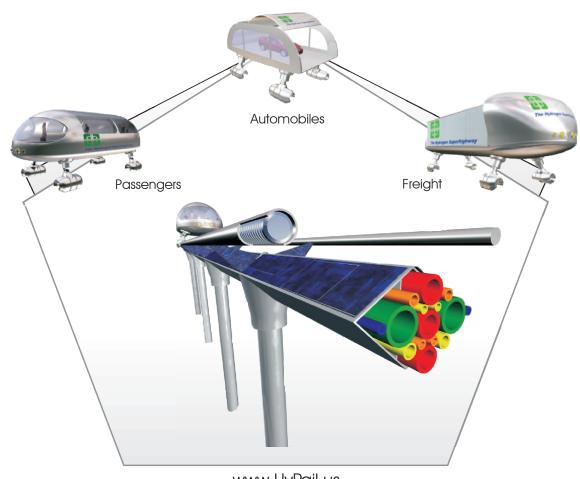






# WORLDWIDE HYDROGEN SUPER HIGHWAYS



- www.HyRail.us -
- www.InterstateTraveler.us -
- www.HydrogenSuperHighway.com -
- Copyright 2002-2010 Justin Eric Sutton and Interstate Traveler Company, LLC -
  - 300 River Place Suite 5550 Detroit, MI 48207 USA -



#### SPECIAL EDITION

FOR

# MICHIGAN SENATE TRANSPORTATION COMMITTEE

#### BOUND ON 13 ARIL 2010

AUTHORED, TYPESET, PRINTED AND BOUND
BY
JUSTIN ERIC SUTTON
MADE POSSIBLE BY THE SUPPORT OF
THE INTERSTATE TRAVELER COMPANY, LLC
ALL RIGHTS RESERVED

#### INTERSTATE TRAVELER COMPANY

#### BUILDING THE WORLD WIDE HYDROGEN SUPER HIGHWAY

What is the Interstate Traveler Hydrogen Super Highway? It is a collection of vital municipal utilities bundled into what we call the Conduit Cluster providing a first of its kind full integration of solar powered hydrogen production and distribution system supporting a high speed magnetic levitation (MagLev) ondemand public transit network built along the right of way of the US Interstate Highway Systems, and any other permissible right of way where such a machine would be of benefit. The Hydrogen Super Highway, also known as the HyRail, is accessed by Traveler Stations that are built within the right of way of the Interstate Highway within the land locked real-estate of the clover leaf interchanges providing maximum ease of access for people who live anywhere near the Interstate Highway. The HyRail is much more than just a high speed rail system.

Transportation System
Solar Energy Collection Grid
Intelligent Electrical Distribution
Intelligent Electrical Load Balancing
Hydrogen Production & Distribution
Liquid / Vapor Storage & Distribution
Redundant Fiber Optic Network
Wireless Internet Access
Millions of Tons of Stainless Steel
Many Thousands of Jobs
...and so much more...







#### The Interstate Traveler

Hydrogen Super Highway

Fast

Safe

Clean

Quiet

Quality

Weather Proof

Sand / Ice Proof

Creates Hydrogen

Creates Clean Water

Creates & Stores Surplus Power

**♦** Dial "211" for Curb to Curb Transit

Creates Millions of Good Paying Green Jobs

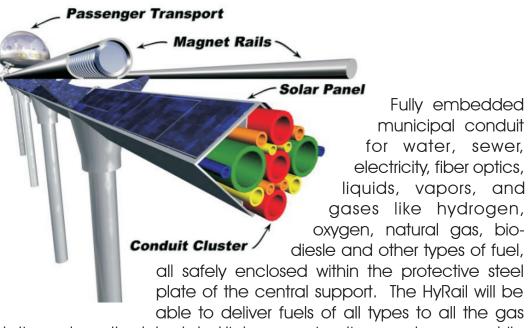






## The HyRail





stations along the Interstate Highway saving time and money while increasing distribution and safety.

Best of all, the system will consume liquid waste and generate pure water from hydrogen.

Under development for nearly 14 years, Unanimously Endorsed by the Michigan Legislature in 2003, formally recognized by the AFL-CIO,



the United Steel Workers of America and the Greater Detroit Building and Construction Trades Council. The Interstate Traveler Hydrogen Super Highway is ready to serve the growing needs of our nation and of the many nations around the world where cities have grown faster than their infrastructure.

The HyRail bridges the gap of time and distance while creating a national, solar powered, hydrogen production and distribution network. The embedded systems of the hydrogen super highway also create a national waste water management system and water purification system that will serve the public for generations to come.







Fast

Reliable

Spacious

Comfortable

On Demand

#### Ride with Friends

Ride with comfort in the spacious and open cabin area. Enjoy the view out the window as the world slips by at 200 mph. Like every pilots dream, being able to fly at tree-top level and really enjoy the countryside.

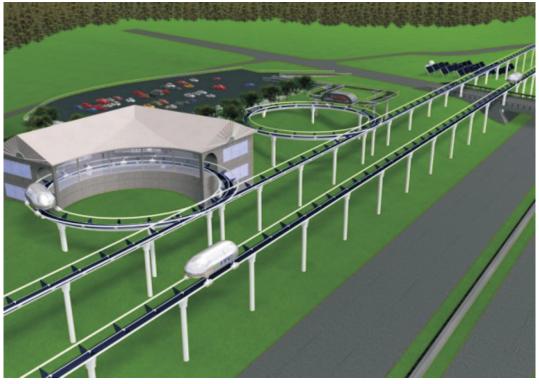


No other transportation system in the world can give you such a smooth ride and such a priceless panorama of the world around you.

Fixed schedule and on-demand transports means no waiting.









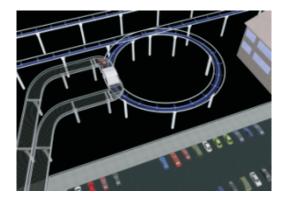


## Ride with Family

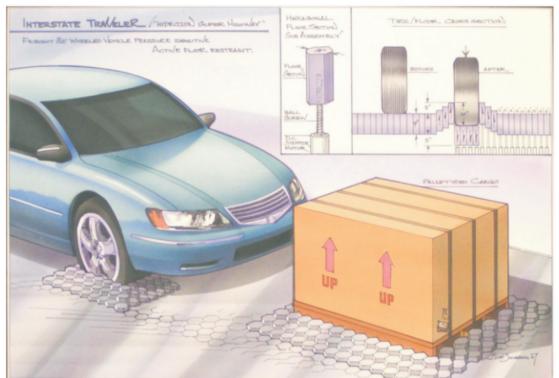
The Car Transport is perfect for Family trips overlong distances.

On the HyRail you will be able to travel with your car, truck or SUV at a high rate of speed. You could even load a bunch of motor cycles for a sunset ride out West or load up the snow mobiles for an afternoon ride 200 miles north.

At 200mph on the HyRail, you will be only about an hour away ...









**Private** 

Versatile

Durable

Cars

Trucks

**Pallets** 

Anything





Huge Area

Commercial

Residential

Club Car

Limousine

Sports Teams

V.I.P.s

# Ride in Luxury

Office, Condominium, Private Parties

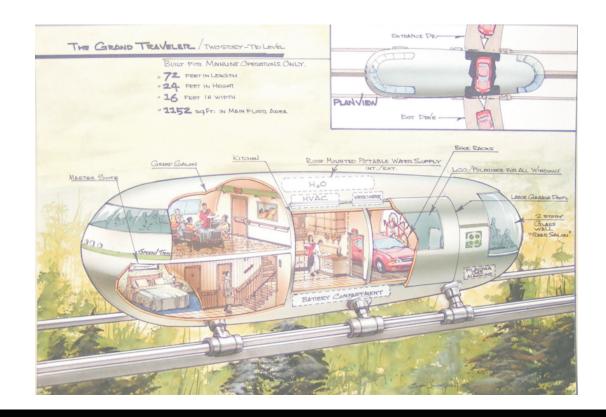
Never before could it be possible for such large, spacious, and comfortable transport vehicles be constructed and reliably operated across a national network of high speed, super efficient maglev rail.

In the future, many tens of thousands of Grand Traveler Transports will glide the rails from State to State and from Country to Country, gliding quietly above the tree line.



Boasting a living space of more than 2,000 square feet, the Grand Traveler will be the pallet of automotive designers for years into the future creating all manor of custom spaces.

From Sea to shining Sea, from North to South and from East to West; riding the HyRail will always be the best.



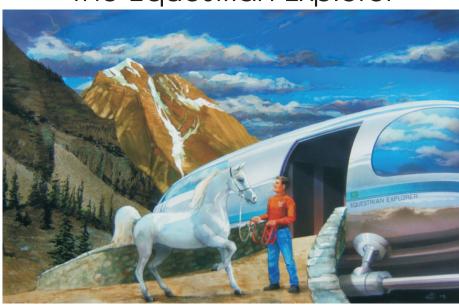


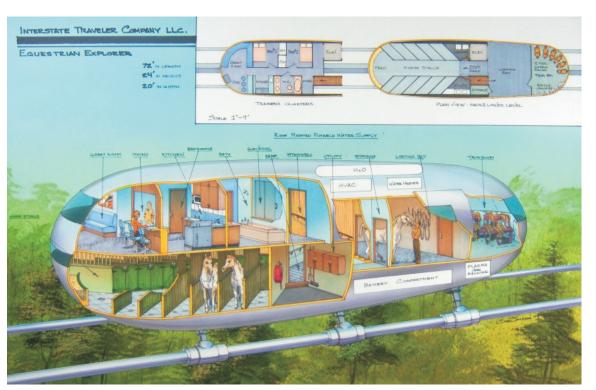


# Sports Model Able to support 2,000 square feet of space...

Of the many diverse and popular sports and vacation activities, our focus groups suggested we illustrate the system used for a wonderful weekend in the mountains where you can bring a large team of horses and handlers and equipment with you. Pick you favorite sport...

#### The Equestrian Explorer







Horses

Street Bikes

Dirt Bikes

**Quad Runners** 

Snowmobiles

Skiing

Snow Boarding

Bicycling

Segways

Hiking

Sight Seeing

Forestry

Ecology





Staff of Eight

**Imaging** 

Chemistry

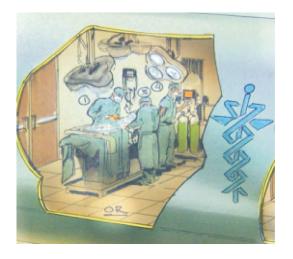
Anesthesiology

Surgery

Fast Travel

Weather Proof

### Triage Traveler



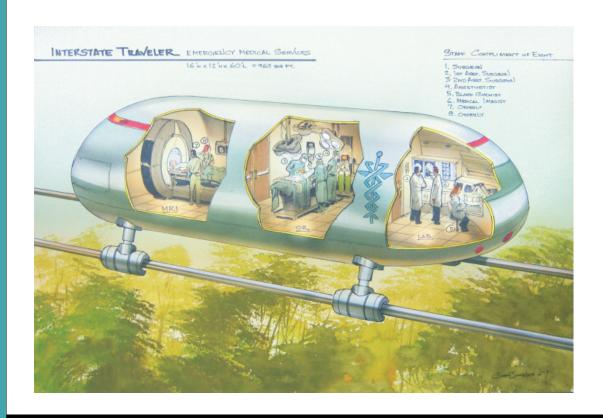
The tragic number of fatalities on American Highways is a harbinger of fate for highways all around the world.

With the Triage Traveler riding on the HyRail, we will be there to help save lives.

According to government statistics, more than 40,000 people per year perish on our Interstate Highways alone.

Many of whom could have been saved if they could have gotten to a hospital within that golden hour.

We will be able to assist in more than just accidents on the highway, we will be able to bring expert specialists to any Traveler Station on the network with staff and equipment and on a regular schedule.







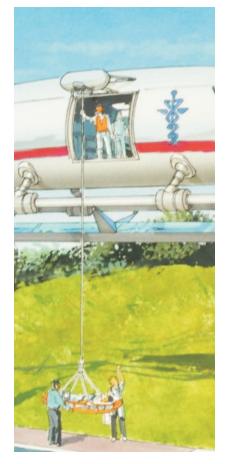
# Ripid Rescue

Quickly rescue injured people

We thank God for the people who dedicate their lives to become paramedics, doctors, fireman and policeman. These brilliant, brave and kind hearted people are who we count on save us when we are in harms way.

Dedicated to those who answer your call for help, the Interstate Traveler Company will dedicate free access and operation to Paramedical Units like the Traige Traveler.

Many car accidents result in a large number of wounded and often outnumber the first responders 2 and 3 to one. The Triage Traveler will bring a staff of eight medical professional to the scene of a car accident on the highway at very high speed to lend much needed support and provide rapid delivery of the critically injured along the highway to the nearest hospital or Traveler Station to transfer to a waiting ambulance.





Triage

Trauma

Mass Casualty

Haz-mat

Disaster Recovery







**Fast** 

Safe

On-board

**Ambulance** 

### Highspeed Hospital

The modern world is now the home of more than 6 billion people, as in 6,000,000,000, and we are all connected by road ways that enable commerce to flourish, but the roadways are not completely safe.

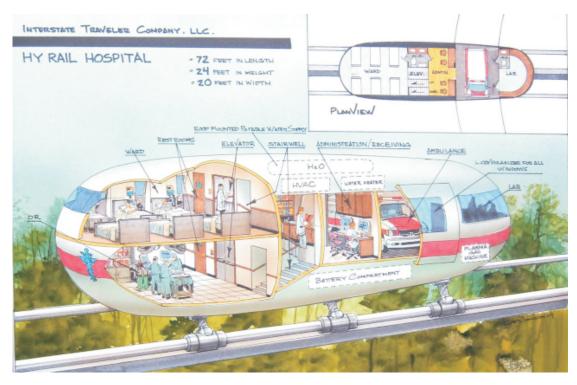
Here in America we have a mortality rate of more than 40,000 people a year on our Interstate Highway System alone, with many more on the surface streets.



Just like the Triage Traveler, we can bring the HyRail Hospital to places of need *fast*, yet with the added ability to perform complex medical procedures and transport groups of injured people to long term care facilities.

When you are in need, the Highspeed Hospital will be there fast...

Disaster Relief - Mass Casualty Support - Complex Procedures







### Wide Doors - Open Spaces

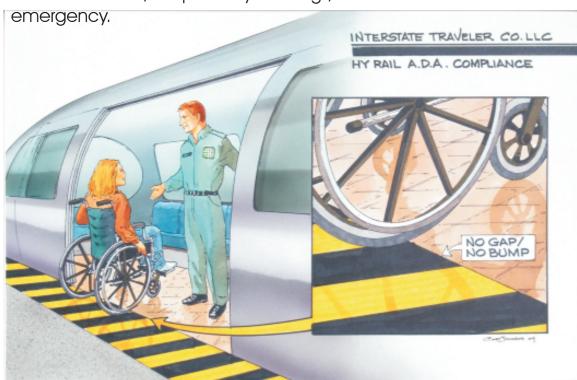
Some of the greatest benefits of the Hydrogen Super Highway are the enormously wide entry doors with huge open spaces and a zero-gap threshold that makes egress with wheel chairs, canes, crutches, walkers, baby strollers and even high healed shoes practically seamless.



Since the creation of the Americans with Disabilities Act

public infrastructure was renewed for the betterment of all people, with or without the need for ramp of hand rail. We are proud of our ability to exceed the current ADA requirements making sure everyone has equal access.

On the HyRail, a Traveler will always be at ease and relax in confidence that a Concierge is close by to aid and assist you if you need directions, help with your bags, or in case of a medical



ADA

Compliant

Secure

Reliable

Comfortable

Community



Secure

**Fast** 

Easy to Use

Stable

Reduced Risk

### Containerized Freight

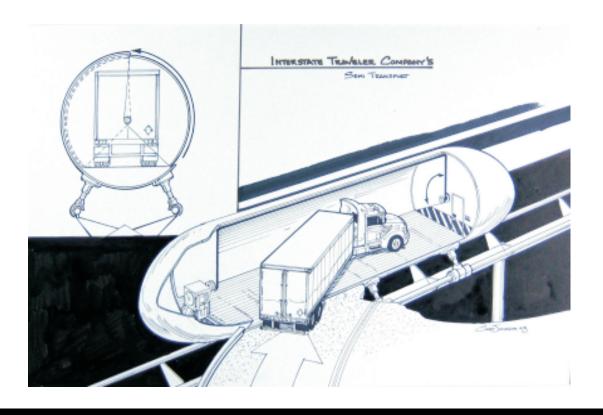
The integration with Port Security is clear to see with the fast and simple container transports. the HyRail network expands, so will the access points for Containerized Freight.



One step above containerized freight will

be the closed shell flat bed, just big enough to load an 18 wheeler, Tractor and all. You will be able to send your Driver, your Truck and your Freight to any place in the Country without the worries of traffic iams or bad weather.

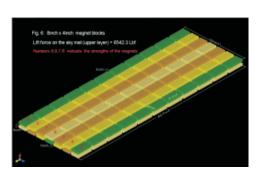
Traditional freight haulers, air cargo, heavy rail hubs and sea ports will all be linked together creating an even greater national distribution network from Port, to Hub, to Factory to Consumer accelerating our economy globally







# Solar City Traveler

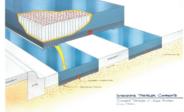


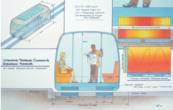
The Solar City Traveler is an ideal lite-duty, 'At-Grade' maglev public transportation system.

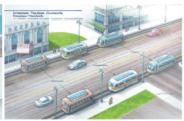
Each Solar City Transport glides along a virtual guide way, or "Glideway", which is created using two sets of magnet arrays, one above the other, creating a virtual

guideway in the center of the lower array and creating an opposite pair of ridges from the top to guide the transport.

The Solar City Traveler can be installed into any sidewalk or roadway and extend across the country side as an ideal Inter-Urban transit system for city streets connecting to surface streets in the urban areas, and beyond.











Secure

Reliable

Comfortable

Community



Worldly

**Local Flavor** 

Community

Center

#### Civic Centers

With the HyRail, the clear waters will flow around the clock.

Reaching back to the great architects of the Bath House, the Public Forum and concepts of a public market area of many small shops, we here have rendered an integration of the best of the best.



At the HyRail Civic Centers visitors will enjoy the greatest facilities in the world to enjoy a Clean, Healthy, Happy and Worldly experience.

The Civic Center is a perfect integration of hospitality and entertainment. With a constant flow of pure water, we will be able to support state of the art public pools, saunas, mineral baths and centers for the finest culinary arts. Each will help create jobs in the massage therapy, physical training, inspired Master Chefs of culinary arts and live entertainment.

Whether you want a hot mineral bath, or a cool lap in the pool... You are just a few minutes down the rail to paradise.





## Optimize Utility Corridors



It has been said for many years that no new highways will be built in America. Well, that may be true, but with the HyRail the existing electrical energy "highways" of voltage hitension lines can be upgraded to move more than just electricity.

Our continents are cris-crossed by thousands of miles of high-tension lines. With the HyRail the utility companies that own those lines can reap the benefits from recycling all that bulk metal and reap the benefits of building commercial roads, condos and businesses where they could not exist before...

Even Rail Roads will also be able to reap the benefits. The hundreds of thousands of miles of Rail Road rights of way can be quickly upgraded without disturbing the existing heavy rail system that is in place. With the Highways, the High-Tension line corridors, and the Rail Road rights of way all coming on-line together, the greater number of people will be employed and served for generations to come.





Recycle

Reuse

Recuperate

Reinvigorate

**New Roads** 

New Highways

New Villages

**New Cities** 



Endless

Water

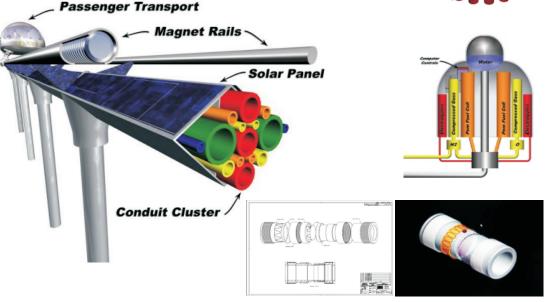
Endless

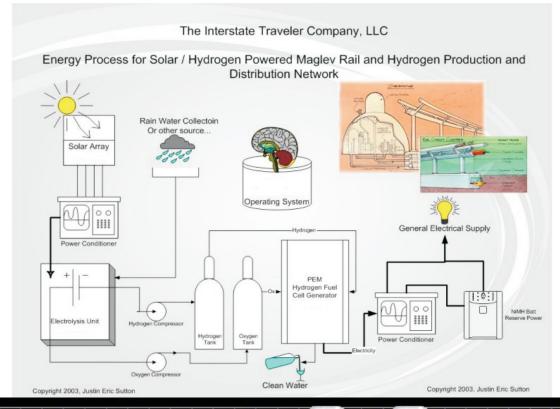
Hydrogen

## Solar - Hydrogen Cycle

As the sun rises in the East to open and warm up the Day, so stands the Hydrogen Super Highway to receive the rays of the sun and put it to good use serving millions of travelers and local communities where ever the rail may go.











16

#### The Desert Blooms

Here is the story:

Feed the Hungry

Generate Clean Water

Carbon Offset

Hydroponic systems can grow food almost anywhere...

#### Sustainable Agriculture













Water

Agriculture

Sanitation

Hydroponics

Plasma Reactors



CAD

**CAM** 

FEA

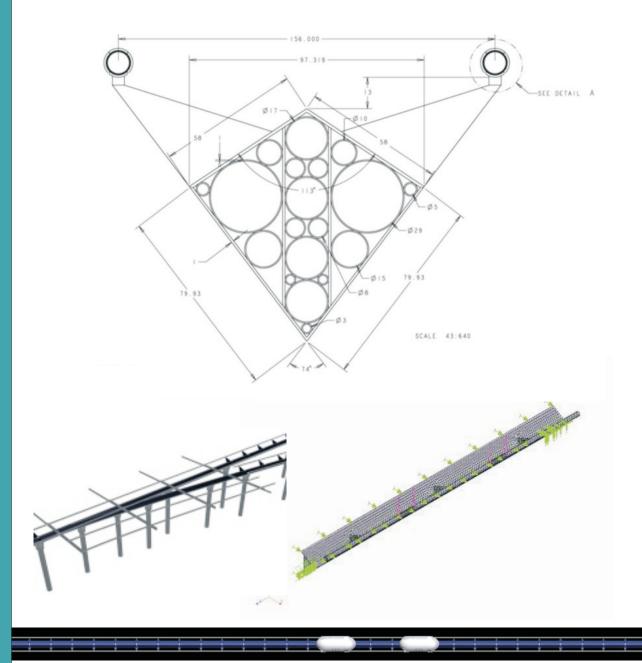
FMA

# Structural Rail Geometry

Using traditional Finite Element Analysis we have completed our preliminary engineering on multiple rail geometries.

The basic design of the HyRail enables the fastest assembly of the strongest rail with the least amount of materials to guarantee efficiency every step of the way.







# Dynamic Suspension

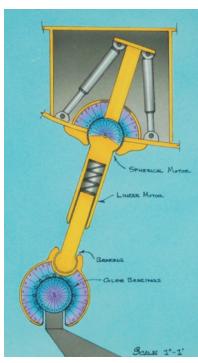


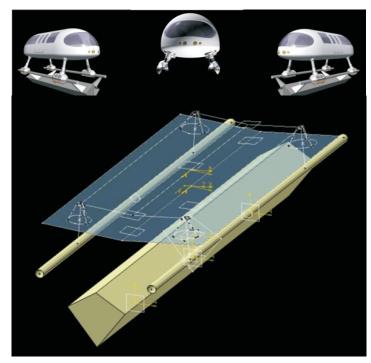


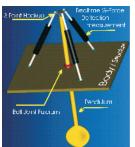
The great and uniquely successful attribute of the HyRail is the G-Force mitigation made possible only by the HyRail's unique suspension system.

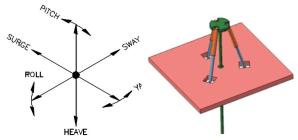
The kinematic feed back from a pendulum or via solid state accelerometers, the suspension system will feel the G-Forces and automatically adjust the Transport, keeping the forces perpendicular to the floor.

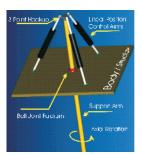














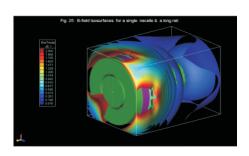
Efficient

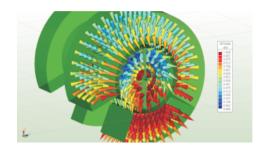
**Powerful** 

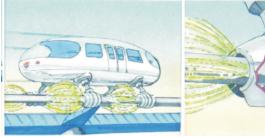
Quiet

#### Magnetic Levitation

The unique and practical application of radially arranged magnetic fields enables the most versatile maglev transportation system possible hosting motors of almost any size and combination. So, whether your transport has two motors, six motors or even twelve, the rail will work perfectly.











#### Interstate Traveler Linear Motor and Levitation Coil Arrangement

Traveling Wave Linear Propulsion

(One of several methods to employ the ITC Rail Coil Arrangement to provide levitation and position control)

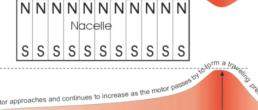
By controlling coil power intensity, the motor can be levitated and pushed along the rail by a traveling intensity wave behind the motor. As the coils radiate from the center of the rail, so too does the intensity wave

Longitudinal Cross Section of ITC Rail and Motor Nacelle

Zero Repulsion

Levitation Repulsion

Increasing Repulsion



Coil power level acts as a traveling wave pushing the motor along the rail.





High

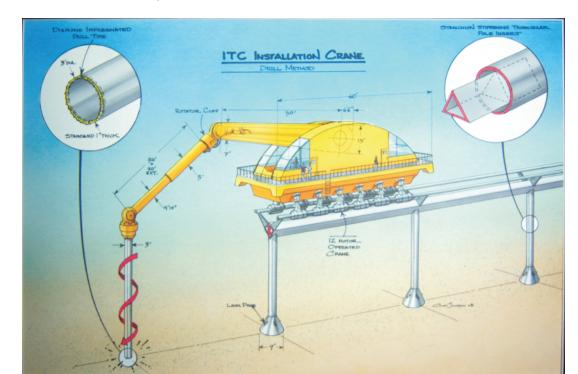
### Rapid Installation

From bedrock to soft soil, the HyRail Installation Crane can set up stanchions fast. Using the stanchion poles themselves as giant drill bits we literally can drill our supports directly into bedrock.

With our logistics predicting a combined output of more than 2,000 sections of rail per day when considering the production of 12 factories working together in America, we will need to work fast to get the system installed and operational.

With a set of eight HyRail Cranes working for each production center, we'll have 96 Cranes with installation teams working simultaneously. Working in sets

of two in parallel down each right of way you can. Imagine the pace of installation when there are 96 sections or rail being installed at any one time.













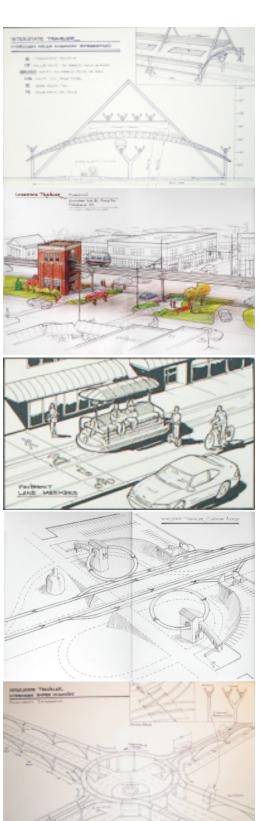
# Urban Efficiency

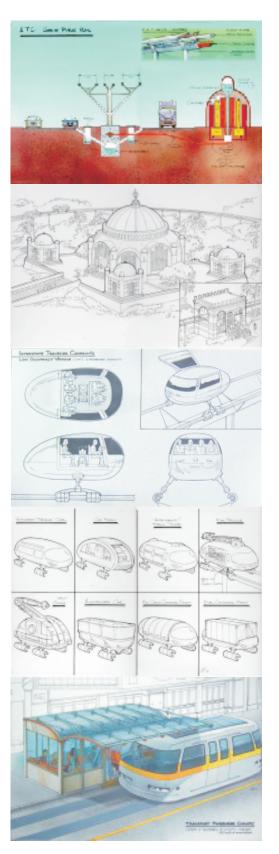
Large

Small

Local

Continental





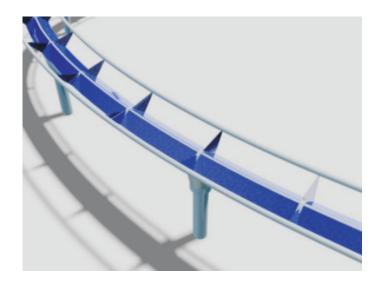






# Appendices

- 24. The Ten Primary Deliverables
- 25. Per Capita Public Share
- 26. One Page Executive Summary
- 27. Installation Analysis
- 28. Return on Investment
- 29. Basic Green Jobs Projections
- 30. National Energy Calculator
- 31. Nested Domain Addressing
- 32. Mag-lev Comparison Chart
- 33. Michigan House Resolution
- 34. Michigan Senate Resolution
- 35. Magazine Ready Art (i)
- 36. Magazine Ready Art (ii)









#### Ten Deliverables

Rapid Transit = \$ /minute

Advertising =\$ /sign

Hydrogen = \$ /kilogram

Electricity =\$ /kilowatt

Energy Storage =\$ /kilowatt

Fiberoptics = \$/bandwidth

Fuel pipelines  $= \$/gallon or Ft^3$ 

Liquid waste =\$ /barrel

Brand New Water = \$ /liter

Internet / Telecom =\$ /minute

There are many other revenue streams that will come on-line in the future such as build license agreements, and other special permits and contract services.







# Per Capita Revenue Share



50 / 50 Revenue Share on Public Rights of Way

In the United States, the Interstate Traveler Company, LLC has established a Per Capita Revenue Share proposal where half of the revenue gathered from operations on public rights of way will be shared with all four levels of government in the following manner:

- 25% is paid to the Federal Treasury
- 25% is paid to the State Treasury
- 25% is paid Per Capita to each County
- 25% is paid Per Capita to each City, Township,
   Village, Native Territory and Port Authority.

For Private Rights of Way, such as existing Toll Roads, Rail Roads and utility rights of way will also receive a 50% revenue share.

The first 100 Miles of HyRail in S.E. Michigan will pay (est) \$25.00/Capita with an increasing amount per annum as the rail network expands.

Estimated Per Capita Starting at \$25,000 / 1,000 People







### **Executive Summary**

One Page Interstate Traveler Operational Summary

All Rights Reserved 2007 - 2010

The Interstate Traveler Hydrogen Super Highway is a modular maglev rail system that is laminated with solar-panels which create enough power to operate all the basic systems for transportation, communications, security, water and sewer, etc., facilitated by the large cluster of conduits contained within the central support beam of the rail. The conduit cluster can be used for virtually any liquid and vapor based materials. Multiple conduits will also be dedicated to fiber optic cables for communication and super conducting electrical cables for power distribution.

The unique integration of components described above creates a self sustaining solar powered energy production and distribution system that is used to propel thousands of transport vehicles on the rail, and produce hydrogen and raw electrical energy to power traditional wheeled vehicles on the road ways, and supply hydrogen as a fuel to the growing aerospace industry in the coming decades.

The benefits of a clustered network of conduits include flexibility to enable regional networks where the larger main conduits may be dedicated to the transport of completely different liquids or gases. As an example, a network of Interstate Traveler Rail in a geographic region that is rich in crude oil resources can dedicate the largest conduits for the movement of crude oil from the field to the refinery. In other areas, the larger conduits can move agricultural methane or electrolytic hydrogen into general distribution.

The suspension system of the magnetically levitated Traveler Transports have the ability to adapt to g-forces on the fly so that the passengers will feel a greatly reduced sense of lateral movement that is felt when accelerating, decelerating and banking. Also, the suspension system enables the optimization of aerodynamics to employ the fuselage as a wing to generate lift and reduce the energy required to levitate the Transports and increase the available power for propulsion. The expected performance of the system should allow a full champagne flute to stand on a table virtually undisturbed during all normal operations.

The goals and expectations for national security include transportation reliability and safety along with resilient municipal infrastructure that is not easily damaged by typical annual weather systems and earth quakes. The Traveler meets all of these attributes, providing also a means with which to organize and optimize hundreds if not thousands of transports for emergency relief operations such as the evacuation of large districts of people in harms way from hurricanes and flood waters.

The transportation diversity opportunity created by the Traveler Rail enables an open platform where virtually any type of transport can be devised for virtually any purpose. Starting with public transit transports, freight transports and personal automobile transports for you in your car, there will also be mobile hospitals with a full compliment of emergency medical response services along with private and commercial transports for mobile restaurants, corporate / executive transports for business meetings, trade schools, universities, resorts, national park lands, and cathedrals of worship. Fleet services for large public venues crafted to promote the home-team professional sports organizations will be early adopters of this system to help "Pack the House" with public transportation.

Finally, the new national network of Traveler Stations will lay the foundation for thousands of new lease-hold franchise businesses that will serve the Travelers, provide the best public restroom facilities anywhere in the world and gainfully employ thousands of people for generations to come.







ITC			D	-	F
	Rail Inst	allation Analysis		#Cost nor Mile look stee	k and harroll
	Tan mst	anation Analysis		#Cost per Mile lock stoc	
	_				meter = 3278 feet
Inte	rstate Tr	aveler Rail Costs/Ki	ilomete	er	
Qty	Units	Description	Cost	Amount	Notes
Liy	2 Kilometer	AMSC HTS Super Conductor Wire	\$120,000.00	\$240,000.00	140105
	2 Kilometer	Solar Panel 72" wide x 1 Kilometer long,	\$871,948.00		8'x1' section of panel at \$266.00 Wook
	2 Kilometer	Concrete 3'x3' x 12' concrete Piers	\$17,482.67	\$34,965.33	
	1 Kilometer	Steel for Rail Tubing / Stanchion / Central Support		\$1,336,112.80	19.7390524530094 % of total cost / kilome
2	7 Kilometer	Supplemental Conduit	\$3,278.00	\$88,506.00	
0.0	8 Kilometer	Fiber Optics	\$16,000.00		figured at \$50t yet may be purchase at \$.3
	5 Units/Kilometer 1 Labor/Kilometer	Full Function Utility Substation 100 people working simultaneously / 1 week	\$1,500,000.00 \$100,000.00		One every FOUR kilometers (2.5 Miles) \$52k / Annual Salary equivalent or \$1K / w
	1 Kilometer	Sitework / demolition / adjustment to overhead line		\$100,000.00	\$02X FAIRIUS COSSI EQUIVALENT OF \$11. FN
	4 Kilometer / pair of rail		\$655,600.00		\$200 f foot " 3278 for Pair or Rails
		Total cost of the InterState Trav		\$6,768,880.13	
		Sect	ion Length (Feet)	66	
			Cost per foot	\$2,064.94	
			Cost per Section	\$136,286.18	
Tar	minal Ct	tions			
rer	minal Sta	HIOHS			
Qty	Units	Description	Cost	Amount	Notes
	0 Each	Grand Terminal Stations	\$8,000,000.00	\$0.00	
	0 Each	Cloverleaf Stations "Traveler Station"	\$3,000,000.00	\$0.00	
	0 Each	Car Ramp for Car Ferry w/ Parking Structure	\$2,000,000.00	\$0.00	
	0 Kilometer	Sidetrack to Local Public Station (1 Kilometer)	\$6,768,880.13	\$0.00	
	0 Each	Remote Public Station, and parking (Private Land)	\$1,000,000.00	\$0.00	
				\$0.00	
Inte	rstate Tra	veler Public Cars			
Qty	Units	Description	Cost	Amount	Notes
	0 Each 0 Each	Grand Public Car Commuter Public Car	\$1,000,000.00 \$500,000.00	\$0.00 \$0.00	
	III Hach	Car Ferry	\$300,000,00	\$n nn	
	0 Each	Car Ferry	\$300,000.00	\$0.00	
	U Each	Car Ferry	\$300,000.00	\$0.00	
	U Each	Car Ferry	\$300,000.00	\$0.00	
ITC I			\$300,000.00	\$0.00	
	Rail Installat	tion Check List		\$0.00	
Qty	Rail Installat	tion Check List	Cost	Amount	Notes
Qty	Rail Installat	tion Check List	Cost \$6,768,880.13		Notes
Qty	Rail Installat Units Kilometer Kilometer	tion Check List	Cost \$6,768,880.13 \$6,768,880.13	Amount	Notes
Qty 100	Rail Installat  Units  Kliometer Kliometer Kliometer	tion Check List  Description  Detroit to Ann Arbor	Cost \$6,768,880.13 \$6,768,880.13 \$6,768,880.13	Amount \$731,039,054.40	Notes
Qty 100	Rail Installat  Units  Kilometer Kilometer Kilometer Elsech	tion Check List  Description  Detroit to Ann Arbor  Grand Terminal Stations	Cost \$6,768,880.13 \$6,768,880.13 \$6,768,880.13 \$8,000,000.00	Amount \$731,039,054.40 \$32,000,000.00	Notes
Qty 1 0 0	Rail Installat Units  Kilometer Kilometer Kilometer Each	tion Check List  Description  Detroit to Ann Arbor  Grand Terminal Stations Cloverleaf Stations "Traveler Station"	Cost \$6,768,880.13 \$6,768,880.13 \$6,768,880.13 \$8,000,000.00 \$3,000,000.00	Arnount \$731,039,054.40 \$32,000,000.00 \$264,000,000.00	
Orty 100	Rail Installat Units  Kilometer Kilometer Kilometer Each	tion Check List  Description  Detroit to Ann Arbor  Grand Terminal Stations	Cost \$6,768,880.13 \$6,768,880.13 \$6,768,880.13 \$8,000,000.00	Amount \$731,039,054.40 \$32,000,000.00	
Ofty 101	Rail Installat Units  Kilometer Kilometer Kilometer Each Each Kilometer Each Each Each Each Each	Description  Detroit to Ann Arbor  Grand Terminal Stations Cloverleaf Stations "Traveler Station" Sidetrack to Local Public Station (Killometer)	Cost \$6,768,880.13 \$6,768,880.13 \$6,768,880.13 \$8,000,000.00 \$3,000,000.00 \$6,768,880.13	Amount \$731,039,054.40 \$32,000,000.00 \$264,000,000.00 \$230,141,924.53	
9 Grty 100	Rail Installat  Units  Kilometer Kilometer Kilometer 4 Each 8 Each 4 Kilometer 3 Each Each Each	Description Detroit to Ann Arbor  Grand Terminal Stations Clowerleaf Stations "Traveler Station" Sidetrack to Local Public Station (1 Kilometer) Car Ramp for Car Ferry w/ Parking Structure Remote Public Station, and parking (Private Land) Grand Public Car (GPC)	Cost \$6,768,880.13 \$6,768,880.13 \$6,768,880.13 \$8,000,000.00 \$3,000,000.00 \$6,768,880.13 \$2,000,000.00 \$1,000,000.00	Amount \$731,039,054.40 \$32,000,000.00 \$264,000,000.00 \$230,141,924.53 \$176,000,000.00 \$0.00	
9ty 10t 8t 33 8t	Rail Installat Units Kilometer Kilometer Each Each Each Each Each Each	Description Detroit to Ann Arbor  Grand Terminal Stations Cloverleaf Stations "Traveler Station" Sidetrack to Local Public Station (1Kilometer) Car Ramp for Car Ferry w/ Parking Structure Remote Public Car (GPC) Commuter Public Car (GPC) Commuter Public Car (GP Passenger)	Cost \$6,768,880.13 \$6,768,880.13 \$6,768,880.13 \$8,000,000.00 \$3,000,000.00 \$2,000,000.00 \$1,000,000.00 \$1,000,000.00 \$5,000,000.00	Amount \$731,039,054.40 \$32,000,000.00 \$264,000,000.00 \$230,141,924.53 \$176,000,000.00 \$2,000,000.00 \$2,000,000.00	
9ty 101 81 33 81	Rail Installat Units  Kilometer Kilometer Kilometer 4 Each 3 Each Each Each 2 Each 0 Each	Description Detroit to Ann Arbor  Grand Terminal Stations Cloverleaf Stations "Traveler Station" Sidetrack to Local Public Station (1 Kilometer) Car Ramp for Car Ferry wil Parking Structure Remote Public Station, and parking (Private Land) Grand Public Car (GPC) Commuter Public Car (60 Passenger) Freight Car	Cost \$6,768,880.13 \$6,768,880.13 \$6,768,880.13 \$8,000,000.00 \$3,000,000.00 \$1,000,000.00 \$1,000,000.00 \$500,000.00 \$300,000.00	Amount \$731,039,054.40 \$32,000,000.00 \$264,000,000.00 \$230,141,924.53 \$176,000,000.00 \$2,000,000.00 \$2,000,000.00 \$25,000,000.00	
91 101 101 101 101 101 101 101 101 101 1	Rail Installat Units  Rilometer Kilometer Kilometer Each Each Kilometer Each Each Each Each Each Each Each	tion Check List  Description  Detroit to Ann Arbor  Grand Terminal Stations Cloverleaf Stations "Traveler Station" Sidetrack to Local Public Station (1 Kilometer) Car Ramp for Car Ferry will Parking Structure Remote Public Station, and parking (Private Land) Grand Public Car (GPC) Commuter Public Car (60 Passenger) Freight Car Car Ferry	Cost \$6,768,880.13 \$6,768,880.13 \$6,768,880.13 \$8,000,000.00 \$3,000,000.00 \$1,000,000.00 \$1,000,000.00 \$500,000.00 \$300,000.00	Amount \$731,039,054.40 \$32,000,000.00 \$264,000,000.00 \$230,141,924.53 \$176,000,000.00 \$2,000,000.00 \$25,000,000.00 \$13,200,000.00 \$33,000,000.00	
Gty 101	Cail Installat Units Kilometer Kilom	Description Detroit to Ann Arbor  Grand Terminal Stations Cloverleaf Stations "Traveler Station" Sidetrack to Local Public Station (1 Kilometer) Car Ramp for Car Ferry wil Parking Structure Remote Public Station, and parking (Private Land) Grand Public Car (GPC) Commuter Public Car (60 Passenger) Freight Car Car Ferry  Total Cost for InterState Tra	Cost \$6,768,880.13 \$6,768,880.13 \$6,768,880.13 \$8,000,000.00 \$3,000,000.00 \$1,000,000.00 \$1,000,000.00 \$500,000.00 \$300,000.00 \$300,000.00	Amount \$731,039,054.40 \$32,000,000.00 \$264,000,000.00 \$230,141,924.53 \$176,000,000.00 \$2,000,000.00 \$2,000,000.00 \$13,200,000.00 \$13,200,000.00 \$13,506,380,978.93	
Gty 101	Rail Installat Units  Kilometer Kilometer Kilometer 4 Each 3 Each 4 Kilometer 5 Each 6 Each 1 Each 1 Each 1 Each 2 Each 1 Each 2 Total Commute Cars 1 Total Car Ferry	tion Check List  Description  Detroit to Ann Arbor  Grand Terminal Stations Cloverleaf Stations "Traveler Station" Sidetrack to Local Public Station (1 Kilometer) Car Ramp for Car Ferry will Parking Structure Remote Public Station, and parking (Private Land) Grand Public Car (GPC) Commuter Public Car (60 Passenger) Freight Car Car Ferry	Cost \$6,768,880.13 \$6,768,880.13 \$6,768,880.13 \$8,000,000.00 \$3,000,000.00 \$1,000,000.00 \$1,000,000.00 \$500,000.00 \$300,000.00 veler installation	Amount \$731,039,054.40 \$32,000,000.00 \$264,000,000.00 \$230,141,924.53 \$176,000,000.00 \$2,000,000.00 \$25,000,000.00 \$13,200,000.00 \$13,200,000.00 \$13,606,380,978.93 \$279,380,576.00	23%
Gty 101	Rail Installat Units  Skilometer Kilometer Kilometer Each Each Each Each Each Each Each Each	Description Detroit to Ann Arbor  Grand Terminal Stations Cloverleaf Stations "Traveler Station" Sidetrack to Local Public Station (1 Kilometer) Car Ramp for Car Ferry wil Parking Structure Remote Public Station, and parking (Private Land) Grand Public Car (GPC) Commuter Public Car (60 Passenger) Freight Car Car Ferry  Total Cost for InterState Tra	Cost \$6,768,880.13 \$6,768,880.13 \$6,768,880.13 \$8,000,000.00 \$3,000,000.00 \$1,000,000.00 \$1,000,000.00 \$500,000.00 \$300,000.00 \$300,000.00	Amount \$731,039,054.40 \$32,000,000.00 \$264,000,000.00 \$230,141,924.53 \$176,000,000.00 \$2,000,000.00 \$2,000,000.00 \$13,200,000.00 \$13,200,000.00 \$13,506,380,978.93	23%
Gty 101	Cail Installat  Units  Kilometer  Kilometers	Description Detroit to Ann Arbor  Grand Terminal Stations Cloverleaf Stations "Traveler Station" Sidetrack to Local Public Station (1 Kilometer) Car Ramp for Car Ferry wil Parking Structure Remote Public Station, and parking (Private Land) Grand Public Car (GPC) Commuter Public Car (60 Passenger) Freight Car Car Ferry  Total Cost for InterState Tra	Cost \$6,768,880.13 \$6,768,880.13 \$6,768,880.13 \$8,000,000.00 \$3,000,000.00 \$1,000,000.00 \$1,000,000.00 \$500,000.00 \$300,000.00 veler installation	Amount \$731,039,054.40 \$32,000,000.00 \$264,000,000.00 \$230,141,924.53 \$176,000,000.00 \$2,000,000.00 \$25,000,000.00 \$13,200,000.00 \$13,200,000.00 \$13,606,380,978.93 \$279,380,576.00	23%
98 88 81 11 18 11 18 18 18 18 18 18 18 18	Rail Installat Units  Kilometer Kilometer Kilometer 4 Each 3 Each 5 Each 6 Each 1 Each 1 Each 2 Each 1 Each 2 Total Commute Cars 0 Total Stations 2 Total Kilometers 2 Total Kilometers 2 Total Kilometers 2 Total Kilometers	Description Detroit to Ann Arbor  Grand Terminal Stations Cloverleaf Stations "Traveler Station" Sidetrack to Local Public Station (1Kilometer) Car Ramp for Car Ferry w/Parking Structure Remote Public Station, and parking (Private Land) Grand Public Car (GPC) Commuter Public Car (60 Passenger) Freight Car Car Ferry  Total Cost for InterState Tra	Cost \$6,768,880.13 \$6,768,880.13 \$6,768,880.13 \$8,000,000.00 \$3,000,000.00 \$1,000,000.00 \$1,000,000.00 \$500,000.00 \$300,000.00 veler installation	Amount \$731,039,054.40 \$32,000,000.00 \$264,000,000.00 \$230,141,924.53 \$176,000,000.00 \$2,000,000.00 \$25,000,000.00 \$13,200,000.00 \$13,200,000.00 \$13,606,380,978.93 \$279,380,576.00	23%
Oty 101	Cail Installat  Units  Kilometer  Kilometers	Description Detroit to Ann Arbor  Grand Terminal Stations Cloverleaf Stations "Traveler Station" Sidetrack to Local Public Station (1Kilometer) Car Ramp for Car Ferry w/Parking Structure Remote Public Station, and parking (Private Land) Grand Public Car (GPC) Commuter Public Car (60 Passenger) Freight Car Car Ferry  Total Cost for InterState Tra	Cost \$6,768,880.13 \$6,768,880.13 \$6,768,880.13 \$8,000,000.00 \$3,000,000.00 \$1,000,000.00 \$1,000,000.00 \$500,000.00 \$300,000.00 veler installation	Amount \$731,039,054.40 \$32,000,000.00 \$264,000,000.00 \$230,141,924.53 \$176,000,000.00 \$2,000,000.00 \$25,000,000.00 \$13,200,000.00 \$13,200,000.00 \$13,606,380,978.93 \$279,380,576.00	23%
Oty 101	Rail Installat Units  Skilometer Kilometer Kilometer Kilometer Each Each Each Each Each Each Each Each	Description Detroit to Ann Arbor  Grand Terminal Stations Cloverleaf Stations "Traveler Station" Sidetrack to Local Public Station (1Kilometer) Car Ramp for Car Ferry w/Parking Structure Remote Public Station, and parking (Private Land) Grand Public Car (GPC) Commuter Public Car (60 Passenger) Freight Car Car Ferry  Total Cost for InterState Tra	Cost \$6,768,880.13 \$6,768,880.13 \$6,768,880.13 \$8,000,000.00 \$3,000,000.00 \$1,000,000.00 \$1,000,000.00 \$500,000.00 \$300,000.00 veler installation	Amount \$731,039,054.40 \$32,000,000.00 \$264,000,000.00 \$230,141,924.53 \$176,000,000.00 \$2,000,000.00 \$25,000,000.00 \$13,200,000.00 \$13,200,000.00 \$13,606,380,978.93 \$279,380,576.00	23%
Qty 101	Rail Installat  Units  Kilometer Kilometer Kilometer 4 Each 5 Each Each 2 Each 2 Each 0 Each 0 Each 0 Each 0 Total Car Ferry 0 Total Stations 0 Total Kilometers 2 Total Miles 1 Pairs of Stations/Mile 1 Cars/mile	Description Detroit to Ann Arbor  Grand Terminal Stations Cloverleaf Stations "Traveler Station" Sidetrack to Local Public Station (1 Kilometer) Car Ramp for Car Ferry wil Parking Structure Remote Public Station, and parking (Private Land) Grand Public Car (GPC) Commuter Public Car (60 Passenger) Freight Car Car Ferry  Total Cost for InterState Tra	Cost \$6,768,880.13 \$6,768,880.13 \$6,768,880.13 \$8,000,000.00 \$3,000,000.00 \$1,000,000.00 \$1,000,000.00 \$500,000.00 \$300,000.00 \$300,000.00 \$300,000.00 Balance	Amount \$731,039,054.40 \$32,000,000.00 \$264,000,000.00 \$230,141,924.53 \$176,000,000.00 \$2,000,000.00 \$25,000,000.00 \$13,200,000.00 \$33,000,000.00 \$1,506,380,978.93 \$279,360,576.00 \$1,227,020,402.93	23%
Qty 101	Rail Installat  Units  Kilometer Kilometer Kilometer 4 Each 5 Each Each 2 Each 2 Each 0 Each 0 Each 0 Each 0 Total Car Ferry 0 Total Stations 0 Total Kilometers 2 Total Miles 1 Pairs of Stations/Mile 1 Cars/mile	tion Check List  Description  Detroit to Ann Arbor  Grand Terminal Stations Clowerleaf Stations "Traveler Station" Sidetrack to Local Public Station (1 Kilometer) Car Ramp for Car Ferry will Parking Structure Remote Public Station, and parking (Private Land) Grand Public Car (GPC) Commuter Public Car (60 Passenger) Freight Car Car Ferry  Total Cost for InterState Tra  Cost of Stael at 1200 dollars per ton at 30	Cost \$6,768,880.13 \$6,768,880.13 \$8,000,000.00 \$3,000,000.00 \$1,000,000.00 \$1,000,000.00 \$300,000.00 \$300,000.00 \$300,000.00 Balance	Amount \$731,039,054.40 \$32,000,000.00 \$264,000,000.00 \$230,141,924.53 \$176,000,000.00 \$2,000,000.00 \$13,000,000.00 \$13,200,000.00 \$13,200,000.00 \$1,566,380,978.93 \$279,360,576.00 \$1,227,020,402.93	23%
Qty 101	Rail Installat  Units  Kilometer Kilometer Kilometer 4 Each 5 Each Each 2 Each 2 Each 0 Each 0 Each 0 Each 0 Total Car Ferry 0 Total Stations 0 Total Kilometers 2 Total Miles 1 Pairs of Stations/Mile 1 Cars/mile	tion Check List  Description  Detroit to Ann Arbor  Grand Terminal Stations Clowerleaf Stations "Traveler Station" Sidetrack to Local Public Station (1 Kilometer) Car Ramp for Car Ferry will Parking Structure Remote Public Station, and parking (Private Land) Grand Public Car (GPC) Commuter Public Car (60 Passenger) Freight Car Car Ferry  Total Cost for InterState Tra  Cost of Stael at 1200 dollars per ton at 30	Cost \$6,768,880.13 \$6,768,880.13 \$8,000,000.00 \$3,000,000.00 \$1,000,000.00 \$1,000,000.00 \$300,000.00 \$300,000.00 \$300,000.00 Balance	Amount \$731,039,054.40 \$32,000,000.00 \$264,000,000.00 \$230,141,924.53 \$176,000,000.00 \$2,000,000.00 \$13,000,000.00 \$13,200,000.00 \$13,200,000.00 \$1,566,380,978.93 \$279,360,576.00 \$1,227,020,402.93	23%
Gty 101	Rail Installat Units  Kilometer Kilometer Kilometer Kilometer Each Each Kilometer Kilometer Each Cach Cach Cach Cach Cach Cach Cach C	tion Check List  Description  Detroit to Ann Arbor  Grand Terminal Stations Cloverleaf Stations "Traveler Station" Sidetrack to Local Public Station (1 Kilometer) Car Ramp for Car Ferry will Parking Structure Remote Public Station, and parking (Private Land) Grand Public Car (GPC) Commuter Public Car (60 Passenger) Freight Car Car Ferry  Total Cost for InterState Tra Cost of Steel at 1200 dollars per fon at 30  Cost per Kilometer Complete Cost per Mile Complete	Cost \$6,768,880.13 \$6,768,880.13 \$8,000,000.00 \$3,000,000.00 \$1,000,000.00 \$1,000,000.00 \$300,000.00 \$300,000.00 \$300,000.00 Balance	Amount \$731,039,054.40 \$32,000,000.00 \$264,000,000.00 \$230,141,924.53 \$176,000,000.00 \$2,000,000.00 \$25,000,000.00 \$13,200,000.00 \$33,000,000.00 \$1,506,380,978.93 \$279,360,576.00 \$1,227,020,402.93	23%
Gty 101	Rail Installat  Units  Kilometer Kilometer Kilometer Kilometer Each Each Kilometer Each Cach Each Cach Cach Carsen Catholic Cathol	tion Check List  Description  Detroit to Ann Arbor  Grand Terminal Stations Cloverleaf Stations "Traveler Station" Sidetrack to Local Public Station (1 Kilometer) Car Ramp for Car Ferry will Parking Structure Remote Public Station, and parking (Private Land) Grand Public Car (GPC) Commuter Public Car (60 Passenger) Freight Car Car Ferry  Total Cost for InterState Tra Cost of Steel at 1200 dollars per Ion at 30  Cost per Kilometer Complete Cost per Mile Complete Convert Miles to Kilometers, Kilometers to Miles	\$6,768,880.13 \$6,768,880.13 \$6,768,880.13 \$8,000,000.00 \$3,000,000.00 \$1,000,000.00 \$500,000.00 \$300,000.00 \$300,000.00 \$and tons per section Balance	Amount \$731,039,054.40 \$32,000,000.00 \$264,000,000.00 \$230,141,924.53 \$176,000,000.00 \$2,000,000.00 \$12,000,000.00 \$13,200,000.00 \$13,200,000.00 \$1,506,380,978.93 \$279,360.576.00 \$1,227,020,402.93 \$10,608,316.75 \$17,082,635.67	23%
Gty 101	Rail Installat  Units  Kilometer Kilometer Kilometer 4 Each 3 Each 4 Kilometer 5 Each 6 Each 2 Each 2 Each 0 Each 1 Each 2 Total Commute Cars 0 Total Car Ferry 0 Total Stations 1 Total Kilometers 2 Total Miles 1 Pairs of Stations/Mile 4 Cars/mile 4 Total Cars	Description Detroit to Ann Arbor  Grand Terminal Stations Clowerleaf Stations "Traveler Station" Sidetrack to Local Public Station (1 Kilometer) Car Ramp for Car Ferry wil Parking Structure Remote Public Station, and parking (Private Land) Grand Public Car (60 Passenger) Freight Car Car Ferry  Total Cost for InterState Tra Cost of Steel at 1200 dollars per ton at 30  Cost per Kilometer Complet Cost per Mile Complet Convert Miles to Kilometers, Kilometers to Miles	Cost \$6,768,880.13 \$6,768,880.13 \$6,768,880.13 \$8,000,000.00 \$1,000,000.00 \$1,000,000.00 \$1000,000.00 \$500,000.00 \$300,000.00 \$300,000.00 Balance	Amount \$731,039,054.40 \$32,000,000.00 \$264,000,000.00 \$230,141,924.53 \$176,000,000.00 \$2,000,000.00 \$2,000,000.00 \$13,200,000.00 \$33,000,000.00 \$13,200,000.00 \$1,227,020,402.93 \$10,608,316.75 \$17,082,635.67	23%
Gty 101	Rail Installat  Units  Kilometer Kilometer Kilometer Kilometer Each Each Each Each Each Cach Cach Carber Commute Cars Cotal Commute Cars Cotal Commute Cars Cotal Commute Cars Cotal Car Ferry Cotal Stations Cotal Car Ferry Cotal Kilometers Cotal	tion Check List  Description  Detroit to Ann Arbor  Grand Terminal Stations Cloverleaf Stations "Traveler Station" Sidetrack to Local Public Station (I Kilometer) Car Ramp for Car Ferry will Parking Structure Remote Public Station, and parking (Private Land) Grand Public Car (GPC) Commuter Public Car (60 Passenger) Freight Car Car Ferry  Total Cost for InterState Tra Cost of Steel at 1200 dollars per ton at 30  Cost per Kilometer Complet Cost per Mile Complet Convert Miles to Kilometers, Kilometers to Miles QTY 2.50	Cost \$6,768,880.13 \$6,768,880.13 \$8,000,000.00 \$3,000,000.00 \$1,000,000.00 \$1,000,000.00 \$500,000.00 \$300,000.00 \$300,000.00 \$300,000.00 \$300,000.00 \$aunument	Amount \$731,039,054.40 \$32,000,000.00 \$264,000,000.00 \$230,141,924.53 \$176,000,000.00 \$2,000,000.00 \$13,200,000.00 \$13,200,000.00 \$13,200,400.00 \$1,200.00 \$1,200.00 \$1,200.00 \$1,200.00 \$1,200.00 \$1,200.00 \$1,200.	23%
Gty 101	Rail Installat  Units  Kilometer Kilometer Kilometer 4 Each 3 Each 4 Kilometer 5 Each 6 Each 2 Each 2 Each 0 Each 1 Each 2 Total Commute Cars 0 Total Car Ferry 0 Total Stations 1 Total Kilometers 2 Total Miles 1 Pairs of Stations/Mile 4 Cars/mile 4 Total Cars	tion Check List  Description  Detroit to Ann Arbor  Grand Terminal Stations Cloverleaf Stations "Traveler Station" Sidetrack to Local Public Station (I Kilometer) Car Ramp for Car Ferry will Parking Structure Remote Public Station, and parking (Private Land) Grand Public Car (GPC) Commuter Public Car (60 Passenger) Freight Car Car Ferry  Total Cost for InterState Tra Cost of Steel at 1200 dollars per ton at 30  Cost per Kilometer Complet Cost per Mile Complet Convert Miles to Kilometers, Kilometers to Miles QTY 2.50	Cost \$6,768,880.13 \$6,768,880.13 \$6,768,880.13 \$8,000,000.00 \$1,000,000.00 \$1,000,000.00 \$1000,000.00 \$500,000.00 \$300,000.00 \$300,000.00 Balance	Amount \$731,039,054.40 \$32,000,000.00 \$264,000,000.00 \$230,141,924.53 \$176,000,000.00 \$2,000,000.00 \$13,200,000.00 \$13,200,000.00 \$13,200,400.00 \$1,200.00 \$1,200.00 \$1,200.00 \$1,200.00 \$1,200.00 \$1,200.00 \$1,200.	23%
Gty 101	Rail Installat  Units  Kilometer Kilometer Kilometer Kilometer Each Each Each Each Each Cach Cach Carber Commute Cars Cotal Commute Cars Cotal Commute Cars Cotal Commute Cars Cotal Car Ferry Cotal Stations Cotal Car Ferry Cotal Kilometers Cotal	tion Check List  Description  Detroit to Ann Arbor  Grand Terminal Stations Cloverleaf Stations "Traveler Station" Sidetrack to Local Public Station (I Kilometer) Car Ramp for Car Ferry will Parking Structure Remote Public Station, and parking (Private Land) Grand Public Car (GPC) Commuter Public Car (60 Passenger) Freight Car Car Ferry  Total Cost for InterState Tra Cost of Steel at 1200 dollars per ton at 30  Cost per Kilometer Complet Cost per Mile Complet Convert Miles to Kilometers, Kilometers to Miles QTY 2.50	Cost \$6,768,880.13 \$6,768,880.13 \$8,000,000.00 \$3,000,000.00 \$1,000,000.00 \$1,000,000.00 \$500,000.00 \$300,000.00 \$300,000.00 \$300,000.00 \$300,000.00 \$aunument	Amount \$731,039,054.40 \$32,000,000.00 \$264,000,000.00 \$230,141,924.53 \$176,000,000.00 \$2,000,000.00 \$13,200,000.00 \$13,200,000.00 \$13,200,400.00 \$1,200.00 \$1,200.00 \$1,200.00 \$1,200.00 \$1,200.00 \$1,200.00 \$1,200.	23%
Gty 101	Rail Installat  Units  Kilometer Kilometer Kilometer Kilometer Each Each Each Each Each Cach Cach Carber Commute Cars Cotal Commute Cars Cotal Commute Cars Cotal Commute Cars Cotal Car Ferry Cotal Stations Cotal Car Ferry Cotal Kilometers Cotal	tion Check List  Description  Detroit to Ann Arbor  Grand Terminal Stations Clowerleaf Stations "Traveler Station" Sidetrack to Local Public Station (1 Kilometer) Car Ramp for Car Ferry w/ Parking Structure Remote Public Station, and parking (Private Land) Grand Public Car (60 Passenger) Freight Car Car Ferry  Total Cost for InterState Tra  Cost of Stael at 1200 dollars per ton at 30  Cost per Kilometer Complet  Cost per Mile Complet  Convert Miles to Kilometers, Kilometers to Miles  GTY  2.50 4.00	Cost \$6,768,880.13 \$6,768,880.13 \$8,000,000.00 \$3,000,000.00 \$1,000,000.00 \$1,000,000.00 \$500,000.00 \$300,000.00 \$300,000.00 \$300,000.00 \$300,000.00 \$aunument	Amount \$731,039,054.40 \$32,000,000.00 \$264,000,000.00 \$230,141,924.53 \$176,000,000.00 \$2,000,000.00 \$13,200,000.00 \$13,200,000.00 \$13,200,400.00 \$1,200.00 \$1,200.00 \$1,200.00 \$1,200.00 \$1,200.00 \$1,200.00 \$1,200.	23%







	А	В	C	D
, IT	LC I	Rail Return On Investment		
via		x Collections, Rent, Advertising		
3		Change values in yellow to see all figures update		
4 Th	ne Int	terstate Traveler Project		
5		Grow budget by x percent:	0%	
6				
7 St	teps:	88 Miles from Detroit to Ann Arbor	88.18	total Miles of track for this estimate
8	1	Passenger Fee / Minute	\$0.05	
9	2	Car Transport Fee / Minute	\$1.00	
10	3	Number of Commuter Cars:	50	
11	4	Number of Car Ferries	110	
12	5	Passengers Per Car	10	People
13	6	Average Time of Trip for Pedestrian	8	Minutes
14	7	Average Distance of Trip for Car Transport	20	Minutes
15		Total Simultaneous Capacity (Passengers Only)	500	
16		Total Number of 8 Minute Time Blocks / Day	180	
17		Total Daily Capacity (Average Time * Total Capacity)	90,000	
18 Ped	destrian	Projected Use as an Average over 24 hours	100%	Percent of Capacity
19 Ca	r Trans	Projected Use as an Average over 24 hours	100%	Percent of Capacity
		Total Projected Use Daily	90,000	Rides
21 Pec		Total Projected Revenue Daily	\$36,000.00	
		Total Projected Use Annually		Rides
		Total Projected Revenue Annually	\$13,140,000.00	
		Total Projected Use Daily		Rides
		Total Projected Revenue Daily	\$19,800.00	
	r Trans	Total Projected Use Annually	7.227.000	Rides
	r Trans	Total Projected Revenue Annually	\$144,540,000.00	
		Revenue / Trip / Single Pedestrian at \$0.05 /minute for 8 minutes		Consumer Fee For Use on a Trip
		Revenue / Trip / Single Car Transport at \$1 /minute for 20 minutes		Consumer Fee For Use on a Trip
		Average Speed Traveled		Miles per hour
		Possible Distance Covered Traveling at 120mph for 8 minutes	16	Miles
		Revenue All Transports / Annually at xx% of Capacity	\$157,680,000.00	(Freight is HOT included in this figure
33		Advertising Revenue Calculations	\$1,405,824,000.00	area area area area area area area area
34		Rent Revenue Calculations	\$36,672,000.00	
35		Total Annual Revenue for All Transports / Advertising / Rent	\$1,600,176,000.00	
36		The state of the s	+1,000,110,000,00	
37		Budget⊳> Cost for Installation for 88.19 miles	\$1,506,380,978.93	
38		Total Annual Revenue	\$1,600,176,000.00	
39		Return on Investment at 100% of Revenue	0.94138456	Years
40		Dept Service Fund	50%	
41		Total Annual Dept Service Fund (P/P Partnership)	\$800,088,000.00	
42		Return on Investment using Dept Service Fund		Years
43				
44		Time to tool up manufacturing in Months	9.00	
45		Unforeseen Delays for Installation in Months	3.00	
46		Time to make and all parts in Months	24.27	
47		Total Months Until Fully Operational	36.27	
48		Total Years Until Operational	3.02	
49		Return on Investment in Months after made Operational	47.56	
50		Return on Investment Years Including Startup time	3.96	
51		Michigan Population	10,079,985	
52		PerCapita Revenue for State of Michigan	\$20	
53		Detroit Population	900,000	
FT 4		Detroit Annual Revenue Per Capita for 88.19 miles	\$17,859,134	
54				
54 55 56				







	Α	B C D E						
1	Interstate 7	Traveler Company, LLC						
2	Job Creation	Estimates						
3	Does Not include Cons	struction Jobs for Rail, Traveler Stations, Etc. or Maintainence						
4								
5	88	Miles of Rail						
6	84	Traveler Stations						
7	3	Lease Hold Businesses / Stations						
8		Total Businesses						
9		Employees / Business						
10		Total Employees in Traveler Stations						
11		Transports on System						
12	5							
13		Concierge Employees						
14	3,840	Total Employees (estimated)						
15								
16		Michigan Eisenhower System						
17		Miles of Rail						
18		Traveler Stations (est)						
19		Lease Hold Business / Station						
20		Total Business						
21		Employees / Business						
22		Total Employees in Traveler Stations						
23		Transports on System						
24	5	2 - 1 - 2 - 3 - 1 - 1 - 1 - 1 - 1						
25		Concierge Employees						
26	37,800	Total Employees (estimated)						
27								
28								
29		Eisenhower Interstate Highway System						
30	·	Miles of Rail						
31		Traveler Stations (est)						
32		Lease Hold Business / Station						
33		Total Business						
34	10	1 1						
35	000,000	Total Employees in Traveler Stations						
36	162,000	Transports on System						
37	5	Concierge / Transport						
38	810,000	Concierge Employees						
39	1,410,000	Total Employees (estimated)						
40								







	А	В	С	D	E	F
1	Interst	ate Traveler E	nergy Calculator			
2		vatt-hour = 3.4121415 Btu	g, carearate			
3		alues in fields marked in Ye	llow			
4	ITC Rail C	Combined Wattage Oเ	itput of Two Parallel Tracks C	ombined		
5	Mil	е	5,280	ft		
6	Wi	dth (two parallel tracks combined)	16	ft		
7	Are	ea	84,480	SqFt/mile		
8	Wa	atts/SqFt (set at 12)	8	watts/SqFt	(should be 12)	
9		tal Watts	675.840	Watts/mile/hou	ır	
0	Tof	tal Solar Hours/day		Solar Hours/da		
1		tal Watts/day/mile	4.055.040	watts/day/mile		
2		tal Miles (set at 54,000)	54,000		(should be 54,000)	
3		tal watts/day/all miles	218,972,160,000			
4		tal Watts/year	79,924,838,400,000			
5			ttage Output of Total Roof Mo			
6		aveler Station Frequency	2	Every 5 Miles	(should be 2 every 5)	
7		tal Traveler Stations	21,600		(	
8		erage Roof Size (PV)		SqFt Roof-mou	inted PV Grid	
9		nimum watts/SgFt	12	oqi tirtooi iiioc	integra ong	
0		tal Watts/hr/station	96,000			
1		tal Watts/hr/all stations	2,073,600,000			
2		tal Watts/day/all stations tal Watts/vear/all stations	12,441,600,000 4,541,184,000,000			
4			Output of Total Roof-Mounted	PV Grid		
5		tal Number of Transports/m			e ( should be 3 per mile)	
6		tal Transports on System	162,000	a aportormili	( 2 2 2 o o por mine)	
7		tal SqFt or roof area		SqFt of PV on F	Roof	
8	0.00	tal SqFt all Transports		Total SqFt PV		
9	Mir	nimum watts/SqFt	22			
0	Tot	tal Solar Hours / Day	8			
1	Tot	tal Watts/hr/Transport	3,520			
2		tal Watts/hr/all Transports	570,240,000			
3		tal Watts/day/all Transports	4,561,920,000			
4		tal Watts/year/all Transports				
15		<u>he Roof (symetrical a</u> ameter	500			
7		dius	250			
8 9	Cir Pi	cumference	1571.428571 3.142857143			
0		ghway ROW Width	3.142637143			
1		rcent of Circumference for r				
2		of Width ngth	320 5,280			
4	Are		1,688,469			
5		rcent dedicated to PV	80%			
6 7		tal Surface area of PV/ Mile atts/SqFt	1,350,775			
8	Tot	tal Watts/Mile/hour	6,753,874			
9		tal Solar Hours / Day		Solar Day (Hou	ırs)	
0		tal Watts/Mile/Day tal Number of Miles	40,523,246 5,000	100 miles / sta	te	
2	Tot	tal Watts/Solar Day / all mile	202,616,228,571			
3		tal Watts/year tal Kilowatts/year	73,954,923,428,571 73,954,923,429			
5		tal Megawatts/year	73,954,923,429			
6	Tot	tal Gigawatts/year	73,955			
7 8		tal Terawatts/year tal BTU / year	73.95 21,674,049,399,350			
9		tal Quad /year	0.0216740			
			- Transports + Roof PV Grid C	Combined		
)				Demand		
1		tal Watts/year	160,086,046,628,571			
2	1 999	tal Kilowatts/year	160,086,046,629			
3		tal Megawatts/year	160,086,047			
4		tal GigaWatts/year	160,086			
5		tal Terawatts/year	160			
6	Val	lue of a Kilowatt	\$0.10			
7	Tot	tal Electrical Output Value	\$16,008,604,662.86			
8	Tof	tal BTU/year	546,236,243,272,284.000			
	1 1000	tal Quadrillion BTU/year		A unit called the	e <i>guad</i> (short for guadrilli	jon
	1.01	220 200 2			100.000 000 0000 000	.911
9		tal watts/ncmh	4,200		ubic meter of Hydrogen	
9	7					
9	Tot	tal Cu Meter Hydrogen/year	38,115,725,388			_
9 0 1 2	Tot Ga	tal Cu Meter Hydrogen/year soline Equivelent Units	3,811,572,539	Gasoline Equiv	vilent Units 10ncmh/1Gal	Ga
9	Tot Ga Nu	tal Cu Meter Hydrogen/year	3,811,572,539	Gasoline Equiv	vilent Units 10ncmh/1Gal	Ga







	Α	В	С	D	E	F	G	
1	Nested Domain Addressing System							
2	Top Level	USA					10	
3	Second	State						
4	Third	County						
5	Fourth		/ City / Villia	age				
6	Fifth	Pri∨ate Ne	twork					
7	Sixth	Private Te	rminal					
8								
9	Example of Add	ressing Me	thod			Marker:		
10	Ordinate	Value / I	Position					
11	USA	1						
12	Michigan		14					
13	Wayne County			1				
14	Redford				8			
15	Shopping Cente	r				2		
16	Stop Number						6	
17		1	14	1	8	2	6	
18	Departure I	D	1.14.1.8.	.2.6				
19								
20	Ordinate	Value / I	Position					
21	USA	1						
22	Illinois		17					
23	Cook County			14				
	Chicago				1			
	Shopping Cente	r				16		
	Stop Number						5	
27		1	17	14	1	16	5	
28	Destination	ID	1.17.14.	1.16.5				
29								
28	Destination				1	1	6	

31



#### Comparisons of Services

#### **Conventional Mag/Lev Rail**

Construction cost: \$36 million per mile

Requires subsidies from Fed, State, and local

50+ Year return on investment

700 feet turning radius

Relies on old technology

Ground level issues (traffc/animals, etc.)

Need to acquire additional land to build

Single revenue source

Foreign designed and built

Built and functioning in 12 years

Transportation district owned vehicles

Requires service road for construction

and maintenance

Passengers only

Minimal choices in lines/stops/stations

Rider fare \$20+/ride

Requires driver/conductor

Isolated systems (regional, point-to-point)

97 thousand jobs created (CA)

Concrete construction (60 year life span)

Interferes with existing traffc for construction

Burns fossil fuel for electricity to run system

No additional services provided

Requires an electrical grid to plug into

Quiet operation

#### **Interstate Traveler**

Construction cost: \$10 million per mile

Subsidizes Fed, State, and local Governments

<2 year return on investment

60 feet turning radius

State-of-the-art technology

Operates above traffc, bridges, kids, and homes

Uses existing interstate highway rights of way

Multiple revenue sources (electricity, hydrogen, water, freight, Passengers, advertising, conduit cluster, rental income, TCP/IP, and energy storage)

USA designed and built

Built and functioning in 3 years

Public and privately owned vehicles

No service road for construction and maintenance

(built from upon itself)

Passenger, freight, and vehicle transport

Unlimited destination options

Rider fare \$0.05/Minute

Driver-less TCP/IP operation

Would connect to national system

Over 1 million new jobs created (CA)

Stainless steel construction (100+year life span)

No traffc interruption during construction

Environmentally perfect, uses solar and hydrogen

Provides conduit cluster for: cable, fber optics, telephone, water, hydrogen/oxygen, electricity,

sewage, and other gases and fuids

No grid needed, produces own power

Quiet operation and environmentally perfect

Creates fresh water from salt water, rivers, and contaminated water (highway run-off)

Dedicated system for Homeland Security

Moves the US to a hydrogen economy in 15 years









Offered by Representatives DeRossett, Adamini, Anderson, Brown, Ehardt, Elkins, Gieleghem, Gillard, Jamnick, Koetje, Lipsey, Meyer, Sheltrown, Woodward, Zelenko, Amos, Bradstreet, Gleason, Hager, Howell, Murphy, Nofs, Pastor, Shackleton, Stakoe, Tobocman, Vander Veen, Voorhees, Ward and Paletko

A RESOLUTION TO MEMORIALIZE CONGRESS TO ENACT LEGISLATION TO SUPPORT RESEARCH, DEVELOPMENT, AND CONSTRUCTION OF THE INTERSTATE TRAVELER PROJECT THROUGH THE REAUTHORIZATION OF THE TRANSPORTATION EQUITY ACT OF THE 21ST CENTURY (TEA-21) AND/OR OTHER RELATED FEDERAL PROGRAMS

WHEREAS, The Interstate Traveler Project is an elevated maglev (magnetic levitation) rail mass transit system that is based upon a conduit cluster concept powered by hydrogen and solar power. The project promises to provide travelers with a clean, quiet, safe, reliable mode of transportation. The intent of the project is to create the world's first switchable maglev rail network that will provide inter-urban/inter-city pedestrian, automobile, and light freight transit services. The project will simultaneously produce, store, and distribute hydrogen, which will not only serve as an alternative energy resource, but also will give Michigan's automakers the incentive to produce hydrogen internal combustion engines, fuel cell cars, and the manufacturing opportunity to build maglev rail cars; and

WHEREAS, By fully integrating with the interstate highway system, existing transportation infrastructure, and mass transit systems, the Interstate Traveler Project seeks to reduce traffic congestion and air pollution while improving traffic safety and efficiency. The Interstate Traveler Project substations will utilize the existing interstate highway system's entrances and exits, providing a seamless link of private automobiles, pedestrian traffic, existing municipal bus routes, and taxi services. These substations will also support the hydrogen distribution system, as well as fiber optics, water, electricity, and other utilities. Although the Interstate Traveler Project is ideally suited for the interstate highway system, it may also be integrated with existing and abandoned railroad right-of-ways or along other appropriate lands; and

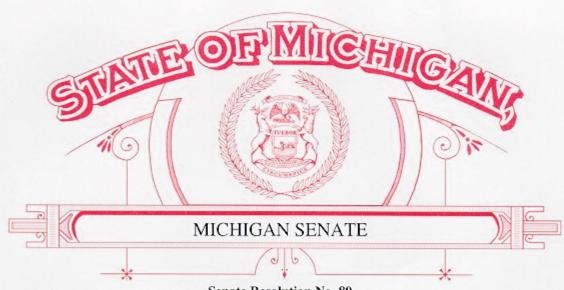
WHEREAS, The Interstate Traveler Project is consistent with the 2003 State-of-the-Union address which called on Congress to appropriate \$1.2 billion for hydrogen fuel cell technology; now, therefore, be it

RESOLVED by the House of Representatives, That we memorialize Congress to enact legislation to support research, development, and construction of the Interstate Traveler Project through the reauthorization of the Transportation Equity Act of the 21st Century (TEA-21) and/or other related federal programs; and be it further

RESOLVED, That copies of this resolution be transmitted to the President of the United States Senate, the Speaker of the United States House of Representatives, and the members of the Michigan congressional delegation.

Adopted by the House of Representatives, April 10, 2003.

CLERK OF THE HOUSE OF REPRESENTATIVES



Senate Resolution No. 89

Offered by Senators Allen, Kuipers, Jelinek, Prusi, Cropsey, Cassis, Goschka, Gilbert and Clarke

A RESOLUTION TO MEMORIALIZE CONGRESS TO ENACT LEGISLATION TO SUPPORT RESEARCH, DEVELOPMENT, AND CONSTRUCTION OF THE INTERSTATE TRAVELER PROJECT THROUGH THE REAUTHORIZATION OF THE TRANSPORTATION EQUITY ACT OF THE 21ST CENTURY (TEA-21) AND/OR OTHER RELATED FEDERAL PROGRAMS

WHEREAS, The Interstate Traveler Project is an elevated maglev (magnetic levitation) rail mass transit system that is based upon a conduit cluster concept powered by hydrogen and solar power. The project promises to provide travelers with a clean, quiet, safe, reliable mode of transportation. The intent of the project is to create the world's first switchable maglev rail network that will provide interurban/intercity pedestrian, automobile, and light freight transit services. The project will simultaneously produce, store, and distribute hydrogen, which will not only serve as an alternative energy source, but also give Michigan's automakers the incentive to produce hydrogen internal combustion engines, fuel cell cars, and the manufacturing opportunity to build magley rail cars; and

WHEREAS, By fully integrating with the interstate highway system, existing transportation infrastructure, and mass transit systems, the Interstate Traveler Project seeks to reduce traffic congestion and air pollution while improving traffic safety and efficiency. The Interstate Traveler Project substations will utilize the existing interstate highway system's entrances and exits, providing a seamless link of private automobiles, pedestrian traffic, existing municipal bus routes, and taxi services. These substations will also support the hydrogen distribution system, as well as fiber optics, water, electricity, and other utilities. Although the Interstate Traveler Project is ideally suited for the interstate highway system, it may also be integrated with existing and abandoned railroad right-of-ways or along other appropriate lands; and

WHEREAS, The Interstate Traveler Project is consistent with the 2003 State of the Union address, which called on Congress to appropriate \$1.2 billion for hydrogen fuel cell technology; now, therefore, be it

RESOLVED BY THE SENATE, That we memorialize Congress to enact legislation to support research, development, and construction of the Interstate Traveler Project through the reauthorization of the Transportation Equity Act of the 21st Century (TEA-21) and/or other related federal programs; and be it

RESOLVED, That a copy of this resolution be transmitted to the President of the United States Senate, the Speaker of the United States House of Representatives, and the members of the Michigan congressional delegation.

Adopted by the Senate, May 28, 2003.



www.HydrogenSuperHighway.com

Copyright 2007 Interstate Traveler Company, LLC 300 River Place Suite 5550 Detroit Mi 48207



At-grade Public Transit For City Streets



Solar Powered Public Transportation - Safe - Clean - Quiet

#### A Proud Supporter of the United Negro College Fund

< www.HydrogenSuperHighway.com >

> Copyright 2008 Interstate Traveler Company, LLC 300 River Place Suite 5550 Detroit Mi 48207



