



10 March 2016

Innovation and Non-Traditional Librarianship

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Innovation and Non-Traditional Librarianship

The Life and Times of a Transportation Project Librarian

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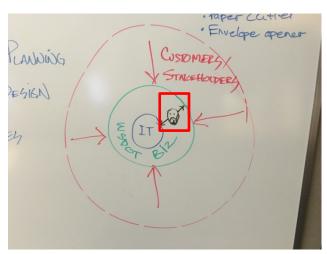
Me



Engineering Policy and Innovation



- Introduction Who is This Guy?
- Briefly Discuss Previous Projects I've worked on @WSDOT
- Current AID Project
- Lessons Learned and Skills Developing to make me a better Project Librarian!



Project Librarian - Bridge between Business and IT?

Introduction

- Project Librarianship...I just wanted to check out books...how did this happen!?
 - After military service, worked as a Video Game
 Tester before entering college
 - One class from BA in English, talked into moving into Information Science, now what?
 - Attained MLIS part-time while working as an Indexer for MSN Shopping, cataloging bolts at Boeing
 - PM education while working on web projects at Boeing Library, full PMP certificate last year!
 - Reference Librarian for Washington State LNI
 - Today...Project Librarian!!!



Previous Projects @ WSDOT

- Embedded Librarian with USFWS
 - Citation Software, From Broken Network to Cloud Solution
- Office Shared Server Cleanup Project
 - 20 years of Word docs, I year to clean
- RPMD Best Practices Project
 - 50 States 50 different databases



Embedded Librarian with USFWS

- Start: Help biologist gather books and reports for 520 Bridge Environmental Impact
 Statement
- Process: Original project was to just gather
 all the materials for the statement, but if
 citation software is broken, what is point?
- Goal: Biologist that can organize and cite their materials
- Take Away: Biologist (Engineers, anyone) will and can put up with any amount of pain,
 Project Librarians can be an information aspirin

Refman to RefWorks





Shared Server Cleanup Project for Library and Research

- Start: I didn't have a plan, but one was developed (next slide)
- Process: I knew a pain point for the group and reason for not wanting to make move was comfort with old structure, so mapping content to new structure was critical.
- Take Away(s): People are busy doing their
 jobs (even other librarians). Project Librarians
 can be business document organizers (even to
 other librarians). Governance is needed for
 long term

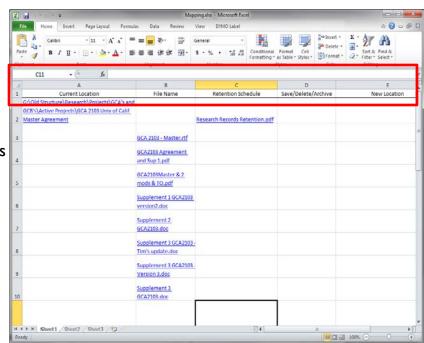


Image: mapping old content to new folder locations

Tools: Microsoft Project for timeline, Excel for mapping content, TreeSize Professional for duplicates detection



Plan we finally developed...

- Find and remove duplicates(5,000 or so)
- 2. Talk to managers, they have a structure in their head, it just needs to be released
- Back up old structure, build new structure
- 4. Move to new structure (leave behind a map for high value, frequently used content)
- Delete old structure

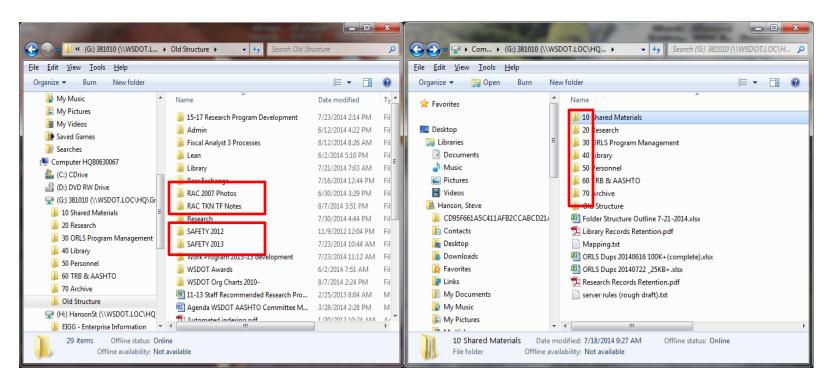




Shared Server Cleanup Project

Old

New





TPF-5(181)RPMD Best Practices

- Start: Communication with each state's research manager
- Process: Gather each state's database schema and compare and contrast to develop a model schema
- Status: Identified commonality between, preparing for bid.
- Take Away: DOT's are complicated places, a Project Librarian can make it less so (next slide)

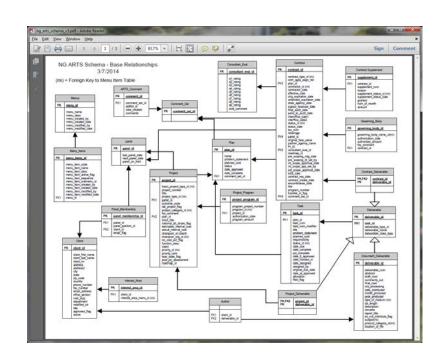


Image: Research DB schema from Minnesota DOT

F

RPMD Best Practices

Seven General Buckets

| Α | В | С | D | Е | F | G |
|-------------------|---------------------|-------------------|-------------------|----------------------------|-------------------|--------------------|
| General (Project) | Problem Statements | Contracts | Finances | Schedule | People | Results |
| Project (16) | Proposed (4) | Contract (23) | Invoices (11) | Tasks (10) | Evaluation (6) | Implementation (9) |
| Main (5) | Topic (1) | Modifications (3) | Budget (9) | Status (5) | PIs (4) | Reports (6) |
| General (4) | ITP (1) | Addendums (2) | Funding (6) | Time (4) | Consultants (3) | Deliverable (4) |
| Editing (1) | Interest Area (1) | Amendments (1) | Modifications (2) | Document Tracking (2) | Organizations (3) | Performance (2) |
| Forms (1) | Needs Statement (2) | Agreements (1) | Financial (5) | Assignments (2) | Roles (2) | Distribution (1) |
| Login (1) | Ideas (1) | | Payments (2) | Milestone (1) | TAG (2) | Output (1) |
| Overview (1) | Plan (1) | | Awarded (1) | Schedule (1) | TRP (2) | Outcome (1) |
| Selected (1) | RFP (1) | | Pooled Funds (1) | Events (1) | Personnel (2) | Graphs (1) |
| Active (1) | | | | Communication Tracking (1) | PM (1) | Features (1) |
| Authorized (1) | | | | Progress (1) | Utilitiy (1) | |
| Closure (1) | | | | | TAC (1) | |
| | | | | | SAC (1) | |
| | | | | | Librarian (1) | |
| | | | | | Panel (1) | |
| | | | | | Centers (1) | |
| | | | | | Client (1) | |
| | | | | | | |
| | | | | | | |



- A one year FHWA grant to "Deploy Practical Solutions with Lean Techniques and Knowledge Management"
- Elements that I am involved currently include the
 - I. Information Architecture (including Web, Taxonomy, Metadata and Glossary Development)
 - 2. Business Architecture (Business Process Mapping)
 - 3. General Project Control timelines and document organization, meeting schedules and general support.
- 6 months into I year project...where are we and what have I learned?



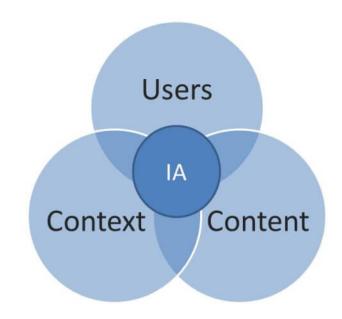
AID – Information Architecture (From Project to Enterprise)

- Start: Partner SpyPond is developing the Information
 Architecture model for Practical Solutions, this could
 become a model for the enterprise.
- My Role(s): Bring information professionals

 together, facilitate meetings, calendars and very much

 working with WSDOT taxonomy team to develop a

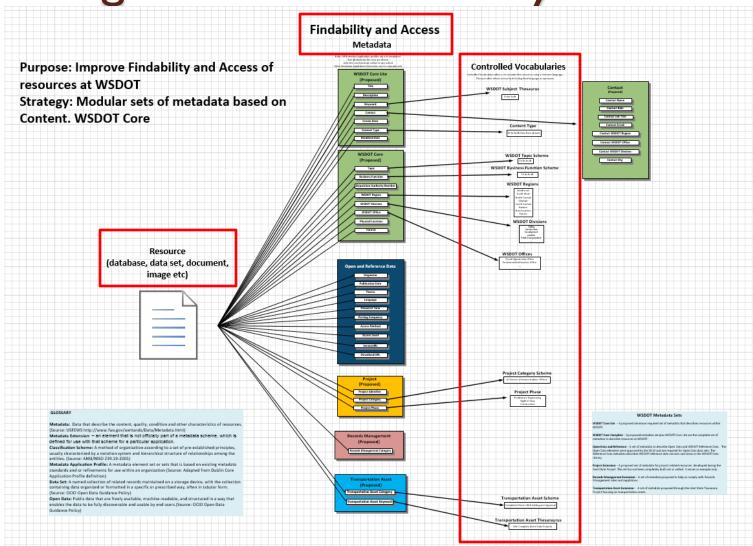
 case for enterprise taxonomy mgmt.
- My Take Away (so far): Taxonomy and Metadata are not being coherently applied across the agency in a managed way. Each department is a silo, making findability nearly impossible. In my opinion, solving these two problems is the most critical aspect of this project (but I'm a librarian, findability is a big deal)



Information Architecture for Practical Solutions

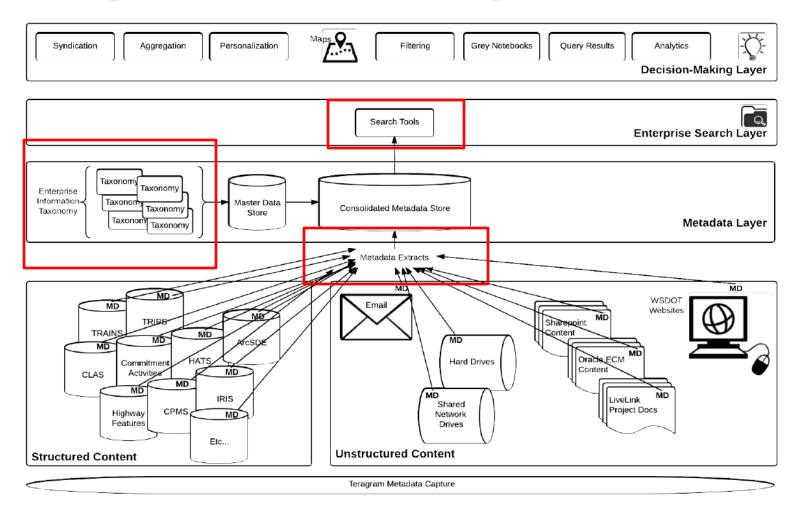


AID – Information Architecture – Navigation and Findability



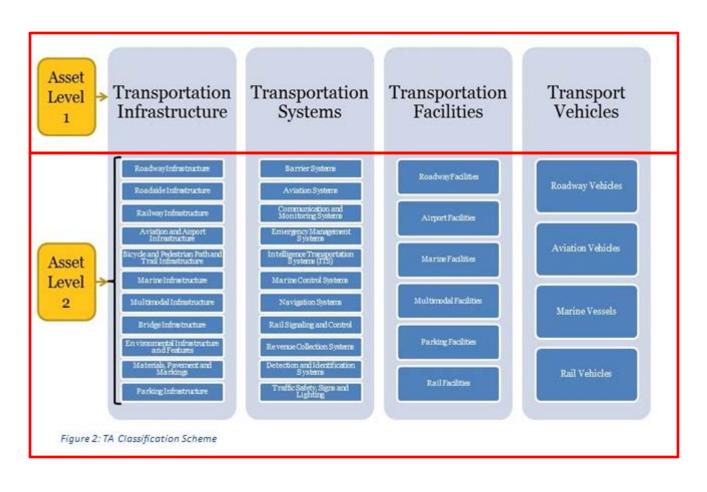
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AID – Information Architecture – Navigation and Findability





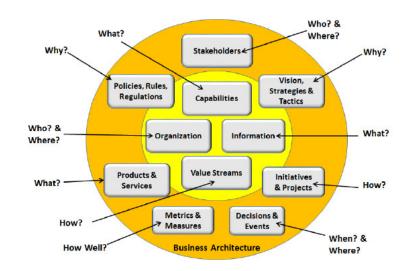
AID – Information Architecture – Navigation and Findability





AID – Business Architecture – Capabilities, Process Maps, Resources

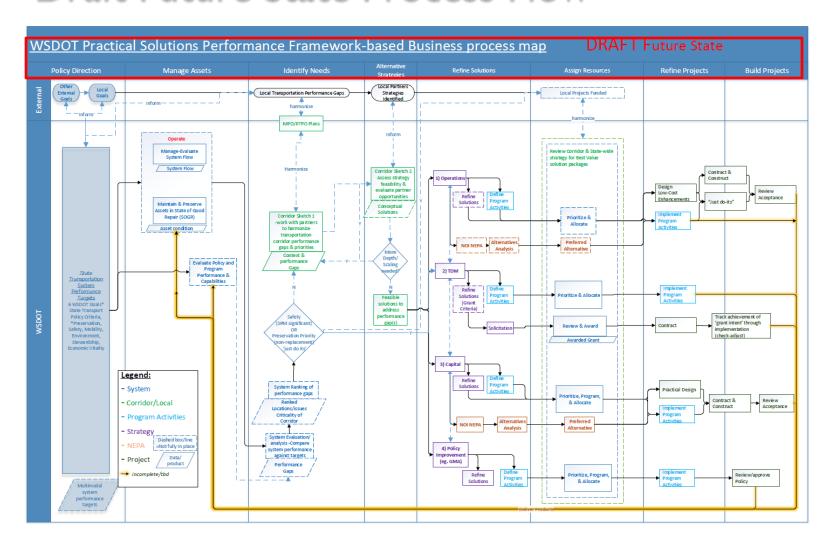
- Start: Map the Future State of the Business
 Process using Practical Solutions at the model
- My Role(s): Collect Glossary Terms, Assist
 with Bringing all Elements Together
- Status: Everything is in flux, maps are still being refined, terms are still being discussed
- Take Away (so far): Every department has
 issues with language meaning, a Project
 Librarian can take the lead on clarifying
 language.



Business Architecture — Wikipedia https://en.wikipedia.org/wiki/Business architecture

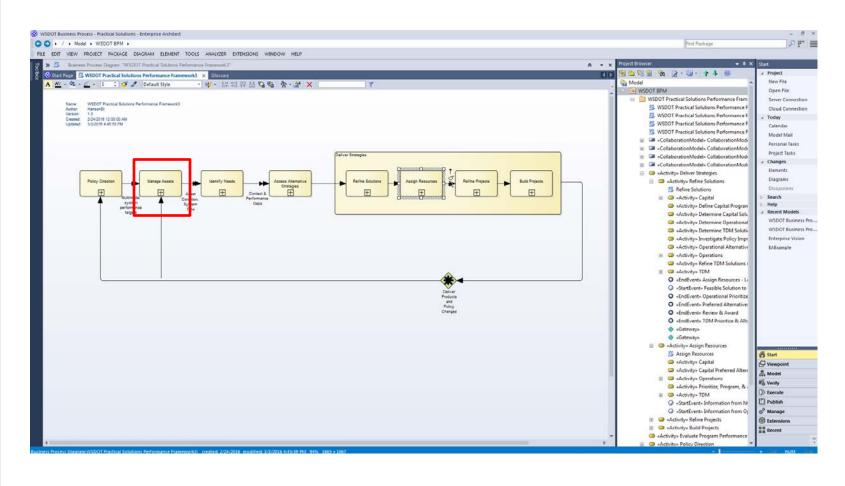


AID – Business Architecture Support – Draft Future State Process Flow

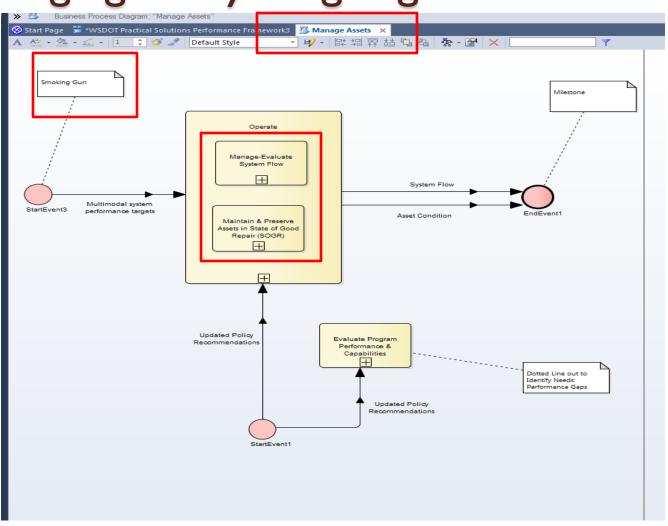




AID – Business Architecture Support – Bringing Everything Together

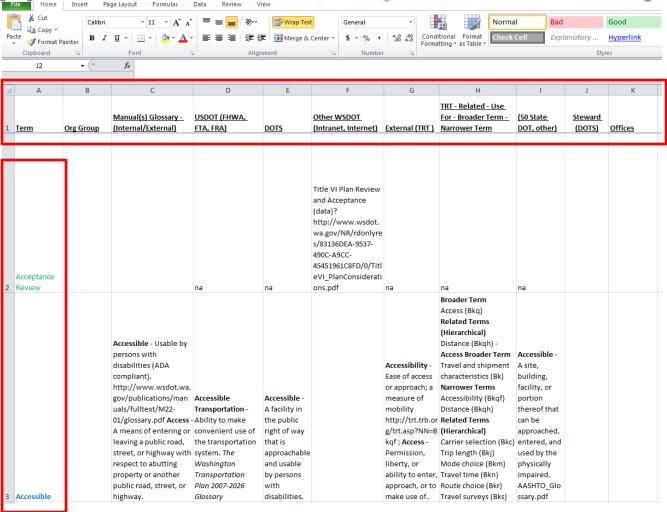


AID – Business Architecture Support – Bringing Everything Together



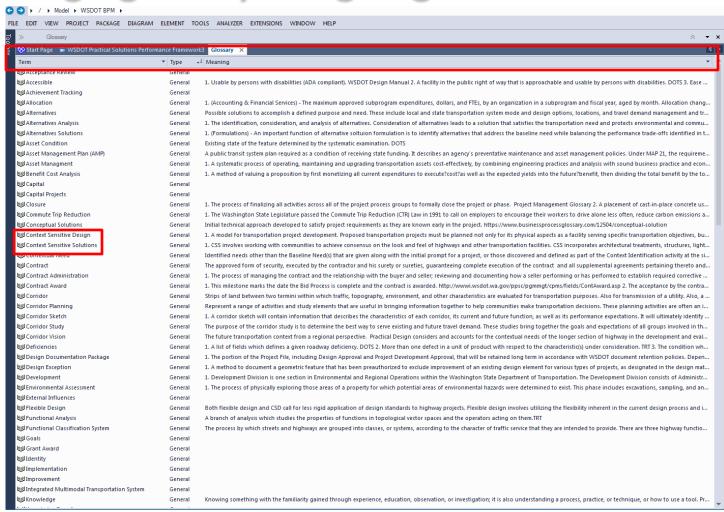


AID – Business Architecture Support – Draft Project Glossary



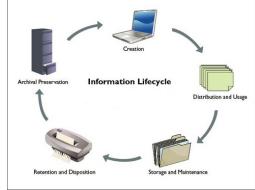


AID – Business Architecture Support – Bringing Everything Together



AID – General Project Management Tasks

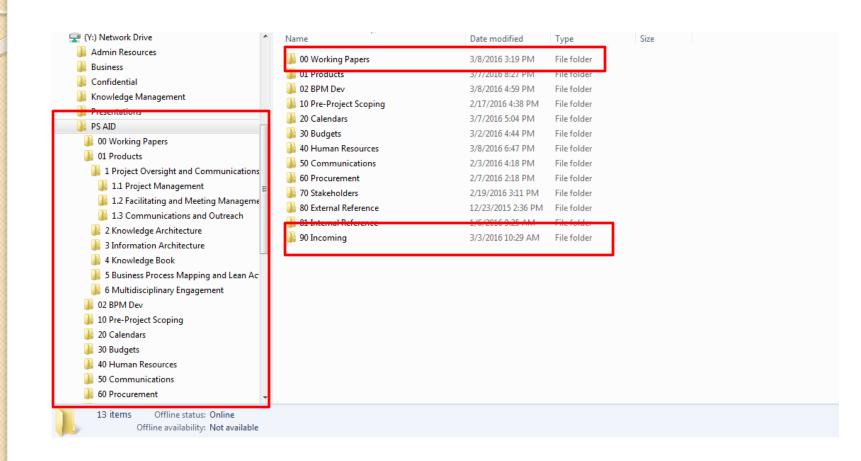
- Start: A new project in a new department, we started working from ground zero
- My Role(s): Organize materials, create timelines, schedule and facilitate meetings, web and email communications. Coordinate.
- Take Away (so far): Rarely am I
 getting things right the first time I
 create them, the key, I am finding is stick
 with the principles of organization and
 project management...but be flexible





Information and Project Lifecycles

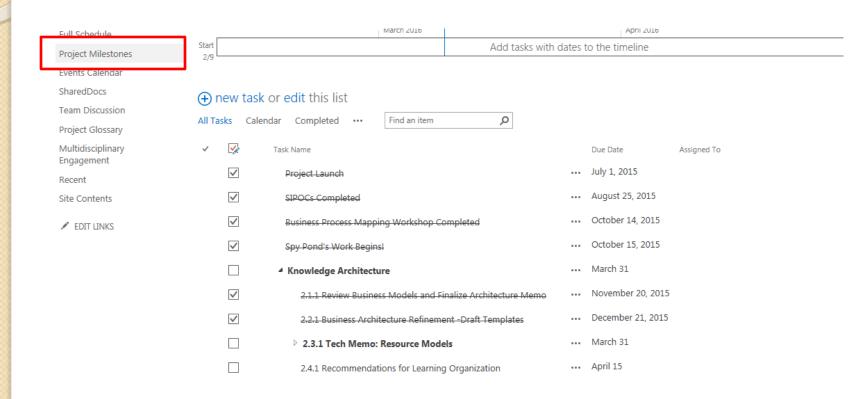
AID – Organizing Documents



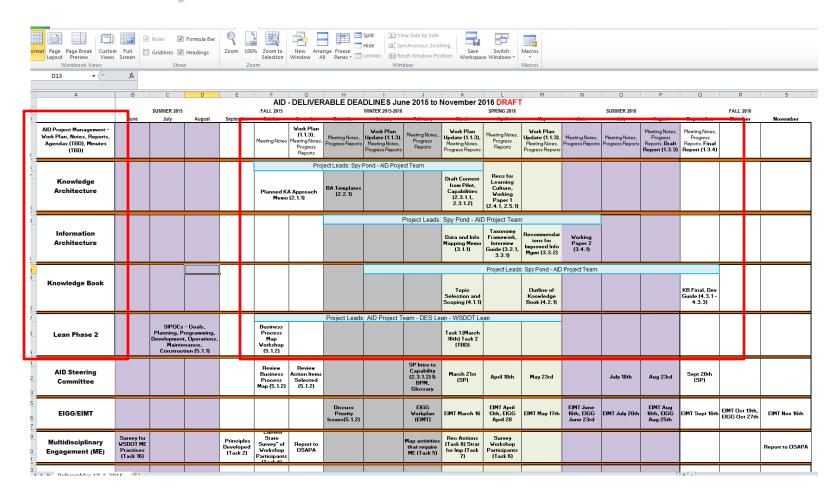
AID – Full Calendar ...Too Much Detail

| Ŭ | ask or edit this list Calendar Completed ··· Find an item | | | |
|-----------------------|--|-----|-------------------|-------------|
| ✓ <u>√</u> | Task Name | | Due Date | Assigned To |
| | △ 1 Project Oversight and Communications | ••• | September 30 | |
| | △ 1.1 Project Management | ••• | May 31 | |
| | 1.1.1 Meeting notes | ••• | | |
| | 1.1.2 Progress reports | ••• | | |
| | ☐ 4 1.1.3 Work Plan | | May 31 | |
| ✓ | ✓ 1.1.3.1 Initial | | November 23, 2015 | |
| | 1.1.3.2 Revision 1 | ••• | January 29 | |
| | 1.1.3.3 Revision 2 | ••• | March 30 | |
| | 1.1.3.4 Revision 3 | ••• | May 31 | |
| | ☐ ■ 1.2 Facilitating and Meeting Management | | September 29 | |
| 1.2.1 Meeting agendas | | | | |
| П | 1.2.2 Meeting presentation materials and handouts | ••• | | |

AID – Milestone Checklist ...good view for me



AID – The calendar my boss actually uses



Web – Communicating the value of the project



Web Author Console

Switch To Edit Site

Intranet Home

Project Delivery

WSDOT A-Z

Employee Center

Data Drawer

Forms



Engineering Policy and Innovation

EPI Staff Research Office Library Services

Partners

Capital Program Development and Management Communications Community Transportation Planning Design Policy Enterprise Risk Management Multimodal Planning Public Transportation Regional Operations Strategic Analysis and Estimating Office Traffic Operations

Engineering Policy and Innovation Division

The Engineering Policy and Innovation (EPI) Division's role is to champion the development and implementation of agency initiatives.

Innovating News

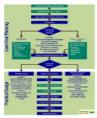
Our work towards practical design solutions is really gaining traction. Secretary Peterson has been asked to talk about WSDOT's approach at the upcoming AASHTO Annual Meeting in Nov. Great job to all that are helping bring this innovative idea to fruition.

Other Innovating articles and archives...

Practical Solutions

Least Cost Planning is an approach to making planning decisions that considers a variety of conceptual solutions to achieve the desired system performance targets.

Practical Design is an approach to making project decisions that focus on the need for the project and looks for the lowest cost solutions.



Practical Solutions Flowchart (pdf 89 kb)

Practical Design Success Stories

Compact roundabouts coming to I-5 ramps near Bellingham

US 12 Rochester vicinity safety improvements (pdf 107 kb)

I-5 Auxiliary Lane, Lakewood (pdf 103 kb)

North Spokane Corridor - Spokane (pdf 98 kb)

US 2 Tumwater Canvon Bridge Replacements (pdf 128 kb)

SR 150 No-See-Um Road Intersection Improvements (pdf 107

Web – Just starting to create a structure for group and project

| 4 | А | В | С | D | |
|----|-----------------------------------|--|------------------------------|---------------------------------|--|
| 1 | EPI Intranet | | | | |
| 2 | Navigation (page) | Page Content | New Navigation | New Page Content | |
| | | Homepage, Innovating News, Practical | Engineering Policy and | Mission Statement, brief stmt | |
| 3 | Engineering Policy and Innovation | Solutions | Innovation | about each section, news | |
| 4 | Least Cost Planning | Least Cost Planning Resources | Practical Solutions Training | | |
| 5 | ŭ | Ü | Secretary's Committee | about, link to SP calendar, etc | |
| | | Practical Design Resources, WSDOT Resources, WSDOT Design Manual, | | | |
| 6 | Practical Design | Other Resources | Knowledge Services | AID, EIGG, etc. | |
| 7 | Innovating News | Innovating the News Articles | Research Office | link | |
| 8 | EPI Staff | Staff | Library | link | |
| 9 | Research Office | External | Staff | dept, phone, email | |
| 10 | Library Services | External | | | |
| 11 | | | | | |
| 12 | | | | | |

Recap - Things I've Learned

- Take Away 1: Biologist (Engineers) will and can put up with any amount of pain, Project Librarians can be an information aspirin. (From 520 Bridge Project)
- Take Away 2: People are busy doing their jobs (even other librarians). Project Librarians can be expert information organizers (even to other librarians). (From Server Cleanup)
- Take Away 3: DOT's are complicated places, a Project Librarian can make it less so (RPMD)

Recap - Things I've Learned

- Take Away (so far): Taxonomy and Metadata are not being coherently applied across the agency in a managed way. Each department is a silo, making findability across enterprise nearly impossible. In my opinion, solving these two problems is the most critical aspect of this project for a project librarian (but I'm a librarian, findability is a big deal) (AID-Information and Biz Architecture)
- Take Away (so far): Rarely am I getting things right the first time I create them, the key, I am, finding is stick with the principles of organization...but be flexible (AID Project Control)
- Take Away (Bonus): Language ambiguity (glossary), individual silo optimization (non-group and non-enterprise thinking) and undocumented processes (BPM) are at the heart of every problem here. This Project Library is trying to help with all three.

Some Advice (I hate when people give Advice)

- **Develop another Business Skill**: Doesn't have to be anything mentioned here, but find a skill that will add value to yourself within the organization Resources on next page
- Join and participate in an organization: I need to take my own advice on this one, often I join a group and then don't get involved, I'm hoping to change this.
- For those wanting to be Project Librarians: Full PMP Certification isn't necessary, you can get associate level certification CAPM through PMI or other organizations...I would try and get some education in Project Management and see where it goes...if I had to do over again, I would have pursued education sooner(and focused on Taxonomy/Metadata out of library school).
- **Speaking of Certification** ...All the study I did for the PMP was with resources available through the DOT library, including the standards, books and instructional videos. Everything! Your library isn't just a place to work, it is also an educational center!!

Resources

Project Management Institute (PMP or CAPM Certification)

www.pmi.org

• AIIM – The Global Community of Information Professionals (you ARE an Information Professional)

www.aiim.org/training

Information Architecture Institute

www.iainstitute.org

Business Process Model and Notation

www.bpmn.org

Enterprise Architect (Business Model Software)

www.sparxsystems.com

Treesize (Find duplicates among your network documents)

www.jam-software.com

Contact

 Questions about the AID Project, FHWA Grants or Practical Solutions

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 Questions about anything else you saw during this presentation

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