



IMAGINE NO MORE TRAFFIC

IMAGINE NO MORE SQUEEZING IN



# CYBERTRAN INTERNATIONAL

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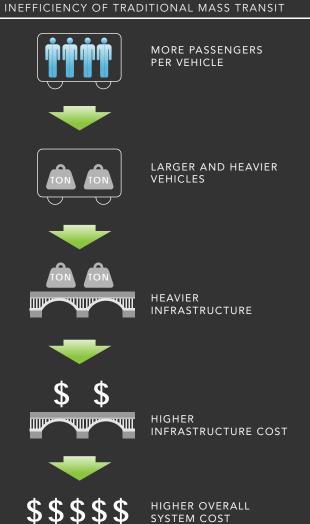
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## LOW COST

CyberTran is an automated system of individual, electrified, small (~20 passenger) rail vehicles. The smaller CyberTran vehicle size reduces fixed costs. More than 10 times lighter than conventional "light" rail, the vehicles run on narrow elevated guideways, which can be mass produced offsite, reducing infrastructure cost and construction time. Lower wait times mean smaller stations, further cutting operating and fixed expenses. The CyberTran design also reduces maintenance costs. Service tailored to demand reduces costly empty vehicles common in conventional mass transit systems. Nonstop service further reduces vehicle wear and tear, since stopping and starting are the energy intensive, high wear portion of the trip. These savings enable CyberTran to be built and operated without subsidies in many cases.

## SAFE

Elevated guideways do not interfere with automobile, bicyclist, pedestrian, and animal traffic. Collision avoidance systems and grade separation ensure the highest level of safety. CyberTran installations reduces automobile usage, and the numerous associated external costs including: traffic congestion, collisions, dependence on foreign oil, social inequity, land use, stress, and respiratory illnesses, amongst others.



CONVENIENT

There is no fixed train schedule. CyberTran vehicles wait at stations for passengers, rather than the other way around, so wait times rarely exceed five minutes. A central computer intelligently routes vehicles and groups passengers in response to user demand. This and offline stations enable nonstop service in spite of high station frequency. The result is average speeds higher than conventional stop-and-start transit.

Automation also makes possible round the clock operation. Instead of a single line system, the combination of small vehicles and offline stations enables flexible corridor alignments, tailored to user needs.

Travel times are designed to be minimized, and all passengers can expect a quiet, safe, and comfortable seat for their trip.

## SUSTAINABLE

Steel wheels, regenerative braking, and dynamic allocation of system resources make CyberTran very energy efficient. Running on electrical energy, CyberTran emits 98% less greenhouse gases than cars per passenger mile. Studies estimate that CyberTran vehicles use 43 times less material resources per passenger mile than an automobile over the lifetime of the vehicle. CyberTran can be powered by solar panels over the guideway and in the stations. CyberTran

was nominated in 2007 for the first World Clean Energy Award in the area of Transport and Mobility.



## DEVELOPMENT TO DATE

The CyberTran system was created by Dr. John A. Dearien, Ph.D., at the Idaho National Laboratory during the 1990's. Since then, numerous development milestones have been achieved:

Track stability up to 60 m.p. Curve self-steering capability High speed simulation Vehicle actuated switching Drivetrain configured Gradability of 10% Control and communication system

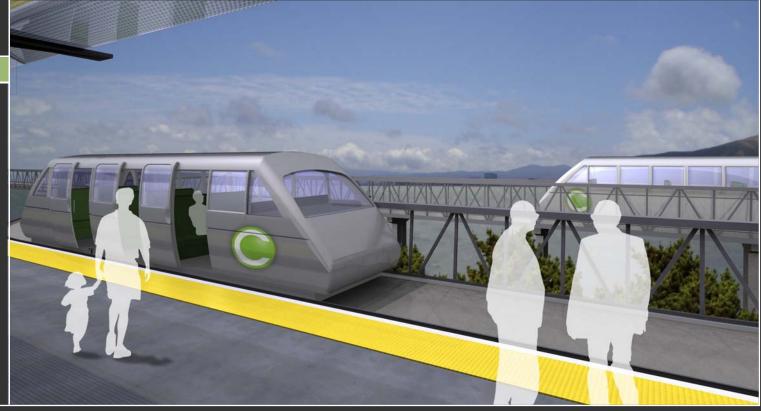
A final phase of development and testing is underway and expected to be completed within two years, after which the first system can be installed.

## APPLICATIONS

### Low Speed (30 MPH or Less)

Initial CyberTran installations will be in low speed applications including within national parks, universities, real estate developments and intermodal connectors.

Subsequent CyberTran installations will be in medium speed applications including urban areas and less dense suburban geographies in markets typically served by light transit rail and commuter rail.







## Medium Speed (30-80 MPH)

### High Speed (80-150 MPH)

The CyberTran system has been designed for high speeds from its inception. Studies have confirmed technical viability. Applications include linking local CyberTran networks with high speed intercity lines.