

Hendryx & Associates

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Ms. Debbie Andres San Jose State University 1 Washington Square San Jose, CA 95112 Attn: Facilities Development & Operations, Debbie Andres

Dear Ms. Andres,

I am pleased to affirm the innovative Spartan Superway project at San Jose State University for the STARS program.

Over the last century, cities have evolved around the automobile. The predominant approach to urban design, known as sprawl, has been to separate jobs, housing, and shopping with the expectation that people would drive between these locations in their private cars. This model provided unprecedented mobility, which led to unprecedented economic growth and prosperity, especially since 1950. Now, roads have become congested. Mobility is reduced. Prosperity is threatened. As cities are the locus of jobs, people continue to migrate to cities and increasingly find they must commute longer distances from available housing, placing additional demands on an already overburdened transportation infrastructure. Unfortunately, automobiles are also the source of about 30% of greenhouse gas emissions, which threaten to make our planet uninhabitable. Clean personal mobility is the key to sustainability, of the economy, of quality of life and of the planet. Innovative sustainable cost-effective solutions are needed to increase personal mobility in our cities.

The Spartan Superway project is one such innovative sustainable cost-effective personal mobility solution. The Superway concept is to carry individuals or families from point to point anywhere in a metropolitan region, non-stop, stations being within walking or bicycling distance of any point. The service is available anytime, day or night, on demand, with capacity sufficient to service the whole population. The vehicles, called *podcars*, about the size of a minivan, can accommodate up to six people with their hand-carried luggage, a shopping cart, or a wheelchair or bicycle. Podcars travel on an unobtrusive elevated grade-separated guideway network, above the traffic, under automatic control – no driver – at speeds of approximately 30 mph. Stations are off the main guideway lines, so as not to impede podcar traffic. Power for the system can be largely derived from solar panels installed above the guideway. Cost of the service would be comparable to car ownership. Capital cost is a small fraction of the cost of new roads or rail lines and can utilize existing rights of way – city streets and highways.

I have been in the Superway Design Center, talked with staff and students, have seen their prototypes, scale models and simulations. Their enthusiasm for the project is palpable. They are addressing all aspects of such an automated transportation network – podcar design, guideway, bogie (interface to the guideway), propulsion, network signaling and control, solar power. Staff is also working with local government agencies on rights-of-way and permitting issues, advance planning for an operational pilot project between the main campus and south campus athletics complex. They are also having discussions with the business and financial community regarding financing a test track to validate and refine the design.

Superway is an ambitious interdepartmental project, especially involving the Engineering, Urban Planning and Business departments. Superway is involving experts from industry as advisors. Superway is an intercollegiate project involving several other universities in the U.S., Europe, Asia and South America. Interns come from around the world to San Jose for a summer of intensive collaboration and education and continue to work together through online collaboration during the school year. This collaborative process itself is an innovation.

In my estimation, the Spartan Superway project is a fine candidate for the STARS Innovation category. I encourage its strong consideration.

Sincerely,

HENDRYX & ASSOCIATE Stan Hendryx CEO