

Date: June 5, 2009
Re: Aerial Tram, Preliminary Study
June 16 2009 – September 11, 2009



This summer, Urban Sparks, a 501c3, will perform a preliminary study of how aerial trams could efficiently and gracefully address some unmet public transportation needs in Seattle. Sponsors for this study will go on record for supporting this preliminary step to considering Aerial Trams as a component of Seattle's transportation system. The report will describe (1) the conditions that led to successful aerial trams used elsewhere, and (2) how those relate to the conditions found in Seattle.

Aerial Trams have several advantages. They have tiny footprints – as small as half a block at each end and a few poles in between for long routes. They do not require continuous ground level rights of way, nor do they disrupt on-the-ground transportation modalities or land uses. Costing just tens of millions of dollars for multi-mile routes, they are valuable components of public transportation in cities such as Portland and Barcelona, which like Seattle, possess dense populations and hilly terrain.

The Aerial Tram Study Report: a first step

This report would be the first step in assessing whether there are places in Seattle where aerial trams could be in service soon. Promising routes would save energy, slash emissions, encourage walking, and reduce congestion, independently of other aerial routes, so that any one route could be pursued independently of others. A pilot route might be to a hilltop neighborhood, a feeder to a light rail station, a ferry dock, or more ambitiously – West Seattle's Admiral District.

The report will include:

- A comparison of trams to other forms of public transportation
- an energy analysis
- a capacity analysis
- pricing survey for various tram types and sizes around the world
- a survey of typical land requirements for tram stations and tram towers
- a photographic study of tram types and locations
- a detailed comparison of the costs, benefits, and impacts of using two large gondolas versus many small gondolas on a given route
- a compilation of existing vendors including their specialties
- a survey of tram accidents and liabilities
- a descriptive summary of air space corridors and guidelines for safety
- a survey of Seattle neighborhoods and travel/work/live patterns
- a map of possible routes.

Our Intern:

Matthew Taylor, is an engineering student from Seattle University (SU) who shows exceptional leadership qualities and who studied engineering at Disney World last semester. His mechanical engineering professor agreed to help supervise this internship, and we expect additional members of his advisory team to include SU's Sustainability Office as well as an Urban Planning faculty member from SU or UW. This team will help choose the questions to address and will monitor the work so that it will lead to a business-worthy report. Matthew will begin work on June 15th 2009.

Request:

For this preliminary report, we need \$5,000 in funding to support the intern – full-time for 3 months, his supervision by a team of professionals and faculty, and a small amount of travel. We are asking for sponsorships of \$100 to \$2,000 each. The report will open with a list of our supporters (with logos starting at the \$500 level).

JFunding could be provided by a government grant or private donors who might like to support this intriguing project. Simplicity in funding is important so we can immediately begin focusing on completing the work this summer.

Please contact:

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