



Transport Solutions for People, Products and Data

SkyTran In Review

Specifications & Benefits

CONVENIENCE: SkyTran is on-demand—no fixed routes or timetables. It's just like your automobile. Vehicles are waiting for you whenever you need one and they take you straight to your destination without wasting time stopping at each and every station. A passenger keys in a desired destination address into a terminal at the originating portal.

EASE OF USE: No need to drive, vehicles are automatic. More affordable and safer than driving, much faster than auto, bus or light-rail.

VEHICLE CAPACITY: SkyTran vehicles can accommodate up to 2 people or 1 person with a luggage capacity equal to airline travel. Vehicle designs can accommodate special ADA needs.

SYSTEM CAPACITY: A single guideway is equivalent to 3 lanes of freeway traffic running at peak capacity. Anytime maximum capacity for a single guideway is 14,400 passengers per hour. SkyTran carries passengers in a continuous stream on a non-stop mainline unlike light rail which carries passengers in bursts where everyone stops at every station on the route. A stopping SkyTran vehicle does not cause other vehicles to stop, the vehicle branches off from the mainline and decelerates at an off-line line stop where passengers disembark.

SPEED: 100 miles per hour cruise speed non-stop in a city, 150 miles per hour non-stop between cities.

SAFETY: Elevated guideways insure there is no possibility of collisions with cars, trucks, pedestrians, children, animals or road debris. SkyTran vehicles move on a single guideway going only one direction—there is no risk of head-on collisions. Computers and sensors monitor vehicle spacing and speed for collision avoidance and each vehicle is enabled with safe high-g emergency braking. Compared to auto travel, there are no intersections where accidents can occur (75% of auto accidents happen at intersections), no dangerous passing or arbitrary lane changing. SkyTran is all-weather and unlike cars cannot slide out of control in rain, ice or snow. SkyTran can safely stop 10 times faster than a car. Derailments are impossible as the motor/maglev vehicle assembly is physically "captured" by the guideway.

COST: Under \$10 million per installed mile including vehicles.

ENERGY EFFICIENCY: Each electric powered vehicle gets the equivalent of 200 miles per gallon. This is achieved by using no-contact, no-friction magnetic levitation bearings, a light weight, aerodynamic vehicle profile and regenerative braking technologies.

MAINTENANCE: A SkyTran vehicle has a mechanically simple, solid state design. Maglev means there's one moving part—the vehicle hovering down the guideway. There are no wheels, bearings, hydraulics, pistons, valves, tires, or linkages to fail resulting in very low maintenance.

ENVIRONMENTAL IMPACT: SkyTran has minimal environmental impact. Because there are no wheels, the vehicles travel almost silently and without vibration. Compared to an equivalent capacity three lane highway or a lower capacity light rail system, SkyTran has minimum visual impact.

LAND USE: Of all transportation options, SkyTran has the least intrusive right-of-way requirements. No expensive, destructive right-of-way acquisitions required, just easements on existing sidewalks. The installation footprint is only as large as the size necessary for the placement of standard utility poles that support the guideway.

INSTALLATION: No heavy digging, disruption or relocation of utilities and roads for installation. SkyTran's lightweight design enables installation on sidewalks, attachment to buildings, routing through shopping mall interiors even direct access to gates at airports.

ACCESSIBILITY: A mature 3-D network of SkyTran stops in a city would enable easy access to the system requiring a short walk. Stops are spaced approximately 1/8 to 1/4 mile apart. SkyTran has no large "stations" like those used with light rail. SkyTran is accessed by way of small portals or "stops" like a bus stop, that are conveniently sited through neighborhoods, cities and regions. The system can be accessed inside office buildings, hotels, malls, schools and airports.

PERSONAL CHOICE: SkyTran passengers always have the option to veto a particular vehicle due to sanitation or other issues.

SECURITY: The whole idea of SkyTran is to empower the passenger to have the personal freedom to select time of departure and destination. You never have to share your vehicle with anyone. Should problems arise, the system is programmed to divert a vehicle for immediate emergency intervention. SkyTran provides privacy, safety and personal freedom.

COMFORT: Vehicles are air conditioned and have entertainment and vehicle-to-vehicle communication options. In normal operations vehicles never accelerate/ decelerate at more than 1/2 g—well within human body comfort zone.