Demonstration of the Intelligent Transportation Network System (ITNS)

ITNS is a totally new form of public transportation designed to provide a high level of service safely and reliably over an urban area of any extent in all reasonable weather conditions without the need for a driver's license. ITNS maximizes ridership; minimizes costs, energy use, material use, land and noise; and emits no air pollutants. In many applications, <u>ITNS can</u> <u>be built and operated at a profit</u>. It is a "firstin-the-world" system, designed to operate in a wide variety of applications. It has been called *"An Essential Technology for a Sustainable World."* This is ITNS!

Off-Line Stations to permit nonstop trips, travel with <u>no time sacrifice</u>. Minimum-size vehicles to permit low-cost guideways up and away from traffic. Fully automatic control for safe, reliable, high capacity. Vertical chassis for minimum-cost guideways with minimum visual impact. Linear electromagnetic motors for <u>all-weather</u> maximum capacity.



J. Edward Anderson, PhD, P.E. has worked on the technology, planning and marketing of ITNS for decades. He has developed detailed plans both for the demonstration and for projects that will follow, and has become known internationally as the world leader in this type of technology. His plans will be available to the engineering team in a three-volume, 1500-page book that describes all details. Volume 1 can be downloaded from www.advancedtransit.org/Library/Books.

The demonstration needed to open a very large market consists of an oval elevated guideway with one off-line station and three vehicles, which will operate at speeds up to 35 mph. The total guideway length is about half a mile and the system will occupy about 12.8 acres of land. This demonstration is sufficient to answer all technical questions and will give potential buyers a chance to "kick the tires."

To enable us to proceed as quickly as prudent, the engineering work required has been divided into the following 12 simultaneous tasks, each of which can be accomplished by an engineering team skilled in a specific type of engineering, and thus is easily available. The project will be directed by Dr. Anderson.

Management &	Chassis Design	Control	Civil Works
Systems Engineering		Software & Hardware	
Safety & Reliability	Guideway & Posts	Propulsion & Braking	Testing
Cabin Design	Guideway Covers	Wayside Power &	Application Design &
		Guideway Electrifica-	Marketing
		tion	_

The engineering work required is to

- 1. Verify quantitative specifications of each component using available computerized design tools.
- 2. Develop procurement documents needed to order each component.
- 3. Negotiate with each supplier.
- 4. Supervise fabrication of the components.
- 5. Supervise assembly of the components and the system.
- 6. Conduct all necessary tests needed to establish reliability, safety, ride comfort, and costs.
- 7. Develop up-to-date models of capital and operating cost, and sales price.
- 8. Develop skills needed to design specific applications.
- 9. Develop marketing tools, advertise system features, and market applications, many known to us.
- 10. Perform functions needed to manufacture ITNS in quantity.

The demonstration will be complete when we have at least one order for a specific system, which is likely to be worth at least \$300,000,000. It will take 15 months from notice to proceed to ready the system for testing, and an additional 6 months for testing. It will require \$30,000,000 of which approximately \$5,000,000 will be in up-front engineering costs; \$18,000,000 in fabrication, manufacturing, and assembly costs; \$3,000,000 in marketing activities; and \$4,000,000 to prepare for quantity manufacture.

J. Edward (Ed) Anderson, PhD, P. E., (763) 586-0877, jea.p.e.phd@gmail.com