Saving Lives with Big Data: Wildfire Prediction and Emergency Response

W1.1

After this video you will be able to..

- Give an example of sensor, organizational, and people-generated data used in wildfire analytics

- Explain to a friend why the integration of unexpected streams of data is critical to wildfire prevention and emergency response

Why important?

San Diego County, May 14, 2014

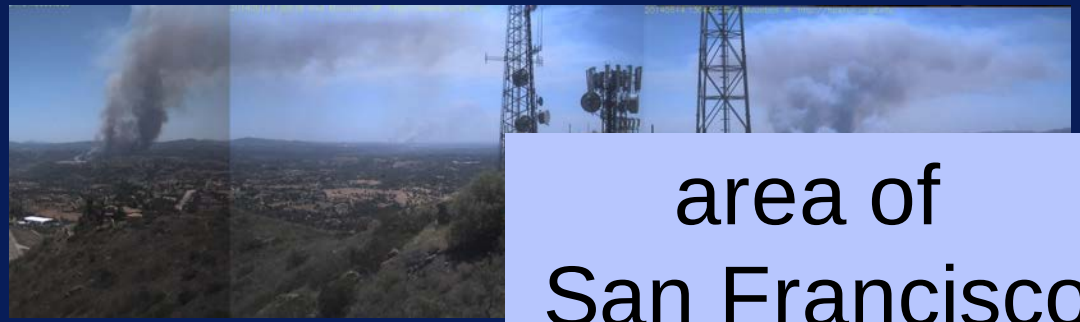
Why important?

San Diego County, May 14, 2014

14 fires burning

Why important?

San Diego County, May 14, 2014

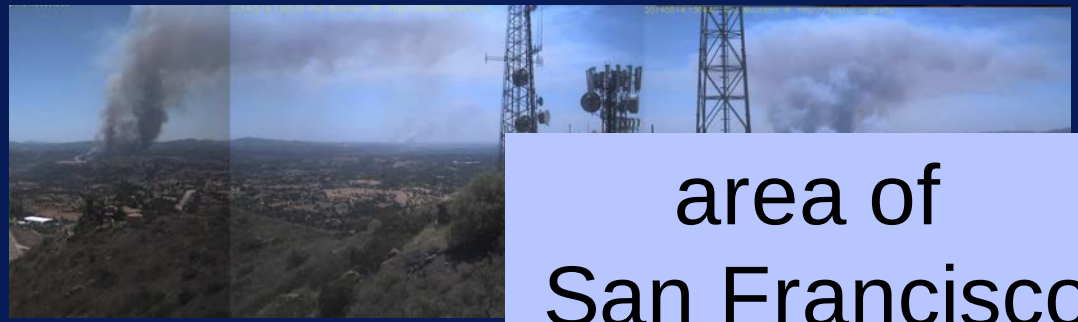


14 fires burning

area of
San Francisco

Why important?

San Diego County, May 14, 2014



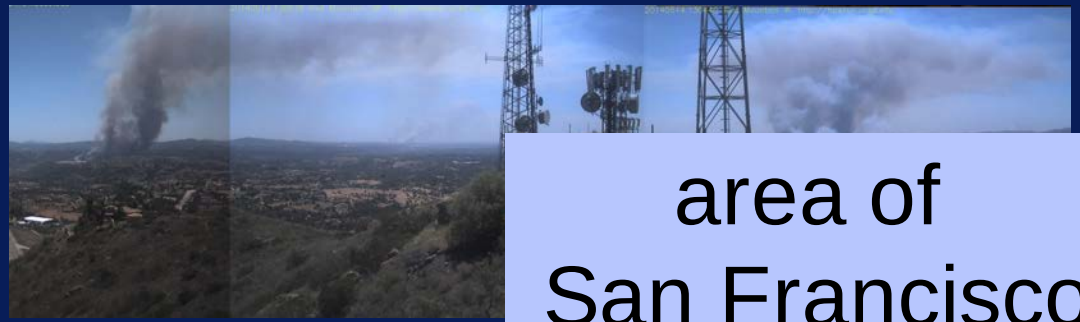
14 fires burning

area of
San Francisco

6 injured
+ 1 death

Why important?

San Diego County, May 14, 2014



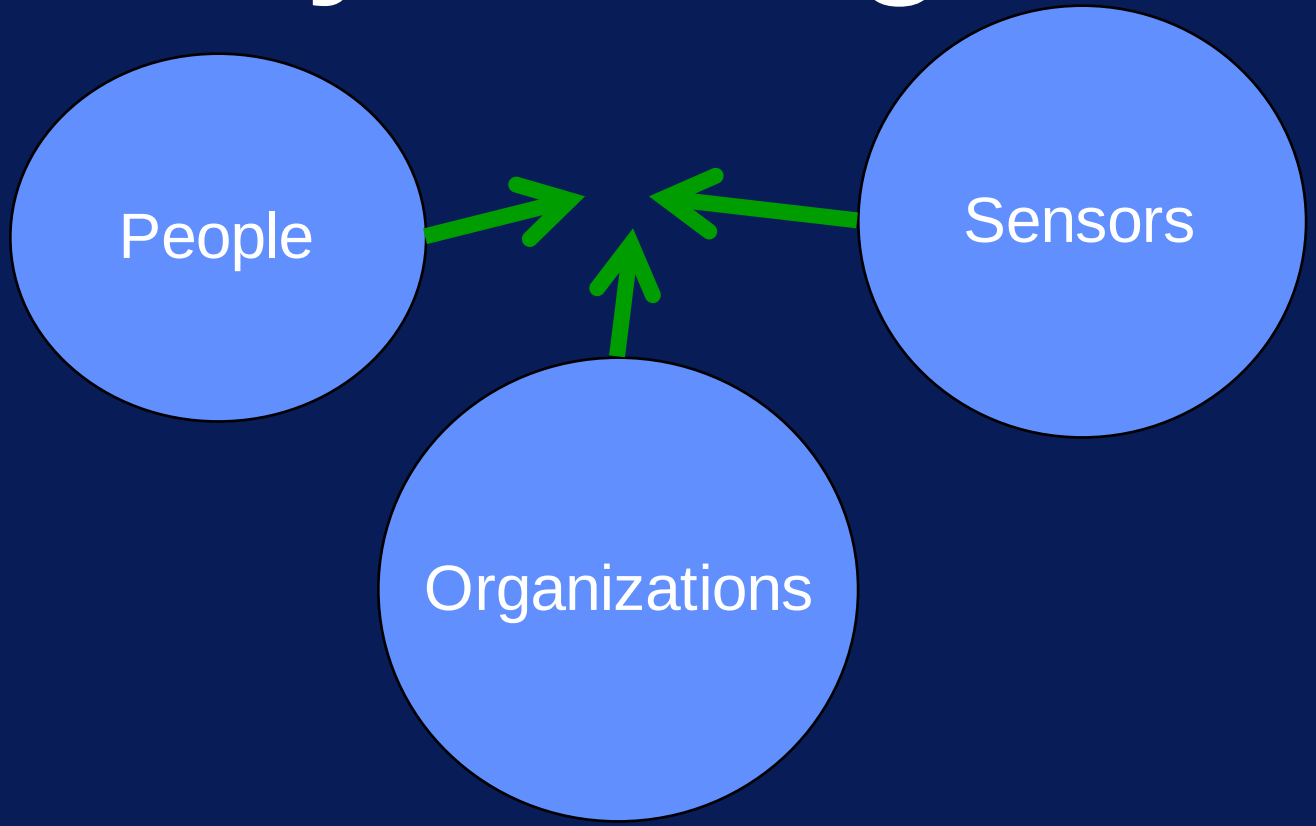
14 fires burning

area of
San Francisco

6 injured
+ 1 death

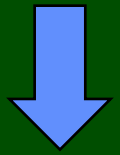
$60 million USD

Why can Big Data help?



Why can Big Data help?

Integration of diverse streams

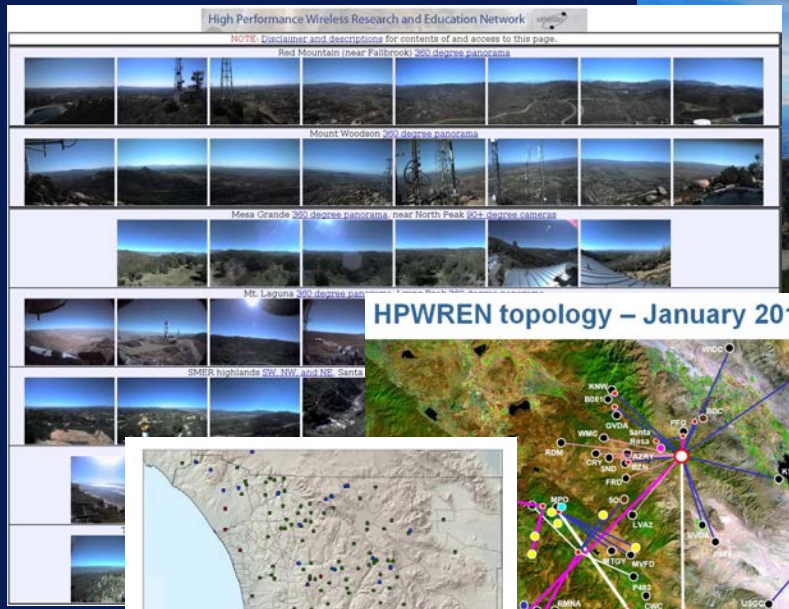


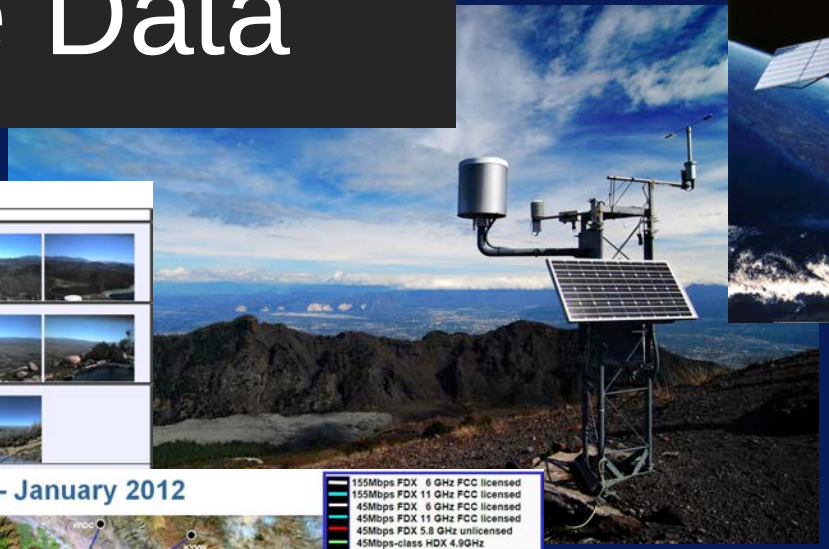
see new things

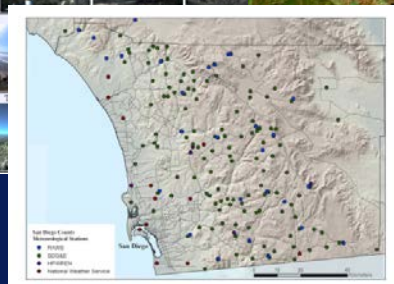
develop predictive analytics

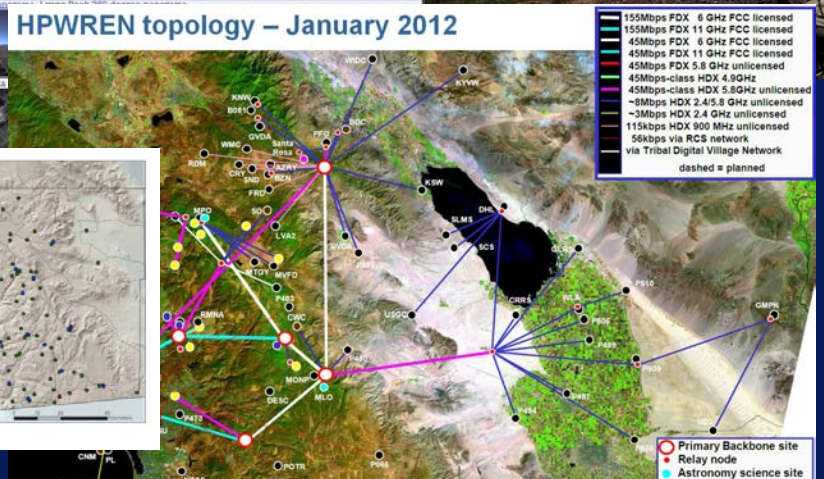
Diverse Data Sources

Machine Data

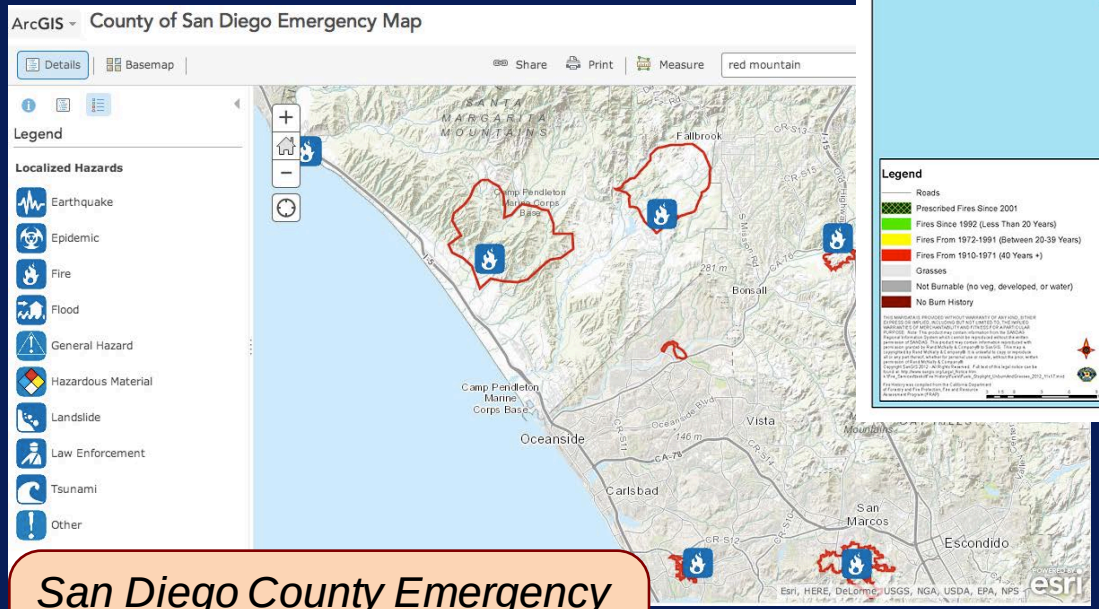


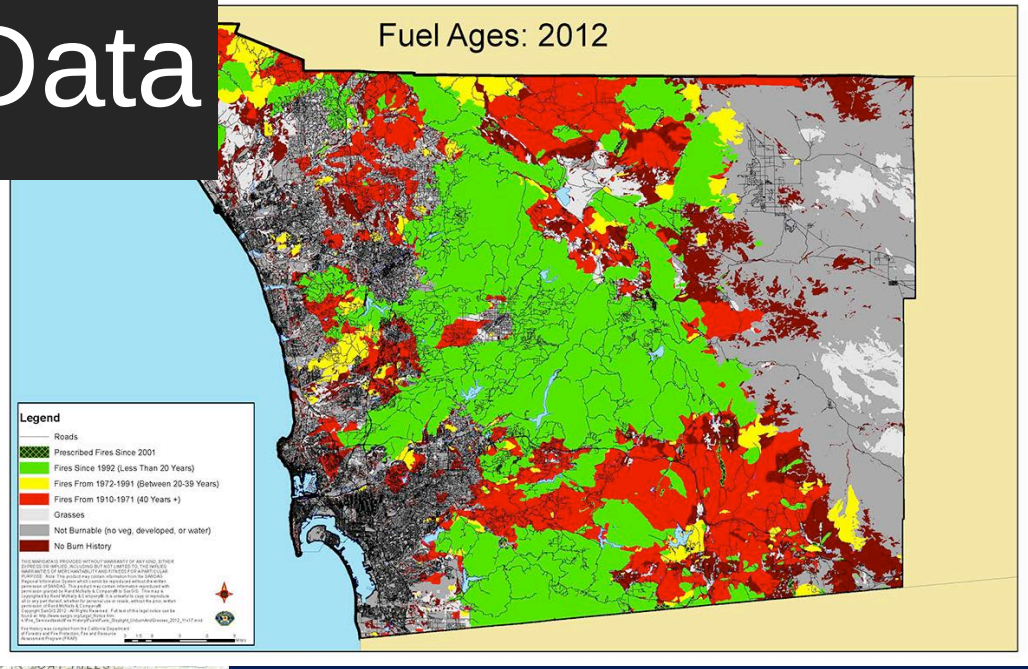






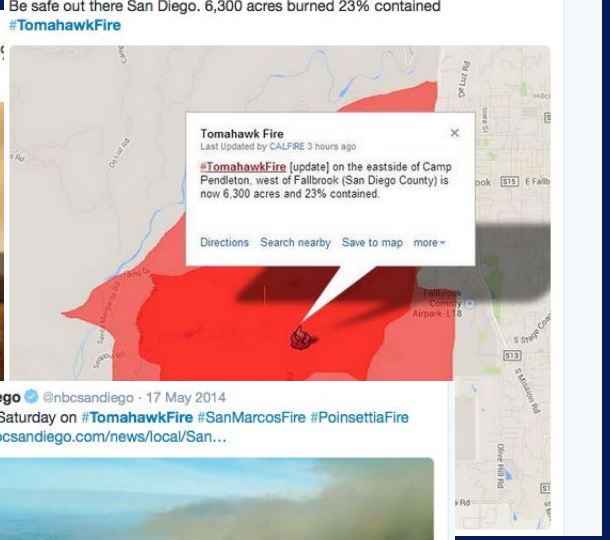
Organizational Data





San Diego County Emergency Map displaying fire perimeter information from NICS.

#NBC7 San Diego @nbcsandiego · 16 May 2014
UPDATE: #TomahawkFire: 6300-acre fire on east side of Camp Pendleton 23
contained on.nbc7.com/PzAWSI1


Be safe out there San Diego. 6,300 acres burned 23% contained
#TomahawkFire
Tomahawk Fire
Last Updated by CALFIRE 3 hours ago
#TomahawkFire [update] on the eastside of Camp Pendleton, west of Fallbrook (San Diego County) is now 6,300 acres and 23% contained.
Directions Search nearby Save to map more

Wow RT"@KTLA: San Diego fires: #CocosFire at 1,200 acres.; #TomahawkFire at 6,000 acres, . ktlane.ws/1gr0UkR "

#NBC7 San Diego @nbcsandiego · 17 May 2014
Our update for Saturday on #TomahawkFire #SanMarcosFire #PoinsettiaFire #CombatFire nbcsandiego.com/news/local/San…
Saturday Update: San Diego Fires
The latest on the San Diego fires as of Saturday, May 17, 2014.

People

Big Data
WIFIRE
Monitoring
Visualization
Fire Modeling

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Wildfire Command Centers of the Future