Impact of Gasoline Spending on US Household Budgets

**Problem**

- **What**
  - Problem(s): High price of gasoline, impact to household budget, impact to lifestyle, greedy oil companies, crude price too high
- **When**
  - Date: 2011 (data provided from 2011)
- **Where**
  - Facility, site: United States
- **Impact to the Goals**
  - Household Budget
    - $2,655 annual spending on gasoline (2011), averaging 4% of gross income

**Analysis**

1. **Household Budget Goal Impacted**
   - $2,655 annual spending on gasoline (2011), that was an average of 4% of household gross income
2. **Cause Mapping**
   - Average price of gasoline $3.52/gal
   - Crude oil is ~68% cost ($2.39/gal)
   - Marketing/distribution ~11% ($0.39/gal)
   - Local, state, federal taxes ~13% ($0.46/gal)
   - Refining ~8% ($0.28/gal)
   - Fuel/engine technology
   - Fuel standards
   - OPEC production targets
   - International supply
   - North American supply
   - Total oil well capacity
   - Transportation
   - Sanctions on oil producing countries
   - World crude oil supply
   - World crude oil demand

**Evidence**

- Global consumption
  - Evidence: U.S. consumption has been decreasing partially due to slow economy
  - Evidence: Global consumption has increased, specifically East Asia during their industrial revolution
- U.S. consumption
  - Evidence: The Organization of the Petroleum Exporting Countries (OPEC) raise and lower production rates
- OPEC
  - Evidence: The Commodity Futures Modernization Act of 2000 deregulated energy futures and derivatives (also known as the "Enron loophole"
- Total oil well capacity
  - Evidence: Transportation (pipeline, trucks, railcars) can limit actual supply vs. well capacity
- Sanctions on oil producing countries
- International supply
- North American supply
- Total oil well capacity
- Transportation

**Solutions**

1. **Action Item**
   - **Type of vehicles within household**
     - Drive/purchase more fuel efficient vehicles
2. **Action Item**
   - **Public transportation not available in all locations**
     - Add/use public transportation
3. **Action Item**
   - **Carpooling**
     - Carpool with co-workers, friends, spouse, etc.
4. **Action Item**
   - **Energy futures deregulated in 2000**
     - Pass law to regulate energy futures

**Cause Mapping**

- **Step 1**: Problem
  - What's the Problem?
- **Step 2**: Analysis
  - Why did it happen?
- **Step 3**: Solutions
  - What will be done?