Finance, Audit, & Costing Committee

Co-Chairs:
Michelle Bulls, NIH Office of Policy for Extramural Research Administration
Jim Luther, Duke University

May 26, 2021
Virtual Committee Session
Planned Agenda

1) Committee Update
   a) Volunteers: Thanks for Your Interest! Details to follow.

2) Treasury/NSF DLT (Blockchain) Grants Payment Pilot

3) Treasury Offset Program

4) Public Data Access – Finance and Costing Discussion
   - A Life-Cycle Perspective
Co-Presenters

- Sheila Doyle – Harvard
- Rick Fenger – University of Washington
- Nate Martinez-Wayman – Duke University
- Melissa Korf – Harvard Medical School
- Tim Reuter – Stanford
F/A/C: DLT Working Group Partnership with NSF & Treasury

Co-Chairs

- Nate Martinez-Wayman, Duke University
- Richard Fenger, University of Washington

Federal Partner Leads:

- Mike Wetklow, NSF
- Craig Fischer, Treasury (FIT)
- Tammie Johnson, Treasury (FIT)
**Post Award Management Draw-downs (LoC):** Quantifying workload associated with post award management, specifically grant drawdowns. In this project grant recipients will quantify the specific workload by FTE of preparing for drawdowns, drawing funds, and reconciling the funds from the existing institution accounting systems with the Federal Government drawdown systems. Attention will also be given to the number of different drawdown systems used by the FDP members.

<table>
<thead>
<tr>
<th>OG:RAD</th>
<th>Highlights</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feedback received</td>
<td>62 responses; representative of all FDP members</td>
</tr>
<tr>
<td>Basis</td>
<td>5 draw systems: ACM$, ASAP, G5, GPRS, PMS <em>(now 4 with the retirement of GPRS)</em></td>
</tr>
</tbody>
</table>
| Points of interest to explore | How workload correlates to institutional volume  
How workload correlates to number of systems used  
How workload correlates to developed institutional tools |
| Final Findings  | 6/15/2021                                                                  |
FAC: DLT Workgroup - NSF & Treasury PoC

MITRE Grant Life-cycle and the LoC
FAC: DLT Workgroup
- NSF & Treasury PoC

MITRE Grant Life-cycle
High Level Current State Grants Payments Flow

Today, the grant payments flow comprises of the Department of the Treasury, the awarding agency, and the prime and sub recipients. Certified payments are only sent to the prime and they manage payments to the subs independently.

Certified payments are released to the prime recipient who then sends funds to sub-recipients.

1. **Federal Grant-Making Agencies** (e.g. NSF) send grant payment information to the payment drawdown system.
2. Prime recipient/grantee requests a drawdown from the payment drawdown system.
3. Once Certifying Official certifies payment, the funds are released from the Treasury General Account via automated clearing house (ACH).
4. The sub-recipient(s) requests a drawdown from the prime recipient.
5. Once prime recipient approves payment, the funds are released to sub-recipients via automated clearing house (ACH).
Detailed Current State Grants Payments Flow

The end-to-end flow of grant payments today from NSF’s perspective includes manual processes, substantial administrative and reporting burden, and a lack of visibility between actors. Highlighted boxes are further detailed on the subsequent slides.
Current State Pain Points and Implications for DLT Solution

Additional details on the nature of the current state pain point and what the DLT solution would need to do going forward to resolve the issue.

<table>
<thead>
<tr>
<th>Process Step</th>
<th>Pain Point and Implications for DLT Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>The solution should interface with the financial system at least daily: There is a 1-2 day lag in the payment system reflecting actions in the financial system, resulting in occasional payment request failures.</td>
</tr>
<tr>
<td>3</td>
<td>DLT will consolidate payment systems and expand data capture: Rather than requesting payment in multiple systems with redundant data inputs, grantees can go into 1 system and enter line-item detail.</td>
</tr>
<tr>
<td>4</td>
<td>DLT will expand the level of automated checks: Payment systems today can only run limited checks (e.g., funds availability). DLT token line-item detail will enable checking expenses against Grant terms &amp; conditions.</td>
</tr>
<tr>
<td>5</td>
<td>DLT can set invoice transaction threshold: Today the interface between the payment and financial system can fail if there are too many invoices. DLT can enforce a limit and set a queue on requests to be processed.</td>
</tr>
<tr>
<td>6</td>
<td>Agency financial system updates payment system with Grant details.</td>
</tr>
<tr>
<td>7</td>
<td>Prime incurs expenses and uploads mass draw down requests at Award summary level from Agency payment system.</td>
</tr>
<tr>
<td>8</td>
<td>Agency payment system checks payment requests and flags any for manual approval.</td>
</tr>
<tr>
<td>9</td>
<td>Agency batches payment information, sends to financial system for processing, and submits to Treasury.</td>
</tr>
</tbody>
</table>
# Current State Pain Points and Implications for DLT Solution

Additional details on the nature of the current state pain point and what the DLT solution would need to do going forward to resolve the issue.

## Process Step

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<td>10</td>
<td>Prime reimburses expenses and generates reports on performance and financial activity.</td>
</tr>
<tr>
<td>11</td>
<td>Prime remits unused funds or erroneous disbursements to the Agency.</td>
</tr>
<tr>
<td>12</td>
<td>Sub-grantee incurs expenses and submits invoice through the prime’s systems.</td>
</tr>
<tr>
<td>15</td>
<td>Sub-grantee generates and submits financial reports to prime.</td>
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## Pain Point and Implications for DLT Solution

<table>
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<th>Implication</th>
<th>Details</th>
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<td>DLT will automate grantee reports:</td>
<td>Grantees face extensive burden completing the SF-425 and SF-270 reports which will be populated through the data tracked on the DLT token and awards systems.</td>
</tr>
<tr>
<td>DLT will automate funds remittance:</td>
<td>Today the remittance of funds is a cumbersome, time-intensive process for grantees. DLT tokens can be remitted digitally within seconds to the originating appropriation account.</td>
</tr>
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<td>DLT may provide visibility into sub-grantee spending:</td>
<td>Awarding agencies have poor visibility into sub-grantee expenses which the DLT token is capable of providing category and/or line-item level visibility into.</td>
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<td>DLT will automate sub-grantee reports:</td>
<td>Sub-grantees have a reporting burden to the prime and Federal agencies which will be consolidated and automated using DLT.</td>
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High Level Future State Grants Payments Flow

Treasury and federal grant-making agencies have increased visibility into prime recipient and sub-recipient grant payments using blockchain.

Certified payments are released directly to the sub-recipients without a pass-through intermediary.

Proposed Future Process:

1. Federal Grant-Making Agencies create a token that captures grant payment information and is recorded on the blockchain.
2. Prime recipient requests a token drawdown and receives token in digital wallet.
3. After the prime creates a subgrant, the sub-recipient(s) requests a token drawdown into their digital wallet and requests to redeem tokens via ACH.
4. Once the Agency’s Certifying Official certifies payment, the funds are released directly to the sub-recipient from the Treasury General Account via ACH.
Detailed Future State Grants Payments Flow In Scope

The end-to-end flow of grant payments will be designed to increase near-real time data transparency to improve reporting burden, cash management, and the customer experience. Highlighted boxes are further detailed on the subsequent slides.

1. Agency awards grant to prime grantee and issues Grant Letter
2. Prime intakes award and sub grants portion of award to sub-grantee after they pass DNP eligibility check
3. Grant tokens are created and added to the agency’s wallet
4. Prime and sub go into DLT system to request token draw downs
5. Prime and sub submit token redemption request
6. DLT validates that request is appropriate and disburses tokens from the agency’s wallet to prime grantee’s wallet or prime grantee to sub grantee’s wallet
7. DLT conducts eligibility list pre-check and agency approves/rejects token redemption request creating pre-populated payment file
8. Agency feeds payment file to financial system to generate Treasury SPR payment file and pass back allocation of funds by TAS to DLT
9. Treasury confirms that payment request passed checks and sends control number for agency certification
10. Prime and sub generate automated reports on performance and financial activity and remits any unused funds
11. Agency authorizes ACH disbursement to prime after agency certification
12. Agency closes out award 120 days after award expiration date
13. Future State Consideration

Full Process Flow

Future State Flow
Agency user creates tokens on the blockchain, representing the grant award linked to accounting codes.

Agency user and Grantees create draw down rules and controls (e.g. thresholds) and may auto-redeem tokens.

Grantees request to draw down tokens, with the option to mass upload requests for multiple grants.

Grantees request to redeem tokens to initiate a payment from the Agency.

Agency user may approve or reject token draw down and redemption requests based on controls.

Prime Grantees may create a subgrant, create controls, and approve or reject token draw down requests.

Users may generate reports and review end-to-end lifecycle of all token activities.
FAC: DLT WG - Volunteers

- Adam Mall, University of Michigan
- Angela Klein, University of Iowa
- Arlie Poteet, University of Washington
- Brandon Johnson, Harvard University
- Bryan Van Sickle, University of Michigan
- Camille Crittenden, UC Berkeley
- Cathy Thompson, University of Florida
- Deborah Goldberg, Columbia University
- Debra Arent, University of Nebraska
- Heather Pawluk, Indiana University
- Ilora Sullivan, University of Michigan
- James P. Becker, Indiana University
- Jeff Vetter, University of Washington
- Julie Fricks, University of Washington
- Kamala Upadhyaya, Virginia Tech
- Kevin Reyes, University of South Florida
- Nick Rafferty, University of Michigan
- Paul Gasior, Johns Hopkins
- Sarah Lorbiecki, University of Illinois
- Sharon Corlett, University of South Florida
- Tim Reuter, Stanford University
Treasury Offset Program

TOP

Tim Reuter, Sr. Director Post Award Operations, Stanford University
treuter@Stanford.edu

Sheila Doyle, Portfolio Team Manager, Harvard University
sheila_doyle@harvard.edu
What is the Treasury Offset Program?

• Source-http://fiscal.treasury.gov/top/

• Individuals, businesses, states, and other entities may owe money to the federal government. That's a debt.

• If they don't pay the debt on time, it becomes overdue (delinquent). When the debt is overdue, the Treasury Offset Program (TOP) helps collect the debt by holding back money from a federal payment to the debtor. (Holding back money from a payment is call "offsetting the payment" or "administrative offset.")

• TOP may offset many types of federal payments to collect delinquent debt. There are some payments that are not offset through TOP

• In fiscal year 2020, TOP recovered more than $10.4 billion in federal and state delinquent debts.
Sending information about overdue debts to TOP

• Source-http://fiscal.treasury.gov/top/

• The law requires agencies to send debts to TOP when the debt is 120 days overdue.

• Information about the overdue debt includes the debtor's taxpayer identification number (TIN). For an individual, that's usually a Social Security Number (SSN). For a business, nonprofit organization, or state agency, that's usually a Federal Employer Identification Number (FEIN).
Matching payments and overdue debts

- Source-http://fiscal.treasury.gov/top/

- When an agency is about to pay a person, business, state, or other entity, they fill out a payment voucher, which includes the name and TIN of the payee. These agencies are called payment agencies.

- The Bureau of the Fiscal Service (of which TOP is part) actually makes the payments on behalf of most agencies. The people who send payments are called "disbursing officials."

- Before sending a payment, disbursing officials use the TOP database to compare payees and debtors.

- A payment is reduced (offset) to pay an overdue debt if these two criteria are met:
  - Information about the payee's name and TIN match with information about the debtor in the TOP database.
  - The payment is a type that can be offset.

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A federal payment or participating state payment is ready to be sent out. Examples: Tax refunds, federal salaries, social security and other benefit payments, and contractor and vendor payments.

Payments are checked against the TOP database.

Does the recipient owe a past-due debt?

**NO**

The payment is issued as usual.

**YES**

All or part of the payment is withheld to help pay off the debt.
Top Half of the Letter

THIS IS NOT A BILL

• PLEASE RETAIN FOR YOUR RECORDS

12/22/16

• LELAND STANFORD JR UNI BOARD OF TRUSTEES
  • 450 SERRA MALL
  • STANFORD, CA 94305

As authorized by federal law, we applied all or part of your federal payment to a debt you owe. The government agency (or agencies) collecting your debt is listed below.

• Palo Alto VAMC 640
  • 3801 MIRANDA AVENUE
  • PALO ALTO CA 94304-1207
  • 8066-347-2353
  • PURPOSE: Non-Tax Federal Dept

TIN Num: XX-XXXXXXXX
TOP Trace Num: XXXXXXXXXXXX
Acct Num: 640VXXXXXXXXXXX

Amount This Creditor: $6984.38
Creditor: 04 Site: U2

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The agency has previously sent notice to you at the last address known to the agency. That notice explained the amount and type of debt you owe, the rights available to you, and that the agency intended to collect the debt by intercepting any federal payments made to you, including tax refunds. If you believe your payment was reduced in error or if you have questions about this debt, you must contact the agency at the address and telephone number shown above. The U.S. Department of the Treasury's Bureau of the Fiscal Service cannot resolve issues regarding debts with other agencies.

We will forward the money taken from your federal payment to the agency to be applied to your debt balance; however, the agency may not receive the funds for several weeks after the payment date. If you intend to contact the agency, please have this notice available.

U.S. Department of the Treasury
Bureau of the Fiscal Service (800) 304-3107
Hearing impaired customers may utilize the Federal Relay Service by dialing (800) 877-8339 to reach a Communications Assistant (CA) who will dial the toll free number.

**PAYMENT SUMMARY**
PAYEE NAME: LELAND STANFORD JR UNI
PAYMENT BEFORE REDUCTION: $6985.38
TOTAL AMOUNT OF THIS REDUCTION: $6984.38
PAYING FEDERAL AGENCY: Department of Veterans Affairs 675

PAYMENT DATE: 12/22/16
PAYMENT TYPE: EFT
Now the Fun Begins

You do not know what invoice was unpaid or to whom at your institution the invoice was sent. The letter is sent to the same person/address the unpaid invoice was sent, the same person that possibly ignored the original Invoice.

The offset amount will never equal the unpaid invoice amount. It might cover all or just a portion of the payment due to your institution making reconciliation difficult.
Example

Unpaid VA Invoice Amount sent to TOP $25,186.06

Payment from AFOSR due to Stanford: $6,985.38
Amount offset by TOP $6,984.38
Actual Payment made to Stanford $ 1.00
Remaining Unpaid Balance on VA Invoice $18,201.68

2nd payment due from AFOSR to Stanford $20,000.00
Amount offset by TOP $18,201.68
Actual Payment made to Stanford $ 1,798.32

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My Experience

• The VA cannot tell me what invoice(s) was sent to TOP. They state their “system” automatically identifies debt due over 120 days and sends it to TOP.

• If the department pays the outstanding invoice and the VA also collects the payment from TOP they have been paid twice.

• The VA does not like to issue refunds, it creates a lot of work for them.

• If they have received duplicate payment, the VA applies that payment to another open invoice from Stanford. Now we have lost connection between the original unpaid invoice and where the TOP was applied.
Another Potential Impact to your Institution

• An agency may withhold issuing a new award (contract) if your institution is shown to have outstanding federal debt.

• If that outstanding debt has been paid via TOP, the specific federal agency reporting may not have that debt marked as paid yet and your institution is reported as being delinquent.

• The agency is not allowed to issue you the award if you are reported as having outstanding federal debt.
• I am not envisioning we will be able to make changes to TOP. This is federal law and will not be something the Treasury could change without the law changing.

• Our goal is to get a better understanding of the size of the problem and identify those agencies that are the most problematic.

• We want to inform institutions that may be unaware this is happening and what to look for.

• Most improvements will be at the individual institution level reaching out to the agencies directly.

• Our hope is to get a contact at Treasury to help them understand the frustration and amount of work created.
Which Agencies have you dealt with?

- We have experienced TOP with the following agencies:
  - Veterans Administration
    - IPAs,
    - Courses taken by Veterans at your institution – Government to Government (G2G)
  - IRS – unpaid or dispute taxes
  - DHHS – Centers for Medicare and Medicaid Services (CMS)
    Additional complications due to HIPAA

- Others?
- I would like to get a longer list of Agencies that have sent invoices to TOP.
- Please enter into the Chat feature the federal agencies you have had report unpaid invoices to TOP. Also enter if that agency was helpful or not helpful in identifying the specific invoice.
Recent Changes

• No longer paying $1 of our amount due.

• An unpaid balance from DHHS CMS - The Department of Treasury, Bureau of the Fiscal Service, Debt Management Servicing Center sent a letter stating institution had 18 days to work with the agency to resolve the issue prior to submitting the debt to TOP.

• It appears under the DHHS CMS program, the institution may request a monthly spreadsheet of what is being offset. I have not seen this with other agencies.
Potential Changes at Agencies

• Acknowledging changes will not come anytime soon

• The agency providing the unpaid invoice to TOP should be required to send a copy to a central office or Receivables office at the institution.

• If the agency has received duplicate payment – from the institution and TOP, they should be required to issue a refund to the institution. They should not be allowed to apply that payment to another open invoice.

• Agencies should have one office that has the information pertaining to all invoices sent to TOP.
Suggested Changes at Treasury

• A duplicate letter sent to an institutional central office
• Send the letters via email and not USPS. Allows more timely investigation at our institution.
• Establish a website for institutions to obtain copies
• Other suggestions?

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Questions

• Suggestions/Comments
• Words of Wisdom
• Positive experiences
Contact information

• Tim Reuter Stanford University
  • treuter@Stanford.edu

• Sheila Doyle, Harvard University
  • Sheila_doyle@Harvard.edu
Public Data Access – Finance and Costing Discussion

A Life-Cycle Perspective
• Released October 29, 2020, Effective January 25, 2023

  • Two main requirements (1) the submission of a Data Management and Sharing Plan (Plan); and (2) Compliance with the approved Plan.

• [NOT-OD-21-014] – Supplemental Information to the NIH Policy for Data Management and Sharing: Elements of an NIH Data Management and Sharing Plan


• [NOT-OD-21-016] – Supplemental Information to the NIH Policy for Data Management and Sharing: Selecting a Repository for Data Resulting from NIH-Supported Research
• NASEM Report on Life-Cycle Decisions for Biomedical Data: The Challenge of Forecasting Costs.
  
  • https://www.nationalacademies.org/our-work/forecasting-costs-for-preserving-archiving-and-promoting-access-to-biomedical-data
• Accelerating Public Access to Research Data
  • https://www.aplu.org/projects-and-initiatives/research-science-and-technology/public-access/

• Guide to Accelerate Public Access to Research Data
  • https://www.aplu.org/library/guide-to-accelerate-access-to-public-data/file
<table>
<thead>
<tr>
<th>#</th>
<th>Activity</th>
<th>Timing</th>
<th>Sponsor Pay</th>
<th>Institution Pay</th>
<th>External Repository</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Lifecycle Public Data Access Activities</td>
<td>Timing (Pre-Proposal submission, Life of award, Post-Closing)</td>
<td>Sponsor Pay (Charged to award) as line item or via Service Center</td>
<td>Separate Award (different prd of performance) and/or Bud Line Item for Data Only</td>
<td>Service Center (likely subsidized by institution but charged to project)</td>
<td>Institution Pay (Admin Capped)</td>
</tr>
<tr>
<td>2</td>
<td>DMP Development</td>
<td>PRE - PROPOSAL</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Data Curation &amp; Metadata Curation FAIR, Data dictionary, etc.</td>
<td>LIFE (SOME PRE)</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td></td>
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<tr>
<td>4</td>
<td>Data Ingest</td>
<td>LIFE</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>DMP Monitoring &amp; Compliance through life of award through closeout</td>
<td>LIFE</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Data Storage (during life of project)</td>
<td>LIFE</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
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<td>7</td>
<td>Data Storage (post-closeout for publication)</td>
<td>POST/LIFE</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
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<tr>
<td>8</td>
<td>DMP Monitoring &amp; Compliance - post closeout</td>
<td>POST</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
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<td>9</td>
<td>Data Storage (post-closeout for DMP Compliance)</td>
<td>POST</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
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<tr>
<td>10</td>
<td>Cold Data Storage (post-closeout / last resort)</td>
<td>POST</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
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<tr>
<td>11</td>
<td>Publication Fees (often based on size and duration of data)</td>
<td>POST</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
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<tr>
<td>12</td>
<td>Data Security (PHI, HIPAA, Export Controls, FISMA, student data and IP)</td>
<td>PRE, LIFE &amp; POST</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
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</table>

**In-Process**

**Draft**

**Contrary to open access principles**
## Cost Implications: Lifecycle Public Data Access Activities

### Column Descriptions

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### Institution Pay

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<th>Institution Pay (Admin Capped)</th>
<th>Institution Pay (Uncapped: O&amp;M or Library)</th>
<th>Institutionally Supported Repository</th>
<th>Publisher / Discipline / Sponsor / Professional Society / One Time (Fig Share)</th>
<th>Institution Covers Cost but then Charges User</th>
</tr>
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</table>

39
## Row (Activity & Timing) Descriptions

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<td>DMP Monitoring &amp; Compliance - post closeout</td>
<td>POST</td>
</tr>
<tr>
<td>9</td>
<td>Data Storage (post-closeout for DMP Compliance)</td>
<td>POST</td>
</tr>
<tr>
<td>10</td>
<td>Cold Data Storage (post-closeout / last resort)</td>
<td>POST</td>
</tr>
<tr>
<td>11</td>
<td>Publication Fees (often based on size and duration of data)</td>
<td>POST</td>
</tr>
</tbody>
</table>
Transition to Q&A
Thanks!

• **Logistics & Coordination**
  • Lillian Andrews (NAS)
  • David Wright (FDP)

• **Presenters**
  • Sheila Doyle – Harvard
  • Rick Fenger – University of Washington
  • Nate Martinez-Wayman – Duke University
  • Melissa Korf – Harvard Medical School
  • Tim Reuter – Stanford