Opening Transportation Research Data & Publications: Rewards & Roadblocks

OSTP Public Access Memo

The White House Office of Science & Technology Policy (OSTP) issued a memorandum entitled “Increasing Access to the Results of Federally Funded Scientific Research” on February 22, 2013. The memorandum addresses new requirements for both intramural and extramural publications and digital data sets resulting from federally-funded scientific research. It also expands on Data.gov and Open Government requirements already in place.

Case Study Research Center: ITS Berkeley

The Institute of Transportation Studies (ITS) at UC Berkeley is a well established transportation research center.
- Comprised of 7 different research units ranging from transportation systems to safety.
- 28 different research funding sources. 5 Federal funders include USDOT, DOE, EPA, and HUD – each of which will have their own OSTP implementation rules and guidelines.
- Most groups have several funding sources, of which Federal agencies account for a small fraction.
- Need to balance funding obligations and researcher expectations during implementation.
- Current requirement, based on compliance by funding agency, is fractious and does not accurately reflect the fluid and interdisciplinary nature of transportation research.

Rewards

Collaboration
- Ability to mix and match data sets
- Mashups
- Reuse data

Publication
- Data citation
- Altmetrics
- Impact factor

Open Culture
- Reproducibility
- Transparency
- Rapid Research

Administrative Advantages
- More accountability
- Data as a deliverable
- Improved records

Roadblocks

Administrative Issues
- Each funding agreement has its own terms of deliverables
- Projects may have multiple funding sources, with different requirements
- Responsibility for tracking compliance, maintaining data management plans, and depositing data

Open Issues
- Interoperability
- Data Formats
- Metadata schema
- Multiple repositories (by funding source)
- When should “final” datasets be made available?

Legal Issues
- Privacy concerns
- Rights and ownership
- Licensing and re-sale?

Funding Issues
- “Unfunded Mandates” – research money diverted to access and publishing
- Long-term vs. short-term funding
- Recharge models
- Cost of infrastructure and overhead

ITS Berkeley Funding Sources by Organization Type

ITS Berkeley Published Research Topics by Keyword

- Local Government
- State Government
- Federal Government
- Not-for-Profit
- Public University
- Private Company
- communications and control
- construction
- economics
- environment
- operations
- safety
- energy
- geography
- planning
- transportation

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