



Transit Consultants & Engineers

Intersa Traisit Solutions!











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OUR CONTRIBUTION

Sky Train Corporation's (STC) robust Overhead-Suspended Light Rail (OSLR) system fits admirably into the scheme of most transit projects. Overhead-suspension brings benefits that existing or light rail technology cannot offer whether elevated, at grade, or underground. These innovations represent the first major change in rearranged light-rail technology in 50 years. <u>Operating cost savings</u> due to automation are 40% with <u>energy reclamation</u> of 80%. <u>Construction cost & time is also reduced</u> by automation, <u>use of standard rearranged components and manufacturing for quick installation</u>. Our system will rule future transportation for high-speed, security, and Smart Growth. The <u>service for passengers, combined freight, and containers to intermodal destinations is greatly improved</u>.

We have been asked to build a "Ride-able Interactive Energy System" at a science museum that was budgeted for three years. See NEWS release Fox 13, presentations at <u>www.skytraincorp.com</u>.

Sky Train Corporation is a premier developer of rail and monorail systems offering to operate with partners listed below and other partners in joint ventures or Public/Private partnerships. STC engineers have experience in container handling (design, build, operate) and in manufacturing of automation equipment. We have devoted over 20-man years to our innovations. STC's concepts **use standard, off** the shelf components from modern light rail or automotive. This greatly improves performance and allows UTILIZATION of the EXISTING TRAINED rail & automotive personnel AND TECHNOLOGY.

Simply, we re-engineer into an overhead-suspended system that incorporates solutions to nature's and man's extremes. Sky Train's STC100W offers transportation capacity exceeding subway CAPACITY to move people, with shorter trains reducing station length by 1/3 and public travel time and distance by 45% on boarding. THIS IS A NEW LEVEL OF SOLUTIONS FOR TRANSPORTATION.

OUR MISSION

Sky Train Corporation was originally funded in part by Florida's Technological Research Development Authority (TRDA). We have completed a Department of Energy (DOE) grant as a joint initiative with The Florida Solar Energy Center (University of Central Florida). We have design support from NASA through a Space Alliance Technology Outreach Program (S.A.T.O.P.) project and evaluated <u>STC100W/150:</u> <u>http://contest.techbriefs.com/2015/entries/automotive-transportation/5253</u>. STC products were <u>peer</u> <u>reviewed by the National Science Foundation</u> and <u>shortlisted by Consultants gaining international</u> <u>recognition.</u> We are a private company with 28 stockholders. Our patent protection with 63 claims covers three advanced systems protecting our concepts; an additional patent is pending since August 2013.

This is a best fit for Smart Growth offering enhanced technologies. We focus on conservation and efficiency and embrace sound growth principles. This alternative transit mode helps control sprawl, improves economic competitiveness, mitigates pollution, and fits the 21st Century model to <u>revitalize our cities.</u> It allows connecting with low ridership <u>rural communities</u> or "feeder", as <u>well as congested urban areas</u>, and provides intermodal service to existing rail. In 2012, the 8 largest development banks announced funding of \$175 billion over 10 years to reduce auto proliferation; STC systems best fit this Climate Change Solution serviced by future automated vehicles, <u>IS YOUR LOCATION FIRST?</u>

In short - Sky Train provides a new format of a versatile Overhead Light Rail System with increased passenger comfort, efficiency, high average speeds, and automated freight loading for added revenue. STC structures use about 4% of the ground space with semi-automated offsite manufacturing. They can be erected quickly with minimum disruption to the environment, residents, or need for utility relocation.

OVERHEAD-SUSPENDED LIGHT RAIL (OSLR)

Combination car adapted for automated container handling at right

A major development in freight container movement - the spreader is substituted for the passenger vehicle car shown above

REWARDS AND BENEFITS

The Sky Train System:

- · Descends to ground level if necessary
- · Safety: Vehicles are locked in the supporting structure
- "Double Super-elevation" gives high speed to vehicles, reducing size of fleet, gaining superior service
- · Swings on curves for passenger comfort allowing over 2 times the speed see our shareware AP!
- · Providing bottom and side access gains ease of freight interchange
- · Operates above congestion insuring scheduling and fast-unimpeded service
- · Designed to continue operating in high winds, sand storms, and flooding
- · Suspended, passes above all traffic and land uses, allows low stations which reduces costs
- · High speed, high capacity transit service, no imposed speed limits
- · Can climb twice the rate of the maximum suggested for highways (to 13 degrees)
- · Uses standard light rail components, performance tested in existing services
- Preferred electric operation ensures good air quality, could be hydrogen powered
- · Components are mostly standard off the shelf, results in low cost due to competitive bidding
- · One Sky Train OSLR track transports the equivalent of nine automobile lanes
- · Sky Train uses 80% less power than most rubber-tired monorail systems or automobiles
- · Can be totally automated, lowering cost, using existing IIOT railway or other control systems
- · Can also be designed for heavy container freight or light duty systems for airports and theme parks

About Sky Train Car Designs:

- · Cars can be 13.3ft (4m) or wider and 40ft (12m) long, 6 across seating high capacity and comfort
- Single cars up to full-length trains offer transportation capacities exceeding modern subways
- · Wide-door level access for handicapped, bicycles, and baggage trolleys
- Level access offers double passenger loading rates compared with steps
- · Cars and stations can be air conditioned for comfort

About Intermodal Stations:

Platform levels at any height

Safety net protects anyone falling from Sky Train platform

An architect's dream; an economical suspended mode, helping dot the "i" in intermodal

System may be configured for malls, airports, or parks using corridors, cuts, or tunnels

LONG TERM EFFECT

- \cdot Creates a recognizable transit "icon" where the system is built
- · Enhances better promotion of shops with view from above
- · LOW CARBON FOOTPRINT attracts investor money & encourages redevelopment
- · Convenient and fast relaxed transit; more time for business and tourism
- · Increasing economic Smart Growth and Transit Oriented Development (TOD) for Smart Cities
- \cdot Mass transit can reduce parking requirements, especially for employees on company grounds
- · Coordinates best with improved land use planning and rearranged bus service

SKY TRAIN CORPORATION SYSTEM DETAIL:

The STC100 has been successfully peer reviewed and included on prestigious short lists of solutions. The STC150, with slight revision, can handle the movement of freight containers.

The SOAR300, designed for low cost structure and high efficiency, is a solution for low ridership locations. We, as technical consultants, provide custom solutions for each client creating partnerships and developing OSLR service. **A CLIMATE CHANGE SOLUTION** we define routes,

capacity, sizes, speed, station locations, and perform design of transferable tooling, team, and vendor selection. See: <u>http://contest.techbriefs.com/2011/entries/transportation/1318</u>

Sky Train **favors elevated systems that are mass-produced** serving the international market. We can design to carry automated containerized freight as a revenue bonus. We own tooling to start the next job, which is movable to the next qualified existing manufacturing partner.

Sky Train's **suspended designs** allow the **elimination of many devices** such as: rubber tired stabilizing wheel sets, energy intensive steering systems, and complex tilt mechanisms. We are designing to use renewable energy and eliminate power lines at \$1/2 to 2 million per mile resulting in smaller sub-stations and reduced mechanical complexity; all reduce weight and cost.

This suspended design gives passengers closer proximity to the ground by:

- Directing the rider's viewing out and downward to enhance security and retail sales. It also fits within the Climate Change, Smart Growth and Livable Community model.

Our main features make use of the ability to:

- Utilize Air Rights over community right of way on roads, rivers, toll roads, or railroads.

Our icon at left depicts batteries or capacitor flash charging units using a computerized buss that monitors vehicle functions, exchanging kinetic and potential energy, constantly monitoring safety for every start/stop cycle similar to Tesla Motors, GE, Siemens, Honda, Mitsubishi, and others. ET: http://contest.techbriefs.com/component/content/article/1461

STC's elevated structure reduces passenger transfer distance, utility relocation costs, traffic impact, and length of construction

time. By eliminating corridors and drainage it no longer divides communities further enhancing land use. <u>The structure becomes a micro-grid</u> also protect against lightning strikes, housing fiber optics, CCTV, other gas, fluid conduits, and street light installations. **The structure** <u>reduces the impact of terrorism, earthquakes, sand storms, or floods</u>. It not only provides a comfortable visual experience, but also allows rescue and supply after a catastrophe. It is ideal as a stand-alone transit loop or as a <u>feeder system for Airports to planes, parking, rail & intermodal transit networks.</u>

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