Smart Transportation: Good for People, Good for the Bay

The traffic trap

The Chesapeake Bay region is becoming more crowded. More people live here today than ever before. In the next 20 years, another 3 million people will live here. More people means more cars and trucks as we commute to work, go shopping, take the kids to school, ship the goods we use, and go where we want to go. Today, the Baltimore-Washington metropolitan region has the nation's second worst traffic and ozone problems.

Our traffic problems aren't just in the number of vehicles. They come from how our communities grow. As we build more houses farther from existing communities, jobs, and shopping, we must drive farther and more often. Moreover, state and federal transportation plans spend more money on roads than in traffic and pollution-reducing alternatives like trains, light rail, bike paths and sidewalks. For more than 50 years, we have tried to handle our traffic problems primarily by building more roads or widening existing one. That's like trying to diet by loosening your belt. Those roads quickly fill up and congestion is worse than before. In Montgomery County, Maryland, traffic congestion along a stretch of I-270 was so thick that the state invested $200 million widening more than 12 miles of it with up to 12 lanes. Less than eight years later, congestion was as bad, if not worse, than before the widening.

Traffic pollutes the Bay

Vehicle exhaust contains a number of pollutants that harm the Chesapeake Bay. Rain washes nitrogen and other pollutants from exhaust into the Bay that cause excessive levels of microscopic algae to grow. The algae blooms cloud the water and absorb the oxygen, creating dead zones for underwater grasses, fish, crabs, and other marine life. Vehicle exhaust contributes more than one third of all the nitrogen pollution entering the Bay from the air.

Roads, parking lots, and other paved surfaces make erosion and sediment pollution worse in the Bay. When we cover water-filtering plants and soil with impervious surfaces, like asphalt, the volume and speed of rainwater runoff increases, scouring streambeds and carrying sediment and pollutants into the Bay. Today, 60 to 70 percent of the impervious surfaces in developed areas are roads and paved surfaces.

Traffic is expensive and dangerous

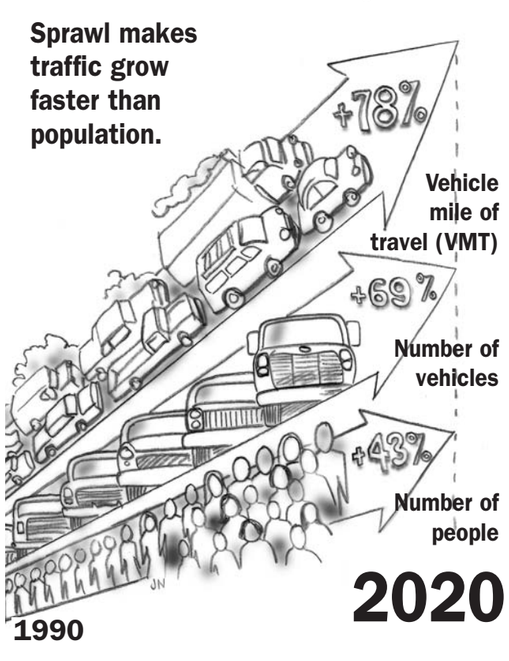
We often overlook the real costs of owning a car, including gas, maintenance, tolls, insurance and depreciation. The average family spends about $7,000 each year to own a car, according to the Urban Land Institute. The further you live from work, the greater the costs. In Pennsylvania, for example, the average suburban household spent about $1,500 more in auto costs per year than urban households, and rural households spent about $4,600 more per year in 1999. In the Norfolk, Virginia area, drivers spent $570 a year just to sit in traffic in 1997, according to the Texas Transportation Institute. In Washington D.C., congestion cost every man, woman and child $1,260 in 1997, according to one study. In addition to the tragic consequences of accidents, they are also expensive. In 1990, the United States spent over $66 billion in costs related to traffic fatalities, $17.5 billion for injuries, and nearly $30 billion in property damage.

Traffic is getting worse and more expensive

Traffic congestion in metropolitan Washington D.C. is second only to that in Los Angeles, according to a 1999 report. By 2020, even with more than $40 billion in transportation spending, traffic delays are expected to become seven times worse in Washington D.C. Delays and congestion are expected to worsen throughout the watershed.

While the regional population is growing rapidly, the number of vehicles and miles we drive is growing even faster. Between 1990 and 2020, the number of vehicles will increase by twice the population growth.

Meanwhile, in 1998 and 1999, the portion of federal funds going to new and wider roads increased by 21 percent while federal funds for alternatives fell by 19 percent.



Source: Metropolitan Washington Council of Governments, 1997.

Smart Transportation is the solution

Clearly, we can't build our way out of traffic congestion and pollution. To reduce pollution and congestion, we must reduce the number of vehicles on the road. Certainly, cars have been and will always be an important part of our lives. We must continue to build and maintain top-quality roads when necessary. But we should have top-quality alternatives as well.

Smart Transportation is built on the concept that choice is the solution to congestion and pollution. By giving people the choice to commute by train or walk to the store, Smart Transportation helps to reduce some of the cars (and their exhaust) some of the time. Even a small reductions at peak traffic times will make significant improvements.

Smart Transportation includes...

- **Demand Management** that evens the flow of traffic with flex-time work schedules, telecommuting, carpooling and the use of other incentives to minimize congestion.
- **Value pricing** that charges less in tolls for those who drive when traffic isn't at its peak and provides congestion-free lanes for carpools and buses.
- **Intelligent transportation systems** that use technological tools like camera and magnetic monitors to improve routing and emergency response, and smart card fares that let you zip through toll booths and transit stops.
- **Equitable funding** that invests a greater percentage of our tax dollars in transportation projects that help reduce pollution and congestion while still improving and maintaining the roads we have.
- **Alternatives** like trains, buses, light rail, sidewalks, and bike paths that help moderate traffic, and pollution, while still getting us where we need to go.

What you can do

Get involved. Attend transportation planning meetings. Tell your lawmakers to invest in alternatives to pollution and congestion.

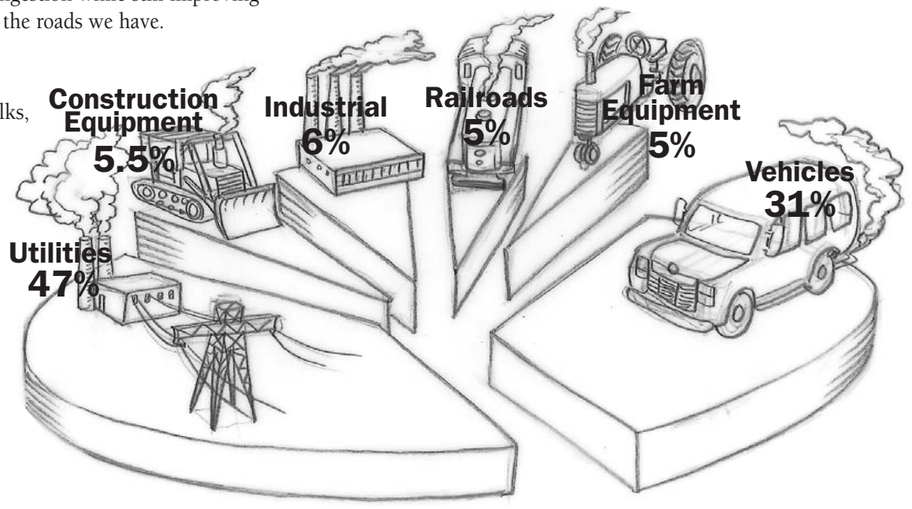
Promote Smart Transportation. Support legislation that holds transportation spending accountable for reducing traffic and pollution. Oppose legislation that increases the gap between what we spend on roads and what we spend on trains, light rail, buses, bike paths, and sidewalks.

Use alternatives. Take the subway, walk, ride your bike. Save some money by sharing the ride. If adequate alternatives aren't available, talk to your local, state, and federal representatives.

Make smart choices. When considering a new home, look for communities that are served by public transportation or where shopping and schools are close. When considering where to locate a business, think about the benefits of putting it where people already live, or near good public transportation.

Join us. Help us to work with lawmakers, businesses, and planners to develop workable solutions to congestion and pollution. Join the Chesapeake Bay Action Network by visiting CBF's Web site at www.savethebay.cbf.org.

Vehicles are the second leading airborne source of nitrogen oxides (NOx) in the Chesapeake region.



Source: U.S. Environmental Protection Agency, 1997.

Smart transportation is the solution

We can take steps, today, to begin to reduce gridlock and pollution. Investing in Smart Transportation is the key. Smart Transportation reduces congestion and pollution while making it cheaper, easier, and faster to travel around the region. If we continue to follow the transportation spending patterns of the past 50 years, gridlock and pollution will only become worse.

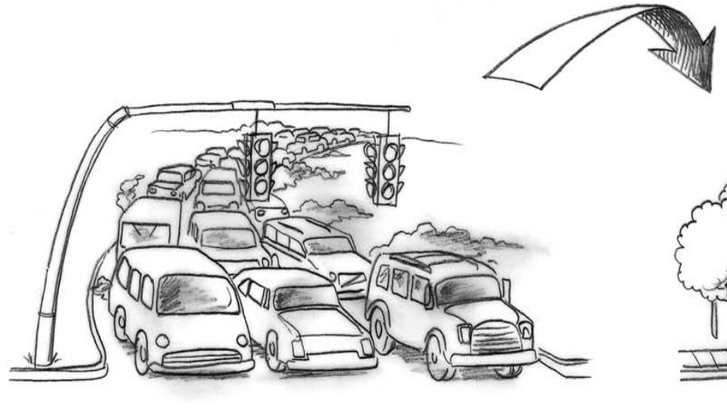
Did you know?

- Except for home mortgages, vehicles are our highest household expense.
- Time lost to congestion is estimated at 76 hours per driver annually.
- Public investment in roads cannot keep pace with increases in automobile use.
- Accidents and injuries cost over $75 billion annually.
- Transportation-related air and water pollution (including sediment, toxics, nitrogen and phosphorus emissions) destroys plant and animal habitat.
- Hydrocarbons and carbon monoxide emissions are reduced by more than 99 percent when either heavy or light rail replaces an average commuter auto trip. Nitrogen oxides are reduced by more than 60% and particulates decrease by more than 90%
- Transit outpaces the car in its ability to move people. In an hour, a single lane of underground metro can carry up to 70,000 people, a trolley or bus in a separate lane can carry over 30,000 while a lane of cars each carrying 4 passengers moves about 8,000.
- From 1970 to 1994, population in the Chesapeake Bay watershed grew 26%. During this same time frame, the amount of vehicle miles traveled in the watershed increased by 105%.

There are options

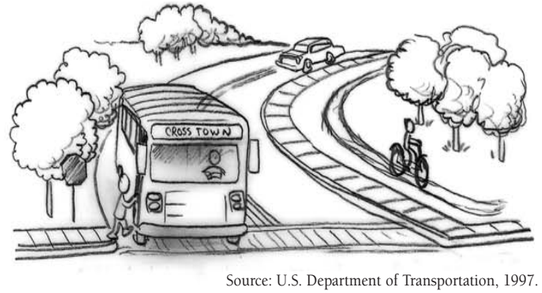
- In walking or riding a bicycle, the only energy we burn is our own; we don't drag around several thousand pounds of plastic and steel; and we need only a safe, narrow pathway.
- A fully occupied bus is six times more fuel efficient than the average commuter auto. A fully occupied rail car is 15 times more efficient.
- Trains and modern buses are highly efficient in energy consumed per passenger-mile; and require very little land (trains) or share roadways (buses, light rail).
- Car drivers demand a lot of land for roads, driveways, and parking lots.
- Cars use a significant amount of energy per person.
- Car engines release substantial amounts of pollutants into the air and water.

Reducing congestion, maximizing the value of public investment and preserving environmental quality are achievable through smart transportation techniques such as demand management, equitable funding, and mixed use development.



Transit, which reduces congestion and pollution, costs $26 billion annually, but...

Emission reduction ($12 billion)
Reduced car owning costs ($10 billion)
Mobility enhancement ($23 billion)
Congestion reduction ($15 billion)



Source: U.S. Department of Transportation, 1997.

...the public benefits of transit investment are valued at $60 billion annually.

We have a choice

For more information on transportation issues, and on how you can help, contact CBF or any of the other organizations listed below.

Chesapeake Bay Foundation
162 Prince George Street
Annapolis, MD 21401
410/268-8816
410/269-0481 (from Baltimore)
301/261-2350 (from DC metro)
www.savethebay.cbf.org

Washington Regional Network
1777 Church Street, NW
Washington, DC 20036
202/667-5445

Surface Transportation Policy Project
1100 17th Street, NW
Washington, DC 20036
202/466-2636

Environmental Defense Fund
1875 Connecticut Avenue, NW
Washington, DC 20009
202/387-3500

1000 Friends of Maryland
1209 Calvert Street
Baltimore, MD 21202
410/385-2910

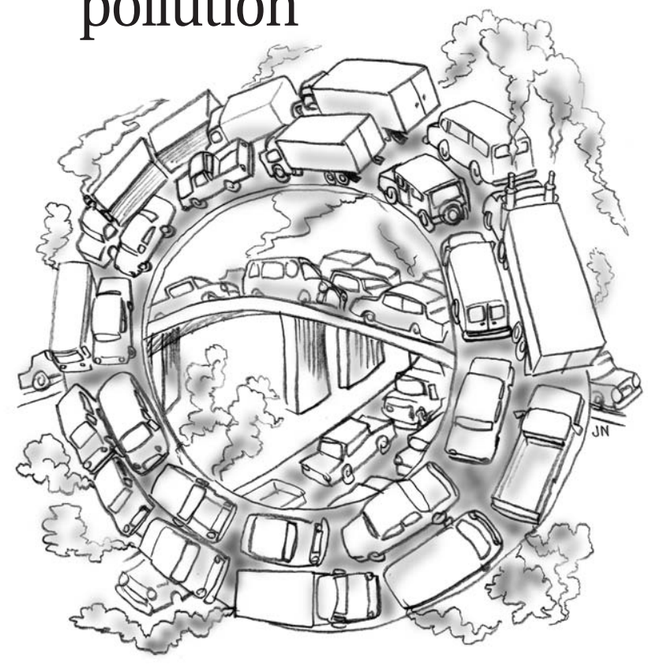
American Public Transit Association
1201 New York Avenue, NW
Washington, DC 20005
202/898-4000

Baltimore Regional Partnership
1209 Calvert Street
Baltimore, MD 21202
410/385-2910

Printed on recycled, recyclable paper, 5/00.

Smart Transportation

How to reduce gridlock and pollution



Transportation options and the future of the Chesapeake Bay

CHESAPEAKE BAY FOUNDATION
Save the Bay