

# APPENDIX 3

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## EXISTING TRANSPORTATION ALTERNATIVES MATRIX



# MEMORANDUM

**To:** Jessica Meaney and Jane Choi  
**From:** Linda Rhine, Jeremy Nelson, Adina Ringler, and Adina Ringler  
**Date:** Revised February 20, 2009  
**Subject:** City of Los Angeles First/Last Mile Study: Matrix of Existing Alternative Transportation Services (Task 2)

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## *Overview*

Access to transit stations from home, work, and other destinations is often challenging, creating a barrier to transit; discouraging riders especially “choice riders” from using transit more often or even on a regular basis. Practical and convenient alternative services are necessary to increase transit station access and bridge the “first mile / last mile” gap through integrated transportation services.

The goal of Task 2 of this study (Matrix of Existing Transit Alternatives) is to develop a baseline understanding of existing alternative transportation services in Los Angeles that we believe have the greatest potential to increase transit ridership by serving as a first mile / last mile connection to existing fixed-route transit services.<sup>73</sup> This study is being conducted at this time because Los Angeles is committed to making public investments in transportation improvements and with the recent passage of Measure R, the City is well positioned to devote the financial resources for recommended improvements to alternative transportation measures.

Task 2 calls for key information about existing alternative transportation services to be included in a matrix. As a first step in completing Task 2, we developed and submitted on 1/15/09 a draft template for the matrix for the Technical Advisory Committee’s (TAC) review and feedback.<sup>74</sup> The general format and structure of this template was approved by the TAC. In addition, the TAC provided several helpful comments that we have incorporated into this deliverable as appropriate.

## *Purpose of this Memo*

We have made substantial progress completing this matrix since our 2/11/09 TAC meeting; in addition we have revised the 2/9/09 draft based on TAC feedback at that meeting. The scoped purpose of this matrix was to provide a foundation for a preliminary evaluation of opportunities and constraints impacting expansion of a broad array of alternative transportation services and with the assistance of TAC comments we believe it has served this purpose.

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<sup>73</sup> While other *existing* first mile/last mile solutions may already be operating in Los Angeles, we believe at this time that these are the most feasible for further evaluation.

<sup>74</sup> To make the best use of project resources, we wanted to get confirmation on the overall format and data fields before the details were researched and completed.

## *Summary of the Alternative Transportation Matrix*

**Major categories** of alternative transportation services that we have included in this matrix are:

- Taxi
- Vanpool
- Carpool
- Private/Institutional Shuttles

For each service category, we have included the following **key data fields**:

- *Service area* – Identify the geographic boundaries or location(s) that are served by each of the alternative transit services including gaps in service.
- *Mission/Purpose* – A general statement describing the fundamental goal or reason for providing this service. For example, the mission or purpose of social service transportation is quite different than carpools/vanpools.
- *Target Population / Eligibility* – Identify who is able to use each service. Is it available to the general public? Are there constraints to service use? For example, is the service limited to employees (such as a company operated shuttle service) or are clients of an agency the only eligible users of a social service transportation service?
- *Organizational Structure* – Identify the organization or agency that operates and funds the service and whether the service is publicly or privately operated/funded.
- *Order of Magnitude Costs*– This category is divided into subcategories for “Costs to Consumer” and “Operating Costs” (i.e. costs to provider). Since it may not be possible to definitively identify costs, a range or relative order of magnitude costs (expressed as high, medium, and low) will provide a preliminary basis to develop future cost projections for strategies as part of later deliverables.
- *Opportunities for Expansion* – Identify the potential to expand the existing service to help bridge the first mile / last mile barriers to existing transportation services.
- *Barriers to Expansion* – Identify the barriers and constraints (regulatory, financial, etc.) that might prevent this service from being expanded. As strategies are developed, we will identify practical ways of trying to eliminate or remove these constraints.

### *Next Steps*

As part of these future deliverables, the most feasible alternatives will be refined, fleshed out, and developed into comprehensive implementation strategies for bridging first mile/last mile gaps.

<b>Taxicab Services</b>	
<b>Name of Service</b>	Various taxi companies serving Los Angeles
<b>Provider / Sponsor</b>	<p><u>Private-sector providers:</u></p> <ul style="list-style-type: none"> <li>- United Checker Cab Company</li> <li>- Bell Cab</li> <li>- United Independent Taxi</li> <li>- Beverly Hills Cab Company</li> <li>- United Taxi of San Fernando Valley</li> <li>- Checker Cab</li> <li>- Yellow Cab</li> <li>- City Cab</li> <li>- Independent Taxi</li> </ul> <p><u>Public-sector regulation:</u> Regulated by the City of Los Angeles Department of Transportation, Division of Taxi Services.</p>
<b>Mission / Purpose</b>	<p>Taxi provider purpose: Taxis provide a form of on-demand door to door transportation service. This “vehicle for hire” taxi service differs from rental car and carsharing services in that the person making the trip a) does not drive themselves, b) does not need to reserve in advance, and c) can access the service at any location.</p> <p>Regulatory agency purpose: Oversight and enforcement of public for-hire vehicles in the City including: processing of license applications, administering of driver examinations, enforcement of taxi regulations, setting allowable fares, and enforcement of unlicensed cabs.</p>
<b>Service Area / Geographic Boundaries</b>	Citywide service. Nine companies franchised by LADOT; in combination, operate more than 2,300 licensed taxicabs. City divided into five service areas, each served by one or more companies.
<b>Target Population / Eligibility</b>	Largely the general public is the target population. Low-income seniors and persons with disabilities are a specialized market for taxi services through subsidized taxi voucher (or “scrip”) programs. An example in Los Angeles is the “CityRide” program that allows individuals meeting certain income requirements and also aged 65 or older and persons with mobility impairments to purchase a book of transit vouchers and use them to pay for taxi fares at a discounted rate.
<b>Organizational Structure</b>	The City of Los Angeles has complete authority over the taxi business within the city and it regulates as a “public utility.” Taxicabs must operate as a specific franchise, under authority of the Board of Taxi Commissioners, appointed by the Mayor and City Council.
<b>Cost to Consumer</b>	Fares standardized for all operators (see below).
<b>Operating Costs</b> <i>order of magnitude, per</i>	Public sector: No operating costs apart from costs associated

Taxicab Services	
<i>rider or per hour</i>	with regulatory functions.  Private sector: Operating costs provided by taxi companies can be derived from rate increase applications on file with LADOT Division of Taxi Services. This study will estimate operating costs based on these and other sources as appropriate.
<b>Expansion Opportunities</b>	Taxi pools; Hail-a-Taxi Initiative; Increased availability at transit stations; Technological innovations, such as integrated payment method with TAP Card, and dedicated taxi phones at rail stations, etc; introduce a Downtown-only fare.
<b>Barriers to Expansion</b>	Regulatory resources are often stretched thin. With exception of Hail-a-Taxi Initiative in downtown, taxis are forbidden from standing/stopping which limits the usefulness for occasional and unscheduled use.
<b>Comments</b>	<p><u>Fare Structure:</u><sup>75</sup></p> <ul style="list-style-type: none"> <li>- Minimum Fare (first 1/9<sup>th</sup> mile)            \$2.85</li> <li>- Each additional 1/9<sup>th</sup> mile                    \$0.30 (\$2.70/mi)</li> <li>- Each 37 seconds delay                        \$0.30 (\$29.19/hr)</li> <li>- LAX to/from downtown<sup>76</sup>                    \$46.50 (flat fare)</li> </ul> <p>All trips originating at LAX charged standard rates, plus \$2.50 surcharge. Minimum fare of \$15.</p>

<sup>75</sup> Effective August 14, 2008.

<sup>76</sup> Downtown is defined as the area bounded by Alameda St, Santa Monica Freeway, Harbor Freeway, Cesar Chavez, Union Station, Chinatown.

Vanpool Services		
Name of Service	Metro Vanpool Program <sup>77</sup>	City of Los Angeles Vanpool Program <sup>78</sup>
Provider / Sponsor	Los Angeles Metropolitan Transportation Authority	City of Los Angeles Department of Personnel
Mission / Purpose	Provide alternative transportation choices to commuters, improve air quality, and reduce traffic congestion in Los Angeles County.	Provide financial and logistical support for the establishment of vanpool services as a comfortable, time-saving and cost-effective alternative to personal vehicles for daily commutes.
Service Area / Geographic Boundaries	Worksites ending anywhere in LA County, including City of Los Angeles. Origins may be outside or inside city limits.	Trips may begin either within or outside city limits, however all destinations must be within city limits: a high percentage are to Downtown Los Angeles/Civic Center area, other vans to Hyperion and Tillman Water Treatment Facilities, Civic Centers in West Los Angeles and Van Nuys, and other areas with city facilities.
Target Population / Eligibility	All potential riders with origin-destination in same general area as an existing vanpool with available seating or, to start a new vanpool, five riders with origins and destinations in same general area.	City employees especially, but employees on contract with the city and non-city employees may also use service.
Organizational Structure	Employers sponsor most vanpools.	City fully subsidizes capital and operating costs, though passengers must designate one primary and two alternative drivers, as well as a van coordinator. New vanpool requires at least five people with similar origin and destination locations. Smaller groups can join existing vanpools, as available.
Cost to Consumer	<p>Individual user or their employer obtains lease on van and, by default, will operate the vehicle at full cost. However, members of the program that (a) work at a site in Los Angeles County, (b) maintain a minimum 70% occupancy rate, (c) advertise open seats and (4) follow other rules of program are eligible for a \$400 or 50% subsidy each month (whichever is less).</p> <p>LA MTA has estimated cost savings of 20-30% for passengers, compared just to unsubsidized <i>vanpooling</i>, in addition to other benefits (time freed for other activities, use of HOV lanes to reduce travel times, etc.) The size of the vanpool determines cost to consumer. Vans can hold 8 or 12 passengers.</p>	<p>Fares based on trip distance and employment status with City. Monthly passes and single day round-trip tickets available. Monthly subscription ranges from \$54.10 to \$180.60; daily round-trip tickets cost from \$2.58 to \$10.75 (fares last updated June 1, 2005).</p> <p>Compared to solo driving, for a 100 mile round-trip, riders with a monthly subscription save up to almost \$1,000/month; riders purchasing daily ticket still save more than \$45/day.<sup>79</sup></p>
Operating Costs <i>order of magnitude, per rider or per hour</i>	<i>TBD as appropriate</i>	<i>TBD as appropriate</i>

<sup>77</sup> [www.metro.net/riding\\_metro/commute\\_services/vanpool/default.htm](http://www.metro.net/riding_metro/commute_services/vanpool/default.htm)

<sup>78</sup> [www.lacity.org/per/vanpool.htm](http://www.lacity.org/per/vanpool.htm)

<sup>79</sup> Assumptions: (1) personal vehicle operating cost of \$0.52 per mile; (2) monthly comparison also assumes 21 work days per month.

Vanpool Services		
Expansion Opportunities	<i>TBD as appropriate</i>	<i>TBD as appropriate</i>
Barriers to Expansion	<i>TBD as appropriate</i>	<i>TBD as appropriate</i>
Comments	<ul style="list-style-type: none"> <li>• What percentage of lease-holders are employers, individuals, or other?</li> <li>• How typically are per rider costs allocated?</li> </ul>	<ul style="list-style-type: none"> <li>• How are insurance issues addressed for City vanpools?</li> </ul>

Carpool Services		
Name of Service	RideMatch.info	"Kiss-and-Ride"
Provider / Sponsor	Commute Smart.info	(private automobile driver)
Mission / Purpose	Public ridematching service, including carpool, serving the Southern California region.	Individuals driving automobiles transport one or more passengers to/from a key transit stop or station, so that the passengers do not need to drive themselves to their own destination.
Service Area / Geographic Boundaries	Five counties in Southern California – Los Angeles, Orange, Riverside, San Bernardino and Ventura Counties	Can be practiced anywhere there is auto access to (or near to) an important transit stop.
Target Population / Eligibility	General public, targeted especially at commuters traveling during peak traffic hours.	People without access to a vehicle of their own, or choosing not to use one for environmental, economic or social equity reasons. Typically, two-income household with a one vehicle results in one family member who needs the vehicle dropping off another who is able to commute by transit (thus the term "kiss-and-ride").
Organizational Structure	Collaboration of five countywide transportation agencies.	None.
Cost to Consumer	Ridematching services are free. Cost to commute will vary by distance, roadway and parking pricing, and other operating costs of personal vehicle use, as well as vehicle occupancy and what proportion of these costs are to be paid by passengers versus the driver.	Assuming driver would have driven anyway to his or her destination, marginal cost to consumer typically not significant.
Operating Costs <i>order of magnitude, per rider or per hour</i>	At \$0.55 per mile in costs to operate a motor vehicle, a driver with a 100 mile round-trip commute could save more than \$25 if the cost to drive is split with just one carpool passenger.	Station access and circulation may be impacted by high turn-over of vehicles for drop-off and pick-up of passengers, impacting transit operations and overall design of station itself.
Expansion Opportunities	Carpooling is the most popular rideshare strategy in Southern California, and yet majority of commuter trips are single occupant vehicle trips.	<i>TBD as appropriate</i>
Barriers to Expansion	<i>TBD as appropriate</i>	<i>TBD as appropriate</i>
Comments	No private carpool assistance or other services, specific to City of Los Angeles and environs.	Note distinct difference from park and ride, where vehicle is left for extended period of time at transit stop/station.

<b>Private/Institutional Shuttle Services</b>		
<b>Name of service</b>	Multiple services throughout City	USC Tram
<b>Provider / Sponsor</b>	Multiple providers	University of Southern California, Trojan Transportation
<b>Mission / Purpose</b>	<p>Fixed route services typically serving a clearly-defined group of riders in a well-defined area or along a specific route. Fares are usually free or nominal cost.</p> <p>Provide specialized service, usually from point to point, or between one point and many to fill gap in broader public transit network, often for specific groups of individuals.</p>	Provide on-campus and inter-campus fixed-route bus services for students, faculty and staff, with connections to local and regional public transit services, as an alternative to driving automobiles and in support of campus goals for environmental sustainability.
<b>Service Area / Geographic Boundaries</b>	Service areas are often quite limited, with one or more shuttles traveling the same or similar routes between one or a few regional transit stops (such as Metrolink) and one or several key destinations – employers, hospitals, educational institutions, shopping centers, etc. Many private companies offer shuttle services to LAX, in addition to a service provided by LAX itself (“Fly-Away”).	Travel within campus and between the University Park Campus and Health Sciences Campus, travel between Union Station in downtown Los Angeles and each campus.
<b>Target Population / Eligibility</b>	Varies by shuttle service. Shopping shuttle may serve seniors, for non-medical trips; commuter shuttle may create a connection between regional rail and an employment center or educational institution.	USC students, faculty and staff, and their guests. A campus ID may be requested while riding the Tram.
<b>Organizational Structure</b>	Shuttles may be provided by one private entity, to serve the needs of their employees, residents and/or visitors, or by agglomerate such as a Transportation Management Association.	Funded and administered by the University (private institution).
<b>Cost to Consumer</b>	Usually free or very low cost, especially if employer or other sponsor offers discounted monthly pass on other transit services and/or parking cash-out to employee or other constituent.	Free to eligible riders and their guests.
<b>Operating Costs <i>order of magnitude, per rider or per hour</i></b>	Operating costs vary between services, from \$50 to \$100 per hour, depending on geographic location, clientele, vehicle type, level of service provided and/or coordination with other providers (economies of scale).	<i>TBD as appropriate</i>

Private/Institutional Shuttle Services		
Expansion Opportunities	It is expected that there is a significant potential for targeted shuttle services to bridge the first/last mile to public transit. <sup>80</sup>	<i>TBD as appropriate</i>
Barriers to Expansion	<i>TBD as appropriate</i>	<i>TBD as appropriate</i>
Comments	Would be good to identify any private employer- or retail-based shuttle services, if available.	UCLA also operates a shuttle operating on and off campus. Other examples include the Loyola Law School Shuttle from 7th Street/Metro Center and the shuttle running from the North Hollywood MetroRail Station to Burbank Studios (Disney and other studios have contributed resources for this shuttle). <sup>81</sup>

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<sup>80</sup> Some services could “collect” passengers from lower density residential neighborhoods for delivery to central transit stop, while others would provide direct transfer from regional transit stop to employment or retail center, or institutional destination not considered a viable distance or path to walk by many people.

<sup>81</sup> The USC shuttle service was selected because it is a downtown service and offers connections to regional transportation services. Other shuttle examples may be evaluated further as part of future deliverables as appropriate.

