



Disaster Spending and Budgeting:

An Overview of Pew's Research

NAS Resilient America Roundtable, October 3, 2023

Big Picture: More Disasters, Higher Spending

Disasters are becoming more frequent, severe:

- From 2000 through 2021, at least one flooding event was reported in the U.S. on **8 out of every 10 days**.
- From 2017 to 2021, the **average annual acreage burned by wildfires was 68% higher** than 1983 to 2016.

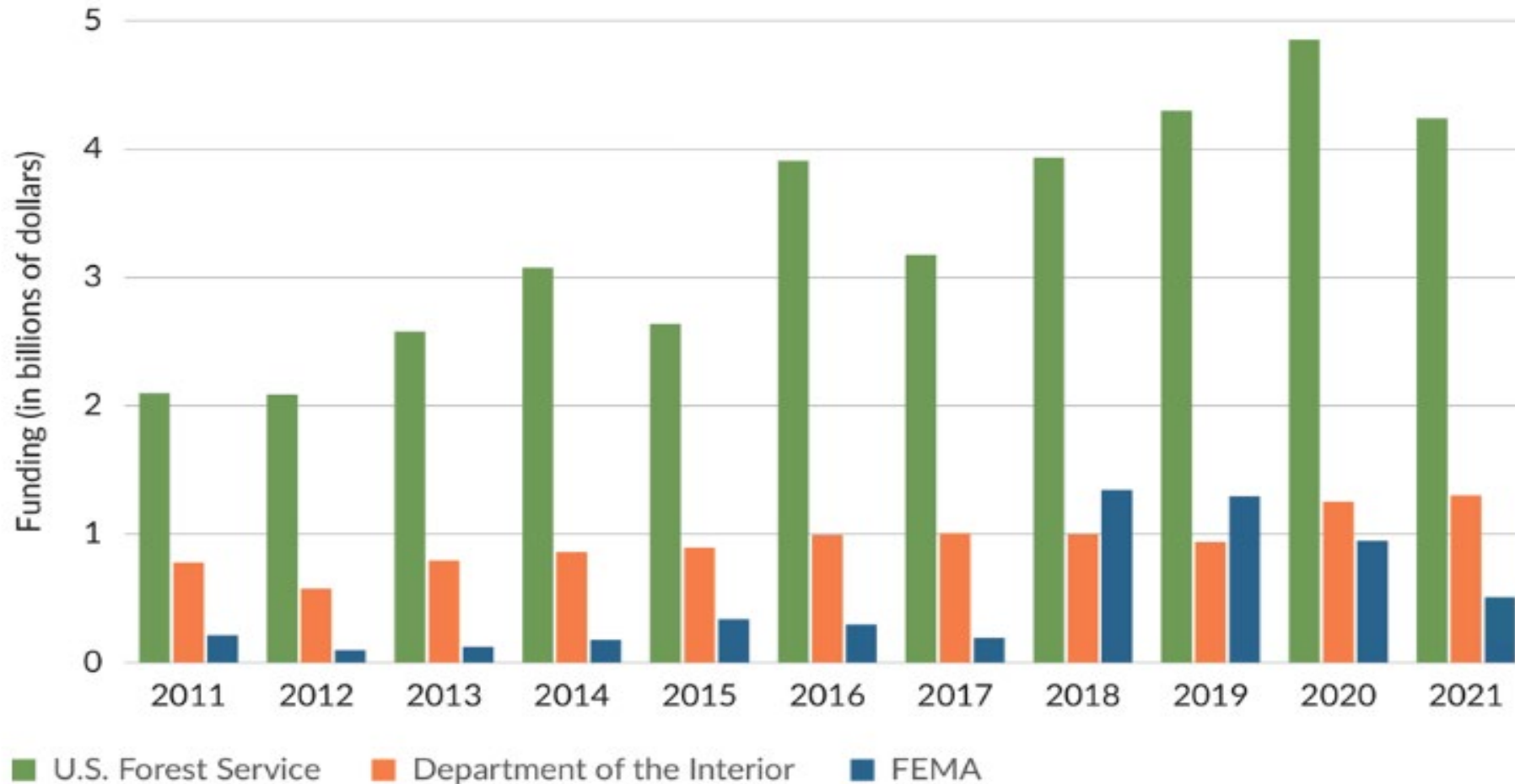
Costs are growing:

- Rise of “billion-dollar disasters”

Government spending is on the rise: The Department of Interior (DOI) and the U.S. Fire Service (USFS) **doubled their combined spending on wildfires** between 2011 and 2020.

Federal spending on wildfire management has grown significantly since FY 2011

Funding over time for wildfire management by the USFS, DOI, and FEMA



Key questions and challenges

Getting the lay of the land:

- What do governments pay for when it comes to disaster assistance?
- Who pays for it?
- How much are governments spending?

Understanding challenges:

- How do governments budget to ensure funding is available?
- How are current budgeting and spending practices holding up to rising risk?

Identifying and advancing solutions:

- As current approaches falter, what steps can we take?

Governments spend on many disaster-related activities

What do we pay for?

RESPONSE



RECOVERY



PREPAREDNESS



MITIGATION



Wildfire management activities

These activities happen, before, during and after fires

Before



Prevention
Mitigation
Preparedness

During



Suppression

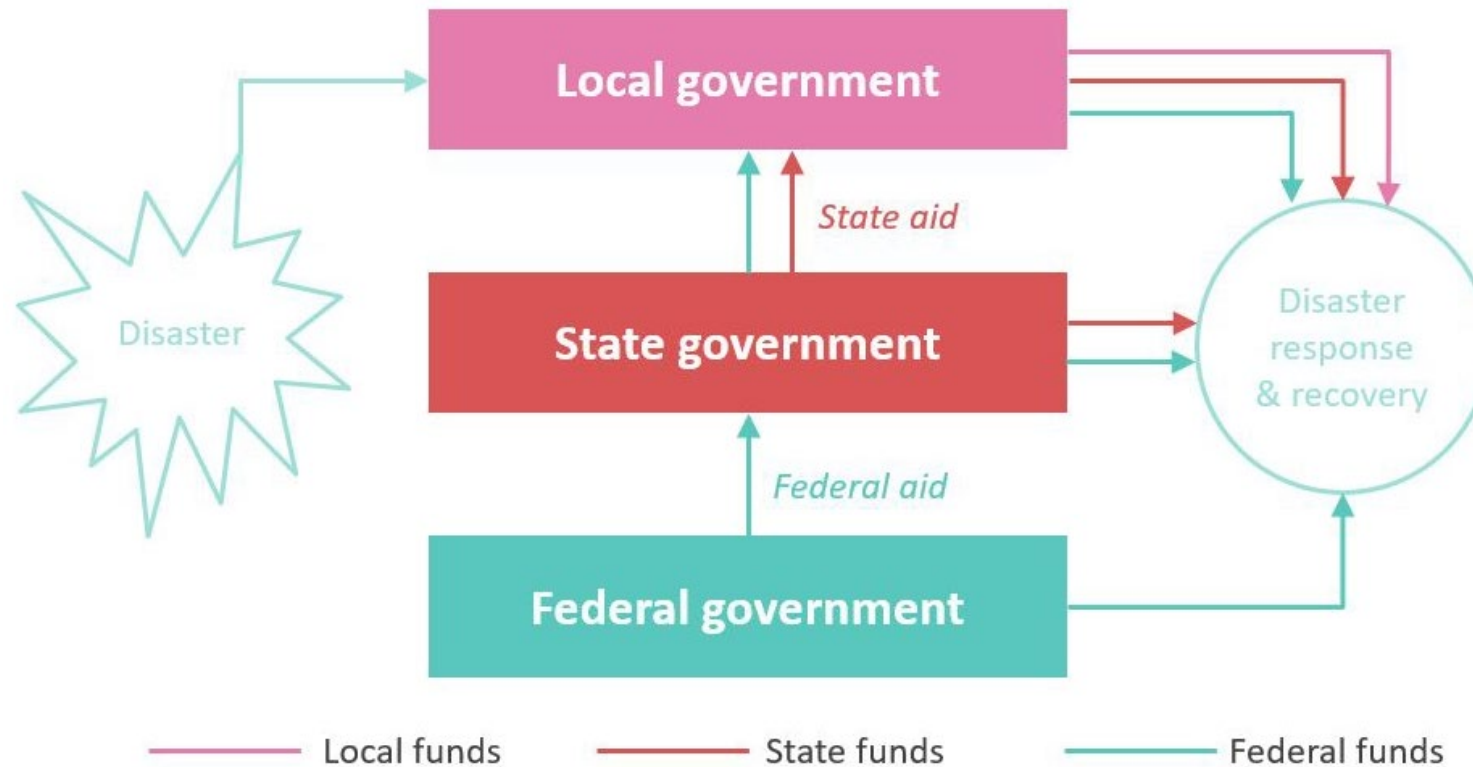
After



Post-fire mitigation
Recovery

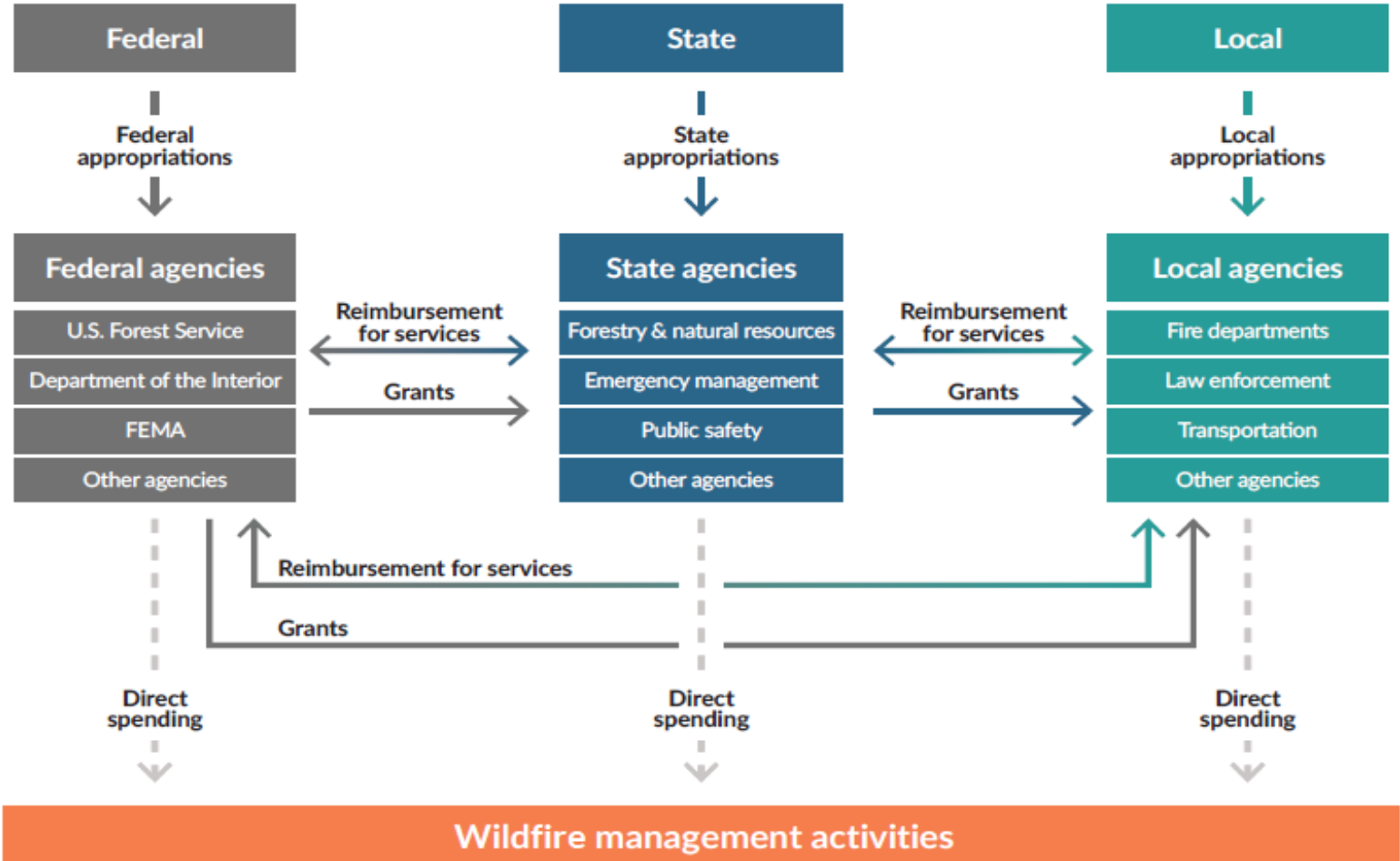
Disaster Spending Involves all Levels of Government

Who pays for disasters?



Wildfire management spending is highly intertwined

Flow of funding for reimbursements, grants, and direct spending among federal, state, and local agencies



Disaster Spending Happens Across Government Agencies

FEMA

Dept. of Housing and Urban Development

Small Business Administration

Department of The Interior

Army Corps of Engineers

NASA

Department of Commerce

Department of Defense

Department of Energy

Department of Transportation

Department of Agriculture

How much do governments spend?

Federal

- Some agency data available (e.g. FEMA's public assistance program spending increased by 23% when comparing the 2000-09 and 2010-19 decades)
- GAO's cross-agency estimates: more than \$460 billion since 2005 (likely an undercount)

State and local

- Mostly unknown
- One example: Washington state spent an annual average of \$24 million in state funds on wildfire suppression between 2010 and 2014. **For the period of 2015 to 2019, that average more than tripled to \$83 million.**

Pre- vs. Post-disaster

- Difficult to parse given data limitations and lack of tracking
- One estimate: \$7 from the federal government to disaster recovery for every dollar in resilience spending

Why focus on states?

Balanced budget requirements

- Unlike federal government spending cannot exceed revenue

Essential roles

- Assistance in smaller disasters
- Cost-shares for primary federal grants
- Source of additional capacity, organizational structure for communities

Federal uncertainty

- More responsibility could shift to states in the future

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How do states budget for disasters?

Preemptive

- Statewide disaster accounts
- Rainy day funds

Responsive

- Supplemental appropriations
- Transfer authority

Variable

- State agency budgets

Use of each mechanism, by state



How are budgeting practices standing up to rising risk?

Findings from wildfire research

Budgeting for suppression and recovery: States struggle to budget for unpredictable and growing costs of fighting and rebuilding after wildfires.

Budgeting for mitigation: States face barriers to investing in mitigation activities that can reduce fire risk in the long-term.

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What can be done?



Measure

Improve comprehensive disaster spending data



Manage

Assess and improve budgeting practices



Mitigate

Prioritize and implement mitigation

Measure Disaster Spending

Tracking and reporting spending data

States currently don't comprehensively track spending:

- Better data could drive budget planning and stability
- Necessary to inform investments in mitigation

Barriers to tracking:

- Spending happens before, during, and after fires
- Tracking spending across agencies is difficult
- Funding comes from multiple sources

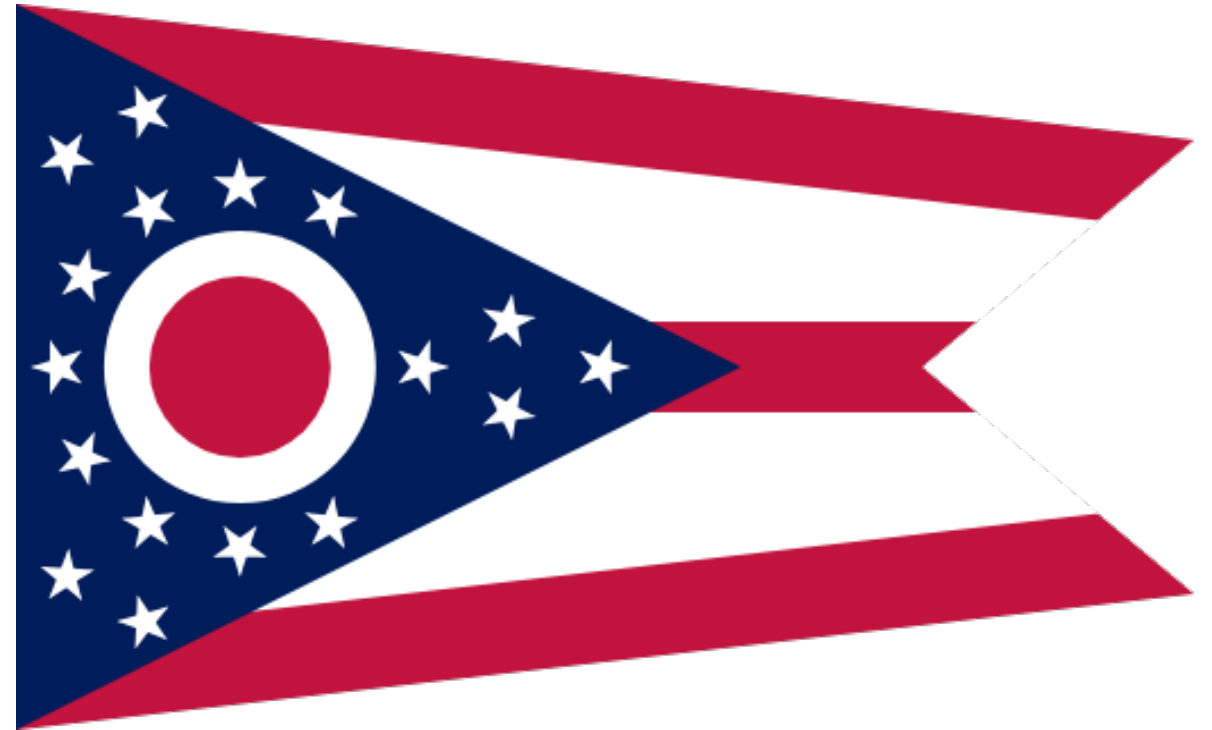


Measure Spending

Cross-agency disaster spending reporting

Ohio

- A policy requires agencies to begin tracking expenditures whenever an emergency operations center is opened to deal with disaster.
- Expenditures are collected by Ohio EMA and reported to the budget office.



Measure Spending

Tracking spending beyond suppression

California

- California has a public facing dashboard that shows their wildfire mitigation investments. Metrics tracked include location and type of project.



Measure Spending

Federal level also needs improvement

Wildland Fire Management and Mitigation Commission:

- Recent recommendations call for cross-agency tracking of wildfire spending



Manage the Budget

Evaluating current processes and practices

Preemptive budgeting vs. supplemental funding

- Making disaster costs part of the regular budget process
- Reducing disruption of finding supplemental funding
- Setting aside funding is not without challenges

Integrating risk information

- Moving away from flat appropriations
- Providing evidence base for pre-emptive budgeting and mitigation
- Could potentially drive investment where need is greatest

Mitigate Risk

Federal and state mitigation investments are growing. The Infrastructure Investment and Jobs Act includes **\$1.9 billion** for mechanical thinning prescribed fires, and other mitigation programs. The Inflation Reduction Act contained an additional **\$1.8 billion** for hazardous fuels reduction.

\$3 billion awarded for FY 2022 Building Resilient and Infrastructure and Communities Program

California passed climate packages with a combined **\$2.7 billion (in 2021 and 2022)** appropriated over a four-year period for wildfire and forest resilience.

Mitigate Risk

Barriers to mitigation persist (from wildfire research)

Challenges persist:

- Suppression crowds out mitigation
- Workforce capacity
- Technical capacity needed to utilize Federal funds
- Funding timelines

States are taking steps to overcome challenges:

- Funding mitigation separately
- Investing in suppression and mitigation workforce
- Augmenting local capacity
- Advancing funding ahead of federal reimbursements

Recommendations



Measure



Manage



Mitigate

Colin Foard

Manager, The Pew Charitable Trusts
cfoard@pewtrusts.org

Pew