

2016



PERSONAL RAPID TRANSIT DEPLOYMENT PLAN

JPODS INC. USA

Cleaner.Faster.Safer.Affordable

ACTIS INFRASTRUCTURE PVT LTD. INDIA

Inspiring with innovations



INTRODUCTION

Personal Rapid Transit

Creating the Next Silicon Valley

JPODS-ACTIS Leads a Transportation Revolution

Personal public transport and tourist attraction for cities



Clean, Fast, Safe, Affordable

INTRODUCTION OF SOLAR POWERED NEXT GENERATION MOBILITY FROM JPODS-ACTIS

Truly Intelligent transport system (ITS)

Automated and individual public transit for all cities

Personal public transport and tourist attraction for cities

PERSONAL RAPID TRANSIT DEPLOYMENT PLAN

- **INTRODUCTION Prototype (Demo system) USA**



PODS DESIGN



- **THE PROBLEM**
- **OUR SOLUTION**
- **COMPETITION**
- **THE NUMBERS**
- **TECHNOLOGY**
- **MONEY**
- **PRT APPROVAL**
- **MANAGEMENT AND BOARD**
- **CONTACT**

Personal public transport and tourist attraction for cities

INTRODUCTION: Concept

JPods concept is to design, build and operate on-demand and computerized PRT networks that can be solar-powered. The company plans to deploy networks of Horizontal-Elevators™ that provide short to medium range travel using ultra-light, computer controlled vehicles that are suspended from rail, mounted on elevated structures. The system is electrically powered. Solar collectors mounted on the overhead rails, positioned to absorb maximum sunlight, make the networks durable against power outages and emit no CO2 gases. The JPod vehicle (Pod Car) has the capacity to hold 1-6 people or a cargo pallet yet uses about 10% of the energy per passenger mile that is required by current modes of urban transport such as train, light rail, buses, and cars.

JPods is Viable Now

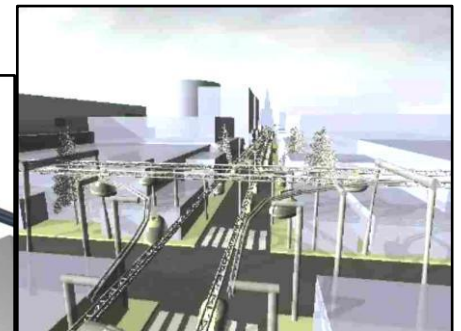
JPods intends to build a privately funded mobility network in Secaucus, New Jersey, to demonstrate a cost effective way to move people, cargo, and waste while creating sustainable jobs. Computer controlled, suspended vehicles move 1-6 people or cargo on elevated rails and operate at 10% of the energy required by cars, buses, and trains. Solar panels mounted over the rails can gather enough energy to power the network. We offer on-demand, personal mobility regardless of age, ability, or wealth.

JPODS SYSTEM IS THE SOLUTION TO THE PROBLEM OF TRAFFIC AND POLLUTION IN CITIES

Major tourist attraction: an opportunity of outstanding image enhancement of the city

PRT stands for Personal Rapid Transit system. It consists of a light guideway infrastructure suspended some 10-15 meters above the ground over city streets or along the curb side

- **Individual travel in automatic, car size vehicles; on demand only; no stopping from start to destination, with high average speed of 50 to 80 km/hr**
- **Safer than air travel; inexpensive to build, maintain and operate.**
- **It is a 50 year old concept which only now is coming to the fore as a result of inexpensive computer technology making such development feasible**
- **Camera. Sensors. automatic re-direction**
- **Anti-vandalism .24/7 transport system**
- **Women safety-round the clock video monitoring**
- **Pods can move in the congested area also**
- **Competitive for all mode of transportation**
- **No emission-no accidents –solve major traffic problem**
- **Technically feasible**



Congested roads consume our time and land, but JPod networks soaring overhead, breaks that mold. JPods Inc. builds on-demand, mobility networks, recruiting the sky to elevate a city's full potential. Used to transport people and cargo, JPods networks are clean, fast, safe, and affordable. By passing a Performance Standard Ordinance that allows access to city right-of-ways based on energy efficiencies, governments open the stage for a new innovation headquarters, the next Silicon Valley.

JPods networks are the 21st century version of Personal Rapid Transit (PRT). In 2007, The New Jersey Legislature concluded PRT is an "enduring idea that offers the unique and rare combination of potentially improving the quantity and quality of transit service while reducing costs, congestion, and environmental impact." This astonishing testimony understates the network's serendipitous efficiencies: the energy cost for each vehicle-mile is a mere US\$0.04.

The efficiencies inherent in the network are the core of JPods competitive advantages. The ultra-light pod cars need only a simple electric motor powered by the solar panels mounted over the rail. This self-reliant system is durable against energy supply shocks. Relative to current passenger and cargo transit services, JPods recovers 90% of energy costs into savings, competitive advantage, and profit.

Part of the energy efficiency advantage surfaced from putting the JPod network on a separate plane. This grade separation allows JPod networks to travel unimpeded by ground pedestrian and vehicle traffic, making the network inherently safer and solving urban congestion. Grade separation also accounts for the JPods small footprint: pylons every 30 meters support the elegant rail, truss, and solar arrays.

Essentially, JPods networks sport all the convenience of an automobile without the hassles of parking, traffic, and debt. Automated pod cars offer on-demand service for 1 to 4 travelling companions, a pallet of cargo, or any shipment less than 550 kg. The nonstop travel gets passengers and freight to their destination quickly and with less energy.

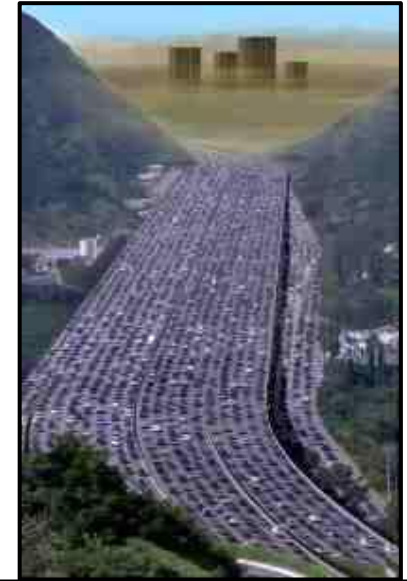
The problem we are solving Myth of “ECO” car solutions

Myth of train and bike energy efficiency

Current City Transport Options

Current state of the PRT market

Reasons why the World is ready for PRT



IN THIS OUR FUTURE? ...Is this a better city landscape than Personal Rapid Transit?

And what about the quality of life?

Pollution; Accidents: Congestion; Financial costs?

Personal public transport and tourist attraction for cities

Competitive Advantages

Product Design: Vehicles hanging from overhead rails (wheels-up vs. wheels-down) employs superior physics to reduce pod weight and energy consumption, increase ride stability and safety, and solve congestion issues in cities.

System Patent: Patent #6,810,817 was issued in 2004 and defines how independently computer controlled vehicles can talk to each other, make decisions together and behave intelligently to move physical packets (PodCars) in a distributed collaborative network. Currently, about 50 additional patents have been researched and identified by JPods.

Management Track Record: A strong team leads the company with an outstanding track record in leading manufacturing, logistics, process controls, power generation and high tech companies.

Scalability: Rapid deployment of the PRT networks would be achieved by a combination of the leadership, management expertise and networks of JPods and our allies. In particular, JPods holds the patent/technology and manufacturing knowledge/experience.

Major Benefits of JPods System

Provides a Renewable Energy Transportation System & Reduces Oil Dependency: JPods can be a solar-powered PRT. Solar panels on the top of the overhead track provide electricity to the rail and backup battery in the pods. A 2.3 mile solar network is expected to produce a 2MW facility capable of powering 50,000 vehicle-miles of transportation per day.

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PERSONAL RAPID TRANSIT DEPLOYMENT PLAN

Increases Energy Efficiency: PRT networks use about 85% less energy than vehicles using fossil fuels because:

- ultra-light and ergonomically designed vehicles need less energy to move
- it is non-stop and eliminates repetitive applications of power in start-stop traffic
- average travel speed is higher and peak speeds are lower than other modes of transportation; therefore, less energy is expended combating wind resistance

JPods PRT design is estimated to utilize about 127 watt-hours per passenger mile versus 900Wh for trains, 1,033Wh for cars, and 1,246Wh for buses.

Creates Green Jobs: Engineers, designers, manufacturers and contractors will be needed to deploy the JPods networks.

Low Cost: JPods PRT networks are expected to cost on average \$10M per mile to build for the network costs. The low vehicle weight radically cuts operating and maintenance costs (\$0.06 per mile vs. \$0.56 per mile costs for cars). Per mile cost to build light rail are typically in excess of \$40M.

Provides Economic Benefits: Increases disposable income by decreasing transportation costs for the general public, reduces government subsidies via financially self sustaining networks, and increases system revenues by potentially moving freight and waste as well as people.

Better Performance: Without repetitive start-stops, PRT provides a faster and more efficient transportation system with average speeds of 30 mph for JPods, as compared to 24 mph for cars, 18 mph for trains, and 8-12 mph for buses for similar service requirements.

PERSONAL RAPID TRANSIT DEPLOYMENT PLAN

Reduces Congestion: The small real estate footprint, grade separation, rail stacking, separate and additional networks to existing infrastructure, and computerized route optimization minimize ground congestion issues.

Reduces Pollution: JPods PRT utilizes a solar renewable energy system that eliminates harmful CO2 emissions. Rubber tires on concrete or steel rails, as well as low weight and speed produce less noise and vibration.

Increases Safety & Time Savings: Existing networks have low injury rates primarily due to slower maximum speeds as well as one directional movement and limited opportunity for collisions. Morgantown PRT has delivered 110 million injury-free and onsite emissions-free passenger miles.

Provides Flexible Transportation: PRT guideways can be laid out in a network or grid (as well as point to point), and there is more than one route connecting an origin and destination. Therefore, service can be maintained when a single guideway is out of service. Stations and guideways can be above ground and mitigate ground transportation issues.

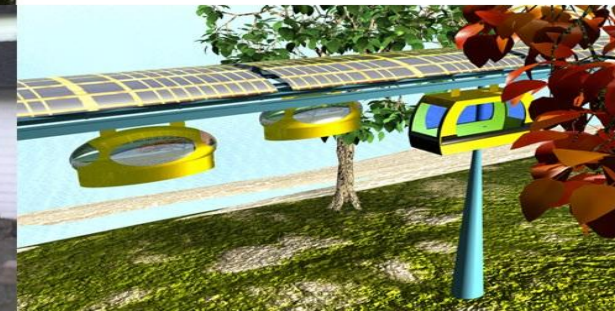
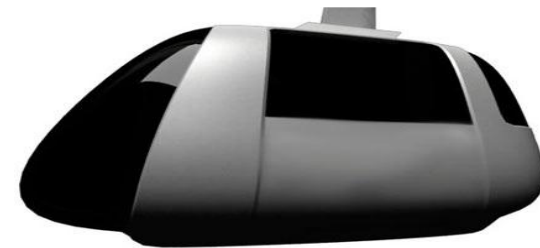
Provides High Quality Service: Provides high quality on-demand, customized service comparable to chauffeured cars (at a fraction of the cost). A high level/frequency of service addresses variable and distributed demands with vehicle utilization tailored to real time demand. The system delivers service as-needed while maintaining service quality at reduced overall cost.

Increases the Value of Existing Transit Networks: PRT inexpensively connects the short gaps between existing transit infrastructure; connecting airports to trains, trains to buses, and many people to their ultimate destination. The Prime Law of Networks is that the value of the network increases exponentially based on the number of interconnected nodes.

Technologies: The following technologies are used to create the JPods network

JPods (passenger pod)

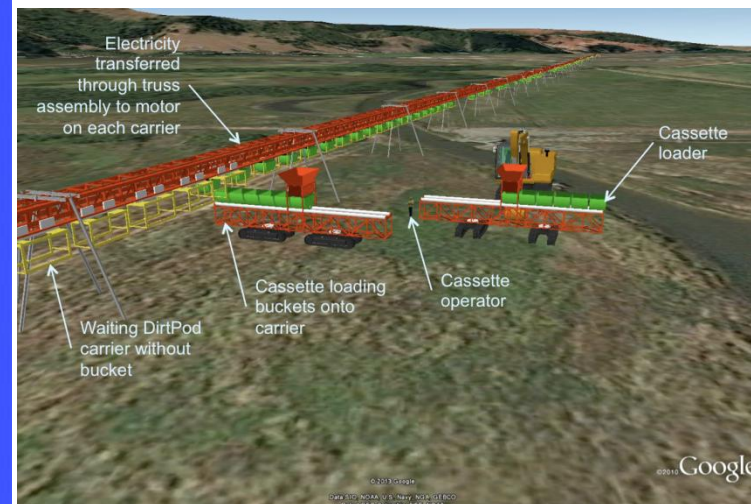
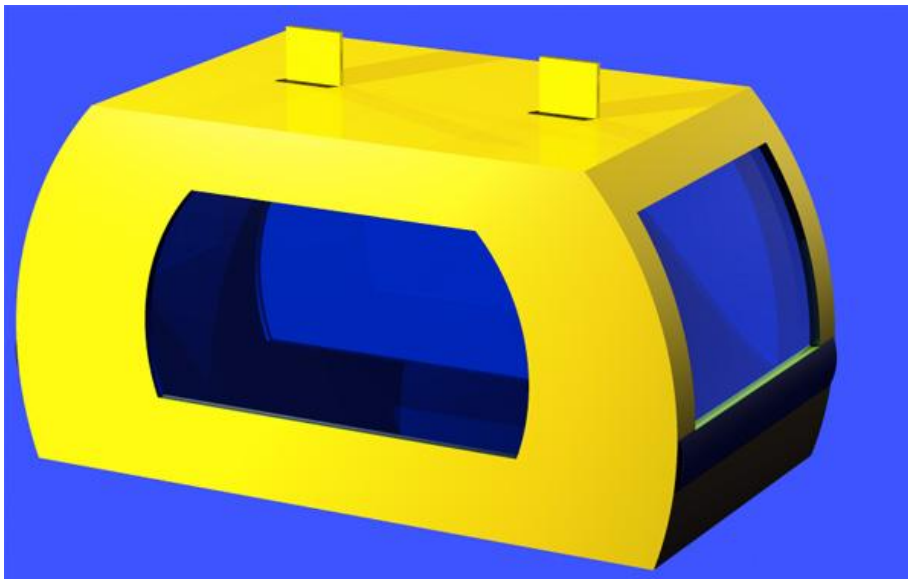
The Pod or JPod is the moving vehicle. It can accommodate 1 to 6 passengers, including handicapped persons. Inside the pod there is a touch screen so that anyone may redirect to another destination while en route. CCTV cameras are mounted inside the pod for safety and security. The JPods also houses the environmental control system for comfortable travel. IT also houses the back-up battery, capable of transporting the JPod to the nearest station in the unlikely loss of power.



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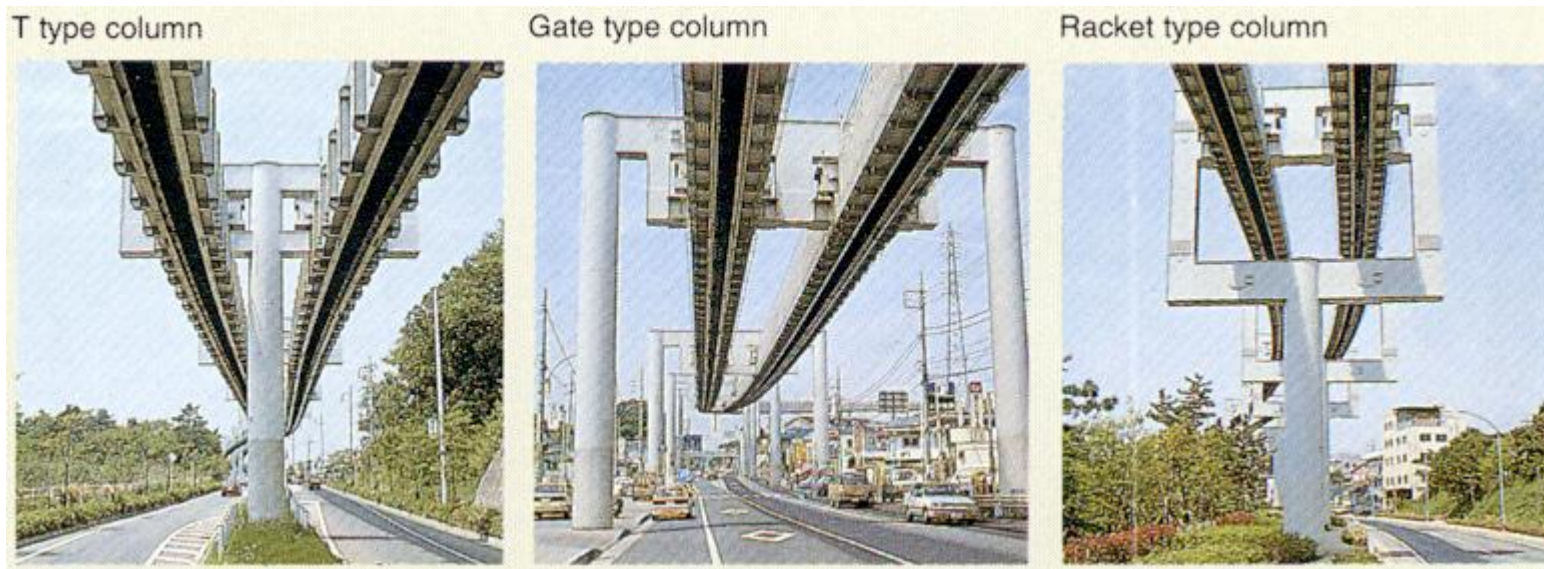
Cargo Pod

Cargo pods are similar to JPods, except they are configured to transport cargo instead of people. They lack some of the environmental controls and instead can accommodate more volume and weight than a JPod. Cargo Pods can be configured to transport pallets or carry loose material such as building materials or trash. They can be loaded and unloaded using a fork truck or a standard pallet lift.



Guideway

The guideway is the rail system that the bogie and Jpod travel along. It is typically above grade, high enough so that as the JPod travels it will not come in contact with traffic below.



Space for construction: 1 diameter footpath curb-median. Top width of the system for a double rail is minimum of 3 meters. Top width of a single rail is 1.6 meters. Solar collectors over the rails would be great at 4 meters.

Stations

The JPods station consists of an elevated platform for the loading and unloading of passengers and cargo. Stairs or an elevator may be used to reach the platform. JPods arrive at the station by switching to a siding of guideway. This allows JPods not stopping at the station to continue along their path uninterrupted. A station can load and unload multiple JPods simultaneously. JPods not carrying passengers will place themselves at the station, waiting for passengers.



Station size 3 meters by 3 meters depend upon the People per Hour.PPH

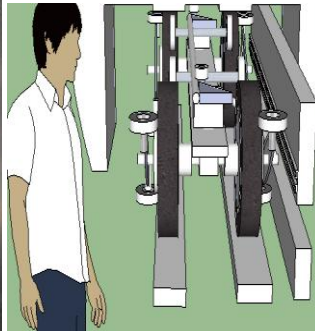
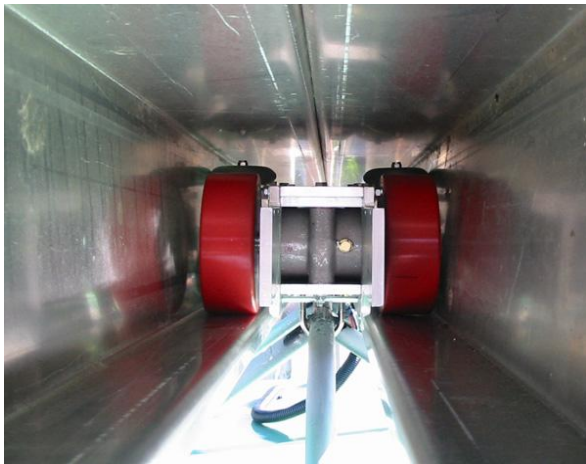
Solar Power Canopy

A JPods network can be completely powered by the solar collectors mounted above the guideway. Typically solar collectors will be 4 meters wide when mounted over the guideway and 6 to 10 meters wide when mounted over a station. 1 mile of track has the capacity to move 8000 vehicle-miles per day.



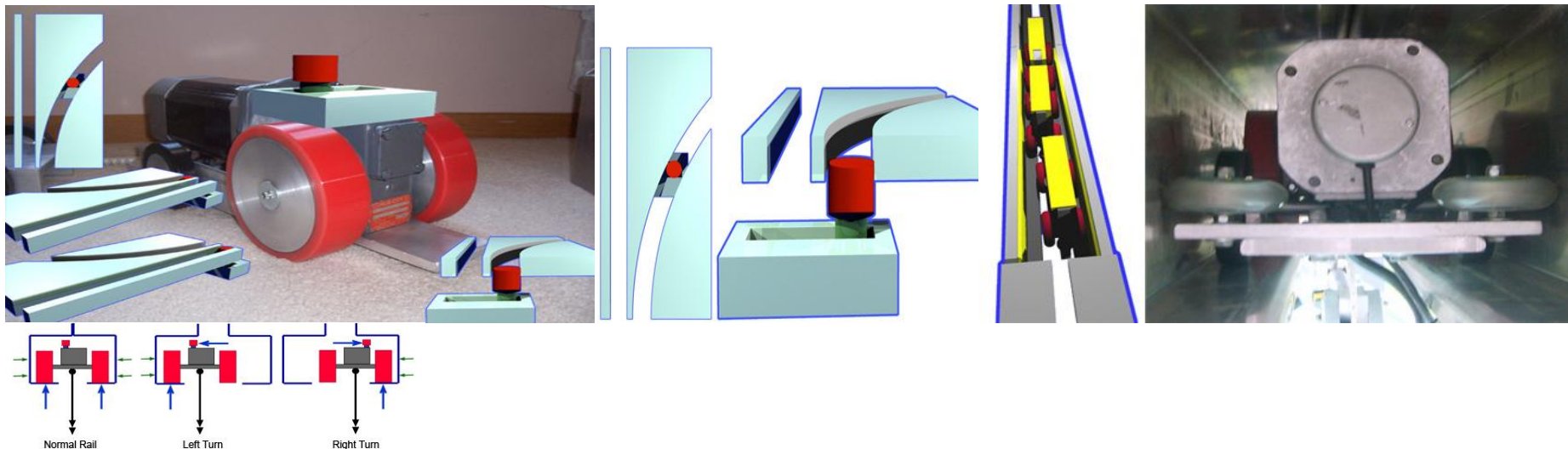
Bogie

The bogie is the integrating component of the JPods system. It sits inside the guideway and supports the JPod. The bogie consists of a small electric motor that powers the traction wheels, used for moving the bogie along the guideway. Guide wheels are mounted horizontally on each side of the bogie, keeping it centered within the guideway. The top of the bogie has a boss that moves right or left and is used for switching. The bogie also has an electric brush that allows for the transfer of electrical power from the solar collectors above the guideway to the electric motor, the network control system, and the environmental control system via the onboard battery.



Switches

Switches are used to direct the bogie and JPod to the appropriate guideway that results in the fastest route to the passenger's destination. A boss mounted above the bogie switches left or right into a guide. The guide then routes the bogie to the planned guideway. Switches are also used at station sidings. This allows JPods to arrive at the station without other JPods having to wait while it unloads.



Related patents: Monorail vehicle switching arrangement: [US 3830163 A](#)

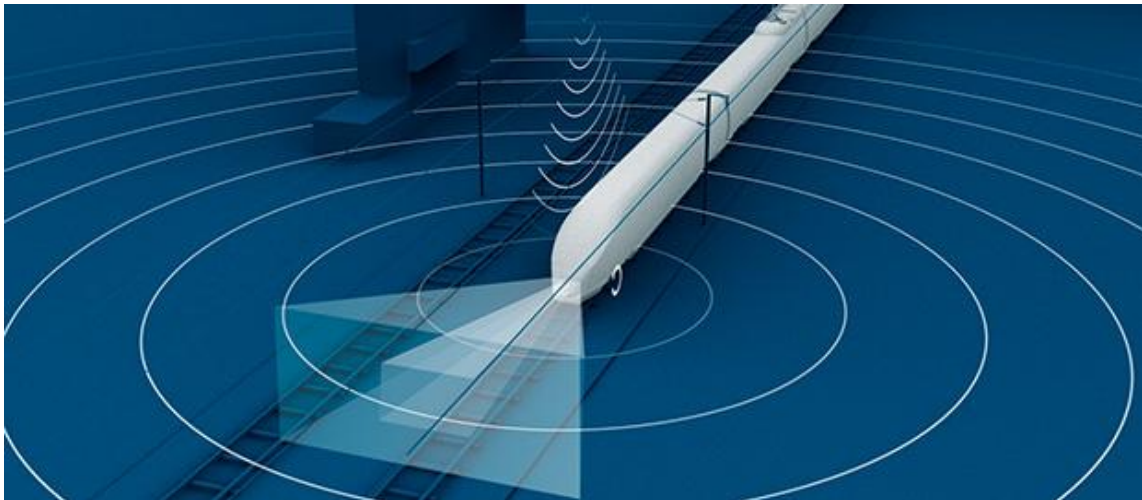
Monorail Switching Device: [US 3777668 A](#) Switch for a suspended railway vehicle: [US 4214535 A](#) Railway switch construction for suspended railroad using two-runway-rail suspension rails: [US 3946974 A](#) Track and bogie for suspended vehicles: [US 20120125221 A1](#) Overhead monorail transit system employing carriage with upper guide wheel and guideway with concave upper surface: [US 5074220 A](#)

Vehicle Control System

The Vehicle Control System utilizes proprietary software to control the movement of JPods within the network. It controls speed and switch direction of each JPod to avoid collisions at merge points along the guideway.

Collision Avoidance System

The Collision Avoidance System is a separate system from the Vehicle Control System. It will override commands from the Vehicle Control System. Under normal operations the Vehicle Control System will prevent any collision between JPods, however during abnormal conditions the Collision Avoidance System may be needed. Circumstances that may activate the Collision Avoidance System would be an obstruction in the guideway or a malfunctioning JPod.

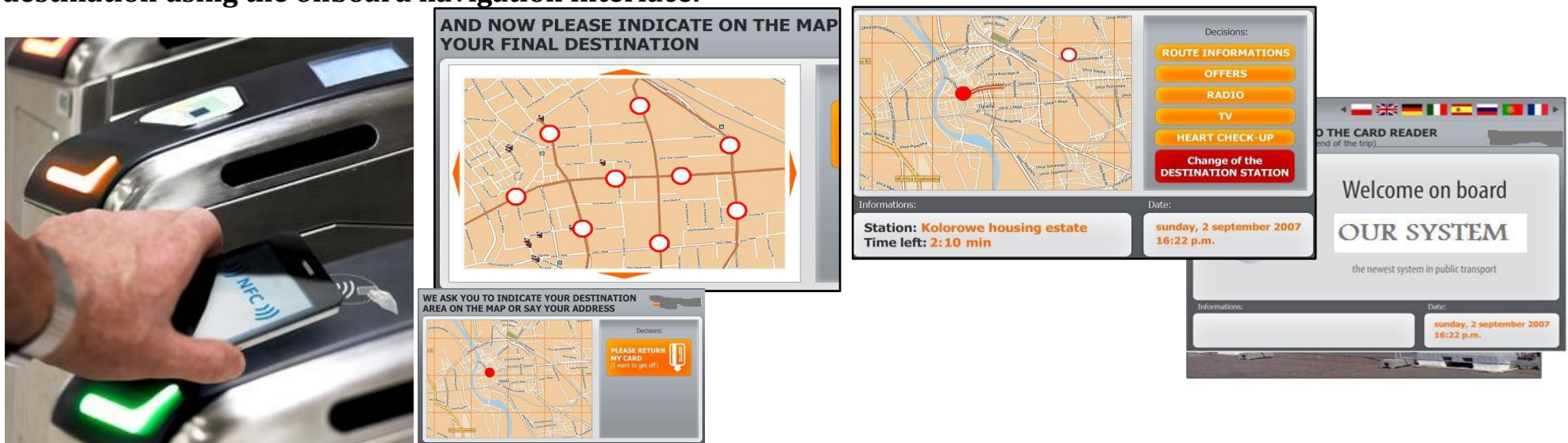


Environmental Control System

An Environmental Control System is used to keep the JPod comfortable for passengers. It consists of a small air conditioning/heating unit that regulates temperature within the JPod.

Ticketing System

The ticketing system will be similar to current modern transit fare systems. Near Field Communication (NFC) technology will be used, enabling users to pay their fare with one time use tickets bought at the station, a personal transit card, or their NFC enabled smart phone. The big difference between JPods and other transit fare systems, is that instead of using their phone or card to allow passage through a gate or turn style, it will be used to open the door of the JPod itself. Once inside, the JPod, the passenger enters their destination using the onboard navigation interface.



Safer


JPods uses safety standards from **ASTM International Technical Committee F24**. These standards resulted in the innovative spirit, care for customers and extraordinary safety record of the theme park industry.

ASTM International, formerly known as the American Society for Testing and Materials (ASTM),

They set the standard. We certify compliance of the design and build to that standard. The insurance company that provides the insurance confirms that we are in compliance. There are multiple checks with risks of law suit to anyone trying to avoid compliance. Personal Rapid Transit developed under ASTM leadership

JPod Systems Codes and Standards

The following codes and standards apply to the design and construction of the JPod chassis:



<i>Issuing Organization</i>	<i>Code / Standard</i>	<i>Title</i>
ASTM International	ASTM F2291	Standard Practice for Design of Amusement Rides and Devices
National Fire Protection Association	NFPA 70	National Electrical Code
ASCE	ANSI/ASCE/T&DI 21-05	Automated People Mover Standards

Faster

Cars are the right answer: personal, on-demand access to work, economic and educational opportunities. Cars are just the wrong mass and randomness of behavior for highly repetitive travel.



As of 2012, congestion cost the average worker 38 hours per year (source: [TTI's 2012 URBAN MOBILITY REPORT](#)); a work-week per year drained from the person and economy. This number is only expected to increase, as the economy improves. This drain equates to a 2% tax on working people that benefits no one. In large metropolitan areas such as Washington DC, Los Angeles, and San Francisco the cost is nearly double.

Commuting to work by bus takes about twice as long as by car. Delays are a tax on time.

JPods combine the personal service of a chauffeured car with the process controls and automation of the Internet.

JPods provide the personal mobility of a car without the requirement to park or operate it.

Personal public transport and tourist attraction for cities

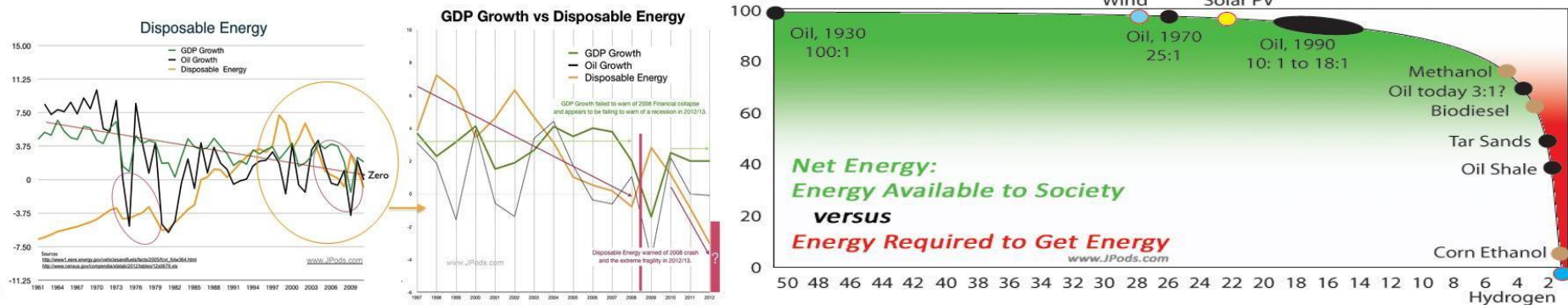
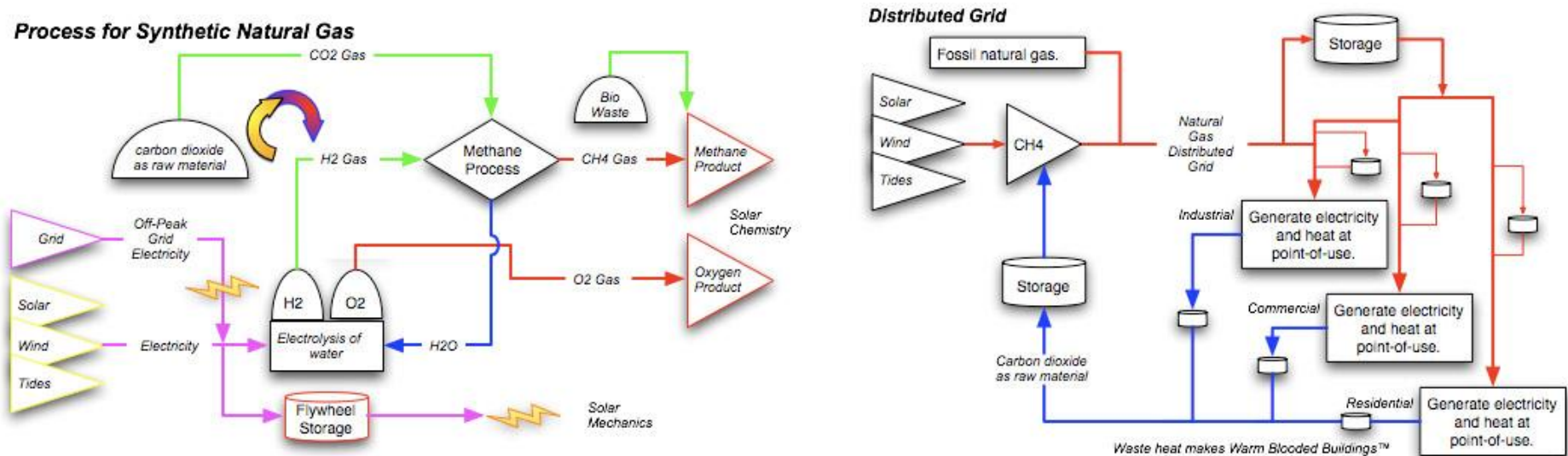
Cleaner

Put this power in personal experience. Walking barefoot on sun-baked asphalt, you quickly get an idea sunshine is a potent and widespread energy source. Harnessing this power to make oil independent transportation requires three actions:

- **Convert the distributed nature of transportation network into solar collectors.**
- **Drive Parasitic Mass towards zero. Current transportation, where we pay for moving a ton to move a person, is too wasteful to take advantage of solar power.**
- **Deregulate transportation so it is open to innovation. Current regulations mandate delays, more highways, more oil dependence and other restrictions beyond the ability of most innovators to navigate.**

There is harmony and synergy between transportation's need for power across a network and sunshine's ability to delivery distributed power. Elimination of Parasitic Mass and power from natural sources is enough to stream resources to need on-demand. At a 65% savings from oil-based transport, it is practical to build a circulatory system for each economic community.

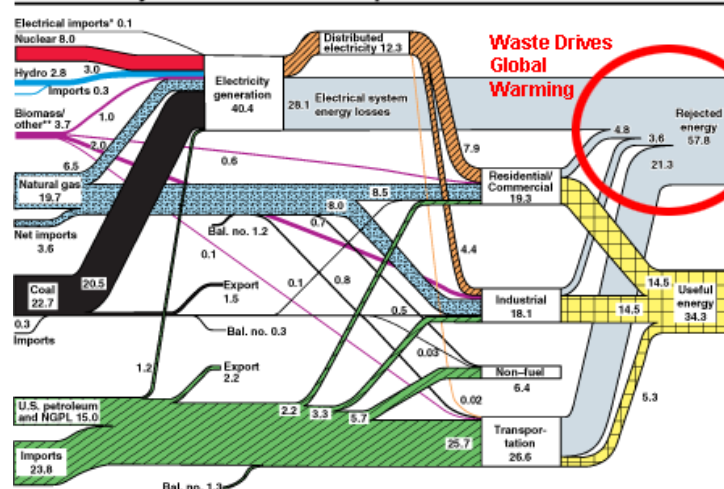
Synthetic natural gas converting: Energy server: solar to methane process bio-waste



Personal public transport and tourist attraction for cities

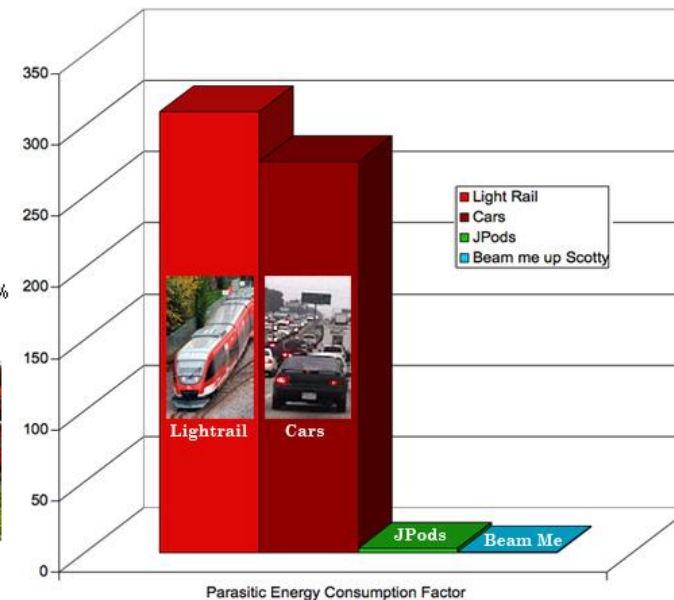
PERSONAL RAPID TRANSIT DEPLOYMENT PLAN

U.S. Energy Flow Trends – 2000
Net Primary Resource Consumption 98.5 Quads



Source: Production and end-use data from Energy Information Administration, Annual Energy Review 2000
*Net fossil fuel electrical imports
**Biomass/other includes wood and waste, geothermal, solar, and wind.

December 2001
Lawrence Livermore
National Laboratory



FTE is Freight Train Equivalent. Long-haul freight and sea borne shipping set a "gold standard" of about 436 ton-miles per gallon of diesel. With that level of efficiency Global Warming and Peak Oil would not be problems.

We know we can move a ton 423 miles using one gallon of fuel (diesel). Yet in half of the eight billion miles Americans drive daily in congested, repetitive travel we move a person 18 miles using one gallon of fuel.

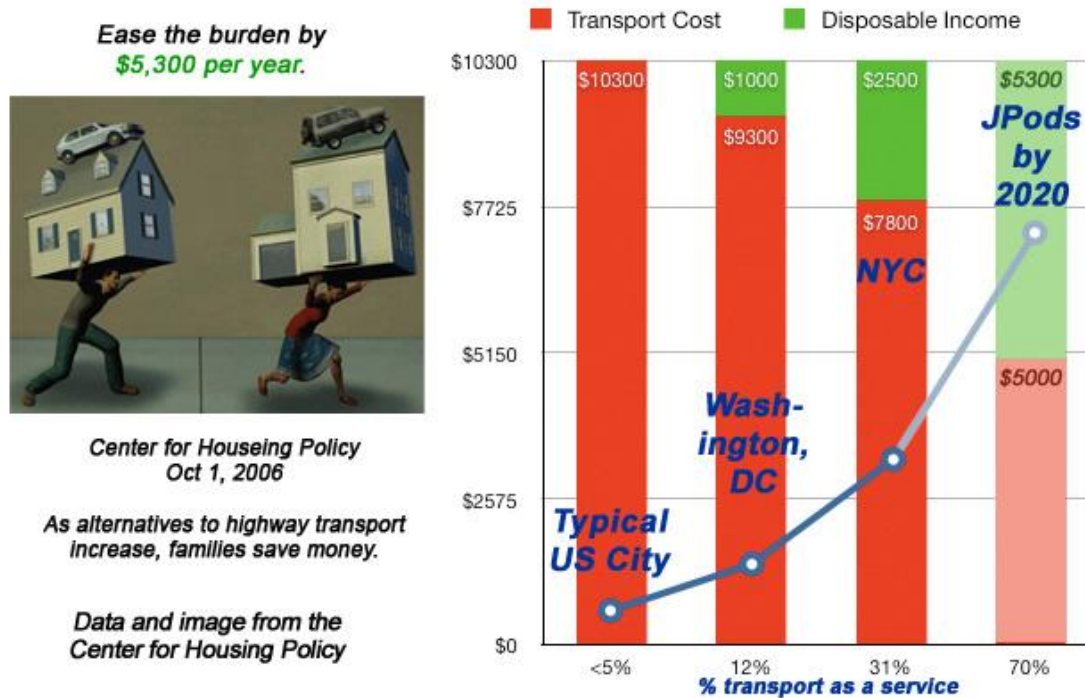
There is no energy crisis; there is a waste of energy crisis. Ending the waste ends the crisis, which in turn, can stop Global Warming.

Personal public transport and tourist attraction for cities

Affordable

Working Family Costs

JPods Can Save Families a Car Payment Per Month



In cities with less than 5% public transportation, a typical working family (\$20-50,000 income per year) spends \$10,300 on transportation. In cities averaging 12% public transportation that cost drops to \$9,300; fewer car payments, insurance, gas and parking results in an extra \$1,000 per year of disposable income.

PERSONAL RAPID TRANSIT DEPLOYMENT PLAN

It is practical to privately finance a 20% displacement of oil-based transportation in the next three to six years, increasing a working family's disposable income by \$2,000.

In 10-12 years, it is possible to cut transportation cost by \$5,000 by displacing 70% of oil-based transport; about a \$5,000 increase in disposable income.

Construction, manufacturing and operations jobs will be created.

Driving Parasitic Mass, the mass we pay to move that is not cargo or passengers, towards zero results in dramatic cost reductions.

Capital Costs

Driving Parasitic Mass towards zero decreases the mass, cost and complexity of the capital infrastructure.

Ultra-light infrastructure can be deployed more quickly and with less ecological and economic impact on the community.

Operational Costs

Energy use is affected by many factors. The very consistent rolling nature of rails greatly decreases the cost to keep railed vehicles rolling.

PERSONAL RAPID TRANSIT DEPLOYMENT PLAN

Maintenance Costs

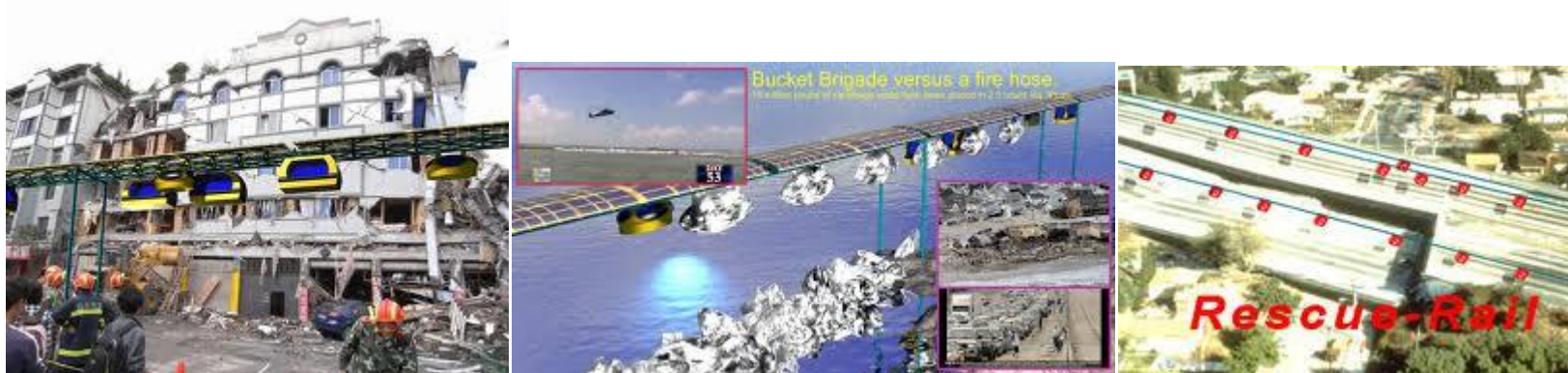
Maintenance increases as a 4th power of axle weight. Using lighter vehicles, such as JPods, can greatly decrease the cost associated with maintaining our transportation infrastructure.

Rescue-Rail networks

Solution: Deploy temporary Jpods networks to provide cleanup. Disaster relief. Food. water and medical support

Rescue-Rail: JPODS networks tailored to be deployed over broken heavy infrastructure and to mitigate congestion and energy use in times of emergency

Uses of Rescue-Rail: Pre-position Rescue-Rail to deploy while infrastructure is unavailable and/or being repaired.



Personal public transport and tourist attraction for cities

PERSONAL RAPID TRANSIT DEPLOYMENT PLAN

Personal Rapid Transit around the world



Suspended train Wuppertal. Germany has been operating 1901 had has experienced one fatal accident



Personal Rapid Transit network built in Morgantown, WV as a solution to the 1973 oil embargo had delivered 110 million oil-free. Injury free passenger-miles

Personal public transport and tourist attraction for cities

INTERNATIONAL PROJECTS

Bringing the World's First Solar Mobility Network to Secaucus, New Jersey

Secaucus and the Meadowlands will likely become the world's center for sustainable infrastructure as JPods starts building solar-powered mobility networks this summer.

On June 24, 2014 Council for Secaucus, NJ passed Ordinance 2014-23 making Performance Standards for sustainable infrastructure the law. We believe Secaucus' leadership will set a world standard in governing to solve congestion, oil-dependence, and climate change. Access to non-exclusive use of rights of way are based on:

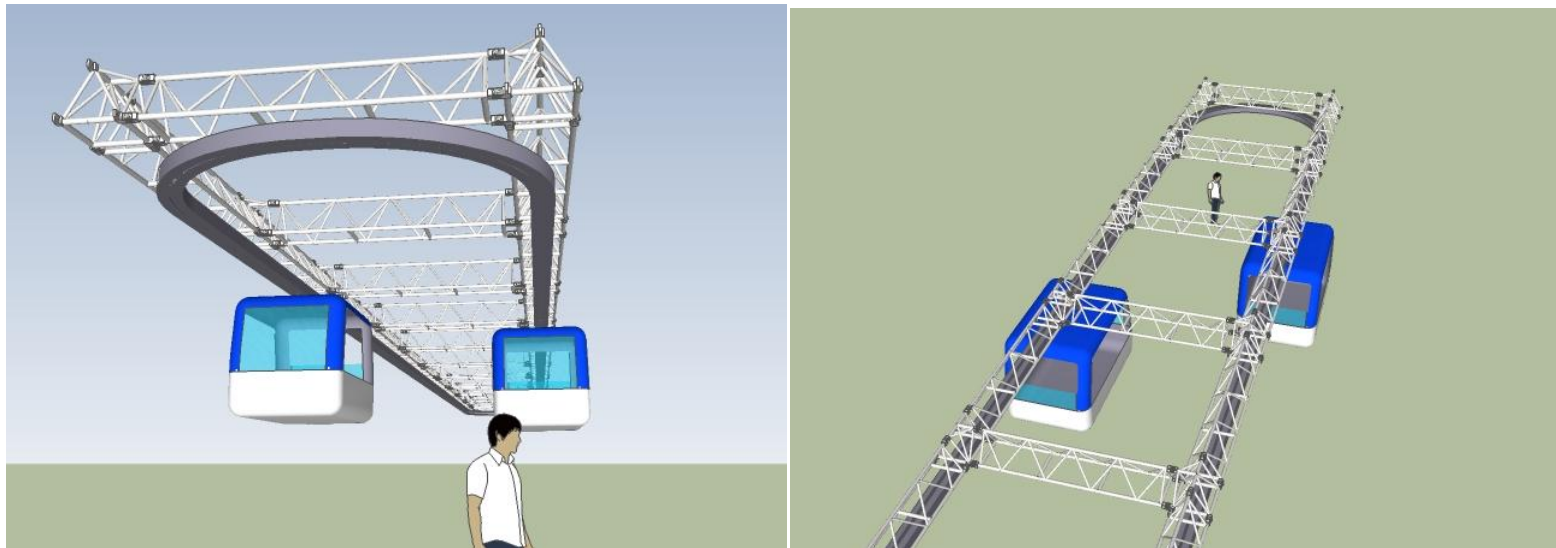
- Construction must be privately funded.
- Systems must operate without government subsidies.
- Efficiency must exceed 120 passenger-miles per gallon.
- Safety must exceed transport modes already granted use of rights of way.
- Environmental approvals will be based on energy saved relative to modes already granted use of rights of way.
- Regulation will be by theme park standards (ASTM Technical Committee F24) with a safety record thousands of times better than highways.

This summer, in Secaucus, JPods will start building a mobility infrastructure with access to all, regardless of age, ability, or wealth. People and cargo can move on-demand without congestion. Each pod in the network will exceed 260 passenger-miles/gallon, won't emit green house gases, and will be 1000 times safer than traveling in cars on the streets below.

PERSONAL RAPID TRANSIT DEPLOYMENT PLAN

In 2007 the New Jersey Department of Transportation commissioned a study titled "[Viability of Personal Rapid Transit In New Jersey](#)". The study concluded PRT has the potential to provide a higher level of personal mobility than comparable transit modes at a potentially reduced capital and operating cost. It also holds the promise of being potentially more energy efficient, less land consumptive and more environmentally responsible while improving the overall service, speed and attractiveness of public transportation. The study also identified the need for sustained political support to allow for the development and placement of such a unique mode of transportation.

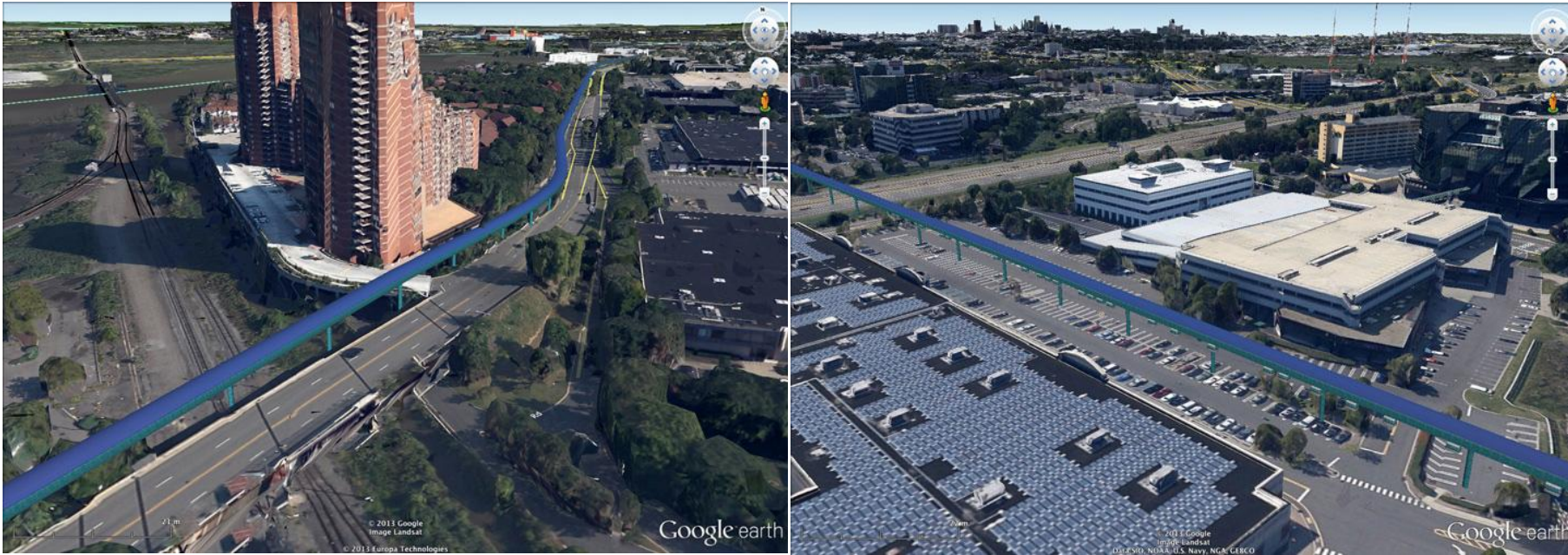
The first phase of building a JPods network in Secaucus will consist erecting a small section of guideway, no more that 100 ft long. This length of track will be used to refine mechanical aspects of a full size network.



The second phase of building the JPods network will consist of building a larger section of guideway, no more than 1/4 mile. The section of guideway will be built to commercial use standards. It will be above grade and will cross over an automobile right-of-way. The guideway will be covered with a solar canopy, capable of providing clean energy to the system. The main purpose of this section of track will be to prove out the cost per mile of laying down guideway. The section of guideway will also be used to showcase the technology to other cities.

The third phase will consist of extending the 1/4 mile guideway to 3 miles, connecting the Frank R. Lautenberg Rail Station at Secaucus Junction to the Meadowlands sports Complex. Along the way, there will be many stations, essentially making most point-to-point transits within the town less than 15 minutes. This includes walking to and from the stations. We have created an [interactive map](#), where you can help the city determine the locations of future stations.

PERSONAL RAPID TRANSIT DEPLOYMENT PLAN



As Automated Guideway travel becomes ubiquitous with Secaucus NJ, it will become the hub for an expanded network reaching out to other parts of New Jersey and New York. The video below shows how JPods might be used to cross the George Washington Bridge.

Relative energy

Economic Work: Economic work is what is accomplished per unit energy consumed. The following chart is DOT's comparison of passenger miles per gallon with Performance Standard and JPods networks added. Multiple units are added. FTR is a ratio relative to the efficiency of a freight train moving a ton of cargo

Mode	Energy Use per passenger mile			Mileage by Mode by Fuel Type			
	Load	Whr/km	FTR	Gas mpg	km/liter	Diesel m	km/liter
Demand response, taxi	1	2613	396	8	4	10	4
Bus, Transit	8.8	774	117	27	14	33	14
Personal trucks	1.72	721	109	29	15	35	15
Cars	1.57	642	97	33	17	40	17
Air, domestic	96.2	596	90	35	18	43	18
Rail, Commuter	31.3	547	83	38	20	46	20
Rail, Transit (light & heavy)	22.5	509	77	41	21	50	21
Rail, Amtrak	20.5	484	73	43	22	52	22
Motorcycles	1.2	339	51	62	32	75	32
Vanpool	6.1	242	37	87	45	105	45
Performance Standard 1	1.57	186	28	112	48	136	58
JPods	1.57	79	12	264	112	321	136

PERSONAL RAPID TRANSIT DEPLOYMENT PLAN



1



2



3

1. ULTRA-battery driven. Heavy. Tires. Supported. Complex control

2. Vectus-expensive LIM propulsion (Linear Induction Motors).heavy .supported

3. 2getthere-battery driven. Heavy. Tires. Supported. Complex control (similar to Ultra)

JPODS PRT system has following technical. Economic and functional advantages

Suspended- cannot fall over; easy and inexpensive guideways and stops

No ground level tracks- less real estate required

Non-contact guideway switch- can add stops later. Without affecting guideway

Very light- less energy and materials for vehicles and guideway

External power- no heavy. Uneconomical. Cumbersome batteries

High capacity- designed from the start for 2-way, downtown traffic

Personal public transport and tourist attraction for cities

At least \$100 billion wasted in traffic jams in the USA alone during 2000 see data at:<http://www.ai.uic.edu/projectsMain.html>

Approximate costs of city infrastructure:

- | | |
|--------------------------------|----------------|
| • 40 storey sky scraper | \$200+ Million |
| • Multilevel city intersection | \$20-100 M |
| • 1 KM Metro(underground) | \$80-100 M |
| • 1 KM Mono rail | \$25 M |
| • 1 KM light rail(LRT/tramway) | \$36-60 M |
| • 1 KM of 6 lane freeway | \$30+ M |
| • 1 KM of 4 lane highway | \$20+ M |

JPODS SOLAR POWERED MOBILITY-1 KM 42 crores (\$ 7 Million)

INCLUDING ROLLING STOCK.EXCLUDING REAL ESTATE

**Does it reduce time to market? – YES, JPODS SYSTEM development will be much faster
Than any road, rail or monorail infrastructure.**

Construction time-8 to 12months for 45 KM

**Is it less expensive? – YES, 2 to 10 times less for the same throughput capacity that
any other public transportation system offers.**

**Does it create a competitive advantage for the customer? – YES, it solves the most critical
problems of modern cities i.e. congestions, accidents, pollution and Investment summary**

- **5 year ROI operating forecast is likely to be above 200%, while 10 year ROI forecast is above 500%.**
- **Investment will be exceptional, because the market is huge and not based on some passing fad or unpredictable preferences. It is like food, i.e. a necessity.**
- **There are really no better means for city transportation in existence or possible.**

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- While the projects are large, the leverage for the initial investors is hard to match.
Inconvenience of public transit, as well as logistics and goods delivery
- Investing in a hotel or other known type of business will not have the leverage, as the
Investment in a global corporation, that JPODS SYSTEM is set to become.
- All of the statements made in this presentation and other documents are based on
reasonable, provable information and calculations.
- Any enquiries are welcomed and can be dealt with during direct discussions with
Interested GOVERNMENT counterpart



Personal public transport and tourist attraction for cities

- **YES. ROI for such systems will be between 2 to 4 years**
- **Recent Swedish Research shows that PRT is more economical than bus system for cities as small as 20,000 populations.**
- **Initial systems will be built in busy city centres, connecting main hotels, business, shopping, tourist attractions and entertainment places with metro, bus or rail stations, possibly airports.**

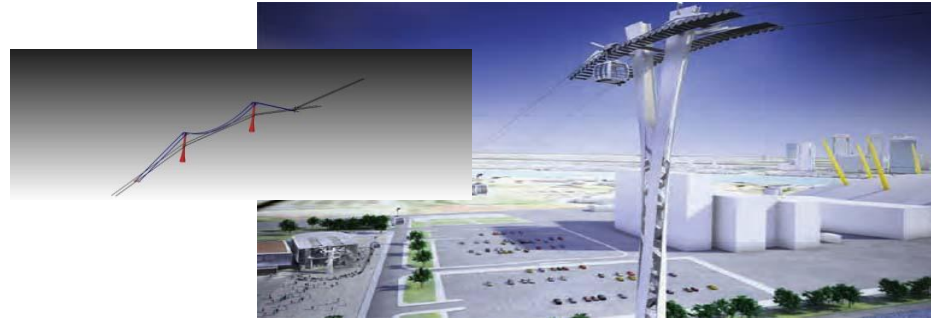
Usage of such a system will be very high, even if people arrive to the city by other transportation means, because JPODS SYSTEM avoids all the parking and congestion problems and people have to move around the city centre all day.

JPODS SYSTEM is profitable, because in comparison with of metro, monorail and bus, it reduces:

RETURN OF INVESTMENT 2-4 YEARS

JPODS SYSTEM can provide a much better solution than Cable Cars for demanding projects like the planned 1, 5 km link across THAMES in Greenwich area

JPODS System can replace Mono rail better cost effective and speed



Mono rail consumes 2 meters space for single lane. Mono rail speed 30 km per hour

PERSONAL RAPID TRANSIT consumes 1 meter and SPEED of 50 km to 100 km per hour



Light rail on the ground consumes 2 meters

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For the GOVERNMENT

JPODS SOLAR POWERED MOBILITY offers to Design Build Finance Operate and Transfer + REVENUE SHARING with the GOVERNMENT

ACTION: GRANT RIGHTS OF WAY (ROW)

Funding: Construction privately financed



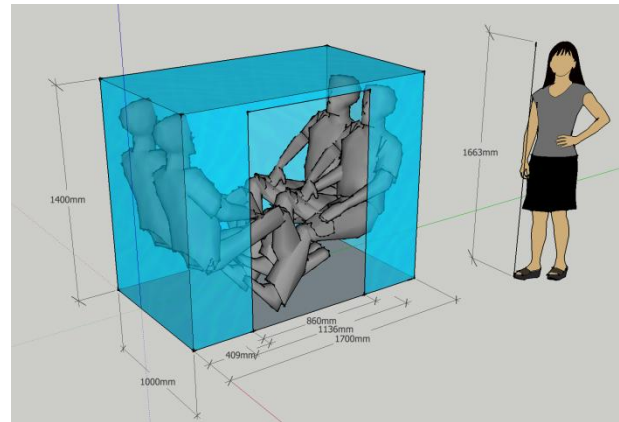
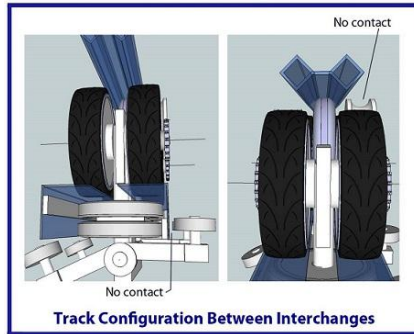
Privately operated without government subsidies

The prototype approval: 40 meters (130 feet) prototype approval: including complete network, switches, a station, sensors, control systems (demo system)

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PRT MANUFACTURING - SYSTEM COMPONENTS TO BE MADE



Civil Engineering Components:

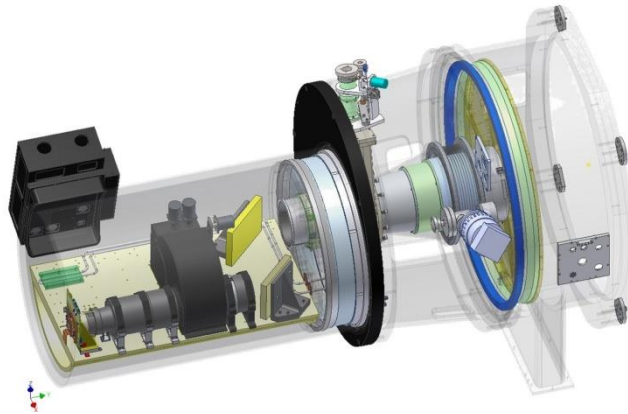
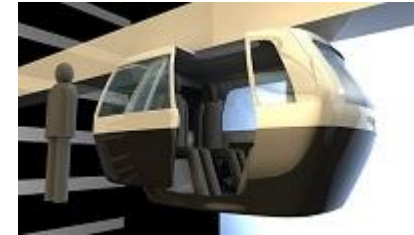
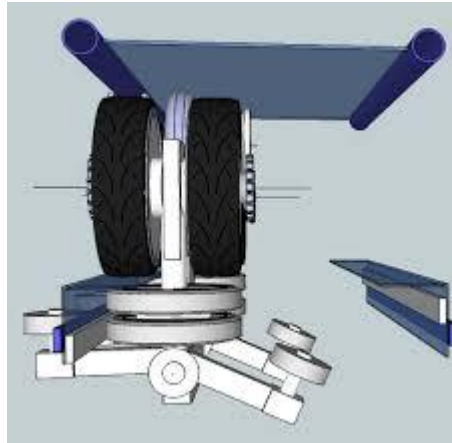
- trusses & rail
- footings
- survey
- interface to existing civil structures

Vehicle/Pod Components:

- frame
- doors
- windows
- seats
- ceilings
- air control
- safety equipment

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- bogeys



- electric motors
- mechanical lifts, stations

Intelligence Components:

- computer networks
- computers
- robotics
- sensors



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- communications (wireless & wired)
- software

Power System Components:

- mechanical leaves
- pipelines
- wiring
- lighting
- vehicle power pickups
- batteries and ultra capacitors
- chemical processing plants

MANUFACTURING FUNCTIONS / SKILLS

- machining & casting
- sheet metal fabrication
- electric motor design and fabrication
- electro-mechanical switching, locks and controls
- sensor and switches
- welding
- composite design and fabrication
- buckyballs industrialization
- welding
- plastic molding and other fabrications
- statistical process controls and preemptive maintenance practices to achieve zero in-service failures

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- truss fabrication
- footings design and fabrication
- integration with existing infrastructure
- survey and route design
- painting
- fiber glassing
- glasswork
- purchasing/component sourcing
- upholstery
- safety equipment
- inspectors & testers
- documentation
- engineering: civil, mechanical, electrical, chemical, and software
- energy storage and distribution (optional)

ESTIMATED JOBS FROM LA GUARDIA / SHEA STADIUM 2.3 MILE PRT PROJECT

For the first PRT projects, many of the components will have to be initially purchased because the skills and facilities for producing small quantities have atrophied in the US. As the PRT systems grow, manufacturing jobs will incrementally increase.

On the LaGuardia/Shea Stadium project, it is estimated that small assembly and testing facilities will create about 20 local jobs as Just-In-Time manufacturing concepts develop. As experience develops and projects expand the assembly/testing facilities will grow to micro-manufacturing facilities. The intent is to develop micro-manufacturing facilities in urban environments that develop and hold the manufacturing “intelligence” locally. Some of the

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manufacturing talent should be able to be borrowed from existing manufacturing companies in the New York Metropolitan area. The micro-manufacturing facilities will scale as demand expands either within the cities where talent and resources reside or outside the cities where costs are lower. If PRT re-tools the transportation and power infrastructure, the job growth would be exponential and similar to the growth of the re-tooling of the communications infrastructure after 1984.

Employment during Construction

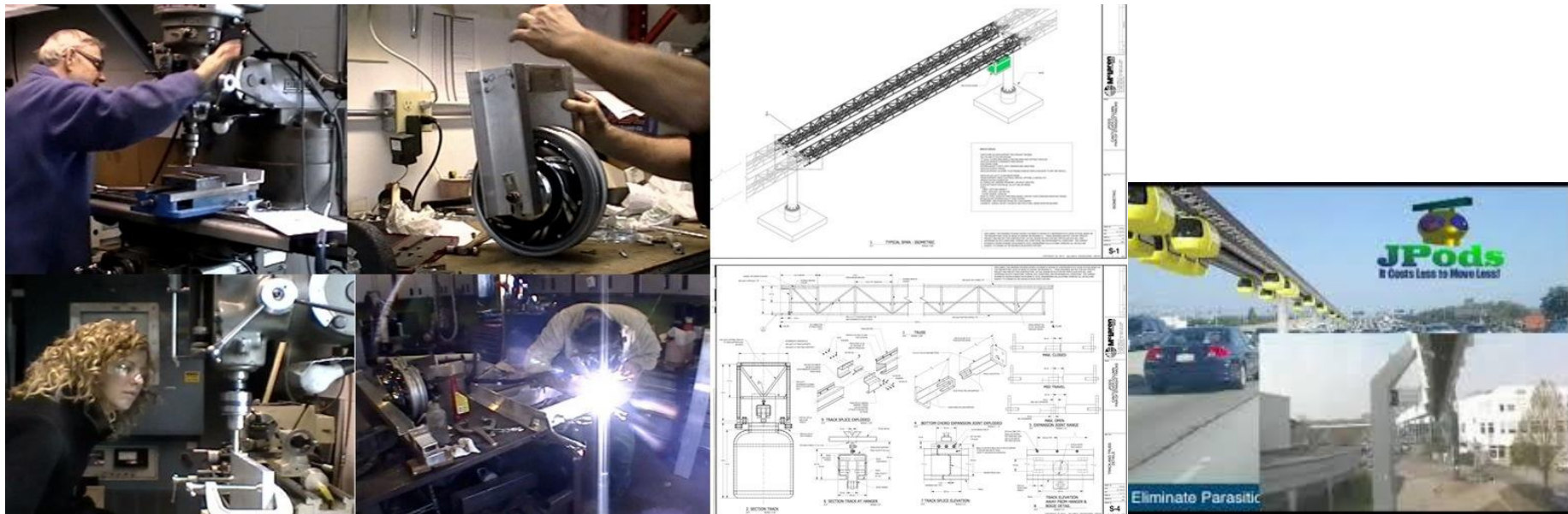
Estimate 50-60 manufacturing, engineering (design, planning & project management), and construction jobs for 4 months to build the 2.3 mile system with 6 stations based upon production of 20 foot prototype. Assuming 4 stations at LaGuardia Airport, 1 station at Shea Stadium subway station, and 1 station at Long Island Railroad station.

Employment During Operations

Estimate 37 full-time employment positions to operate a 2.3 mile PRT system with 6 stations

- 2 management positions
- 2 administrative positions
- 1 financial position
- 10 diagnostic/maintenance positions
- 20 station operators
- 2 general support positions

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People building the JPods structure units and creating the civil engineering documents to deploy the PRT networks.

About JPods

The company was started in 1999, and currently has 12 active employees (2 full-time and 10 part-time). Current ownership is private. The development of JPod's baseline technology was completed in 1999 and patent #6,810,817 issued in 2004 for the use of distributed, collaborative computer networks that move physical packets. In 2006, a 20 foot operational demonstration was deployed in San Jose, CA. JPods has existing Letters of Interest for potential PRT networks including customers such as Anshan, China; Kunming, China; Linyi, China; and Secaucus, New Jersey.

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MANAGEMENT AND BOARD MEMBERS

Bill James: Founder, CEO, Director. BS-West Point. Logistics implementation in the Army, manufacturing experience at Honeywell, and computational background creating statistical process control and process management software has prepared James to lead the realization of solar powered mobility. He also holds the patent to JPods' framework technology.

Gordon Israelson: Chief Technical Officer, Director. BS-West Point, MS-Physics, U. of Minn. A licensed Professional Engineer, power plant design and construction. Multiple patents, 6 Sigma certification, ASME member.

Megan Keller: Director of Documentation. BA-Hamline University. Versed in the clear display of quantitative information.

Frank Pao: Director. Principal Owner of Atlantis Energy, a solar manufacturing facility in Poughkeepsie, NY.

David Ray: Chief Financial Officer. BS-West Point. Extensive experience in financing startup companies.

Chuck Mahan: Director. BS-West Point, Retired Lt General. Expertise in large-scale logistics.

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Chuck Bratton: Chief Intelligent Systems. BS-University of Maryland. Experienced in multi-million dollar, multi-national software developments in publishing, manufacturing, and human interfaces.

Bill Saylor: Chief of Distributed Power. BS–West Point, MS-MIT. Member of the IEEE P1547 standards committee for distributed grid interconnection standards. Designed/installed distributed power projects using natural and fossil sources.

Mike Teske: Director and Design Team. Past President, Vekoma Rides USA (Vekoma is world's largest in-house design and manufacturer of amusement rides). Past Technical Director for opening 5 major theme parks, 110 major attractions.

Mike Cassano: Chief Software Development Officer. BS, MS University of Minnesota. Developed at Red Hat, BitCoin.

Steven Day: Chief of China Deployment. Securing contracts and financing in China.

Charlotte Vandervalk: Co-founder of the New Jersey Master Mobility Company. Retired Assemblywoman.

Michael Kates: Co-founder of the NJ MMC. Partner at Hackensack law firm and adjunct professor at Rutgers.

Charles Hundley: Co-founder of the Virginia MMC. BS-West Point, LLD-Washington and Lee University, Lawyer.

Nathan Melicharek: Co-founder of Rescue-Rail Mobility Company, President of Rescue-Rail. BS-UC Berkeley, MS-ODU.

Introduction of Personal Rapid Transit to India from Actis Infrastructure jointly JPODS

Company Description

Actis Infrastructure is a Private Limited company registered under company's act 1956

Actis is a great growing infrastructure developer with an excellence in core development in infrastructure across globe

A robust infrastructure that provides the level of availability and response necessary in a global business environment.

Actis infrastructure is an participating to build an efficient infrastructure setup can ensure a nations sustained economic growth

The company formed to fund the capital requirement of various infrastructure projects in the Groups Energy, Highways, Personal Rapid Transit and Evacuated tube transport technologies

Our public transit projects are: *Inspiring with innovations®*

Specialties: Actis Infrastructure is participating in Public transit and ET3 Projects on finance operate transfer basis in a Public Private Partnership, PPP model

Mission Statement

Our success is based on understanding the commercial, community and environmental aspects of every project, we have the ability to deliver challenging and innovative buildings that become the catalyst for a wider generation, making real differences to the quality of people's lives

We have four market, leading business in professional services, construction services, support services and infrastructure investment

Procurement Division

Integrity in all business relationships. Excellent talent. Innovative solutions. This is what you can expect from Actis. We custom tailor our approach and expertise to meet our clients' project requirements. Our engineering services include preliminary and final design, program management, and construction engineering and inspection.

Actis provides construction engineering and inspection services for roadway, highway, airport, harbor, transit, and bridge and building projects throughout the Midwest. Our construction personnel are committed to working with clients to control the construction schedule, budget, and Quality Control and Quality Assurance (QC/QA). We also establish and manage safety programs and customize construction management services to address the unique requirements of each client and project.

Our construction engineering and inspection services include:

- **Schedule and Budget Evaluations**
- **Construction Observation**
- **Value Engineering**

- **Constructability Reviews**
- **Project Scheduling and Permitting**
- **Quality Assurance/Quality Control**
- **Monitoring and Coordinating Daily Construction Activities**

Management and Board of Directors



Mr. Rajashekar B N

Chief Executive Officer

Is the Chief Executive Officer of the Board of ACTIS . He has been aiding in government relations, project exploration, strategic planning, and oversight of ACTIS office in India, which is based in Bangalore India. He has over 8 years of experience in Financial Services, and has expertise in Procurement. Is involved as specialist in Executing PPP Model infrastructure projects across Globe

Transport professional with almost 4+ years of experience in Urban Transportation assignments such as PRTS, Highways, Project Financing, and Integrated Mega Townships etc

PERSONAL RAPID TRANSIT DEPLOYMENT PLAN

Strong analytical skills to understand issues related to transportation projects such as Personal Rapid Transit system, pre-bid/post-bid traffic consultancy for highway projects, Parking analysis, analysis through scenario building.

- **Undertaking pre-feasibility/feasibility, techno-economic studies & detailed Project reports for PRT projects (willingness to pay willingness to shift analysis) Identification of public transport routing for cities, network principles with understanding of traffic movement pattern. Traffic forecasting techniques, future traffic flow projections.**
- **Undertaking traffic data analysis, traffic characteristics, traffic movement pattern, V/C capacity analysis, junction analysis, and detailed market surveys for PRT technology**
- **Preparation & floating of infrastructure proposals under various Public Private Partnerships techniques such as Swiss challenge method, BOOT mode, Annuity mode or Bond Financing etc. Meetings, presentations and one-to-one interactions with different state government agencies, development agencies, Ministers of states, state Chief Ministers.**

Mr. Raja Irwin

Managing Director

Is noted authority on finance, enterprise, business and technology development. Raja has practical application development experience in information system design, network and software architectures. He currently applies his technical expertise and business experience to offer organizational development, business re-engineering, technical consulting and capital formation, with special emphasis on green, clean. Environmental and water studies. have spent a good amount of time discussing economic strategies and modeling for solar projects globally. Analysis from feasibility levels, to detailed generation and expense models were the focus of their work together. Over Twelve years of experience in IT / ITES project management and mechanized in business analysis

Personal public transport and tourist attraction for cities

CONTACT US

ACTIS INFRASTRUCTURE PVT LTD

Inspiring with innovations

1/15. MOUNT JOY ROAD. BULL TEMPLE ROAD CROSS

HANUMANTHANAGAR. BANGALORE-560019

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JPODS city landscapes



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JPODS City landscapes

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