

Transportation and Mobility

The city of Elgin is in a unique position, located adjacent to many significant transportation corridors and systems linking Elgin to Chicago, other neighboring communities within and surrounding the Fox River Valley, as well as O’Hare Field. It is also at the confluence of these roads used for private and public transportation, as well as commuter and commercial railroads. A significant bicycle path system follows along the Fox River, entering and exiting Elgin’s urban fabric.

With all of these modes of transportation into and throughout the city (including walking), it becomes critical to understand and manage how these impact the city of Elgin. The role of the Transportation working group has been to look at transportation systems and make recommendations to identify green and sustainable opportunities for action.

Transportation and Mobility Goal I

Reduce Energy Consumption and Pollution from Transportation Operations

Transportation relies heavily on internal combustion engines, which use oil based products. According to US EPA, motor vehicles are the number one cause of air pollution causing adverse health and environmental effects. Fine particulate matter get deep into the lungs and can get into the blood contributing to asthma, chronic bronchitis, irregular heart beat, even premature death for people with heart and lung disease. The environment is also damaged by particulate matter as it lands in our food crops, water supply and in the forest. Reducing pollution from vehicles, environmental and personal health will improve while reducing our reliance and consumption of oil.

Objective 1

Reduce Energy Consumption and Pollution from Transportation Operations

Tasks/Metrics

1. Summarize available information in a pamphlet to be distributed to the public.
2. Develop public presentations of the summarized information.
3. Partner with School District U-46, private schools, community organizations and area businesses to create a Clean Air Campaign through signs in parking lots, “drive thru’s”, education pledges and clean air stickers.

Objective 2

Reduce idling within the municipal fleet and community-at-large.

Idling or “leaving the car running” is a wasteful practice that is not only harmful to air quality and human health but vehicles as well.

According the city of Minneapolis, the EPA and National Institute of Environmental Health Services, an average car burns about a gallon of gas for every hour of idling. Ten seconds of idling uses more fuel than simply restarting the vehicle. Idling can lead to increased air pollution, has been linked to cancer, heart and lung disease and asthma. Also idling causes undue hardship on a car’s engine; an idling engine does not run at peak efficiency and causes increased residue on spark plugs and dirty engine oil.

Tasks/Metrics

1. Develop a “reduce idling” driver list (commitment to turning off one’s vehicle when idling over 1 minute) largely to promote awareness of idling and help the community become accustomed to thinking about resource consumption. Use the city of Minneapolis, Minnesota as a model.
2. Create an “idle policy” for municipal fleet vehicles.
3. Identify enforcement possibilities for the future.
4. Create an idling ordinance for all vehicles within Elgin.

Transportation and Mobility Goal II

Reduce Energy Consumption and Pollution related to Transportation Infrastructure

Construction, maintenance, and functionality of transportation infrastructure uses energy and is a source of pollution affecting the public health and environment. By carefully choosing materials, methods and procedures, negative impacts can be reduced, while providing sustainable infrastructure to support our transportation and mobility needs.

Objective 1

Analyze traffic control device functionality to optimize mobility and alleviate congestion.

Tasks/Metrics

1. Complete an inventory of traffic control devices and assess their operations in terms of traffic flow.
2. Develop a well-publicized feedback mechanism for users of the roadways to reflect real world conditions.

Objective 2

Investigate alternative construction materials for a sustainable transportation infrastructure to reduce energy demand and promote environmental stewardship.

Tasks/Metrics

1. Prioritize the use and application of alternative construction materials, depending on the type of application and expected traffic load.
2. Study, comment, and when possible utilize the recommendations and checklists developed by Greenroads.us
3. If feasible pursue a "Green Roads" certification for a local road project.

Objective 3

Facilitate creation of charging stations for electric vehicles (EV) in an effort to reduce "range anxiety" and make electric vehicle usage more convenient for average citizens.

While there does not seem to be a consensus for how close electric vehicles charging stations should be, a study funded by the US Department of Energy recommends public charging stations be located near locations where the EV owner will be parked for a significant period of time (1 – 3 hours.) These include shopping malls, governmental facilities, public parks, sports venues, arts productions, museums, libraries and outlet malls. This recommendation should serve as the starting point for determining future EV charging locations.

Tasks/Metrics

1. Conduct a study to determine the number and locations of electric vehicle charging stations.
2. Implement recommended network of charging stations.

Objective 4

Encourage investment from public and private sectors to add livability infrastructure to encourage use of public transportation (train, bus, vehicle/ride sharing) and non-motorized transportation (walking, biking).

Tasks/Metrics

1. Monitor public, quasi-public and private improvements related to train and bus shelters, benches, bike racks, drinking fountains, widen/improved sidewalks (shopping/entertainment areas and between destinations), shade trees and outdoor seating.
2. Work with PACE to inventory existing bus shelters; develop recommendations for expansion of these facilities
3. Adopt a resolution to install bike racks next to each bus shelter to encourage biking and bus ridership

Transportation and Mobility Goal III Promote Alternative Transportation Options

Current transportation options rely heavily on personal vehicles which contribute to increasing pollution levels, traffic congestion, and excessive energy consumption in comparison with other means of transportation. Promoting alternative transportation options will help to reduce use/ownership of internal combustion vehicles while satisfying the need to move goods and people.

Objective 1

Educate the public and businesses on the benefits of alternative forms of transportation and mobility to reduce pollution and energy consumption.

Tasks/Metrics

1. Create a pamphlet with local transportation information and cost comparison on transportation per vehicle type.
2. Distribute directly to businesses and at public events.

Objective 2

Research vehicle sharing programs in an effort to reduce traffic congestion, therefore reducing its pollution, economic and health impacts.

Tasks/Metrics

1. Contact at least two organizations with vehicle sharing programs to review implementation procedures in Elgin.
2. Evaluate their successes.
3. Develop similar program for Elgin.

Objective 3

Research resident's vehicle usage and conditions to gauge willingness to participate in a vehicle sharing program.

Tasks/Metrics

1. Utilizing direct mail and a web survey, gauge the public and business community's willingness to participate in a vehicle sharing program.
2. Utilizing direct mail and web survey, determine existing vehicle usage.

Additional Resources/Best Practices

Automobiles and Carbon Monoxide

<http://www.epa.gov/otaq/consumer/03-co.pdf>

City of Minneapolis, Minnesota “No Idling” campaign and ordinance

http://www.ci.minneapolis.mn.us/airquality/antiidling_home.asp

City of Mount Vernon, New York Car Sharing Program

<http://cmvny.com/>

A program in which two vehicles from a car-sharing company are provided municipal workers during the day and then made available for rental at night and throughout the weekend. To use the car share program, Residents must pay a \$99 membership fee and additional hourly rental rates that start at \$10.

(<http://green.autoblog.com/2010/05/10/city-of-mount-vernon-launches-nations-first-municipal-car-shari/>)

City of Portland, Oregon

<http://www.portlandonline.com/transportation/index.cfm?a=292688&c=34749>

In addition to utilizing several car-sharing companies, Portland is also one of the first local governments to provide free, reserved public parking spaces to car-sharing companies. Providing an additional perk to using one of these services.

Chicago Transit Authority and I-GO Smart Card

<http://www.igocars.org/how/chicago-card-plus-i-go-card/>

A public/private partnership that provides dual account holders (Chicago Transit Authority and I-Go) access to both services using the same card.

Green Roads Rating System

<http://greenroads.us/>

Idling Reduction Programs for the Chicago Metropolitan Area

<http://www.cleanaircounts.org/documents/Idling%20Reduction%20Programs.pdf>

US EPA Transportation and Air Quality

<http://www.epa.gov/otaq/>