

Independent Mass Transit

Kemps Landing Magnet School:

**4722 Jericho Road, Virginia Beach, VA
23462**

Congestion

Congestion is a problem that originates from one single car.

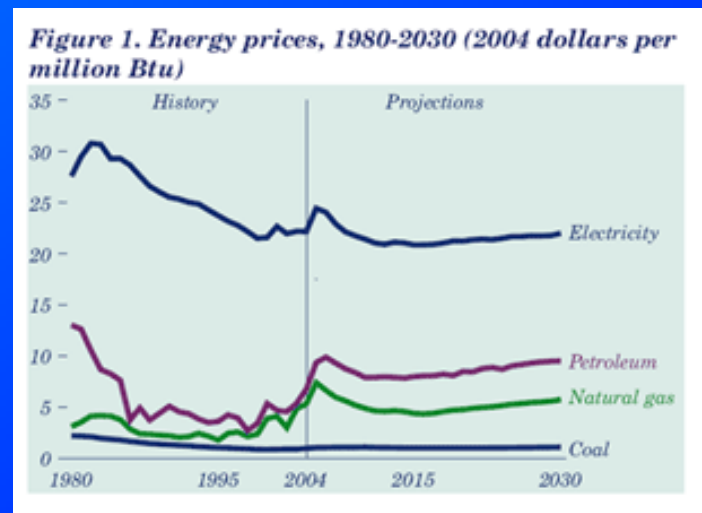
It is filling our roads and causing hours of commute time for America's work force.

It is a huge problem in Virginia, especially in Northern Virginia and Hampton Roads. The Independent Mass Transit (IMT) system will help to reverse this problem.



Oil Dependency

Currently Americans use 315 billion gallons of oil per year. With the world consuming 1.18 trillion gallons of (unrefined) oil a year, prices will most likely continue to increase. When the population increases, the demand from new markets also does.



Other Transportation Systems

IMT is a good choice for Hampton Roads because other types of transportation proved to be insufficient.

Busses will not work for our area because of the many neighborhoods, and people would find traveling to the bus stops inconvenient and sometimes unreliable.

Monorail would be good now, but may not suit our area in the future, and can provide an eye sore to the community, if it was above the roadways.

Subways would not work for our area because of the high water table in the Coastal Plain.

What is Independent Mass Transit (IMT)?

The IMT roadway system is very unique. It incorporates a three-tier computerized structure, one for local, state, and regional travel. This would allow commuters to travel both short and long distances more efficiently. The cars that travel on the IMT System are propelled by electromagnets.



Electromagnets

An electromagnetic field only exists when currents are flowing. In the IMT system, there are magnets on the road and on the bottom of the cars.

The flowing electricity between the magnets, causes the poles to switch back and forth. When the poles on the car and street are opposite, they will attract. When the two correspondents are the same, they will repel. This will shoot the car onto the next electromagnet.



Global Positioning System (GPS)

Because of a refined GPS device, the computer will have access to the car's location at all times. From this data, the computer can locate the best possible route for the car to travel to its destination. This will take little input from the driver.

GPS will help to space out the vehicles on the second and third tiers of IMT, as computers take full control.



In a normal helium's nucleus there are two protons and two neutrons. This gives the atomic number of four. If a neutron is missing, the result is helium 3. This happens every so often because of energetic nuclear reactors, such as the sun. The sun creates helium by fusing two hydrogen atoms together, but will also create helium 3. When helium is in this state, it wants to join deuterium, an isotope of hydrogen that has a neutron next to its proton. When these two components join together, they form Helium-4 and drop a proton. The missing mass is then converted to energy.



Helium-3 is so safe that even if the worst case scenario were to occur, human fatalities or significant exposures to radiation would not result.

The Helium-3 fusion is ten times greater than the amount of energy received from fossil fuels, without the pollution or increased risk of global warming. It is also a renewable resource.

Cost Estimate

The IMT system has a high initial cost, but will save us a great amount of money in the long run.

A person with a car that receives 20 miles per gallon, and drives 15,000 miles a year, will pay over \$1,850 every year. That means Americans spend over \$440 billion each year on gas.

The IMT will cost approximately \$2 billion, for every 20,000 miles.

Because we are not using fossil fuels to power it, America will save billions of dollars.

Advantages of Independent Mass Transit (IMT)

The time it takes to commute would decrease approximately by 90%, and long distance travel would take half the time it takes today.

Accidents with Independent Mass Transit (IMT)

With the Independent Mass Transit system, accidents will be greatly decreased.

IMT would force all cars on the road to travel at the same constant speed. This, in theory, would completely eliminate accidents. When cars wanted to turn off or on to the road, the speed and magnitude would decrease, allowing the cars to verge.

Safety of Independent Mass Transit (IMT)

Because cars would be driving by the influence of computers and magnetism, this allows for free-hand driving. Commuters would be able to take their full concentration off of the road, and focus on other things.

Distractions, such as cell phones, would no longer be a problem.

The IMT system would force all cars on the road to be traveling at the same speed. This would make traveling at faster speeds much safer.