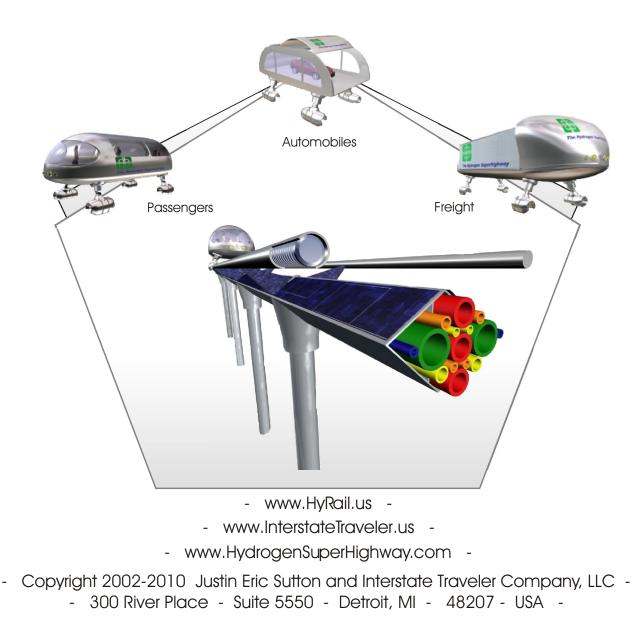






# WORLDWIDE

# HYDROGEN SUPER HIGHWAYS





#### HYDROGEN SUPER HIGHWAY

#### BOUND ON XX 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) on-demand 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...

<del>80</del>



## The Interstate Traveler

Hydrogen Super Highway

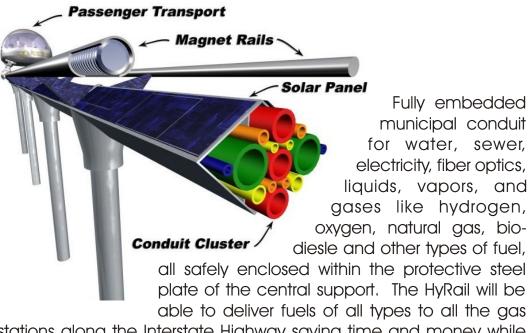




2



### 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.



<u>8</u>



#### 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.



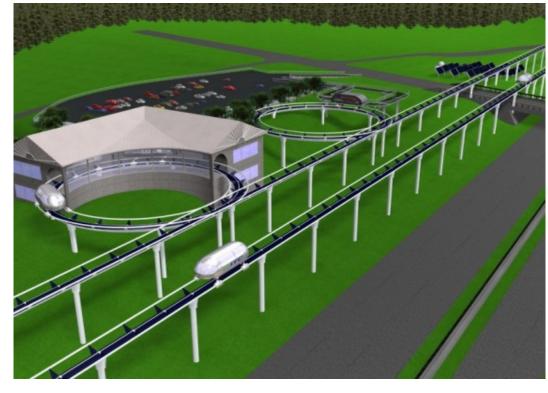
No other transportation system in the world can give you such a smooth ride and such a priceless panorama of the world around you.

Fixed schedule and on-demand transports means no waiting.





<u>8</u>2



Fast

Reliable

Spacious

Comfortable

On Demand

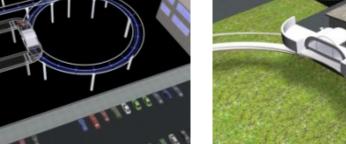
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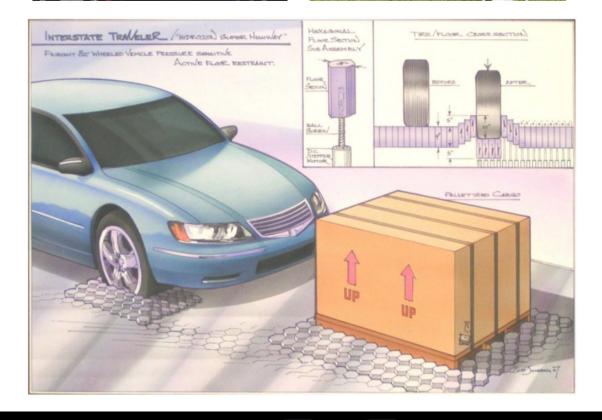
### Ride with Family

The Car Transport is perfect for Family trips over long 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



<u>6</u>2

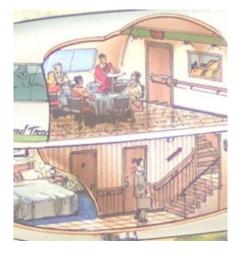


# Ride in Luxury

Office, Condominium, Private Parties

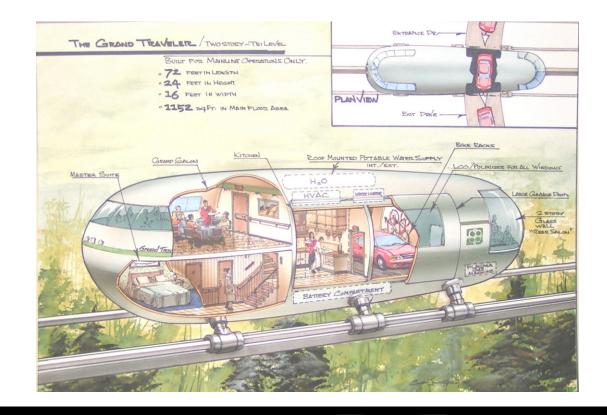
Never before could it be possible for such large, spacious, and comfortable transport vehicles be constructed and reliably operated across a national network of high speed, super efficient maglev rail.

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.



Huge Area

#### Commercial

Residential

Club Car

Limousine

#### Sports Teams

6

V.I.P.s



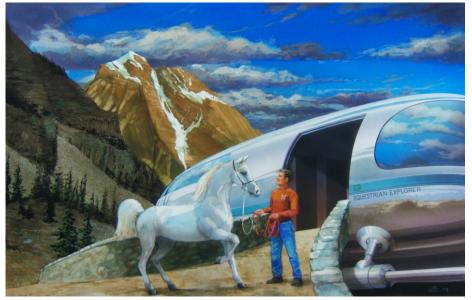
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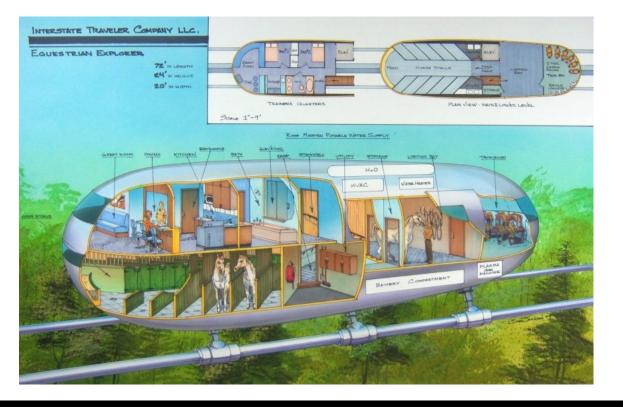
### Sports Model

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





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7



Staff of Eight

Imaging

Chemistry

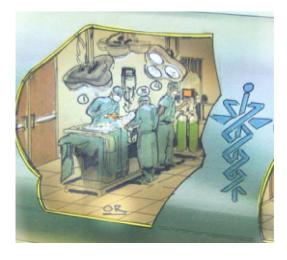
Anesthesiology

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.

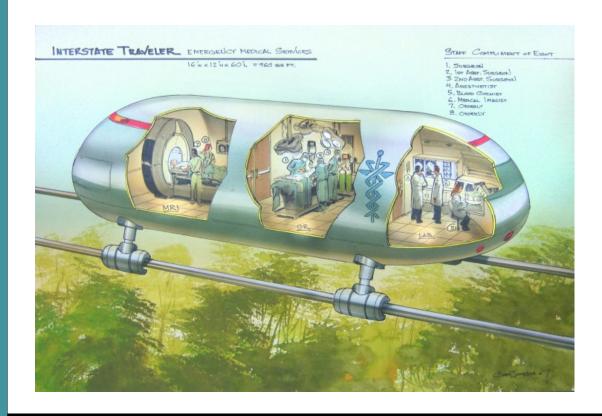
With the Triage Traveler riding on the HyRail, we will be there to help save lives.

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

<u>8</u>2

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.





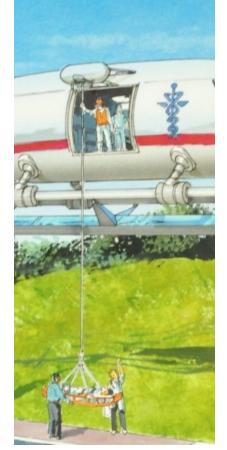
# Rapid Rescue

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.

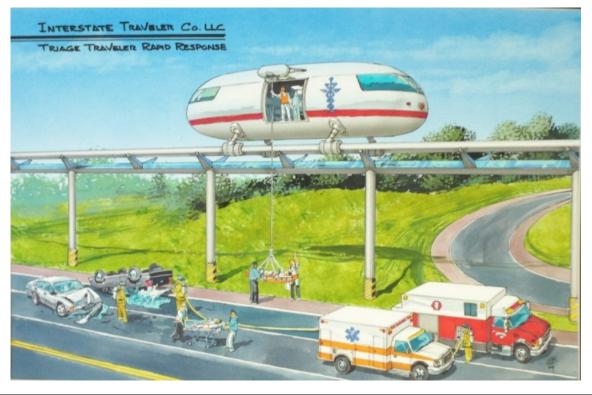
Dedicated to those who answer your call for help, the Interstate Traveler Company will dedicate free access and operation to Paramedical Units like the Traige Traveler.

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



<del>8</del>



#### 6 Bed Ward

Staff of !2

Onboard Ambulance

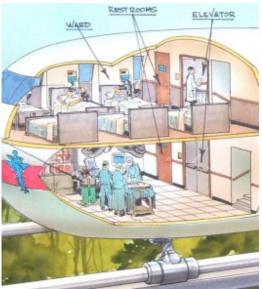
Mass Casualty Response

General Practice

### 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.

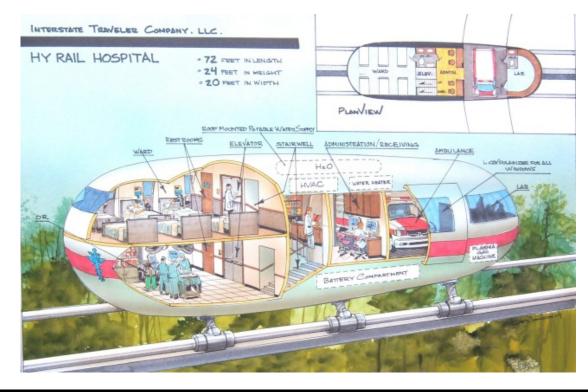
Here in America we have a mortality rate of more than 40,000 people a year on our Interstate Highway System alone, with many more on the surface streets.



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







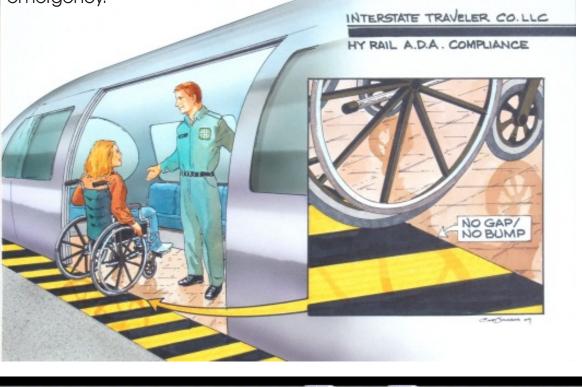
### Wide Doors - Open Spaces

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 emergency.







ADA Compliant Secure Reliable Comfortable Community



<del>\_\_\_\_\_</del>



Secure

Fast

Easy to Use

Stable

Reduced Risk

## Containerized Freight

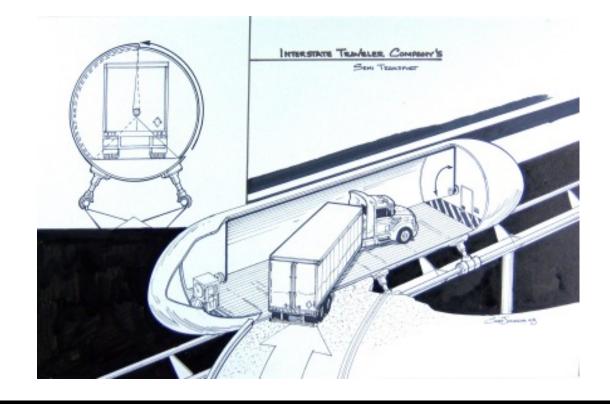
The integration with Port Security is clear to see with the fast and simple container transports. As the HyRail network expands, so will the access points for Containerized Freight.



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 jams or bad weather.

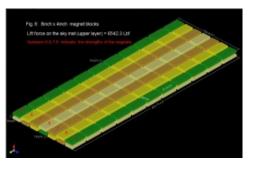
Traditional freight haulers, air cargo, heavy rail hubs and sea ports will all be linked together creating an even greater national distribution network from Port, to Hub, to Factory to Consumer accelerating our economy globally



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<u> (12)</u>

### Solar City Traveler

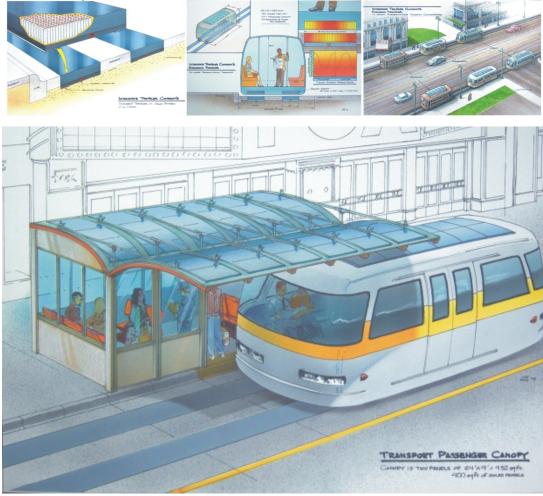


The Solar City Traveler is an ideal liteduty, 'At-Grade' maglev public transportation system.

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





<del>23</del>



### 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.



Worldly

#### Local Flavor

Community

Center



<u>8</u>

## **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



<u>8</u>

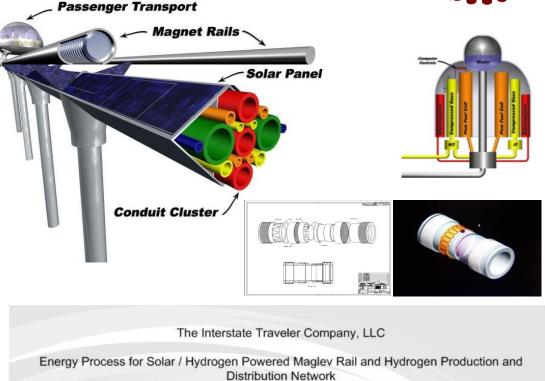


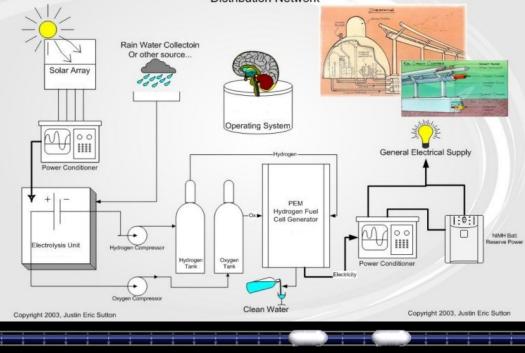
# Solar - Hydrogen Cycle

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.



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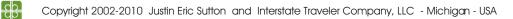


Endless

Water

Endless

Hydrogen



### The Desert Blooms

Here is the story:

Feed the Hungry

Generate Clean Water

Carbon Offset

Hydroponic systems can grow food almost anywhere...

#### Sustainable Agriculture

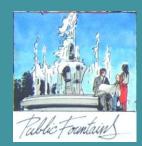














Water Agriculture Sanitation Hydroponics Plasma Reactors





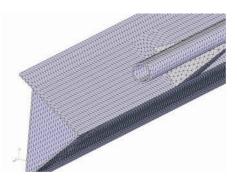
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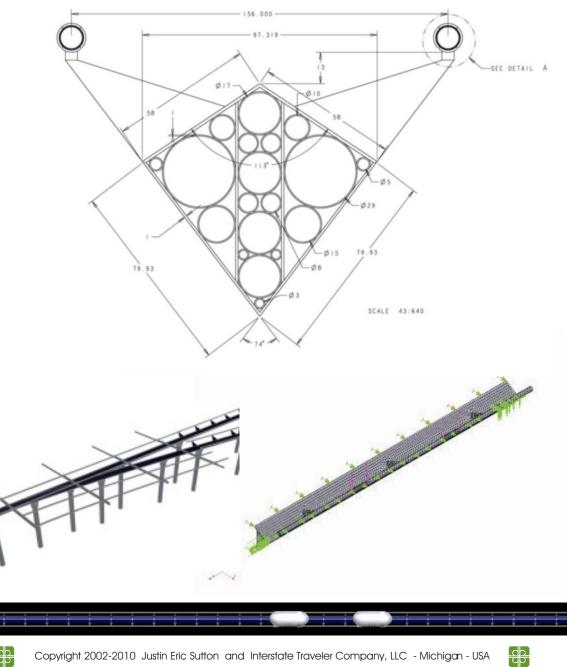


## Structural Rail Geometry

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.





CAD CAM FEA

FMA



#### Dynamic Suspension

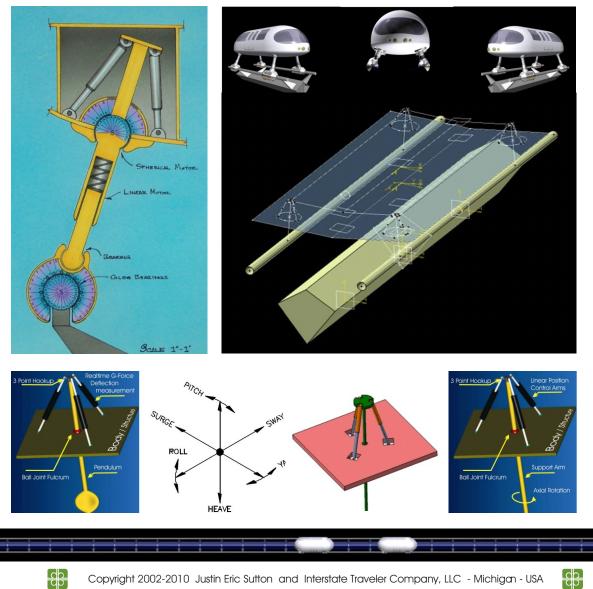


The great and uniquely successful attribute of the HyRail is the G-Force mitigation made possible only by the HyRail's unique suspension system.

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.



#### G-Force Mitigation

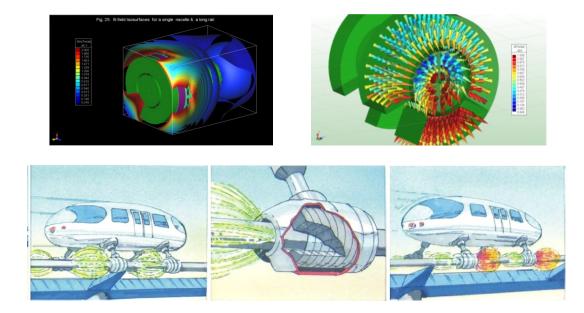


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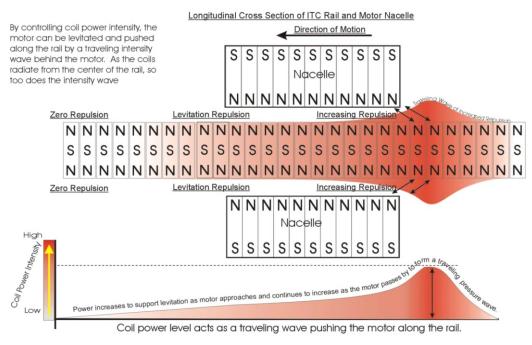
## Magnetic Levitation

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)



Efficient

#### Powerful

20

Quiet

<u>\_\_\_\_</u>

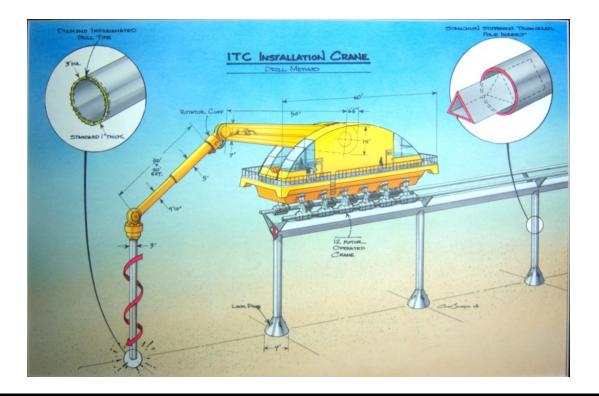
### Rapid Installation

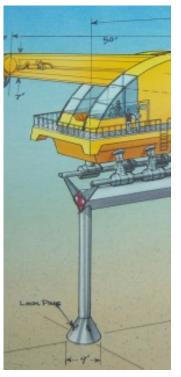
From bedrock to soft soil, the HyRail Installation Crane can set up stanchions fast. Using the stanchion poles themselves as giant drill bits we literally can drill our supports directly into bedrock.

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.







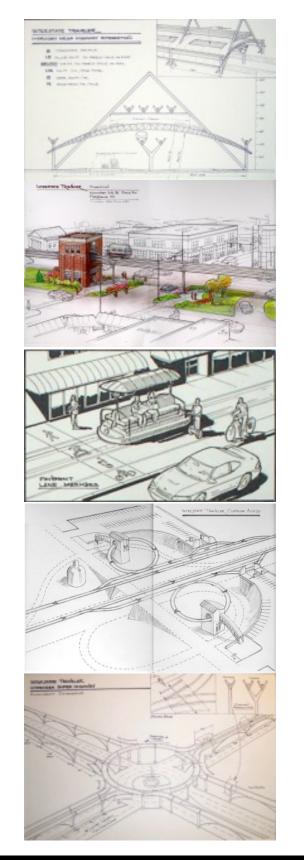


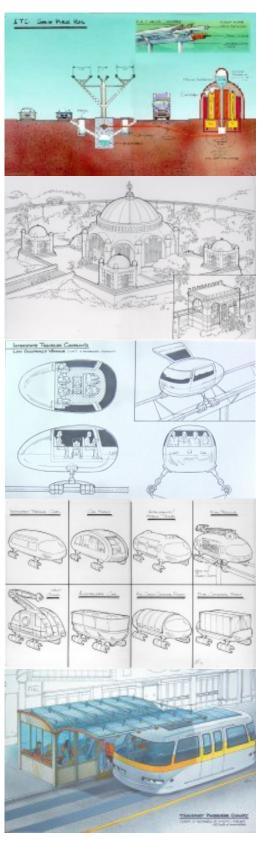
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### Urban Efficiency





Large

Small

Local

Continental

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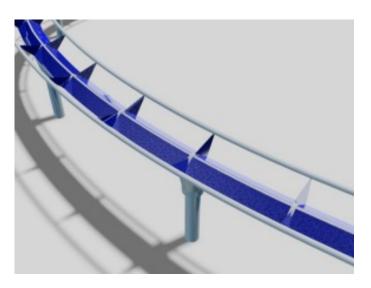
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# Appendices

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)



<u>db</u>



#### Ten Deliverables

Rapid Transit Advertising Hydrogen Electricity Energy Storage Fiberoptics Fuel pipelines Liquid waste Brand New Water Internet / Telecom

- = \$ /minute
- = \$ /sign
- = \$ /kilogram
- = \$ /kilowatt
- = \$ /kilowatt
- = \$ /bandwidth
- = \$ /gallon or Ft<sup>3</sup>

<u> (12)</u>

- = \$ /barrel
- = \$ /liter
- = \$ /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 eight levels of government support in the following manner:

1 2 3	Federal State County	12.5% 12.5% 12.5%
4	Local	12.5%
5	Medical	12.5%
6	Educational	12.5%
7	Recreational	12.5%
8	Historical	12.5%

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

The first 100 Miles of HyRail in S.E. Michigan will pay (est) \$12.50/Capita with an increasing amount per annum as the rail network expands.

Estimated Per Capita Starting at \$12,000 / 1,000 People



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#### **Executive Summary**

One Page Interstate Traveler Operational Summary

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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.

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	ITC	Rail Inct	allation Analysis			
Ľ			anation Analysis		#Cost per Mile lock stoc	
					1 mile = 5,280 feet 1 Kilor	meter = 3278 feet
I	Inter	state Tr	aveler Rail Costs/Ki	lomete	er.	
1	Qtv	Units	Description	Cost	Amount	Notes
		Kilometer	AMSC HTS Super Conductor Wire	\$120,000.00	\$240,000.00	
		Kilometer	Solar Panel 72" wide x 1 Kilometer long,	\$871,948.00		8' ±1' section of panel at \$256.00 Hoot
		Kilometer	Concrete 3x3'x12'concrete Piers	\$17,482.67	\$34,965.33	
		Kilometer	Steel for Rail Tubing / Stanchion / Central Support	\$1,336,112.80		19.7390524530094 % of total cost / kilomete
_		Kilometer	Supplemental Conduit	\$3,278.00	\$88,506.00	
-		Kilometer Units/Kilometer	Fiber Optics Full Function Utility Substation	\$16,000.00 \$1,500,000.00		Figured at \$5% yet may be purchase at \$.35 One every FOUR kilometers (2.5 Miles)
-		Labor/Kilometer	100 people working simultaneously / 1 week	\$100,000.00		\$52k / Annual Salary equivalent or \$1K / we
		Kilometer	Sitework / demolition / adjustment to overhead line	\$100,000.00	\$100,000.00	
	4	Kilometer / pair of rails	Solid-state Magnets	\$655,600.00	\$2,622,400.00	\$200 / foot * 3278 for Pair or Rails
			Total cost of the InterState Trav	eler Kilometers	\$6,768,880.13	
			Sect	ion Length (Feet)		
				Cost per foot		
-				Cost per Section	\$136,286.18	
•	Terr	ninal Sta	ations			
	Qtv	Units	Description	Cost	Amount	Notes
		Each	Grand Terminal Stations	\$8,000,000.00		
	0	Each	Cloverleaf Stations "Traveler Station"	\$3,000,000.00	\$0.00	
		Each	Car Ramp for Car Ferry w/ Parking Structure	\$2,000,000.00		
		Kilometer	Sidetrack to Local Public Station (1 Kilometer)	\$6,768,880.13		
-	0	Each	Remote Public Station, and parking (Private Land)	\$1,000,000.00		
					\$0.00	
1	Intor	stato Tra	veler Public Cars			
1	Gty	Units		Cost	Amount	Bloton
		Each	Grand Public Car	\$1,000,000.00		Notes
		Each	Commuter Public Car	\$500,000.00		
	0	Each	Car Ferry	\$300,000.00		
ľ			ion Check List			
ľ	Qty	Units	Description	Cost	Amount	Notes
ľ	Qty	Units Kilometer		\$6,768,880.13		
ľ	Qty	Units Kilometer Kilometer	Description	\$6,768,880.13 \$6,768,880.13		
ľ	Qty 108	Units Kilometer	Description Detroit to Ann Arbor	\$6,768,880.13 \$6,768,880.13 \$6,768,880.13	\$731,039,054.40	
ľ	Qty 108 - - 4	Units Kilometer Kilometer Kilometer	Description	\$6,768,880.13 \$6,768,880.13	\$731,039,054.40 \$32,000,000.00	
ľ	Gty 108 - - 4 88 34	Units Kilometer Kilometer Each Each Kilometer	Description Detroit to Ann Arbor Grand Terminal Stations Cloverleaf Stations Sidetrack to Local Public Station (1 Kilometer)	\$6,768,880.13 \$6,768,880.13 \$6,768,880.13 \$8,000,000.00 \$3,000,000.00 \$6,768,880.13	\$731,039,054.40 \$32,000,000.00 \$264,000,000.00 \$230,141,924.53	
ľ	Gty 108 - - 4 88 34	Units Kilometer Kilometer Each Each Kilometer 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 w/ Parking Structure	\$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	\$731,039,054.40 \$32,000,000.00 \$264,000,000.00 \$230,141,924.53 \$175,000,000.00	
ľ	Qity 108 - 4 88 34 88 -	Units Kilometer Kilometer Each Each Kilometer 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 wi Parking Structure Remote Public Station, and parking (Private Land)	\$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	\$731,039,054.40 \$32,000,000.00 \$264,000,000.00 \$230,141,924.53 \$176,000,000.00 \$0.00	
ľ	Gty 108 - 4 88 34 88 - 2	Units 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 wP Parking Structure Remote Public Station, and parking (Private Land) Grand Public Car (GPC)	\$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 \$1,000,000.00	\$731,039,054.40 \$32,000,000.00 \$264,000,000.00 \$230,141,924.53 \$176,000,000.00 \$0.00 \$2,000,000.00	
ľ	Qty 108 - 4 88 34 88 - 2 50	Units Kilometer Kilometer Each Each Kilometer Each Each Each Each Each	Description Detroit to Ann Arbor Grand Terminal Stations Cloverleaf Stations "Traveler Station" Sidefrack 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) Commuter Public Car (GP Passenger)	\$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 \$1,000,000.00 \$500,000.00	\$731,039,054.40 \$32,000,000.00 \$264,000,000.00 \$230,141,924.53 \$175,000,000.00 \$0,00 \$2,000,000.00 \$25,000,000.00	
ľ	Gty 108 - 4 88 34 88 - 2 50 44	Units 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 wP Parking Structure Remote Public Station, and parking (Private Land) Grand Public Car (GPC)	\$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 \$1,000,000.00	\$731,039,054.40 \$32,000,000.00 \$264,000,000.00 \$230,141,924.53 \$176,000,000.00 \$0.00 \$2,000,000.00 \$2,000,000.00 \$13,200,000.00	
ľ	Gty 108 - 4 88 34 88 - 2 50 44 110	Units 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 wi Parking Structure Remote Public Station, and parking (Private Land) Grand Public Car (GPC) Commuter Public Car (60 Passenger) Freight Car	\$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 \$500,000.00 \$500,000.00 \$300,000.00 \$300,000.00	\$731,039,054.40 \$32,000,000.00 \$264,000,000.00 \$230,141,924.53 \$176,000,000.00 \$0.00 \$2,000,000.00 \$2,000,000.00 \$13,200,000.00	
ľ	Qty 108 4 88 34 88 2 50 44 110 52 110	Units 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 W Parking Structure Remote Public Station, and parking (Private Land) Grand Public Car (GPC) Commuter Public Car (GP Passenger) Freight Car Car Ferry	\$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 \$1,000,000.00 \$500,000.00 \$300,000.00 <b>velor installation</b> tons per section	\$731,039,054.40 \$32,000,000.00 \$264,000,000.00 \$230,141,924.53 \$176,000,000.00 \$0,00 \$2,000,000.00 \$2,000,000.00 \$13,200,000.00 \$13,200,000.00 \$13,200,000.00 \$13,200,000.00 \$13,200,000.00 \$1,506,380,978.93 \$279,360,576.00	23%
ľ	Gty 108 4 88 34 88 2 50 44 110 52 110 180	Units Kilometer Kilometer Each Each Each Each Each Each Each Each	Description Detroit to Ann Arbor Grand Terminal Stations Cloverieaf 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 (50 Passenger) Freight Car Car Ferry Total Cost for Inter State Trar	\$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 \$1,000,000.00 \$500,000.00 \$300,000.00 \$300,000.00 \$300,000.00	\$731,039,054.40 \$32,000,000.00 \$224,000,000.00 \$230,141,924.53 \$176,000,000.00 \$2,000,000.00 \$2,200,000.00 \$13,200,000.00 \$13,200,000.00 \$13,200,000.00 \$1,506,380,978,93	23%
ľ	Oty 108 4 88 34 88 - 2 50 44 4 110 52 110 180 142.0	Units Kilometer Kilometer Each Each Each Each Each Each Each Each	Description Detroit to Ann Arbor Grand Terminal Stations Cloverieaf 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 (50 Passenger) Freight Car Car Ferry Total Cost for Inter State Trar	\$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 \$1,000,000.00 \$500,000.00 \$300,000.00 <b>velor installation</b> tons per section	\$731,039,054.40 \$32,000,000.00 \$264,000,000.00 \$230,141,924.53 \$176,000,000.00 \$0,00 \$2,000,000.00 \$2,000,000.00 \$13,200,000.00 \$13,200,000.00 \$13,200,000.00 \$13,200,000.00 \$13,200,000.00 \$1,506,380,978.93 \$279,360,576.00	23%
ľ	Gty 108 4 88 34 88 - 2 50 44 110 52 110 180 1420 88.2	Units Kilometer Kilometer Each Each Each Each Each Each Each Each	Description Detroit to Ann Arbor Grand Terminal Stations Cloverieaf 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 (50 Passenger) Freight Car Car Ferry Total Cost for Inter State Trar	\$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 \$1,000,000.00 \$500,000.00 \$300,000.00 <b>velor installation</b> tons per section	\$731,039,054.40 \$32,000,000.00 \$264,000,000.00 \$230,141,924.53 \$176,000,000.00 \$0,00 \$2,000,000.00 \$2,000,000.00 \$13,200,000.00 \$13,200,000.00 \$13,200,000.00 \$13,200,000.00 \$13,200,000.00 \$1,506,380,978.93 \$279,360,576.00	23%
ľ	Oty 108 4 88 34 88 - 2 50 44 110 52 1100 180 142.0 89.2 1.021	Units Kilometer Kilometer Each Each Each Each Each Each Each Each	Description Detroit to Ann Arbor Grand Terminal Stations Cloverieaf 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 (50 Passenger) Freight Car Car Ferry Total Cost for Inter State Trar	\$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 \$1,000,000.00 \$500,000.00 \$300,000.00 <b>velor installation</b> tons per section	\$731,039,054.40 \$32,000,000.00 \$264,000,000.00 \$230,141,924.53 \$176,000,000.00 \$0,00 \$2,000,000.00 \$2,000,000.00 \$13,200,000.00 \$13,200,000.00 \$13,200,000.00 \$13,200,000.00 \$13,200,000.00 \$1,506,380,978.93 \$279,360,576.00	23%
ľ	Oty 108 4 88 34 88 - - - - - - - - - - - - -	Units Kilometer Kilometer Each Each Each Each Each Each Each Each	Description Detroit to Ann Arbor Grand Terminal Stations Cloverieaf 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 (50 Passenger) Freight Car Car Ferry Total Cost for Inter State Trar	\$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 \$1,000,000.00 \$500,000.00 \$300,000.00 <b>velor installation</b> tons per section	\$731,039,054.40 \$32,000,000.00 \$264,000,000.00 \$230,141,924.53 \$176,000,000.00 \$0,00 \$2,000,000.00 \$2,000,000.00 \$13,200,000.00 \$13,200,000.00 \$13,200,000.00 \$13,200,000.00 \$13,200,000.00 \$1,506,380,978.93 \$279,360,576.00	23%
	Oty 108 4 88 34 88 - - - - - - - - - - - - -	Units Kilometer Kilometer Each Each Each Each Each Each Each Each	Description Detroit to Ann Arbor Grand Terminal Stations Cloverleaf Stations "Traveler Station" Sidefrack to Local Public Station (1 Kilometer) Car Ramp for Car Ferry W Parking Structure Remote Public Car Ferry W Parking (Private Land) Grand Public Car (GPC) Commuter Public Car (GP Passenger) Freight Car Car Ferry Total Cost for Inter State Tran Cost of Steel at 1200 dollars per ton at 30	\$6,769,880.13 \$6,769,880.13 \$6,769,880.13 \$8,000,000.00 \$3,000,000.00 \$6,768,880.13 \$2,000,000.00 \$1,000,000.00 \$1,000,000.00 \$300,000.00 \$300,000.00 <b>velor installation</b> Ions per section Balance	\$731,039,054.40 \$32,000,000.00 \$284,000,000.00 \$230,141,924.53 \$176,000,000.00 \$2,000,000.00 \$2,000,000.00 \$33,000,000.00 \$33,000,000.00 \$33,000,000.00 \$13,200,000.00 \$33,000,000.00 \$1,227,020,402.93 \$1,227,020,402.93	23%
1	Oty 108 4 88 34 88 - - - - - - - - - - - - -	Units Kilometer Kilometer Each Each Each Each Each Each Each Each	Description Detroit to Ann Arbor Grand Terminal Stations Cloverieaf 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 Tran Cost of Steel at 1200 dollars per ton at 30 Cost per Kilometer Complet	\$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 \$1,000,000.00 \$500,000.00 \$300,000.00	\$731,039,054.40 \$22,000,000.00 \$224,000,000.00 \$2230,141,924.53 \$176,000,000.00 \$2,000,000.00 \$2,25,000,000.00 \$13,200,000.00 \$13,200,000.00 \$13,200,000.00 \$13,200,000.00 \$1,506,380,978.93 \$279,380.576.00 \$1,227,020,402.93 \$1,227,020,402.93 \$1,0,608,316.75	23%
	Oty 108 4 88 34 88 - - - - - - - - - - - - -	Units 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 wf Parking Structure Remote 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	\$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 \$1,000,000.00 \$500,000.00 \$300,000.00	\$731,039,054.40 \$22,000,000.00 \$224,000,000.00 \$2230,141,924.53 \$176,000,000.00 \$2,000,000.00 \$2,25,000,000.00 \$13,200,000.00 \$13,200,000.00 \$13,200,000.00 \$13,200,000.00 \$1,506,380,978.93 \$279,380.576.00 \$1,227,020,402.93 \$1,227,020,402.93 \$1,0,608,316.75	23%
	Oty 108 4 88 34 88 - - - - - - - - - - - - -	Units 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 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 Steel at 1200 dollars per ton at 30 Cost per Kilometer Complet Cost per Mile Complet 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 \$6,768,880.13 \$2,000,000.00 \$1,000,000.00 \$1,000,000.00 \$300,000.00	\$731,039,054.40 \$32,000,000.00 \$2264,000,000.00 \$220,01,924.53 \$176,000,000.00 \$2,000,000.00 \$2,25,000,000.00 \$13,200,000.00 \$13,200,000.00 \$13,200,000.00 \$13,200,000.00 \$13,200,000.00 \$1,506,380,978.93 \$279,380.576.00 \$1,227,020,402.93 \$1,227,0	23%
	Oty 108 4 88 34 88 - - - - - - - - - - - - -	Units Kilometer Kilometer Each Each Each Each Each Each Each Each	Description Detroit to Ann Arbor Grand Terminal Stations Cloverleaf Stations "Traveler Station" Sildefrack 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 Steel at 1200 dollars per ton at 30 Cost per Kilometer Complet Cost per Mile Complet Convert Miles to Kilometers, Kilometers to Miles QTY	\$6,768,880.13 \$6,768,880.13 \$6,768,880.13 \$6,768,880.13 \$2,000,000.00 \$1,000,000.00 \$1,000,000.00 \$1,000,000.00 \$300,000.00 \$300,000.00 \$300,000.00 \$300,000.00 \$300,000.00 \$200,000.00 \$300,000.00	\$731,039,054.40 \$32,000,000.00 \$224,000,000.00 \$230,141,924.53 \$176,000,000.00 \$2,000,000.00 \$2,000,000.00 \$13,200,000.00 \$13,200,000.00 \$13,200,000.00 \$13,200,000.00 \$13,200,000.00 \$13,200,000.00 \$13,200,000.00 \$1,227,020,402.93 \$127,920,402.93 \$1,227,020,402.93	23%
	Oty 108 4 88 34 88 - - - - - - - - - - - - -	Units Kilometer Kilometer Kilometer Each Each Each Each Each Each Each Each	Description Detroit to Ann Arbor Grand Terminal Stations Cloverleaf Stations "Traveler Station" Sidefrack to Local Public Station (1 Kilometer) Car Ramp for Car Ferry w/ Parking Structure Remote 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 Convert Miles to Kilometers, Kilometers to Miles OTY 2.50	\$6,769,880.13 \$6,769,880.13 \$6,769,880.13 \$6,769,880.13 \$8,000,000.00 \$3,000,000.00 \$6,768,880.13 \$2,000,000.00 \$1,000,000 00 \$1,000,000 00 \$300,000.00 \$300,000.00 \$300,000.00 \$300,000.00 \$300,000.00 \$300,000.00 \$200,000.00 \$300,000.00 \$200,000.00 \$300,000.00 \$200,000.00 \$300,000.00 \$300,000.00 \$200,000.00 \$300,000.00 \$200,000.00 \$300,000.00 \$200,000 \$200,000.00 \$	\$731,039,054.40 \$32,000,000.00 \$246,000,000.00 \$230,141,924.53 \$176,000,000.00 \$2,000,000.00 \$1,200,000.00 \$13,200,000.00 \$13,200,000.00 \$13,200,000.00 \$1,206,380,978,93 \$279,360,576.00 \$1,227,020,402.93 \$1,22	23%
	Oty 108 4 88 34 88 - - - - - - - - - - - - -	Units Kilometer Kilometer Each Each Each Each Each Each Each Each	Description Detroit to Ann Arbor Grand Terminal Stations Cloverleaf Stations "Traveler Station" Sildefrack 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 Steel at 1200 dollars per ton at 30 Cost per Kilometer Complet Cost per Mile Complet Convert Miles to Kilometers, Kilometers to Miles QTY	\$6,768,880.13 \$6,768,880.13 \$6,768,880.13 \$6,768,880.13 \$2,000,000.00 \$1,000,000.00 \$1,000,000.00 \$1,000,000.00 \$300,000.00 \$300,000.00 \$300,000.00 \$300,000.00 \$300,000.00 \$200,000.00 \$300,000.00	\$731,039,054.40 \$32,000,000.00 \$246,000,000.00 \$230,141,924.53 \$176,000,000.00 \$2,000,000.00 \$1,200,000.00 \$13,200,000.00 \$13,200,000.00 \$13,200,000.00 \$1,206,380,978,93 \$279,360,576.00 \$1,227,020,402.93 \$1,22	23%
	Oty 108 4 88 34 88 - - - - - - - - - - - - -	Units Kilometer Kilometer Kilometer Each Each Each Each Each Each Each Each	Description Detroit to Ann Arbor Grand Terminal Stations Cloverleaf Stations "Traveler Station" Sidefrack to Local Public Station (1 Kilometer) Car Ramp for Car Ferry w/ Parking Structure Remote 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 Convert Miles to Kilometers, Kilometers to Miles OTY 2.50	\$6,769,880.13 \$6,769,880.13 \$6,769,880.13 \$6,769,880.13 \$8,000,000.00 \$3,000,000.00 \$6,768,880.13 \$2,000,000.00 \$1,000,000 00 \$1,000,000 00 \$300,000.00 \$300,000.00 \$300,000.00 \$300,000.00 \$300,000.00 \$300,000.00 \$200,000.00 \$300,000.00 \$200,000.00 \$300,000.00 \$200,000.00 \$300,000.00 \$300,000.00 \$200,000.00 \$300,000.00 \$200,000.00 \$300,000.00 \$200,000 \$200,000.00 \$	\$731,039,054.40 \$32,000,000.00 \$246,000,000.00 \$230,141,924.53 \$176,000,000.00 \$2,000,000.00 \$1,200,000.00 \$13,200,000.00 \$13,200,000.00 \$13,200,000.00 \$1,206,380,978,93 \$279,360,576.00 \$1,227,020,402.93 \$1,22	23%

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1	110	Rail Return On Investment		
2	via Fairbo	x Collections, Rent, Advertising		
3		Change values in yellow to see all figures update		
4	The In	terstate Traveler Project		
5		Grow budget by x percent:	0%	
6		Stew budget by A percent.		
7	Steps:	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	Pedestrian	Projected Use as an Average over 24 hours	100%	Percent of Capacity
19	Car Trans	Projected Use as an Average over 24 hours	100%	Percent of Capacity
20		Total Projected Use Daily	90,000	
21	Pedestrian	Total Projected Revenue Daily	\$36,000.00	10000
22	Pedestrian	Total Projected Use Annually		Rides
23		Total Projected Revenue Annually	\$13,140,000.00	1000
24	Car Trans	Total Projected Use Daily		Rides
25	Car Trans	Total Projected Revenue Daily	\$19,800.00	Rides
26	Car Trans	Total Projected Use Annually	7,227,000	Didaa
			\$144,540,000.00	Ribes
27	Car Trans Pedestrian	Total Projected Revenue Annually Revenue / Trip / Single Pedestrian at \$0.05 /minute for 8 minutes		Consumer Fee For Use on a Trip
28				
29	Car Trans	Revenue / Trip / Single Car Transport at \$1 /minute for 20 minutes		Consumer Fee For Use on a Trip
30	Efficiency	Average Speed Traveled		Miles per hour
31	Efficiency	Possible Distance Covered Traveling at 120mph for 8 minutes		Miles
32	Car/Pedest	Revenue All Transports / Annually at xx% of Capacity	\$157,680,000.00	(Freight is IIOT included in this figure
33		Advertising Revenue Calculations	\$1,405,824,000.00	
34	-	Rent Revenue Calculations	\$36,672,000.00	
35		Total Annual Revenue for All Transports / Advertising / Rent	\$1,600,176,000.00	
36				
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	V
42	-	Return on Investment using Dept Service Fund	1.883	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 36.27	
47		Total Months Until Fully Operational Total Years Until Operational	30.27	
48 49		Return on Investment in Months after made Operational	47.56	
49 50		Return on Investment Years Including Startup time	3.96	
50		Michigan Population	10,079,985	
52		PerCapita Revenue for State of Michigan	\$20	
53		Detroit Population	900,000	
54		Detroit Annual Revenue Per Capita for 88.19 miles	\$17,859,134	
JA		Detroit Afritual Revenue Per Capita for 88.19 Miles	\$17,039,134	
55				

<del>43</del> 43





	A	В	С	D	E				
1	Interstate 7	Trave	ler Co	ompa	ny, LLC				
2	Job Creation	Estimat	es						
3	Does Not include Construction Jobs for Rail, Traveler Stations, Etc. or Maintainence								
4	Detroit to Ann Arbor								
5	88	Miles of Ra	ail						
6		Traveler St							
7			d Business	es / Station	IS				
8		Total Busir							
9			s / Busines						
10			oyees in Tr		ions				
11 12	264		on System						
12	1,320		/ Transport Employees						
					er et e el\				
14	3,840	I otal E	mploye	es (estil	nated)				
15		Minhime	. Eisende						
16	4.400		n Eisenh	lower Sy	stem				
17		Miles of Ra		-					
18			ations (est)						
19			d Business	/ Station					
20 21		Total Busin							
22			s / Busines loyees in Tr		ione				
23			on System						
24			/ Transport						
25			Employees						
26	37,800				mated)				
27									
28									
29		Eisenho	wer Inte	rstate Hi	ghway System				
30	54,000	Miles of Ra	ail						
31	20,000	Traveler St	ations (est)						
32	3		d Business	/ Station					
33	60,000	Total Busir							
34	10		s / Busines						
35	600,000		oyees in Tr		ons				
36	162,000		on System						
37	5		/ Transport						
38	810,000		Employees						
39	1,410,000	Total E	mploye	es (estii	mated)				
40									



<del>(1)</del>



In	terstate Traveler En	ergy Calculator			
	1 watt-hour = 3.4121415 Btu	ergy carculator			
	Enter Values in fields marked in Yellow				
	CRail Combined Wattage Outp				
	Mile	5,280	100		
	Width (two parallel tracks combined)	16	1		
	Area		SqFt/mile		
	Watts/SqFt (set at 12)	8	watts/SqFt	(should be 12)	
	Total Watts		Watts/mile/hour		
	Total Solar Hours/day Total Watts/day/mile		Solar Hours/da	У 	
	Total Miles (set at 54,000)	4,055,040	watts/day/mile	(should be 54,000)	8
}	Total watts/day/all miles	218,972,160,000			
	Total Watts/year	79,924,838,400,000	· · · · · · · · · · · · · · · · · · ·		
Tra	veler Stations Combined Watta				
	Traveler Station Frequency	2	Every 5 Miles	(should be 2 every 5	)
	Total Traveler Stations	21,600			
	Average Roof Size (PV)	8,000	SqFt Roof-mou	nted PV Grid	
	Minimum watts/SqFt	12			
	Total Watts/hr/station	96,000	-		
	Total Watts/hr/all stations	2,073,600,000			
	Total Watts/day/all stations	12,441,600,000			
-	Total Watts/year/all stations	4,541,184,000,000	DV A L		
-	nsports Combined Wattage Ou			( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )	
i	Total Number of Transports/m Total Transports on System		i ransports/Mile	( should be 3 per mi	le)
	Total SqFt or roof area		SqFt of PV on R	nof	
1	Total SqFt all Transports		Total SgFt PV		
1	Minimum watts/SqFt	22			
	Total Solar Hours / Day	8			
_	Total Watts/hr/Transport	3,520			
!	Total Watts/hr/all Transports	570,240,000			
}	Total Watts/day/all Transports Total Watts/year/all Transports	4,561,920,000 1,665,100,800,000	8		
;	The Roof (symetrical arc				
6	Diameter	500			
3	Radius Circumference	250 1571.428571			
,	Pi	3.142857143			
)	Highway ROW Width	300			
1	Percent of Circumference for ro Roof Width	20.35% 320			
}	Length	5,280			
i	Area Percent dedicated to PV	1,688,469 80%			
5	Total Surface area of PV/ Mile	1,350,775			
	Watts/SqFt Total Watts/Mile/hour	5 6,753,874			
	Total Solar Hours / Day	0,755,074	Solar Day (Hou	rs)	
0	Total Watts/Mile/Day	40,523,246			
	Total Number of Miles Total Watts/Solar Day / all mile	202,616,228,571	100 miles / stat	e	
	Total Watts/year	73,954,923,428,571			
	Total Kilowatts/year Total Megawatts/year	73,954,923,429 73,954,923	-		
i	Total Gigawatts/year	73,955			
	Total Terawatts/year	73.95			
	Total BTU / year Total Quad /year	21,674,049,399,350 0.0216740			
			Combined		
Gra	and Totals of Rail + Stations + Ti Total Watts/year	160,086,046,628,571	Jombined		_
	Total Kilowatts/year Total Megawatts/year	160,086,046,629 160,086,047			
	Total GigaWatts/year	160,086			
	Total Terawatts/year	160,086			
	Value of a Kilowatt	\$0.10			
	Contraction of the second s				
	Total Electrical Output Value	\$16,008,604,662.86	-		
	Total BTU/year	546,236,243,272,284.000			
-	Total Quadrillion BTU/year	0.546	A unit called the	e <u>guad</u> ' (short for <u>quad</u>	drillion)
	Total watts/ncmh	4,200	watts/normal cu	ubic meter of Hydroge	en
-	Total Cu Meter Hydrogen/year	38,115,725,388			
					0-1-0-1
:	Gasoline Equivelent Units	3,811,572,539		ilent Units 10ncmh/1	GarGas
		3,811,572,539 3,970,388.061 500,000,000			GarGa

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	А	В	С	D	E	F	G
1	Nested Domain Addressing System						
2		USA	/ (ddi (	Jooning	0,010		
2	Top Level Second	State			2		
4	Third	County			ss		
4 5	Fourth		/ City / Villia				
6	Fifth	Private Ne		age			
7	Sixth	Private Te					
8	Sixui	Flivale Te	minai		2		
					5		
9	Example of Add	ressing Me	thod		· · · ·	Marker:	· .
10	Ordinate	Value / I	Position				
11	USA	1					
12	Michigan		14		6		
13	Wayne County			1	6		
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			
24	Chicago				1		
25	Shopping Center	r				16	
26	Stop Number						5
27		1	17	14	1	16	5
28	Destination	ID	1.17.14.	1.16.5			
29							

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#### 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 acquie additionalland to build Single revenuesource

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 Bur ns fossil fuel for electricity to run system No additionalservices provided

Requires an electricalgrid to plug into Quiet operation

#### Interstate Traveler

Construction cost: \$10 million per mile Subsidizes Fed, State, and local Governments <2year 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, rentalincome,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 connectto nationalsystem

Over 1 million new jobs created(CA)

Stainless steel construction (100+year life span)

No traffc interruption during construction

Environmentallyperfect, 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,producesown power

Quiet operation and environmentally perfect

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

Dedicatedsystem for HomelandSecurity

Moves the US to a hydrogene conomyin 15 years

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#### House Resolution No. 23

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 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 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 further

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.



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#### Magazine Ready Art

