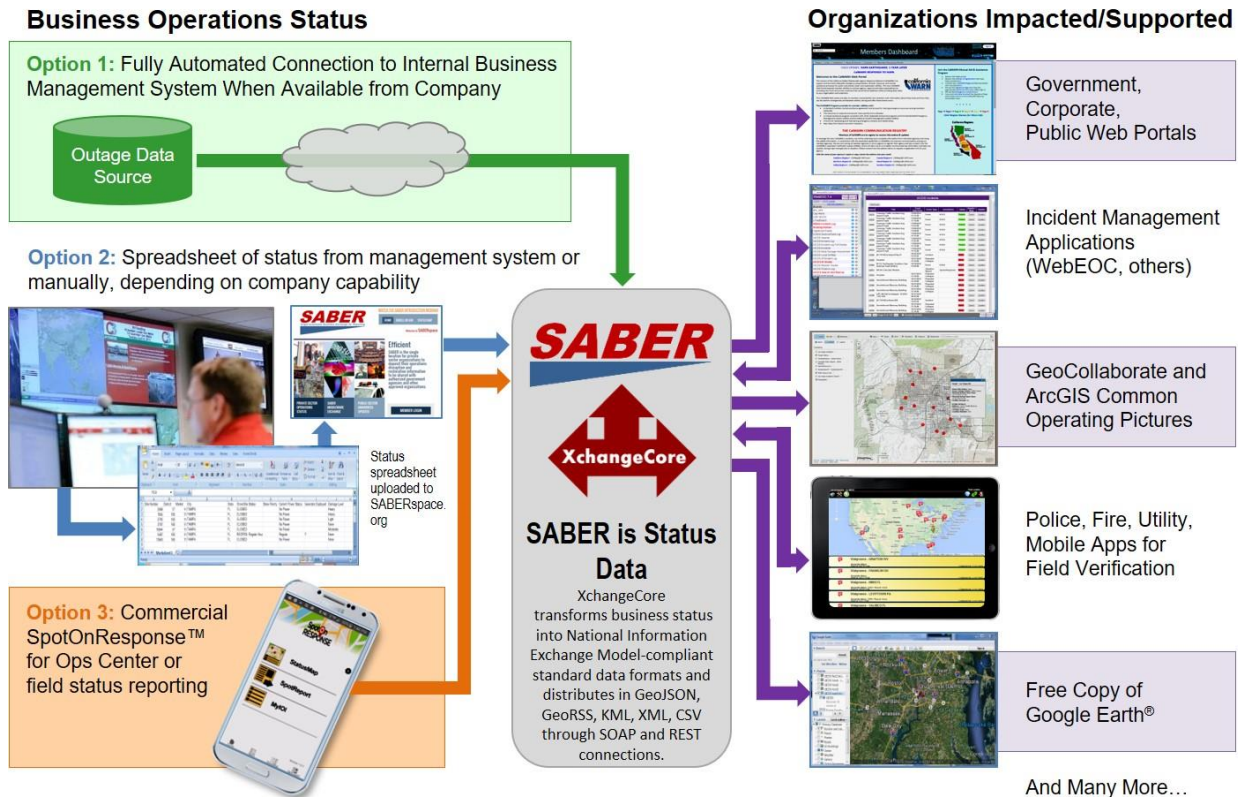


## Technology for Participating in SABER Consume, Orchestrate, Provide



### Private Sector Status Is Provided to SABER's XchangeCore

Initially, a company can do as little as upload an Excel® spreadsheet to a secure website (Option 2), but XchangeCore can make the process even easier by automatically receiving disruption data from existing software (Option 1). Some software in use by the private sector can do this automatic sharing to SABER, such as WebEOC™, ETeam™, and SpotOnResponse™. Other applications can be made to work seamlessly to exchange information through XchangeCore using example code that is freely available to companies to connect to XchangeCore.

SABER has teamed with SpotOnResponse LLC to connect the SpotOnResponse mobile app and web application directly to SABER through XchangeCore (Option 3). For more information, see [www.SpotOnResponse.com](http://www.SpotOnResponse.com).

### XchangeCore Web Services Data Orchestration Exchanges Data

SABER employs XchangeCore Web Services Data Orchestration to transform, orchestrate, notify, and distribute status. Originally developed by the Department of Homeland Security and then enhanced by the Department of Defense and the private sector, XchangeCore



([www.XchangeCore.org](http://www.XchangeCore.org)) is now operated by a nonprofit for the benefit of the XchangeCore Community. XchangeCore is a fully operational, standards-based solution to sharing all types of information.

As used by the SABER, XchangeCore never reaches into private sector data; rather, private sector organizations send their disruption data – on their schedule and in their existing format – to XchangeCore. XchangeCore converts the disparate data formats used by companies into the National Information Exchange Model incident (NIEM) format to assure subsequent sharing to the public sector based on specific agreements

### **Viewing Status on Third-Party Applications and Portals**

Commercial incident management software used by public and private sector organizations already can send and receive disruption information through existing connectors. WebEOC™, ETeam™, and SpotOnResponse™ and others all work seamlessly to exchange information through XchangeCore. Popular map viewers Google Earth®, Google Maps®, ArcGIS Online®, Bing Maps®, GeoCollaborate™, and Live Earth® already connect with XchangeCore to add private sector disruption information to your existing Common Operational Picture. These existing connectors are usually available for your application at no cost.

To add new applications to ingest the SABER data, there is abundant example code that has already allowed many third-party applications to connect to the XchangeCore middleware. If SABER can match you up with a similar connector, the process should be quite easy.

If you have no viewing application, the [www.SABERspace.org](http://www.SABERspace.org) website has received a contribution from SpotOnResponse mobile app company to use the SABER Status Map.

### **The SABER Status Reporting Best Practice**

Under a contract with the Department of Homeland Security, Directorate of science and Technology, SABER has established a status reporting best practice. The best practice is a result of extensive analysis of what information is of value to businesses. The SABER technologies are then used to transform status of value to businesses into the “Lifelines” information useful to the Federal Emergency Management Agency.

The result of the best practices study is a definition of status in the National Information Exchange Model which establishes federal government information sharing conformance.

While SABER will accept any type of data input from businesses (our philosophy is a little status knowledge is better than none), we encourage companies to adopt the SABER status best practice – even if not all of the status information is filled out at any given time.

The table that follows shows the SABER status data elements and definitions. A spreadsheet template is available with all the values in easy-to-use dropdown lists.

Again, SABER accepts any status information but endeavors to transform all status into the SABER status reporting best practice.



## SABER Business Status Data Element Definitions


SABER ELEMENT	SABER DEFINITION	CORRESPONDING NIEM DEFINITION
What	Lifeline Component currently Food; Water; Hotel; Pharmacy; Fuel; Financial	A kind of activity
Name	Business Common Name	A name of an activity
Description	Description of situation causing status and restoration needs/priorities	A description of an activity
Status	Open/Closed/Limited	A status or condition of something or someone
Status Comments	Instruction: include description of partial operations	A comment regarding a status
Reopening Date	Expected reopen	An activity planned to occur on a certain date and time.
Damage to Facility	Lost stock, Lost equipment, Security needed, Structure needs some repairs, Major structural damage, Other	An element for the description of the damage to the facility like Beaches, Parks, Transit, and Other
Problem with Employee Availability	Inadequate for full service, Employees cannot get to work, Employees evacuated/displaced, Credentials required for entry, Other	A text or code indicating availability of an item
Problem with Utilities	Electric causes Limited/Closed, Water causes Limited/Closed, or Gas causes Limited/Closed Communication causes Limited/Closed	True if the utilities (Electricity, gas, water, sewage etc.) are functional; false if not
Using Generator	No fuel, Limited/Open with fuel for 1 day, Limited/Open with fuel for 2-4 days, Limited/Open with fuel for 5+ days	A description of a status or condition of something or someone
Problem with Customers Getting to Store	Road debris/Roads closed, Evacuation ordered, Curfew/Restricted hours, Other	A description of the cause of inaccessibility
Problem with Financial Transactions	Cash only, Manual credit/debit cards accepted, No check cashing, Other	A specific method of payment



Problem with Supply of Commodities	Supplies not available, Delivery affected by roads closed, Delivery restricted by evacuation/curfew, Delivery requires credentials to enter area, Other	A description of the nature of a transaction associated with a shipment
Address	Number, Street, City, State, Zip or only street address	A complete address
City	City	A name of a city or town.
State	State Abbreviation	A name of a state, commonwealth, province, or other such geopolitical subdivision of a country
Zip	Zip Code	An identifier of a post office-assigned zone for an address.
County	County Name	A name of a county, parish, vicinage, or other such geopolitical subdivision of a state
Phone	Primary phone number	A telephone number
Email	Email of store or manager	An electronic mailing address by which a person or organization may be contacted
Store ID	Store identifier defined by owner	A description of a kind of identification
Manager Name	Manager Name	A complete name of a person
Latitude	Decimal Degrees Latitude	A point's latitude on the surface of the earth expressed as geographic coordinates in decimal degrees. Points in the northern hemisphere range from 0.0 to +90.0 degrees. Points in the southern hemisphere range from 0.0 to -90.0."
Longitude	Decimal Degrees Longitude	A point's longitude on the surface of the earth expressed in decimal degrees. Points east of the prime meridian range from 0.0 to +180.0 degrees. Points west of the prime meridian range from 0.0 to -180.0."
Created By	Name/Email	A name of an entity primarily responsible for generating or producing the information



Submit Date	Date/Time	A full date and time
Adapter Name	Unique name of the adapter providing data to SABER/XchangeCore	A name of a computer application used to process data
Adapter Location	URL of adapter	An Internet Protocol (IP) address or Uniform Resource Locator (URL) of a device that uniquely identifies a specific site on the Internet or another network.
Data Source	URL or Name	A name, identifier, or reference of a resource from which the information was taken
Icon	URL of icon	A physical location of a binary object
UUID	Unique Identifier internal key	An identifier.

 Internal data elements not provided by user