Use and Application of Federal Advisory Committee Act (FACA) Database

Natsuko Nicholls & Jason Owen-Smith

Institute for Research on Innovation and Science

University of Michigan

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Presentation Overview

1. Focus on Research Impact

    1) What we do at IRIS: Measuring the impact of research

    2) Different aspects of impact: Economic, sociopolitical

    3) Increased needs at universities to measure the *pro bono* work by academics – Measuring the social impact of research through university experts' federal service (FACA database)

2. Use and application of federal service data

    1) Descriptive findings

    2) Ongoing and future work: Building datasets and record linkage

        a. Institutional profile (R&D, institutional characteristics) *(public data)*

        b. Publicly available university salary data *(public data)*

        c. IRIS UMETRICS award, employee, vendor transaction data *(restricted data)*

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# IRIS: Measuring the Impact of Research

What is IRIS?

The Institute for Research on Innovation and Science (IRIS) is a national consortium of research universities organized around an IRB-approved data repository. IRIS develops data for research and reporting to understand, explain and improve the public value of academic research.

Different Approaches to Measure the Impact

People take different approaches to examine how public investment in research can continue to advance human knowledge, economic growth, and quality of life. IRIS data permit stakeholders like university administrators, funders, and us researchers to model the production and impact of science at different levels.
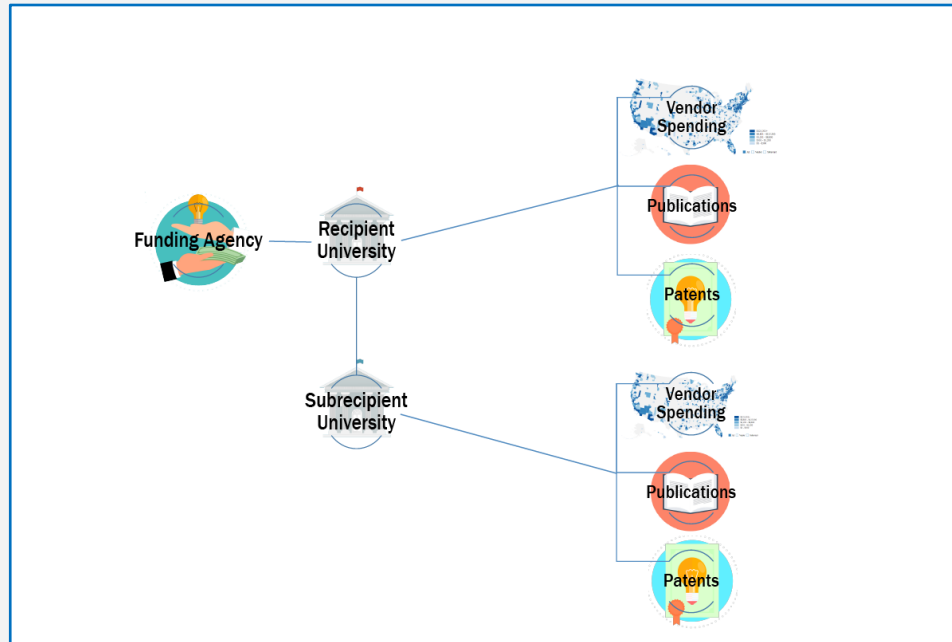
State and national level

Individual-level
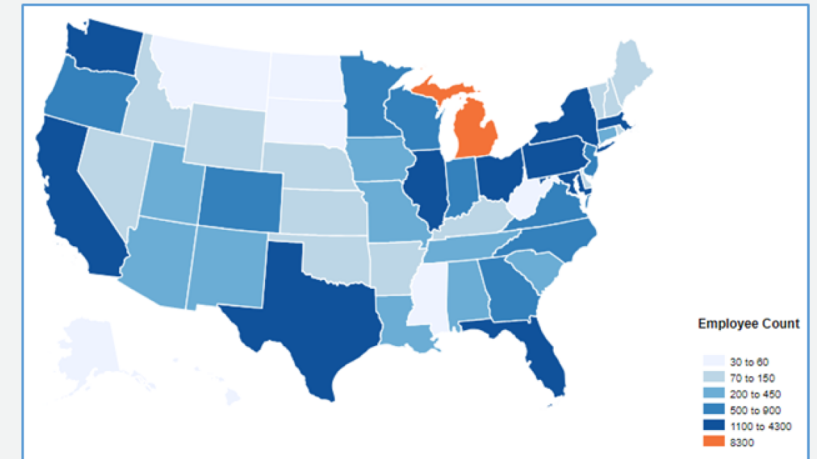
Industry level

Research Focus: Social Impact of Research

- Focusing on the way that scientific knowledge is applied and translated into society through researchers' pubic engagement and service.
- The application of knowledge through public service is an important and understudied mechanism for translating academic expertise to government.
- The question remains as to whether or not a systematic mechanism exists in order to track, measure, and assess the value of university expertise influencing policy within the context of research and its impact.
- Exploration into a useful but underutilized an administrative data source, the Federal Advisory Committee Act (FACA) database, with an eye towards linking the federal service data to other sources in order to measure research impact in a sociopolitical setting.
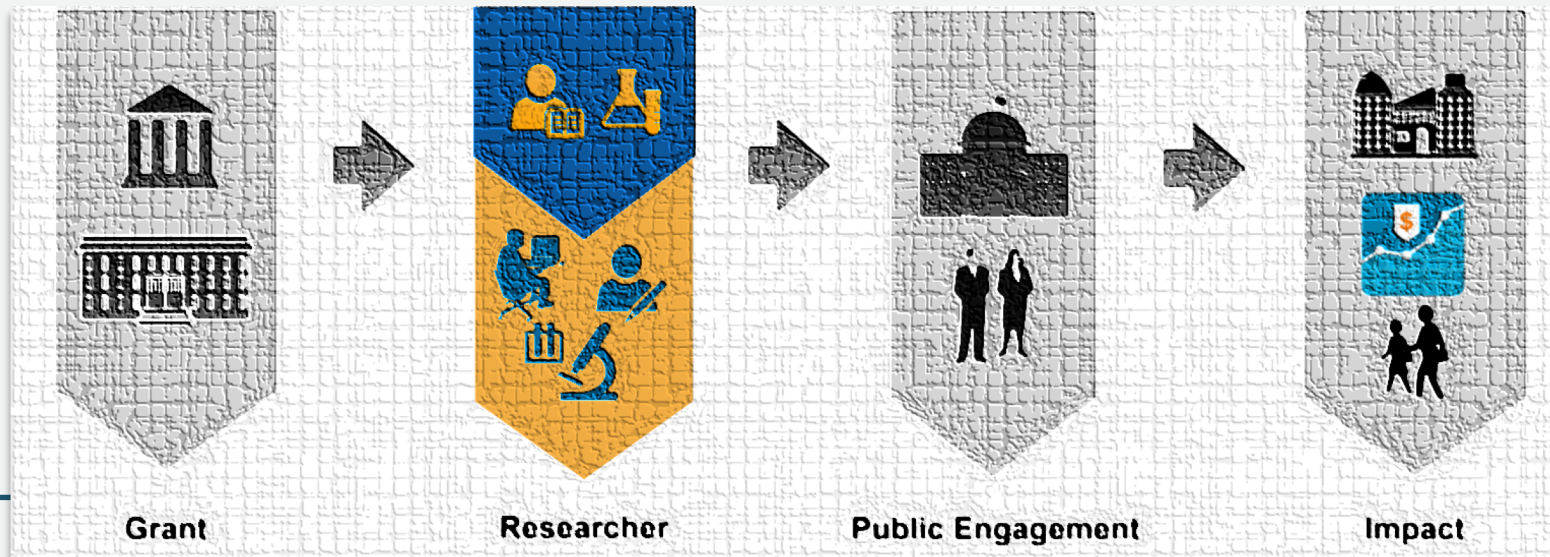
Transforming Administrative Data into Research Data

1. Identifying data discrepancies
   - Inconsistency in data structure and formatting

2. Finding solutions
   - Extensive effort of data manipulation (e.g., de-duplication, cleaning, parsing, classification, tagging, transformation, mapping, etc.)

3. Adding value: Examples of how we added value to the federal service data through data processing: e.g.,
   - Cleaned member occupational and affiliation records
     - ✓ Help to differentiate academics from non-academics
     - ✓ Help to identify academic institutions represented by university experts
   - Cleaned individual names (with a combination of other data fields)
     - ✓ Help to disambiguate advisory experts' names
     - ✓ Help to assign unique identifiers to unique individuals

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FACA

- FACA: Federal Advisory Committee Act (1972-)

  - The Federal Advisory Committee Act (FACA) database is publicly and electronically available dataset that contains rich information on federal advisory committees and committee members. There have been only a handful of social science studies making use of the information on advisory committees.

  - This law requires records of all advisory committees should be made available to the public with some exceptions. This is still the legal foundation for committee operation and defines an "advisory committee" that dispenses objective advice and recommendations to officers and agencies of the executive branch.

- Data about federal advisory service

- (Digital) data coverage: 1997-2017

- Understanding the relationships between FACA database tables *(next slide)*

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FACA Database Relational Tables

faca_faca_AgencyHistory_199...
- AgencyHistory_Id
- Agency_Id
- Agency_Name
- Agency_No
- Agency_Abbr
- FiscalYear
- AgencyURL
- DeskOfficerNumber
- CMOOfficeAddress1
- CMOOfficeAddress2
- CMOOfficeCity
- CMOOfficeState
- CMOOfficeZipcode
- Classification
- Ceiling
- Hierarchy
- Complete
- LastUpdate
- CMOPositionTitle
- CMOPrefix
- CMOFirstName
- CMOMiddleName
- CMOLastName
- CMOSuffix
- CMOPhone
- CMOFax
- CMOEmail
- DMPositionTitle
- DMPrefix
- DMFirstName
- DMMiddleName
- DMLastName
- DMSuffix
- DMPhone
- DMFax
- DMEmail

1,047 rows

faca_faca_CommitteeHistory_ ...
- CommitteeHistory_Id
- Committee_Id
- Agency_Id
- FiscalYear
- Committee_Name
- Committee_No
- NewCommitteeThisFY
- TerminatedThisFY
- AgencyContinuanceRecommendation
- CommitteeRemarks
- SpecificTerminationAuthority
- EstablishmentAuthority
- SpecificEstablishmentAuthority
- CommitteeType
- Presidential
- CommitteeFunction
- CommitteeStatus
- Agency_No

20,928 rows

faca_faca_InterestArea_1997t...
- InterestArea_Id
- CategoryFull
- Category
- Area
- InterestAreasID

169 rows

faca_faca_CommitteeInterestA...
- CommitteeInterestAreaHistory_Id
- CommitteeInterestArea_Id
- Committee_Id
- InterestArea_Id
- InterestAreasID
- Committee_No

10,034 rows

faca_faca_CommitteeReportHi...
- CommitteeReportHistory_Id
- CommitteeReport_Id
- Committee_Id
- FiscalYear
- ReportTitle
- IncludeInAnnualReport
- ReportLink
- IsPresidentialActionRequired

16,894 rows

faca_faca_memberhistory_199...
- CommitteeMemberHistory_Id
- CommitteeMember_Id
- Committee_Id
- FiscalYear
- Prefix
- Suffix
- OccupationOrAffiliation
- AppointmentStartDate
- AppointmentEndDate
- RepresentedGroup
- Chairperson
- AppointmentType
- AppointmentTerm
- PayPlan
- PaySource
- MemberDesignation
- IncludeInAnnualReport
- Committee_Name
- Agency_Id
- CommitteeType
- Presidential
- CommitteeFunction
- CommitteeStatus
- Agency_No
- EstablishmentAuthority
- type_of_service
- academics
- new_lastname
- new_firstname
- new_middlename
- new_affiliation_academics
- member_id_four

1,303,085 rows

Descriptive Findings: Federal Advisory Committee & Member History at a Glance

Over the last two decades, more than 300,000 unique individuals have engaged in federal advisory service. Of all, approximately 60% are academics.

Each year with an average of 1,000 active advisory committees in existence, more than 60,000 members provided either policy or non-policy advice in over 40 broadly defined issue areas.
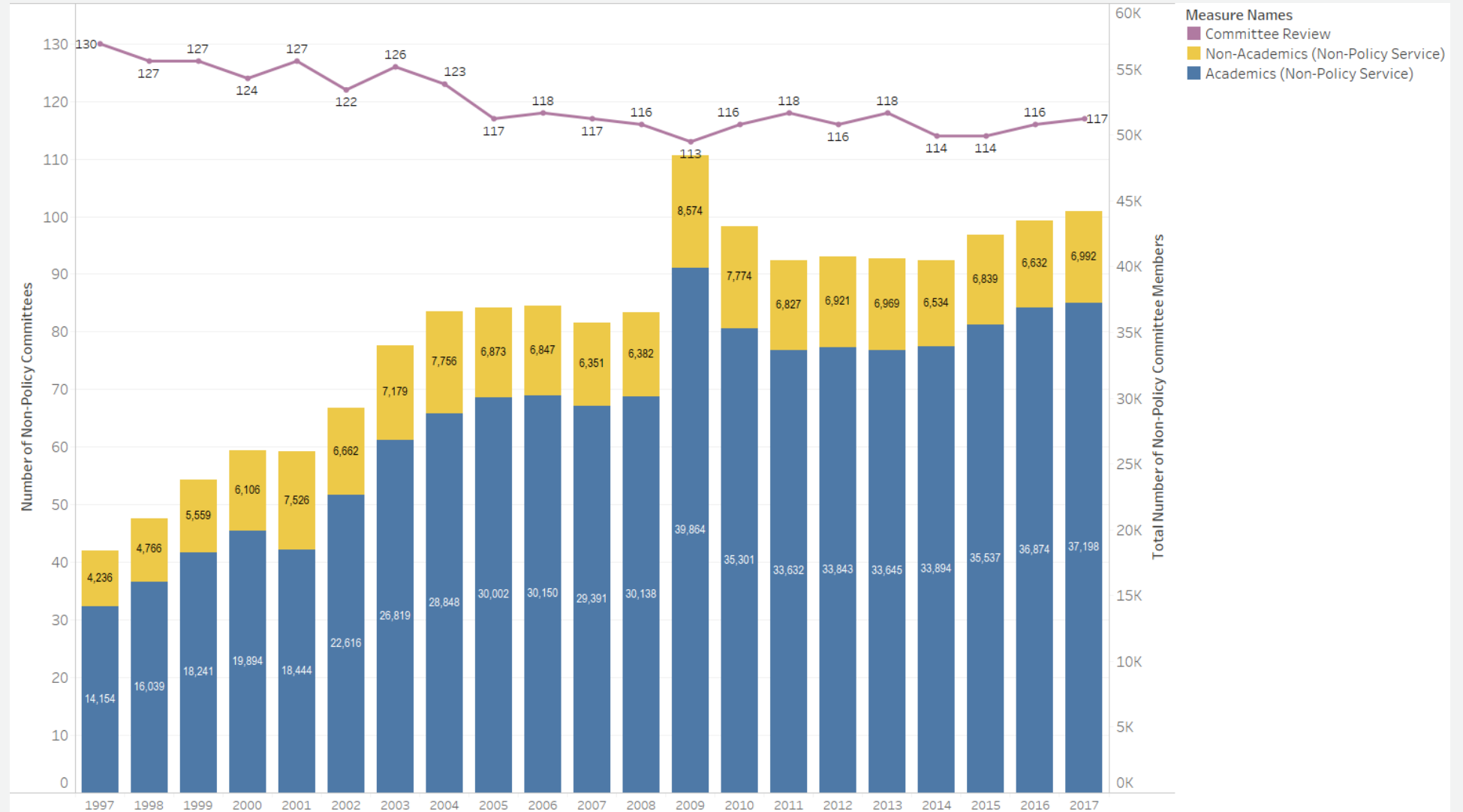

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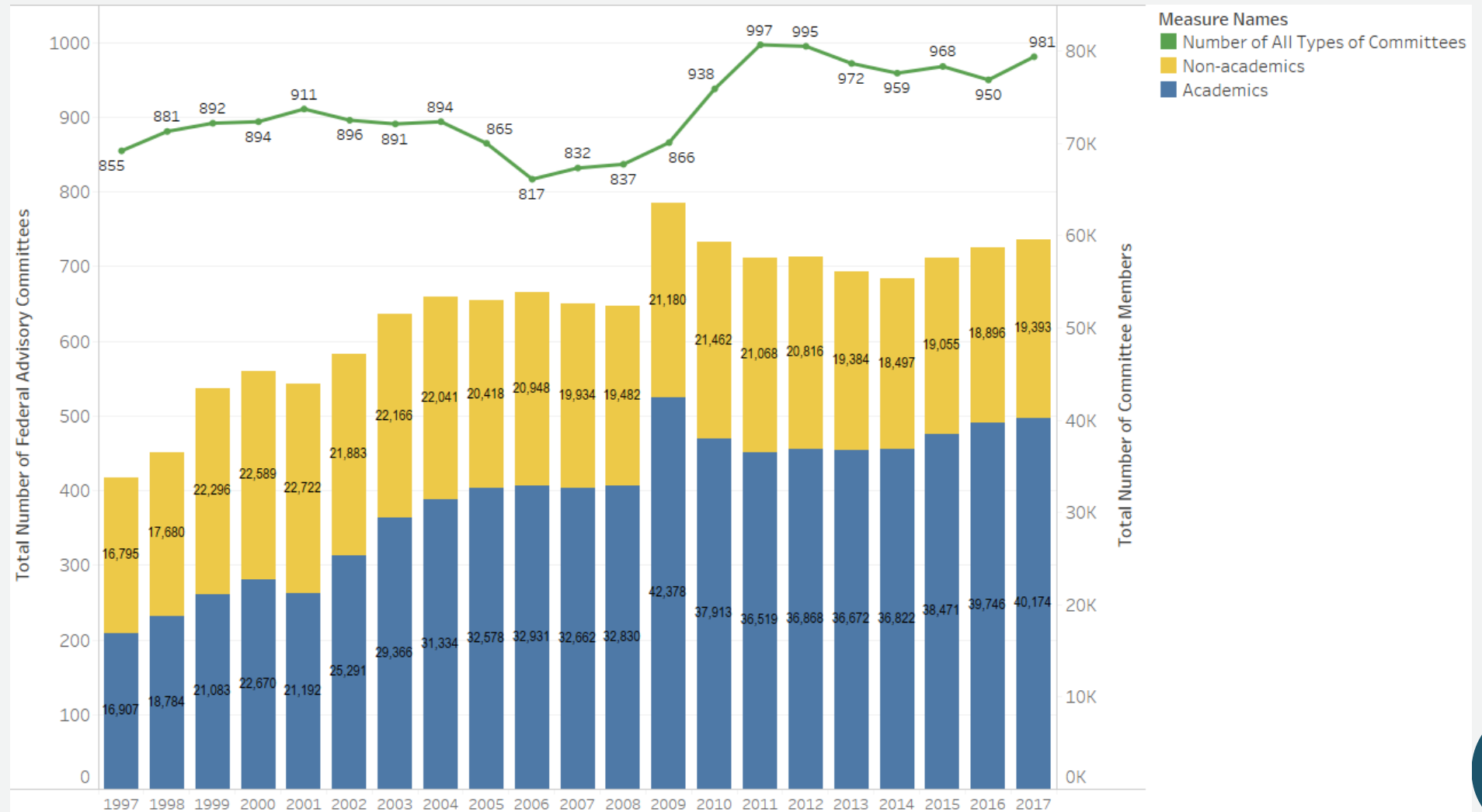
Re-grouping committee functions into a two broader categories: 1) 'national policy issue advisory board' as policy; 2) 'regulatory negotiations' as policy; 3) 'scientific technical program advisory board' as policy; 4) 'non scientific program advisory board' as policy; 5) 'grant review' as grant review; and, 6) 'special emphasis panel' as non-policy.

Despite steady decrease in number of individuals who served on policy advisory committees, academics have kept relatively stable spots in policy advisory committees (around 20%).
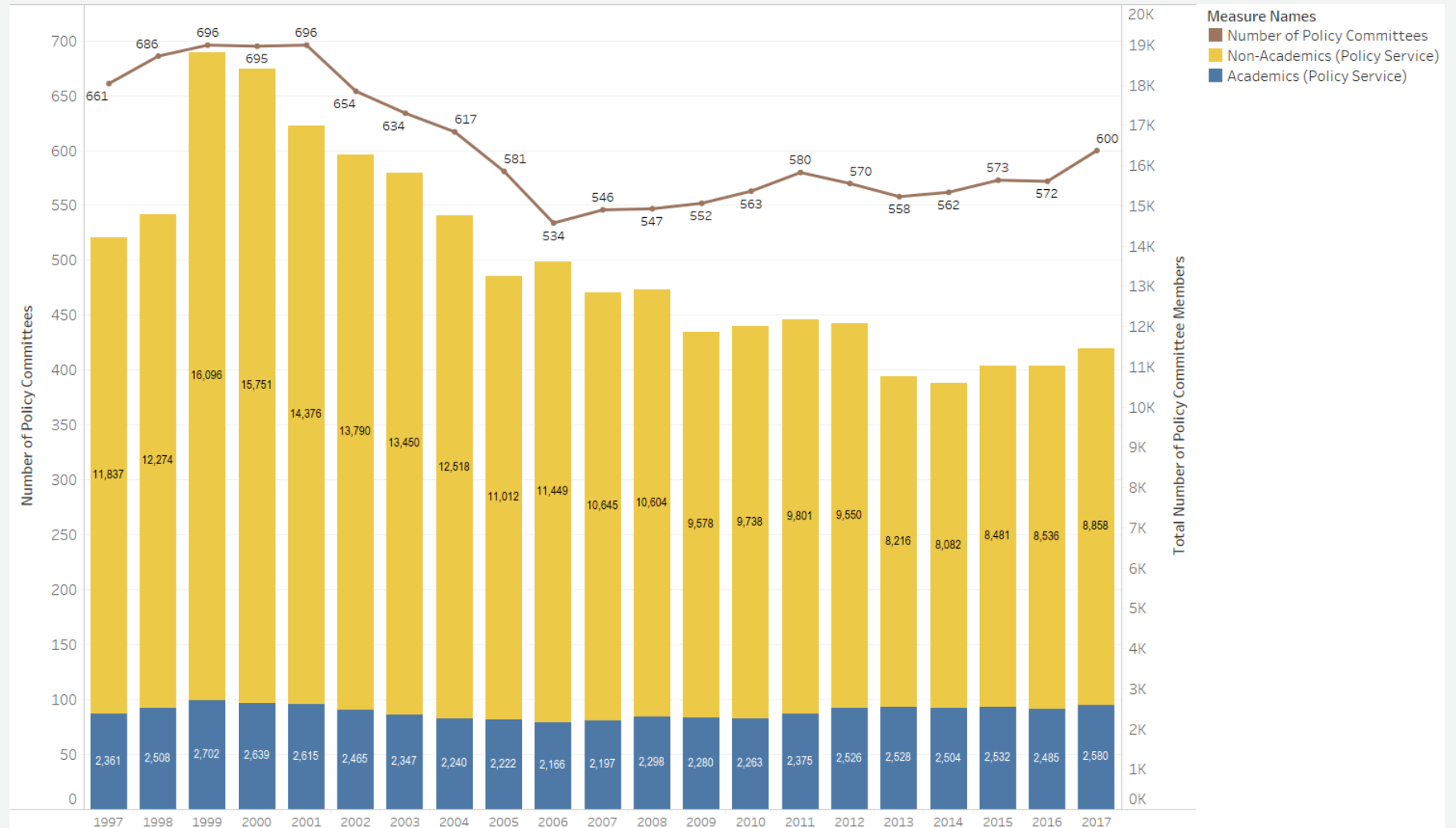
Annual Trend: Non-Policy Service

An increased number of academics have provided non-policy (mostly grant review) service over the last two decades.

The Nexus between University Research and Public Service with an Advisory Role

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Relationship between Federally Funded R&D and Percentage of Policy Service

A plot includes 100 selected universities except for the UC and UT systems.

JHU's R&D is adjusted by removing Applied Physics Lab's R&D.

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Ongoing and Future Work

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Linking FACA to Other Data Sources

University Experts (FACA data) — Federal Awards (IRIS data) — Disciplines (University HR /salary data) — **Federal Advisory** Committees (FACA data) — Committee Interest Areas (FACA data)

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Linking FACA to Other Data Sources

1. University salary data *(if publicly available)* help to verify university experts' affiliations that are often only partially available in FACA

2. IRIS UMETRICS data *(though restricted access)* help to integrate information on grants that fund university experts' research

Federal Funding Source

Discipline of University Experts Serving on Federal Advisory Committees

FACA Committee Issue Area

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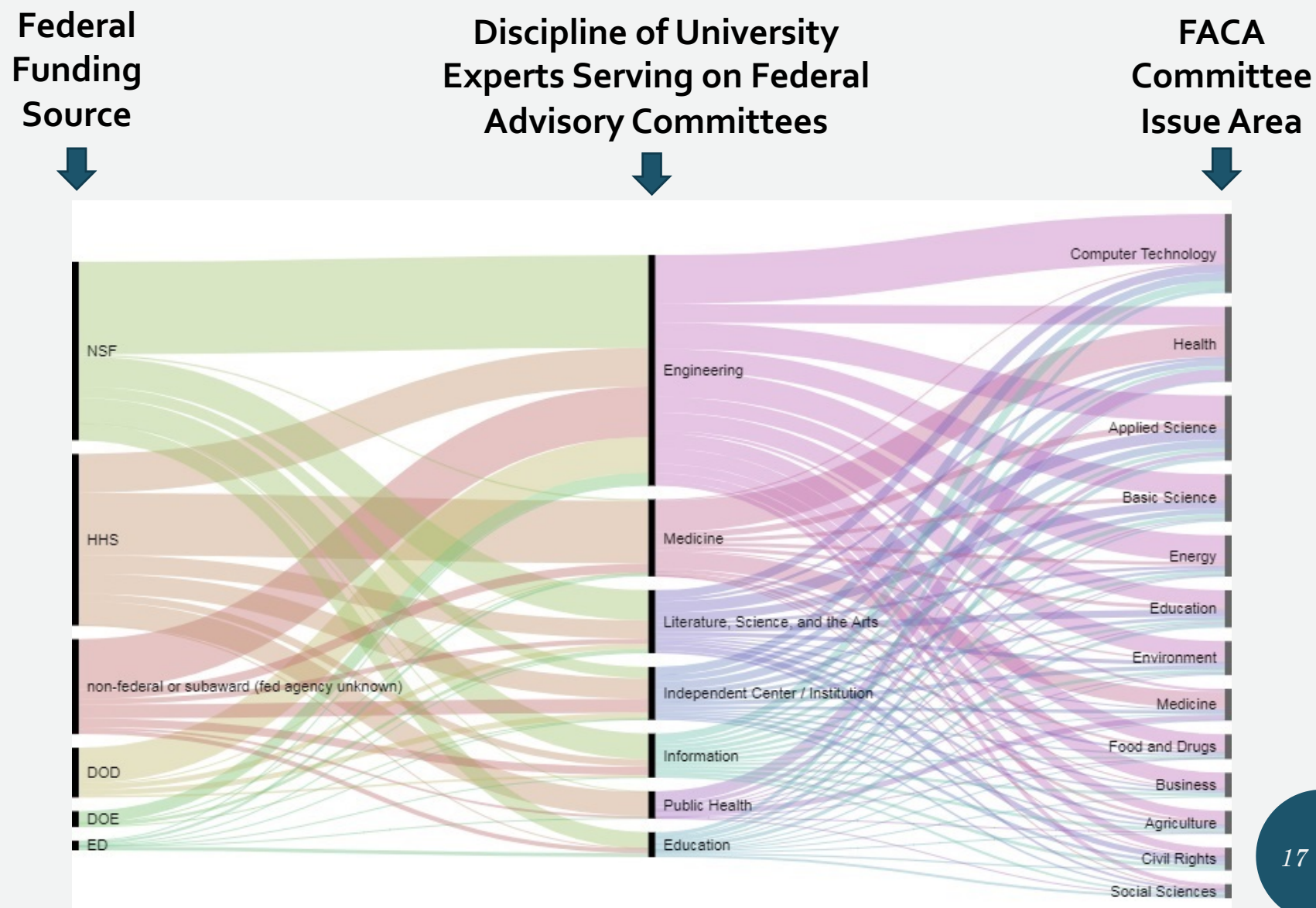
Thank you.

Any questions about our research and/or IRIS UMETRICS data?

Contact: Natsuko Nicholls, Research Manager

hayashin@umich.edu

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