mapping.news

a project to describe local journalism in realtime

august 8, 2025 — nick deMarchis   oxford media policy summer institute

agenda

1 **importance of local news**
- trust
- coverage

2 **decline of local news**

3 **gaps in the field**

4 **my tool**

5 **methodology**
and areas for further research

6 **early results & areas for improvement**

7 **similar work & stakes**

1.
local news in the US is vital

1a.

local news is more **trusted** in the US, and Americans believe it is **important**

Americans – especially Republicans – tend to trust local news more than national news

*% who say they have **a lot of/some trust** in the information that comes from ___ news organizations, by party*

- Local
- National

	All U.S. adults	Rep/Lean Rep	Dem/Lean Dem
Local	74	66	83
National	59	40	78
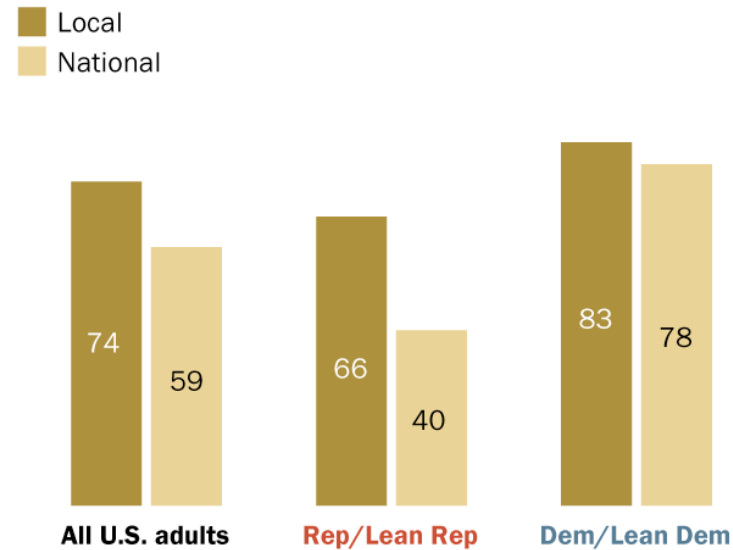
Note: Other response options included "Not too much" and "Not at all." No answer responses are not shown.
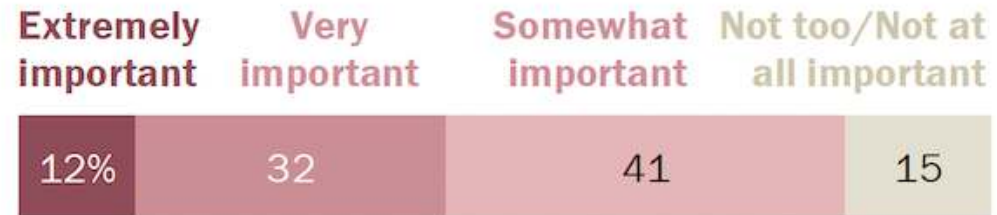Source: Survey of U.S. adults conducted Sept. 16-22, 2024.

PEW RESEARCH CENTER

1a.
local news is more <u>trusted</u> in the US, and Americans believe it is <u>important</u>

Most Americans say local media are at least somewhat important to their community

% of U.S. adults who say they think local news outlets are ___ to the well-being of their local community

Extremely important	Very important	Somewhat important	Not too/Not at all important
12%	32	41	15

Note: Respondents who did not answer are not shown.
Source: Pew Research Center survey of U.S. adults conducted Jan. 22-28, 2024.
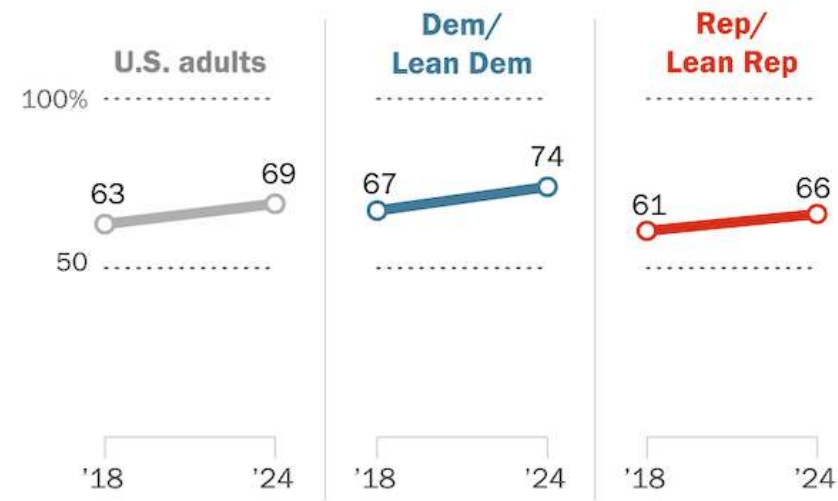"Americans' Changing Relationship With Local News"

PEW-KNIGHT INITIATIVE

1a.
local news is more <u>trusted</u> in the US, and Americans believe it is <u>important</u>

Majorities of both parties say local journalists are in touch with their community

% of U.S. adults who say local journalists in their area are mostly in touch with their community

Source: Pew Research Center survey of U.S. adults conducted Jan. 22-28, 2024.

"Americans' Changing Relationship With Local News"

PEW-KNIGHT INITIATIVE

1b.

local news provides unique coverage for communities

- **local budget negotiations**

  news presence proven to reduce waste, fraud and abuse when covered by beat reporter

- **local elections**

  news presence proven to increase voter turnout

- **high school sports scores**

  for students getting recruited for college scholarships

- **reduces community cost of borrowing**

  news presence proven to reduce bond interest rates

- **etc. etc. etc.**

- **preaching to the choir**

Darr 2018, Gao 2020, Hayes 2015

2.

local news in the US is in decline

print subscriptions haven't been profitable since the mid-2000s

local news in the US is in decline

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The Big Idea Series / Democracy Under Attack

Journalism's Market Failure Is a Crisis for Democracy
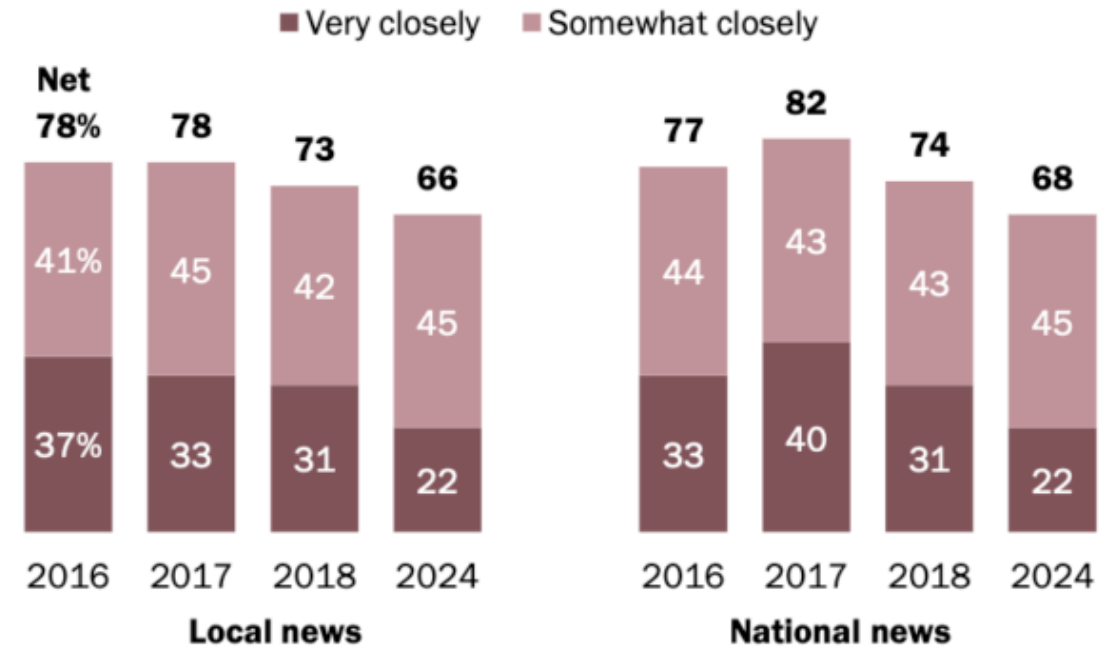
by Victor Pickard

March 12, 2020

Local journalism is failing in the United States. Many of us learn in school that a free society requires a free press, but we

local news in the US is in decline

Fewer Americans are closely following local and national news

% of U.S. adults who follow local news/national news ...

■ Very closely   ■ Somewhat closely

Local news

	2016	2017	2018	2024
Net	78%	78	73	66
Somewhat closely	41%	45	42	45
Very closely	37%	33	31	22

National news

	2016	2017	2018	2024
Net	77	82	74	68
Somewhat closely	44	43	43	45
Very closely	33	40	31	22

Source: Pew Research Center survey of U.S. adults conducted Jan. 22-28, 2024. "Americans' Changing Relationship With Local News"

PEW-KNIGHT INITIATIVE

local news in the US is in decline

Total Number of Local U.S. Newspapers: 2005 and 2024

There has been a net loss of 3,300 papers since 2005.

■ Nondaily ■ Daily
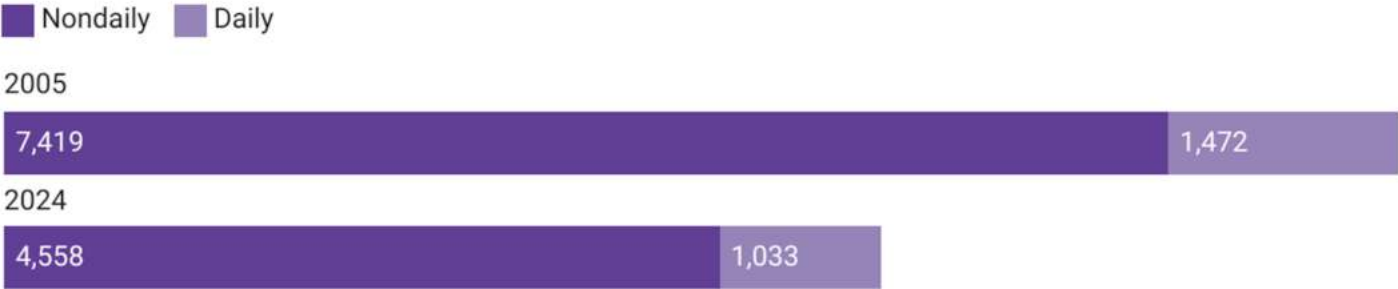
2005
7,419 | 1,472

2024
4,558 | 1,033

Chart: Medill Local News Initiative • Source: Local News Initiative Database • Created with Datawrapper

local news in the US is in decline

Newspaper Employment: 2005 & 2023

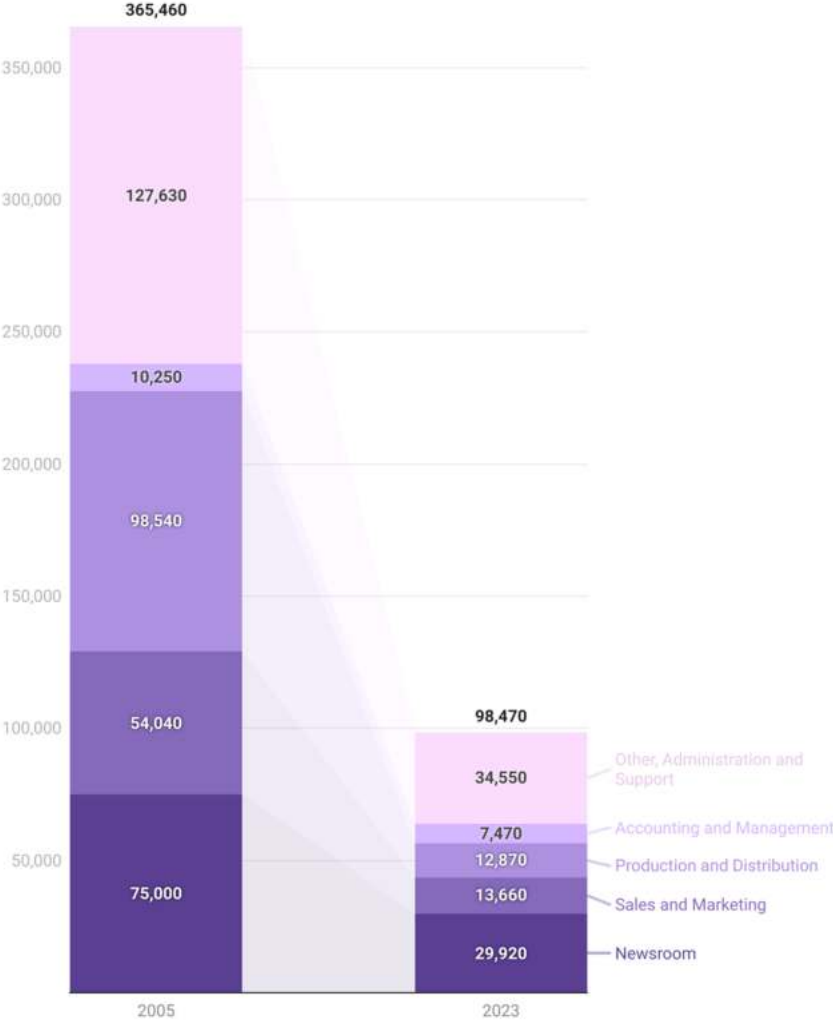Total newspaper employment has decreased by more than 70% over the past fifteen years.

2005 — 365,460
- 127,630
- 10,250
- 98,540
- 54,040
- 75,000

2023 — 98,470
- Other, Administration and Support — 34,550
- Accounting and Management — 7,470
- Production and Distribution — 12,870
- Sales and Marketing — 13,660
- Newsroom — 29,920

Chart: Medill Local News Initiative • Source: Bureau of Labor Statistics • Created with Datawrapper

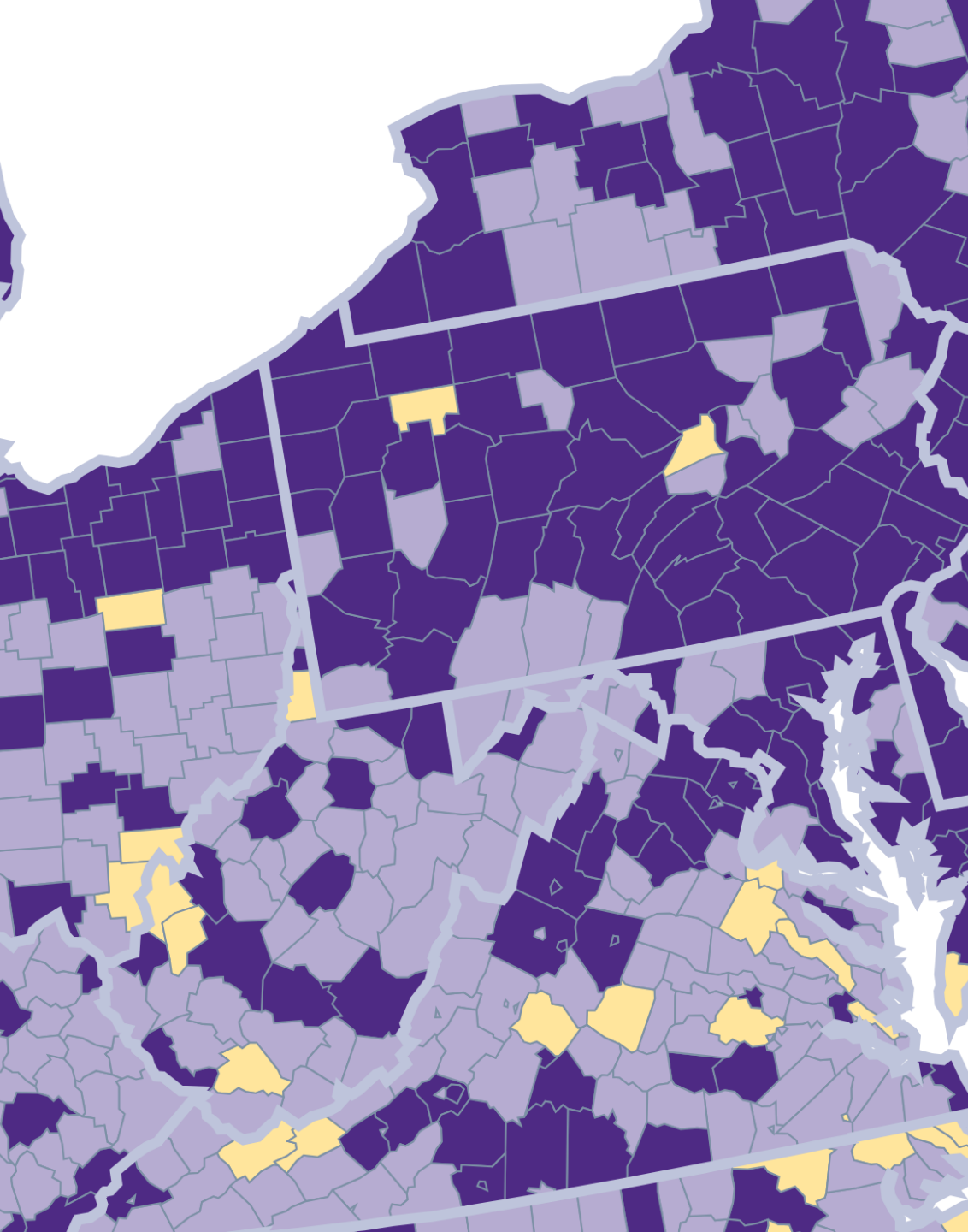# news deserts have proliferated as a result.

Local News Landscape

There are 201 counties in the United States with no news outlets. There are 1,563 counties with only one.

Legend:
- No news outlets
- 1 news outlet
- 2 or more news outlets
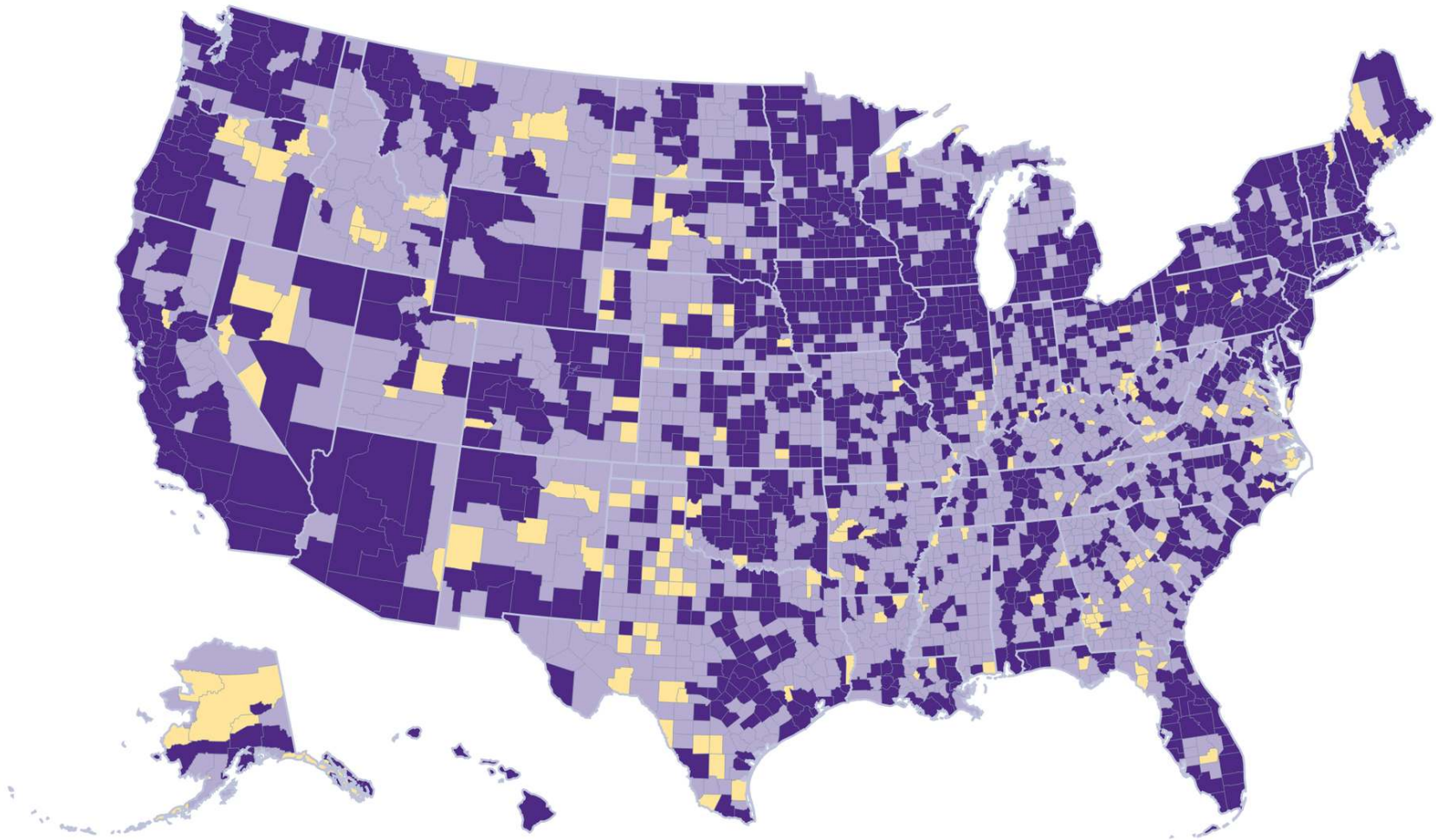
3.
gaps in the research

- **really great work in giving a clear nationwide picture of what areas are well-served and which aren't**

- **however, most existing research is focused on county-level coverage**
  - based on the headquarters for outlets, not necessarily their stated coverage area
  - in addition, stated coverage area often differs from actual coverage area

- **coverage most important to communities is inherently local — whether to local sports stadiums, city halls or fire stations**

what if we could see the coverage communities are receiving in realtime?

ok, so i built a tool that

- **maps the locations mentioned in local news**

- **in NYC**
(just to start)

- **in realtime**

- **on a public-facing website**
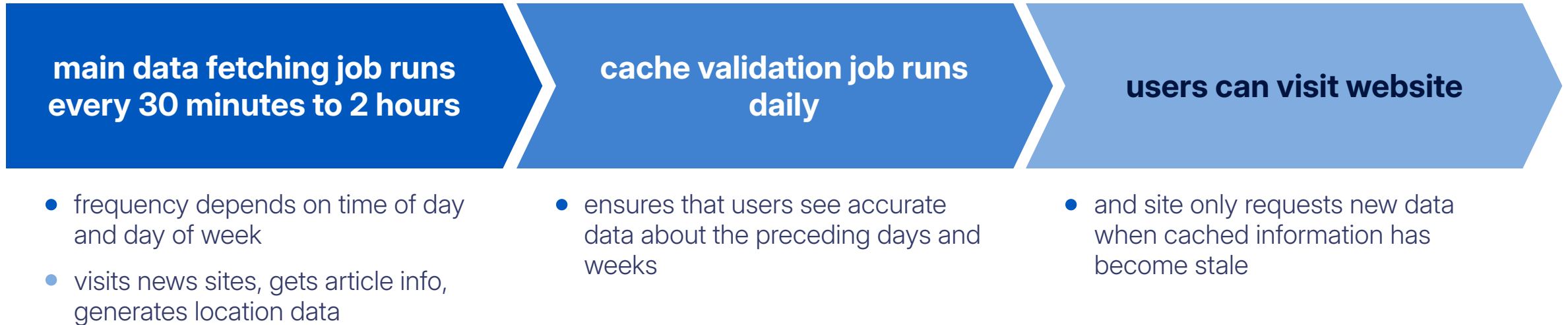
- **and i have about seven months of data :)**

4.
live demo!

5.
methodology

process for getting and serving data

main data fetching job runs every 30 minutes to 2 hours

- frequency depends on time of day and day of week
- visits news sites, gets article info, generates location data

cache validation job runs daily

- ensures that users see accurate data about the preceding days and weeks

users can visit website

- and site only requests new data when cached information has become stale

data collection

find new articles — 1

scrape their text contents — 2

extract locations mentioned with LLM — 3

geocode locations — 4

verify geocoded location against string — 5

add to database and mark article as read — 6

what is a location?

too broad

- counties, states, regions or countries
  - this would definitely be possible to do later, but
- places with multiple meanings
  - e.g., NYC has 2 subway stops called 36th Street on the same subway line

too specific

- locations of any individuals or their places of residence
- time-restricted locations (e.g. a temporary festival)
- locations that require context-specific information
- effectively, anything that can't be reasonably inferred from the text of any given news article

just right

- addresses
- "points of interest"
- someone familiar with the area could get there without further directions (e.g., the corner of W 34th St. and 6th Avenue)
- institutions with multiple buildings that often don't have more specific info (e.g., hospitals, universities)

why realtime?

"virality" 🤢

this map responds to what's going on in realtime. it maintains relevance and can gain repeated visitors, while also providing a look up to 3 weeks back.

quick response

allows communities to see new news or identify known gaps more quickly and communicate with community peers or journo contacts, respectively.

modifiable

i don't have to wait to recollect a full dataset to display a new bit of information or filtering. any changes can go up as quickly as the news does.

fun

i really liked building this project with live data and quick feedback loops.

6.
early results & areas for growth

early results!

- **mostly anecdotal at this point since i haven't had a chance to crunch the data** 🙃

- **visible difference between those with hyper-local outlets and those without**
  - with: Canarsie and Bushwick
  - without: Brownsville and Kew Gardens

- **dots become *huge* with crime coverage**
  particularly high-profile violence, whose coverage is driven by the Post reporting on the same location for several days

areas for growth

filtering
- based on time period
- based on news outlet
- etc.

topic analysis
- which articlces about what topics (e.g. crime, business, sports, etc.)?

outlet analysis
- which outlets are covering which areas?
- which outlets have beat reporters for areas, vs. only occasional coverage?

population analysis
- associate article locations with population information, and identify communities with less coverage

better LLM validation

and running on custom hardware :)

crowdsource corrections

concerns

this shouldn't be another Citizen

Citizen is a video-driven crime-reporting app that shares data with the NYPD. realtime info is important, but this meta-analysis isn't designed to be used in law enforcement activity.

not necessarily transferable to other areas

the success of this proof-of-concept has relied on NYC's rich, hyper-online media environment.

however, the analysis methods and data pipelines could probably be expanded more broadly with low-moderate effort.

cost

this is surprisingly expensive to run (with the decisions i made thus far)! economies of scale are great, but there will likely need to be technical tradeoffs or increased maintenance to scale to the country and other areas.

7.
similar work & stakes

Tow Center for Digital Journalism

- **Tow Center is analyzing the crossover between 3 regional outlets in North Carolina with similar methods**
  - however, they're not doing it in realtime :)

- **they're also doing a broader inventory of the journalism environment with county-level data**
  - but drilling in with a lot more interesting info that required a lot of original work on their part

understanding where coverage occurs can allow for:

- **better understanding of the journalism landscape**

- **allow outlets to divert resources to less-served areas**

- **communities to advocate for themselves, and build momentum for local coverage**

thank you!

nickdemarchis.com

References

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