



Unitrans Advisory Committee

**Public Works Training Room
1717 Fifth Street
(Corporation Yard)**

AGENDA

**Thursday, July 14, 2005
6:30 p.m.**

Committee Members: Kristen Birdsall, Dan Fenocchio, Elaine Musser, Dave Pelz,
Rob Roy, James Schwab, Julie Sontag, Roche Zefo

Staff: Sue Gedestad, Operations Administrator
Geoff Straw, Unitrans General Manager

Council Representative: Stephen Souza

- 6:30 PM**
- 1. Roll Call**
 - 2. Introductions**
 - 3. Approval of Agenda**
 - 4. Committee and Staff Announcements**
 - 5. Public Communications:** At this time, any member of the public may address the Unitrans Advisory Committee on items within the committee's jurisdiction which are not listed on this agenda. Public comments will be accepted for items listed on the agenda when that matter is considered by the committee. No formal action may be taken on issues not listed on this agenda. Presentations may be limited depending on time available.
-

General Notes: The times designated for particular agenda items are approximate and are subject to change. Please be aware that items may be heard earlier depending on the time taken on previous agenda items.

The City does not transcribe its proceedings. Persons who wish to obtain a verbatim record should arrange for attendance by a court reporter or for some other acceptable means of recordation. Such arrangements will be at the sole expense of the individual requesting the recordation.

Agenda packets are available for review or copying at the Yolo County Library, Davis Branch, 315 East 14th Street.

Meeting facilities are accessible to persons with disabilities. By request, alternative agenda document formats are available to persons with disabilities. To arrange an alternative agenda document format or to arrange aid or services to modify or accommodate persons with a disability to participate in a public meeting, contact the City Clerk by calling 757-5648 (voice) or 757-5666 (TDD).

Consent Calendar

- 6. No Items**

Regular Calendar

- 7. Overview of Committee's Function**
- 8. Recap of Prior Year's Service Changes and Activities**
- 9. Recommendations for 05/06 Route Changes**



ASUCD CITY OF DAVIS

UNITRANS

5 South Hall • University of California
Davis, California 95616 • (530) 752-2877

GENERAL MANAGER'S REPORT

FISCAL YEAR 2003-04

December 20, 2004

Prepared by:

Geoff Straw, Unitrans General Manager

Table of Contents

Summary Analysis of the Year.....	1
Overview.....	1
Increases in Ridership.....	1
Maintenance Facility Expansion Substantially Completed.....	1
Five New Buses Put Into Service.....	2
Strong Financial Results.....	2
Service Changes in FY03-04.....	2
Additional Items of Note.....	3
Summary of Transit Services Provided During FY03-04.....	4
Fiscal Year 2003-04 Unitrans Performance Analysis.....	4
TABLE A: Unitrans Fiscal Year 2003-04 Financial Results.....	3
TABLE B: Unitrans Operating Characteristics, FY03-04.....	5
TABLE C: Unitrans Performance Indicators, FY03-04.....	6

Copy of Annual Report to the State Controller - Includes Financial Statements prepared by independent auditor (*forthcoming under separate cover*)

Summary Analysis of the Year

Overview

Fiscal Year 2003-04 was an eventful one for Unitrans. In addition to the record ridership levels experienced (that have become almost routine in recent years), several major capital projects were completed. Following is additional information on these and other key milestones.

Increases in Ridership

Ridership continued its rapid increase to new record levels, with the annual increase at 10 percent, resulting in annual ridership of 3,450,060 one-way passenger-trips. That is the third consecutive year of a double-digit increase, and reflects an increase of more than 300,000 passenger-trips in comparison to the previous year. Daily ridership when UCD is in session averaged greater than 20,000 boardings, with a maximum of almost 26,000 achieved in one day. Summer ridership continued to increase, with summer ridership now close to 6,000 boardings per day.

Maintenance Facility Expansion Substantially Completed

The long-awaited expansion of the Unitrans Maintenance Facility on Garrod Road was substantially completed during the year. During construction, there were frequent disruptions to the operations and maintenance activities, but no disruptions in passenger service resulted. The facility expansion doubled the number of maintenance bays from three to six. The expanded structure also includes additional space for the operations and dispatch functions, and it provides weather protection over the fueling islands. In addition, the site work increased the number of bus parking spaces to address planned expansions in the fleet. The new facility became available for occupancy in early August 2004 (after the end of FY03-04), but some upgrades to the older portion of the building remain to be completed in FY04-05.

In addition to the general facility expansion, work continued on the installation of a Hydrogen fueling infrastructure to provide an even cleaner fuel alternative than the compressed natural gas (CNG) currently in use. This infrastructure will fuel an experimental bus that has been converted to run on Hydrogen-Enriched Natural Gas, which tests have indicated will reduce emissions up to 90 percent below CNG. The converted bus was tested in limited use in fall 2003. Unfortunately, there have been delays in the completion of our blended Hydrogen-CNG fueling station, given uncertainty about code regulations related to Hydrogen storage, and this has prevented the H-CNG bus from operating in revenue service. At the same time, the presence of the Hydrogen fueling station at the Unitrans Facility made this the first station on California's "Hydrogen Highway," which was commemorated during a visit from Governor Arnold Schwarzenegger in April 2004.

Five New Buses Put Into Service

Unitrans took delivery of five new CNG-powered buses, replacing the last of our pre-1980's diesel-powered buses. These buses feature a "low-floor" configuration with only a single step into the main passenger area. A feature unique on the Unitrans buses is a seating layout that eliminates several seats to gain additional standing area. This is intended to increase overall capacity. Both the seating layout and low-floor design will be experimental for Unitrans, and these will be evaluated for consideration in future orders. The buses were dedicated at a ceremony in December 2003 and have been well-received by passengers. Since their introduction, Unitrans has been able to provide over 90 percent of its mileage during the school year using clean-fuel buses (and continues to provide 100 percent of summer service using clean-fuel buses).

Strong Financial Results

Unitrans had a good financial year in 2003-04. In total, Unitrans expended \$3,050,811 (un-audited) during the year. Obviously, as service levels have increased in recent years, operating costs have also risen proportionately. Nonetheless, operating revenues and ridership levels increased at corresponding rates, permitting Unitrans to fund its operations along with a significant contribution to reserves (almost \$155,000) in FY03-04. For FY04-05, an increased undergraduate fee ratified by students in the previous year will go into effect. Because this fee is earmarked for capital projects (primarily as a local match for federal grants), it is not included in the operating budget. The new fee will allow for the continued funding of capital projects, permitting a larger annual contribution from the operating budget to reserves. In order to maintain balance between fee and fare revenue, Unitrans also implemented a cash fare increase to \$1.00, which became effective on August 1, 2004. Because all pass and ticket prices remain unchanged, this increase is not expected to have a negative impact on regular riders.

Table A below presents a preliminary summary of operating expenditures and revenues for FY03-04. It should be noted that this table reflects un-audited figures. However, an external auditor is currently completing final financial statements and a full audit, and a copy of that report will be forwarded to the City when completed.

Service Changes in FY03-04

The constraints on the number of buses limited Unitrans to only minor expansions in service in Fiscal Year 2003-04. The fast-growing W-Line between South Davis and the MU Terminal was expanded again, operating 15-minute service frequencies during the day. With W-Lines operating to both the MU and Silo terminals every 15 minutes, the W-Line service levels are now comparable to the G-Line, which remains the highest ridership line. In addition to the very frequent weekday service on the G and W lines, Saturday G-Line and W-Line service was also introduced in FY03-04. That service proved to be very well-used and, with the prior Saturday line (modified P/Q), now results in good coverage of the entire city. Those same lines (P/Q, G, and W) were also expanded to run in the evening hours during summer and other UCD break times. The

TABLE A: FISCAL YEAR 2003-04 FINANCIAL RESULTS
ASUCD Unitrans

	2003-2004 Appropriations	2003-2004 Actual	2003-2004 Difference	2004-2005 Appropriations
Expenditures				
General Assistance	\$2,008,581	\$1,853,699	(\$154,882)	\$2,100,975
General Administration	\$118,594	\$138,298	\$19,704	\$129,404
Services Rendered	\$0	\$16,706	\$16,706	\$0
Marketing	\$52,000	\$47,757	(\$4,243)	\$50,000
Repair And Maintenance	\$260,500	\$308,677	\$48,177	\$282,000
Equipment Purchase	\$0	\$43,207	\$43,207	\$0
Fuel And Oil	\$280,000	\$321,888	\$41,888	\$280,000
Vehicle Insurance	\$45,000	\$54,074	\$9,074	\$60,000
YCTD Unlimited Access	\$85,000	\$85,000	\$0	\$85,000
ASUCD Charters	(\$39,762)	(\$39,765)	(\$3)	(\$37,000)
Training	\$29,500	\$50,519	\$21,019	\$45,600
Replacement Reserve	\$171,269	\$154,663	(\$16,606)	\$15,375
External Sales	\$0	\$16,087	\$16,087	\$45,000
Total Expenditures	\$3,010,682	\$3,050,811	\$40,129	\$3,056,354
Revenues				
Fares	\$120,000	\$169,159	\$49,159	\$148,000
Transit Fee	\$1,793,150	\$1,798,726	\$5,576	\$1,782,050
Advertising Sales	\$13,000	\$14,193	\$1,193	\$14,000
Miscellaneous	\$40,000	\$24,826	(\$15,174)	\$40,000
University Agreements	\$84,500	\$84,500	\$0	\$84,500
TDA - Yolo County	\$16,500	\$16,500	\$0	\$17,000
TDA - City Of Davis	\$529,907	\$529,907	\$0	\$545,804
FTA - Section 5307	\$413,625	\$413,000	(\$625)	\$425,000
Total Revenues	\$3,010,682	\$3,050,811	\$40,129	\$3,056,354

availability of evening transit service for Davis residents throughout the year has been a long-standing request but was finally made cost-efficient with the higher levels of ridership.

The year also saw the introduction of a service that did not prove to be cost effective. A parking shuttle was requested by UCD students to provide rides from available parking spaces south of the Mondavi Center, and reduce the need to search for parking near the campus core (as well as the use of non-campus spaces in the city). The free shuttle was funded jointly by ASUCD and Transportation and Parking Services (TAPS), and ran during the winter quarter, which is traditionally the period with highest parking demand. The shuttle only attracted a handful of riders each day, and was discontinued at the end of the quarter.

Additional Items of Note

- Conceptual planning was underway in FY03-04 for a new Silo Terminal. The location for this terminal would be on the north side of Hutchison Drive (across

from the Silo Union), to provide a common terminal for all lines in that corridor, as well as an off-street parking area for buses needed at peak times.

- Unitrans staff worked with Covell Village partners to make their proposed design transit-friendly and to include funding for a new Unitrans line as part of their proposed development.
- Unitrans had been one of the last transit systems in the nation where drivers gave change to fare-paying customers. With the introduction of the \$1.00 cash fare in August 2004, drivers no longer carry change.

Summary of Transit Services Provided During FY03-04

Below is an overview of service for Fiscal 2003-04

- Unitrans operated 13 distinct full-service routes, serving the City of Davis and the UCD campus.
- In addition, Unitrans operated a host of more specialized services, including daily trips for Davis secondary schools, Topsy Taxi, weekend Amtrak shuttles, limited charter service, and Saturday G-Line, P-Line, Q-Line and W-Line services.
- Service characteristics, including frequencies and periodic fluctuations, were very similar to the previous year, although somewhat more intense (as noted in the text above).
- System statistics (comparison to FY02-03 figures in parentheses):
 - Number of One-Way Passenger-Trips Provided: 3,450,060 (+307,475)
 - Revenue Hours Operated: 70,192 (+4,948)
 - Revenue Miles Operated: 752,243 (+51,993)

Fiscal Year 2003-04 Unitrans Performance Analysis

To gain further insight into the efficiency and effectiveness of Unitrans services, it is necessary to conduct an analysis of ridership and operating data on a service category basis. Ridership and operating statistics for FY03-04 were reviewed to identify passenger activity, marginal costs, allocated costs, allocated subsidy, farebox recovery ratio and other performance measures. Tables B and C below present this breakdown of financial performance indicators for each route.

As presented in Table B, system-wide ridership totaled 3,450,060 one-way passenger-trips in FY03-04. Annual ridership by route ranged from a low of 14,132 one-way passenger-trips on the T-Line to a high of 448,758 one-way passenger-trips on the G-

TABLE B: Unitrans Operating Characteristics, FY03-04

Line/Description	Annual One-Way Passenger-Trips	Annual Operating Cost (Note 1)	Annual Farebox Revenues (Note 2)	Vehicle Service Hours	Vehicle Service Miles
A - Line: Downtown / Fifth St. / Alhambra	241,060	\$275,940	\$131,560	6,890	76,574
B-Line: Wake Forest / Sycamore/ Drake	218,400	\$137,329	\$119,193	3,429	30,110
C-Line: Sycamore / Wake Forest	174,588	\$81,460	\$95,282	2,034	20,881
D-Line: Lake Blvd. / Arlington (MU)	149,741	\$127,037	\$81,722	3,172	31,514
D-Line: Lake Blvd. / Arlington (Shields)	264,079	\$207,736	\$144,122	5,187	55,631
E-Line: Downtown / F Street / J Street	174,170	\$130,161	\$95,054	3,250	26,950
F-Line: Oak / E. Alvarado / Catalina	122,973	\$124,474	\$67,113	3,108	29,220
G-Line: Anderson / Alvarado / N. Sycamore (MU)	448,758	\$245,703	\$244,912	6,135	57,468
G-Line: Anderson / Alvarado / N. Sycamore (Silo)	374,271	\$225,358	\$204,260	5,627	59,311
L-Line: E. Eighth St. / Chesnut / Fremont Circle	135,419	\$148,263	\$73,905	3,702	33,732
P-Line: Davis Perimeter Via South Davis	182,083	\$276,101	\$99,373	6,894	89,124
Q-Line: Davis Perimeter Via West Davis	206,708	\$285,793	\$112,812	7,136	92,258
S-Line: Holmes/Harper School Tripper	30,609	\$33,321	\$16,705	832	7,306
T-Line: Davis High School Tripper	14,132	\$19,144	\$7,713	478	5,558
W-Line: Cowell/Lillard/Drummond (MU)	281,907	\$152,909	\$153,852	3,818	55,708
W-Line: Cowell/Lillard/Drummond (Silo)	396,694	\$234,249	\$216,497	5,849	54,315
Saturday/Undesignated/Shuttle	34,468	\$106,171	\$18,811	2,651	26,583
Overall Total	3,450,060	\$2,811,148	\$1,882,885	70,192	752,243

Note 1: Operating costs allocated by each route's proportion of annual vehicle service hours.

Note 2: Farebox revenues allocated by each route's proportion of total ridership.

Line/MU. Of particular note is the high ridership experienced on the two G-Lines and two W-Lines. Combined, these four routes provided 1,501,630 passenger boardings, or 43.5 of system-wide ridership.

The total Unitrans operating cost in FY03-04 was \$3,050,811, including the contribution to reserves and the pass-through of student fee funds to the Yolo County Transportation District to fund fare-free service for undergraduates. Excluding these two budget items leaves an annual operating cost of \$2,811,148, and net farebox revenues of \$1,882,885. The two perimeter routes (P-Line and Q-Line) required the greatest amount of operating funds (\$276,101 and \$285,793, respectively), followed by the A-Line (\$275,940) and the G-Line/MU (\$245,703). The two limited-service school tripper routes (S-Line and T-Line) required relatively low amounts of operating funding. As these operating cost figures are dependent wholly on the service levels provided, Table B also presents the number of vehicle service hours and miles provided on each route.

When fare revenue is subtracted from the total operating cost and divided by the number of one-way passenger-trips, the subsidy required per one-way passenger-trip is calculated. This performance measure is particularly important, as it directly compares the most significant public "input" (public subsidy funding) with the most significant "output" (one-way passenger-trips). System-wide, Unitrans required a subsidy of only \$0.27 per one-way passenger-trip. This is an astounding accomplishment, as many small urban systems struggle to keep their subsidy per passenger-trip below \$5.00. Obviously, the collection of undergraduate fees (\$23.50 per quarter per undergraduate student, or \$1,798,726 for the fiscal year) contributes to this success story. Nonetheless, the cash fares provide strong support for local services and demonstrate the importance of Unitrans services in meeting the community's travel needs. As indicated in Table C below, the C-Line actually generated income of \$0.08 per passenger boarded. Other routes with relatively low subsidy per passenger-trip figures include the W-Line/MU (\$0.00), the G-Line/MU (\$0.00), the W-Line/Silo (\$0.04) and the G-Line/Silo (\$0.06). Conversely, of the regular year-round services, the P-Line requires the greatest subsidy per passenger boarding (\$0.97), followed by the Q-Line (\$0.84) and the A-Line (\$0.60).

The financial efficiency of a transit system can be measured by the farebox recovery ratio, which is illustrated in Table C below. The farebox recovery ratio is particularly important as a measurement for meeting the mandated minimums required for state funding. The Unitrans system-wide farebox recovery ratio in FY03-04 was 67.0 percent, well above the 20 percent ratio required under the California Transportation Development Act. By route, the C-Line achieved the greatest farebox recovery ratio (1117.0 percent), followed by the W-Line/MU (100.6 percent), the G-Line/MU (99.7 percent) and the W-Line/Silo (92.4 percent). Conversely, of the regular year-round services, the P-Line achieved the lowest farebox recovery ratio (36.0 percent), followed by the Q-Line (39.5 percent) and the A-Line (47.7 percent).

An important measure of service effectiveness is "productivity," defined as the number of one-way passenger-trips provided per vehicle service hour. As presented in Table C, Unitrans achieved an outstanding productivity of 49.2 one-way passenger-trips per

TABLE C: Unitrans Performance Indicators, FY03-04

Line/Description	Subsidy Per One-Way Passenger-Trip	Farebox Recovery Ratio	Passenger-Trips Per Vehicle Service Hour	Passenger-Trips Per Vehicle Service Mile
A - Line: Downtown / Fifth St. / Alhambra	\$0.60	47.7%	35.0	3.1
B-Line: Wake Forest / Sycamore/ Drake	\$0.08	86.8%	63.7	7.3
C-Line: Sycamore / Wake Forest	(\$0.08)	117.0%	85.8	8.4
D-Line: Lake Blvd. / Arlington (MU)	\$0.30	64.3%	47.2	4.8
D-Line: Lake Blvd. / Arlington (Shields)	\$0.24	69.4%	50.9	4.7
E-Line: Downtown / F Street / J Street	\$0.20	73.0%	53.6	6.5
F-Line: Oak / E. Alvarado / Catalina	\$0.47	53.9%	39.6	4.2
G-Line: Anderson / Alvarado / N. Sycamore (MU)	\$0.00	99.7%	73.1	7.8
G-Line: Anderson / Alvarado / N. Sycamore (Silo)	\$0.06	90.6%	66.5	6.3
L-Line: E. Eighth St. / Chesnut / Fremont Circle	\$0.55	49.8%	36.6	4.0
P-Line: Davis Perimeter Via South Davis	\$0.97	36.0%	26.4	2.0
Q-Line: Davis Perimeter Via West Davis	\$0.84	39.5%	29.0	2.2
S-Line: Holmes/Harper School Tripper	\$0.54	50.1%	36.8	4.2
T-Line: Davis High School Tripper	\$0.81	40.3%	29.6	2.5
W-Line: Cowell/Lillard/Drummond (MU)	(\$0.00)	100.6%	73.8	5.1
W-Line: Cowell/Lillard/Drummond (Silo)	\$0.04	92.4%	67.8	7.3
Saturday/Undesignated/Shuttle	\$2.53	17.7%	13.0	1.3
Overall Total	\$0.27	67.0%	49.2	4.6

vehicle service hour. In comparison, most small urban transit systems struggle to achieve a productivity figure of 20 passenger-trips per vehicle service hour. Not surprisingly, the C-Line achieved the greatest productivity (85.8), followed by the G-Line/MU (73.1) and the G-Line/MU (66.5). The P-Line achieved the lowest productivity (26.4), followed by the Q-Line (29.0) and the A-Line (35.0).

It should be noted that this success in achieving high productivity figures comes at a price – many runs are operated at a “crush” load, which is deemed by many travelers as a deterrent to using transit. Unitrans is tracking the number of bus trips that board 60 or more riders to better deploy “tripper” resources. In short, the only method to reduce the number of crush loads – which typically occur during the peak morning and afternoon travel periods – is to expand service levels and/or utilize larger buses on impacted bus lines. Unitrans is currently investigating the use of larger modern double deck buses on the G-Line, A-Line and C-Line. However, double deck buses cannot be used on the W-Line, since the Richards railroad under-crossing precludes their use. As such, additional tripper runs could be scheduled once fleet expansions occur. It should be noted that Unitrans recently ordered four 40-foot Orion coaches, although delivery is not anticipated until January 2006. Unitrans will continue to apprise City staff of capacity issues as they occur.

Another measure of service effectiveness is the number of one-way passenger-trips provided per vehicle service mile. As presented in Table C, the system-wide average during FY03-04 was 4.6. In general, those lines that operate relatively short routes in areas of high transit demand perform best in terms of passenger-trips per vehicle service mile.

It should be noted that several of the existing routes experience on-time performance challenges, particularly during periods of high ridership. In addition, those lines that operate relatively long routes also experience on-time performance challenges, as each traffic delay is compounded. Unitrans is currently investigating technology solutions that would better inform dispatchers and route supervisors when buses are falling behind schedule so that tripper resources could be deployed to help “distribute” boardings over a greater number of vehicles. Unitrans has recently met with Yolo County Transportation District (Yolobus) officials to determine if a joint study on technology solutions would be the best approach to this project. Regardless, Unitrans and/or Yolobus officials may seek written support from area leaders (including the City of Davis) to secure a discretionary Federal Transit Administration grant to help fund the project.