CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

Department of Transportation
JAMES R. HELMER –DIRECTOR

March 27, 2009

Mr. Michael Burns
General Manager
Santa Clara Valley Transportation Authority
3331 North First Street
San Jose, CA 95134

Dear Mr. Burns:

SUBJECT: Airport Area Automated Transit Network

On behalf of the City of San Jose, I am writing to request that you include $4 million dollars in VTA's proposed two-year budget, or $2 million in a one-year budget, for development of an Automated Transit Network (ATN) in the vicinity of the Mineta San Jose International Airport.

As you know, the City of San Jose has been exploring the possibility of constructing an ATN to fulfill the 2000 Measure A voter mandate to provide a rail connection between the Airport, the Santa Clara Caltrain/future BART station and North First Street Light Rail. An ATN, also known as Personal Rapid Transit, is a system of small (4-6 passenger), lightweight, computer-controlled (driverless) vehicles operated on or suspended below an elevated guideway. Vehicles wait at stations for passengers to arrive. There are no scheduled routes; passengers specify their destination. Stations are off the main line, so travel is non-stop. The concept is similar to an exclusive horizontal elevator with seats.

Judging from the results of a Request for Information (RFI) that the City issued late last year (that VTA staff participated in) and subsequent conversation with a number of transportation experts and vendors, we believe this technology is ready for deployment. We also believe it would provide far greater value at a much lower cost to VTA and the region than the "proven technology"—an Automated People Mover—that had been under consideration. As you know, that two-mile project was estimated to cost more than $500 million. We anticipate a similarly-sized ATN would cost roughly $50 million. The contrast in price illustrates the wisdom of this $4 million investment. Attached is a brief overview of some of the leading ATN firms around the world.

Here are some of the reasons why we believe it is in VTA's interest to support this project.

- Although ATN is an emerging technology, San Jose would not be the first to deploy such a system. By the end of the year, two ATN systems are scheduled to open to passenger service: one at Heathrow/London Airport and the other in Masdar, Abu Dhabi. Two other companies have test tracks in operation, one in Poland the other in Sweden (the latter is a joint venture with a Korean firm). An earlier version of the technology has been used in Morgantown, West Virginia for 30 years. Our analysis could result in the purchase of an "off the shelf" system (one of the two systems currently being deployed), enhancing one of those two systems, or integrating the best of several available systems/subsystems.

- By design, an ATN would provide greater flexibility than a linear Automated People Mover (APM). An ATN would be able to serve multiple points within the Airport, as well as provide a direct connection (with no intermediate stops) to area transit stations, hotels and office buildings. This flexibility would likely make the ATN system, and the transit services it feeds, more attractive to choice riders.

- Ultimately, we envision expanding the system to other portions of San Jose where the City would like to encourage more dense development. An ATN system can help overcome the "last mile" hurdle at locations such as these, serving as a local feeder to the existing transit network. ATNs offer the potential to substantially increase VTA ridership and as a result reduce vehicle miles traveled and greenhouse gas emissions. Cities and the region as a whole are going to be under increasing pressure in the coming years to significantly reduce VMT and GHG emissions.

- An ATN system could be operated and expanded through private franchises or a public-private partnership. Already two large local developers and an international finance firm have expressed interest in participating in some way in the deployment of an ATN system in San Jose.

- The demonstration is likely to be of interest to a number of other cities in the area. Already a number of cities in the greater Bay Area, including Santa Cruz, Marin County, Oakland and Pleasanton, have taken steps to promote the construction of an ATN system in their community. NASA-Ames has expressed interest in serving as an advisor to the San Jose Airport ATN project and as a test bed for systems/components that would be considered for it. An ATN could be employed by other cities in the county to address transportation needs VTA cannot meet and/or to complement services VTA already operates or supports. The initial Airport area system could be expanded to serve other neighboring cities.

- In a recent trip Mayor Reed took to Washington D.C., officials from the Obama administration, the Federal Transit Administration (FTA) and the Department of Energy (DOE) expressed strong interest in this project. As a new "green"

technology, ATN appears to have much greater potential for outside funding than a standard APM

San Jose intends to recruit a Federally Funded Research and Development Center (FFRDC) to help the City independently evaluate the systems currently available and to construct a reliable, effective system that can meet San Jose's needs. Involving an FFRDC, which are designed to independently vet emerging technologies, will reduce potential risks and increase the credibility of the project to federal agencies and potential private funders. The FFRDC will be complemented by transportation planning consultants who will help us identify potential routes, model throughput, and project ridership levels.

It is this level of specificity that will best position the City to secure federal funding for the second phase of the project: final design. That is why we ask that VTA include $4 million dollars in its proposed two-year budget for the ATN project: $2 million for the initial study and $2 million as a local match to leverage an additional $4 million for final design. If VTA opts for a one-year budget, we ask that $2 million be included for initial design.

Unfortunately, San Jose's current financial situation prevents the City or the Airport from matching VTA's financial contribution. However, the City has and will continue to devote considerable staff time to this effort.

San Jose, as the Capital of Silicon Valley, is highly motivated to facilitate the development of new innovations, especially new technology that supports our *Green Vision* goals. ATN systems are being developed in Europe, Asia and the Middle East. With the Airport Area ATN project, we see an opportunity for Silicon Valley to lead the United States in the deployment of this new transit technology.

We look forward to a continued partnership with VTA on this project.

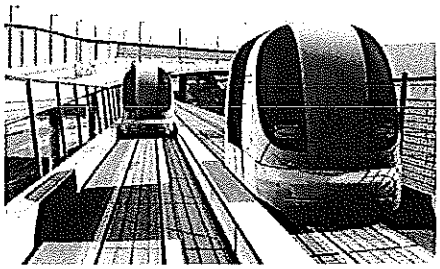
Sincerely,

James R. Helmer
Director of Transportation

Attachment

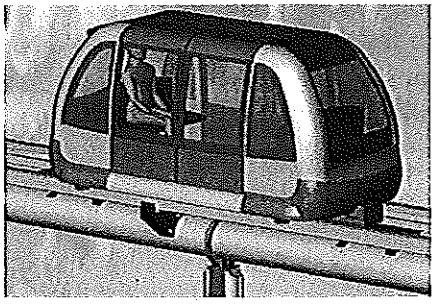
Automated Transit Network Vendor Profile Summary

Department of Transportation, City of San Jose, CA



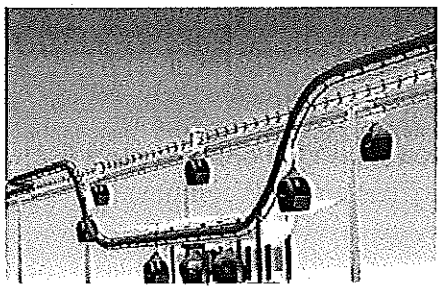
ULTra, *Advanced Transport Systems Ltd.* ***(UK)***

- Status: First Prototype in UK, 2008
- Commercial Operation, London Heathrow Airport 11/2009
- 25 mph battery-powered, 5-passenger ADA Compliant Cabs, Accommodate Luggage.
- $15M/mile, 2-meter wide, Single-Direction Guideway
- http://www.ultraprt.com/



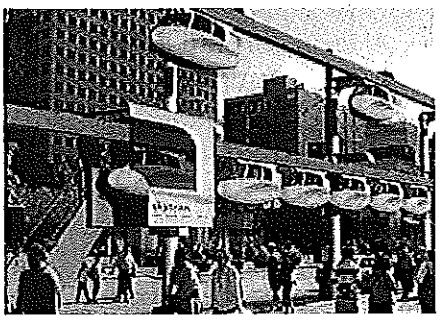
Vectus, *POSCO Vectus Ltd.* ***(UK/Sweden/Korea)***

- Status: Prototype Test Track since 2007
- Developed in Uppsala, Sweden. Similar to ULTra
- 25 mph battery-powered, 4-passenger ADA Compliant Cabs, Accommodates Luggage
- $15-25 M/mile, 1.5-meter wide Tubular Steel, Single-Direction Trackway
- http://www.vectus.se/eng_index.html



Mister, *MIST-ER, Sp. Z o o.* ***(Poland)***

- Status: Prototype Test Track in 2008
- Seeking Partner to Expand Development & Test Track
- 30-50 mph Track-powered, 2 to 4-passenger, Suspended & Gimbaled cabs, ADA Capable.
- $17 M/mile, 1-meter wide Steel Single-Direction Guideway
- http://www.mist-er.com/home-page.html



SkyTrans, *Jenkins/Gales & Martinez, Unimodal Systems LLC, ITNL Enso Rail Systems* ***(Los Angeles, CA)***

- Status: Design Development. Consortium Formed in 2008
- Proposed Test loops at NASA-Ames in 2/2009
- 30-50 mph Track-powered, 2-4 passenger Suspended Cabs, ADA Capable
- $39 M/mile, Dual, 1-ft wide Steel Beam, Single-Direction MagLev Guideway * http://www.skytran.net/

CabinTaxi, *Cabintaxi Corporation* ***(Detroit, MI)***

- Status: Proven Concept. Developed & Tested in 1975-78.
- Planned application in Hamburg cancelled by German Govt.
- Technology purchased from MBB by Cabintaxi USA
- 22 mph, 3 & 12 passenger Veh. demonstrated, ADA capable
- $?/ Mile, Over-under, Dual-Direction Suspended System,
- http://faculty.washington.edu/jbs/itrans/cabin.htm

For further information contact City of San Jose, DOT
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Henry Servin, henry.servin@sanjoseca.gov (408) 975-3708

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