

Proposed \$25 Million Joint Venture

A \$500,000 equity Investment for 5% of the Smart Skyways



[See animation of back-to-back Stations](#)

SmartSkyways is a transportation solution that focuses on guided elevated transport with "smart" behavior and off-line stations. This innovation has the potential to revolutionize the way we travel, with a proposed budget of \$25 million over three years, to plan, publicly discuss and build a test track. The company's business model involves building these systems for a public-private partnership with the State of Colorado. The team behind SmartSkyways boasts impressive experience in real estate development, technology engineering, and prototype building. The key features include:

- * Multi-modal aerial easement 30' x 30' with guideway 20' high
- * Stacked pay zones with Fiber/HDTV and smart grid, AI Media
- * High-speed backbone (between cities) with off-line docking
- * Driverless circulators on dedicated paths linking to Skyways Stations
- * Automated Delivery of Cargo and mail transportation

SmartSkyways also envisions a futuristic high-speed, driverless, electric, and all-weather transport system at a cost of \$25 million per mile (before civil costs of fitting the guideways into the local areas). The technology includes 6-seater runabouts to 18 passenger buses, linear induction motors for highway speeds, and solar-powered guideways and stations. Where possible electrolysis will be used.

Goals

These funds will be used on Leg #1 for its soft costs preparing for the construction of 5 to 6 miles of one lane track. The soft costs mentioned above include research, planning, illustration, evaluations, [discussions](#), engineering, testing and legislation. These are all necessary to fund a \$150 million for this route in the Platte Valley. In addition, another \$150million will be allocated for the other smart infrastructures. All the construction funding is expected to come from revenue bonds based on user fees. Skyways is an integral component to the future development of a WORLD STAGE DISTRICT. It will provide linkage to about 1 million population from Golden along Colfax (leg #2) to downtown and this Ai Media Smart District without driving or needing parking. As the full [210-mile corridor](#) develops, a population of 3 to 4 million people will have convenient access to the World Stage District and to the 9 towns and 8 resorts in the mountains, then Skyways revenues will grow.

Money management

There are other ways to add to the funding: 1. Crowdfunding for the initial \$1 Million of so. 2. Philanthropic grants totaling \$3 million will be used to prepare a detailed *“Project Development Plan”* for city submission of Leg # 1. This plan will consist of [illustrations](#), evaluations, [discussions](#), engineering needed, costing, testing and legislation. 3. Convertible Debentures up to \$20 million in \$100,000 certificates. These funds will be due in 5 years giving providing the time for a \$6 million ¼ mile test track about the size of a high school running track. This track will test up to 6 chassis for command and control, switching, costs of guideways, length of docking ramps, merging and propulsion. 4. Construction funding for \$300 million and up. These will be 5-year notes averaging 6% but accruing during construction. 5. \$300 million in Revenue bonds pas off the construction loans and offers a 3% rate with 30-year amortization plus 50% of the surplus until bonds are retired then the State owns 100% of everything

Stations



Stations include
- solar windows
- solar windows
- solar windows
- solar windows

Types of Stations

Gallery of Station Animations

Free Standing
Costs \$250,000 and uses solar windows

Linked by Walkway
Stations can be linked with nearby building or parking

In Between Buildings/ Parking
Each station has at least one bay loading while another unloads. Activity centers may have many bays

Built Into New Buildings



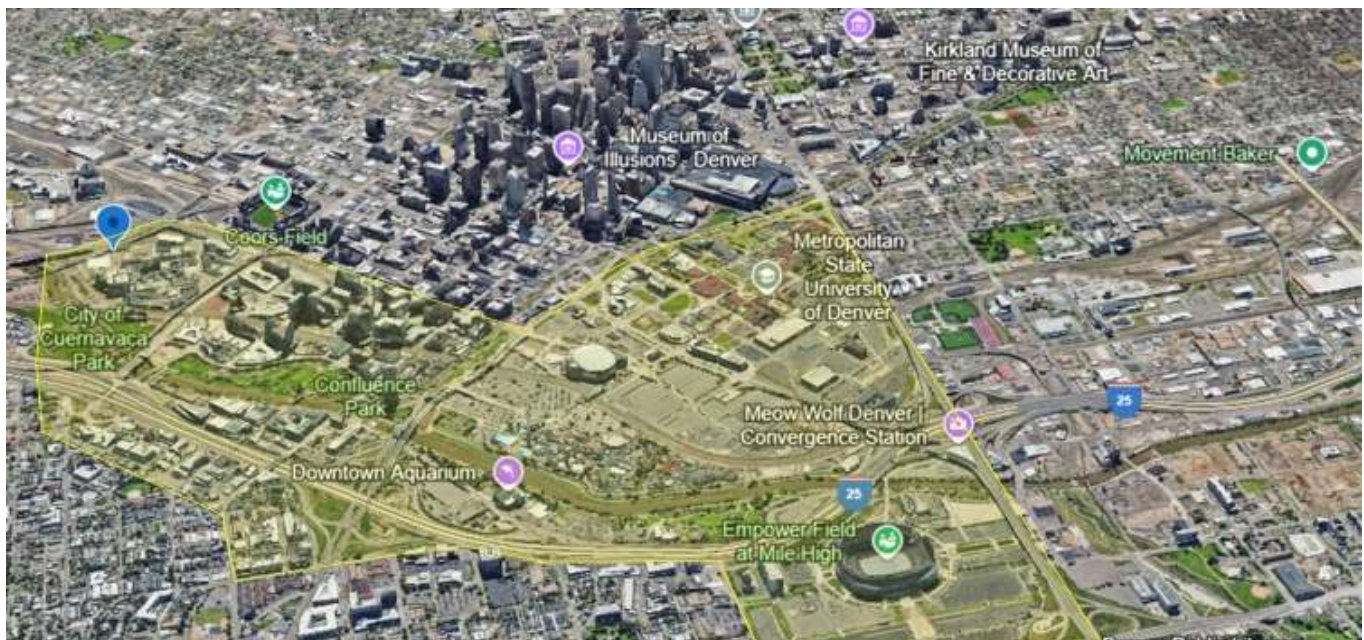
Typical Small Station with single bay



Study for a Distinctive Mountain Station

(see Smart Districts in column 3)

The 600-acre Platte Valley Rail Yard Redevelopment project





First Development will be in the Platte Valley [Animate Platte Valley Loop](#)



Multiple Redevelopment Sites at:

1. Stadium
2. Ball Arena
3. Kroenke Redevelopment
4. Aquarium (see slide 3 for rendering)

THE EMBARCADERO LOOP MEANING THE BEGINNING AND END OF A TRIP UP I-70 TO MTS.

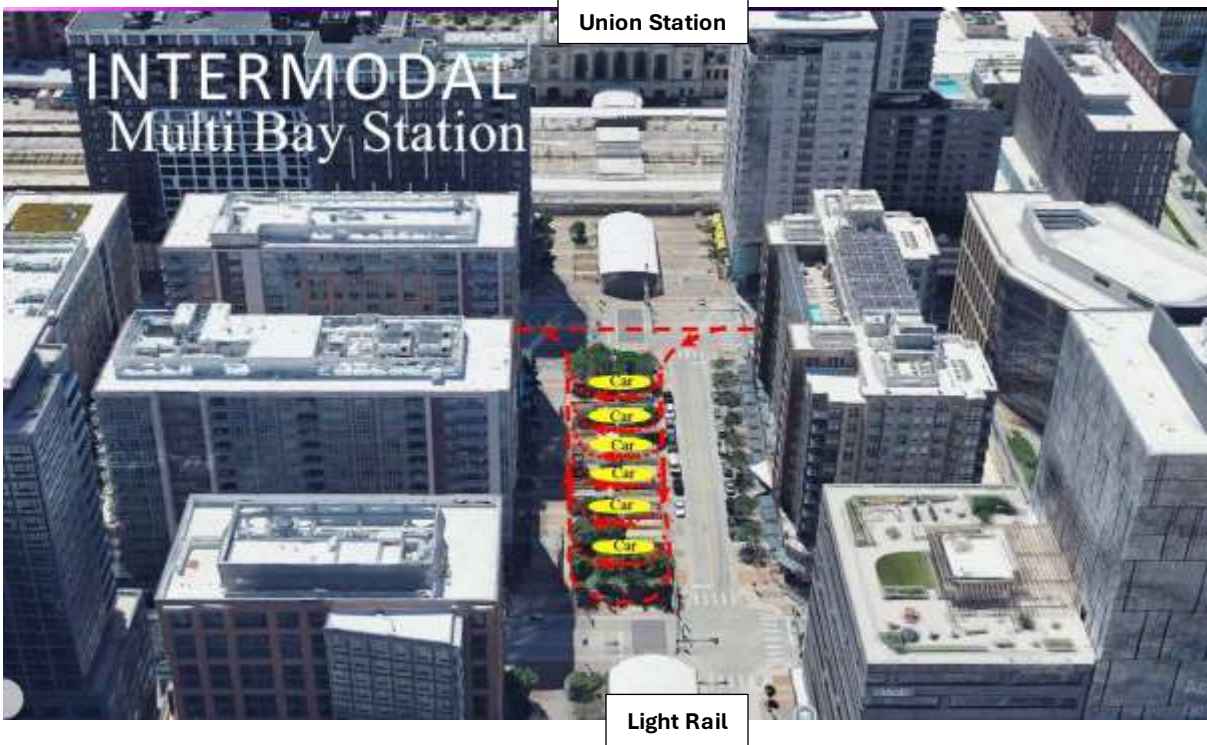
This is a one-way loop for 5-miles that connects 9 stations serving all the activity centers through out the Platte Valley. It also provides a shared connection into downtown Denver at the Union Station for bus, light rail, cars, taxi, Trains and Mall Trams.

9 Stations at:

1. Intermodal
2. Baseball 25,000 seats
3. Cuernavaca Apts- 500 units + park
4. REI Westbank- Commercial
5. Aquarium
6. Kroenke River Project
7. Broncos Stadium District -75,000 seats
8. Auraria Campus – 40,000 students
9. Kroenke Ball Arena project 15,00 units

[Slideshow](#) Leg # 1 in the Platte Vally

The Intermodal Lies between the Light Rail Station and Union Station



Platte Valley 9 Smart Districts



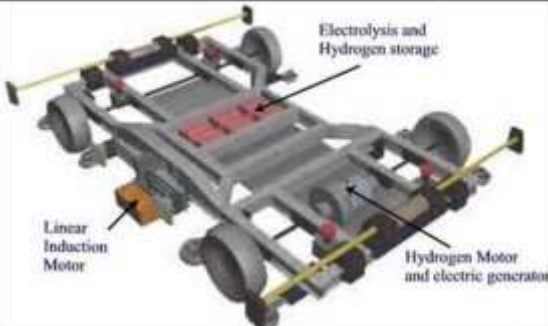
Skyways Component Parts

These images and animations are all work done 20 years ago

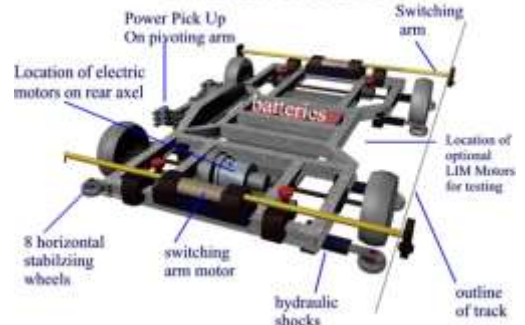


6 Passenger car like seats

How Cars Generate Their Own Propulsion



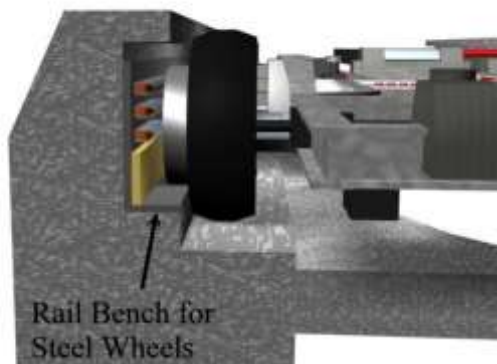
CHASSIS FUNCTIONS



75-foot Guideway Section



Switch



Rail Bench for Steel Wheels

Our Guideway Sections Are Modular

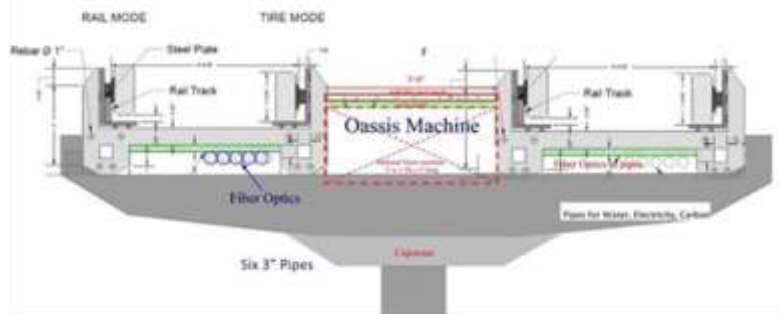
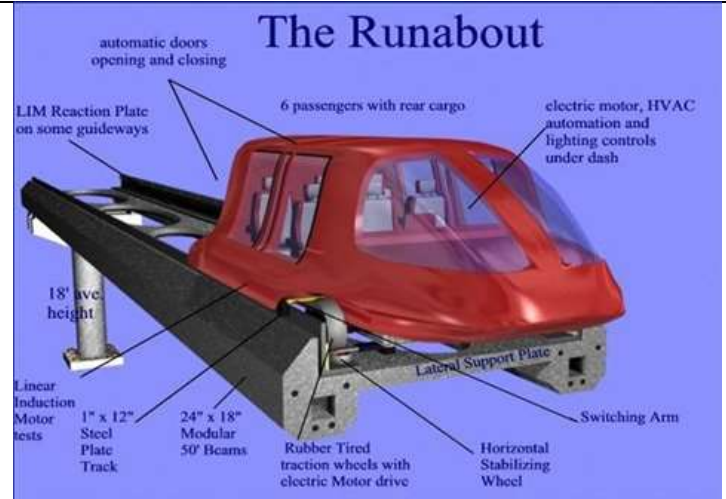
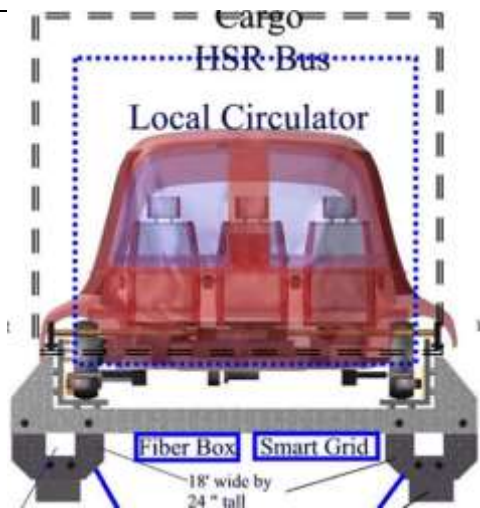
This allows for expansion, replacement, precasting and even relocation. Ice, snow and rain have little place to build up.



Straight

Curved

Switch



Section with Oasis Machine Generator



Dual Guideway with Solar up and Fiber Optics Underneath



Ramps can go anywhere



A Cargo Solution

By selling travel info & reservations

This also helps tourism while earning extra money. This is a new area to be explored with mobile technology.



Travel Commerce



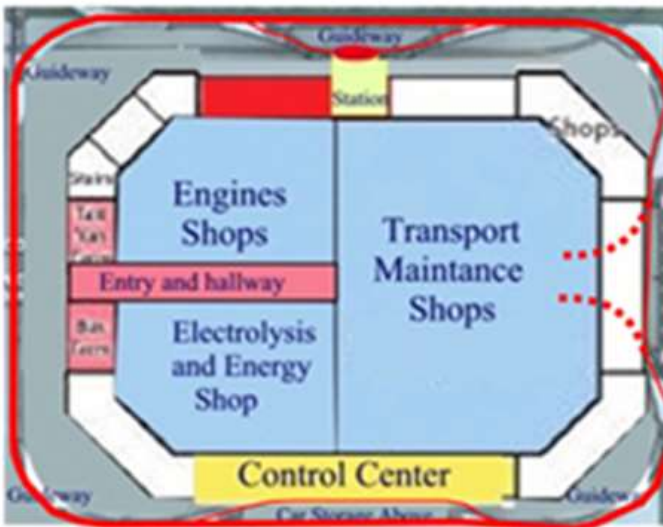
Internet Ports for each Seat and Station Kiosks - growing up to 100,000 users per day over time

Research Center Location at the back of Auraria Campus



This is a campus of 40,000 in town students comprising 3 Levels of University: 1. University of Colorado focused on advanced study, 2. Metro University focused on intermediate education and 3. Community Collage preparing entry level students with two year of college and a cheaper beginning. Since it is new knowledge, we think the research Center should be a JV with University of Colorado, and a venture with Metro University teaching this new knowledge to the world, thru this public system.

This is a great spot for sharing this new knowledge throughout the Auraria Campus, and then the other world stages but also throughout the 210-mile corridor as it gets built. When this happens the network of 40 databanks will report their machine learning findings to the research center and grow a smart Colorado. The red dotted line above is a maintenance cutoff route from the main line meant only for the research center. To win the hearts and minds of the many stakeholders, we need to show why this is the highest and best use for this property.



Although these transport ideas have been around for 30 years and constant improvements have been made to driverless software, no one has yet built anything like it in America, especially with integrating smart infrastructures with it. The water from air is about 10 years old as is Carbon Capture, but the Ai technology is still fairly new and has not been concentrated into a "Stacked Pay Zone" corridor before. A research center is needed to stimulate the smart technologies but also to collect the Machine Learning from the 25 Special Districts that create it.



The Skyways component of the \$10 billion National Experiment represents a [\\$5 billion investment](#), with the remaining five smart-infrastructure systems making up the other half of the program at roughly \$1 billion each. As an initial illustration, Skyways Leg #1 covers approximately five to six miles, and at an estimated \$30 million per mile, the first segment is a \$150 million project for just the Skyways portion. Bingham Labs recommends a public discussion to validate the assumptions behind a transportation system funded primarily through user fees rather than taxes. To illustrate a \$1 billion revenue bond at 3 percent interest over a 30-year amortization schedule produces an annual debt service of about \$30 million, and the central financial question is how to structure a mix of high-volume subscribers and occasional riders so that user fees reliably cover this obligation while still generating a surplus.

The model envisions frequent users subscribing at a discounted monthly rate in exchange for unlimited ridership, while occasional riders pay a higher per-use fee. The viability of this structure depends on determining how many subscribers—drawn from the one million residents living within a mile of Legs 1 and 2—would be willing to pay approximately \$150 per month for unlimited travel between downtown Denver and Golden. Bingham Labs' prior analyses indicate that this blended user-fee approach can support the debt service while still producing a surplus. Early modeling suggests a return on investment of five to ten percent within the first five years of operation, driven by immediate demand from mountain and Front Range passengers traveling to and from downtown and the AI Media District, all of whom naturally feed into Leg #1.

As adoption increases and the surrounding population becomes accustomed to the convenience and reliability of Skyways, the return on investment is expected to strengthen. Long-range projections indicate that ROI could double within ten to fifteen years and potentially triple within fifteen to twenty years, supported by population density, commuter patterns, and the system's role as a primary mobility spine for the region. Over time, Skyways becomes a stable, self-funding transportation asset that not only services its own debt but also generates meaningful surplus revenues for the State, the builders, and long-term capital partners. The best part is the ripple effect which we project at 10:1

Skyways Animation Studies



<https://lloydgoff.com/03182.mp4>



[Platte Valley Loop](#)



[Airpark Animation](#)



[\(16\) skyway5 - YouTube](#)



ssOverview-1.mp4



R&DStation-1.mp4



FUTURE5.mp4

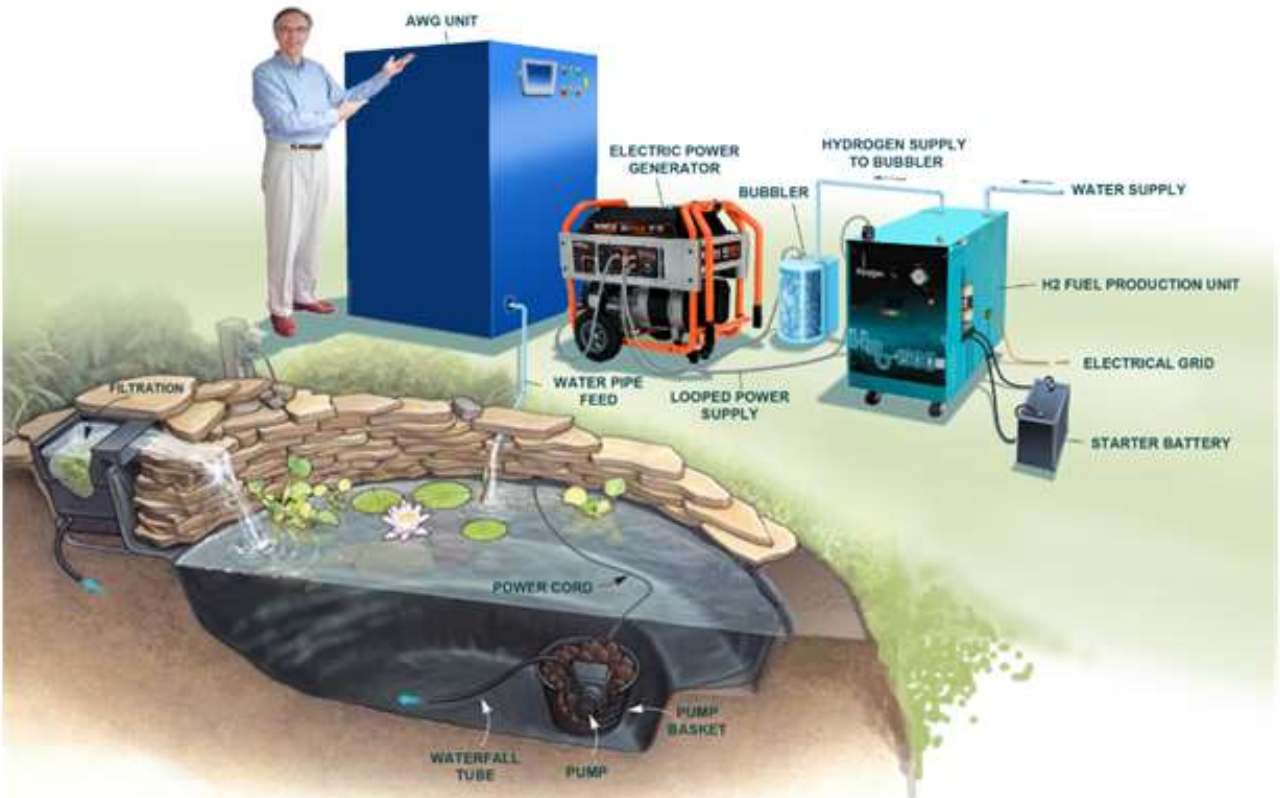


SectionSmall.mp4

Electrolysis Propulsion Kent Bingham Left His Research Papers

The drawing below is a schematic for an Oasis Machine to generate electricity needed to capture water vapor through sucking fans, condensers and filters. Learn more at: https://www.lloydgoff.com/web/OASIS_MACHINE_TECHNOLOGY.pdf

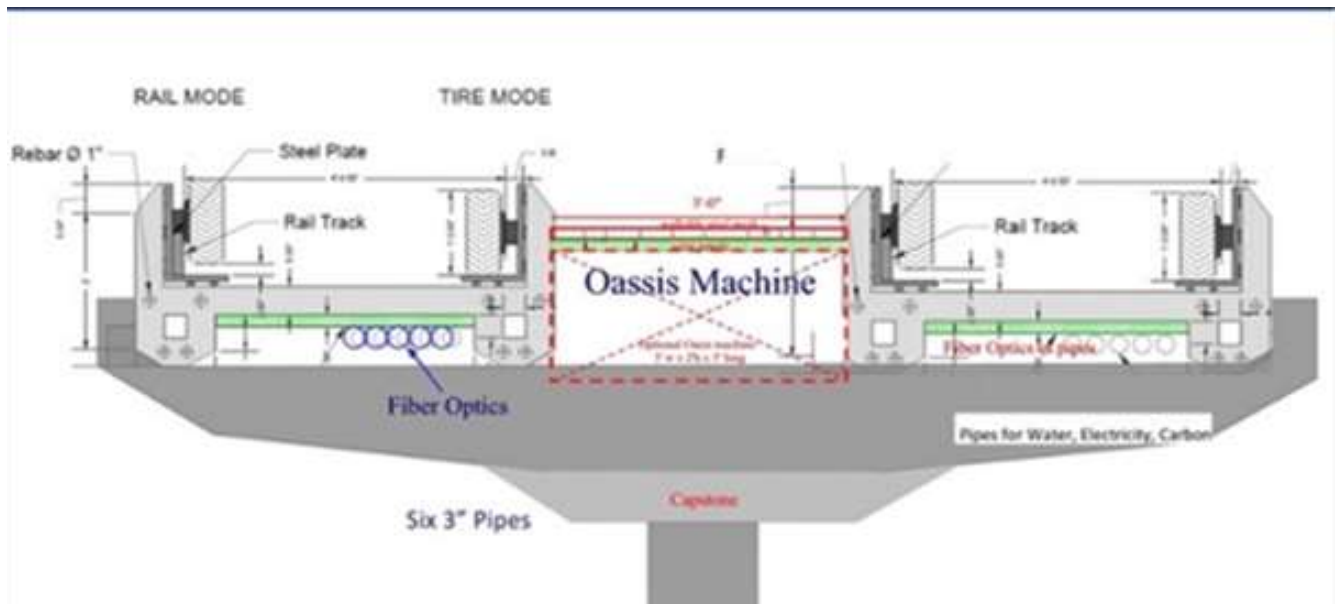
OASIS MACHINE



The applications for use of this technology are endless. Someday it can scale power appliances, homes, landscaping, wildfire protection, crops, commercial and even industrial uses. It is planned as the power source for each of our smart infrastructures.

This is an illustration for using Electrolyzers for propulsion.

They provide hydrogen to a combustion motor that generates electricity like the alternator on your car. The hydrogen comes from splitting one gallon of water with an electrical current. These can be used to provide the electric current to a linear induction system of the track. In order to get over the mountain passes in all kinds of weather, the linear induction system does not depend on traction from the wheels as convention motors do. It can go up the steepest hills and then act as a brake going down.



How Power Works in a Linear Induction Guideway

1. The guideway provides the *propulsive force*, not the vehicle's electrical power.

In an LIM system, the guideway contains **stator coils**. When energized, they create a **moving magnetic wave**. The vehicle carries a **reaction plate** (aluminum or copper) that the magnetic wave pushes against. So, the guideway is providing **force**, not electricity.

2. The vehicle still needs its own onboard electrical supply.

Even though propulsion is handled by the guideway, the vehicle still needs power for:

- AI systems
- Sensors
- HVAC
- Lighting
- Communications
- Safety systems
- Door controls

This power typically comes from **batteries**, **supercapacitors**, or a **small onboard generator**, depending on the design.

3. The guideway's electrical system is isolated from the vehicle.

There is **no physical electrical contact** between the vehicle and the guideway. This is one of the advantages of LIM/LSM systems: The only interaction is magnetic

- No third rail
- No overhead catenary
- No arcing
- No mechanical wear
- No conductive contact hazards

A Simple Analogy

Think of the guideway as a **conveyor belt made of magnetic fields**. It moves the vehicle forward, but it doesn't power the vehicle's internal electronics.

✂ What This Means for Skyways


Our design — with a visible LIM transmitter, induction plate, and tire-rail hybrid undercarriage — fits perfectly with this architecture:

- The **guideway** supplies the *moving magnetic field* for propulsion.
- The **vehicle** carries its own low-voltage electrical system for onboard functions.
- There is **no need** for a powered rail or third-rail system.
- Safety and maintenance costs drop dramatically.
- The system remains quiet, clean, and weather-resilient.

This is exactly why LIM-based systems are so attractive for elevated guideways.

New Transportation Design Talent Is Coming to Bingham Labs

Bingham Labs has engaged Eyoub Kahn as head of his company CONCEPTUAL DESIGN GROUP to be our Transportation planner and submit our Concept plans to the State/City. CDG creates unique architectural environments that entertain, stimulate and inspire the public. Our industrial design work has established a transportation track record designing exciting vehicles, products and systems that are functional and efficient. CDG represents excellence in design on a global scale. The initial task is to illustrate the full scope of the proposed 210 miles and then to focus of Leg #1. It could be possible to build a test track research center in the Auraria Campus.

	
<p>A Motorized wheel with Airless Tires</p>	<p>Driverless Circulators</p>
	
<p>A Driverless Circulator Planned Stop</p>	<p>A New Chassis with Electric Generator</p>

Planning Capability



Our Client base

Over the last two decades, we have done projects for Major Corporations worldwide. Some of our partners in progress have been:

- The Walt Disney Company
- Universal Studios
- Time-Warner Entertainment
- MGM Grand
- AT&T Systems Integration
- JVC Computer Products
- Ford Motor Company
- Boeing Aerospace
- SpaceHab
- NASA
- The Mandalay Bay Resort
- United Arab Emirates
- Government of Hong Kong
- CalTrans
- City of Irvine
- City of Anaheim
- WATG International
- HOK International

