Alternative Utility Vehicles

This workshop was presented by Pete Varney, the Associate Director of the Garage and Car Pool Department at the University of Illinois. Pete helps take care of the University’s huge fleet of motor vehicles (2,500) that are used for both passenger transport and utility work purposes. He and his coworkers have been trying to reduce energy consumption by purchasing hybrids and electrical vehicles to be used where the need is appropriate. These vehicles have the advantage of accessing tight areas around the campus and fuel efficiency. Several factors have to be taken into consideration such as: payload, range, comfort (many are not suited for taller people), visibility, and speed (25 mph), and parts are sometimes difficult to obtain. An excellent presentation!
Alternative Service Vehicles

Pete Varney
University of Illinois

University of Illinois fleet

- Illinois’ fleet is centralized/decentralized
- Overall equipment 2,500 pieces
  - 227 passenger (Car Pool)
  - 275 Service vehicles (Truck Pool)
    - Includes ASV
- My role and responsibilities

Provide Transportation for Crafts and Trades in order to allow them to accomplish their mission
What is an Alternative Service Vehicle?

- Any non-traditional vehicle
  - Mini Trucks
  - Electric vehicles
  - Hybrids

ASV Use at Illinois

- Mail Distribution
- Project Coordinators
- Parking Enforcement
- Generator Service
- Locksmith
- Route assignments (plumbers)
Why explore using an Alternative Service Vehicle?
(You need a reason)

- Smaller – footprint
- Fuel efficiency – “green-ness”
- Accessibility (to work site)
- Q: “Why are we buying X or Y?”

Obstacles

- Illinois Vehicle Code
- Will it get the job done?
- Operator prejudice

Costs and Benefits

- Fuel economy
- Ergonomics
- Maintenance
- Payload

Advantages / Disadvantages

- Robustness
- Cost
- Parts availability
- “Old School” technology
Comparison of FSV and ASV

- Payload
- Range
- Comfort - heat/ac
- Visibility
- “Road Rage”

Vehicle Comparison

<table>
<thead>
<tr>
<th></th>
<th>Full Size Van</th>
<th>Electric</th>
<th>Mini Truck</th>
<th>Hybrid</th>
</tr>
</thead>
<tbody>
<tr>
<td>MPG</td>
<td>6-10</td>
<td>N/A</td>
<td>14-25+</td>
<td>20’s</td>
</tr>
<tr>
<td>Payload (lbs)</td>
<td>3,500</td>
<td>400-1,000</td>
<td>1,500 - 3,000</td>
<td>~2,000</td>
</tr>
<tr>
<td>Range (miles)</td>
<td>Gas tank</td>
<td>~44</td>
<td>Gas tank</td>
<td>Gas tank</td>
</tr>
<tr>
<td>Max Speed (mph)</td>
<td>65 +</td>
<td>25</td>
<td>25</td>
<td>65 +</td>
</tr>
</tbody>
</table>

Vehicle Comparison – Cost

- Full size van $15,000 - $16,000
- Mini Truck $11,000 - $14,000
- Electric $ 9,000 - $25,000
- Hybrid $25,000 - $35,000

- Above price is for standard vehicle without specialized equipment (bins, racks, etc.)

ASV are part of the plan

- Fuel / Engine monitors
- Driver education ($/gallon signs)
- “Why are we buying this?”
Contact Information

Pete Varney  
University of Illinois Garage & Car Pool  
pvarney@illinois.edu  
217-333-7583 office  
217-840-0837 cell

Contact Information

Tiger Trucks  
www.tigertruck.com  
1-866-688-1778

Vantage Vehicles  
www.vantagevehicle.com  
1-817-921-5491

Contact Information

Mag International  
www.maginternationalinc.com  
1-877-268-4468

Columbia ParCar  
www.parcar.com  
1-800-222-4653
<table>
<thead>
<tr>
<th>Contact Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>e-ride Industries</td>
</tr>
<tr>
<td><a href="http://www.e-ride.com">www.e-ride.com</a></td>
</tr>
<tr>
<td>1-800-950-4351</td>
</tr>
</tbody>
</table>