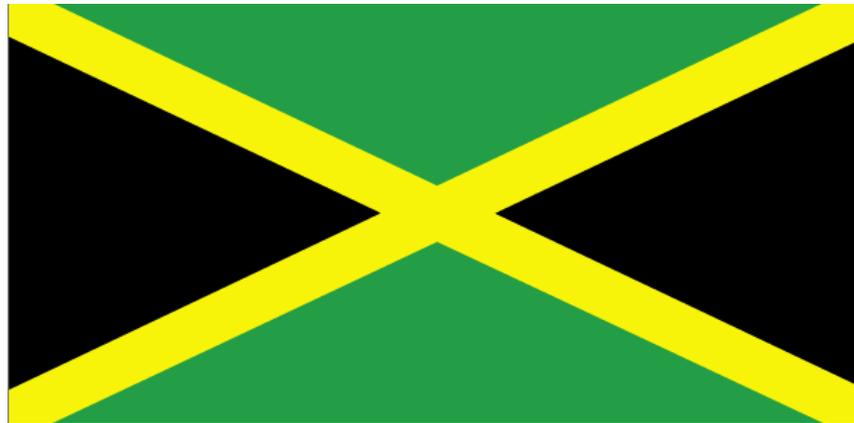




# WORLDWIDE HYDROGEN SUPER HIGHWAYS

## Montego Bay Project Mass Transit and Public Utilities Infrastructure Proposal



# A Vision For Jamaica

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In 2006, the Government of Jamaica (GOJ) mandated the Planning Institute of Jamaica (PIOJ) to lead the preparation of a comprehensive long-term National Development Plan (NDP) which will seek to place Jamaica in a position to achieve developed country status by 2030. For Jamaica, an efficient and effective transport sector is indispensable to economic progress. Other sectors such as mining, manufacturing, trade, tourism and agriculture are critical to Jamaica's growth and development and like many other sectors depend upon transportation. Without adequate infrastructure to facilitate the movement of people and goods, economic and social benefits will be limited.

As an island Jamaica's land transport sub-sector is entirely a domestic system, with no cross-boundary land transport issues. However the land transport sub-sector is linked to the air transport and maritime sub-sectors, which are both dominated by international transport modes. It will be important therefore to develop and strengthen the inter-modal transport linkages between land, sea and air transport modes particularly in the context of expanding Jamaica's role as an international transport hub.

The transport sector in Jamaica may be considered to include road (tier one), rail transportation (tier 2), air (tier 3) and maritime transportation (tier4). The Ministry of Transport and Works (MTW) has prepared a draft National Transport Policy to provide a framework for the future development of the sector, the "[Vision 2030 Jamaica Transport Sector Plan](#)"

**This proposal** to manufacture, construct, operate and maintain the "Interstate Traveler Mass Transit & Public Infrastructure System", *upon acceptance and subsequent deployment*, will insure Jamaica realizes the goals and objectives set forth by the "Vision 2030 Jamaica Transport Sector Plan" within years as opposed to decades.

Port of Montego Bay / Sangster International Airport to Port of Falmouth.  
23.73 Miles / 38.11 Kilometers

With Assembly Facility at the Port Of Montego Bay



## Sangster International Airport Station



A1

Station

Station

Station

Craft Market Station



Montego Bay Railway Station



Montego Bay

Port of Montego Bay

Assembly Facility

Actual route and station locations between the "Craft Market and Sangster Airport" will require more detailed maps with info on existing right-of-ways but would include three additional stops.



### Assembly Facility

**Montego Bay Railway Station;**  
*Existing / poor condition / squatters are living in some of the abandoned rail cars.*

### Craft Market Station

**Three Additional Stops;**  
*Waterfront district locations to be determined.*



# Sangster International Airport Spur



Total components required to build one kilometer of rail including utility sub stations, Site work, demolition, adjustment to overhead lines and labor cost.

Cost Per Item

Total cost to construct rail and substructure Including embedded public utilities conduit

# ITC Rail Installation Analysis

#Cost per Mile lock stock and barrel

1 mile = 5,280 feet 1 Kilometer = 3278 feet

## Interstate Traveler Rail Costs/Kilometer

Qty	Units	Description	Cost	Amount	Notes
1	Kilometer	AMSC HTS Super Conductor Wire	\$120,000.00	\$120,000.00	
2	Kilometer	<a href="#">Solar Panel 72" wide x 1 Kilometer long.</a>	\$871,948.00	\$1,743,896.00	8' x 1' section of panel at \$266.00 /foot
2	Kilometer	<a href="#">Concrete 3'x3' x 12' concrete Piers</a>	\$17,482.67	\$34,965.33	
2	Kilometer	<a href="#">Steel for Rail Tubing / Stanchion / Central Support</a>	\$1,336,112.80	\$2,672,225.60	41.1142565557548 % of total cost / kilometer
8	Kilometer	Supplemental Conduit	\$3,278.00	\$26,224.00	\$1 / per foot
1	Kilometer	Fiber Optics	\$16,000.00	\$16,000.00	figured at \$5/ft yet may be purchase at \$.35/ft
0.25	Units/Kilometer	Full Function Utility Substation	\$1,500,000.00	\$375,000.00	One every FOUR kilometers (2.5 Miles)
1	Labor/Kilometer	100 people working simultaneously / 1 week	\$100,000.00	\$100,000.00	\$52k / Annual Salary equivalent or \$1K / week
1	Kilometer	Sitework / demolition / adjustment to overhead line	\$100,000.00	\$100,000.00	
2	Kilometer / pair of rail	Solid-state Magnets	\$655,600.00	\$1,311,200.00	\$200 / foot * 3278 for Pair of Rails

Total cost of the InterState Traveler /Kilometers

\$6,499,510.93

Additional cost for terminal stations, car ferries & required side track

Section Length (Feet)

66

Cost per foot

\$1,982.77

Cost per Section

\$130,862.64

Total cost per kilometer of rail sections and utilities conduit

## Terminal Stations

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 (1Kilometer)	\$6,499,510.93	\$0.00	
0	Each	Remote Public Station, and parking (Private Land)	\$1,000,000.00	\$0.00	

Additional Cost for individual transport vehicles

\$0.00

## Interstate Traveler Public Cars

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Qty	Units	Description	Cost	Amount	Notes
0	Each	Grand Public Car	\$1,000,000.00	\$0.00	
0	Each	Commuter Public Car	\$500,000.00	\$0.00	
0	Each	Car Ferry	\$300,000.00	\$0.00	

# Montego Bay Project Estimated Cost

Qty	Units	Description	Cost	Amount	Notes
38	Kilometer		\$6,499,510.93	\$247,696,361.67	
-	Kilometer		\$6,499,510.93		
-	Kilometer		\$6,499,510.93		
1	Each	Grand Terminal Stations	\$8,000,000.00	\$8,000,000.00	
-	Each	Cloverleaf Stations "Traveler Station"	\$3,000,000.00	\$0.00	
7	Kilometer	Sidetrack to Local Public Station (1Kilometer)	\$6,499,510.93	\$45,496,576.53	
-	Each	Car Ramp for Car Ferry w/ Parking Structure	\$2,000,000.00	\$0.00	
14	Each	Remote Public Station, and parking (Private Land)	\$1,000,000.00	\$14,000,000.00	
-	Each	Grand Public Car (GPC)	\$1,000,000.00	\$0.00	
70	Each	Commuter Public Car (60 Passenger)	\$500,000.00	\$35,000,000.00	
-	Each	Freight Car	\$300,000.00	\$0.00	
	Each	Car Ferry	\$300,000.00	\$0.00	
70	Total Commute Cars	<b>Total Cost for InterState Traveler Installation</b>		<b>\$350,192,938.20</b>	
0	Total Car Ferry	<u>Cost of Steel at 1200 dollars per ton at 30 tons per section</u>		<u>\$88,746,166.08</u>	34%
1	Total Stations	<b>Balance</b>		<b>\$261,446,772.12</b>	75%
70	Total Cars / Station				
45.1	Total Kilometers				
28.0	Total Miles				
0.018	Pairs of Stations/Mile				
2.50	Cars/mile				
70	Total Cars				
			<b>Total Cost: \$450,192,938</b>		

Assembly & Maintenance Facility; \$100,000,000.00

# Return on Investment / Montego Bay Project

Grow budget by x percent: 0%

<b>Steps:</b>			<b>28.01</b>	total Miles of track for this estimate
1	Passenger Fee / Minute		<b>\$0.05</b>	
2	Car Transport Fee / Minute		<b>\$0.32</b>	
3	Number of Commuter Cars:		70	
4	Number of Car Ferries		0	
5	Passengers Per Car		80	People
6	Average Time of Trip for Pedestrian		<b>12</b>	Minutes
7	Average Distance of Trip for Car Transport		<b>20</b>	Minutes
	Total Simultaneous Capacity (Passengers Only)		5,600	
	Total Number of 12 Minute Time Blocks / Day		120	
	Total Daily Capacity (Average Time * Total Capacity)		672,000	
Pedestrian	Projected Use as an Average over 24 hours		<b>100%</b>	Percent of Capacity
Car Trans	Projected Use as an Average over 24 hours	<b>N/A</b>	<b>100%</b>	Percent of Capacity
Pedestrian	Total Projected Use <b>Daily</b>		672,000	Rides
	Total Projected Use Hourly		28,000	
Pedestrian	Total Projected Revenue <b>Daily</b>		\$403,200.00	
Pedestrian	Total Projected Use <b>Annually</b>		245,280,000	Rides
Pedestrian	Total Projected Revenue <b>Annually</b>		\$147,168,000.00	
Car Trans	Total Projected Use <b>Daily</b>	<b>N/A</b>	-	Rides
Car Trans	Total Projected Revenue <b>Daily</b>	<b>N/A</b>	\$0.00	
Car Trans	Total Projected Use <b>Annually</b>	<b>N/A</b>	-	Rides
Car Trans	Total Projected Revenue <b>Annually</b>	<b>N/A</b>	\$0.00	
Pedestrian	Revenue / Trip / Single Pedestrian at \$0.05 /minute for 12 minutes		<b>\$0.600</b>	Consumer Fee For Use on a Trip
Car Trans	Revenue / Trip / Single Car Transport at \$0.32 /minute for 20 minutes	<b>N/A</b>	<b>\$6.400</b>	Consumer Fee For Use on a Trip

Continued...

Efficiency	Average Speed Traveled	120	Miles per hour
Efficiency	Possible Distance Covered Traveling at 120mph for 12 minutes	24	Miles
Car/Pedest	Revenue <i>All Transports</i> / Annually at xx% of Capacity	\$147,168,000.00	(Freight is NOT included in this figure)
	Advertising Revenue Calculations	\$56,191,920.00	
	Rent Revenue Calculations	\$720,000.00	
	<b>Total Annual Revenue for All Transports / Advertising / Rent</b>	<b>\$204,079,920.00</b>	

<b>Budget &gt;&gt; Cost for Assembly Facility &amp; installation of 28.02 miles</b>	<b>\$ 450,192,938.00</b>
<b>Total Annual Revenue</b>	<b>\$ 204,079,920.00</b>
<b>Return on Investment at 100% of Revenue</b>	<b>2.2059639 YRS</b>
<b>Dept Service Fund</b>	<b>50%</b>
<b>Total Annual Dept Service Fund (P/P Partnership)</b>	<b>\$ 102,039,960.00</b>
<b>Return on Investment Using Dept Service Fund</b>	<b>4.4119278 YRS</b>

## **Infrastructure Investments and Job Creation**

*Three types of job creation: direct, indirect, and induced effects;*

**Direct job creation** refers to the jobs directly involved in constructing the new infrastructure projects.

**Indirect job creation** refers to the jobs generated when supplies are purchased for the infrastructure projects.

**Induced jobs** are created when the overall level of spending in the economy rises, due to workers newly receiving incomes when they are hired to build the infrastructure projects, and to produce supplies for the project.

*Infrastructure investments as job-creation tool. All forms of spending will produce jobs but infrastructure investment is a highly effective engine of job creation.*

Thus, infrastructure investment spending will create about 18,000 total jobs for every \$1 billion in new investment spending, including direct, indirect, and induced jobs. By contrast, a rise in household spending levels generated by a tax cut will create, at most, about 14,000 total jobs per \$1 billion in spending, 22 percent less than infrastructure investments.

$1,000,000,000 / 450,192,938 = 45\% \times 18,000 = \mathbf{8,100 \text{ New Jobs In the Montego Bay Metropolitan Region}}$

# Management and Organization Plan

What form of organization does the business operate under, and why? Who are the key management team members and what skills do they have to help the business? Who are the key support groups for your management team, including accountants, attorneys, consultants, board of directors, and advisory board members?

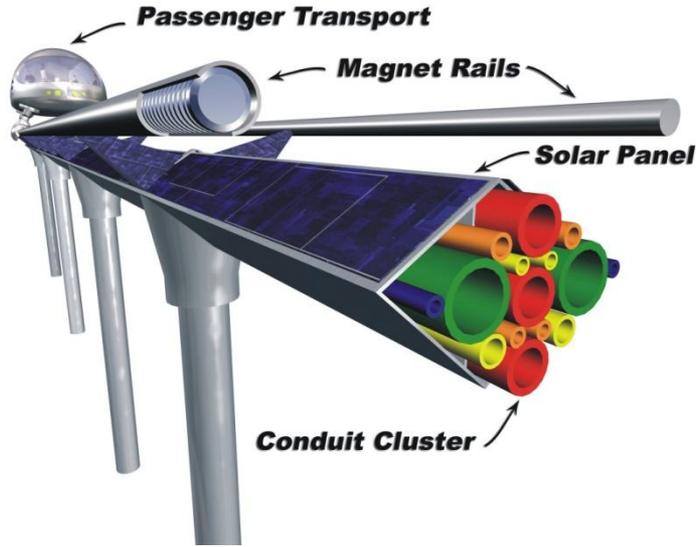
Interstate Traveler Company, LLC (ITC) is a Michigan based Limited Liability Company formed in 2003. This form of organization has allowed us to add members and key resources to the LLC through the issuance of membership units. Key members of the management team include the Founder and managing partner Justin E. Sutton; Chairman of the board, Jay C. Wilbur; President and CEO, Jim M. Jung; Chief Manufacturing Officer, Laurie Moncrieff; and Chief Operations Officer, Jack Salo. Supporting the management team is a wealth of talented outside resources including our supplier partners for design, engineering, manufacturing, and operations support; an advisory board that includes expert in transportation, energy, advanced manufacturing, computer technology, physics, and engineering. Our organization plan is to maintain a small team of direct employees for ITC and contract out the majority of the engineering, manufacturing and logistics operations to the wealth of underutilized resources available in southeast Michigan. There is a huge supply base in place to support the automotive industry and this same talent is available to ITC for every aspect of building the Kingston to Spanish Town System but as possible we will endeavor to use any Jamaican resources that are available with respect to suppliers and workforce. For example, here in the US we have forged a relationship with the International Brotherhood of Electrical Workers (IBEW) and the National Electrical Contractors Association (NECA) to provide skilled electricians to work on the system. We would seek those same types of relationships with Jamaican counterparts for those services. A likely scenario for the initial assembly operations would be to construct a (or occupy an existing) facility, owned and operated by the Interstate Traveler Company, in Kingston which will serve as the model for future assembly operations around the country.

# Marketing Plan

The Magnetic Levitation (Mag-Lev) industry is untapped in the U.S. While the technology has been available for 70 years, and there have been attempts to construct sample or demonstration units, there is no existing commercial installation in the US. The main reason has been cost - the cost to construct and the cost to operate. The Interstate Traveler design overcomes these constraints with our unique integration of multiple technologies and ability to generate electricity, hydrogen for fuel, and potable water for municipalities and other consumers to purchase. Our marketing plan is a multi pronged approach targeting consumers and businesses alike. We will market the mag-lev transportation system to urban and suburban commuters that desire an alternative to auto, bus, or train transportation - an alternative that is faster (250mph vs. 70mph), less costly (\$0.02 per mile vs. \$0.18 per mile), and uses green technology (solar vs. fossil fuel) as its energy source. We will use the traditional avenues of advertising, promotions, and publicity, to get the word out about the system and its capabilities. We believe one of the best forms of advertising will be the actual construction of the rail system as automobiles and trucks traveling on the highway start to wonder about "what's going on" and begin to create a buzz about the system. We will also continue to build our internet presence. We have an existing website that we use to provide information to the public about ITC, the concept, and the progress of the company. You can view the site at [www.interstatetraveler.us](http://www.interstatetraveler.us). Going forward we intend to upgrade the site to include interactive features for customers such as rate sheets, availability, and transportation requests, blogs, customer feedback, testimonials, and the social media interfaces like Twitter, Facebook, YouTube and LinkedIn.

For our business customers we will use a direct sales approach to target freight carriers, electricity producers, municipal governments, and commercial consumers of hydrogen and oxygen fuels. A third customer we will market to includes business advertisers that advertise in public venues like train and bus stations, outdoor billboards, public transportation vehicles, airports, and other locations with pedestrian and vehicle traffic.

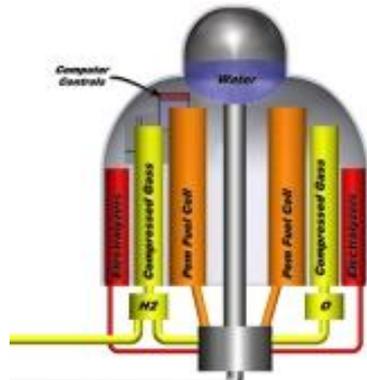
# Rail, conduit cluster, utility sub stations and transport vehicles



Passenger Transport



Freight Transport

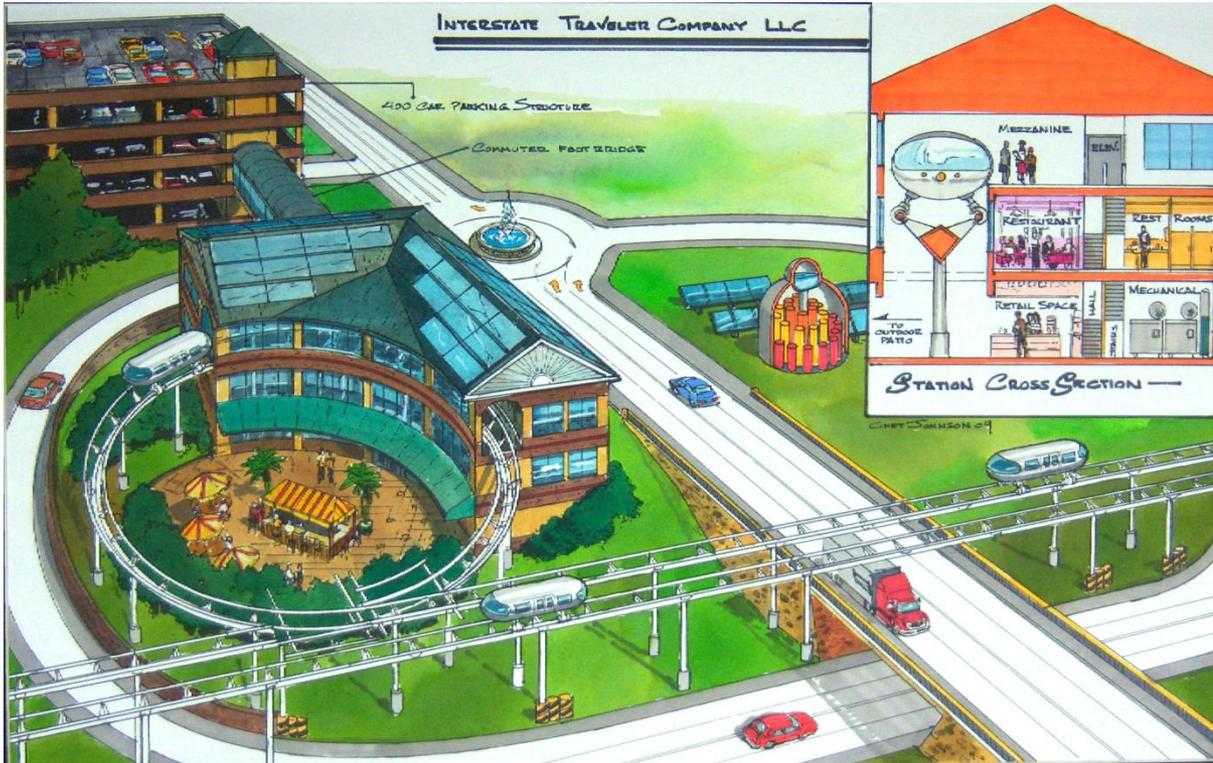


Utility Sub Station



Auto Transport

# Traveler Stations





# WorldWide Hydrogen Super Highways



Passengers



Automobiles



Freight

- [www.HydrogenSuperHighway.com](http://www.HydrogenSuperHighway.com) -

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