



## ***Emergency Response Support System***



For more information:

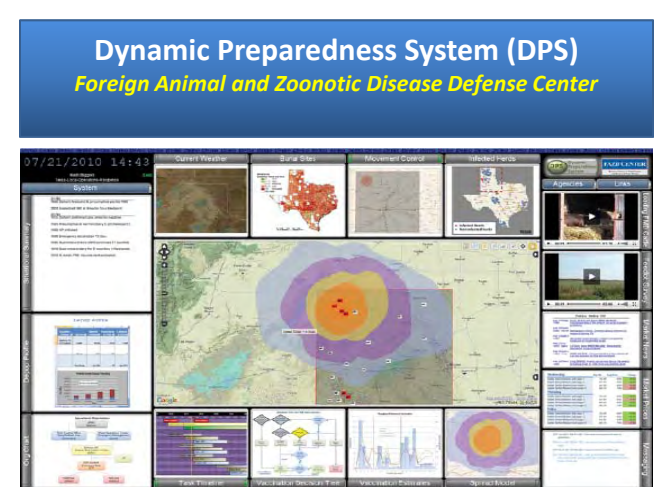
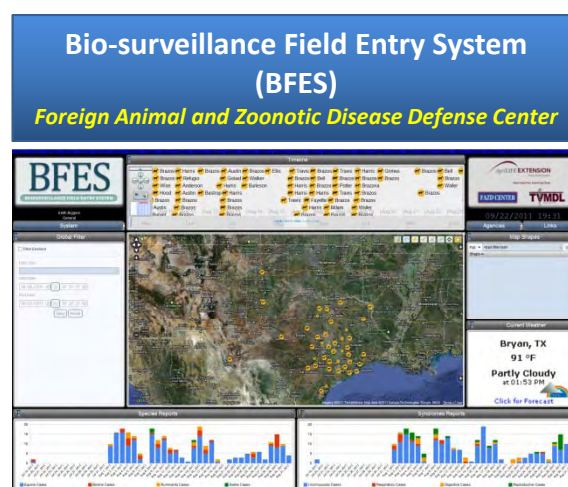
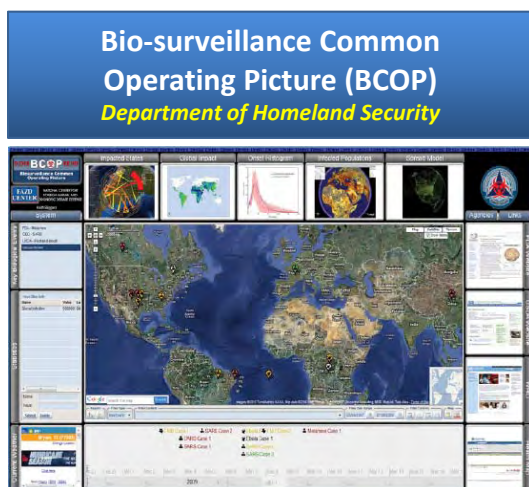
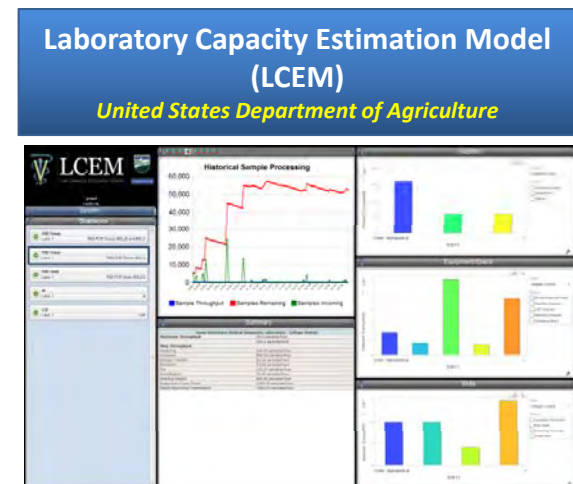
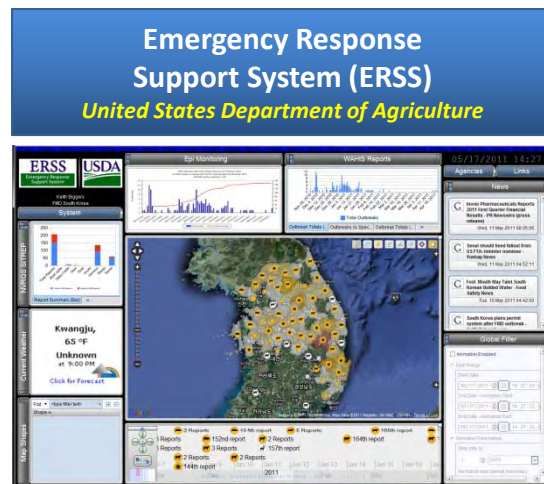
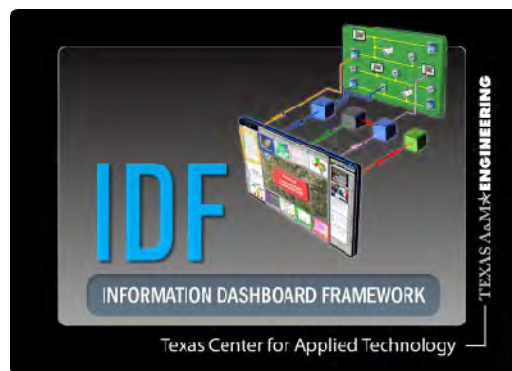
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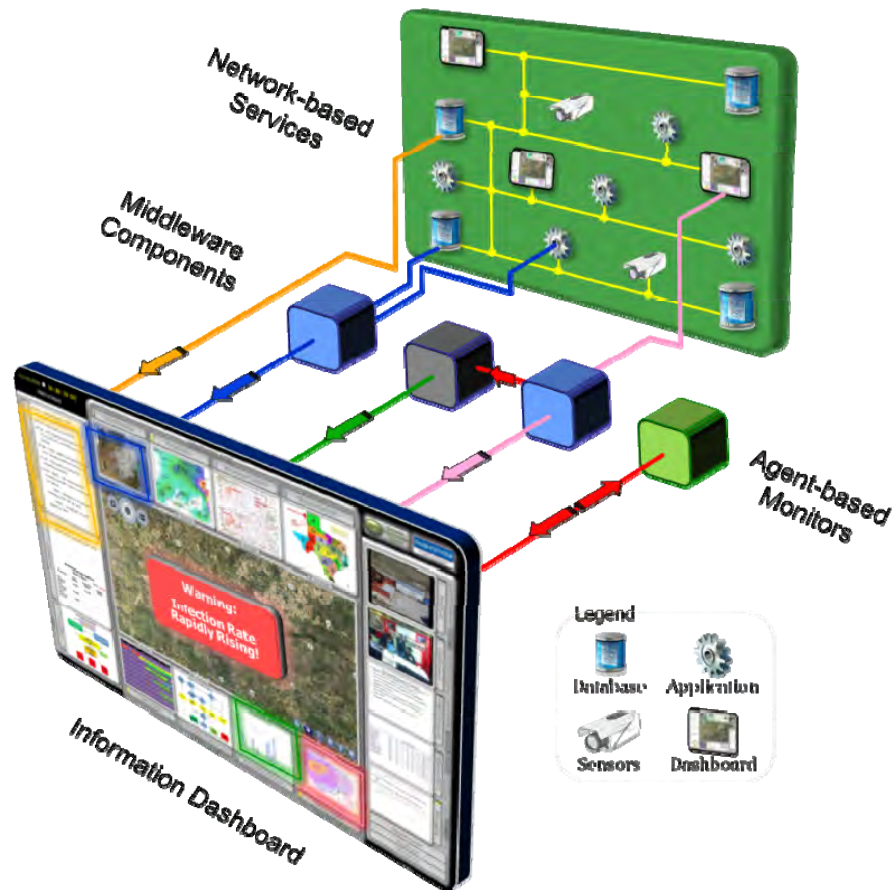
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# Information Dashboard Framework Overview

- Provides a robust and extensible framework for developing user-defined operational pictures
- Allows visual integration of multiple distributed information sources in a common display
- Built upon a service-oriented architecture that provides network centric environments
- Capable of supporting a variety of usage contexts including operational, training, and analysis-based missions
- Offers a portable web-based application that can be used anywhere from within a command center, to out in the field



# Dashboard Component Capabilities



## Levels of Integration

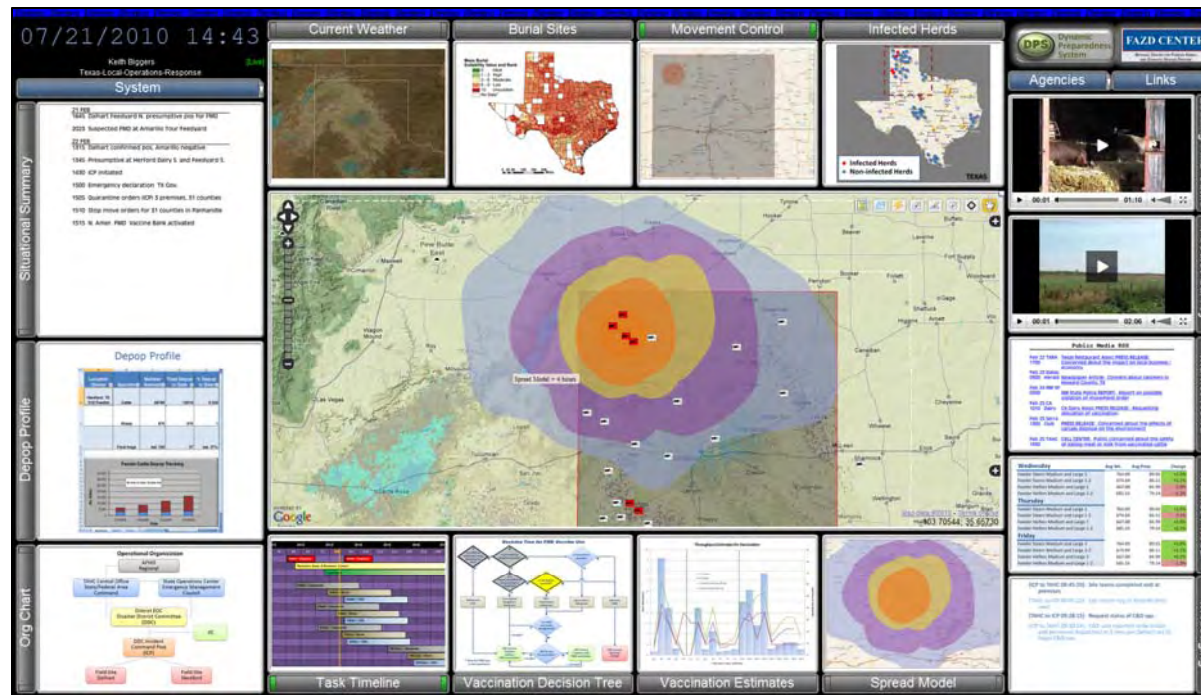
- Visual
- Middleware (converging data streams)
- Application to Application Data Sharing
- Hybrid (any combination of the above)

## Decision Support Tools

- Manual – visual integration of data
- Assisted – visualization development using visual programming
- Automated – monitoring agents



# A Toolbox of Dashboard Components



Mapping

Resource  
Mgmt

Planning

Admin

Checklists  
and FormsSimulation  
EngineExercise  
Mgmt

Logs

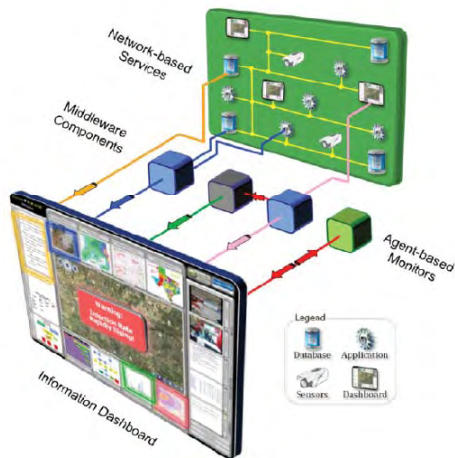
Reporting

Comms

External  
LinksModels  
and DataVisual  
Analytics

Video

# Emergency Response Support System Overview



- Developed for USDA's Animal and Plant Health Inspection Service (APHIS)
- Provides a web-based tool for large and small-scale incident management
- Developed around a service-oriented architecture and allows integration of bio-surveillance information, various tools for incident management, real-time information to support continuity of operations, and many other external references to support incident management.
- Used as an operational tool during a response, as an analysis tool after an event is complete, and as a training tool to prepare for possible future incidents.
- Developed using the Texas A&M University's Information Dashboard Framework

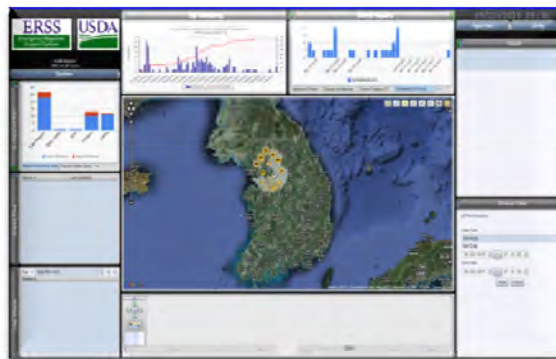
## Incident Management

*Calculators, Resource Tracking, Report Generation*



## Continuity of Operations

*FastEggs, FastMilk, SecureMilk*



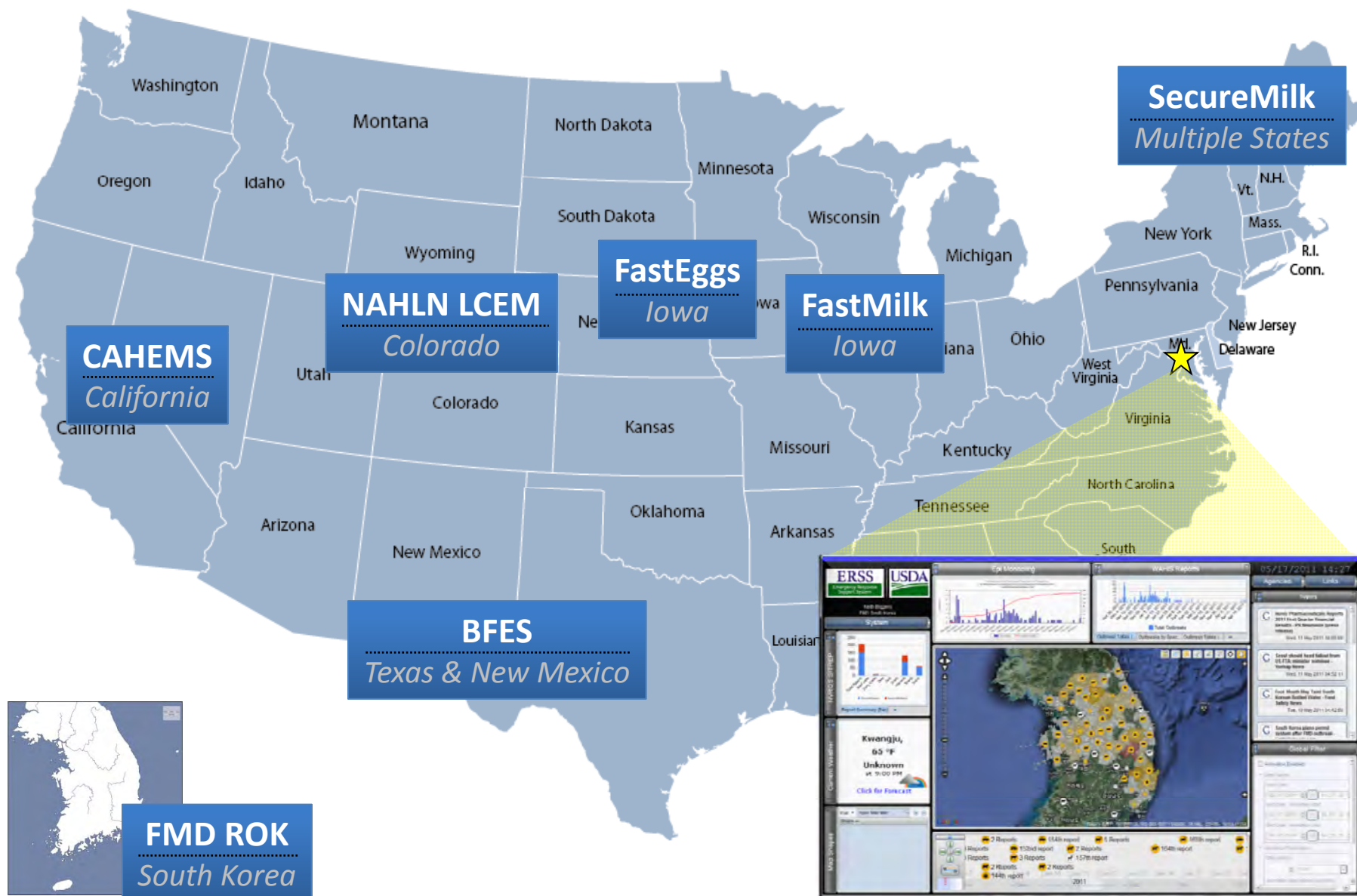
## External Integration

*EMRS, LCEM, CAHEMS*



# ERSS Design Concepts



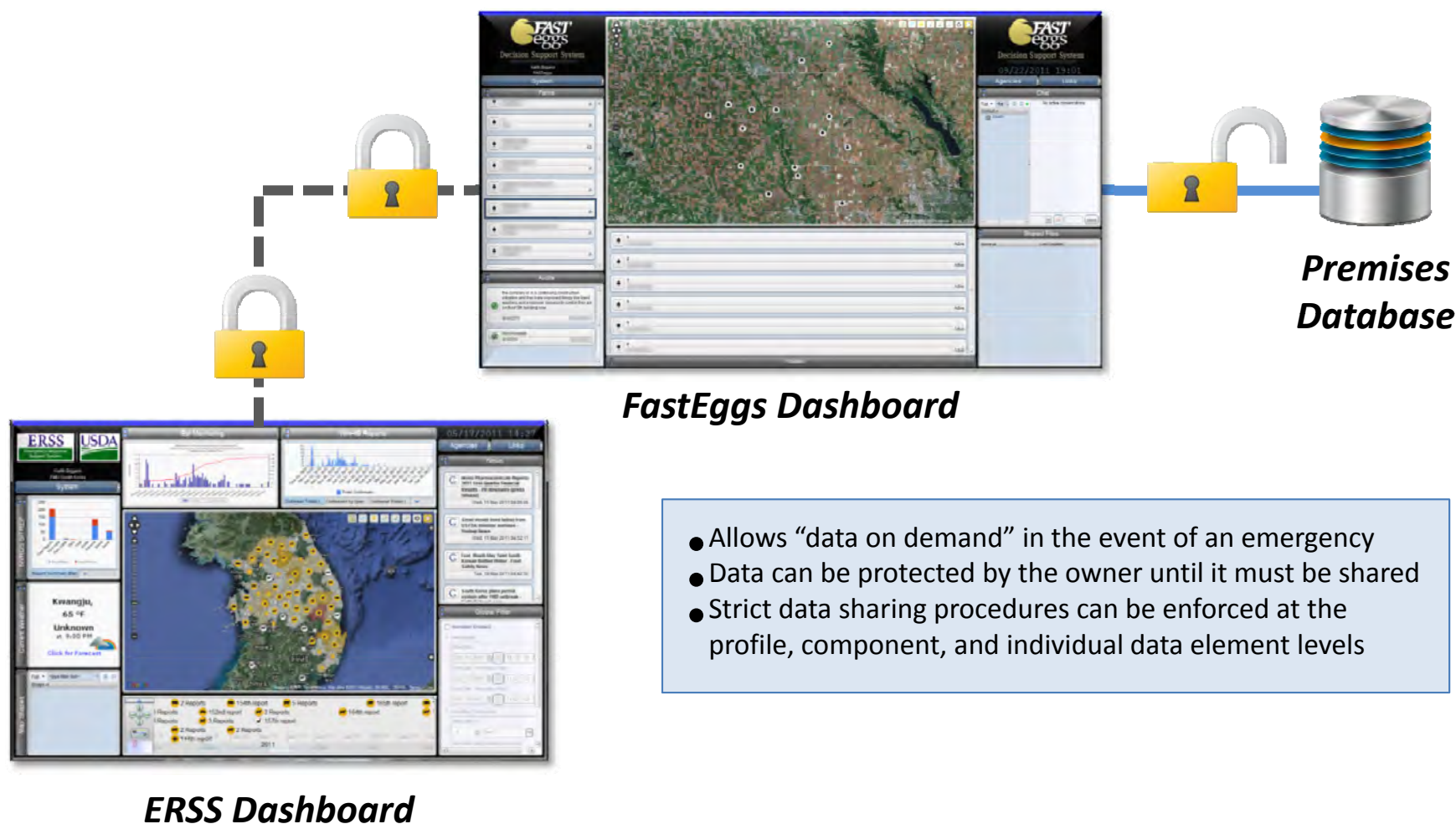




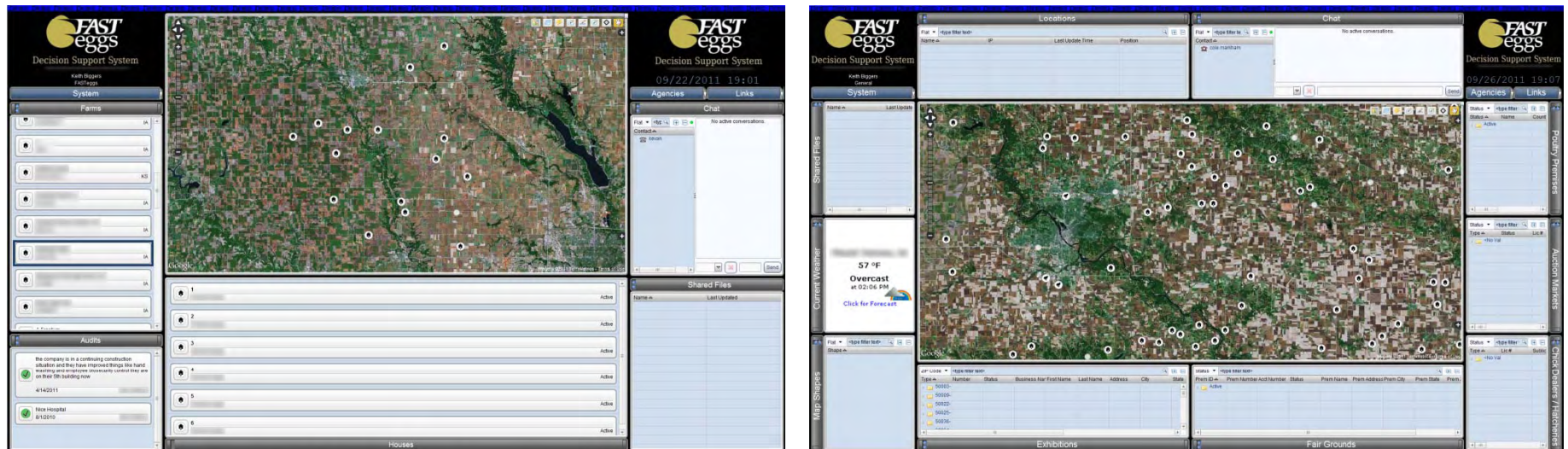
# World-wide Data Integration







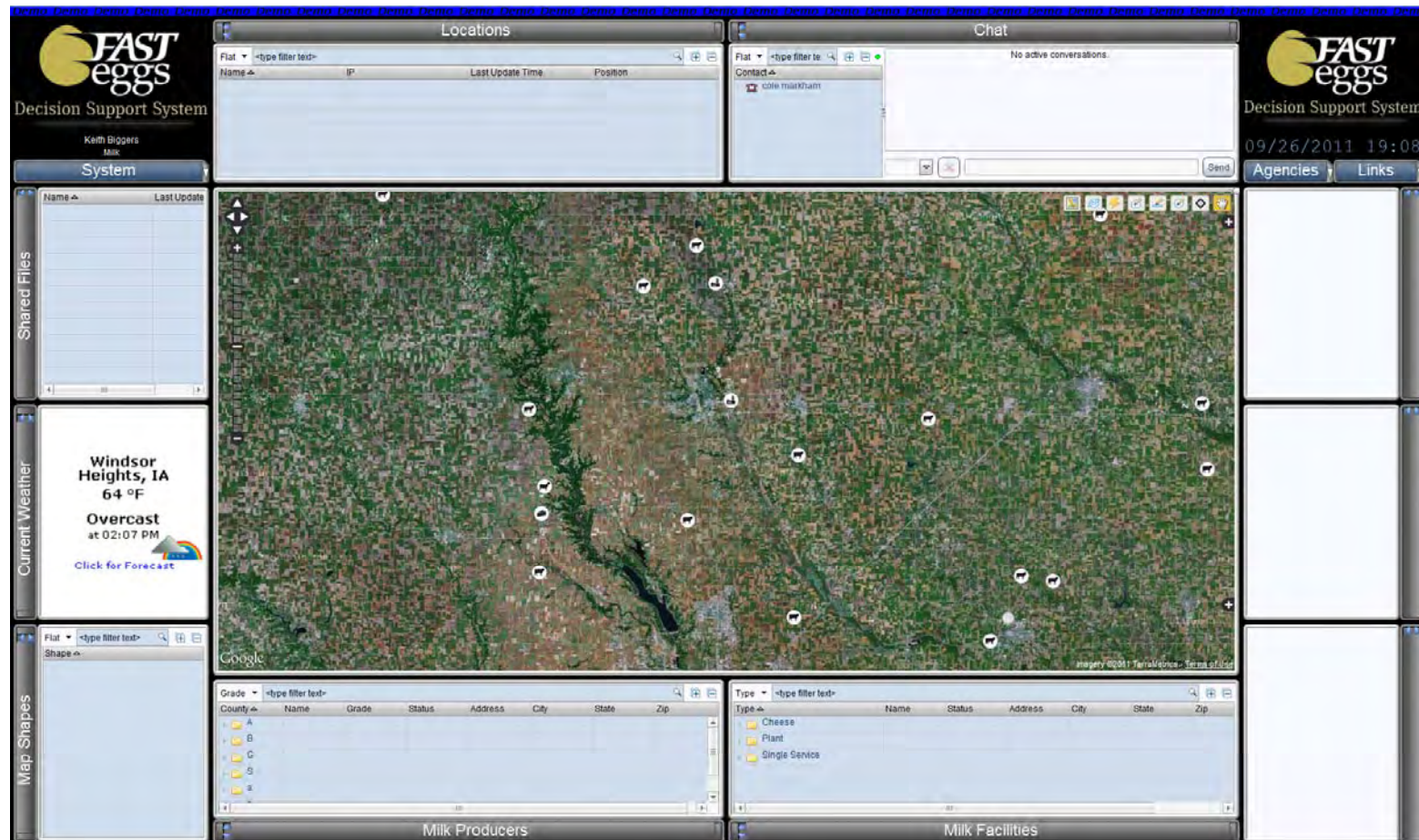
# FastEggs Decision Support System



- Developed to support decision making regarding poultry movement during an incident
- Delivers real-time access to testing/audit history of farms
- Provides geospatial visualization of poultry premises, dealers, hatcheries, auction markets, exhibition halls, and fair grounds

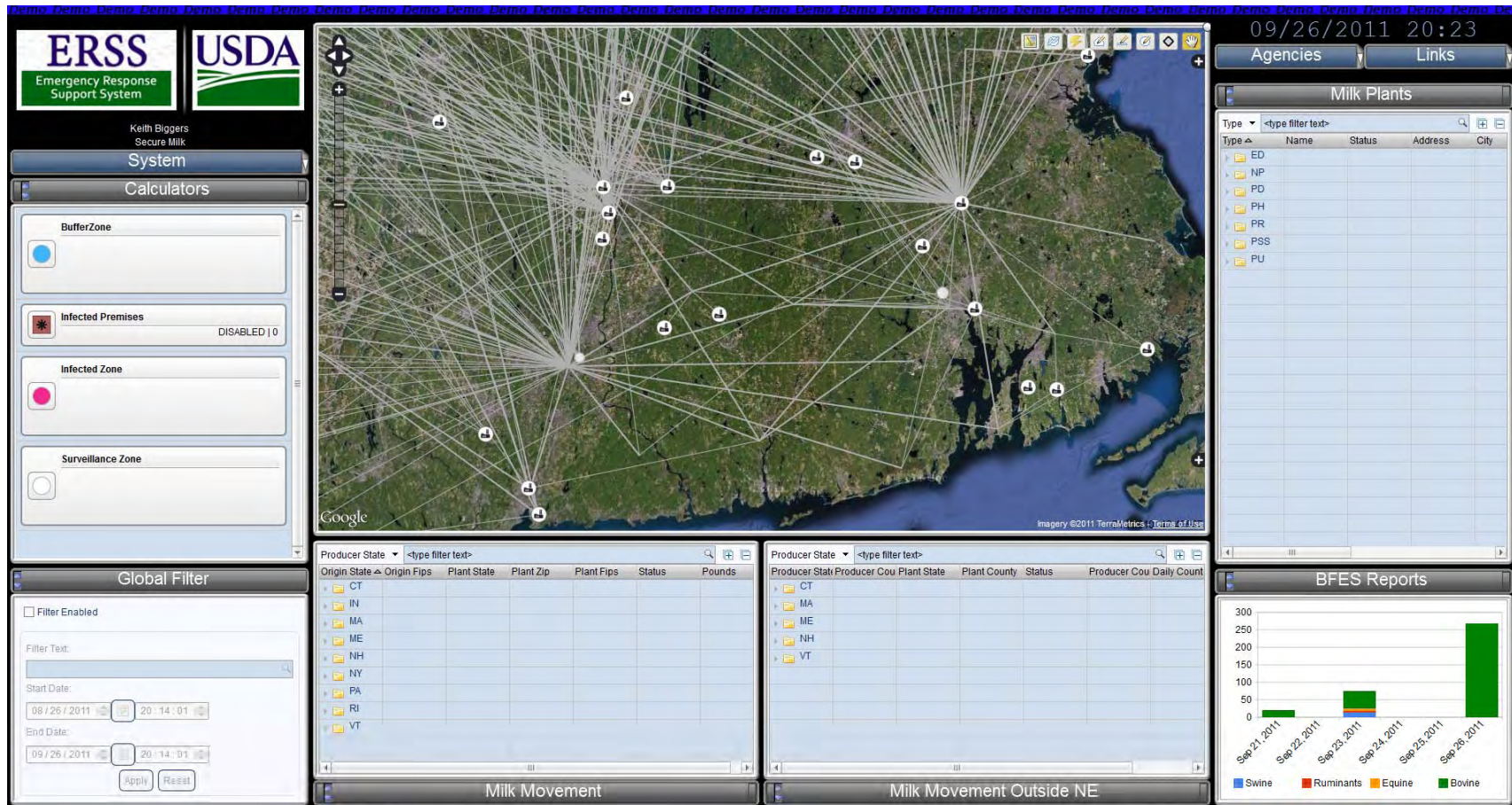


# FastMilk and SecureMilk Supply



- Developed to support decision making regarding dairy movement during an incident
- Provides geospatial visualization of dairy producers and facilities

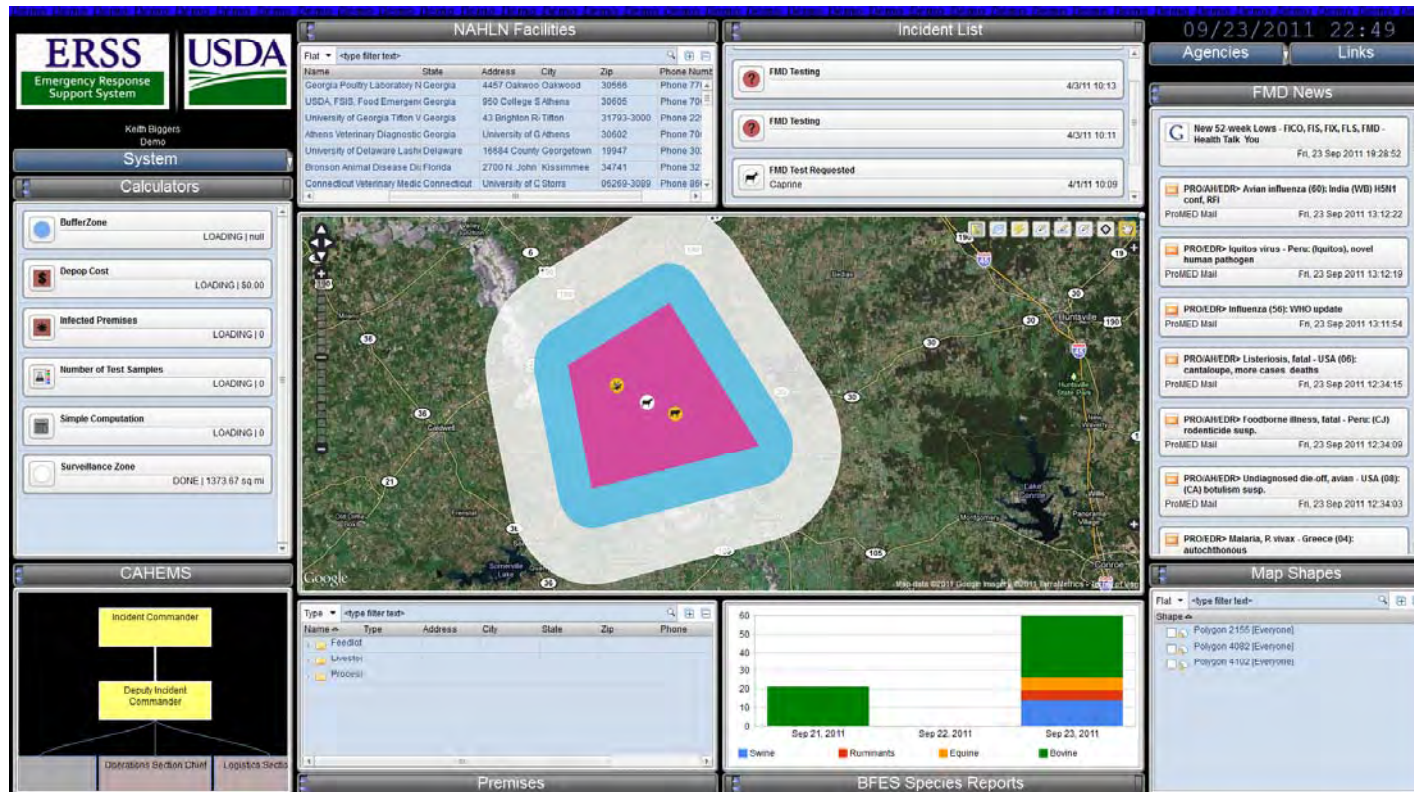
# Secure Milk Supply



- Developed to support decision making regarding dairy movement during an incident
- Provides geospatial visualization of dairy premises and transport details



# Calculators and Estimators for Quick Approximation

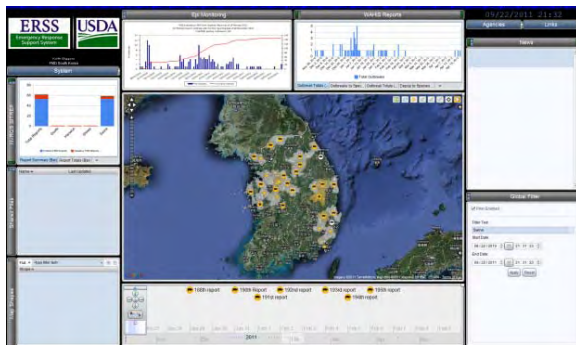


## Automated Estimation of:

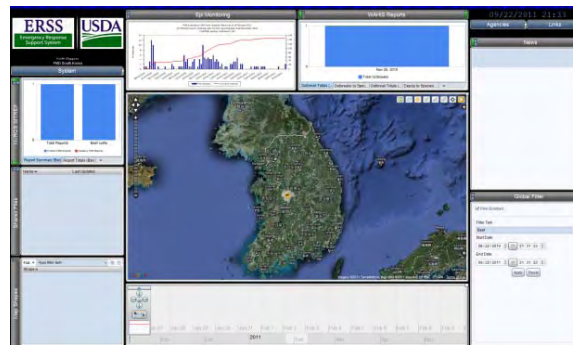
- Infected Zone
- Buffer Zone
- Surveillance Zone
- Sample Collection
- Depopulation
- Disposal

# Custom Data Filtering and Animation

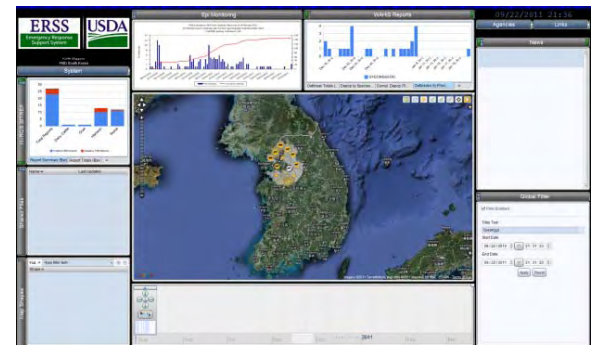
## Global Filtering Based on Species Type



*Filter on Species*

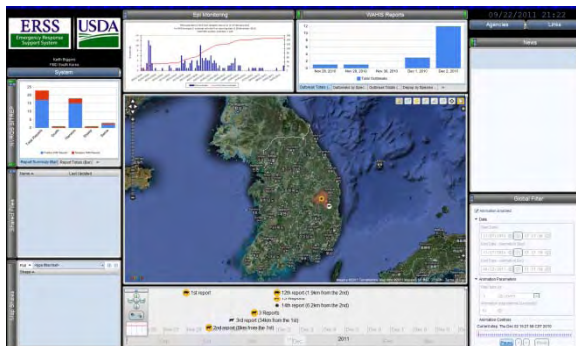


*Filter on Date Range*

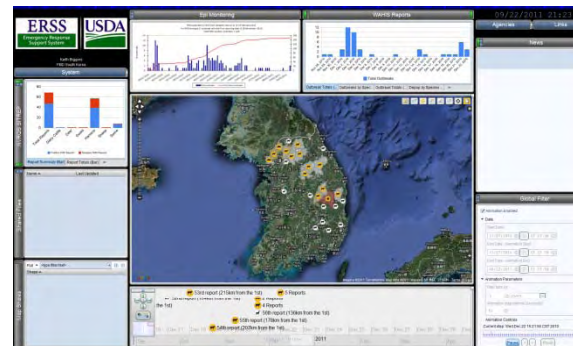


*Filter on Location*

## Multi-source Animation



*December 2, 2010*



*December 22, 2010*



*January 21, 2011*

Org Chart

☒ Show active positions

```
graph TD; IC[Incident Commander] --> DIC[Deputy Incident Commander]; DIC --> PIO[Public Information Officer]; DIC --> OSC[Operations Section Chief]; DIC --> LSC[Logistics Section Chief]; OSC --> DOSC[Deputy Operations Section Chief]; LSC --> DOLSC[Deputy Logistics Section Chief];
```

Contact Info

Position

Deputy Incident Commander

Name

Keith Biggers

Address

State Capitol, Suite 1173  
Sacramento, CA 95814

Phone

(916) 445-2841

Email

official@ca.gov

Activate

Available Resources

HPAI Position Manual  
FMD Position Manual

Resource

## Animal Disease Field Response Toolkit

California Department of Food and Agriculture  
Animal Health and Food Safety Services Division  
California Animal Health Emergency Management System (CAHEMS)

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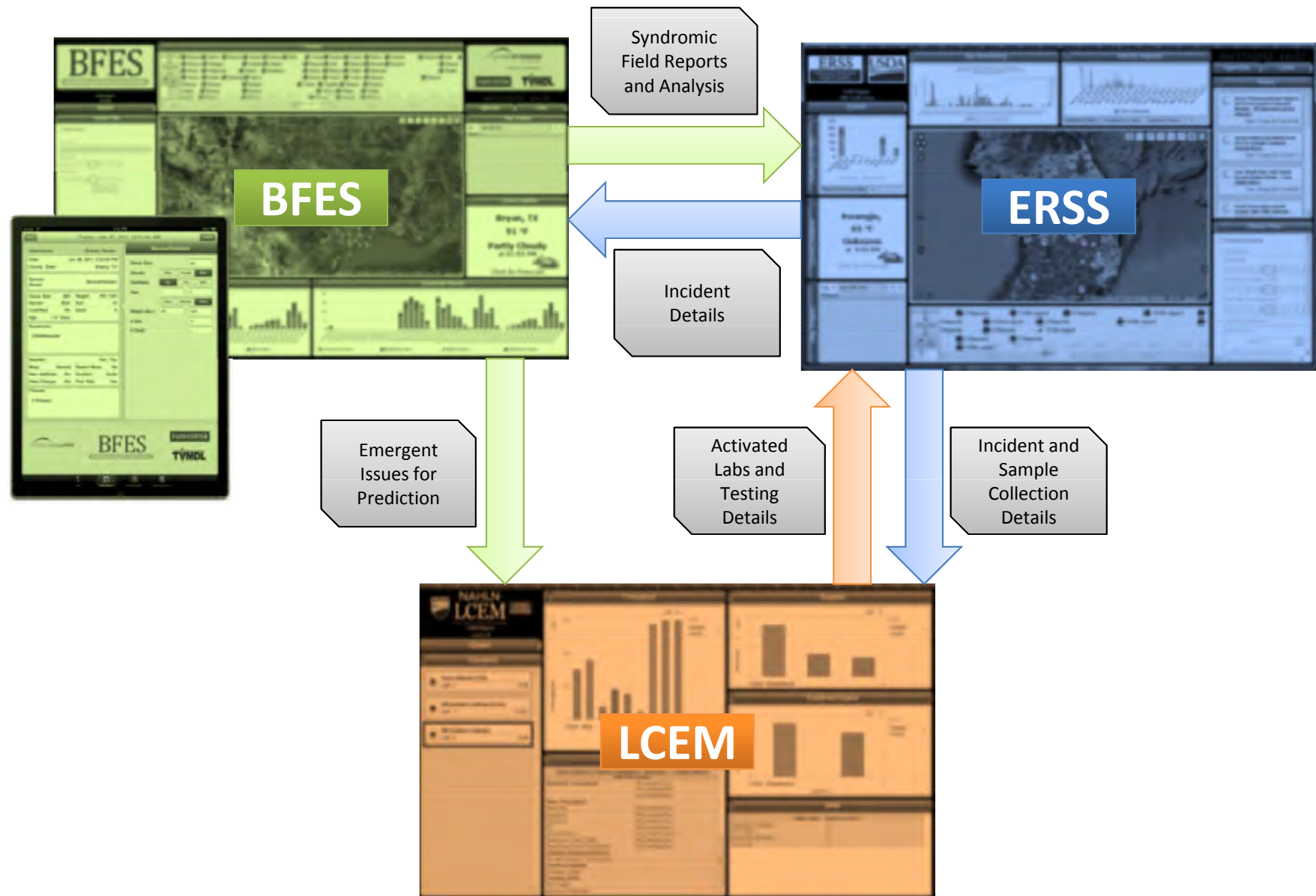
**Command Staff**  
**Deputy Incident Commander**  
**Foot and Mouth Disease (FMD)**  
**Position Manual**

Deputy Incident Commander - FMD  
Position Manual

**COMMAND STAFF**

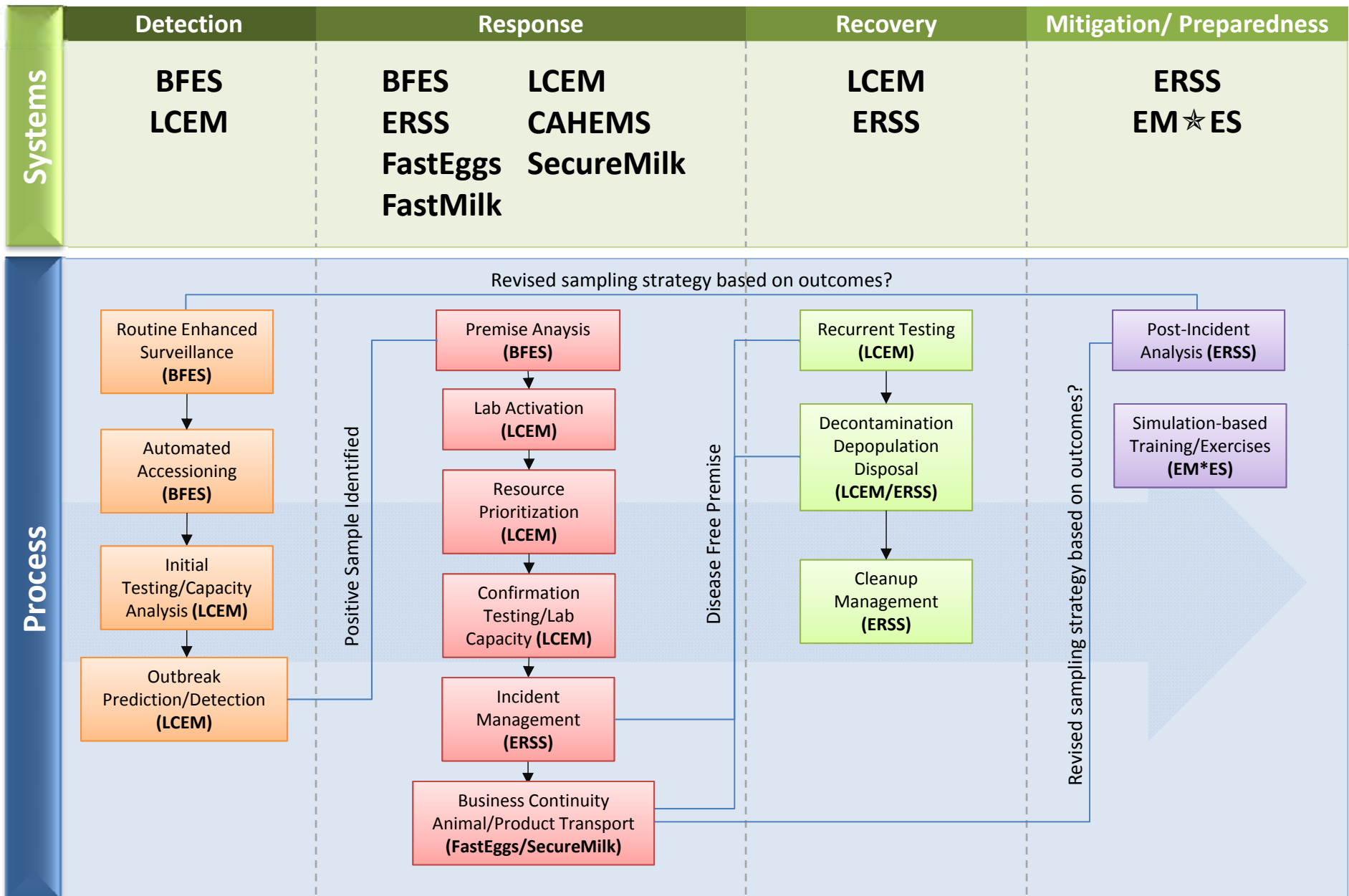


# An Example of Dashboard Integration

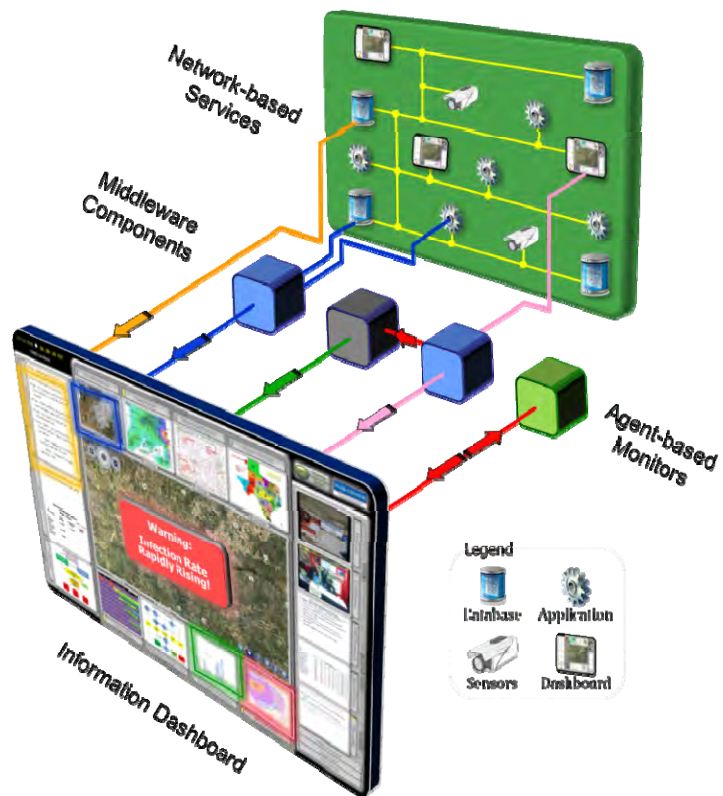




# Dashboards: Real-time Information to Decision-makers



# Questions?



## Information Dashboard Framework

