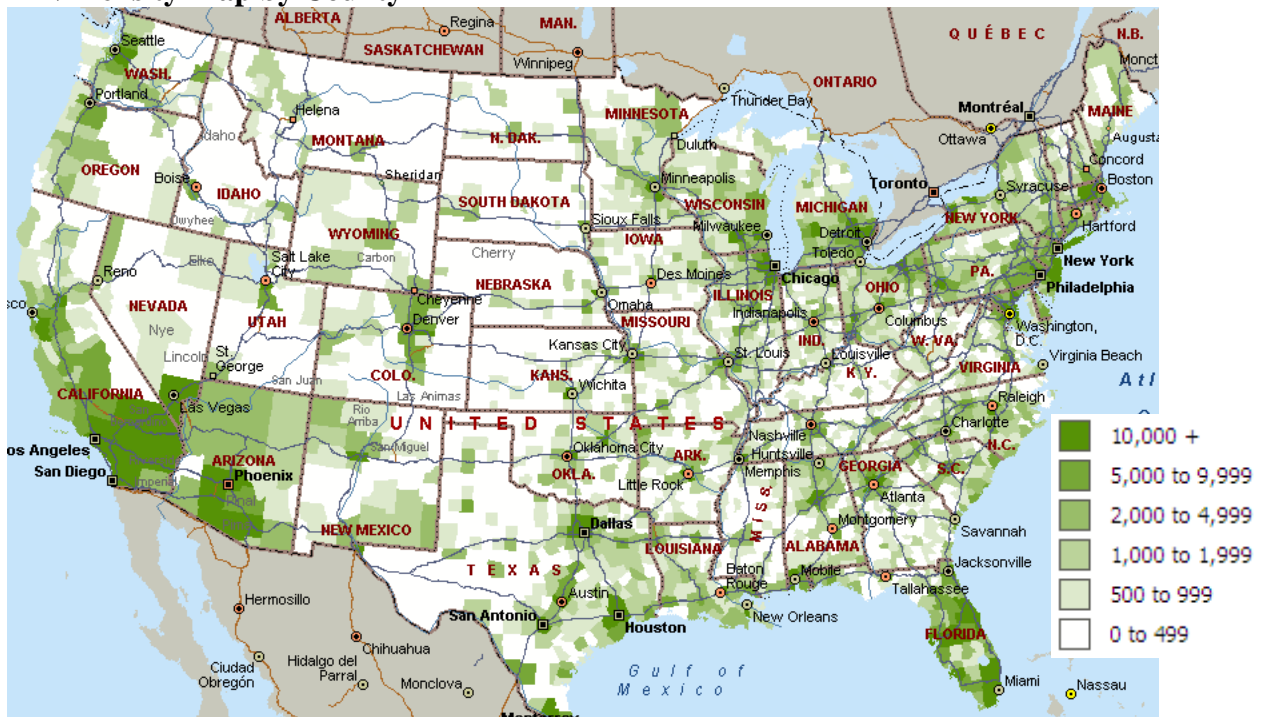


Infrastructure Subcommittee Report Out 26 February 2009

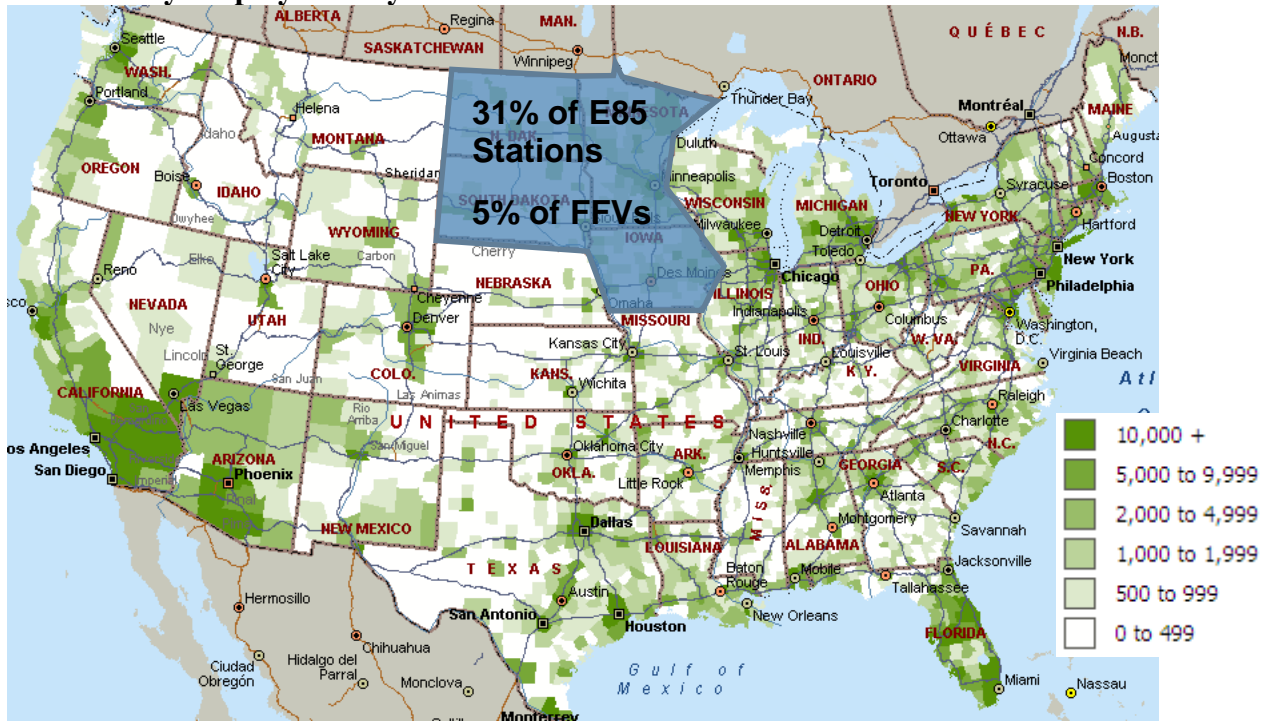
1a. Given the considerable transportation bottlenecks that currently inhibit the distribution of biofuels, it may be difficult to justify producing EISA-mandated volumes for end-use markets that do not exist or that have not matured (i.e., limited flex-fuel vehicles and fueling stations exist).

- The issue is distribution bottlenecks not transportation bottlenecks.
- EPACT of late 1980s created incentives for auto manufactures to produce FFVs. This has resulted in the production of more than 7 million in the market today. Similar incentives for retailers to install fueling capability did not come with the vehicle incentives. Incentives for fueling facilities have only been offered recently. There are currently 7 million FFV's in market place today yet there are only 1800 E85 refueling stations out of 121,000 retail fueling facilities in the U.S. This mismatch in pump density relative to FFV density should be addressed through policy. (e.g. increase incentives by matching refueling pumps to FFV density). **See maps below.**
- Need outreach program. EERE needs to work with state energy offices, national governors' association, needs to focus on right states (based on map) and needs to make better information available.

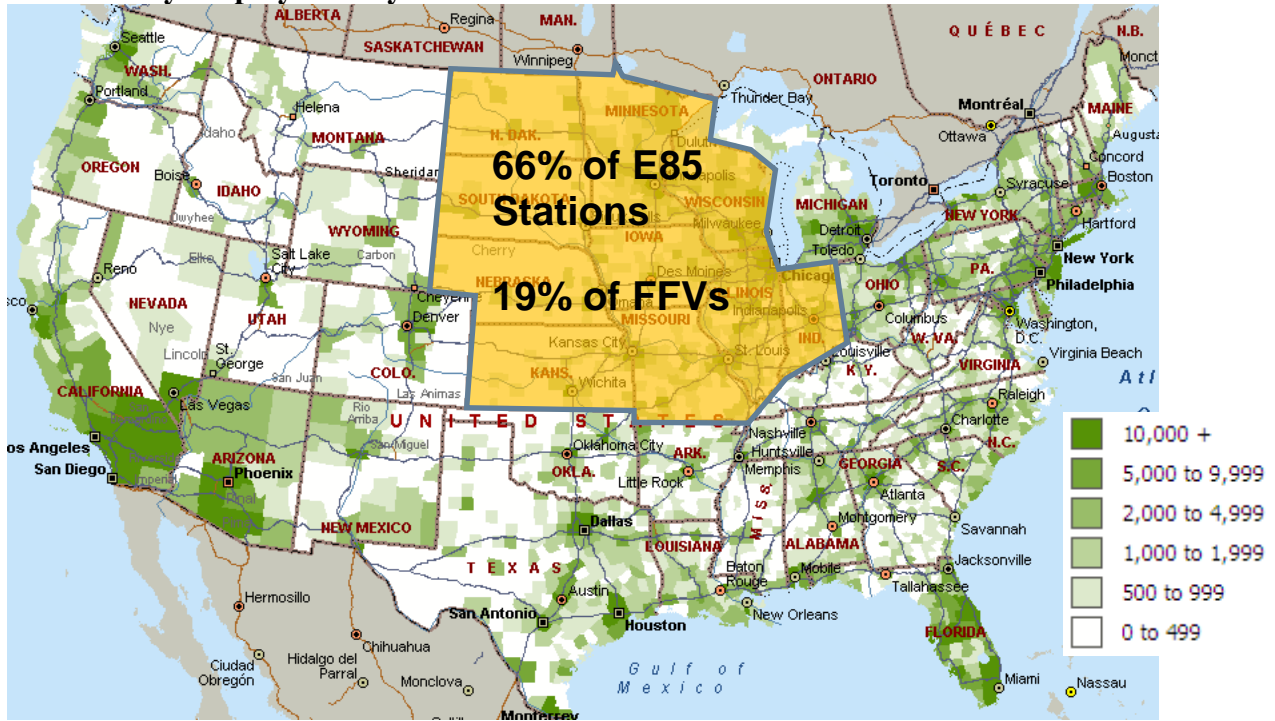
FFV Density Map by County



FFV Density Map by County



FFV Density Map by County



1b. How can service station owners and managers be convinced to begin carrying biofuels in the absence of E85 capable vehicles.

- Focus introduction of pumps in locations with highest FFV density.
- Develop mechanisms to maintain pricing differential to incentivize people to use alternative fuels based on fuel energy density.
- Need fuel specs set for a range of blends. Should work with EPA and ASTM to have fuel specs for blends between E10 and E85.
- Need to reevaluate where incentives need to be along the value chain in order to mitigate economic barriers to ethanol blends (over 10 %). Consider reallocating blenders credit, possibilities include incentivizing retailers to install capability for higher blends of ethanol, blender pumps, and a BTU (energy density) adjustment to the federal gasoline tax.

1c. How can consumers be convinced to buy E85 capable vehicles in the absence of fueling stations?

- Engage in education efforts to help consumers understand that purchasing an FFV allows them the capability to choose between conventional fuels or ethanol blends up to E85 based on pricing/value.
- Conduct a comprehensive review of regulatory factors influencing installation of ethanol blend pumps and ethanol blend fuels. Take action to streamline the regulatory hurdles and constraints faced by potential retailers of higher ethanol blends.

1d. Finally, what assurances do fuel distributors have that EISA mandates will not significantly change?

- There are no assurances. Consistent behavior is critical to long term success.

2. Distribution end points for ethanol are usually in dense, urban centers where real estate is expensive, permitting complex, and safety equipment, such as proper ethanol fire-fighting foams, not readily available. What kind of public education efforts can be undertaken to overcome these challenges?

- Implement effective nationwide public service announcement program.
- Follow structured process for hazmat education and training to educate on difference of ethanol vs. Petroleum based fuel and that risks are not higher, just different. Reach out to national, state and local entities to ensure they are aware of these issues.
- Public education isn't the only issue. Funding mechanisms must be found to assist.

3. *Is the development of a GIS data website for alternative fuels a task that can/should be accomplished in the near term? If so, who should be responsible? What are the steps to implement the recommendation?*

- Current web search technology is sufficient to deal with the location of alternative fuels if available information is provided. Refueling station availability should be searchable and attachable to standard consumer GPS mapping technology
- Information could be integrated with standard GPS search engines as well as websites.
- See if there isn't a simpler commercial solution to get 90 percent of the way there.

4. *Challenge: Aggregating enough ethanol in one location to improve transportation economics and efficiencies. Where should new aggregation storage centers (by region or by state), be constructed to collect ethanol from local biorefineries to better feed rail, barge or possible pipeline transportation to demand centers? Could a federal biofuels GIS database help answer this, and how could the knowledge GIS framework DOE is working on be best improved to help identify key aggregation points?*

- The industry knows this information. Biorefinery locations are known and carefully planned based on availability of resources and transportation infrastructure. (for example manly terminal in Iowa developed with out a GIS system in place.)
- Market conditions should drive technologies and location decisions.
- Do not believe a GIS database is going to make it any easier.