



TRANSPORTATION PLANNING AND TRAFFIC ENGINEERING CONSULTANTS

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MEMORANDUM

To: North Tahoe Transit Vision Service/Cost Committee

From: Gordon Shaw, PE, AICP, LSC Transportation Consultants, Inc.

Date: August 7, 2013

RE: North Tahoe Truckee Transportation Vision Service Plan and Cost Allocation

INTRODUCTION

This memo presents the operating plan, capital requirements and cost implications of a regional transit "vision" for the North Tahoe / Truckee region, that would increase service frequency, extend hours of service, brand and operate all services under a single banner, and make all services free to the passenger.

Note that this transit service does not include services provided within the resorts, shuttle services solely connecting ski parking areas with nearby base areas or between base areas, or the North Lake Tahoe Express. Other services not discussed in this plan may continue (such as the North Lake Tahoe Express, the Water Shuttle, skier shuttle, and connections to the East Shore or South Shore), with funding beyond this program. This plan assumes a single transit organization is providing all services discussed below.

OPERATING PLAN

The plan would combine and expand existing TART and Town of Truckee transit services. The following are the improvements over existing services:

- Service is provided throughout the year on SR 267 between Truckee, Northstar, Kings Beach and North Stateline. This addresses the long-term desire to provide year-round service on this key regional corridor.
- Evening hourly service is provided throughout the year around the 89/267/28 triangle as well as on the West Shore, with service until 2:00 AM in the summer and winter, and until 9:00 PM in the spring and fall.

- Bus pullouts on Brockway Road at Cedar House and the Regional Park

In addition, other bus stop improvements would occur as part of developments, over time.

- Advanced Public Transit Systems (APTS) technologies would be implemented. This would include Automatic Vehicle Location (AVL) tracking on all vehicles, Automatic Passenger Counters (APCs), and real-time traveler information distributed over the internet and at key bus stops.

On an annual basis, assuming that all improvements are funded for full implementation in 10 years, this option would incur an average capital cost of \$1,153,800 per year. Some of these costs can be accommodated through Federal capital funding programs. It is assumed that Federal programs would fund 80 percent of replacement of the existing transit fleet, and 50 percent of other capital needs. Applying these factors, the "local share" for these capital improvements would average \$409,500 annually.

ALLOCATION OF COSTS

Total annual local costs of the Vision Plan program, including local share of capital costs, would equal \$7,556,000. As no passenger revenues (fares) would be collected, this figure is also the total local subsidy that would be required for the program. The subsidy is allocated to individual jurisdictions and ski resorts as follows:

1. Allocation of marginal operating costs is based on the costs incurred in each jurisdiction, as shown in the Table C. For services operating along SR 89 between Tahoe City and Truckee and long SR 267 between Kings Beach and Truckee, the existing funding allocation agreement between Placer County and Truckee is applied. Specifically, all costs south of Squaw Valley Road and Northstar Drive are allocated to Placer County, while costs to the north are shared 50 percent / 50 percent between Placer County and the Town of Truckee.
2. The additional dispatcher costs associated with evening transit service expansion is allocated between Placer County and the Town based on the proportion of evening vehicle-hours of service operated in each jurisdiction.
3. Similarly, the additional dispatcher costs associated with Dial-A-Ride service is allocated based on the proportion of Dial-A-Ride vehicle-hours of service operated in each jurisdiction.
4. Marketing and administrative costs are allocated between eastern Placer County and Truckee/Donner Summit based on the proportion of total vehicle-hours of service operated in each jurisdiction.
5. As shown in Table B, Capital costs are allocated to the individual jurisdictions based on the number of vehicles required to serve each jurisdiction (for fleet), the number of bus stop improvements in each jurisdiction, the increase in vehicle-hours of service (for CNG improvements) and the total number of vehicle-hours of service (for communication improvements). As the need for improvement to the North Stateline transit stops is

TABLE C: Allocation of Marginal Operating Costs

Season/Service Period/Service Area	% of Responsibility (1)				VSH by Jurisdiction				Annual \$ by Jurisdiction					
	Annual Marginal Operating Cost		Truckee/		Eastern Placer		Washoe		Truckee/		Eastern Placer		Truckee/	
	Annual VHS	Cost	Truckee/ Donner Summit	Eastern Placer	Washoe	Truckee/ Donner Summit	Eastern Placer	Washoe	Truckee/ Donner Summit	Eastern Placer	Washoe	Truckee/ Donner Summit	Eastern Placer	Washoe
Summer														
Day: 6:30 AM - 6:30 PM														
J	Tahoe City -- Truckee	3,564	\$312,000	75.3%	24.8%	0.0%	0.0%	2,682	882	0	\$235,000	\$77,000	\$0	\$0
u	Truckee -- Crystal Bay	3,564	\$312,000	82.5%	17.5%	0.0%	0.0%	2,940	624	0	\$257,000	\$55,000	\$0	\$0
n	Tahoe City -- Crystal Bay	1,782	\$156,000	100.0%	0.0%	0.0%	0.0%	1,782	0	0	\$156,000	\$0	\$0	\$0
s	West Shore	1,782	\$156,000	100.0%	0.0%	0.0%	0.0%	1,782	0	0	\$156,000	\$0	\$0	\$0
e	Crystal Bay -- Incline Village	891	\$78,000	0.0%	100.0%	0.0%	100.0%	0	0	891	\$0	\$0	\$78,000	\$0
p	Truckee Local	891	\$64,000	0.0%	100.0%	0.0%	0.0%	0	891	0	\$0	\$64,000	\$0	\$0
t	Supplementary Placer DAR Van	648	\$46,000	100.0%	0.0%	0.0%	0.0%	648	0	0	\$46,000	\$0	\$0	\$0
M	Truckee Dial-A-Ride	908	\$65,000	0.0%	100.0%	0.0%	0.0%	0	908	0	\$0	\$65,000	\$0	\$0
E	Evening: 6:30 PM - 2:00 AM													
R	Tahoe City -- Truckee	1,215	\$106,000	75.3%	24.8%	0.0%	0.0%	914	301	0	\$80,000	\$26,000	\$0	\$0
	Truckee -- Crystal Bay	1,215	\$106,000	82.5%	17.5%	0.0%	0.0%	1,002	213	0	\$87,000	\$19,000	\$0	\$0
	Tahoe City -- Crystal Bay	608	\$53,000	100.0%	0.0%	0.0%	0.0%	608	0	0	\$53,000	\$0	\$0	\$0
	West Shore	608	\$53,000	100.0%	0.0%	0.0%	0.0%	608	0	0	\$53,000	\$0	\$0	\$0
Winter														
Day: 6:30 AM - 6:30 PM														
D	Tahoe City -- Truckee (1)	5,568	\$487,000	75.3%	24.8%	0.0%	0.0%	4,190	1,378	0	\$366,000	\$121,000	\$0	\$0
e	Truckee -- Crystal Bay (1)	5,568	\$487,000	82.5%	17.5%	0.0%	0.0%	4,594	974	0	\$402,000	\$85,000	\$0	\$0
c	Tahoe City -- Crystal Bay	3,016	\$264,000	100.0%	0.0%	0.0%	0.0%	3,016	0	0	\$264,000	\$0	\$0	\$0
1	West Shore	2,552	\$223,000	100.0%	0.0%	0.0%	0.0%	2,552	0	0	\$223,000	\$0	\$0	\$0
3	Truckee -- Donner Summit	1,607	\$140,000	0.0%	100.0%	0.0%	0.0%	0	1,607	0	\$0	\$140,000	\$0	\$0
t	Crystal Bay -- Incline Village	1,276	\$112,000	0.0%	0.0%	100.0%	100.0%	0	0	1,276	\$0	\$0	\$112,000	\$0
7	Truckee Local	1,276	\$91,000	0.0%	100.0%	0.0%	0.0%	0	1,276	0	\$0	\$91,000	\$0	\$0
	Supplementary Placer DAR Van	928	\$67,000	100.0%	0.0%	0.0%	0.0%	928	0	0	\$67,000	\$0	\$0	\$0
	Truckee Dial-A-Ride	1,301	\$93,000	0.0%	100.0%	0.0%	0.0%	0	1,301	0	\$0	\$93,000	\$0	\$0
Evening: 6:30 PM - 2:00 AM														
A	Tahoe City -- Truckee	1,740	\$152,000	75.3%	24.8%	0.0%	0.0%	1,309	431	0	\$114,000	\$38,000	\$0	\$0
p	Truckee -- Crystal Bay	1,740	\$152,000	82.5%	17.5%	0.0%	0.0%	1,436	305	0	\$125,000	\$27,000	\$0	\$0
p	Tahoe City -- Crystal Bay	870	\$76,000	100.0%	0.0%	0.0%	0.0%	870	0	0	\$76,000	\$0	\$0	\$0
r	West Shore	870	\$76,000	100.0%	0.0%	0.0%	0.0%	870	0	0	\$76,000	\$0	\$0	\$0
Spring / Fall														
Day: 6:30 AM - 6:30 PM														
S	Tahoe City -- Truckee	3,696	\$323,000	75.3%	24.8%	0.0%	0.0%	2,781	915	0	\$243,000	\$80,000	\$0	\$0
p	Truckee -- Crystal Bay	3,696	\$323,000	82.5%	17.5%	0.0%	0.0%	3,049	647	0	\$266,000	\$57,000	\$0	\$0
r	Tahoe City -- Crystal Bay	1,848	\$162,000	100.0%	0.0%	0.0%	0.0%	1,848	0	0	\$162,000	\$0	\$0	\$0
i	West Shore	1,848	\$162,000	100.0%	0.0%	0.0%	0.0%	1,848	0	0	\$162,000	\$0	\$0	\$0
n	Crystal Bay -- Incline Village	1,848	\$162,000	0.0%	0.0%	100.0%	100.0%	0	0	1,848	\$0	\$0	\$162,000	\$0
g	Truckee Local	1,848	\$133,000	0.0%	100.0%	0.0%	0.0%	0	1,848	0	\$0	\$133,000	\$0	\$0
/	Truckee Dial-A-Ride	1,884	\$135,000	0.0%	100.0%	0.0%	0.0%	0	1,884	0	\$0	\$135,000	\$0	\$0
F	Evening: 6:30 PM - 9:30 PM													
A	Tahoe City -- Truckee	1,008	\$88,000	75.3%	24.8%	0.0%	0.0%	759	249	0	\$66,000	\$22,000	\$0	\$0
L	Truckee -- Crystal Bay	1,008	\$88,000	82.5%	17.5%	0.0%	0.0%	832	176	0	\$73,000	\$15,000	\$0	\$0
L	Tahoe City -- Crystal Bay	504	\$44,000	100.0%	0.0%	0.0%	0.0%	504	0	0	\$44,000	\$0	\$0	\$0
L	West Shore	504	\$44,000	100.0%	0.0%	0.0%	0.0%	504	0	0	\$44,000	\$0	\$0	\$0
TOTAL			\$5,591,000					44,856	16,810	4,015	\$3,896,000	\$1,343,000	\$352,000	\$0

Note 1: Existing allocation procedure. Allocation of 89 and 267 Routes 100 percent to Placer County south of Squaw Valley and Northstar, and 50 percent to the north.