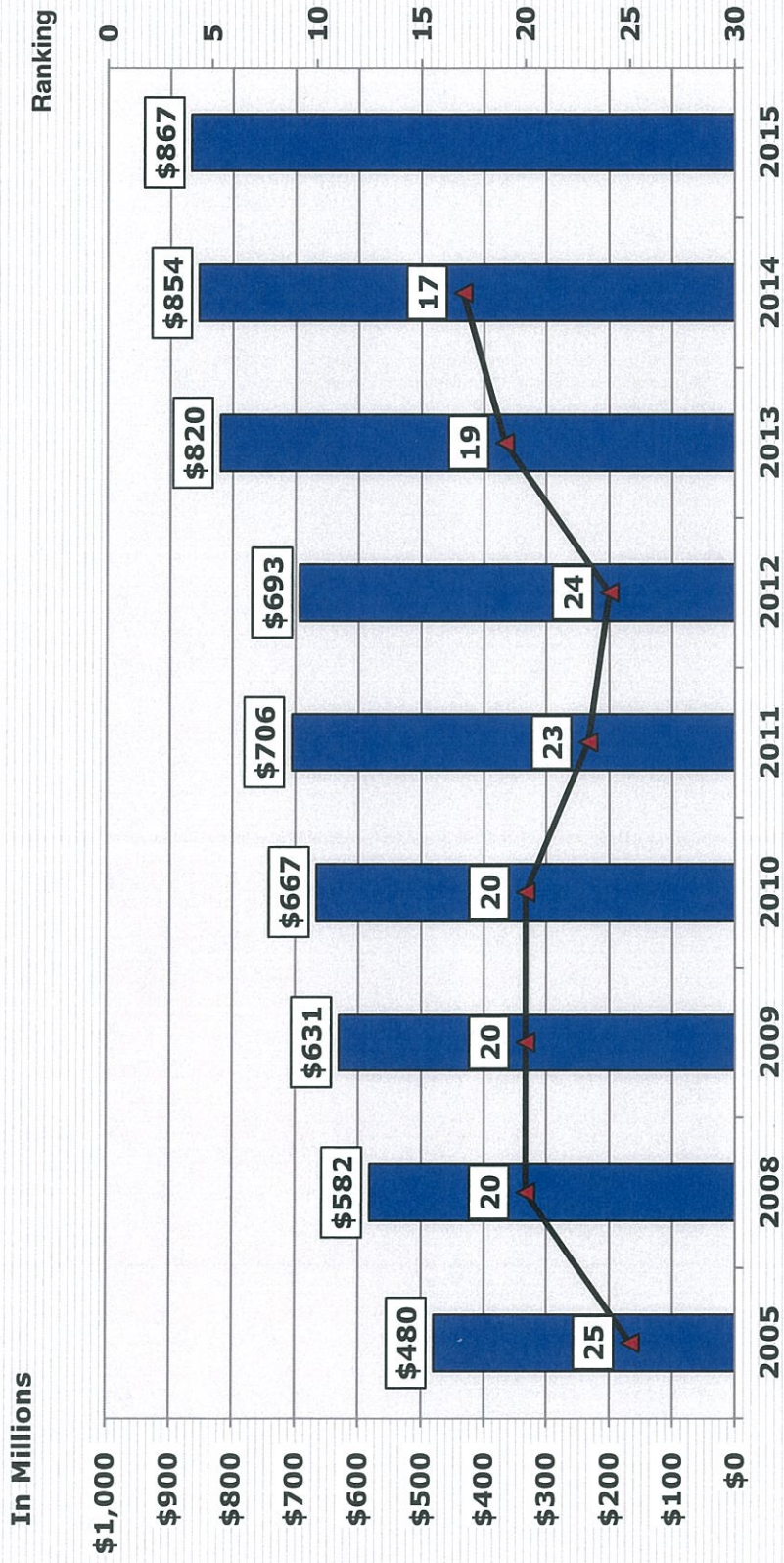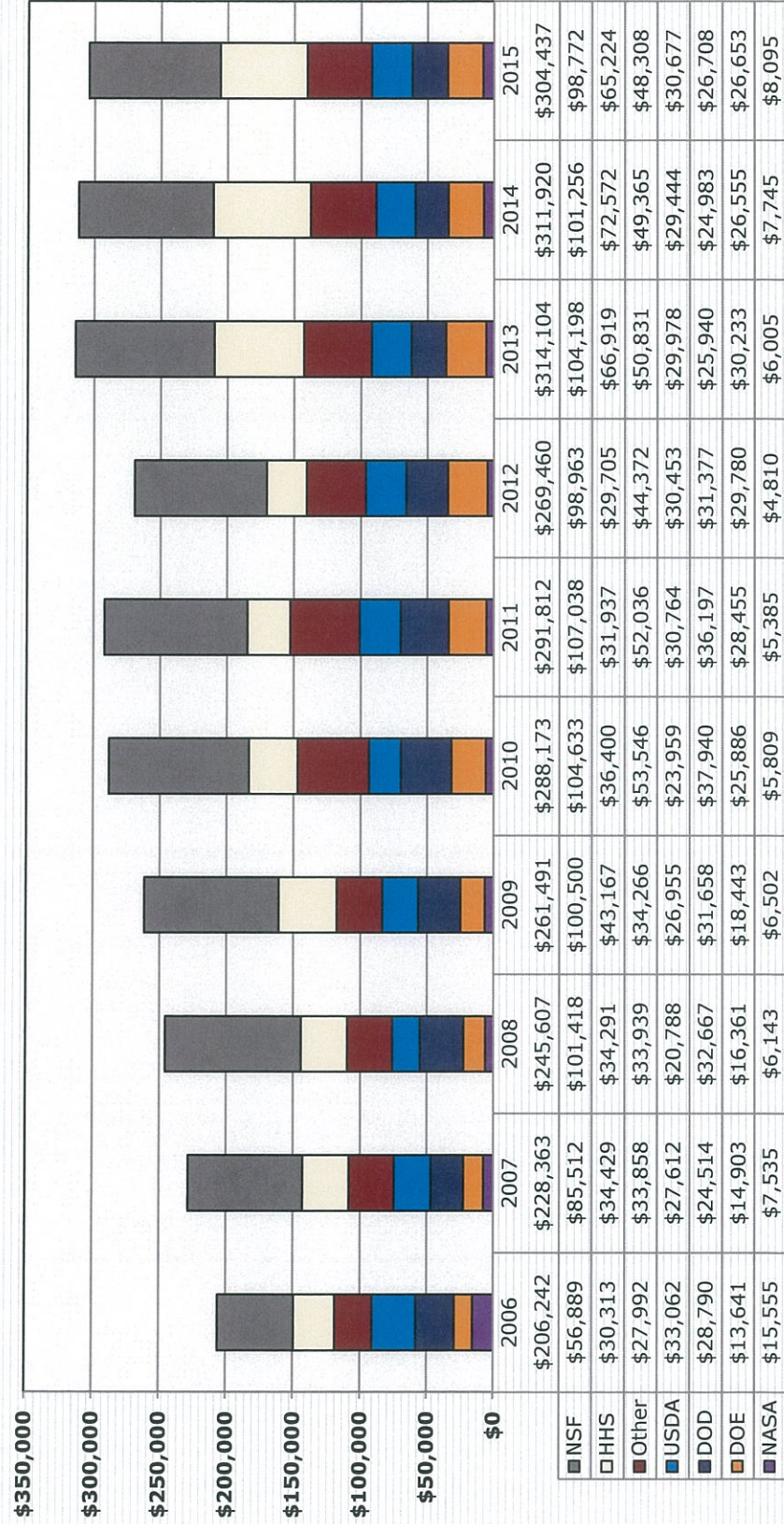
Expenditures by Sponsor Type as Reported for

Texas A&M University

Dollars in Thousands

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Federal Government	$492,955	$543,888	$582,364	$630,655	$689,624	$705,720	$693,421	$820,015	$854,214	$866,678
Institution Funds	$206,242	$228,363	$245,607	$261,491	$288,173	$291,812	$269,460	$314,104	$311,920	$304,437
State/Local Governments	$127,042	$146,757	$157,163	$180,900	$191,115	$186,541	$193,012	$229,051	$232,928	$247,330
Business	$115,623	$121,498	$124,138	$133,140	$139,411	$131,925	$128,819	$154,423	$167,219	$180,289
Nonprofit	$33,613	$36,465	$43,421	$34,622	$46,754	$54,880	$49,392	$52,299	$70,607	$71,559
					$18,027	$24,112	$52,378	$62,596	$61,956	$44,519
Other	$10,435	$10,805	$12,035	$20,502	$6,144	$16,450	$360	$7,542	$9,584	$18,544

Legend: Federal Government · Institution Funds · State/Local Governments · Business · Nonprofit · Other

Texas A&M University

Rankings on Total NSF Expenditures Since 1985

In Millions

Ranking

Year	Expenditure	Ranking
2005	$480	25
2008	$582	20
2009	$631	20
2010	$667	20
2011	$706	23
2012	$693	24
2013	$820	19
2014	$854	17
2015	$867	

National Science Foundation Higher Education Research & Development Survey

Total Expenditures

by Field of Science as Reported for Texas A&M University

Dollars in Thousands

Field	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Life Sciences	$303,886	$355,426	$399,690	$436,688	$689,624	$705,720	$693,421	$820,015	$854,214	$866,678
Engineering	$189,069	$188,462	$182,674	$193,967	$193,506	$187,666	$217,734	$299,122	$319,265	$320,555
Environmental Sciences	$161,735	$164,434	$183,338	$216,875	$247,926	$263,765	$256,102	$278,536	$291,643	$298,538
Physical Sciences	$69,531	$112,571	$129,147	$130,662	$129,023	$131,467	$106,883	$128,322	$123,796	$113,175
Non-Science and Engineering	$38,430	$39,200	$35,346	$39,170	$44,594	$46,308	$45,463	$45,768	$45,493	$53,824
Social Sciences	$9,617	$11,729	$21,240	$16,112	$23,108	$23,168	$23,453	$23,914	$28,062	$30,428
Computer Sciences	$6,574	$7,560	$9,994	$11,030	$15,549	$13,040	$10,024	$13,425	$17,125	$19,796
Mathematical Sciences	$9,786	$7,697	$7,980	$10,161	$10,511	$9,517	$8,224	$9,368	$8,686	$11,444
					$10,127	$11,719	$12,378	$13,023	$12,333	$9,079
Other Sciences	$5,229	$9,304	$9,340	$9,190	$9,884	$14,732	$9,878	$4,990	$4,388	$6,173
Psychology	$2,984	$2,931	$3,305	$3,488	$5,396	$4,338	$3,282	$3,547	$3,423	$3,666

National Science Foundation Higher Education Research & Development Survey

Expenditures by Federal Agency as Reported for
Texas A&M University

Dollars in Thousands

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
NSF	$206,242	$228,363	$245,607	$261,491	$288,173	$291,812	$269,460	$314,104	$311,920	$304,437
HHS	$56,889	$85,512	$101,418	$100,500	$104,633	$107,038	$98,963	$104,198	$101,256	$98,772
Other	$30,313	$34,429	$34,291	$43,167	$36,400	$31,937	$29,705	$66,919	$72,572	$65,224
USDA	$27,992	$33,858	$33,939	$34,266	$53,546	$52,036	$44,372	$50,831	$49,365	$48,308
DOD	$33,062	$27,612	$20,788	$26,955	$23,959	$30,764	$30,453	$29,978	$29,444	$30,677
DOE	$28,790	$24,514	$32,667	$31,658	$37,940	$36,197	$31,377	$25,940	$24,983	$26,708
NASA	$13,641	$14,903	$16,361	$18,443	$25,886	$28,455	$29,780	$30,233	$26,555	$26,653
	$15,555	$7,535	$6,143	$6,502	$5,809	$5,385	$4,810	$6,005	$7,745	$8,095

Purchasing on Sponsored Awards/BAM Implementation

Update to the
Council of Principal Investigators
February 10, 2016

Gary Barnes, Associate Vice President for Finance
Carol Cantrell, Senior Associate Vice President for Research Administration

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Procurement and Accounts Payable Systems

AggieBuy
- SciQuest is the software vendor for AggieBuy, A&M's branded name for the e-procurement and accounts payable system
- TAMU selected through a competitive bid process
- Implemented FY 2010

BuyA&M
- Periscope is the vendor that provides software for the procurement and accounts payable system
- TAMU System selected as a Texas State Contract Vendor
- May 28, 2015 – TAMUS Project Team engages TAMU

BAM History and TimeLine

- **Spring, 2013 -** *TAMU invited to the initial Periscope demos*
- **Fall, 2013 -** *TAMUS Pilot testing, four Members participate*
- **April 10, 2014 -** *Chancellor announces Periscope contract*
    - *TAMUS creates roll-out schedule*
    - *TAMU asks to be one of the first Members implemented*
    - *TAMUS and Periscope accepted numerous "feature requests" from TAMU*
- **May 28, 2015 -** *TAMUS Project Team engages* TAMU
- **August 19 -** *Periscope releases major upgrade into PROD*
- **September 22 -** *User Training began*
- **October 05 -** *activation of departments begins*
- **December 04 -** *last day to initiate AggieBuy transactions*
- **December 30 -** *AggieBuy licensing expires*
- **January 20, 2016 -** *"Spend Radar" activation*

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BAM Challenges and Solutions

- System Slow
- Vendor Problems
- Punch-out Catalogs
- "Too many clicks" – inefficient process
- Integration Problems to FAMIS
- Routing and Approvals
- NIGP Numbers

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Periscope
HOLDINGS INC

Buy A&M Performance Status Update – 2.8.16

Focus of Discussion

This bi-weekly status update highlights past, present, and future product/performance enhancements and issue resolutions. An on-going dialogue with this group is integral to our mutual success and is continually showing its value (below highlights details).

What is Being Done about It?

Has been done:

Team – User experience (UX) experts onsite Jan. 28 to discuss changes to improve navigation

Technology – Additional monitoring and alerts being implemented to identify problems in system

Product – Testing new fixes and enhancements for deployment in February 2016:

- Behind-the-scenes efficiencies
- Internal Email notification link to point to SSO
- RPA modifications to reduce errors

Is being done:

Your feedback has enabled quick wins for performance which you'll see in Production, March 2016

Product – Additional enhancements underway:

- Remove unnecessary clicks
- Streamline approvals ("approve & next") and better sorting
- UX changes to modify overall look & feel
- Continued focus on improving approval response times
- Database efficiencies (behind the scenes)

Will be done:

High Priority Issue: RPA's not converting to PO - resolution is close and will be in Test and Production soon

Major changes underway: Work is underway on new UX as part of new major software release in Spring 2016

Upcoming User Experience Changes Enabled by Your Feedback

Home Page

Catalog Search
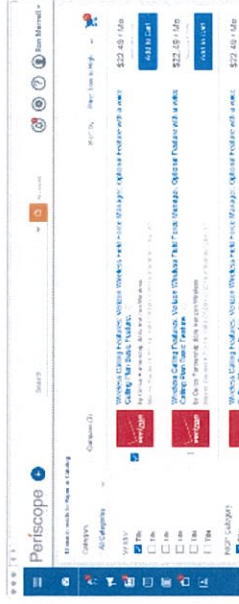
BAM Processing Analysis

Process	Time In AggieBuy	Time In BAM as of 12/23/15	Time Difference (minutes) as of 12/23/15	Current time in BAM as of 01/29/16
Department creating and submitting Request for Payment	Less than 1 minute	4-5 minutes	3-4	3 - 4 minutes
Requisition approval	less than 30 seconds	2-3 minutes	2	1:30 – 2 minutes
Creating/entering an invoice	1.5 minutes	7 minutes	5.5	4 – 5 minutes
Opening, reviewing and approving invoice	1 minute or less	6-7 minutes	5	4 – 5 minutes
Setting up vendor	1 minute	6 minutes	5	5 – 5:30 minutes

Periscope Addressing Issues

- TAMU has requested 200+ enhancements
- Periscope added servers to address slow response time during the Christmas break
- Periscope is re-writing their entire user interface. Planned delivery is early summer 2016.
- PI/SRS routing and approvals to be fully implemented 3/1/16.
- NIGP will be specific for research (approximately 10 to select from)

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Purchasing Solutions on Sponsored Projects

- **Open Market (>$10k: equipment and services) requests that will route to Procurement Services**
- **Direct Open Market – Requisitioner/Shopper orders in BAM**
  - Delegated and non-contract request
  - Limited to delegated amount determined by system member (TAMU's is $10k)
  - Requires end user to convert requisition to PO and then manually submit PO notification to vendor
- **Shopper orders in BAM**
  - Contract item purchase request (these will be our master orders but not many are loaded yet)
  - Punch-out purchase request (currently only have 4 where there were 20 in AggieBuy but Periscope is working on getting more loaded)
  - Requires end user to manually submit the PO notification to the vendor
- **Purchases made outside of BAM**
  - These purchases are made by calling the vendor directly or ordering on-line (not using BAM) or in-person shopping.
    - RPA (Request for Payment Authorization)
      - No PO notification sent to vendor via BAM
      - Receiving is done at the time RPA is created via RPA Goods Received Date field
    - University Issued Payment Card
      - Card is usually charged at the time the goods are shipped or picked up
      - If card was not provided at the time of the order the vendor may accept at the time of billing. Instead of entering RPA document in BAM, the department can ask the vendor if they will accept the payment card.
      - Department follows payment card guidelines and processes
    - Personal Reimbursement
      - Shopper pays for the goods at the time the goods are ordered or picked up
      - Reimbursement to the shopper is made via BAM using the RPA process

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Approval Path
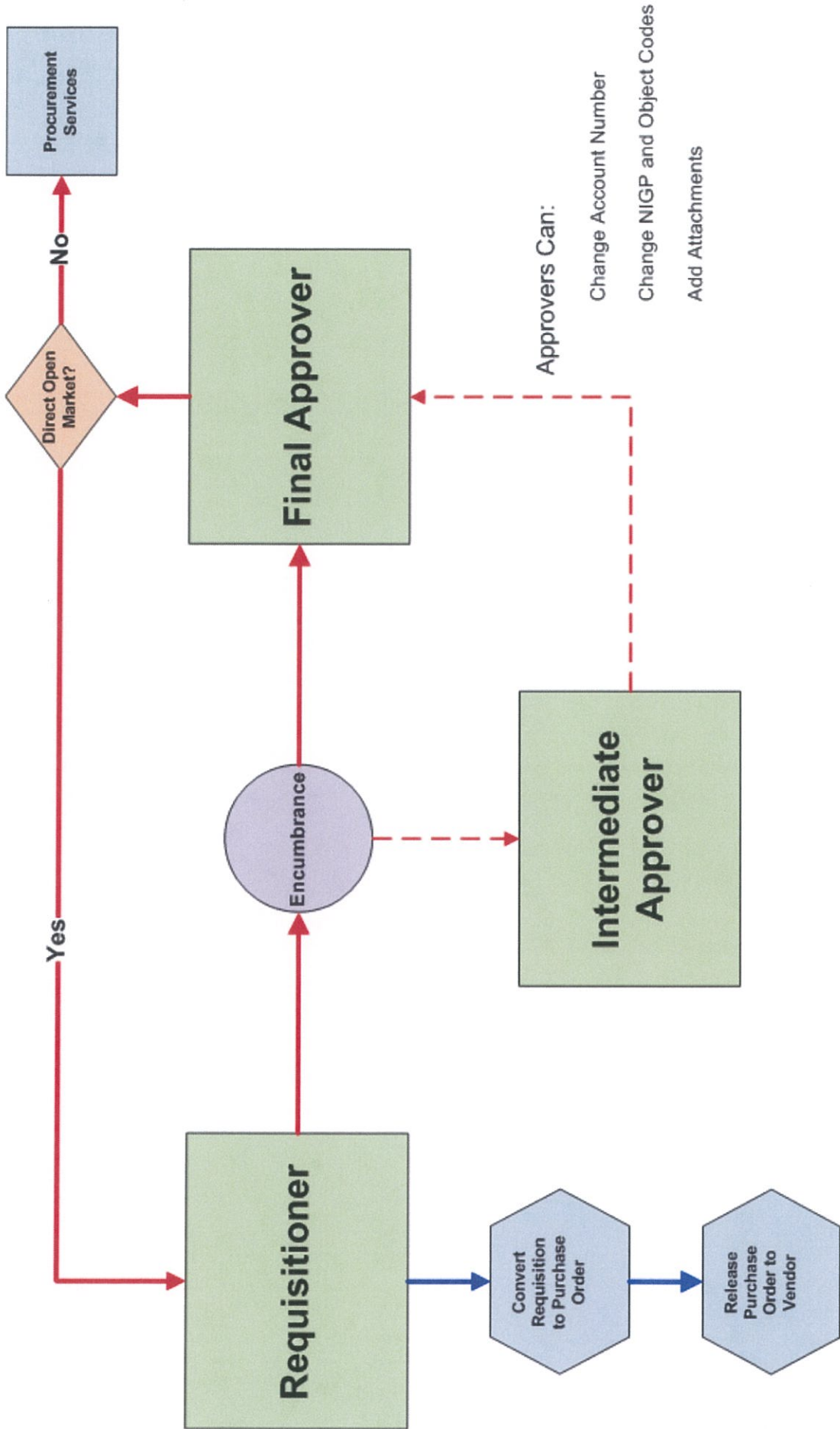
Requisitioner → Final Approver → Direct Open Market?

Direct Open Market? — Yes → Requisitioner

Direct Open Market? — No → Procurement Services

Requisitioner → Encumbrance → Final Approver

Encumbrance → Intermediate Approver

Intermediate Approver → Final Approver

Requisitioner → Convert Requisition to Purchase Order → Release Purchase Order to Vendor

Approvers Can:

Change Account Number

Change NIGP and Object Codes

Add Attachments

Efforts Made to Facilitate Sponsored Research Purchases and Payments to Vendors

- PURCHASE (<$10K) -- GOES TO VENDOR FOR ORDERING BEFORE GOING TO SRS FOR PROJECT COMPLIANCE
  - Changed the BAM Routing to place SRS project compliance (allowable, allocable, reasonable, budgeted) AFTER purchase made and vendor receives order.

  - PI can obtain goods and services and move forward on performing research as the bills are being paid.

  - Currently this is the same risk process with AggieBuy and this change in routing will not increase risks.

  - If PI believes that there is some question over project compliance for items under $10K, they can still phone or email their SRS project administrator to get an okay on the project compliance before proceeding.

Efforts Made to Facilitate Sponsored Research Purchases and Payments to Vendors

- PURCHASES (>$10K) - GOES TO SRS PROJECT COMPLIANCE, PURCHASING AND THEN THE VENDOR FOR ORDERING (In Discussion)

  - Initially believed that BAM could route based on "object class codes" or "amount thresholds" but not both criteria.

  - Now we can use both object class and threshold, routing will be changed to go to SRS for project compliance for > $10K purchases before going to purchasing; This will help mitigate high risks for PIs.

  - Purchasing services for over $10K will help provide best prices for the PI and the sponsor.

Efforts Made to Facilitate Sponsored Research Purchases and Payments to Vendors

- **TRANSFERRED ACCOUNTS PAYABLE (VOUCHER AUDIT) TO SYSTEM MEMBER FOR PAYMENT**
  - In order to focus SRS services on proposal, contracts and project administration and reinvest in PI services, we have transferred these fiscal responsibilities from SRS back to the System Members.

  - Payments on Sponsored Research will no longer go through SRS for review of Voucher Audit, fiscal review, etc. (Exception will be that SRS will perform voucher compliance for about 5% of the Travel Vouchers but only those with "exotic" terms and conditions.)

  - Project compliance (allowable, allocable, reasonable, budgeted) will still be responsibility of SRS project administration.

  - This transfer should free up resources from SRS "back office" fiscal operations to reinvest in PI services and support for the core functions (proposals, contracts and project administration)

Efforts Made to Facilitate Sponsored Research Purchases and Payments to Vendors

- **TRANSFERRED PURCHASING FROM SRS TO SYSTEM MEMBERS**
  - In order to focus SRS services on proposal, contracts and project administration and reinvest in PI services, we have transferred these purchasing responsibilities from SRS back to the System Members

  - Purchasing over $10K on Sponsored Research will no longer be performed at SRS but will be sent to the System Members.

  - Currently SRS did not address purchases on AggieBuy so transfer to BAM will be less change to TAMU than for non-AggieBuy users.

  - Should free up resources from purchasing operations to reinvest in PI services and support for the core functions (proposals, contracts and project administration)

Efforts Made to Facilitate Sponsored Research Purchases and Payments to Vendors

- **ELIMINATED SRS PROJECT COMPLIANCE REVIEWS ON LOW-RISK EXPENDITURES**

  - SRS Project Administration will now only be reviewing "higher risks" object class codes for project compliance (allowable, allocable, reasonable, budgeted) including
    - Animals
    - Consultants
    - Contract Services
    - Entertainment
    - Equipment
    - Human Subject Payments
    - Ship Charges
    - Travel
    - Visa Costs

  - Establishing streamlined review processes for "low-risks" versus "high-risks" should help expedite getting vendors paid.

PI ROLES & RESPONSIBILITIES

- The PI, not the department, college or SRS, is responsible if the purchase made by the PI is not allowed on the project. The PI is the responsible person for overall administrative, fiscal, scientific and technical direction and conduct of a sponsored project within the terms and conditions of the award and in accordance with University and System rules and regulations.

SRS ROLES & RESPONSIBILITIES

- SRS, not the department or college, is responsible for project compliance on the project. SRS provides overall guidance and assistance to the PI and to the departments and college in the administration of the project and ensuring that the project is performed within compliance guidelines.

DEPARTMENTS AND COLLEGES ROLES & RESPONSIBILITIES

- Departments and colleges are responsible for managing personnel and facilities in the successful performance of research. Departments provide many support services to PIs in coordination with SRS ranging from ensuring that payments are made to vendors and that payroll is properly charged on payroll documents.

TIPS to PIs

- Remember there are several options to acquiring the goods and services you need.
- Provide the communication to your department that is needed (copy of invoice, verification that goods and services received, train your staff, etc.)
- Provide input to CPI, Departments, Colleges, SRS, your fiscal offices and others as to processes you consider to be "LIBS" (Locally Imposed restrictions or requirements) –

"We are committed to making things better for the Research Community."