

# 2035 Plan Research Group Presentation

June 22, 2006

**Goal Statement: Be a center of transportation research and innovation.**

## Initiative

**General statement of Research Group:** Develop a comprehensive regional goods movement “knowledge base” as a resource to inform policy and planning. (A comprehensive listing of existing goods movement, reports, studies, and information on freight movements in our region).

**Problem Statement 3-1 (High Priority):** Need to Diversify fuels for transportation. This addresses long term availability, dependence on foreign sources.

## **Solutions:**

### Policies

1. Support consortium of universities to develop and commercialize hybrid vehicles. (*High*)
2. Analyze current state and federal policies to propose changes and/or take advantage of policies to enhance alternative fuels production and use in our region.
3. Require a percentage of public auto/truck fleets to be hybrids.

### Initiatives

4. Comprehensive research on production and use of ethanol/bio-fuels.
  - a. Research number of E-85 ready vehicles.
  - b. Research sales at existing E-85 outlets.
  - c. Research location of ethanol plants in the surrounding area.
  - d. Research barriers to ethanol use (shipping losses, evaporation, volatility).
  - e. Research market advantages of our region for production of bio-fuels.
  - f. Research costs/availability in production technology – economies of scale, advantage of location near existing petroleum refineries (for blending and/or delivery).
  - g. Research impacts of E-85 and other alternative fuels on engines/vehicles.
5. Funding program to support entrepreneurs providing alternative fuels.
6. Fund research to reduce costs of H2 and fuel cells.

**Problem statement 3-5 (High Priority):** Need for innovative ways for trucks/freight to get where they/it need to go more easily.

**Solutions:**

**Policies**

1. Townships/municipalities/county planning commissions should seek to locate industrial and distribution facilities near existing transportation terminals and interchanges. *(High)*
2. Encourage development for multi-trailer terminals at Ohio Turnpike interchanges.
3. Research examples of collaboration of trucking companies on deliveries and facilitate implementation.

**Initiatives**

4. Research means to improve efficiency of transfer of goods between modes.

**Projects**

5. Fund a pilot project of parts/goods movement for localized areas/supply chains (Multi-F). *(High)*

**Problem Statement 3-11 (High Priority):** Need to support/expand transportation logistics and supply chain research in the region.

**Solutions:**

**Policies**

1. Look for potential to coordinate transportation to common suppliers/locations to improve efficiency.

**Initiatives**

2. Research implications of co-locating product facilities (integrated supply chain).
3. Identify clusters and develop related industries; and research the cluster's impact on transportation/freight movement

**Projects**

4. Fund a pilot project of parts/goods movement for localized areas/supply chains (Multi-F). *(High)*

**Problem Statement 3-8 (High Priority):** Need to find ways to better utilize ports in the Great Lakes.

**Solutions:**

**Initiatives**

1. Research environmental friendly ways to discharge ballast water. *(High)*
2. Research competitive markets for short sea shipping on the lakes (O-D of goods, routes, obstacles). *(High)*
3. Research innovative ways to transfer goods between modes easily to make intermodal movement more competitive (terminal, ships, containers or trailers).
4. Research more energy and environment friendly propulsion and possible use of alternative fuels.
5. Research environmental/economic/safety impacts of year round operation of the Great Lakes and St. Lawrence seaway systems to determine recommendation.

**Problem Statement 3-9 (High Priority):** Facilitate Toledo Science and Technology corridor identity and movement of people and ideas.

**Solutions:**

**Policies**

1. Promote share rides for connections between entities.
2. Regular, good transit connections between universities.
3. Institutional Rearranging (allow people to stay in one location but available services of different institutions at that one location).

**Initiatives**

4. Research role of transit in establishing identity for corridor (studies of other successful corridors – e.g. silicone valley, research triangle, etc.). *(High)*
5. Research potential transit and/or communication/information technology to facilitate interaction between facilities. *(High)*
6. Develop “knowledge base” of interactions/destinations between corridor entities.

**Projects**

7. People mover (fixed guideway transit) connecting area research facilities using available right-of-ways where possible.
8. Separate transit/highway connection for BGSU/Owens CC/UT/MUO (I-75/I-475).

**Problem Statement 3-3 (Moderate Priority):** Need to research innovative traffic systems to improve traffic flow.

**Solutions:**

**Policies**

1. Support implementation of roundabouts.
2. Support coordinated signal timing on all major arterials (especially numbered routes).
3. Support ITS applications in our region including “Freeway Management Systems”.

**Initiatives**

4. Ensure that TIP criteria supports signal coordination and ITS options and projects.
5. Conduct research and additional education on designs of and applications of roundabouts in our region.