Merge Lanes Ahead

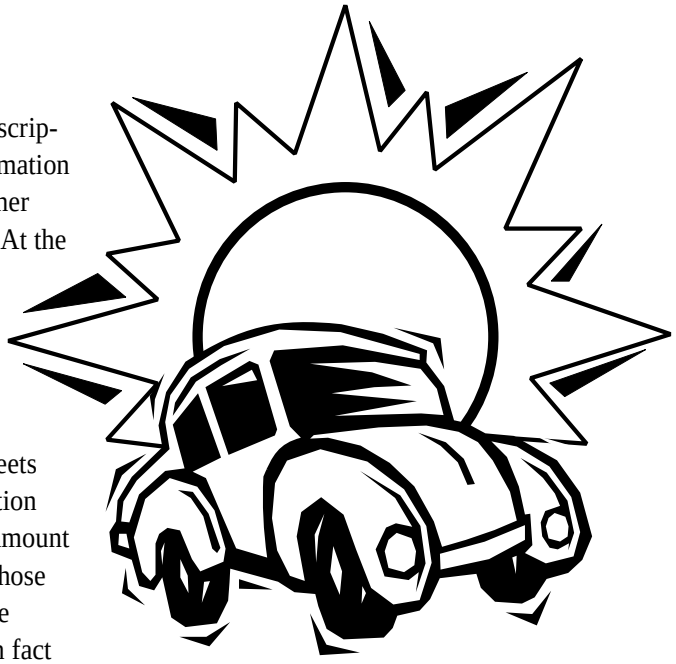
Conserving energy through land use and transportation planning.

Introduction

This is the first in a series of nine fact sheets dealing with the relationships between transportation, land use, energy and our future. Each fact sheet develops a different topic with useful ideas about transportation and energy.

We've called the series *Merge Lanes Ahead* because we believe that merging the way we plan transportation, land use and energy conservation is ultimately how we will create the kinds of communities Floridians want. That's our goal for this series — to help consumers, policy-makers, and institutions learn how to create more sustainable communities.

This first fact sheet describes how topics were selected for the series and provides brief descriptions of the information covered in the other eight fact sheets. At the onset it should be noted that much has been written about these topics and that these fact sheets provide a distillation of an enormous amount of material. For those interested in more information, each fact sheet includes suggested readings and references.



This fact sheet is one of a series examining the relationships between transportation, land use and energy.

Other topics include:

Fact Sheet 2..... Transportation and energy consumption

Fact Sheet 3..... Traffic congestion

Fact Sheet 4..... Street design

Fact Sheet 5..... Land use and transportation

Fact Sheet 6..... Economics of driving your car

Fact Sheet 7..... Reducing automobile travel

Fact Sheet 8..... Community case studies

Fact Sheet 9..... Road blocks to change

For more information, or to order additional copies of this fact sheet or any other fact sheet in the series, please contact: Julia "Alex" Magee, 1000 Friends of Florida, Post Office Box 5948, Tallahassee FL 32314-5948, or call (904)222-6277. Check out our home page at www.1000fof.org for additional information.

What's the Problem?

Florida is one of the most auto-dependent places in America. While the state's population increased by 33 percent between 1980 and 1990, our use of automobiles for work trips increased by almost 60 percent. That's about twice as much as the nation as a whole. To fine tune our driving habits, many of us have a sedan for work, a minivan for hauling the kids, an RV for weekend and summer vacations, and a pickup truck for odd jobs. During the 1980s the number of registered vehicles in Florida grew twice as fast as the population. Today the state has nearly 1.2 vehicles for every man, woman and child. Almost 90 percent of our automobile trips are made with one occupant

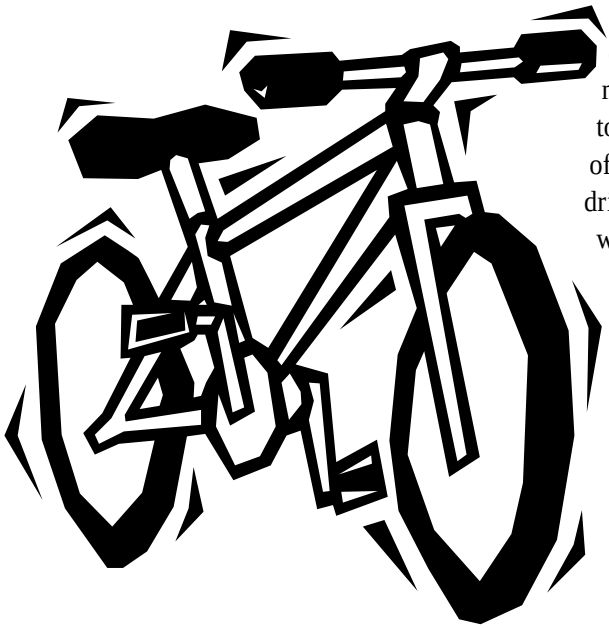
— the most energy intensive way to use our vehicles.

What is even more alarming is the future picture. Florida is expected to add another 4 million people and 4 to 5 million vehicles in the next 25 years. Most will be concentrated in the same urban centers where traffic congestion is the worst. Imagine a continuous strip of teeth-gritting congestion stretching from Key West to Jacksonville and you've got a pretty good idea of what the east coast could look like in 2020 unless we change our gas-guzzling ways.

Here's what this series of fact sheets covers:

Fact Sheet 2: Transportation and Energy Consumption

All the driving we do uses a lot of gasoline, wears out our cars, streets and highways, and is very expensive. The cost per mile of driving our cars has risen as steadily as our travel habit. Driving more is burning our hard earned cash, and sending our energy budgets up in smoke!



So, why do we drive so much? It's easy to compile a list of excuses for driving everywhere we go and then say, "I really have no choice!" But how many people do you know who drive their cars to the health club to work out on the exercise bike, or drive across the parking lot to go from the grocery store to the drug store? While it's often true that there aren't enough sidewalks, bike lanes and public transit in our cities and towns, it is also true that many of us have truly gas-guzzling driving habits. We may be overlooking alternatives which are available and would even save us money.

Fact Sheet 2 examines the connection between transportation and energy consumption and explains why the transportation sector in the United States requires so much of our energy supply. The transportation-energy issue is especially important because:

- the transportation sector consumes 22.5 percent of the total energy used in the U.S.;
- the transportation sector makes up a large and growing portion of the U.S. economy (17 percent of the Gross National Product in 1995);
- the U.S. consumption of energy for transportation is out of balance with the rest of the world, particularly Western Europe; and
- the U.S. dependence on imported petroleum poses a threat to our national security.

Improving the Transportation Picture

Given that transportation requires a great deal of refined energy, what can be done to improve the situation? One approach is depicted on page 3, which shows a pyramid of strategies that can be used to improve mobility, decrease congestion, and reduce overall energy use. These strategies are grouped into three areas:

1. increasing the supply of roads, transit systems, and bike and pedestrian facilities;

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2. using land use management strategies to increase walkability and lessen the need for automobiles; and
3. changing individual travel demand behavior through telecommuting, congestion pricing or employer-provided ridesharing.

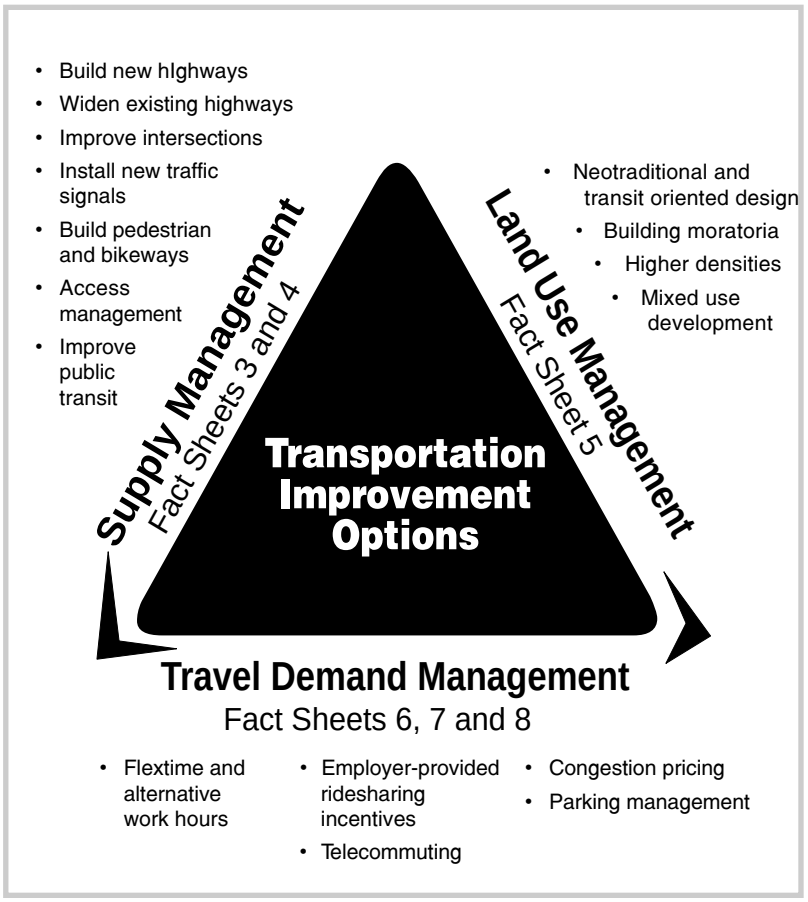
Fact Sheets 3 and 4: Managing the Supply

The left side of the pyramid shows "supply management" options. These are traditionally the first options transportation planners use in an attempt to improve traffic congestion. Geared to increasing the supply of transportation alternatives, supply management strategies include widening roads, building new roads, improving intersections, installing new traffic signals, and building mass transit systems. Passage of the 1991 federal Intermodal Surface Transportation Efficiency Act (ISTEA) expanded these supply options to include things other than cars, such as bike and pedestrian facilities. While these options are popular and provide visible statements of progress, many of them (road construction and mass transit in particular) are very expensive and their ability to reduce congestion is questionable.

Some of these supply-side issues are addressed in Fact Sheets 3 and 4. Fact Sheet 3 looks at traffic congestion and suggests some questions to consider before assuming that highway construction is the answer to reducing congestion or improving mobility. Fact Sheet 4 examines road design and provides some suggestions for improving highway aesthetics and making our streets more pedestrian and bicycle friendly.

Fact Sheet 5: Managing Land Use

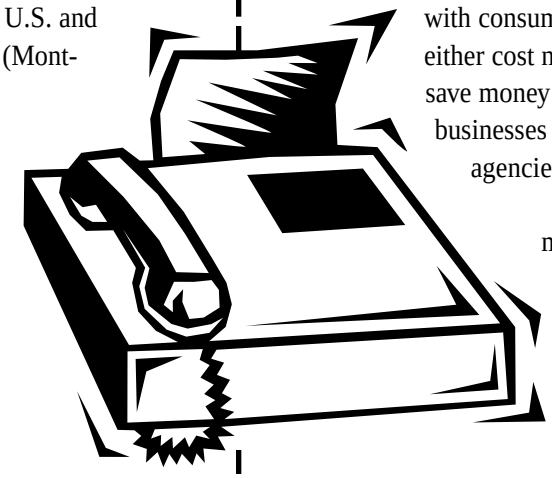
The right side of the pyramid suggests options involving land use management. Land use and transportation are inextricably linked. For example, building a new highway opens up



land for development (thus increasing congestion.) On the other hand, building a regional shopping center along a two-lane road will significantly affect the transportation system. By controlling land use and encouraging transit-oriented design, neotraditional design, building moratoria, higher density zoning, and mixed use zoning, we can cut traffic congestion. These options are most effective in areas that are not already fully developed, but they can also be used in built-out areas that are being redeveloped.

Fact Sheet 5 examines one of these strategies, neotraditional design, in some detail. Neotraditional design, also known as New Urbanism, attempts to develop communities that are less dependent on automobiles, and that

enable people to walk from their homes to businesses and stores. This strategy is being applied in a growing number of developments throughout the U.S. and Canada, including Kentlands (Montgomery County, Maryland); Laguna West (outside Sacramento, California); Harbor Town (Memphis, Tennessee); Celebration (outside Orlando, Florida); and Cornell (north of Toronto, Ontario).



Fact Sheets 6, 7 and 8: Managing Travel Demand

At the bottom of the pyramid is "travel-demand management," or changes that can be made to affect the demand for travel. Some of these options include telecommuting, pricing and management of parking, flextime and alternative work schedules, congestion pricing, and employer-provided ridesharing incentives. These options can be effective anywhere because they focus on individual behavior.

While Florida's population increased by 33 percent between 1980 and 1990, our use of automobiles for work trips increased by almost 60 percent.

Their success hinges on common sense and home-grown ingredients — public education and community organization — and usually requires a partnership between the public and private sectors. Many local governments are reluctant to try these ideas. They believe that strategies like these are difficult to implement because they require the cooperation of a large and diverse number of groups and individuals. But many communities are finding that people will cooperate to solve community problems. When they understand the issues and are given good options by government, they make good choices.

Many of these approaches can be done without a large budget, but they do require teamwork, coalition building, leadership and vision. They are usually popular with consumers because they either cost nothing or actually save money for households, businesses and government agencies.

Travel-demand management is examined in Fact Sheets 6, 7, and 8. Fact Sheet 6 looks at the economics of driving, focusing on direct costs, indirect costs and subsidies. Fact Sheet 7 examines alternatives to driving, including telecommuting. Fact Sheet 8 provides case descriptions of several innovative, non-construction alternatives to traffic congestion including transportation management associations; a trip reduction ordinance used by Pleasanton, California; a rideshare-parking management program used by Montgomery County, Maryland; and two transit management strategies used by Phoenix, Arizona and Norfolk, Virginia.

Fact Sheet 9: Road Blocks

Fact Sheet 9 concludes the series with a discussion of "road blocks to change". What are the impediments to implementing these ideas and how can they be overcome? In developing this series of fact sheets we found that there is no shortage of good ideas, although sometimes there is a shortage of politically feasible ones. As Stanley Hart, a California transportation consultant, said, "the automobile has become entrenched in our economy, in our psyches, and in our physical surroundings."

Our challenge is to do some digging; to look at what transportation decisions really mean to energy conservation, land use and to the future of our communities.

Each of us has an important role to play in helping our state, regional and local leaders