



Michigan House of Representatives INTERSTATE TRAVELER TASK FORCE

Representative Bill Rogers, Chairman

Senator Valde Garcia

Representative Mike Huckleberry

Representative Wayne Schmidt

Representative Jimmy Womack

Tom Murphy, Supervisor of Brighton Charter Township

Jared Rodriguez, Grand Rapids Area Chamber of Commerce

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List of individuals who testified or submitted testimony before the Interstate Traveler Task Force:

Dr. James Anderson, Michigan State University, Professor of History
David Brown
Mary Cryderman, The Green Panel
Eileen Denhard, Play and Stay Vacations
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Ray Fullerton, Interstate Traveler Company, Director of University Relations
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Richard Pratt, Tower Pinkster
Javier Rodriguez, EDAG Inc.
Roger Sla, East Lansing Commission on Environment
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Robert Steffens
Ryan Steffens, BREETH Green, Owner
William Vaughan, Good Samaritan Group
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Letter from State Representative Bill Rogers, Interstate Traveler Task Force Chairman

As a brief bit of background, I first learned about the Interstate Traveler Company and their proposal approximately seven years ago, when I served as a member on the Livingston County Board of Commissioners.

I was honored to serve as the Chairman of the Interstate Traveler Task Force in this, my first term in office. It was a privilege to participate in a process that can lead to a better understanding of the Interstate Traveler Company and their project, the transportation system(s) in Michigan, and an opportunity to study a company and a proposal that holds so much potential for our state's economy.

It is important to thank the members of the task force who all believe in the importance of diversifying our transportation systems in our state's economic future, and who traveled across the state to take testimony from citizens. The dedication of State Representatives **Mike Huckleberry**, **Wayne Schmidt** and **Jimmy Womack**, Senator **Valde Garcia**, along with **Tom Murphy** and **Jared Rodriguez** made all of this possible. I would also like to thank the dedicated staff members who have worked countless hours on this task force including **Marc Jordan**, **Meghan Lizotte**, **Kent Wood** and **Ed Wendover**.

The Interstate Traveler Company, supporters, critics, citizens, engineers, and others told a great story and gave us tons of information. And we, listened very carefully! I am proud to say that the Bi-Partisan Interstate Traveler Task Force conducted four hearings in different cities across Michigan, and offered over fifty individuals the opportunity to provide testimony that helped produce the summary report and recommendations that follow.

All who participated in this process share a common goal; to improve the image of this state, and to strengthen and expand the untapped potential in Michigan.

A handwritten signature in black ink that reads "Bill Rogers".

Bill Rogers
State Representative, Michigan's 66th District



The Purpose of the Bi-Partisan Interstate Traveler Task Force

Everywhere in Michigan we see the effects of a struggling economy and the despair it has brought. It is during these troubling times when we must be open minded and willing to find unique solutions. This is not a time for quick fixes or band aids. Michigan must be prepared to make tough policy decisions to bring about major economic changes.

This task force was created to conduct a non-partisan, bi-cameral review of the Interstate Traveler Company and their proposal which would create thousands of jobs in Michigan. This report summarizes the thoughts of the task force members, and also makes a recommendation on whether or not the Interstate Traveler Company and their proposal is worth investigating further.

How Information Was Collected

During the summer of 2009, the members of the Interstate Traveler Task Force held four meetings across Michigan, hearing from Interstate Traveler CEO, engineers, professionals, and citizens. The members of the task force, Chairman Bill Rogers, Sen. Valde Garcia, Rep. Mike Huckleberry, Rep. Wayne Schmidt, Rep. Jimmy Womack, Eric Davis, Tom Murphy and Jared Rodriguez held hearings in East Lansing, Ann Arbor, Grand Rapids and Detroit. These locations were chosen as representative voices of Michigan's various economic sectors and major locations the Interstate Traveler Company and its project will eventually impact.

During the East Lansing hearing, the task force members focused on the two issues of *ridership and safety*.

During the Ann Arbor hearing, the task force members focused on the *energy issues* associated with the proposal.

During the Grand Rapids hearing, the task force members focused on the *environmental impact the proposal would have in Michigan*.

During the final hearing in Detroit, the task force members focused on the *proposal's financial data, private funding sources, and the "revenue sharing" ideas within the proposal*.

Ridership

Ridership for the Interstate Traveler project centers on convenience and expediency.

The project will look to combine the factors that make both train and automobile travel convenient. Factors that make train travel convenient include not having to drive and being able to work or relax while in route. The factors that make vehicle travel convenient are, namely, the ability to start and end travel as the traveler desires, the network of roads allowing the vehicle



operator to travel to the exact destination, and the ability to travel to the desired destination with or without stopping. The project also proposes to add an element of speed and consistency to travel, thereby allowing the passenger to travel practically unabated to the rider's destination of choice.

Additionally, riders are to have the choice of commuting as an individual, as a family, with their vehicle, or in a public transport. The rider also has a choice of stopping at any exit along the interstate. It is this ease of choice for a point of entry and exit, in addition to the ease and speed of travel that will compel the public to use the Interstate Traveler. Additional conveniences, such as fuel savings, environmental awareness, cost, and comfort may also be factors that increase ridership.

The Interstate Traveler is also hoping that sales of energy, advertisements, and water will reduce administrative and operating costs, thus lowering the cost of individual ridership costs, and increasing the incentive for riders to take the Interstate Traveler.

The Safety of the Interstate Traveler

As with any project involving energy and high speeds, safety is an important factor for the public. Although many of the components and processes that will be used in this system already exist in the commercial world, the project recognizes that there are certain components that will require customized manufacturing as well as the risks that go along with customization and high speed travel.

The project will implement a two-pronged approach to address these risks and safety issues. The first prong is the commitment to build and test all customized components before construction of demonstration prototypes. This will allow for changes and finalization in design concepts and allow each component to be individually tested before public use.

The second prong is the commitment to build a scale demonstration system combining all of the separate components before beginning construction on public land. The rigorous testing of the combined scale demonstration will help in finding any integration problems before construction and will allow for the building of the final project with minimal development delays.

As with any high speed transportation, the safety of the passenger inside the moving vehicle is always a concern. To address this, the transports will be equipped with a suspension system that has the ability to adapt to g-forces on the fly, thus allowing the passenger with a reduced sense of lateral movement and keeping forces and objects perpendicular to the floor when accelerating, decelerating, and banking. According to a summary of the project, "the expected performance of the system should allow a full champagne flute to stand on a table virtually undisturbed during all normal operations." In addition, the transports and service stations will all be compliant with and, in some cases, exceed Americans with Disabilities Act requirements.



Energy Issues

Energy, as defined in physics, is the ability to do work. Transporting any mass whether it is cargo or people requires energy to do the work of moving the cargo to its destination. The method by which we acquire, store and use the energy consumed by a transportation system will determine the viability of the system from both economic and functional points of view.

We now live in a world where energy acquisitions are changing rapidly. Soon the use of fossil fuels will be prohibitively expensive. When oil was first used as a fuel, it was near the earth's surface and recovery was as simple as drilling a shallow well. Now supplies exist in increasingly remote locations. The costs of recovering this oil and coal are increasing as the easily accessed supply declines forcing energy companies to look into previously uneconomical areas for their raw materials. In addition, climate change is forcing governments worldwide to impose economic sanctions on users of hydrocarbon fuels. When these two economic forces are added together and extrapolated over twenty years, it becomes apparent that any energy using system that does not employ carbon free energy will fail before it reaches its useful life expectancy.

This is especially true of long life infrastructure projects like the Interstate Traveler. Even systems that use electricity fall into the category of poor long term investments unless they are totally carbon free. Cap and trade costs, escalating fuel prices and pollution control costs will rapidly make the continued use of these systems impractical.

The Interstate Traveler uses solar power to mitigate this situation in the case of short run systems and completely eliminates the problem as the system size grows and begins to take advantage of the economics of scale.

We are all familiar with the New York and eastern grid blackouts in 1955, 1967 and 2003 where various components of the Northeastern grid tripped offline in cascading failures that were so large they could be seen from space. The Interstate Traveler is not susceptible to this effect. Because the Interstate Traveler relies on solar energy that is available only when the sun is shining, they must store the energy or resort to grid power for non solar house of operation. The Interstate Traveler uses Hydrogen as an energy capacitor to create a physical means of storing a portion of the solar energy for later use. The ability of hydrogen to provide effective storage of massive amounts of energy has been known for over a century.

The fact that the Interstate Traveler can instantly switch from hydrogen production to grid tie generation allows them to back-up the electric grid for local municipalities. If the entire 54,000 miles of Interstate Traveler were up and running, they could absorb any regional blackout by either tripping on they generators or re-directing hydrogen production current to the grid. Either would take mere seconds not the minutes or hours conventional plants require.

It is widely accepted that hydrogen is the only viable method of energy storage if the goal is zero emission carbon footprint and a sustainable economic model free from cap and trade costs.



In addition, the system as designed by the Interstate Traveler Company produces salable commercial products and provides a ready backup to our nation's electrical grid.

The Environmental Impact the Interstate Traveler Project Will Have

The Interstate Traveler intends to be a model for environmental impact on the future of transportation. As proposed, the project would allow for commercial and public transportation by the sole use of sustainable solar and hydrogen power.

The project is touting that it will not rely on the use of fossil fuels, although it will still allow for the transportation of automobiles and trucks used on standard road and expressways.

As designed, the traveler pods will travel atop a conduit lined by solar panels. The solar panels are to harness the solar energy used to power the pods by turning it into hydrogen. The excess hydrogen can then be stored in the generating stations positioned every three miles along the rail and be used as a reserve or sold to the public. The project also proposes that through the ability to produce excess energy through the solar to hydrogen process, the sales of that energy will help to lower ridership costs, thereby increasing the use of a transportation system that is environmentally and energy sustainable.

The Interstate Traveler project is touting the use of hydrogen for its sustainability, high energy yield (approximately 2.75 times greater than hydrocarbon fuels), effective octane number, little to no emissions, and little to no toxicity or ozone-forming potential.

Another product of the solar to hydrogen energy process will be pure water. The project plans to use this clean water in a variety of ways, including, but not limited to, drinking fountains, public fountains, and using it as irrigation for various agricultural projects in a given geographic area.

Questions remain about the ability of such a system to rely solely on solar energy, given the climate and total average number of days of sun in Michigan. The project has said that, given the advancement in the field of solar energy, even the use of lower quality solar panels will be sufficient to power the system. They have also suggested that technology allows for energy to be extracted even on days with significant cloud cover.

Project Funding

The State of Michigan is at an economic crossroads. From stagnant automotive manufacturing to the daily outsourcing of jobs, Michigan must look to new and innovative opportunities. The Interstate Traveler Company is offering the State of Michigan revolutionary and far reaching opportunities to the future of ground transportation.



Michigan stands to gain substantially from this groundbreaking technology. **The Interstate Traveler Company is not asking for public funding for this project but is only seeking access to the highway right-of-ways through a Public/Private Partnership.**

Private and corporate investment will finance the complete building and implementation of the rail system. Secondly, the building of this rail offers an opportunity of a steady revenue stream to federal, state and local government entities generated from energy savings and production as well as the use of right of ways.

The Interstate Traveler Company is reporting the cost of building and making the rail fully operational at \$10 million per standard mile along existing Eisenhower Interstate Highway rights-of-ways, not including the cost of bridges greater than 66 feet. The price per standard mile is subject to change by extraneous market forces and/or as department change orders dictate. The pricing per standard mile of Interstate Traveler Company rail provides the following:

Pricing for the Interstate Traveler Company rail includes bi-directional travel for main line installations along the Interstate Highway Right of Way, a pair of Interstate Traveler Stations at each entrance to the Interstate Highway to support simultaneous bi-directional egress and a single Utility Substation for averaging every 5 miles of Interstate Traveler rail.

The pricing also includes 3 Interstate Traveler Rail Transporters (of various functions) per mile. The style and type of car is to be decided by mutual agreement at the earliest possible time.

Public-Private Partnership & Revenue Sharing

The Interstate Traveler Company has insisted their rail prototype will be completely funded through private revenue streams and all they need from the state of Michigan is guarantees and support. The Interstate Traveler Company feels it can do much more with a public/private partnership agreement and support through access of right-of –ways than accepting government funds.

Here is how the Interstate Traveler Company is proposing the partnership agreement works:

Through the creation of this agreement excess power produced from the rail can be sold to generate revenue. The Interstate Traveler Company believes through this generation of excess power it will be able to pay royalties to Federal, State, County and Local Governments as compensation of the use of established, or yet to be established rights-of-way.

The proposed public/private partnership agreement reads that excess revenues will be dispersed as follows:

50% of the Gross Revenue for all systems of the Interstate Traveler Company rail tallied quarterly, based on statewide performance shall be paid by wire transfer in four equal parts; thereby **50%** is divided into four equal parts of **12.5%** paid to the Federal Government, the State



Government, the Counties of the State collectively, and the local governments collectively to include Townships, Cities, Port Authorities and Tribal Lands, where said royalties will begin to be disbursed after the 2nd year of Interstate Traveler rail operations on a system of 20 miles or larger.

All royalties paid according to this agreement are in lieu of any existing or proposed fees that may arise or exist among all state and local government bodies, for the use of right-of-way as required by this agreement and are subject to negotiations.

For privately held lands, the royalties will be negotiated separately, yet will be bound by all standards of the Interstate Traveler Company's network integration protocols.

The Interstate Traveler Task Force recognizes that the project cannot move forward without a signed Public-Private Partnership with the State of Michigan.

Task Force Recommendation

After the four task force meetings, and months of one-on-one meetings, the Interstate Traveler Task Force members would like to encourage the House and Senate Transportation Committees to further review and consider the Interstate Traveler Company and their maglev-mass transportation system.

This company offers the opportunity to single-handedly change Michigan's future by providing thousands of temporary and permanent jobs, providing the federal, state, and local governments with millions of dollars to their tax bases, while also expanding our electrical grid. The members of the task force believe this project could potentially boost Michigan to the forefront, once again for business relocation and reinvention, while allowing Michigan to again become the nation's envy once again.

Although the task force members are strongly supportive of the Interstate Traveler Company and their proposal, the members also have a few recommendations for the Transportation Committee members to review:

Project Financing

One of the major reasons the Interstate Traveler Company and their proposal were selected for this task force was because the company boasts they have individuals willing to finance all the costs associated with their proposal, and the state would not have to spend any money, nor give the Interstate Traveler Company any tax credits.

The final task force meeting in Detroit was focused on the financial aspects of the project, and after the meeting was over, the task force members left with much of the information they already had, many unanswered concerns, and even more questions in regard to finances.



The Interstate Traveler Company refused to or did not have answers to many of the financial questions the members asked.

The task force members are still skeptical about the private financing the Interstate Traveler Company boasts about, and would like to see the committees review the financial aspects of this proposal further and in more detail. With the realities in terms of Michigan's economy and its massive budget deficit, the State of Michigan does not have the money to help finance this project.

If the private investment is not there, the task force recommends that the project not move forward.

Alternative Maglev Proposals and Companies

The Interstate Traveler Task Force was created in order to study the specific proposal brought forth by the Interstate Traveler Company because of all the "extras" included in the proposed project. Although the Interstate Traveler Company and their proposal were selected, the task force members recognize that this is not the only company or individual that has maglev-mass transportation proposals. The task force members encourage the committees to review alternative proposals, while keeping in mind all of the "extras" the Interstate Traveler Company includes in their proposal such as being privately funded, expanding the electrical grid, providing revenue sharing dollars to federal, state and local governments, and the ability to not only move people but to also move vehicles and commerce cheaper and faster.

Review of the Public/Private Partnership

The task force members encourage the Attorney General, the Department of Management and Budget and/or the Michigan Department of Transportation to review the Public/Private Partnership which has been written by the Interstate Traveler Company, in order to ensure the State of Michigan is protected properly.

Additional Requirements for the Public/Private Partnership

The task force members would like to encourage the committee members to 1) add a bond to the Public/Private so if the project were to fail, the State of Michigan would be able to remove the installed hardware without causing the state financial liability; and 2) add language in the Public/Private Partnership regulating ridership fees.



The task force members wish to thank the following colleagues for their participation in taskforce meetings:

Senator Patty Birkholz
Representative Bob Genetski
Representative Kevin Green
Representative Andrew Kandrevas
Representative Rashida Tlaib

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