Pathways of Digital Citizens: Using a Public API to Query Government Website Analytics Data

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Step 1: We built a User Interface to do an API Query

See also: https://open.gsa.gov/api/dap/

Step 2: Query all "site" data to identify ULRs of interest

Total Visits and Volatility (10 days)

Chart shows 9 URLs out of 3,140.

Step 3: Create Visualizations

* Strengths 👍

- This Digital Analytics Program (DAP) data, https://analytics.usa.gov/, provides data on government website visits and encourages transparency.
- The public API allows users to query DAP data from earlier months and years.
- DAP data helps agencies design user-friendly websites.

* Challenges 👎

- The API times out for large queries. With our current user interface, data access can be difficult and time consuming.
- A model based on querying assumes you know what to search for. Why not just make the data publicly available?
- Data stored on .gov website only. Is this consistent with FDLP principles?

Government Website Visits Jan-Sept 2020

See more at: https://library.pfw.edu/dapdot

Visits to Airnow.gov

Visits to Dept. of Labor & Travel.state.gov
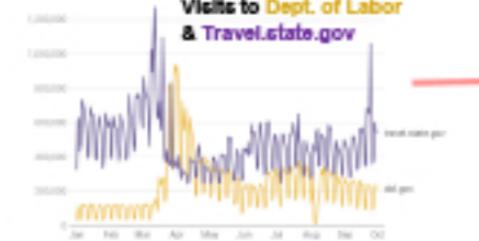
Visits to CDC.gov and IRS (Get My Payment)
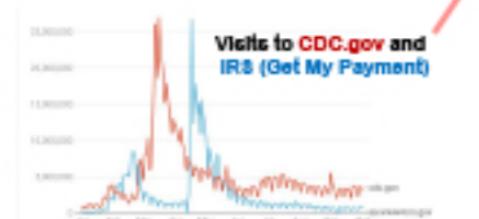
What did we observe?

Wildfires and airnow.gov visits
Read more about Airnow.gov at https://www.airnow.gov/about-airnow/
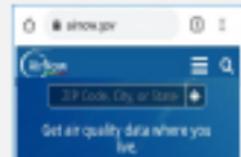
Large Fluctuations During COVID

- Dramatic changes in visits to cdc.gov, sa.www4.irs.gov (get my payment), dol.gov, and travel.state.gov in March & April 2020
- While these trends may not be surprising, it shows how intimately connected these websites can be to issues of the day.
- The patterns across these URLs both overlap and diverge. How does the 2020 data compare to the 2019 data?

Conclusion

DAP data (https://analytics.usa.gov/) tells important stories about how we the people interact with the government as digital citizens. How should this data be made accessible and archived? Could this data inform efforts to better preserve government websites? By building a user interface for the API (still in production, see: https://library.pfw.edu/dapdot), this project aims to lower barriers of access and to support citizens' rights to government information within an "electronic democracy."