

JPODS FACT SHEET

10x

It requires a ten times benefit to drive a paradigm shift. In the niche of highly repetitive urban transport, self-reliant JPods networks stream resource to need on-demand while converting 90 cents of every dollar spent on transport into profit, customer savings, jobs and materials to build the networks.

JPods networks are overhead rails from which ultra-light vehicle move people and cargo using 1/10th the energy of cars, passenger trains and buses. Solar collectors over the rails gather 25,000 vehicle-miles of power per mile of rail per day. JPods are ribbons of power and mobility.

COMPANY DETAILS

- Company started in 1999.
- Patent #6,810,817 was issued in 2004 for technology surrounding distributed computer networks that transport physical packets in Personal Rapid Transit (PRT) networks using PodCars.
- Company founders are mostly West Point graduates working to end risks from America's oil dependence.
- Ownership: private.

FUNDING

- Self funded to date. Currently \$300,000 to get to building permits in Secaucus, NJ.
- Signed a Letter of Intent for \$1-10 billion to refinance completed rails.
- \$8 billion in Private Activity Bonds at FTA.

USE OF PROCEEDS

- Build theme park scale system in a commercial introducing the technology to the community.
- Establish "shovel ready" protocols.
- Cost Breakdown is estimated to be 15% labor, 40% materials, 30% regulatory, 10% marketing and administration, and 5% miscellaneous.

BUSINESS MODEL

- JPods' objective is to build the Physical-Internet™ with solar-powered, computerized PRT networks that provide circulatory systems for economic communities and move packets of people and cargo like the Internet moves data packets, highways move cars, etc. Similar to the Internet concept, these PRT networks will provide feeder and connector networks to existing rail, airports and road infrastructure.
- The initial target market is commuter range travel with payloads less than 1,200 pounds. The overhead tracks allow for bike paths to be created underneath the PRT network.
- The economic model is JPods, Inc. builds the networks and sells them to the Local Mobility Companies (LMC's) which are owned by private developers; the LMC's charge fares for the use of the system. The PRT cost per vehicle-mile is about \$0.06

versus the car cost per vehicle-mile of about \$0.56. The fare price will be set by markets.

- To achieve rapid deployment of the PRT network, the goal is to form strong allies and collaborative partnerships.

MARKET SIZE

The need is for 500,000 miles of solar-powered JPods rails to be logistical capillaries. This is about 4 time the 140,000 miles of freight rails that will be the logistical arteries and 1/4th of the 2 million lane miles of oil-powered urban roads that are failing.

Freight rail averages 480 ton-miles per gallon. Oil to power highways is failing. Oil costs have increased 500% every 15 years for the last 40 years. In 15 years a tank of gasoline will cost \$300. The banking system collapsed when a tank of gasoline hit \$80 in 2008.

PRODUCT DEVELOPMENT MILESTONES

- Established baseline technology – completed in 1999 and patent issued in 2004.
- Completed 20 foot PRT demonstration in 2006.
- Letter of Interest/Intent for sites: Kunming (China), Mall of America, De Anza College (Cupertino, CA), Lancaster (CA), NASA (AL).
- Find large scale users – in progress with Walmart, China municipalities, etc.
- Build commercial grade, regulatory approved PRT networks – pending capital funding.
- About 500,000 miles of PRT networks in the US can displace 70% of oil powered urban transport, saving \$600 billion per year spent to import oil; 8.3 year payback on entire network.

TARGET CUSTOMERS

- Feeder networks and cross connections to existing rail, airports, and other hubs. Start in Secaucus, NJ.
- China municipalities. Signed LOI for 230 km.
- Airport networks that connect terminals, hotels, and car rentals with the economic community.
- LMC's/Developers that will own and operate networks. Local interests should own local transport.

PROBELMS SOLVED

- **Oil Dependency:** eliminates dependency on oil energy to move people and cargo.
- **Congestion:** provides separate and additional networks to the existing road and rail systems.
- **Pollution:** renewable energy system that does not emit CO2 gas.
- **Safety:** existing networks have low injury rates, especially when compared to the higher injury rates of highway networks.
- **Time Saving:** average travel speed for JPods PRT is 30 miles per hour versus 24 for cars, 18 for trains, and 8-12 for buses.

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- **Efficiency:** watt-hours per passenger mile for JPods PRT are 127wh versus 1,033wh for cars, 900wh for trains, and 1246wh for buses.
- **Transportation Costs:** decreases the cost per vehicle ton to move people and cargo.
- **Construction & Operating Costs:** construction costs are estimated to be \$8-14 million per mile. Operating costs (power and operation) are estimated to be \$.06 per vehicle mile. Replacement costs are estimated to be \$.18 per vehicle mile.
- **Economic Productivity:** increases productivity, efficiency, and economic health.

VALUE PROPOSITION

- Provides low cost, efficient transportation for people and cargo.
- Provides the high quality service of a chauffeured car at a fraction of the cost or transport by bus.
- Deploys a self-reliant, renewable energy system for transportation of people and cargo and reduces dependency on oil.
- Helps communities and economies to prosper by providing efficient and clean transportation.
- Provides networks that are low cost to build and operate. JPods networks use 85% less energy than vehicles using fossil fuels, and the low vehicle weight radically cuts highway maintenance costs.
- Increases disposable income by decreasing transportation costs per family.

COMPETITIVE ADVANTAGES

- **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.
- **Product Design:** Vehicles hanging from overhead rails (as opposed to riding on tracks) employs superior physics, solves congestion issues in cities, reduces energy consumption, and increases ride stability and safety.
- **Patents:** Patent #6,810,817 was issued in 2004 for technology surrounding distributed computer networks that transport physical packets in PRT networks. About 50 more patents have been researched and identified. During initial deployment it is expected that many more patents will be identified.
- **Scalability:** There is a deep bench of extremely experienced leaders and managers contained in a proprietary database that can assist in rapid deployment of the JPods networks.
- **Market Readiness:** The markets are ready for local, community based PRT's due to the recent oil crisis and focus on independence from oil.
- **Hedgehog Concept: Passion** is for on-demand mobility and efficiency; **Best in the World** at on-demand commuter range transport of payloads less

than 1,200 pounds; **Economic Metric** is profits per passenger/freight mile.

- **Paradigm Shift:** Gladwell's book, "Outliers" documents that it takes about 10 years of preparation to drive a paradigm shift; JPods has been in existence for 10 years and has achieved this level of preparation.

COMPETITION

- **Morgantown, WV PRT** network is 9 miles long and has delivered 110 million injury-free passenger-miles since beginning operations in 1975. Built in response to the 1973 oil embargo, the network contains 18-passenger vehicles that are not cost effective due to high vehicle mass. JPods drives the vehicle mass toward zero to obtain low costs and energy needs.
- **ULTraPRT** (UK) Heathrow network opened in 2010 and has delivered 500,000 injury-free trips.
- **VectusPRT** (Sweden) is building in Korea.
- **Other small competitors** are MISTER (Poland), Taxi2000 (US) and several other small companies. ULTra is the only company with significant contracts including Heathrow Airport (UK) and City of Masdar (Abu Dhabi).
- **Large company** competition from Siemens, GE, etc. should be expected because of the large margins, large scale of the opportunity, and government interface.

STRATEGY

- Start small, execute well, iterate relentlessly.
- Delight customers, the fare box payers.
- Leverage theme park approach to give new communities experience, standardize JPods deployment practices, and establish safe and innovative regulatory practices.
- Focus on niche solutions. Do not solve the world's problem, solve someone's problem. Build dense networks in niches with paybacks of 1-5 years.
- Strive for at least a 31% network density (NYC subways) to make communities Economic Lifeboats, durable against oil price and supply shocks. That density saves families a car payment per month.
- Focus on the customer, fare box payer, versus government sources of subsidies.
- Provide a superior technology platform.
- Enlist strong local partners and alliances. Use ex-military networks. Leverage open source practices.
- There is currently no strategic supplier risk; materials and components to build JPods networks are commodities. Future prices and labor shortages will likely increase as demand for networks increase.
- The buyers (owner/operators) of the networks are expected to be private.
- Capital exceeding \$8 billion is available to support network expansion of "shovel ready" projects. Additional capital stated an intent to invest.