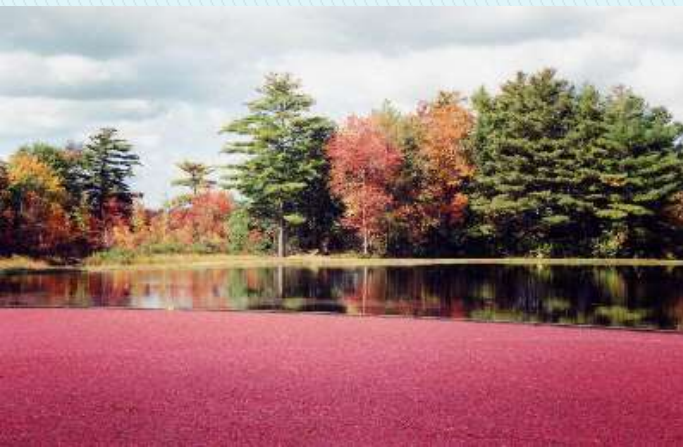


Long-Term Power Outage and Implications for Food and Agriculture

Kristin Gunther
Wisconsin Department of
Agriculture, Trade and Consumer Protection

Food and Agriculture in Wisconsin

- ▶ WI agriculture generates \$59 billion annually
- ▶ 3rd largest economic sector in the state
- ▶ Food and Ag accounts for 1 in 10 jobs
- ▶ WI Ranks #1 in cheese and cranberries
- ▶ WI Ranks # 2 in milk production



America's Dairyland

- ▶ 12,929 licensed dairy farms
- ▶ 1.2 million dairy cows
- ▶ 23.4 *billion* lbs. of milk per year
- ▶ 64,000,000 lbs of milk/day
- ▶ 500 dairy farms > 500 cows = 50% of the state's milk
- ▶ 82% of dairy herds < than 100 cows
- ▶ Cows must be milked 2 – 3 times daily
- ▶ Milk must be immediately cooled
- ▶ Most dairy farms can hold milk 1 – 3 days max

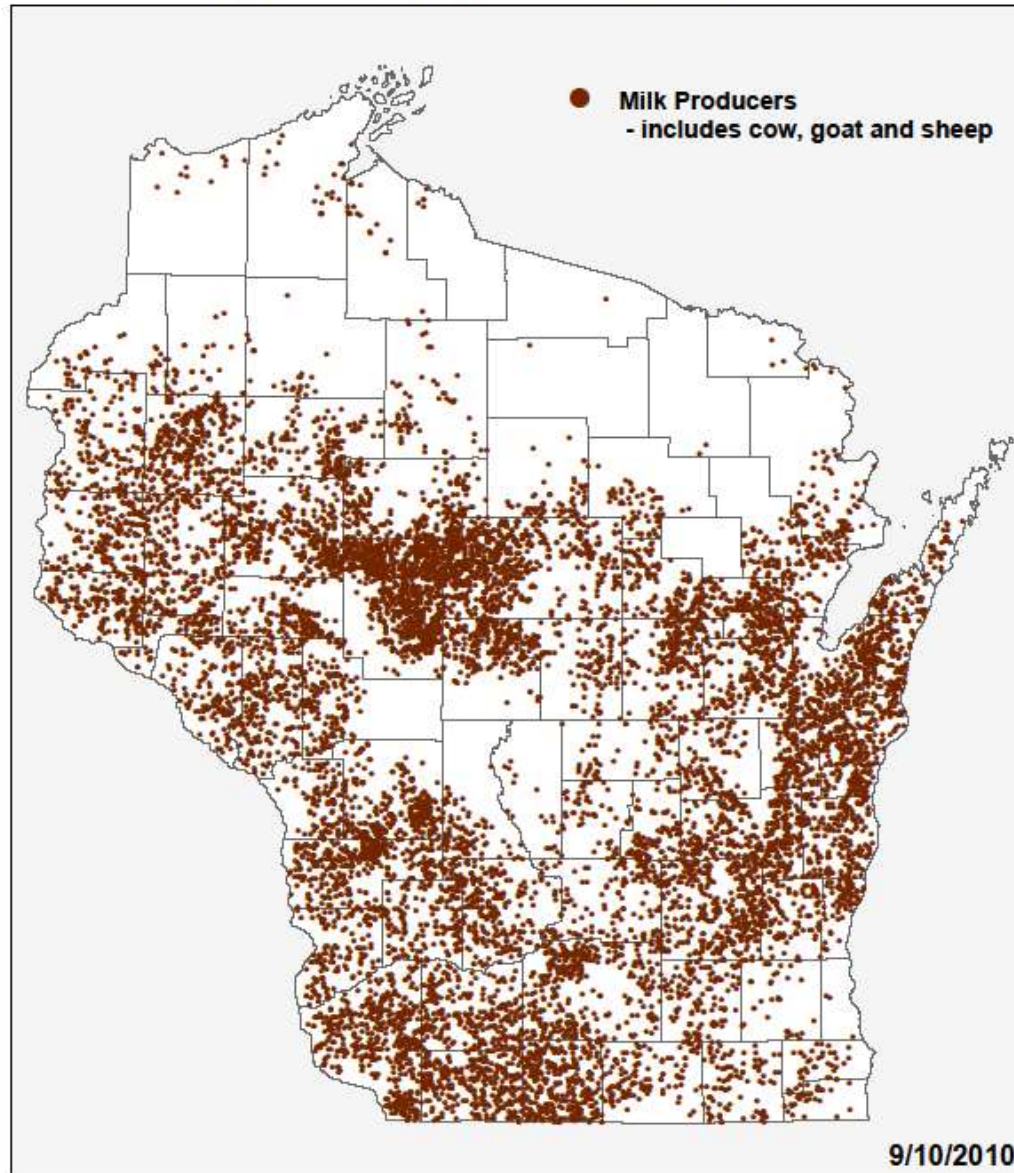


Milk and Cheese

- ▶ 90% of milk is used for cheese production
- ▶ 26% of the nation's cheese supply
- ▶ 450 licensed milk haulers
- ▶ 10 lbs of milk makes 1 lb of cheese
- ▶ 2.4 billion pounds of cheese annually
- ▶ WI imports milk from other states

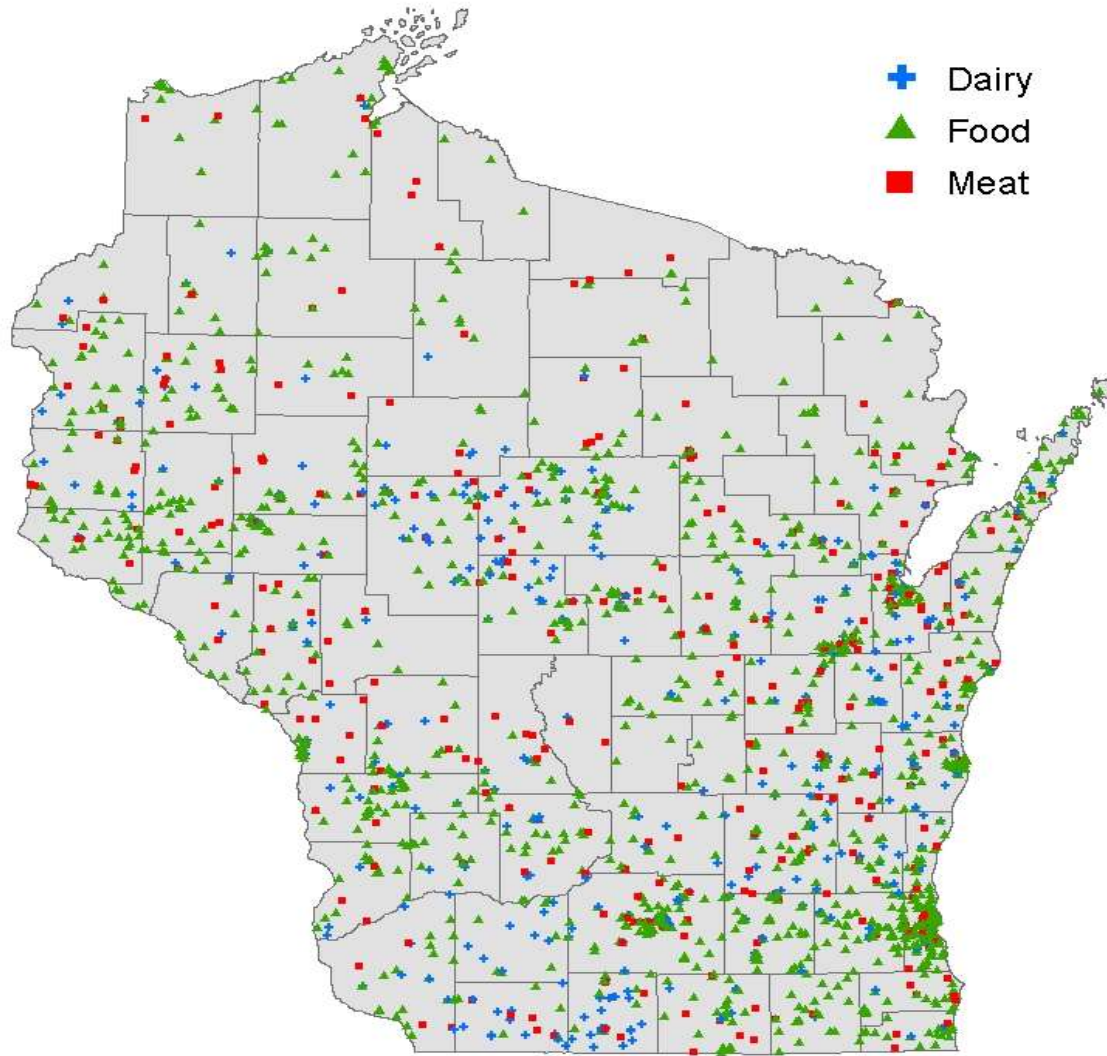


Wisconsin Milk Producers



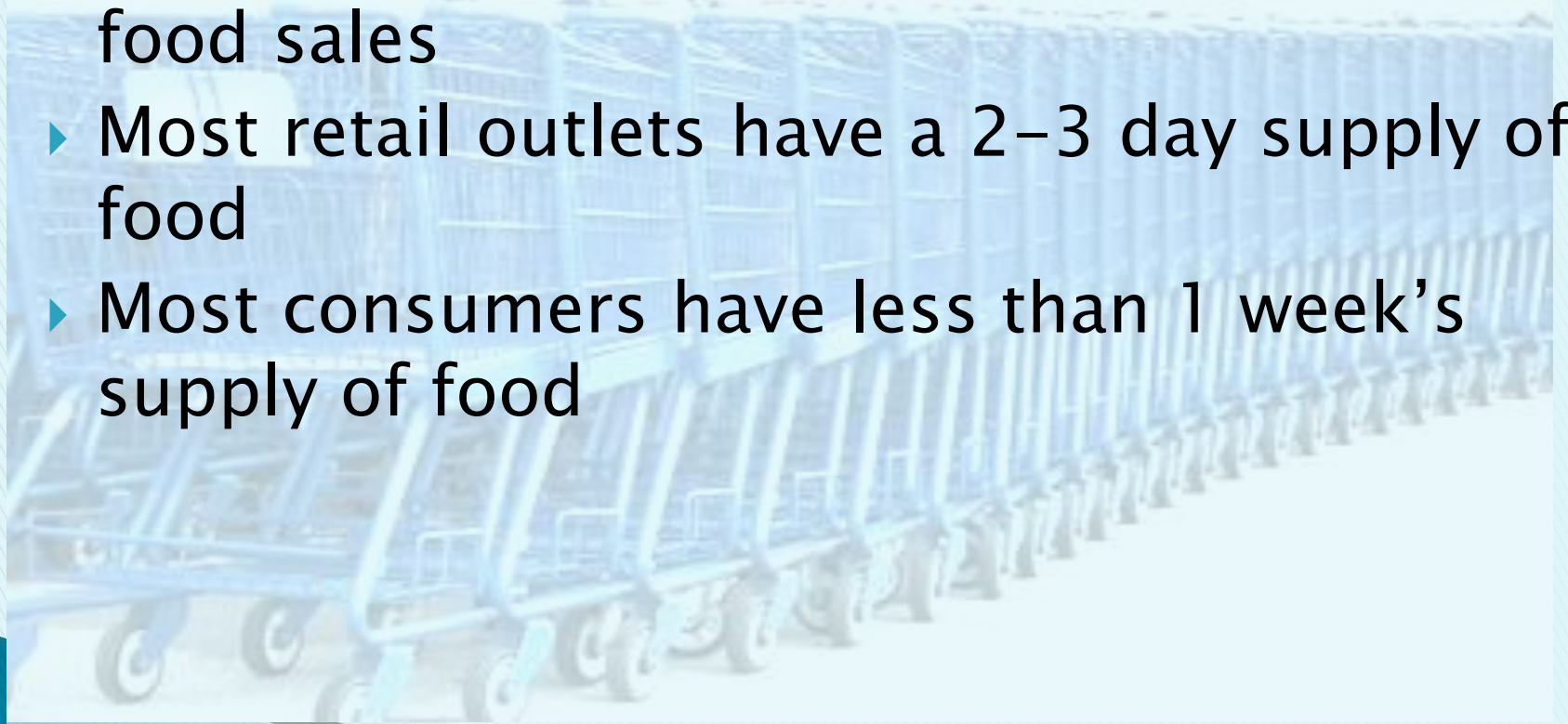
Wisconsin Department of Agriculture, Trade and Consumer Protection

Dairy, Meat & Food - Processing Facilities

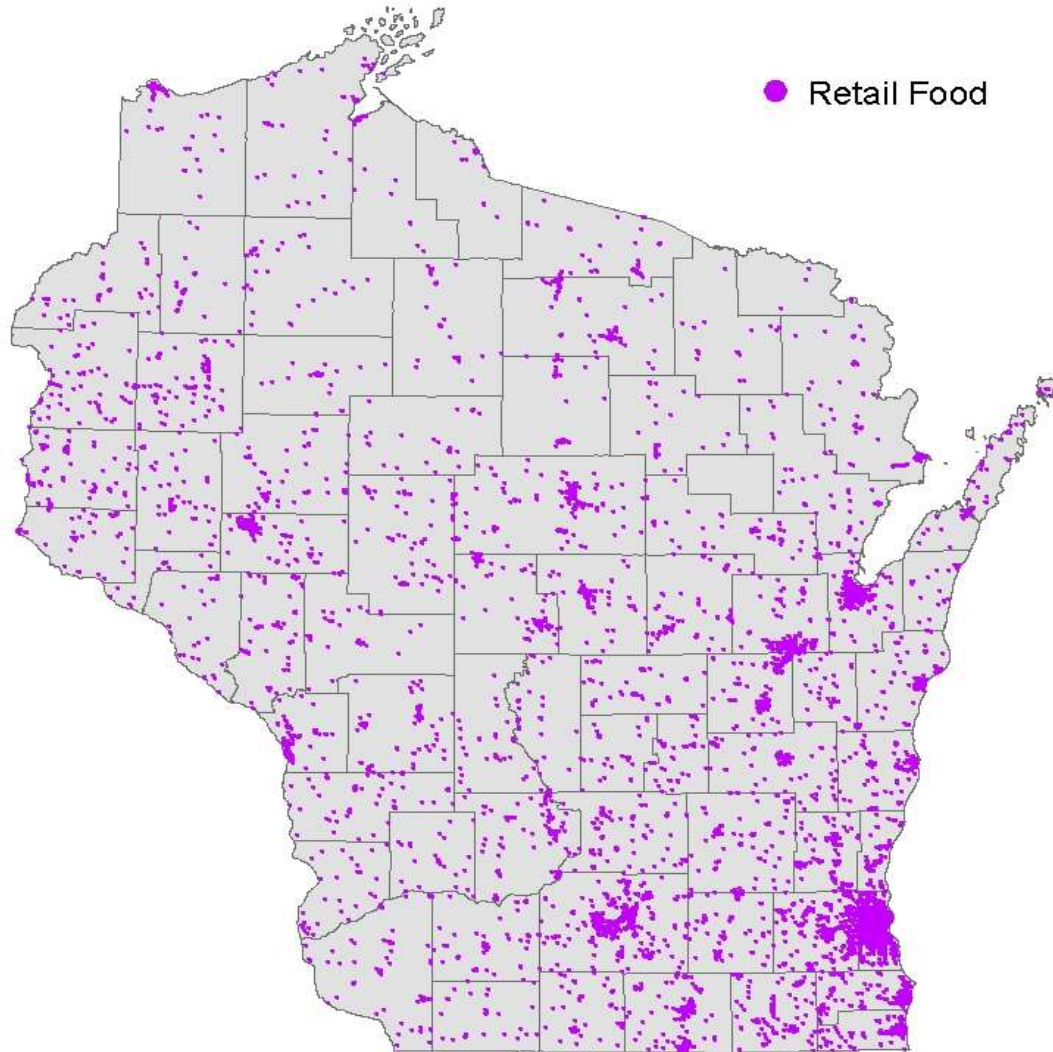


Beyond Production to Retail

- ▶ Complex system of wholesalers, distributors and retailers
- ▶ American consumers rely on Just-in-Time food sales
- ▶ Most retail outlets have a 2–3 day supply of food
- ▶ Most consumers have less than 1 week's supply of food



Retail Food Establishments



Food Distribution Focus Group

- ▶ **Purpose:** Begin the planning process for assuring availability of food and water in large-scale disruptions
- ▶ **Objectives:**
 - Document existing capabilities and gaps within the food distribution system
 - Identify tools for closing gaps/enhancing emergency response
 - Connect industry, VOAD and government stakeholders as response partners in food emergencies



Food Distribution Focus Group



Participants:

- ▶ **Industry:** Wal-Mart, Wisconsin Grocers Association, Reinhart FoodService, Sysco, Wisconsin Petroleum Marketers and Convenience Store Assn., Kwik Trip, American Transmission Corp., Midwest Food Processors Assoc.



- ▶ **VOAD:** American Red Cross Badger Chapter; America's Second Harvest Food Bank; Salvation Army; Southern Baptists Convention

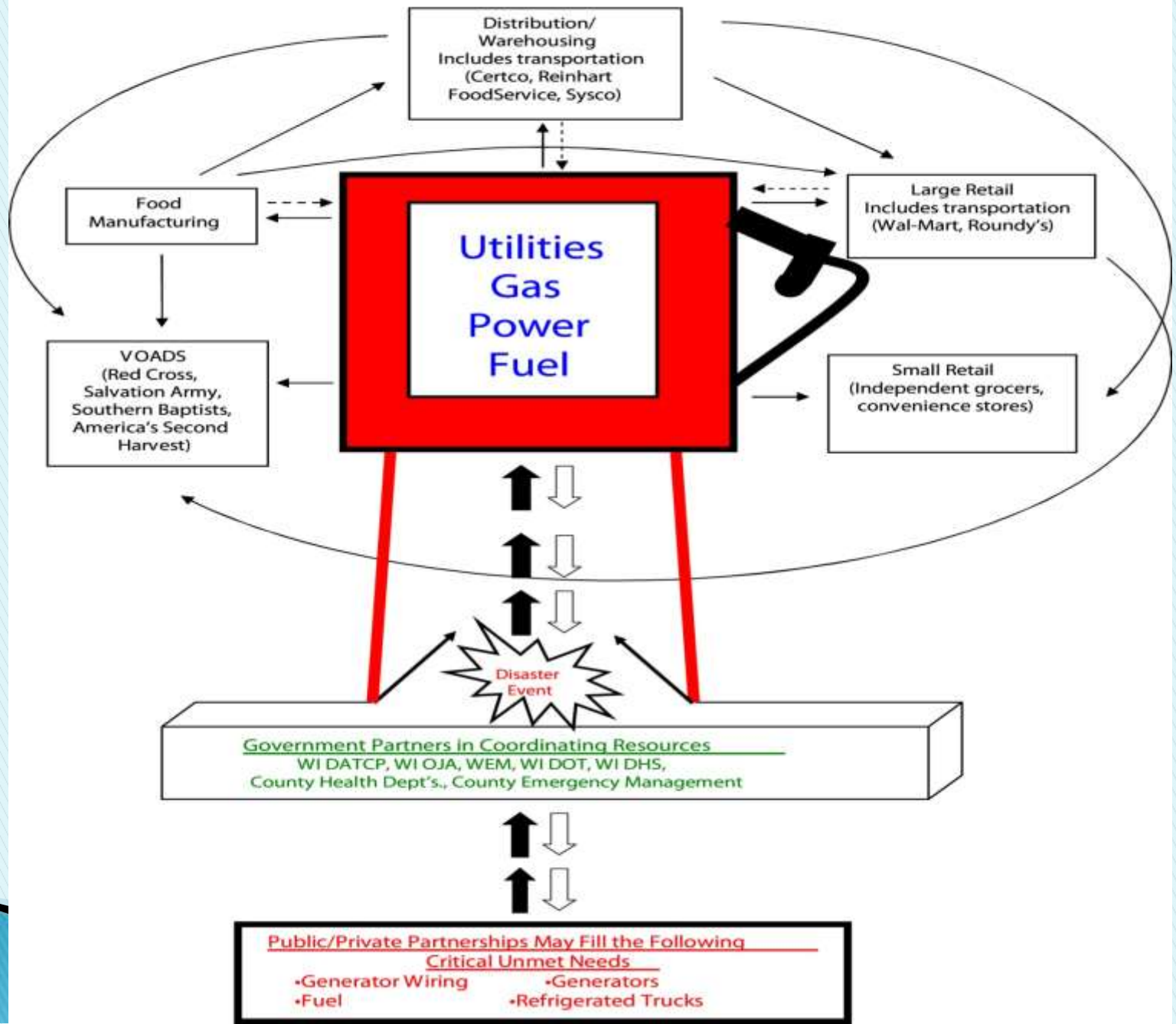


American Red Cross

- ▶ **Government:** DATCP, DOT, WI National Guard, State Patrol, DHS, WEM regional and county directors



Emergency Food Distribution Stakeholder Relationships



Retail Grocers and Power

- ▶ Most retail grocers have no access to or ability to connect to generators
- ▶ Without power many stores cannot operate
 - Electronic system for pricing
 - Electronic system for inventory
 - Electronic system of cash registers
 - Refrigeration/food safety issues
 - Fuel sales
- ▶ Many residents dependent on a single grocery store for their sustenance
- ▶ Food and agriculture not considered critical infrastructure and are not prioritized by utility providers the same as primary infrastructure

How do the VOADs fit in?

- ▶ **Southern Baptists** only respond at the request of the Red Cross or Salvation Army for mass feeding services
- ▶ **Badger Chapter of the American Red Cross** has an agreement with Sysco Food Service of Baraboo for fuel, which has its own fuel tank, pump and generator.
- ▶ **Salvation Army** has mobile feeding units with generators; extensive agreements exist for access to fuel, generators, food and water
- ▶ **Second Harvest** has warehouses in Milwaukee and the Fox Valley. Cold and frozen storage capacity for 3,000,000 lbs. food; 1.5 million lbs non-perishables; fleet of 5 trailers, 1 box truck; partner with Schneider Trucking.

Focus Group Outcome:

Toolkit for Stakeholders

- Food Emergency Checklist and Contact Sheet for Emergency Response
 - Stakeholder Capabilities and Responsibilities Table -- documenting who does what
 - Food Distribution Diagram
 - Establishing a network for food distribution stakeholders to share information (forthcoming)
 - Toolkit online: <http://www.datcp.state.wi.us/>
- ▶ Continued discussion/exercises requested

Checklist-Emergency-Food-Distribution-rev02

VOAD GROUPS	Bottled Water Commercial Ice Emergency Programs Community Generators to Donate Food Bank/Share Refrigerated Trucks Non-Perishable Food Food Warehousing Food Delivery Volunteer Resources Other																PRIMARY EMERGENCY CONTACT				BACKUP EMERGENCY CONTACT					
																		Name:	Home Address:	Home Phone:	Work Phone:	E-mail:	Name:	Home Address:	Home Phone:	Work Phone:
America's Second Harvest (Foodbank and Pantry)	x	x																								
American Red Cross (Mass and Long-Term Feeding, Emergency Food Distribution)	x	x																								
Salvation Army (Mass Feeding and Care)	x	x																								
Southern Baptists Convention (Food Preparation and Distribution)																										

Kwik Trip Success Story

- ▶ Active participant in workgroup and exercise
- ▶ Modified standard corporate plans to include wiring for generators
- ▶ Designated specific stores for retro-fitting wiring
- ▶ Installed generators at facilities in key locations



Role of Big-Box Retail

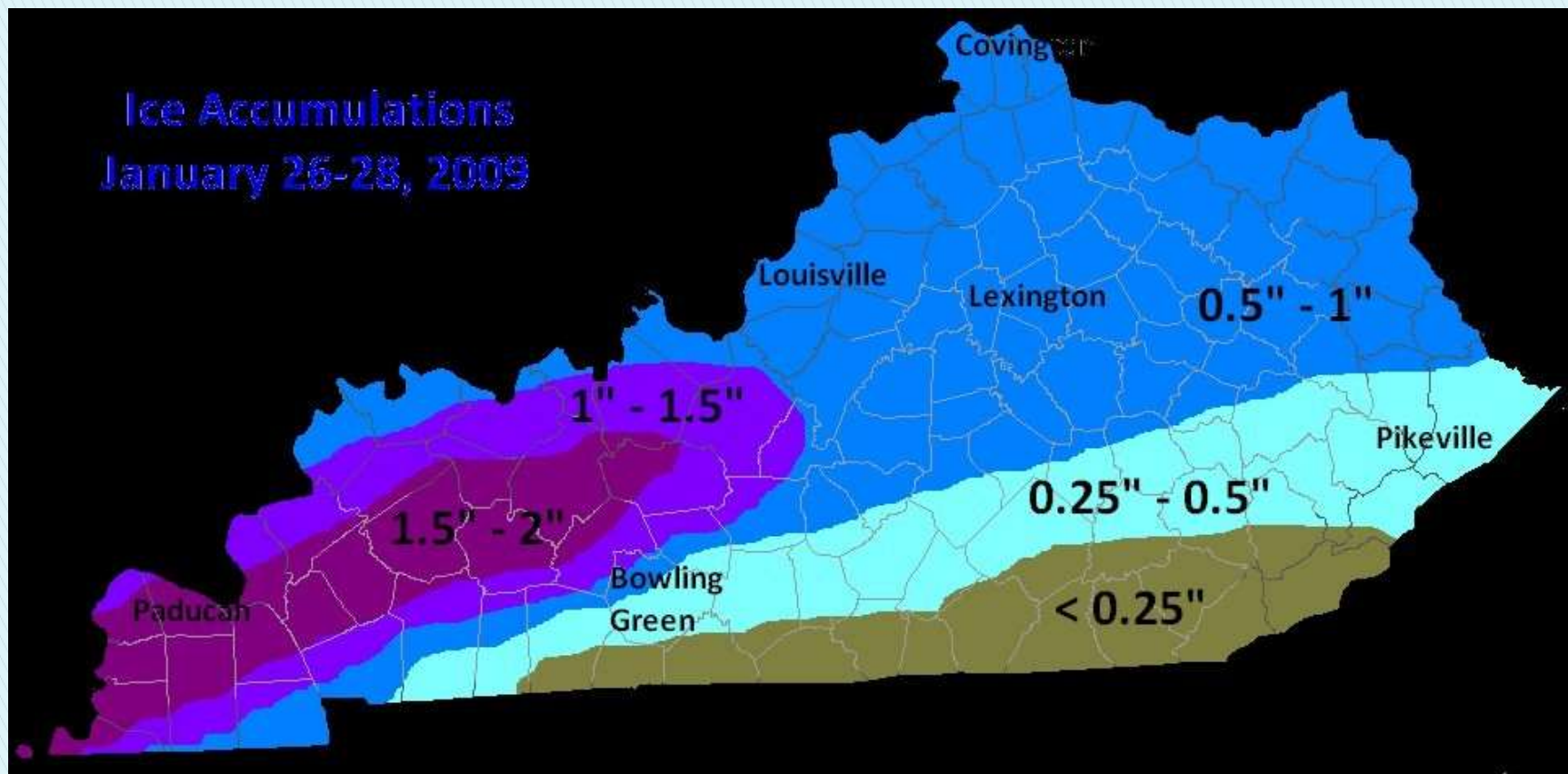
Wal-Mart has unique emergency response capabilities:

- designated trade areas for response efforts
- many stores can operate without power
- Individual store managers have authority to release emergency supplies
- Wal-Mart has done extensive research into foods purchased during emergencies and can ensure those foods are available

Actual Event: Kentucky's Ice Storm

- ▶ 1,000,000 without power > a week, and some for up to a month
- ▶ Roads remained impassable from downed trees and power lines
- ▶ Entire KY power grid was severely compromised
- ▶ 102/120 counties declared emergencies
- ▶ The entire KY NG (4600 total) was deployed
- ▶ 172+ shelters operated across the state
- ▶ Communication shut down statewide for much of the first week

Kentucky Ice Storm – 2009





Importance of Retail to Response

- Food industry not considered critical infrastructure
- With no communication from utilities:
 - Distributors forced to cancel food deliveries
 - Shelters lost opportunity to integrate perishable food into feeding effort
 - Retailers without power, communities without food

Many rural communities rely on a single store for all basic needs



Fuel/Transportation Resources

- ▶ Transportation was crippled > week
- ▶ Overwhelming demand for open retailers
 - stores required 2–3 semi-truckloads each of water and charcoal daily to meet local demands.
- ▶ Operable gas stations also overwhelmed
 - Law enforcement
 - Crowd control
 - Gasoline rationing
- ▶ Fuel shortages:
 - gas stations need power for pumps
 - Impassable roads = no deliveries
 - Many stations lost fuel supply for 24+ hours.



Kentucky's Ice Storm



Lessons from Kentucky's Ice Storm

- ▶ On-time demand for foods puts them in the category of being a critical resource
- ▶ VOADs may not be able to help all victims
- ▶ Food retailers and distributors need to be included in emergency planning

90% of available food is privately owned

Conclusion

- ▶ The farm-to-fork system is driven by just-in-time delivery
- ▶ Throughout the system there is no predictable supply of readily available food
- ▶ Long-term power outages will result in immediate food shortages
- ▶ Food must be considered a critical infrastructure in all plans

