

# ***Washington-HEP Integrated Planning System Review and Prospects***

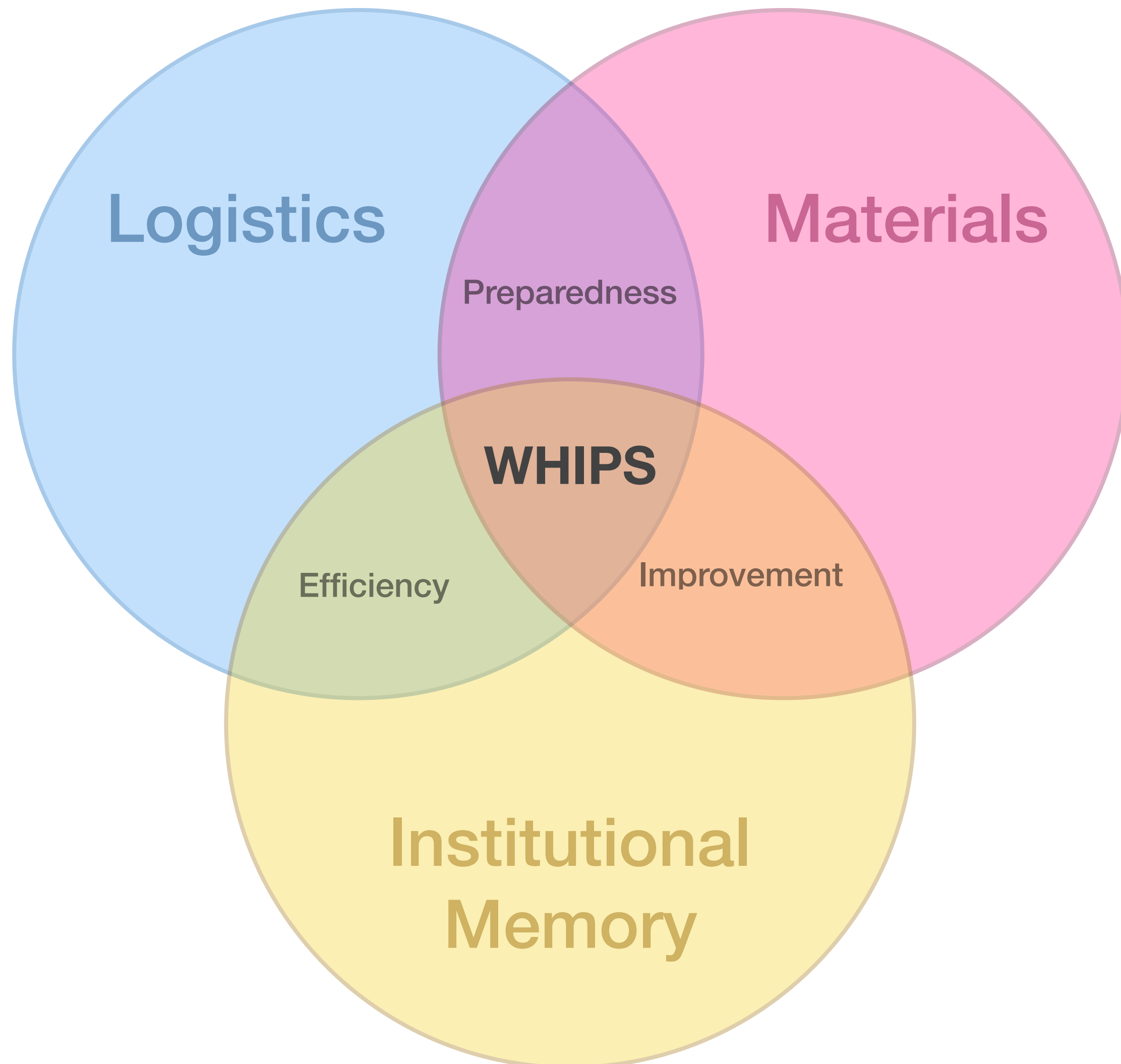
**Fernanda Psihas**

**Justin Vasel**

22 October 2019

# WHIPS: **W**ashington-**H**EP **I**ntegrated **P**lanning **S**ystem

*EST. 2017*



1. **Database** to store information
2. **User interface** web app to allow users to see and modify information in the database
3. Collection of **scripts/algorithms** to perform key operations like assigning meetings.

# Our challenge

3 days

68 attendees

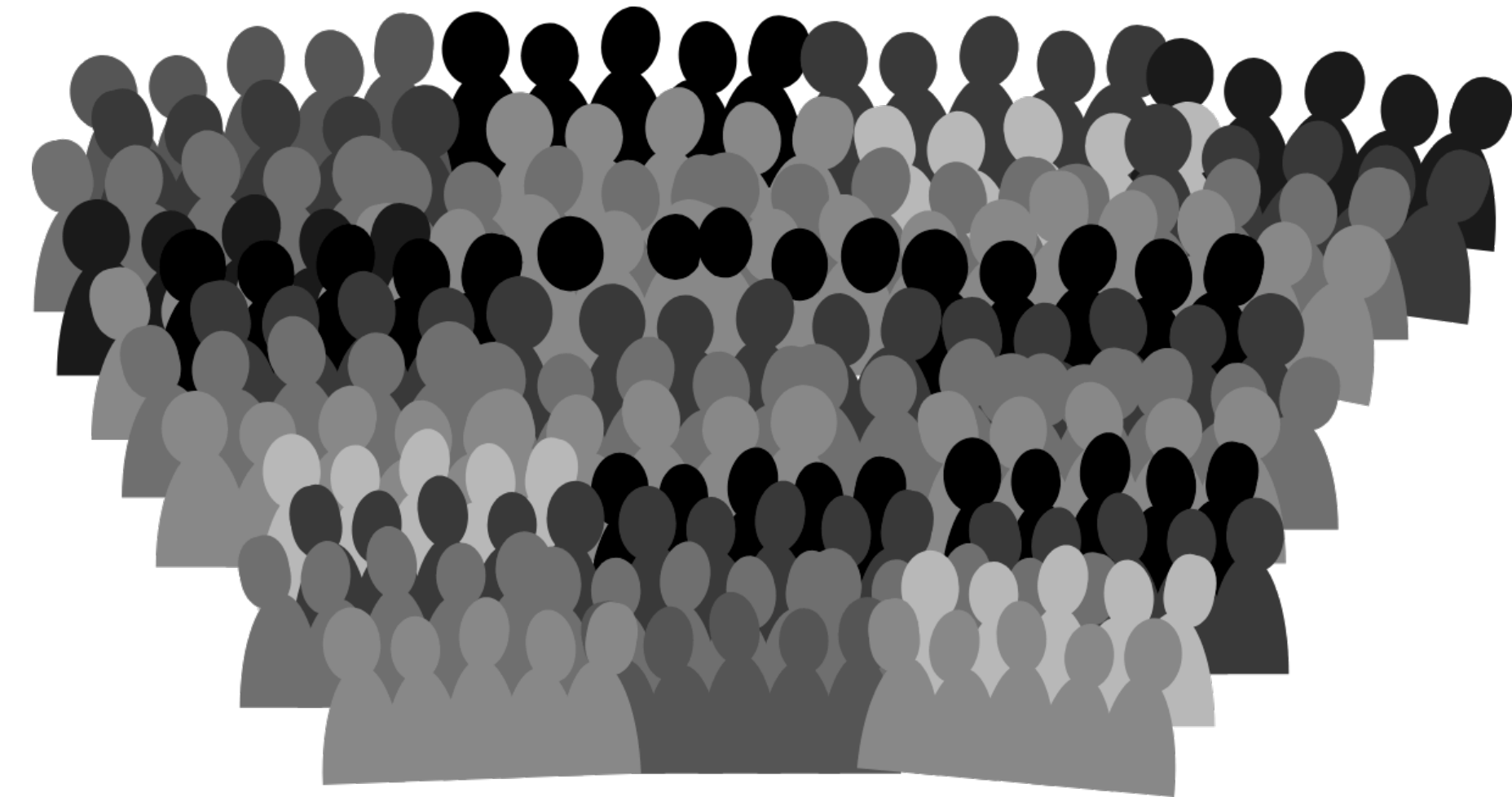


# Our challenge

3 days

68 attendees

538 congressional offices



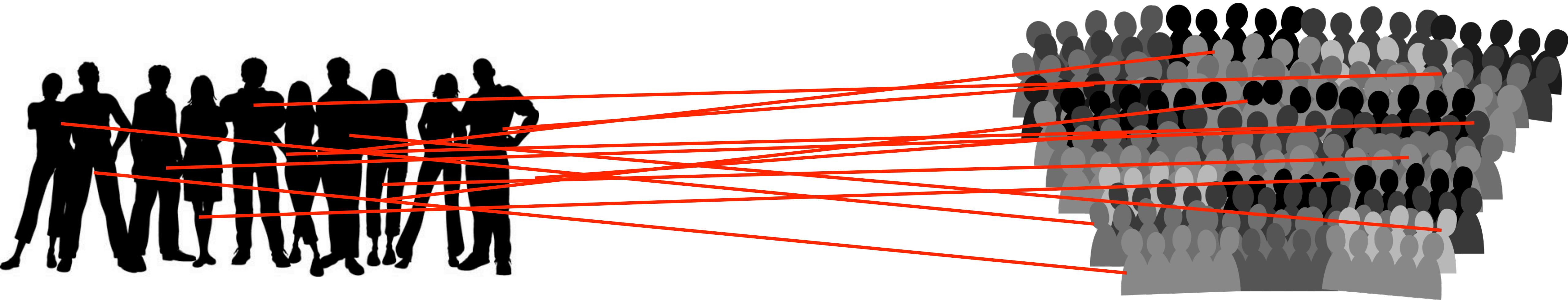
# Our challenge

3 days

68 attendees

538 congressional offices

1,191 connections to congressional offices



# What is a "connection"?

## Connection Types

**Immediate Family**

– An immediate family member resides in the state/district.

**Extended Family**

– An extended family member resides in the state/district.

**Current Resident**

– You currently reside in the state/district.

**Former Resident**

– You used to reside in the state/district.

**Registered Voter**

– You are currently registered to vote in the state/district.

**Current Workplace**

– You currently work in the state/district.

**Former Workplace**

– You used to work in the state/district.

**Educated**

– You attended college/grad school in the state/district.

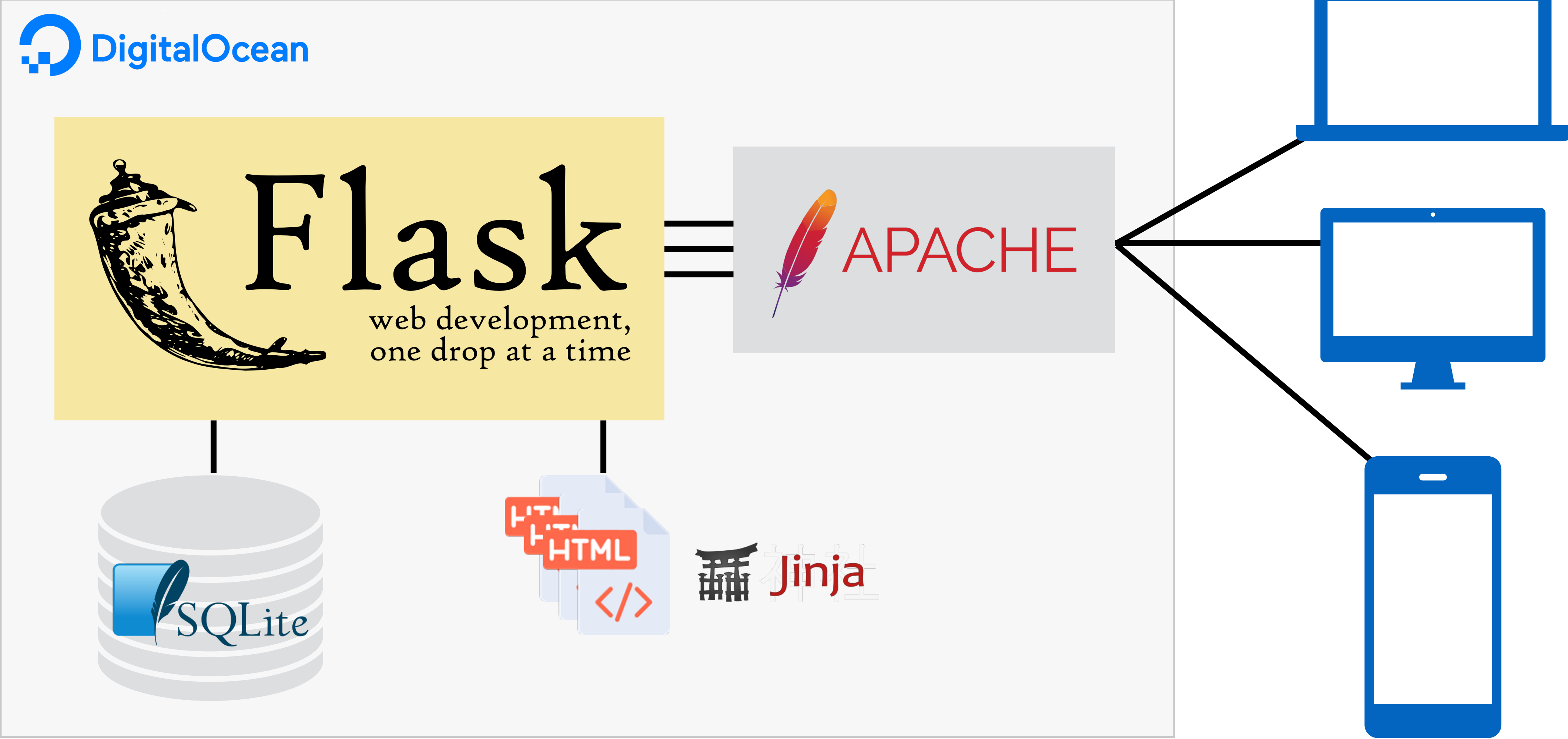
**# Previous Visits**

– How many times have you visited this office in the past?

These qualities are used to compute a **connection score**, which quantifies the strength of the connection.

Connection score is used by the assignment algorithm.

# WHIPS architecture



# WHIPS technology



**Flask** is a "micro-framework" built on Python.

Out of the box, it gives you a basic web server with routing functionality and HTML templating.

All other functionality comes from community-developed extensions.

e.g. Flask-SQLAlchemy, Flask-SocketIO, Flask-User, Flask-Login, Flask-Admin, Flask-shell, ...

With extensions, can develop a web app with basic functionality (like user authentication) quickly.

Why we chose it: Easy to learn, well-documented and tutorialized.





## WHIPS technology

Data needs to be stored outside of the running application.

We need to store information about many entities (trip attendees, connections, meetings, members of Congress, etc.).

We also need to track relationships between these entities.

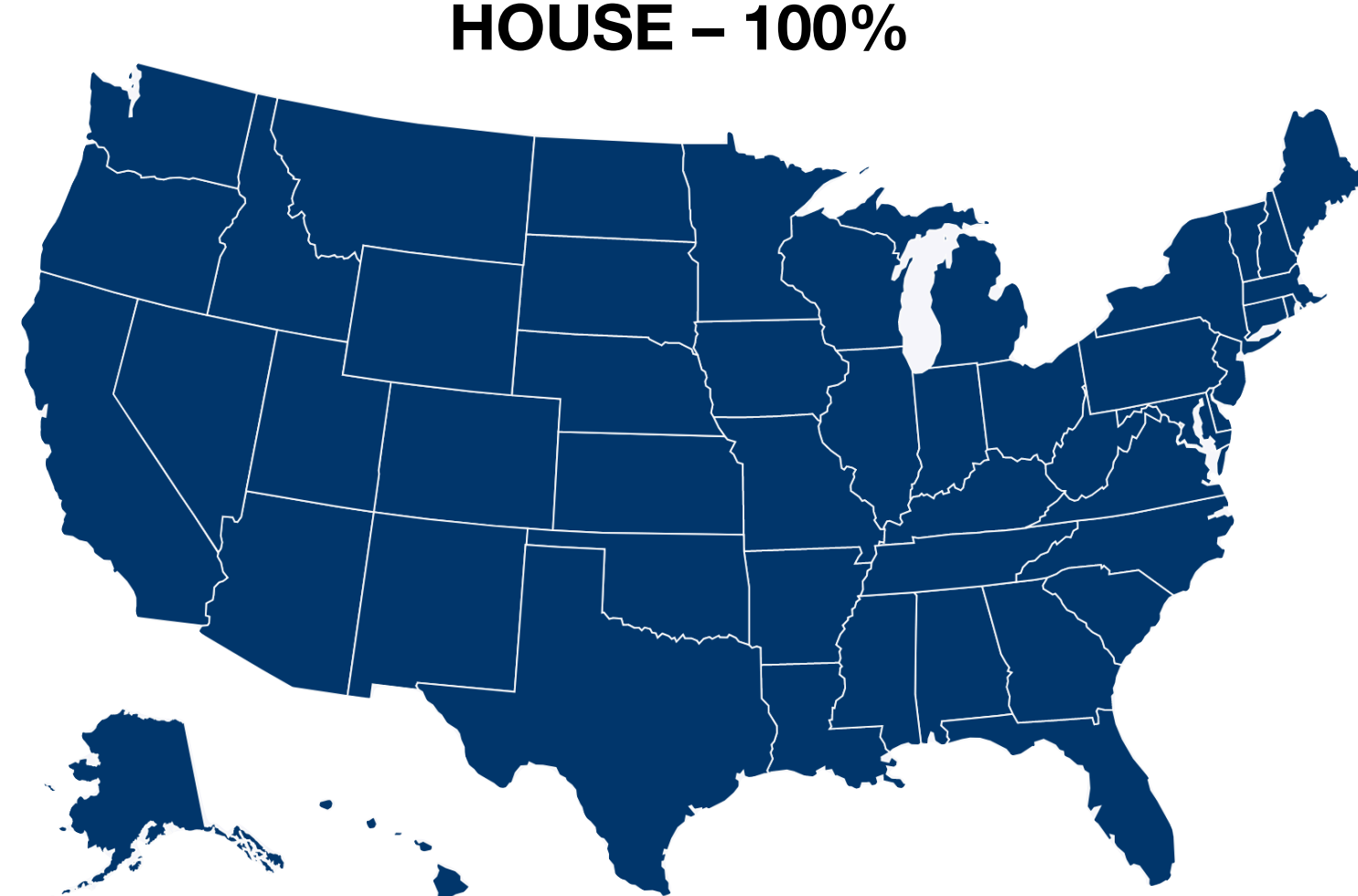
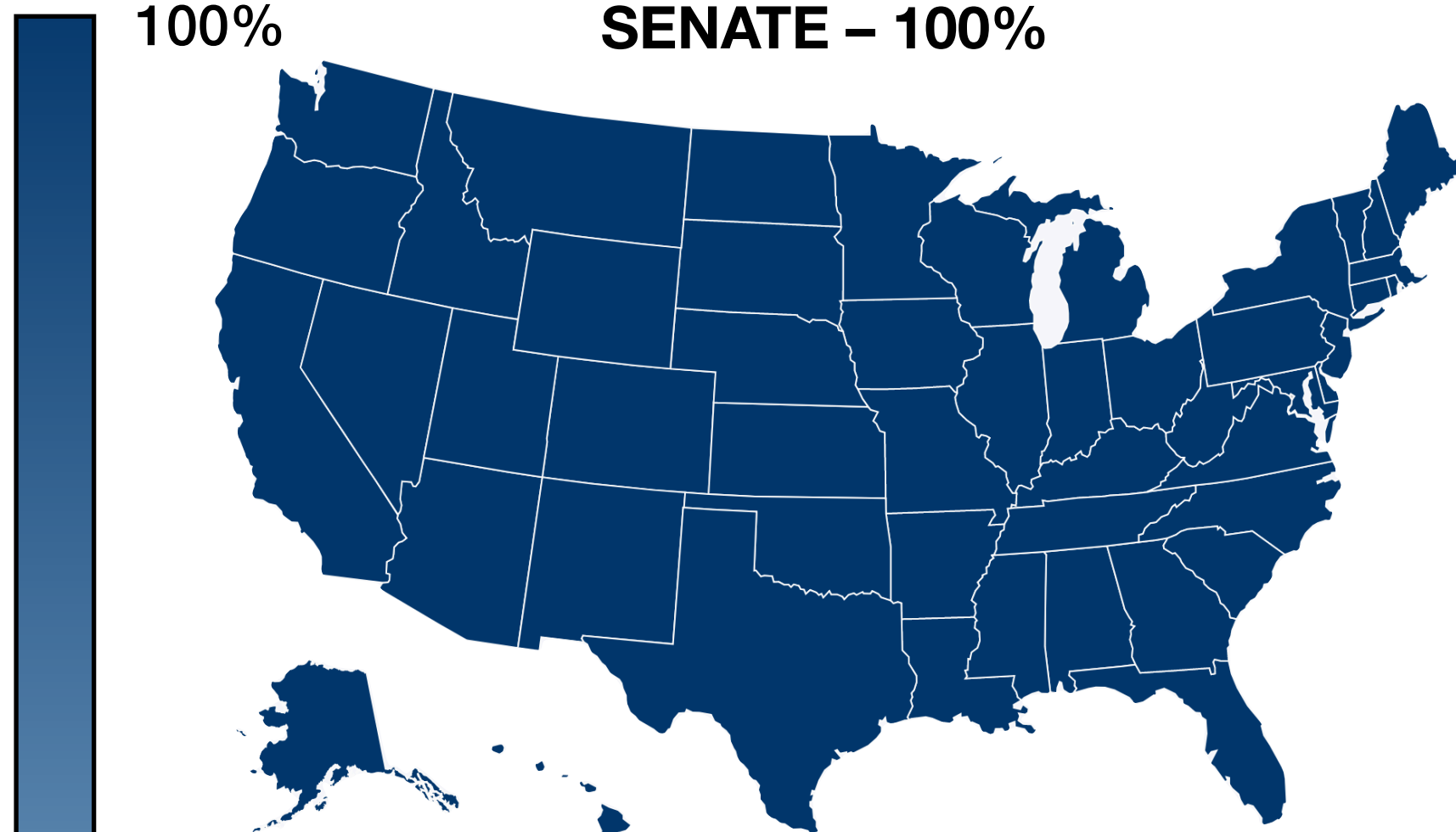
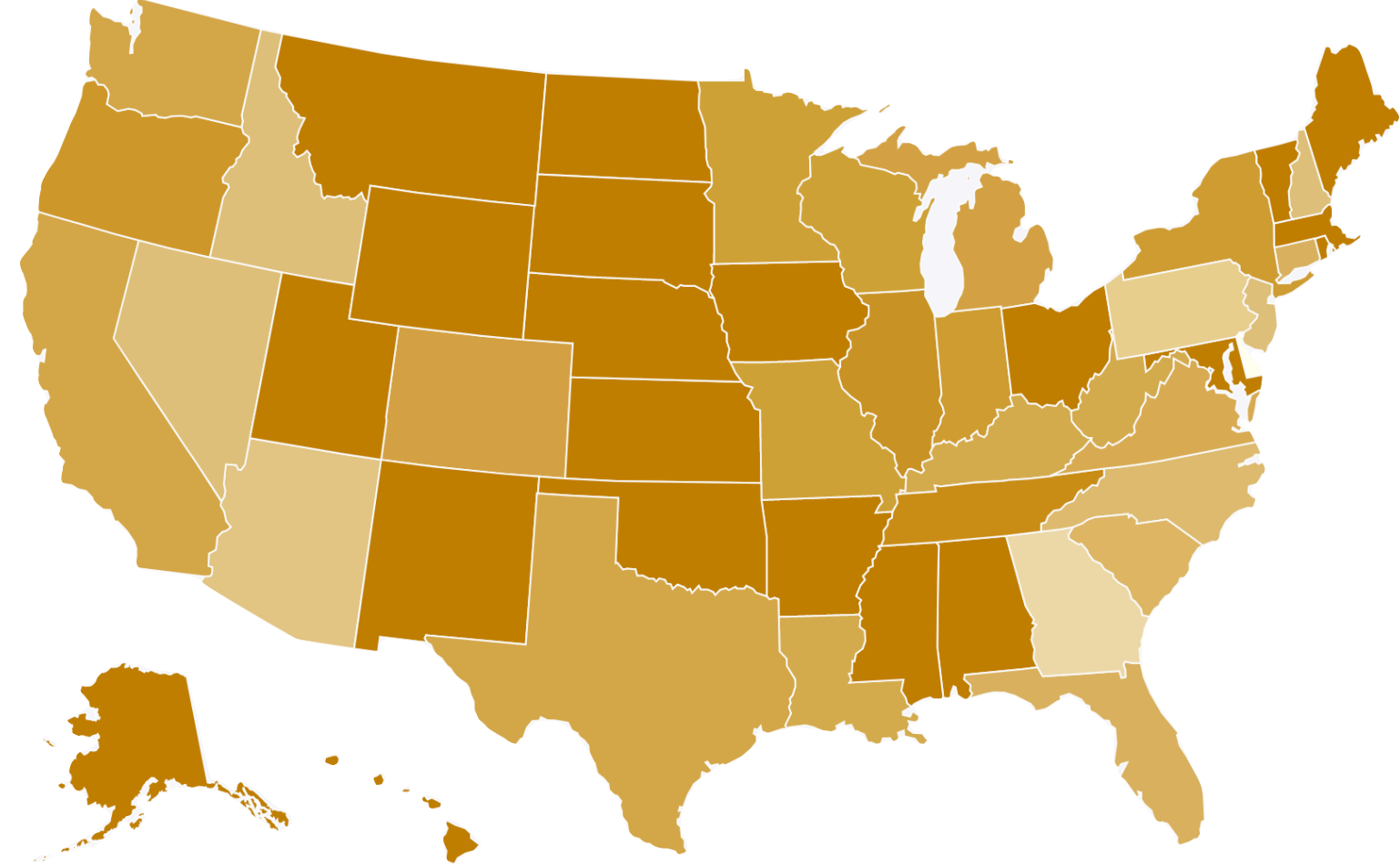
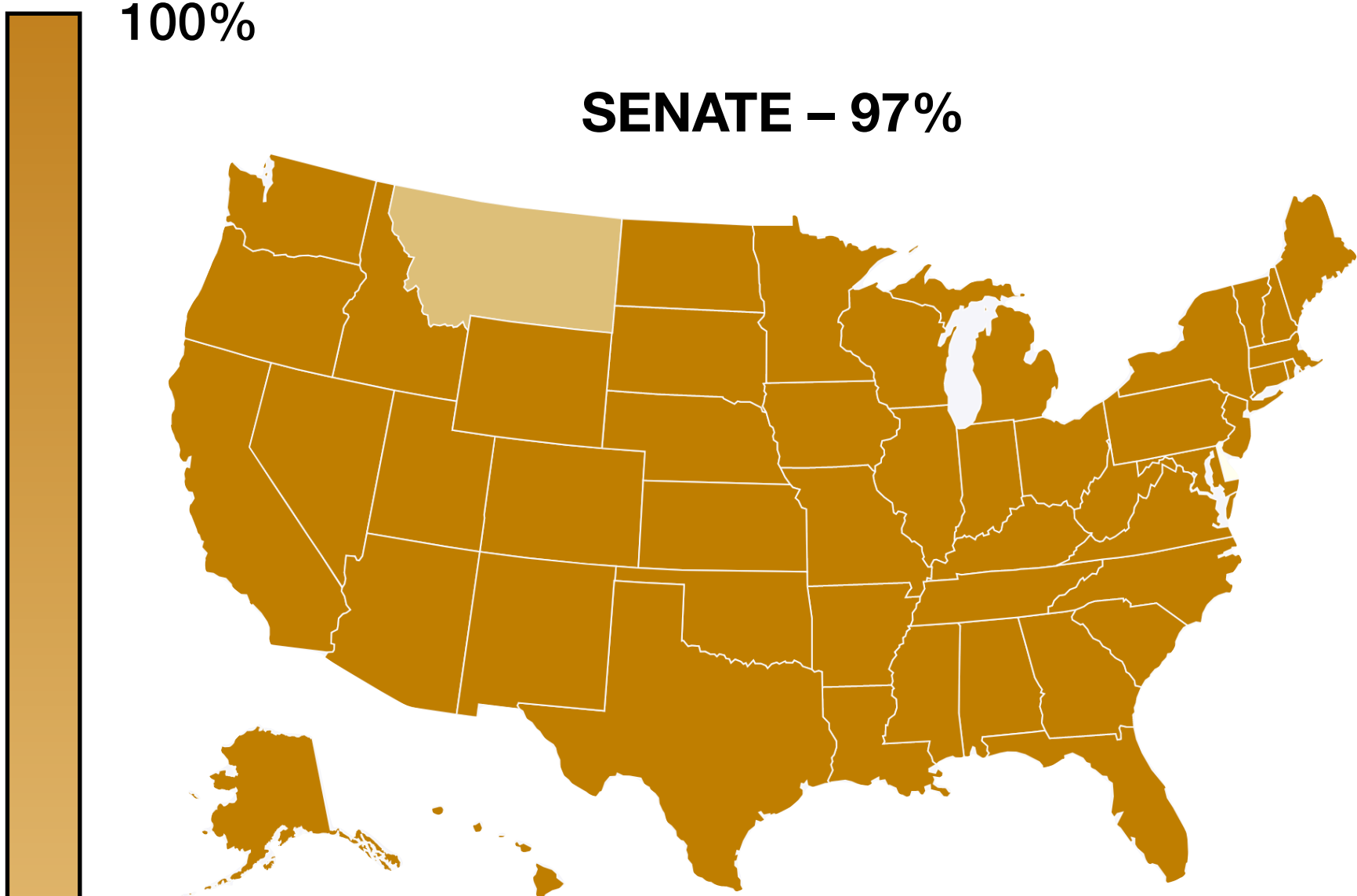
SQL is a natural choice.

We chose **SQLite3** because it is easy to manage and has low overhead (serverless).

# Connected & Contacted Offices in 2019

*538 offices contacted*

**NEW RECORD!**



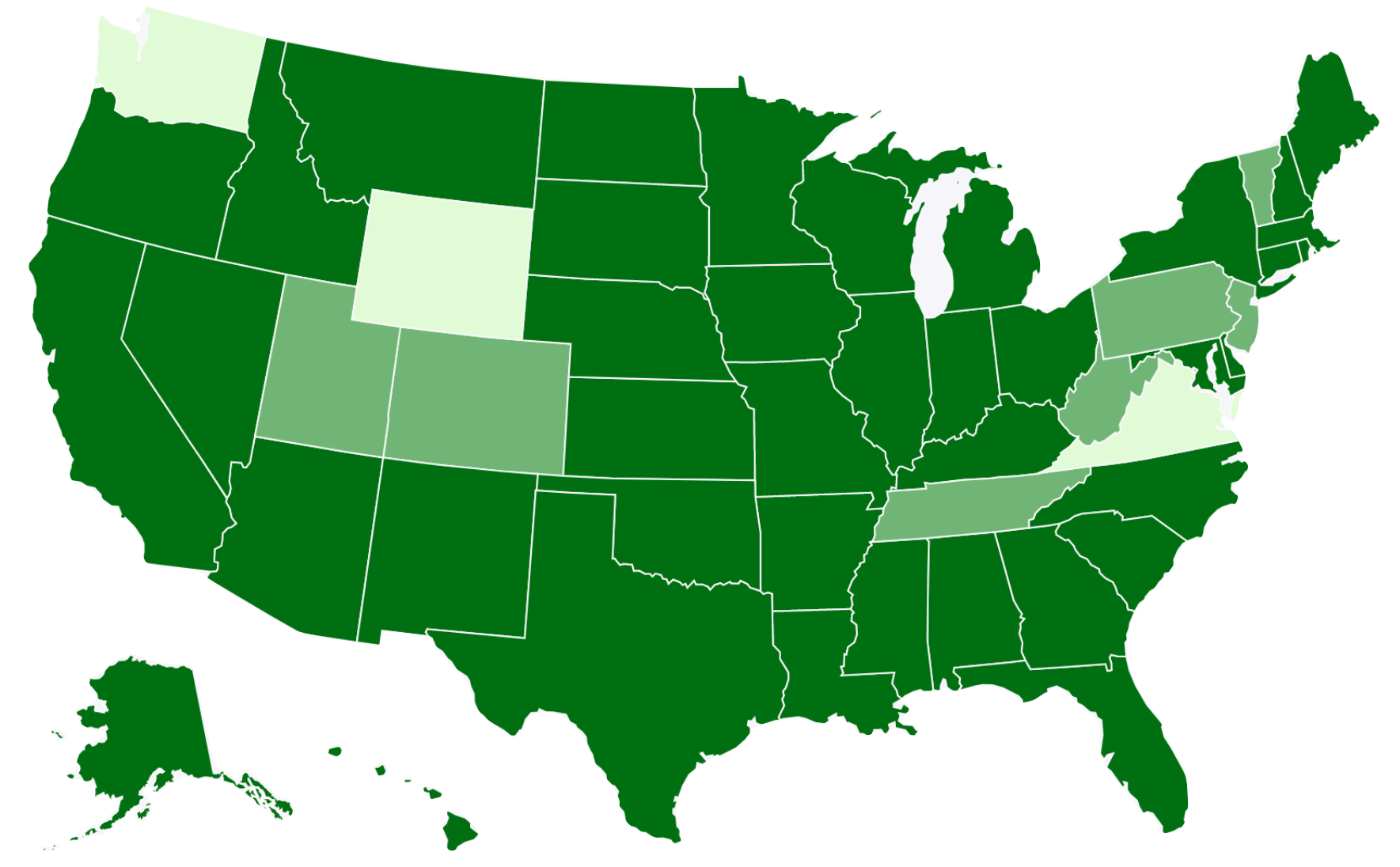
**NEW RECORD!**

# Scheduled Meetings in 2019

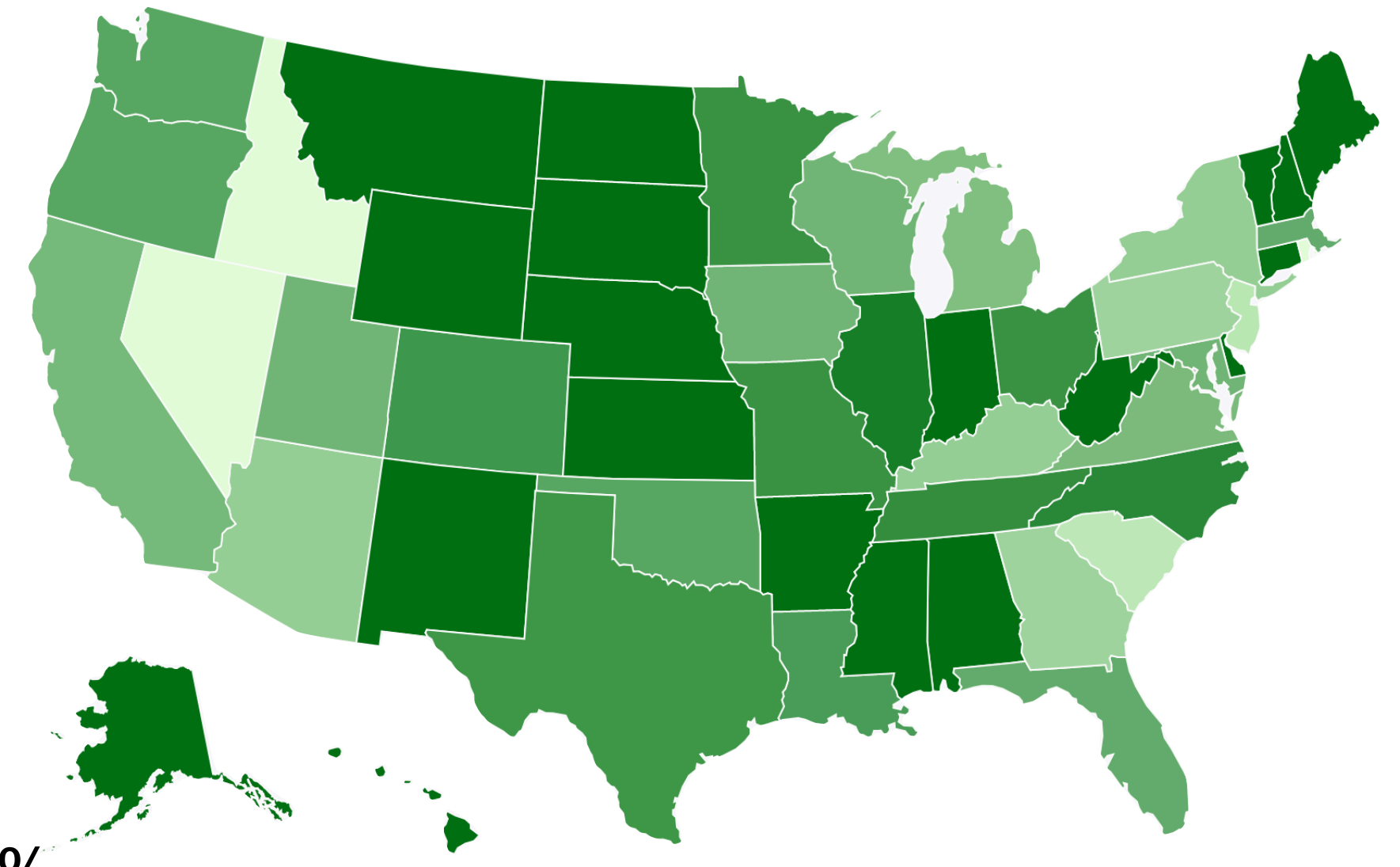
*434 meetings*

100%

**SENATE – 87%**



**HOUSE – 79.2%**

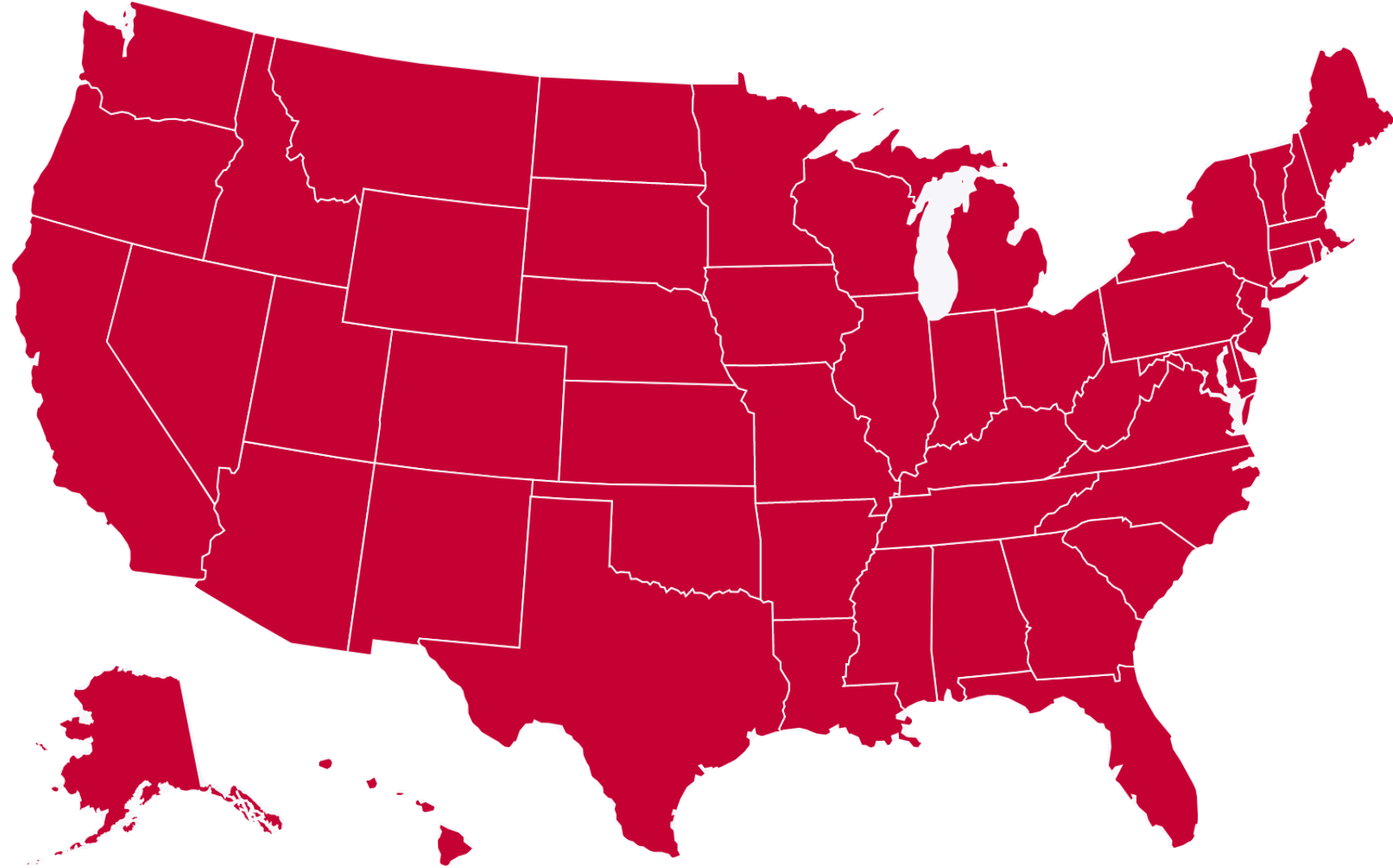


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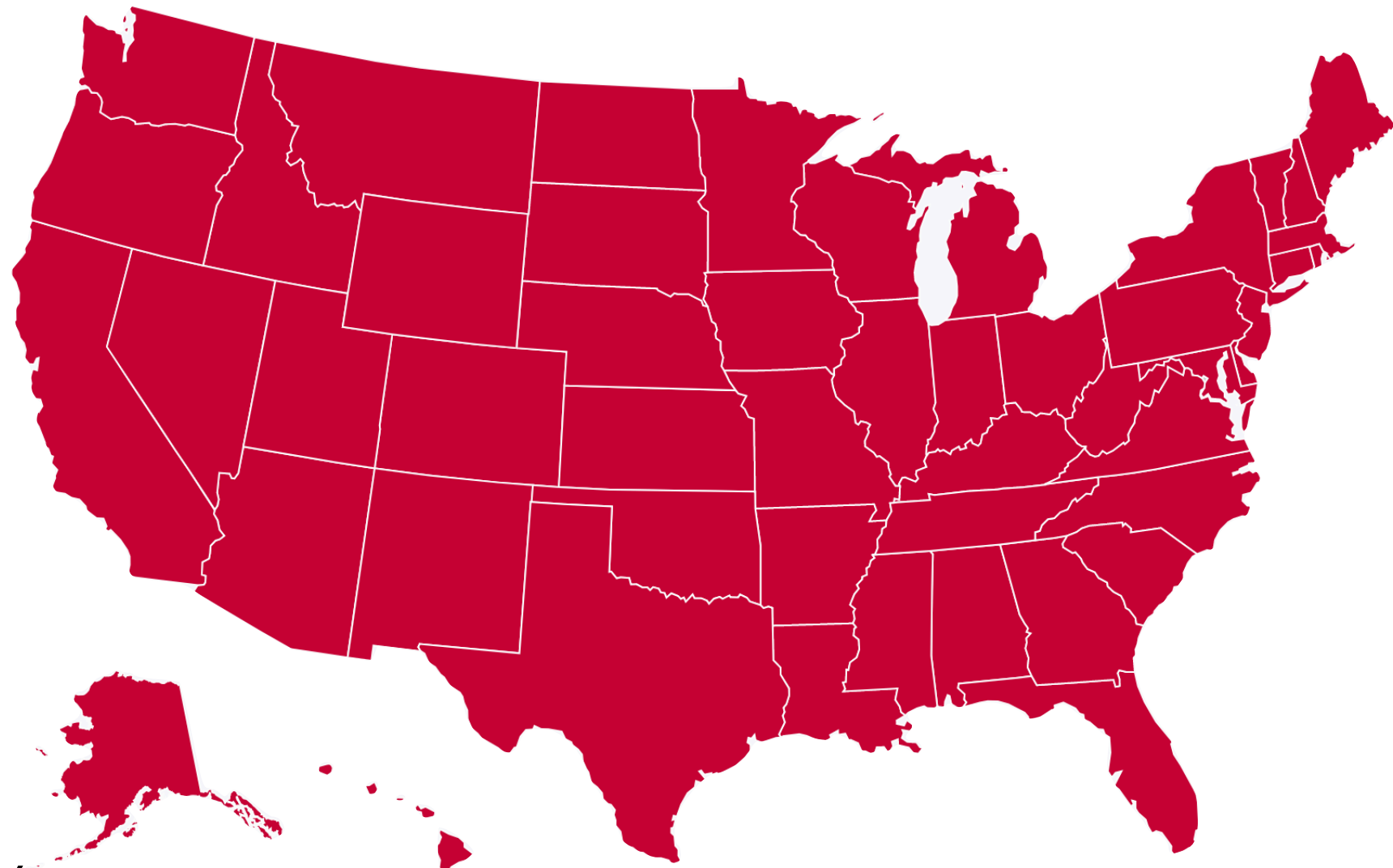


100%

SENATE – 100%



HOUSE – 100%



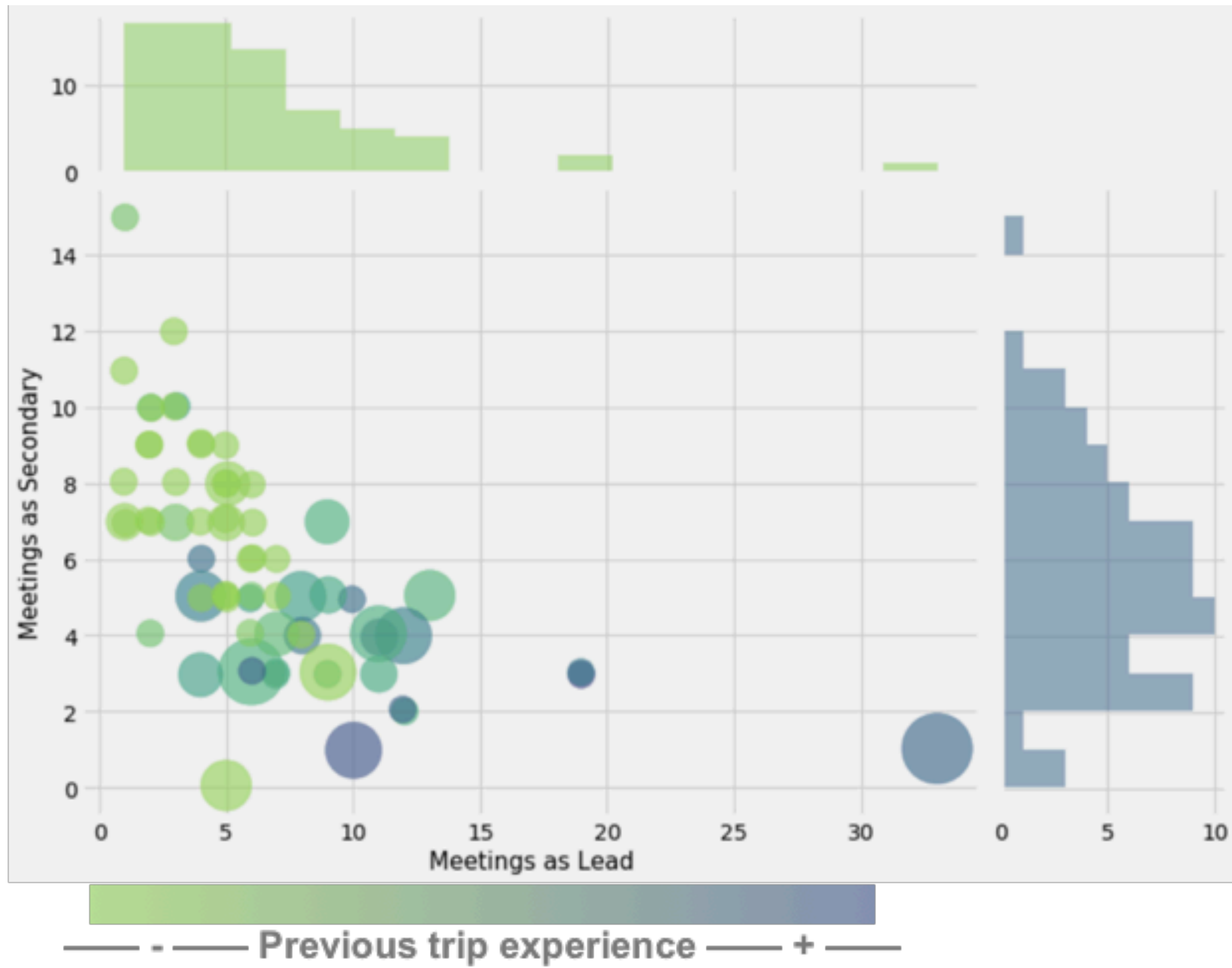
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# Materials Delivered in 2019

## 538 packets delivered

**NEW RECORD!**





**Currently in WHIPS...**

**117** People

**2,076** Connections

# 2019 recommended : Improvements for 2020

My judgement is that ~68 people should suffice to get 100% coverage as well as 100% scheduled meetings.

**I expect improvements to come from choosing our team of trip attendees carefully.**

The UEC plays a big role in developing the materials for the trip. **Strongly supporting changes that address feedback from Congress is crucial to our effort.**

We are getting better at training every year, but this is where we will have the most room to improve in the coming years, particularly in the following areas:

- **Scheduling meetings**
- **How (not) to deliver the message**



# *Year 1: Piloting the platform*

We first deployed a pilot version of the platform in 2018.

## **The goals of WHIPS1.0:**

Replace old meeting assignment code.

Switch to a centrally maintained database

Facilitate meeting scheduling on the ground.



# WHIPS 1.0

## Washington-HEP Integrated Planning System

### FUNCTIONALITY

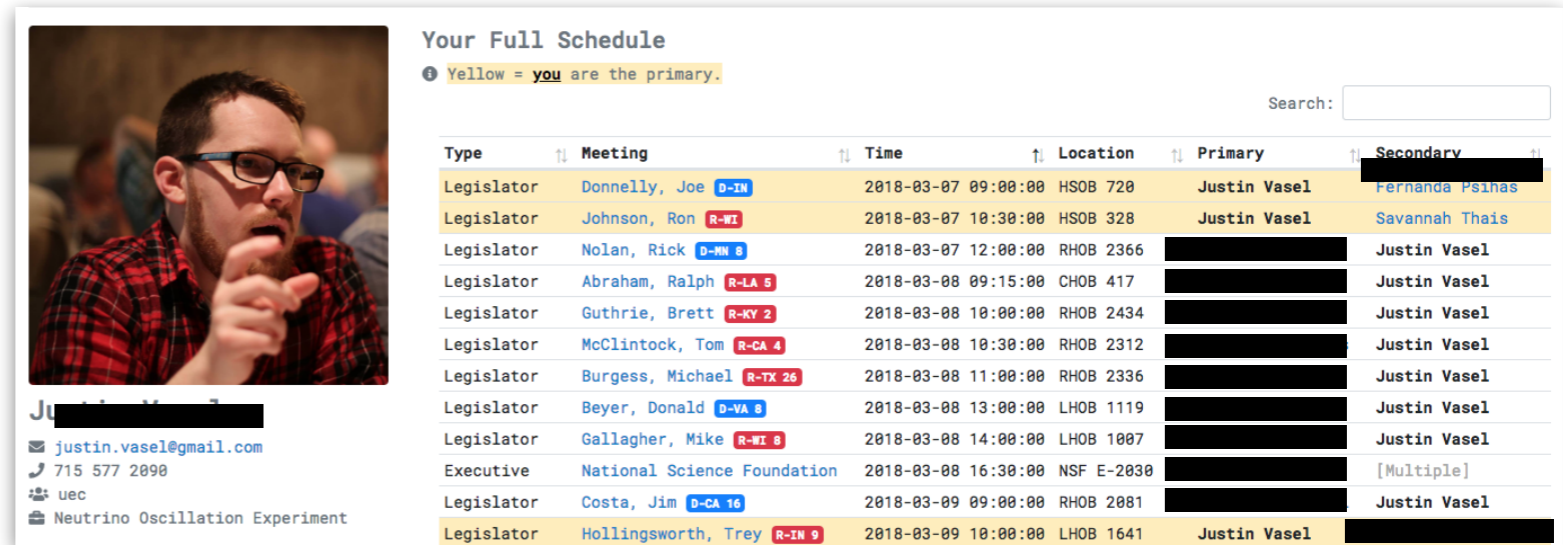
Database of connections and congressional offices.

Individual profile keeps attendee's schedules and connections.

Allows for live scheduling on the ground.

*Allows for meeting notes to be added to the meeting page.*

*Allows for tracking of scheduled, rejected, and assigned meetings.*



**Your Full Schedule**  
Yellow = you are the primary.

Search:

Type	Meeting	Time	Location	Primary	Secondary
Legislator	Donnelly, Joe <span>D-IN</span>	2018-03-07 09:00:00	HSOB 720	Justin Vasel	Fernanda Psihas
Legislator	Johnson, Ron <span>R-WI</span>	2018-03-07 10:30:00	HSOB 328	Justin Vasel	Savannah Thais
Legislator	Nolan, Rick <span>D-MN</span>	2018-03-07 12:00:00	RHOB 2366		Justin Vasel
Legislator	Abraham, Ralph <span>R-LA</span>	2018-03-08 09:15:00	CHOB 417		Justin Vasel
Legislator	Guthrie, Brett <span>R-KY</span>	2018-03-08 10:00:00	RHOB 2434		Justin Vasel
Legislator	McClintock, Tom <span>R-CA</span>	2018-03-08 10:30:00	RHOB 2312		Justin Vasel
Legislator	Burgess, Michael <span>R-TX</span>	2018-03-08 11:00:00	RHOB 2336		Justin Vasel
Legislator	Beyer, Donald <span>D-VA</span>	2018-03-08 13:00:00	LHOB 1119		Justin Vasel
Legislator	Gallagher, Mike <span>R-WI</span>	2018-03-08 14:00:00	LHOB 1007		Justin Vasel
Executive	National Science Foundation	2018-03-08 16:30:00	NSF E-2030		[Multiple]
Legislator	Costa, Jim <span>D-CA</span>	2018-03-09 09:00:00	RHOB 2081		Justin Vasel
Legislator	Hollingsworth, Trey <span>R-IN</span>	2018-03-09 10:00:00	LHOB 1641	Justin Vasel	

**Justin Vasel**  
justin.vasel@gmail.com  
715 577 2090  
uc  
Neutrino Oscillation Experiment

J [redacted] Wednesday, March 20th 2019, 02:04 -0500

Wow, really excellent meeting! Louise knocked it out of the park Staffer was so excited, took notes, was really engaged, talked about how funding happened and said they'd sign a Senate dear colleague letter

Fernanda Psihas Wednesday, March 20th 2019, 11:26 -0500

She was polite and attentive. Mainly concerned about how this affects their district. She asked for a contact to a constituent. Definitely bring a constituent if we can next year!

# *Year 2: Full Deployment*

On 2019 we launched the full version.

## **The goals of WHIPS2.0:**

Centralize all meeting logistics on WHIPS

Incorporate progress tracking for users and managers

Streamline assignments, progress tracking, and communications with trip attendees.

# WHIPS 2.0

## Washington-HEP Integrated Planning System

### FUNCTIONALITY

Multi-year database infrastructure of connections and congressional offices.

Progress tracking for individual meetings.

Progress tracking for attended, package delivered, and rejected meetings.

Improved live scheduling on the ground.

*Requires meeting notes to be added to the meeting page.*

*Access to previous years meeting notes.*

MEETING #766 2019-MARCH

Rep. Bill Foster **D-IL 11** ✓ Packet Delivered!

Congressional Office Meeting - House

ASSIGNED ✓ CONTACT ✓ SCHEDULE ✓ FILE REPORT ✓

**Attendees**

**Primary**  
J [redacted] (UEC)

**Secondary**  
None assigned

**Coordinates**

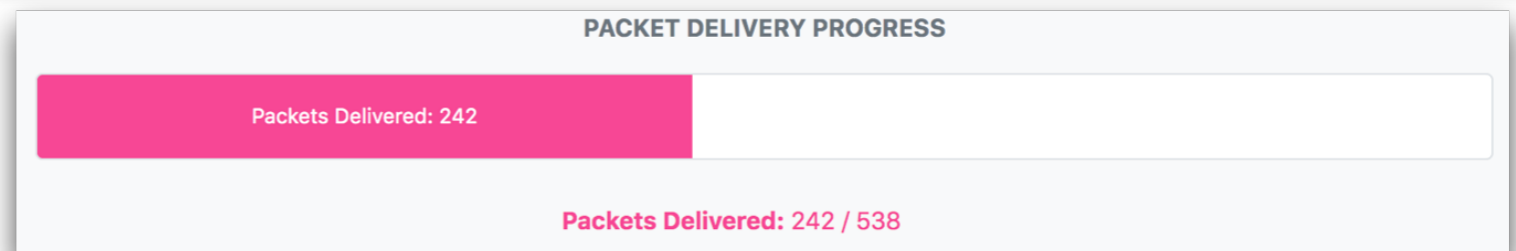
**Time**  
2019-03-19 14:00:00

**Location**  
Rayburn House Office building 2366

**Meeting with**

**Name & email**  
[redacted]  
<[redacted]@mail.house.gov>

**Position**  
Fellow



There are **6 days** remaining until the trip. Contact your assignments!  
34 meetings are still unassigned. Claim them [here](#).

CURRENT PROGRESS

Rejected: 6   Scheduled: 148   Contacted: 417   Assigned: 504   Unassigned: 34

★ ★ ★ WHIPS ★ ★ ★

[report bugs](#) · [code of conduct](#)

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# WHIPS 2.0

## Washington-HEP Integrated Planning System

### FUNCTIONALITY

**Incorporated a trip code of conduct.**

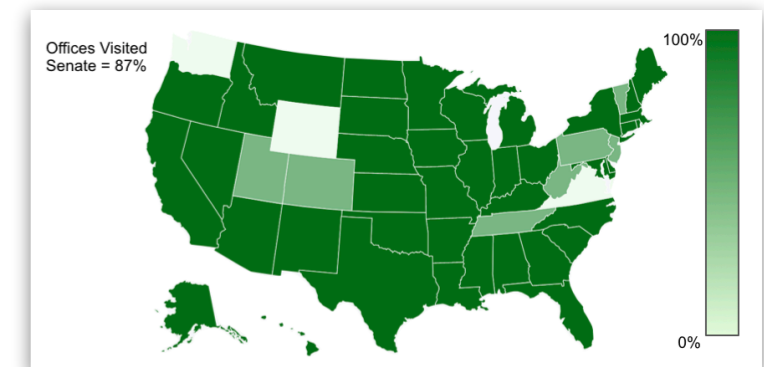
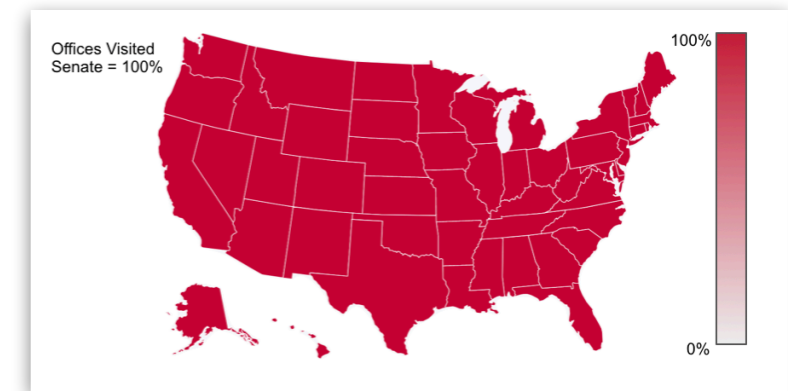
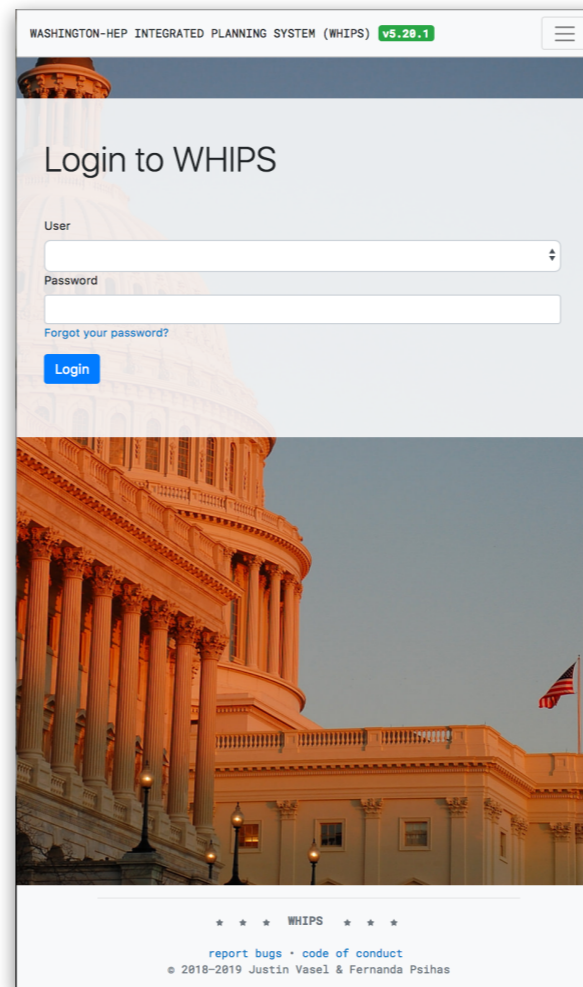
*Personalized procurement and grant letters by meeting.*

*Improved mobile version functionality.*

*Automated email notifications*

*Improved manager assignment/logistics functionality.*

*Automates progress/connections map generation.*



## HEP DC Trip Code of Conduct

*Fermilab Users Executive Committee, SLAC Users Organization, US LHC Users Association*

All trip attendees will conduct themselves in a professional manner that is welcoming to all participants and free from any form of discrimination, harassment, bullying, or retaliation. Participants will treat each other with respect and consideration to create a collegial, inclusive, and professional environment in all activities associated with the trip.

Participants will avoid any inappropriate actions or statements based on individual characteristics of any kind. Disruptive or harassing behavior of any kind will not be tolerated. Harassment includes but is not limited to inappropriate or intimidating behavior and language, unwelcome jokes or comments, unwanted touching or attention, and stalking.


The above considerations apply to both interactions with other participants and interactions with Congressional offices and their personnel. Participants agree to maintain civil, respectful, and appropriate discourse during all visits. As representatives of the High Energy Physics community, participants agree to abstain from making statements, or introducing materials and/or personal opinions--political or otherwise--which are unrelated to or in conflict with the message agreed upon by the community.

Violations of this code of conduct policy may be reported to any of the trip organizers. Sanctions may range from verbal warning, to ejection from the trip, to notifying appropriate authorities, at the discretion of the organizers. Retaliation for complaints of inappropriate conduct will not be tolerated. If a participant observes inappropriate comments or actions and personal intervention seems appropriate and safe, they should be considerate of all parties before intervening.

# New this year. Automated, district-specific grant and procurement information

District-specific materials provide direct links between the appropriated funds and economic benefits locally.

Developers:  
**Rob Fine**  
**Michael Baumer**  
**Justin Vasel**  
**Fernanda Psihas**




**Fernanda Psihas**  
*Fermilab Users Executive Committee  
Fermi National Accelerator Laboratory  
P.O. Box 500 - MS 220  
Batavia, IL 60510  
Phone: 218 343 0747  
E-mail: fernanda.psihas@gmail.com*

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The Honorable Ted Cruz  
United States Senate  
404 Russell Senate Office Building  
Washington, D.C. 20515

Dear Senator Cruz:

The DOE Office of Science and NSF Directorate for Mathematical and Physical Sciences (MPS) directly support scientists, engineers, and students in all 50 States, the District of Columbia, and Puerto Rico through research grants to academic institutions and contracts to supporting industries. In fiscal year 2018, the Department of Energy (DOE) Office of Science had a budget of \$908 million for High Energy Physics, and the National Science Foundation (NSF) had a budget of \$7.7 billion.




**Institutions receiving DOE HEP grants during FY18**

Please find below specific information about grants and contracts that were awarded by the DOE Office of Science and NSF to institutions and businesses in your State during FY18 and preceding years.

**Texas State**

In the past 6 years, this district has been awarded:

- DOE Office of Science HEP research grants totaling: **\$47,507,892**  
*Grants to researchers in your State from the DOE Office of High Energy Physics*
- DOE Office of Science contracts totaling: **\$61,090**  
*Contracts with companies in your State, primarily related to the operation of DOE National Laboratories*
- NSF MPS research grants totaling: **\$332,561,769**  
*Grants to researchers in your State from the NSF Directorate for Mathematical and Physical Sciences*



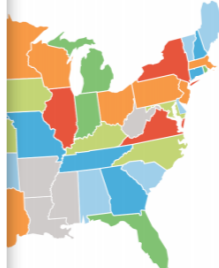
**Fernanda Psihas**  
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P.O. Box 500 - MS 220  
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Phone: 218 343 0747  
E-mail: fernanda.psihas@gmail.com*

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Representatives  
Office Building  
5

**March 25, 2019**

8, Fermilab spent \$183.5 million in the United States to purchase goods and services in 44 of Columbia. Please find below specific information about goods and services purchased State or district during this time.



Amount Range	States
\$1,000 - \$100,000	Alabama, Delaware, Hawaii, Idaho, Maine, Montana, Nevada, North Dakota, Oklahoma, South Carolina, Vermont
\$100,000 - \$500,000	Arizona, Connecticut, Georgia, Missouri, Nebraska, New Hampshire, Tennessee, Utah
\$500,000 - \$1 million	Iowa, Kansas, Kentucky, Maryland, North Carolina
\$1 million - \$3 million	Florida, Indiana, Michigan, New Mexico, Oregon, Rhode Island
\$3 million - \$5 million	Colorado, District of Columbia, Massachusetts, Minnesota, New Jersey, Ohio, Pennsylvania, Texas, Washington, Wisconsin
More than \$5 million	California, Illinois, New York, South Dakota, Virginia

**Minnesota's 5<sup>th</sup> Congressional District**

Vendor	ZIP Code	Amount (\$)
Minnesota, University Of	55455	2,366,234
Minnesota, University Of	55455	74,000
Itasca Consulting Group Inc	55401	20,000
Minco Products Inc	55432	9,302
Best Buy Inc	55423	6,008
Twin City Plating Inc	55413	1,950

# *Year 3: Finishing Touches*

For 2020, we want to finalize a base version, with targeted improvements.

## **The goals of WHIPS2.0:**

Aid users to achieve prompt meeting scheduling.

Aid managers to re-assign offices and track idle meeting assignments.

Tie loose ends related to database structure and manager controls.