

Tools for Identifying Asset Conflicts in GIS and Planning Work Cooperatively

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- ✓ Overview of Conflict Identification
 - Motivation
 - SB1 & PG&E
- ✓ Using ArcGIS Online for Collaboration
- ✓ Demo
- ✓ Conclusions & Future State



✓ Motivation

- Desire to understand work happening within PG&E and other asset owners
 - Visualize work in the future
 - Visualize conflicts with planned work and other assets
 - Plan work cooperatively
 - ✓ “be there when we’re there” or “be gone when they’re there”
- California SB1
 - Major driver for planning work
 - Municipalities will create additional moratoriums through SB1



✓ Goals

- Reduce gas and electric projects created from SB1 work
- Apply principles to work with local municipalities / operators
- Forecast workload 5+ years
- Save everyone time and \$\$



A better transportation future



By 2027, Caltrans will repair or replace



17,000 MILES
OF PAVEMENT



55,000 CULVERTS
OR DRAINS



7,700 SIGNALS, SIGNS
AND SENSORS



500 BRIDGES



Overview of SB 1 Investments



SB 1's investment in transportation is split equally between the state and cities and counties.



\$26 Billion for Cities and Counties



\$26 Billion for State Highway System



Local Streets and Roads



Repairs to Local Streets and Roads: **\$1.5 billion**

Addresses years of unfunded road maintenance, rehabilitation and critical safety projects. Invests in “Complete Streets” projects uniquely tailored to the needs, preferences and functions of the people who live there.



Matching Funds for Local Agencies: **\$200 million**

Supports the investments cities and counties have made in their own regions through voter-approved transportation tax measures.



Local Planning Grants: **\$25 million**

Addresses community needs by providing support for planning that may have previously lacked funding. Good planning will increase the value of transportation investments.

ArcGIS Online Portal



✓ Secure Hosting

- ISO 27001
- FedRAMP
- SSAE16 SOC1 Type 2
- Managed Logins
- Group Sharing / Permissions

✓ Flexible Sharing

- Can federate data with existing AGOL Orgs, ArcGIS Portal
- Control view and edit access
- Quick platform creation

✓ Simple Data Management

- Upload your planned work, we (and AGOL) will do the rest

Home Gallery Map Scene Groups Content Organization

PG&E

Pacific Gas and Electric Company®

REBUILDING CALIFORNIA SB1

Conflict Dashboard

Moratorium Map

Statewide Conflicts Map

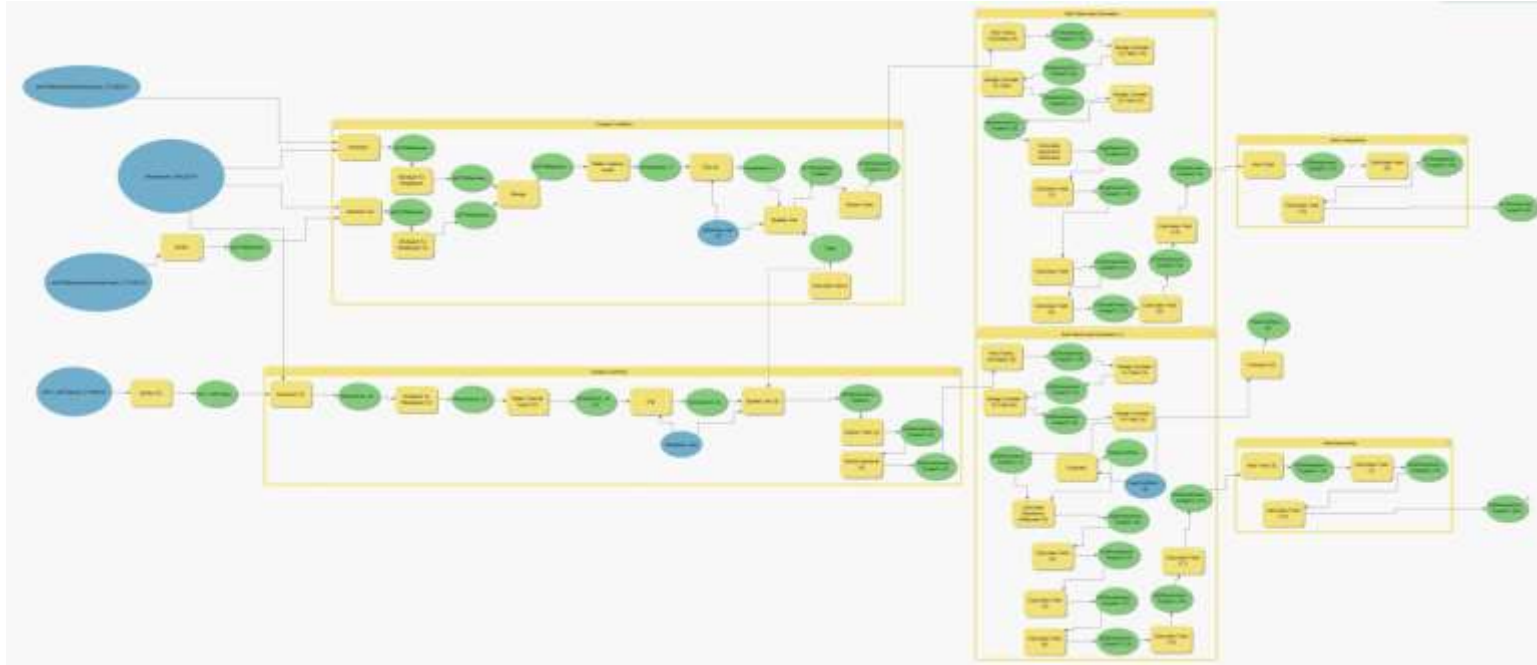
Web Maps By PG&E Division

Web Applications

Gallery

The maps found on this site contain conflicts identified between PG&E planned work, existing transmission/distribution gas assets, reg stations and the current California Senate Bill 1 (SB1) funded projects. Click on "Statewide Conflicts Application" to view all conflicts, or click the image "Web Maps By PG&E Division" to view individual division maps.

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✓ How it works

1. Assets uploaded
2. Planned work uploaded
3. Conflict Model run to create point conflicts
4. Dashboard populated, reports created

✓ How to interact

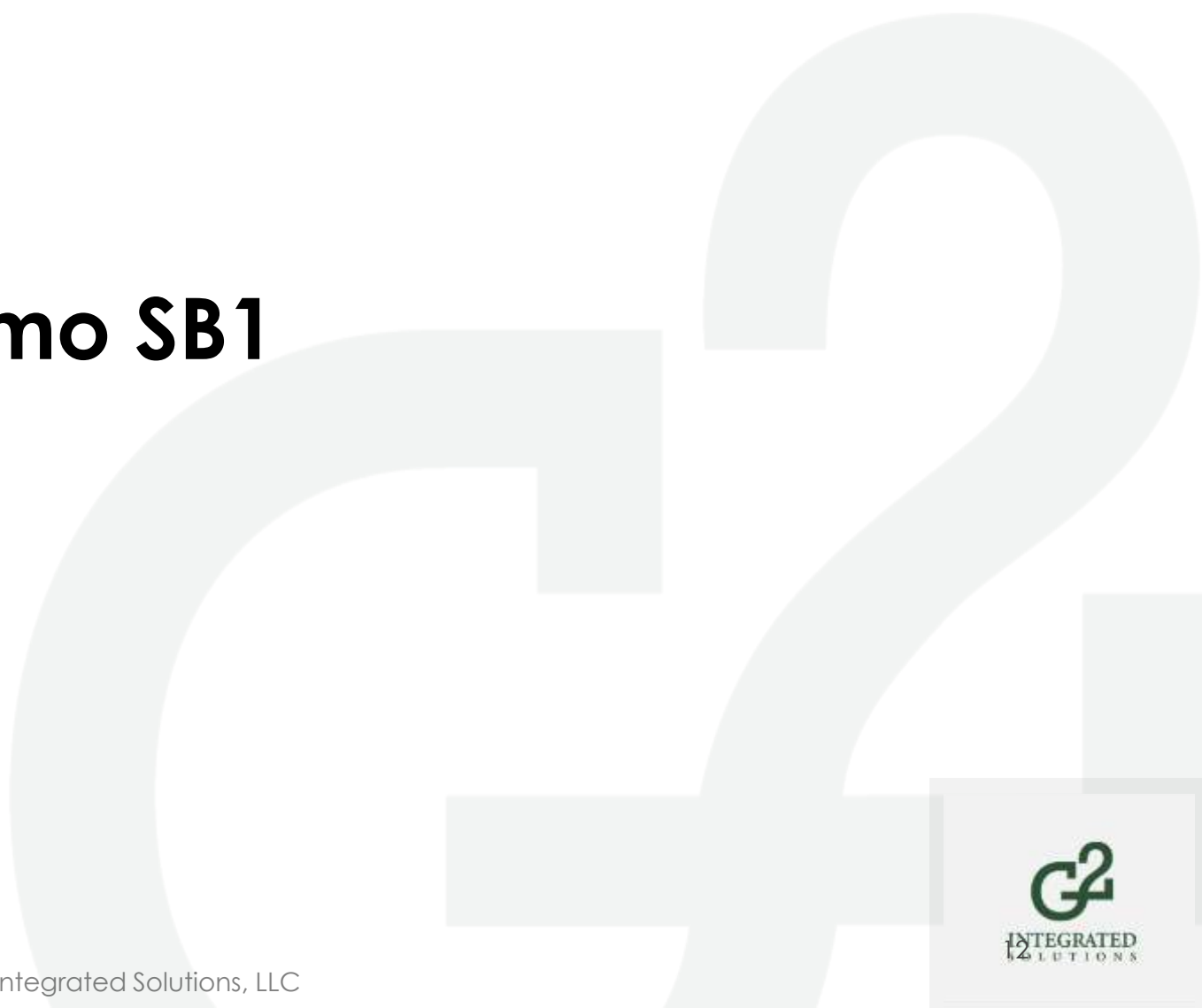
- Simple review workflow
- View conflicts in web map, or application
- View dashboards and export reports



- ✓ Requirements to Implement & Participate
 - Known spatial locations of planned work
 - That's it!
- ✓ What makes it easier to get started
 - GIS data for assets and planned work
 - Automated reporting or server based location for updates and schedules
- ✓ What makes it really, really easy
 - REST endpoints / Hosted Feature Services & Layers



Demo SB1



Conclusions & Future State



- ✓ ArcGIS online platform provides
 - Easy platform to view data and conflicts
 - Flexible Collaboration Environment
 - Access to data by Engineers and non-GIS users
 - \$ savings in avoided work
- ✓ Future state
 - Statewide (nation wide?) GIS Portal for planned work conflicts
 - Add time-aware planning online
 - Models → Geoprocessing tools
 - Hire a graphic designer

QUESTIONS

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