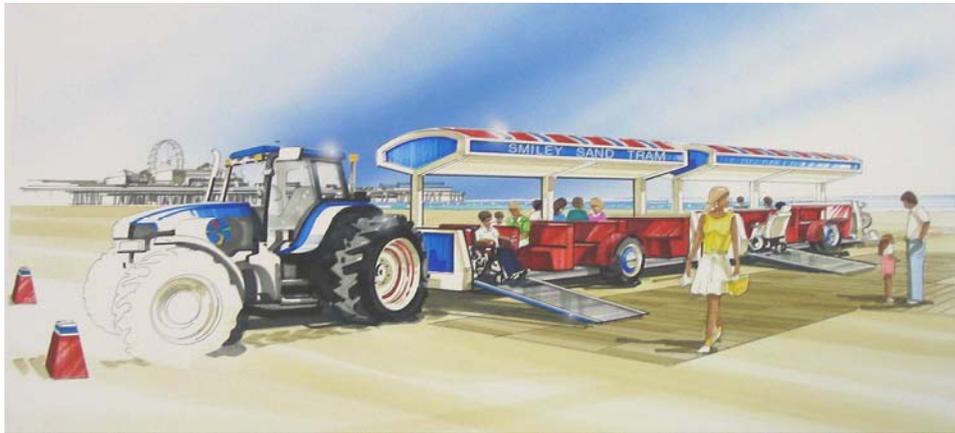


Santa Monica Smiley Sand Tram



TRANSFORMING BEACH PARKING, TRANSPORTATION AND ACCESS

Prepared by Santa Monica Pier Restoration Corporation, February 2006

Concept History

In the fall of 2004 a long-term event was staged in the 1550 parking lot occupying over 70% of the lot. The event producer was required to implement shuttle service from the south beach parking lots up to the Pier. A local business man offered the use of an open air propane powered tram and on October 5, 2004 at 8pm, the tram was dropped off in the 2030 Barnard Way parking lot for an initial trial run. The tram was an instant hit.

Tram use in Santa Monica is not a new concept. A Santa Monica ordinance adopted in 1971 allows for the operation of trams along Ocean Front Walk and electric trams were operated between Santa Monica and Venice throughout the 1920's.



Electric trams took passengers between the Venice and Santa Monica Piers. - 1920

In 2004, due to pedestrian traffic concerns, Ocean Front Walk was not utilized for the tram. Instead, the official route for the tram was established along the streets running one block east of the beach. This route required extensive traffic management and, while providing effective transportation, provided limited access to the world-class beach. At a late-night brainstorming session on how to improve the route SMPD Sergeant Greg Smiley suggested that the tram run on the sand. With the emerging vision of the "Beach Tram", the Santa Monica Pier Restoration Corporation began the process of research, prototype design and consideration of the issues this concept would raise.

Streamlined Beach Parking

Beach parking and access to Santa Monica's premier beach attractions has been the subject of extensive research and discussion for many years. The parking lots adjacent to and north of the Santa Monica Pier frequently operate at full occupancy during the summer and on weekends. In contrast, south beach parking lots operate with much lower average occupancies.

The total parking inventory for Santa Monica's beaches is impressive, with over 5285 spaces available to beachgoers. Of the 17 beach parking lots, only the Pier, 1550 and north beach parking lots have an average weekend and summertime occupancy of between 95 and 110%. The south beach parking lots, representing just over half of the total available beach parking, have consistently lower average weekend and summer occupancies of 60 to 70%.

Many options have been explored to increase parking access for the high demand lots around the Pier. Two-story parking structures, expanded beach parking lots, temporary parking surfaces and improved directional signage are among the ideas previously presented. A Pier/Beach shuttle has been utilized during peak times and for Twilight Dance Series Concerts, however ridership on the street-bound shuttle has been minimal, with an average of less than two passengers per hour. The open air Smiley Sand Tram would be a fun, highly desirable mode of transportation that requires minimal infrastructure, utilizes existing resources and enhances beach access.

The Smiley Sand Tram would also directly connect all of Santa Monica beach attractions, transforming the beach experience, relieving the burden on high-volume parking lots and reducing "drive-around" traffic. The Tram would make any beach parking lot a useful parking resource.

Tram Route Details

- Flagged routes
- Clearly marked and wheelchair accessible stops
- Pick-up and drop-off stops at all parking lots
- Pick-up and drop-off stops at major destinations- Pier, Downtown Shopping via the Santa Monica Blvd. pedestrian overpass, and 415 PCH
- Trams run north and south along route
- Safe distance from bike path and volleyball courts

- Possible split route, with one tram running north of the Pier, and one running south. (Passage underneath Pier depends on final tram design)



Rough outline of proposed flagged beach tram route with stops at each parking lot and on either side of the Santa Monica Pier.

Challenges

Making the Santa Monica Smiley Sand Tram a reality depends on the ability to overcome significant challenges given the unique environment of the beach, high volume of beach visitors and basic operating expenses. These issues will need to be carefully studied to ensure that the integrity of the environment is not compromised, the safety of the public is maintained and that the final design is faithful to the spirit of the beach and the community.

Beach Environment

Santa Monica beaches and the Santa Monica Bay are ecologically sensitive environments. Dedicated organizations such as Heal the Bay work hard to ensure the health and continued vitality of these important natural resources. Several areas of the Santa Monica beach serve as wintering grounds for the Western Snowy Plover, an endangered bird species native to the Pacific Coast. For tram operations to be viable, it is essential that its impact on the environment is minimized through conscientious operation, sustainable practices and minimal disruption.

Safety

The primary use of beach space is for recreation and enjoyment and the beaches draw large crowds during peak summer months. Currently, the county, state and city operate a number of vehicles on the beach including lifeguard trucks, trash trucks, beach rakes, maintenance trucks and emergency vehicles. Accidents have occurred involving beach visitors and vehicles resulting in serious injuries. To ensure public safety a comprehensive plan for beach tram operations needs to be developed incorporating clearly defined routes, low-speed operation and attentive operators.

Cost Benefit Analysis

All costs and potential revenue sources described below are estimates based on current production costs and market demand.

Operating Expense

Estimated production cost: \$100,000 (First tram, additional trams substantially less. Initial prototype production is estimated at under \$100,000 and is anticipated to take approximately 6 months. Existing tram shells will be modified to include retractable access ramps, bike racks, handrails, beach rakes and modified beach drive-train.)

Estimated Operating costs:

- Driver, fuel and maintenance - \$60-70/hour including driver, fuel and maintenance.

- Per Day - Noon to Midnight
 \$1680/day (two trams)
 \$3360/day (four trams)

- Per Week - 5 days a week Wednesday through Sunday, Noon to Midnight: The operation could be expanded to seven days/week depending on beach traffic and ridership.
 \$8400 (two trams)
 \$16,800 (four trams)

- Summer Operation - 12 weeks (End of June, July, August and beginning of September)
 - \$100,800 (two trams)
 - \$201,600 (four trams)

Potential Revenue

Currently, four potential areas of revenue generation have been identified for the tram; fares, advertising, facility use fees, grants (start-up only), and city funding. The funding sources identified below are purely speculative and are subject to final project parameters, public input and public policy decisions.

Fares

Ridership - A modest fee charged per rider per direction

Ex: $\$1/\text{ride} \times 1350 \text{ passengers/ day} \times 2 \text{ trams} = \$2700/\text{day}$
 (Approximately \$162,000 for a 12 week summer season)

(Based on average ridership of 45 passengers per tram, average tram trip of 20 minutes and three tram trips per hour.)

Advertising

A variety of advertising opportunities could provide revenue for tram operations including on-board advertising, rack card/coupon distribution, in tram announcements or seasonal sponsorships.

Ex: Rack card/coupon distribution \$1350 week x five (limit) - \$6700 (based on \$.10 per rider)
 On board ads: \$2700 week x six (limit) - \$16,200 (based on \$.20 per rider)
 In tram announcements: \$4110 per week x five (limit) - \$20,550 (based on \$.30 per rider)

Total potential revenue: \$43,450/week
 \$521,400/summer

Sponsorship - Official summer tram sponsorships.

Ex: Benefits include all weekly advertising opportunities plus mention on all tram maps, on-line tram info and flyers:
\$120,000 x 2 (limit) - \$240,000

Facility Use Fees

Increased Parking Fees:

Ex: Rates for prime parking lots, Pier and 1550 are increased from \$8 to \$10 in acknowledgement of high demand. Additional revenue from parking lots could equal over \$180,000 for the summer period. (Based on average per day parking of 250 (Pier) + 850 (1550) x \$4 x 7days/week x 12 weeks, actually - \$184,800.)

City Funding

The operation of the beach tram could be incorporated into the budgetary requirements of the Pier and Beach fund, subject to City Council consideration and approval of additional allowances for the respective funds.

Other Funding Sources

Grants for unique public transportation could be sought through regional, state and federal transportation agencies. In addition, funding from local or regional public transportation providers could support the operation of the tram through cooperative private/public partnerships.

Operation Summary

Santa Monica's wide beaches are perfectly suited for the Smiley Sand Tram. Operating along a narrow path along the underutilized portion of Santa Monica's beaches, the Tram will connect Santa Monica's vast beach resources in a fun and seamless manner while maintaining a safe distance from concentrated uses such as the water and volleyball courts. The Tram will create an incentive for visitors to park in any beach parking lot including currently underutilized lots, with guaranteed fun transportation to their desired destination. The unique Smiley Sand Tram will operate during peak summer hours, weekends and for special events, with guiding principles of safety, sustainability, and accessibility.

Safety:

- Well marked and clearly flagged designated routes
- Attentive drivers operating slow moving, easily identifiable vehicles
- Eye catching, colorful, attractive and whimsical design
- Pleasant audible chime and notification bell
- Comfortable, safe seating
- Average operating speed of 3-7 MPH
- Hand rails and guardrails
- Low-pressure balloon tires

Sustainability:

- Bio-diesel or natural gas propulsion (future options include hydrogen and solar power)
- Invisible footprint with tram trailing beach cleaning rake
- Pedestrian-oriented
- Bike racks
- Affordable operation
- Revenue generating potential
- Desirable, multi-use transportation

Accessibility:

- Easy access for wheelchairs
- Ample space for strollers, beach gear and families
- Bike racks
- Graded ramps providing ADA compliant access
- Safe direct access to all beach parking and beach destinations

Conclusion

Santa Monica has a long history of innovation in guest services and some of the greatest beaches in the world. This new concept in beach transportation incorporates the best of Santa Monica: easy accessible transportation, spectacular views, unprecedented beach access and sustainability. The Smiley Sand Tram is the world's first open-air sustainable tram operating on the sand and making the ocean and beach experience accessible to all ages and abilities. Combining age-old charm with cutting-edge technology, the Smiley Sand Tram will create a seamless connection between Santa Monica's vast beach parking assets and its prime recreational ocean destinations.