

**MOORPARK CITY COUNCIL
AGENDA REPORT**

TO: Honorable City Council

FROM: Dave Klotzle, Interim City Engineer/Public Works Director 
Prepared by: Shaun Kroes, Senior Management Analyst 

DATE: December 22, 2010 (CC Meeting of 01/05/2011)

SUBJECT: Consider Moore & Associates, Inc. Recommendations for Changes to Moorpark City Transit Bus Routes and Timetables

SUMMARY

On November 15, 2008, the City Council approved entering into an agreement with Moore & Associates, Inc., to evaluate Moorpark City Transit's bus system. The goal was to determine if there were improvements to the system that could be made to increase ridership without increasing costs. Moore & Associates was also tasked with developing proposed maps and schedules for evening and weekend service. Moore & Associates completed its route study in 2009. Staff has been evaluating Moore's report, including examining proposed bus stop locations and determining the feasibility of Moore's proposals. The final report, completed December 1, 2010, (Attachment 1) provides an evaluation of the City's transit system as well as proposed route maps and schedules.

BACKGROUND

Moorpark City Transit currently operates two bus routes Monday through Friday, between 6:00 a.m. and 6:00 p.m. Route 1 travels in a counter-clockwise loop around the City and Route 2 travels in a clockwise loop around the City. Both routes cover the majority of the City. Route 1 provides service to Villa del Arroyo Mobile Home Park and Route 2 provides service to Moorpark Marketplace. Moorpark City Transit provides service to many passengers, however, the primary passengers are students traveling to and from K-12 schools and Moorpark College. Moorpark City Transit also has some passengers also commute to and from work and use the bus to travel to the Active Adult Center.

Moore & Associates performed three primary tasks as part of their Agreement. The first was to perform a ride check analysis. The second task was to provide an evaluation of the City's existing service. The third task was to provide recommendations for adjustments to the City's bus routes (if any) as well as proposed bus routes and schedules for evening and weekend service.

DISCUSSION

Moore & Associates reported that Moorpark City Transit operates an efficient transit system. Moorpark City Transit has seen ridership increase 33.0% over a five-year period (FY 05/06 through FY 09/10). It should be noted that Moorpark City Transit had a 46.6% increase in ridership between FY 05/06 and FY 08/09, however, a ridership decrease of 9.27% in FY 09/10 has decreased the overall ridership trend. Staff does not have a definitive answer as to why ridership decreased the last fiscal year. Nationally, decreases in ridership are being blamed on the economic downturn as commuters have lost jobs. In Moorpark, it is possible that some students have decided to use other means of transportation to travel to and from school. The local Boys and Girls Club has reduced the number of bus routes that it used to bring students to the Club on Casey Road in the afternoon; this reduction is likely one reason for the decrease in Moorpark City Transit's ridership.

Ride Check Analysis

Moore & Associates' Ride Check Analysis consisted of their staff taking 39 trips over a two-day period. As indicated in the report, improvements in on-time performance are necessary. Both Route 1 and Route 2 fell below industry standards of 90%. Combined, Route 1 and Route 2 had an on-time performance of only 66.4%. Route 1 had an on-time performance of 78.3%, compared to Route 2's on-time performance of 53.6%. Many factors can be attributed to the low on-time performance. Delays can be caused by traffic at Moorpark College and train crossing signals at Spring Road and Moorpark Avenue. The other factor can be the current practice of requesting drivers to wait two minutes past designated departure times. The practice was put into place after passengers complained about the buses leaving bus stops too soon. Many complaints were actually determined to be a result of passengers' timepieces being early compared to the City buses timepieces. To decrease the risk of perceived premature departures, the bus drivers were instructed to wait two minutes to depart from their stop. Boarding passengers with wheelchairs could also delay trips, particularly with the City's older buses which require a wheelchair lift instead of the City's new buses with wheelchair ramps.

Staff's proposal to improve overall trip on-time performance is to carefully monitor the buses using the City's tracking system to replay bus trips. If it is determined that delays are a result of a driver's failure to adhere to departure times, corrective action will be

required. If it is determined that the factors are outside of the driver's control, then further adjustments to the respective route or trip may be required.

The Ride Check Analysis also provided details of where passengers primarily boarded and alighted from the buses. Route 1's primary boarding locations appear to be at Woodcreek Apartments and near Moorpark High School. This is not surprising since it has already been established that many passengers use Moorpark City Transit to travel to and from school. What was surprising was seeing that the Civic Center was the primary alighting location. This could be explained by the Boys and Girls Club, which used Route 1 to bring some of its participants to its Casey Road location when local schools ended. It should be noted that the Boys and Girls Club has since ceased its use of Moorpark City Transit. Based upon the ridership data, it appears that many passengers board Route 1 from the Mountain Meadows area and travel to Virginia Colony and Moorpark College.

Route 2's primary boarding location was the Moorpark Civic Center. One factor that plays a role in this particular bus stop is that passengers transfer from between two buses during a shift change at 3:10 p.m. This occurs just after Route 2 has boarded many passengers from the Moorpark High School. Route 2's secondary boarding location of Peach Hill Park is partially attributable to the Boys and Girls Club, which used that bus stop to travel from Peach Hill School to the Civic Center, where passengers then walked to the Casey Road location. Route 2's boardings and alightings also reflect the locations where Route 1 doesn't provide service, including Moorpark Marketplace, Mesa Verde Middle School, Vintage Crest Senior Apartments, and Second Street and Millard. Route 2's overall ridership was more distributed throughout the system compared to Route 1, although it did have a concentration of passengers in the northeast portion of Moorpark.

Service Evaluation

Moore & Associates used passenger data and cost data provided by the City to evaluate Moorpark City Transit's existing service performance. The evaluation covered five fiscal years (FY 05/06 – FY 09/10). With the exception of FY 09/10, Moorpark City Transit has seen an increase in ridership and a decrease in cost-per-passenger. Although FY 09/10 saw a decrease in ridership compared to FY 08/09, ridership is still higher than all the remaining previous fiscal years. Moore & Associates reports that nationally, transit ridership growth is usually five to six percentage points each year. Moorpark City Transit's annual ridership growth has averaged 6.6%. Not accounting for FY 09/10, Moorpark City Transit's annual ridership growth averaged 11.7%. Operational costs have increased 20.0% in the past five years, but passenger revenue has increased 95.4% during the same time period. Although public transit rarely pays for itself, the farebox ratio for Moorpark City Transit has been above 30% for the past two fiscal years. The City has a farebox ratio goal of 20% or higher.

Moore & Associates report shows that Route 1 has a higher service level compared to Route 2. Route 1's number of passengers per service hour and service mile are both in the low 40 percentile compared to Route 2's mid 20 percentile. Route 1's operating cost per passenger decreased 15% over the past five years compared to Route 2's decrease of only 3%. Not surprisingly, Route 1 has a higher farebox ratio than Route 2. The highest discrepancy was in FY 08/09, when Route 1 had a farebox ratio of 41% compared to Route 2's farebox ratio of 30%. Overall, in the past five years, Moorpark City Transit's farebox ratio has increased 63%, and, according to Moore & Associates, at 31% is higher than many small community transit operations.

Service Recommendations

Based on the results of the Ride Check Analysis and Service Evaluation, Moore & Associates proposed two distinct route scenarios. Scenario A consisted of minor adjustments intended to streamline the existing system. Scenario B reduced service duplication and established two distinct routes that would require transferring between Route 1 and Route 2 if a passenger wanted to get from one end of Moorpark to the other. After reviewing the two scenarios, staff recommends Scenario A for several reasons. First, as previously indicated, the existing transit service has good ridership. A disruption as significant as Scenario B could jeopardize that ridership. Second, Scenario B's additional service to Moorpark Highlands and Meridian Hills did not promise to provide an increase in ridership compared to the potential loss of ridership at existing service areas.

Scenario A has a greater impact on Route 1 than on Route 2. The first change is the elimination of service to Sierra Avenue and the business district of Goldman Avenue and Maureen Lane. This area is proposed to be cut due to lack of ridership. The time saved from eliminating those stops will be utilized to establish Route 1 service at Moorpark Marketplace. The new service will enable passengers in the Mountain Meadows area to travel to Moorpark Marketplace in 14 minutes, compared to 38 minutes on Route 2. Staff explored the feasibility of establishing service at Moorpark Highlands and Meridian Hills. Route 1 would have been the preferred route to use for those neighborhoods, however, Moore & Associates indicated that the City would see greater increases in ridership by establishing new service to a retail area than to gated communities. The first reason is that bus stops near the gated communities would require long walks from passengers' homes. The second is that private, gated communities tend to utilize public transit at a lower rate compared to other locations. Thirdly, service could not have been provided in these neighborhoods by Route 2 without sacrificing service in the downtown area.

Scenario A has less of an impact on Route 2 than Route 1. This scenario reduces a few Route 2 bus stops that are underutilized. Specifically, Route 2 would no longer travel to Rite Aid, but would instead turn right onto Christian Barrett Drive instead of looping out to Tierra Rejada Road. Route 2 would also stop service to Country Hill Park

and instead would travel north on Country Hill Road to Countrywood Drive. All other stops would remain unchanged. Scenario A provides ten minutes of dwell time between trips (instead of the current eight minutes). This should help to decrease Route 2's late arrival time exceedances. As Route 2 is monitored for timeliness, it is possible that the dwell times could be shortened and an additional trip could be established.

For weekend and evening services, Moore & Associates developed three different scenarios. Scenario A has the same service delivery structure as daytime Scenario A. Scenario B is a significant revision in service delivery aimed at reducing service duplication, expanding the Moorpark City Transit service area, and supporting future program growth. Scenario C modifies the operation to include a single route (Route 1) for the evening and weekend service. After discussion with Moore & Associates, staff concluded that if a scenario were to be implemented, Scenario C would be recommended. Scenario C provides the most coverage of the City with the least expenditure and least confusion for passengers. Alternative route maps would not be required at existing bus stops nor would additional maps be required on bus schedules. Additional timetables would indicate the hours of service.

With any type of weekend or evening service hours, Moorpark City Transit would likely experience a significant decrease in ridership compared to its daytime fixed route service, primarily as a result of the lack of K-12 students utilizing the service to travel to and from school. For example, ridership decreased 73% during winter 2008/09 while grades K-12 and Moorpark College were on break. Ridership remained 10% lower during the week of January when grades K-12 were back in session but Moorpark College was still on break. During summer months (June through August) Moorpark City Transit averages a 20% drop in ridership while summer school is in session, compared to ridership during regular school sessions in the fall and spring.

In addition to the increased expenditure for weekend and evening service, per Federal requirements, the City would be required to establish complimentary Americans with Disabilities Act (ADA) service during the same extended service. The ADA service could add an estimated 30% to costs associated with the increased service days and hours. Due to the estimated lower ridership that is anticipated during evening and weekend hours for Moorpark City Transit, the City could consider establishing a General Dial-A-Ride (General DAR) transit service for evening and weekend service within the City only rather than expanding the fixed-route services. A General DAR service would work similarly to the existing Intra-City Senior DAR and ADA DAR systems. The General DAR system would utilize ADA accessible vehicles. The benefit of establishing a General DAR system is that it removes the requirement to operate a separate ADA DAR program at the same time that a fixed route system operates. Fares would be established for the service, perhaps \$2.00 per trip for students/adults and \$1.00 per trip for seniors/disabled. The City could apply for Jobs Access/Reverse Commute funding for the program, which would fund 50% of the program. The extended service hours would also be eligible for Federal Congestion Mitigation and Air Quality (CMAQ) funds.

Both of these funding sources would not be available until Fall 2011, at which time Staff would return to City Council with a recommendation for extending transit services prior to applying for any grant funds.

Summary

Moore & Associates' evaluation helped to illuminate where Moorpark City Transit could improve its operations. It is recommended to remove Route 1 bus stops located at Shasta Avenue and Los Angeles Avenue (northwest corner), Goldman Avenue and Los Angeles Avenue (northeast corner), Hertz Street (flagstop), and Maureen Lane and Los Angeles Avenue (northwest corner). New Route 1 bus stops would include Moorpark Marketplace (behind Famous Footwear) and Patriot Drive (at designated bus turnout). It is recommended to remove Route 2 bus stops located at Spring Road in front of Rite Aid, Country Trail Park, and Countrywood Drive and Bentcreek Road (southeast corner). New Route 2 bus stops would include Spring Road and Christian Barrett Drive (northwest corner), and Mountain Trail and Country Hill Road (northeast corner). The new routes for Route 1 and Route 2 are detailed in Exhibit 3.1. The new Route 1 timetable is detailed in Exhibit 3.3, and the new Route 2 timetable is detailed in Exhibit 3.5. Staff proposes that the preferred routes and timetables be publicized on the buses for comment for at least thirty days before proceeding with implementing the changes. If a significant amount of opposition to the proposed changes is received, staff will return to City Council with proposed adjustments.

Based upon the current decrease in transit funding, expanding weekend and evening hour service is not recommended at this time until additional funding becomes available.

FISCAL IMPACT

The City's Agreement with Moore & Associates was for \$7,410.00. The evaluation was completed within the original Agreement amount. The City has Local Transit Programs 8C Fund (5000) budgeted to cover new maps, timetables, and bus schedules (estimated at \$5,000). The City's new bus purchase included an automated bus announcement system that will be activated once the new routes are established.

STAFF RECOMMENDATION

1. Receive and file Moore & Associates' Transit Evaluation Study.
2. Approve Route 1 and 2 Scenario A as detailed in Exhibit 3.1, Route 1 timetable as detailed in Exhibit 3.3, and Route 2 timetable as detailed in Exhibit 3.5.
3. Authorize staff to proceed with implementing route and timetable adjustments after a 30 day public comment period.

Attachment:
Transit Route Evaluation

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1.

RIDE CHECK ANALYSIS

CHAPTER 1 – RIDE CHECK ANALYSIS

As part of our evaluation of Moorpark City Transit's fixed-route on-time performance, Moore & Associates conducted a ride check Monday, January 12 and Tuesday, January 13, 2009. A total of 39 trips were evaluated across the two-day period.

Trips on Route 1 on January 12 at 11:00 a.m. and January 13 at 12:30 p.m. as well as on January 13 at 1:10 p.m. were missed due to staff lunches. Trips on January 13 along Route 2 were missed at 4:10 p.m. and 5:10 p.m. due to staff illness. The ride check was conducted across two service days with a representative sampling of all day-parts. A total of 802 riders were counted onboard MCT vehicles across the survey period – 430 on Route 1 and 372 on Route 2.

On-Time Performance

On-time performance was assessed at the beginning (Civic Center), midpoint (Peach Hill Park on Route 1, Mountain Trail Street/Tierra Rejada Road on Route 2), and end of each trip (Civic Center). Our ride check was conducted under actual operating conditions. Methodology for determining on-time performance was the same as employed by Moore & Associates for each of our client properties. Our survey coordinator synchronized his time piece with Verizon Communications' automated clock. In turn, he synchronized the watches of all surveyors. The surveyors then rode MCT buses collecting data at all time points along a given route. The data collected by the surveyors was then entered into Microsoft Excel for cleaning and analysis.

The following criteria were used to evaluate on-time performance:

- **On-time**, defined as any trip departure occurring up to five minutes after the published schedule time.
- **Early**, defined as any departure from an established time-point occurring in advance of the published schedule time.
- **Late**, defined as any departure from an established time-point occurring five or more minutes after the published schedule time.

The chapter will first cover system on-time performance by trip segment, day-part, and route. Following the on-time performance discussion is analysis of Moorpark City Transit's productivity on the individual route and individual stop levels. Moore & Associates identified the trip start and end points for both routes as the Civic Center, Peak Hill Park as the midpoint for Route 1 and the intersection of Mountain Trail Street and Tierra Rejada Road as the midpoint for Route 2.

Moorpark City Transit's actual on-time performance during the January 2009 assessment (66.4 percent) fell below the industry standard of 90 percent. Exhibit 1.1 illustrates composite on-time performance as well as performance by route and trip segment. Route 1 performed better (78.3 percent) than Route 2 (53.6 percent). Aggregate on-time performance was highest at trip midpoint (74.4 percent) and poorest at trip end (57.9 percent). One troubling fact is only two thirds of all surveyed trips departed from the initial time-point on-time. Given the eight minutes of recovery time built into the schedule, there should be adequate "cushion" to allow for every trip to start on-time.

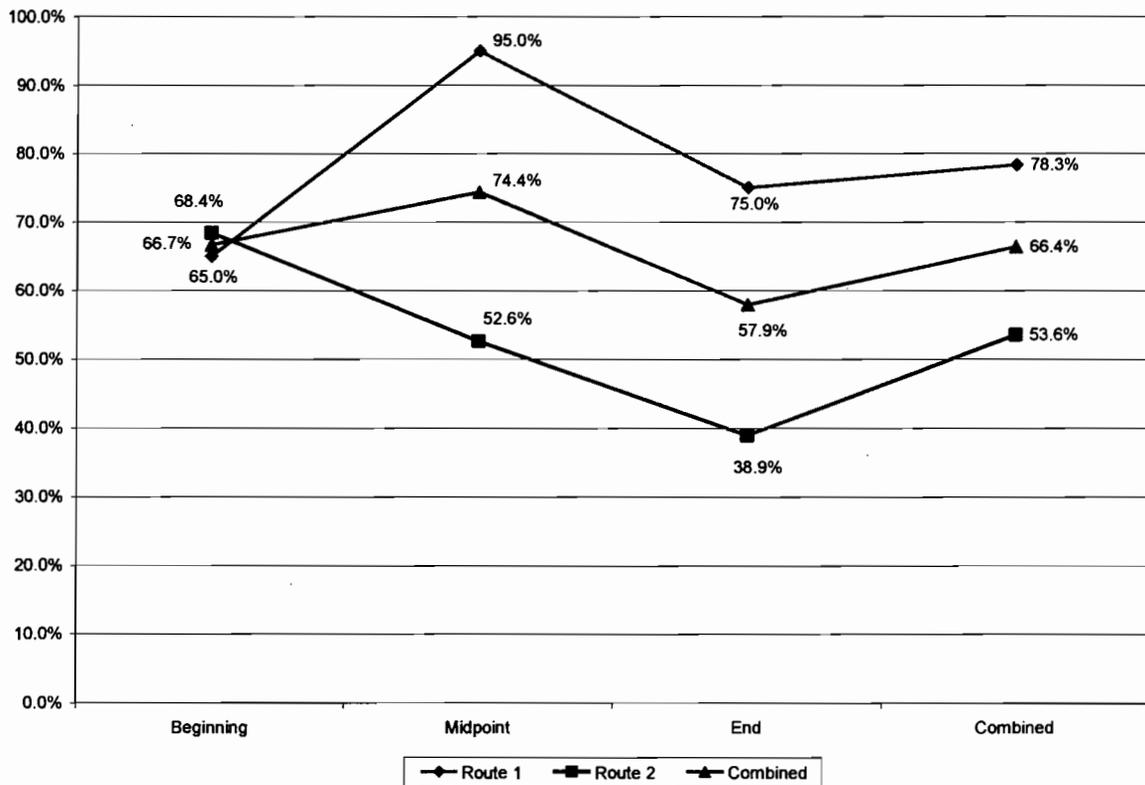
Exhibit 1.1 On-Time Performance by Route

	Beginning	Midpoint	End	Combined
Route 1	65.0%	95.0%	75.0%	78.3%
Route 2	68.4%	52.6%	38.9%	53.6%
Combined	66.7%	74.4%	57.9%	66.4%

Route 1's on-time performance peaked at trip midpoint (95 percent) before diminishing at trip end (75 percent). Ending a trip on-time is not a significant concern, so long as the bus departs the penultimate time point as scheduled and is able to begin the subsequent trip on-time.

Route 2's on-time performance deteriorates as the run progresses, with its best performance at trip start (68.4 percent) and worst at trip end (38.9 percent). Route 2's poor performance can be attributed in part to technical operational problems related to Metrolink crossing signals on January 13, delaying the bus for several minutes.

Exhibit 1.2 On-Time Performance by Route



Critical to the evaluation process is data segregation by day-part. In doing so, we identified four distinct time blocks:

- 6:00 a.m. to 8:59 a.m. (early morning),
- 9:00 a.m. to 11:59 a.m. (late morning),
- 12:00 p.m. to 2:59 p.m. (early afternoon), and
- 3:00 p.m. to 6:00 p.m. (late afternoon).

This process allows Moore & Associates to identify specific issues related to time of day while also isolating one-time events affecting on-time performance. The only early arrivals on Route 1 occurred at trip end, where they had little or no impact on customer perceptions of service reliability. The only early departures on Route 2 occurred at trip midpoint,

during the “early afternoon” day-part. With respect to on-time performance at trip start, there was a problem with trips beginning late. For instance, on Route 1, 20 percent of trips in the “late morning” day-part ended late. However, 80 percent of trips also started late, potentially revealing a driver training issue given the sizeable (eight-minute) cushion between trips. Nearly 50 percent of Route 2’s trips were late, compared with less than 20 percent on Route 1.

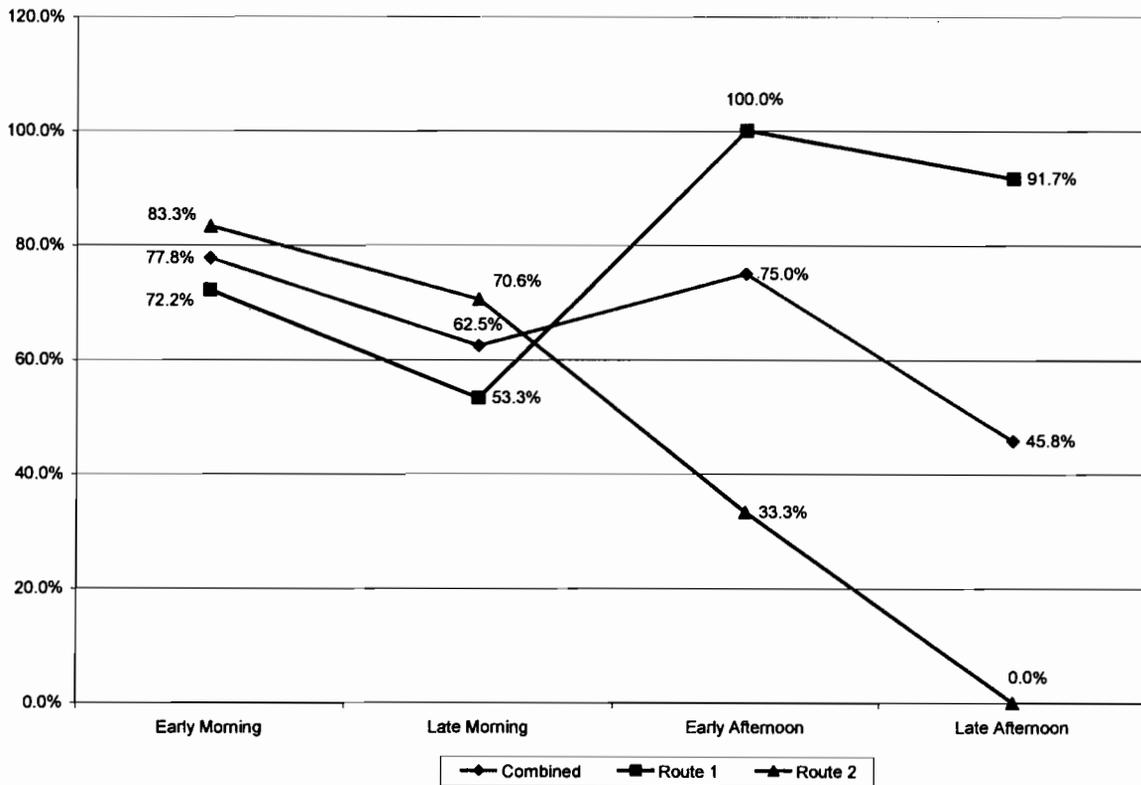
Route 1 performed better in the two afternoon day parts (100 percent and 91.7 percent, respectively), while Route 2 performed better in the two morning day parts (83.3 percent and 70.6 percent, respectively). On-time performance for MCT was highest in the “early morning” and “early afternoon” day-parts (77.8 and 75 percent, respectively), mirroring those day-parts of greatest ridership.

Exhibit 1.3 On-Time Performance by Route and Day-Part

	Beginning			Midpoint			End			Combined		
	On-Time	Early	Late	On-Time	Early	Late	On-Time	Early	Late	On-Time	Early	Late
Route 1												
Early Morning	50.0%	0.0%	50.0%	100.0%	0.0%	0.0%	66.7%	0.0%	33.3%	72.2%	0.0%	27.8%
Late Morning	20.0%	0.0%	80.0%	80.0%	0.0%	20.0%	60.0%	20.0%	20.0%	53.3%	6.7%	40.0%
Early Afternoon	100.0%	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%	0.0%	0.0%
Late Afternoon	100.0%	0.0%	0.0%	100.0%	0.0%	0.0%	75.0%	25.0%	0.0%	91.7%	8.3%	0.0%
Subtotal	65.0%	0.0%	35.0%	95.0%	0.0%	5.0%	75.0%	10.0%	15.0%	78.3%	3.3%	18.3%
Route 2												
Early Morning	83.3%	0.0%	16.7%	83.3%	0.0%	16.7%	83.3%	0.0%	16.7%	83.3%	0.0%	16.7%
Late Morning	83.3%	0.0%	16.7%	83.3%	0.0%	16.7%	40.0%	0.0%	60.0%	70.6%	0.0%	29.4%
Early Afternoon	100.0%	0.0%	0.0%	0.0%	33.3%	66.7%	0.0%	0.0%	100.0%	33.3%	11.1%	55.6%
Late Afternoon	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Subtotal	68.4%	0.0%	31.6%	52.6%	5.3%	42.1%	38.9%	0.0%	61.1%	53.6%	1.8%	44.6%
Combined												
Early Morning	66.7%	0.0%	33.3%	91.7%	0.0%	8.3%	75.0%	0.0%	25.0%	77.8%	0.0%	22.2%
Late Morning	54.5%	0.0%	45.5%	81.8%	0.0%	18.2%	50.0%	10.0%	40.0%	62.5%	3.1%	34.4%
Early Afternoon	100.0%	0.0%	0.0%	62.5%	12.5%	25.0%	62.5%	0.0%	37.5%	75.0%	4.2%	20.8%
Late Afternoon	50.0%	0.0%	50.0%	50.0%	0.0%	50.0%	37.5%	12.5%	50.0%	45.8%	4.2%	50.0%
Subtotal	66.7%	0.0%	33.3%	74.4%	2.6%	23.1%	57.9%	5.3%	36.8%	66.4%	2.6%	31.0%

Exhibit 1.4 illustrates on-time performance by day-part and by route. Route 1's performance declines significantly from the "early morning" to "late morning" day-parts before rebounding in the early afternoon. Route 2's performance deteriorates steadily throughout the day, declining from 83.3 percent in the "early morning" to zero percent in the "late afternoon."

Exhibit 1.4 On-Time Performance by Route and Day-Part

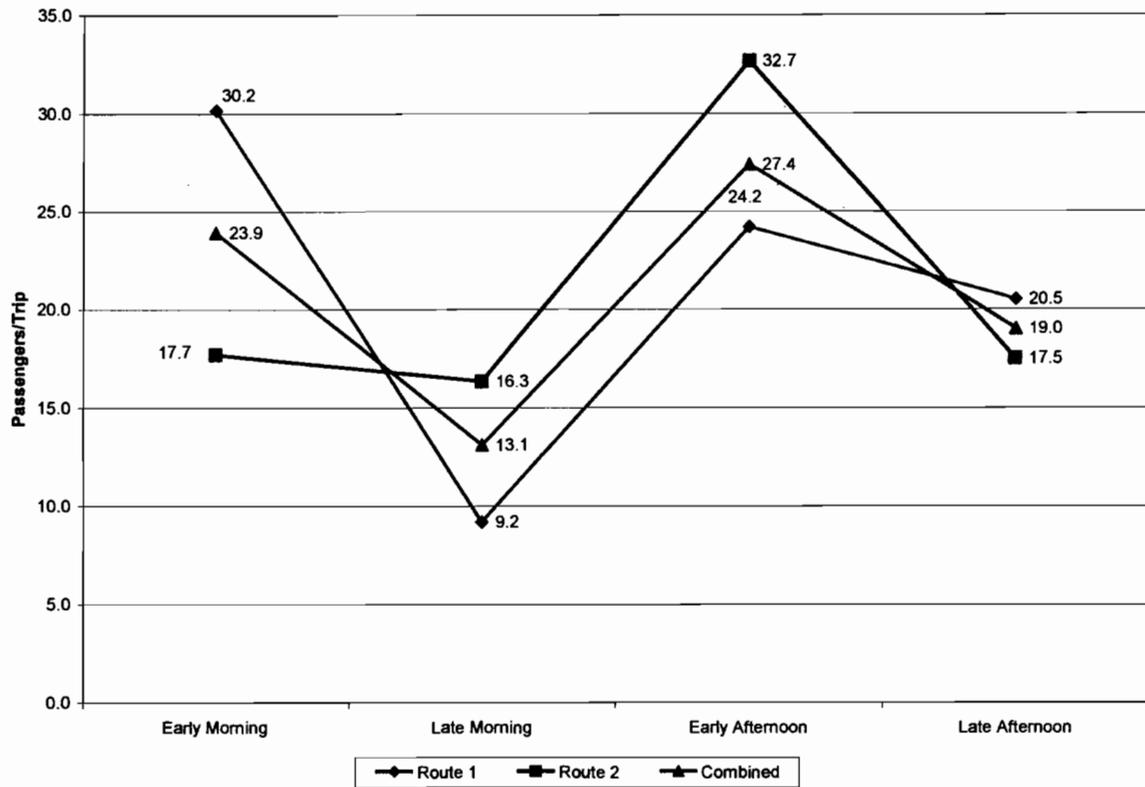


Fixed-Route Boarding and Alighting

In addition to tracking on-time performance at published timepoints, our surveyors recorded boarding and alighting activity at each published bus stop. The data were collected on the same trip sheets used to evaluate on-time performance. The trip sheets were imported into Microsoft Excel. Total boardings and alightings were calculated and assigned according to route, stop, and day-part. This data was used to create a snapshot of total ridership and activity.

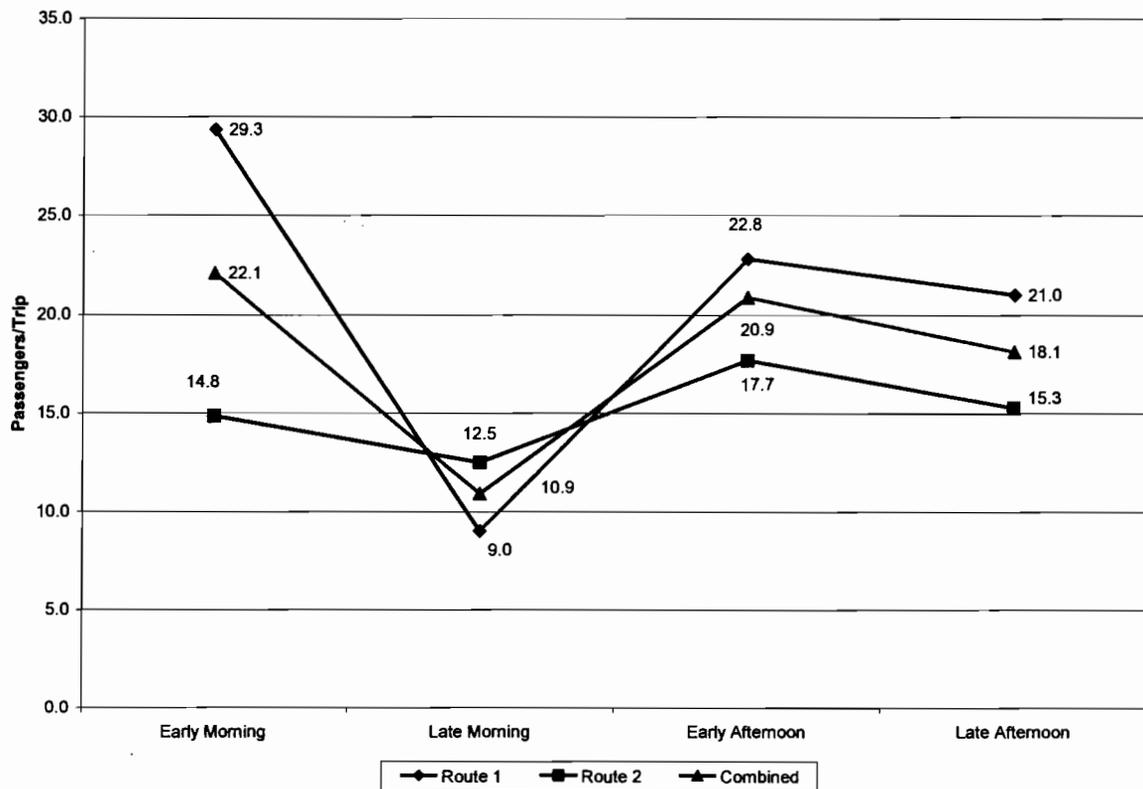
Route 1 experienced higher boarding activity across the survey period than Route 2, though the routes had very similar boarding patterns. Both peaked in the "early morning" and "early afternoon" (although Route 2's peak in the "early morning" day-part was not as dramatic as Route 1's).

Exhibit 1.5 Boarding by Day-Part



Route 1 noted higher alighting activity across the survey period than Route 2; although as with boarding activity, the two routes noted similar trends. Alighting activity peaked in the “early morning” and “early afternoon” day-parts. Alighting activity dipped significantly in the “late morning” day-part. This can be attributed to MCT’s primary customer base which uses the service to travel between home and school.

Exhibit 1.6 Alighting by Day-Part



Stops along Tierra Rejada comprise a significant share of the most frequent boarding (origin) points. Notably absent are stops along Route 1's "jog" through Mission Bell Plaza and Moorpark Town Center.

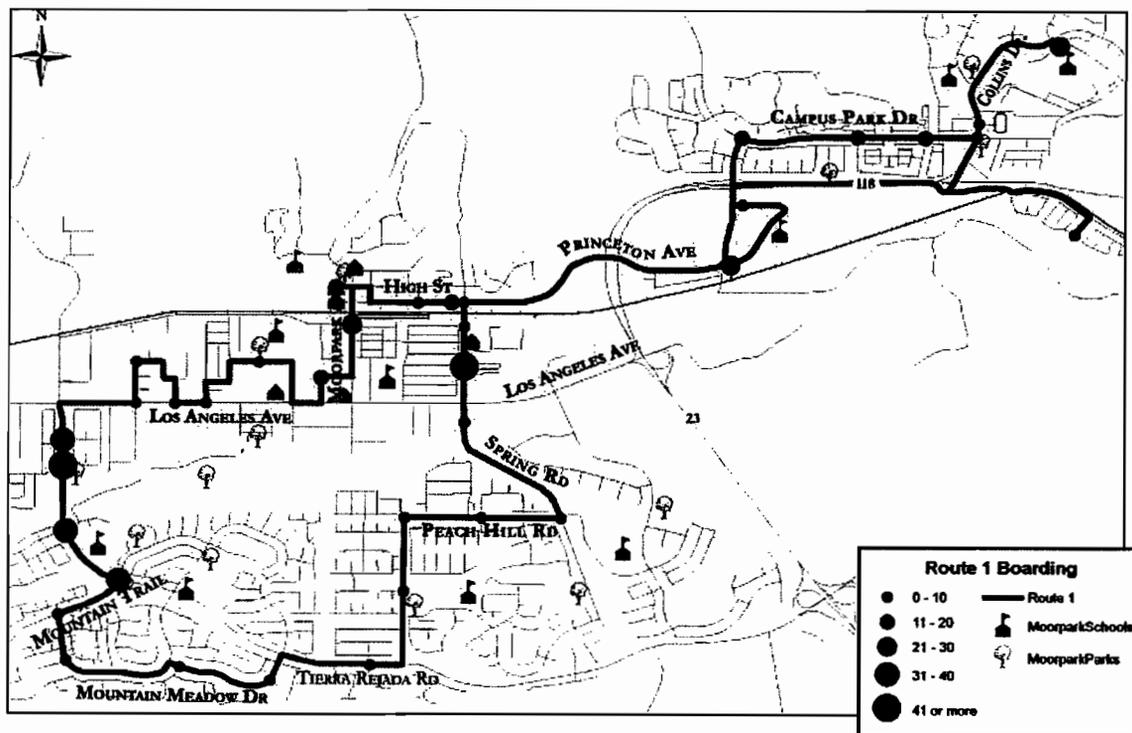
Exhibit 1.7 Route 1 Top Boarding Locations

Rank	Stop	Boarding
1	Woodcreek Apartments	49
2	Tierra Rejada Road & Harvester Street	45
3	Mountain Trail Street & Tierra Rejada Road	36
4	Tierra Rejada Road & Courtney Lane	33
5	Tierra Rejada Road & Countrywood Drive	31
6	Moorpark College	30
7	Moorpark Avenue & Poindexter Avenue	23
8	Virginia Colony Park	21
9	Campus Park Drive & Penn Street	19
10	Princeton Avenue & Spring Road	18

Note: numbers reflect total boardings across both survey dates.

Ridership was particularly strong along Tierra Rejada between Los Angeles Avenue and Tierra Rejada Park. This can be attributed in part to the location of Moorpark High School (between Countrywood Drive and Mountain Trail Street) as well as Mountain Meadows Plaza. Boarding activity was relatively modest within the southeastern portion of the service area (Peach Hill Road and Tierra Rejada Road east of Mountain Trail Street).

Exhibit 1.8 Route 1 Boarding



Note: numbers reflect total boardings across both survey dates.

Alighting activity along Route 1 was concentrated largely in the northeastern portion of the service area (Campus Park Drive/Moorpark College Area), with significant alighting activity at Virginia Colony Park (near Moorpark Community High School) and Moorpark College. The Woodcreek Apartments also ranked among the “top five” stops (in terms of both boardings and alightings). In contrast with boarding activity, only one stop along Tierra Rejada Road (Tierra Rejada Road and Countrywood Drive) was among the top ten destinations, no doubt due to its proximity to Moorpark High School.

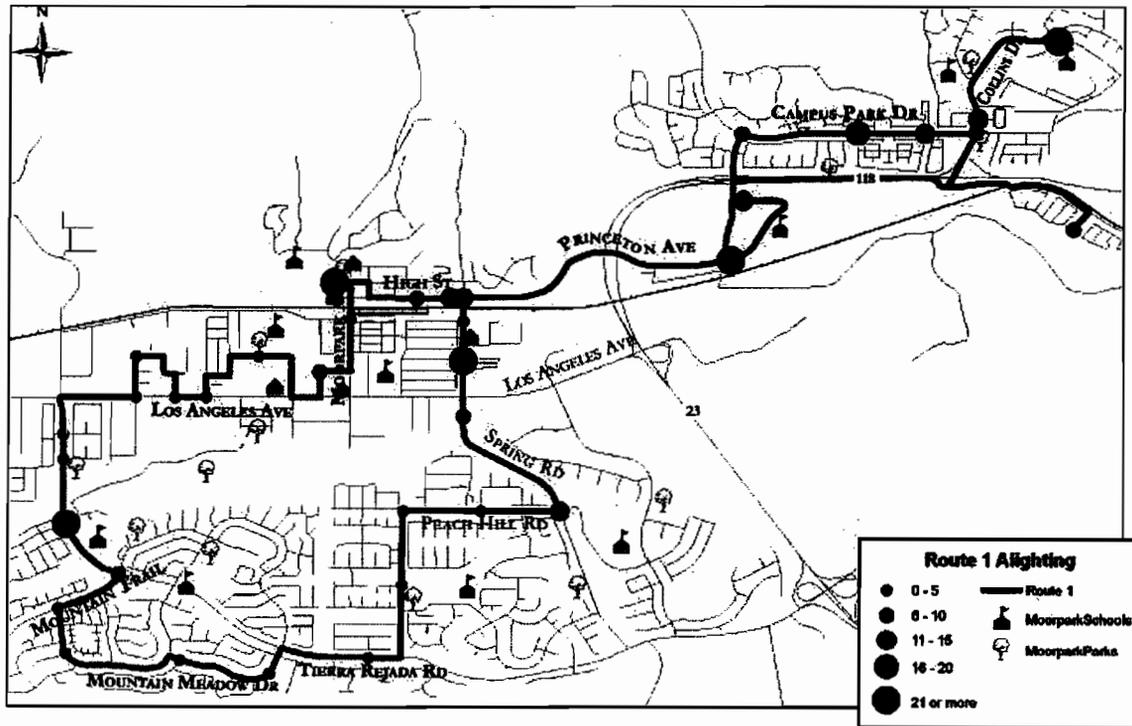
Exhibit 1.9 Route 1 Top Alighting Locations

Rank	Stop	Alighting
1	Civic Center	69
2	Virginia Colony Park	54
3	Moorpark College	46
4	Tierra Rejada Road & Countrywood Drive	40
5	Woodcreek Apartments	21
6	Campus Park Drive & Penn Street	20
7	Campus Park Drive & Marquette Street	15
8	Spring Road & Peach Hill Road	15
9	High Street & Spring Road	15
10	Princeton Avenue & Spring Road	11

Note: numbers reflect total alightings across both survey dates.

As noted above, alighting activity was concentrated within downtown Moorpark as well as the northeastern portion of the service area. Alighting activity was modest through Moorpark Town Center and Mission Bell Plaza, as well as the southeastern portion of the service area (Miller Parkway/Spring Road/Peach Hill Road area). Interestingly, Route 1's ridership is highest along portions of the shared alignment with Route 2.

Exhibit 1.10 Route 1 Alighting



Note: numbers reflect total alightings across both survey dates.

Boarding activity along Route 2 was more balanced than Route 1. Given the Civic Center’s position as the most popular destination on Route 1 (and the most popular boarding point on Route 2), it is clear a significant share of Moorpark City Transit patrons utilize the Civic Center as an interline “transfer” point. Area schools play a critical role in generating ridership on Route 2, as evidenced by the popularity of stops near Peach Hill Park, Mesa Verde School, Moorpark College, and Mountain Meadows School (Mountain Trail Street and Walnut Creek Road).

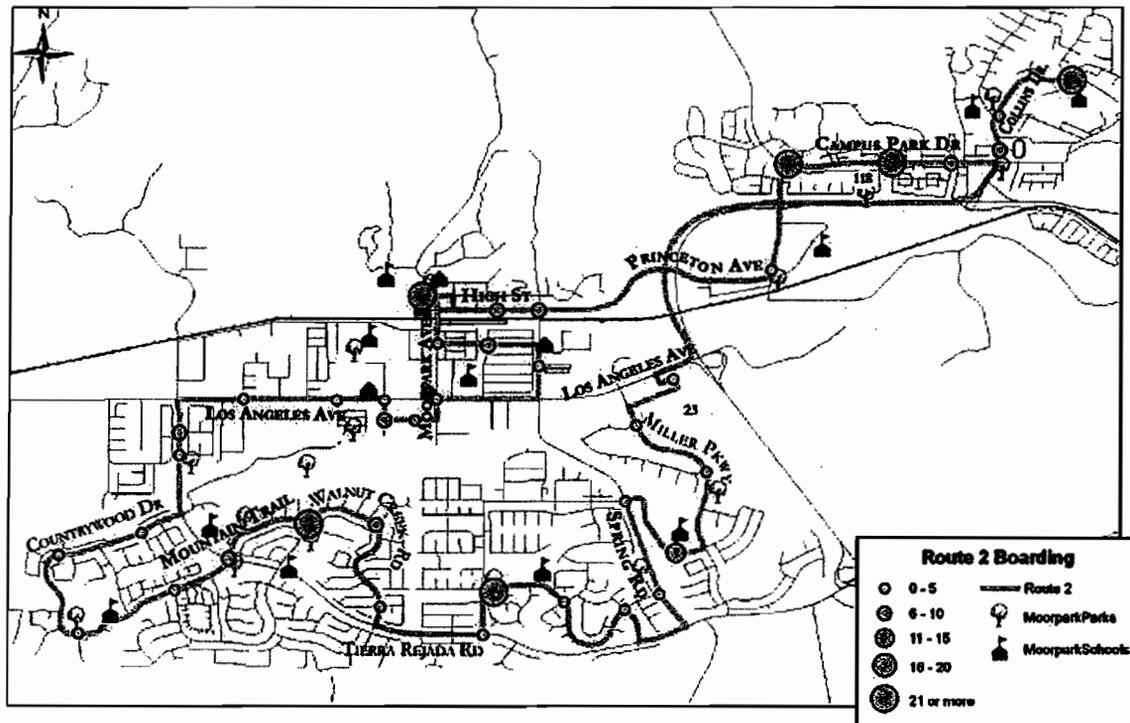
Exhibit 1.11 Route 2 Top Boarding Locations

Rank	Stop	Boarding
1	Civic Center	62
2	Peach Hill Park	41
3	Moorpark College	36
4	Varsity Park Plaza	33
5	Campus Park Drive & Penn Street	22
6	Mountain Trail Street & Walnut Creek Road	21
7	Mesa Verde School	13
8	Vintage Crest Apartments	10
9	Mountain Trail Street & Tierra Rejada Road	10
10	Tierra Rejada Road & Courtney Lane	9

Note: numbers reflect total boardings across both survey dates.

Despite the more balanced picture of boarding activity along Route 2, there is still a clustering of boarding activity in the northeastern portion of the service area. Significant pockets of very modest ridership exist along Miller Parkway, Spring Road, Los Angeles Avenue, and in the Country Trail Park area.

Exhibit 1.12 Route 2 Boarding



Note: numbers reflect total boardings across both survey dates.

Once again, Moorpark College was the most significant trip generator, both for students as well as for transfers to and from Ventura County Transportation Commission’s VISTA inter-city service. Several retail centers also made the “top ten”, including Varsity Park Plaza and Moorpark Marketplace.

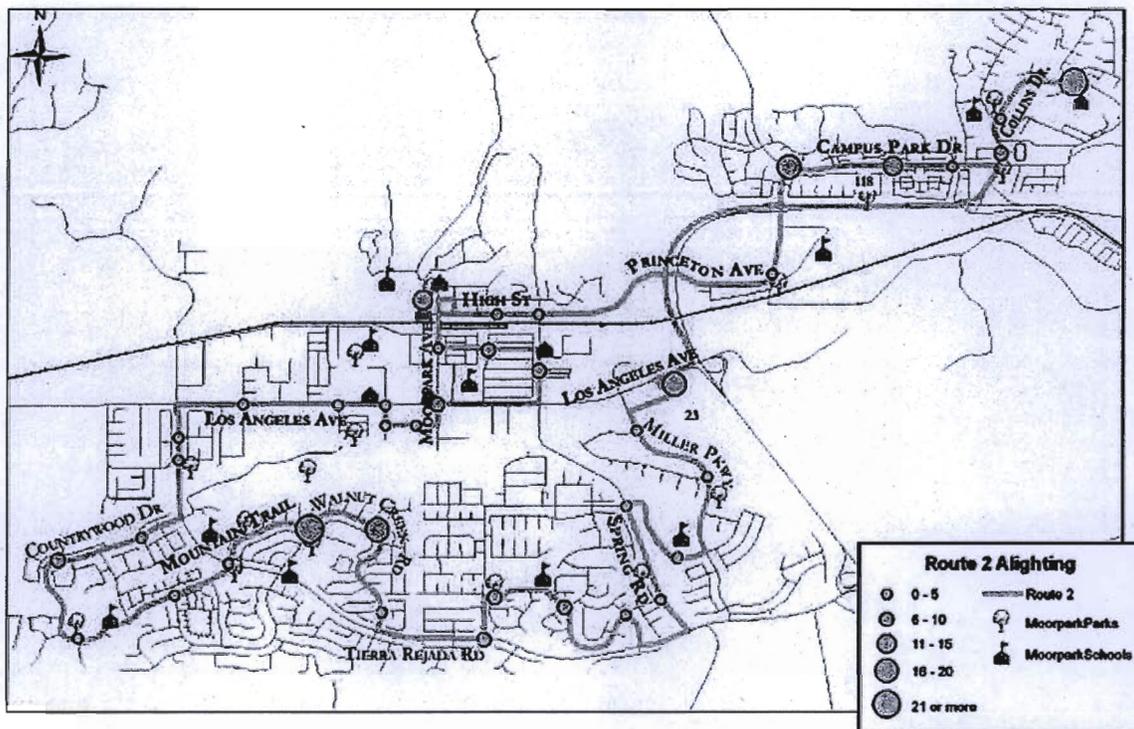
Exhibit 1.13 Route 2 Top Alighting Locations

Rank	Stop	Alighting
1	Moorpark College	52
2	Mountain Trail Street & Walnut Creek Road	28
3	Walnut Creek Road & Crescentmeadow Court	20
4	Varsity Park Plaza	18
5	Moorpark Marketplace	16
6	Civic Center	14
7	Campus Park Drive & Penn Street	13
8	Collins Drive & Campus Park Drive	9
9	2nd Street & Millard Street	8
10	Woodcreek Apartments	8

Note: numbers reflect total alightings across both survey dates.

As before, ridership along Route 2 was more balanced than Route 1. The northeastern section of the service area includes several significant trip generators. Alighting activity in the downtown area is less pronounced than Route 1. Relatively little ridership activity was evident in the following areas: Country Trail Park, Miller Parkway, Christian Barrett Drive, Los Angeles Avenue, and Tierra Rejada Road.

Exhibit 1.14 Route 2 Alighting



Note: numbers reflect total alightings across both survey dates.

2

2. SERVICE
EVALAUTION

CHAPTER 2 – SERVICE EVALUATION

This section presents an evaluation of Moorpark City Transit's fixed-route service using quantitative criteria to assess both service effectiveness and efficiency. The indicators were evaluated across a five-year period which supports illustration of recent, as well as historic, performance.

Exhibit 2.1 Fixed-Route Performance

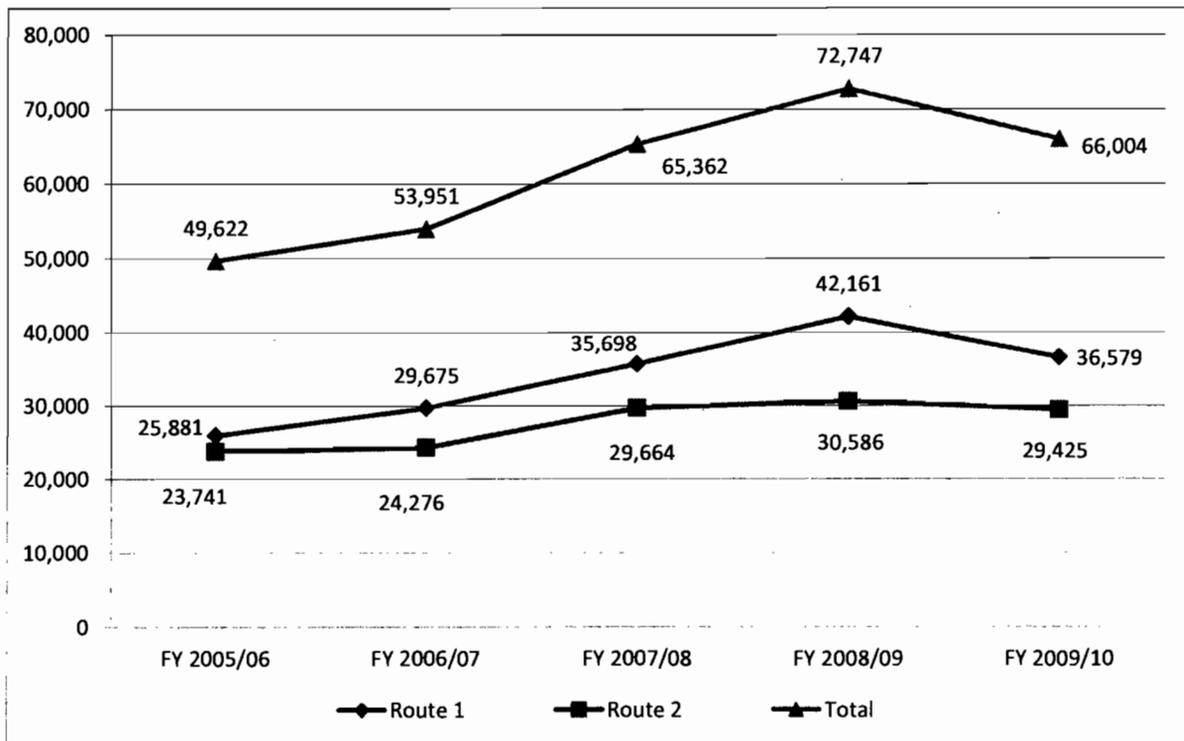
	FY 2005/06	FY 2006/07	FY 2007/08	FY 2008/09	FY 2009/10
Performance Measure					
Operating Cost	\$152,148	\$162,781	\$172,331	\$176,457.51	\$182,587.91
percent change		7.0%	5.9%	2.4%	3.5%
Fare Revenue	\$29,231.49	\$33,512.54	\$48,209.95	\$63,136	\$57,119.30
percent change		14.6%	43.9%	31.0%	-9.5%
Vehicle Service Hours (VSH)	5,654	5,588	5,610	5,654	5,654
percent change		-1.2%	0.4%	0.8%	0.0%
Vehicle Service Miles (VSM)	92,443	91,364	91,724	91,527.00	91,527.00
percent change		-1.2%	0.4%	-0.2%	0.0%
Passengers	49,622	53,951	65,362	72,747	66,004
percent change		8.72%	21.15%	11.30%	-9.27%
Performance Indicator					
Operating Cost/VSH	\$26.91	\$29.13	\$30.72	\$31.21	\$32.29
percent change		8.3%	5.5%	1.6%	3.5%
Operating Cost/VSM	\$1.65	\$1.78	\$1.88	\$1.93	\$1.99
percent change		8.3%	5.5%	2.6%	3.5%
Operating Cost/Passenger	\$3.07	\$3.02	\$2.64	\$2.43	\$2.77
percent change		-1.6%	-12.6%	-8.0%	14.0%
Passengers/VSH	8.8	9.7	11.7	12.9	11.7
percent change		10.0%	20.7%	10.4%	-9.3%
Passengers/VSM	0.54	0.59	0.71	0.79	0.72
percent change		10.0%	20.7%	11.5%	-9.3%
Farebox Recovery	19.2%	20.6%	28.0%	35.8%	31.3%
percent change		7.2%	35.9%	27.9%	-12.6%
Fare/Passenger	\$0.59	\$0.62	\$0.74	\$0.87	\$0.87
percent change		5.4%	18.7%	17.7%	-0.3%

Annual Ridership

Total unlinked trips (i.e., one-way trip by a single fare-paying rider) along Route 1 increased at a greater pace than Route 2 (18 percent average growth versus 9 percent) until FY 2008/09. Route 2 however posted only a slight loss in FY 2009/10 whereas Route 1 experienced a 13 percent drop in ridership.

Total system ridership increased 33 percent across the five-year period. This growth outpaced transit ridership growth nationally, which has posted annual gains of between five and six percent. Should the City elect to further expand the MCT program, ridership would continue to increase on a double-digit basis. In other words, the City has yet to tap existing as well as latent demand for transit service.

Exhibit 2.2 Ridership



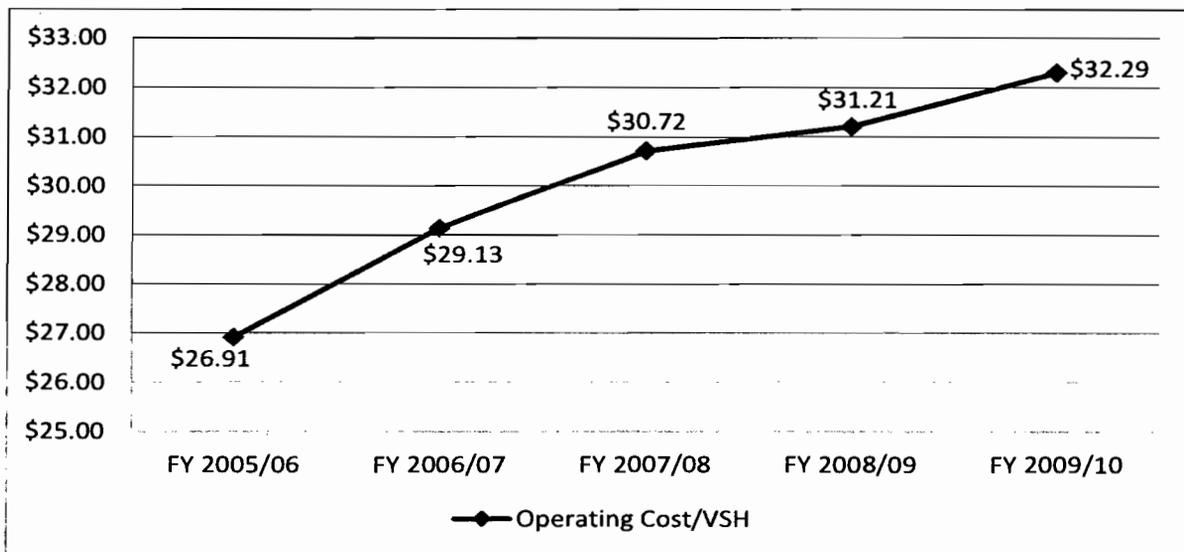
Operating Cost/Vehicle Service Hour

This indicator serves as a measure of a transit program’s cost effectiveness by tracking the cost to provide a single hour of revenue service, which is the time an MCT vehicle spends in actual revenue service (i.e., excluding deadhead time).

In FY 2007/08, the City paid \$30.72 for every hour of service provided by its operations contractor. This represents a 14.2 percent increase over FY 2005/06. This increase can be attributed in large part to external factors such as fuel prices and cost of liability insurance.

FY 2007/08 and FY2008/09 saw decreasing rates of growth for this metric. This is largely due to the slowly rising operating costs and relatively little change in the number of vehicle service hours. However FY 2009/10 saw increased rates of growth in operating cost/VSH as operating costs jumped 3.5 percent.

Exhibit 2.3 Operating Cost/VSH

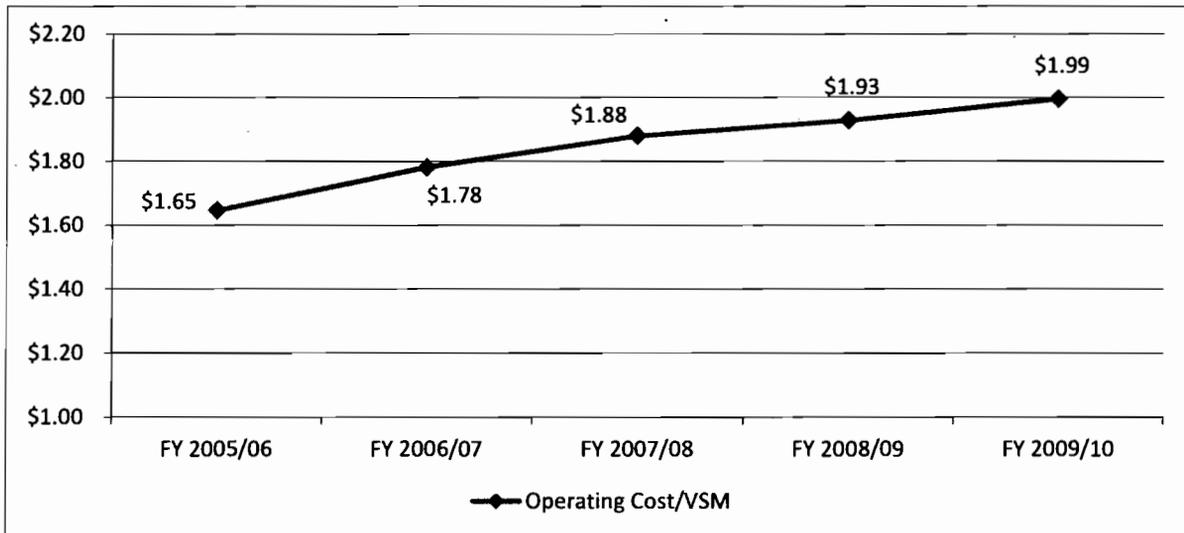


Operating Cost/Vehicle Service Mile

This metric serves as a barometer of a transit program’s cost-effectiveness by illustrating the cost of providing a single mile of revenue service.

The Cost/VSM trend mirrors that of Cost/VSH across the last five fiscal years. In FY 2007/08, the City paid \$1.88 for every mile of transit service, a 13.9 percent increase over the prior year. Costs continued to increase over the evaluated period though at a slower rate after FY 2006/07.

Exhibit 2.4 Operating Cost/VSM



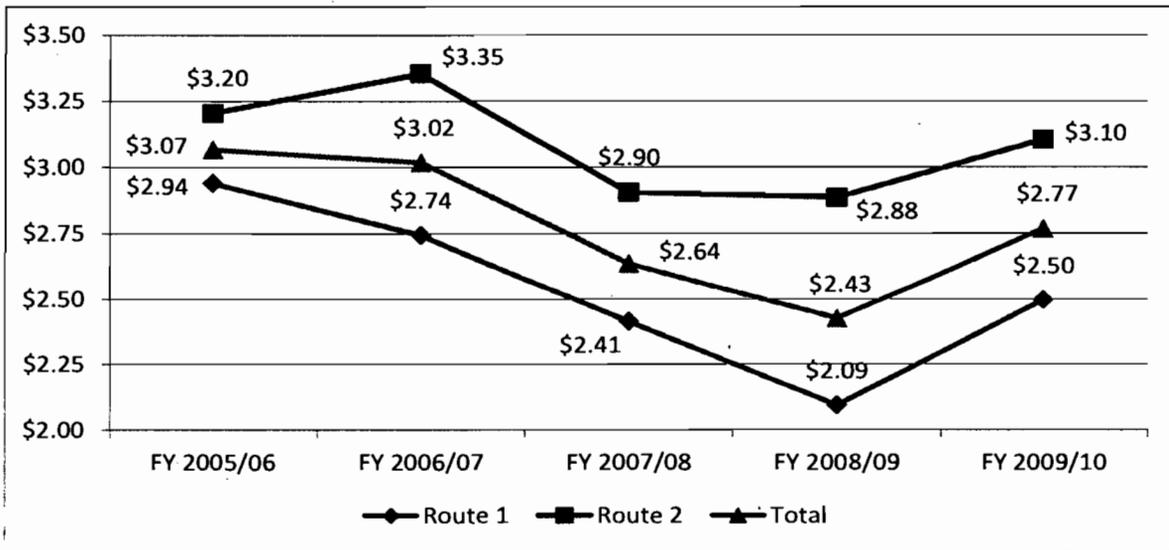
Operating Cost/Passenger

Another gauge of cost effectiveness, Operating Cost/Passenger analyzes how much the City is spending to provide each unlinked trip.

Across the past five fiscal years, Moorpark City Transit has significantly increased ridership (33 percent) while minimizing increases in operating cost (20 percent). This ratio has resulted in year-on-year reductions in the program’s Cost/Passenger metric. Only FY 2009/10 saw an increase in operating Cost/Passenger due to declining ridership.

Route 1’s Cost/Passenger fell 15 percent across the past five years. Route 2’s cost/passenger fell 3 percent over the same period. Overall Route 2 continued to have a higher operating Cost/Passenger than Route 1 throughout the five-year evaluation period.

Exhibit 2.5 Operating Cost/Passenger

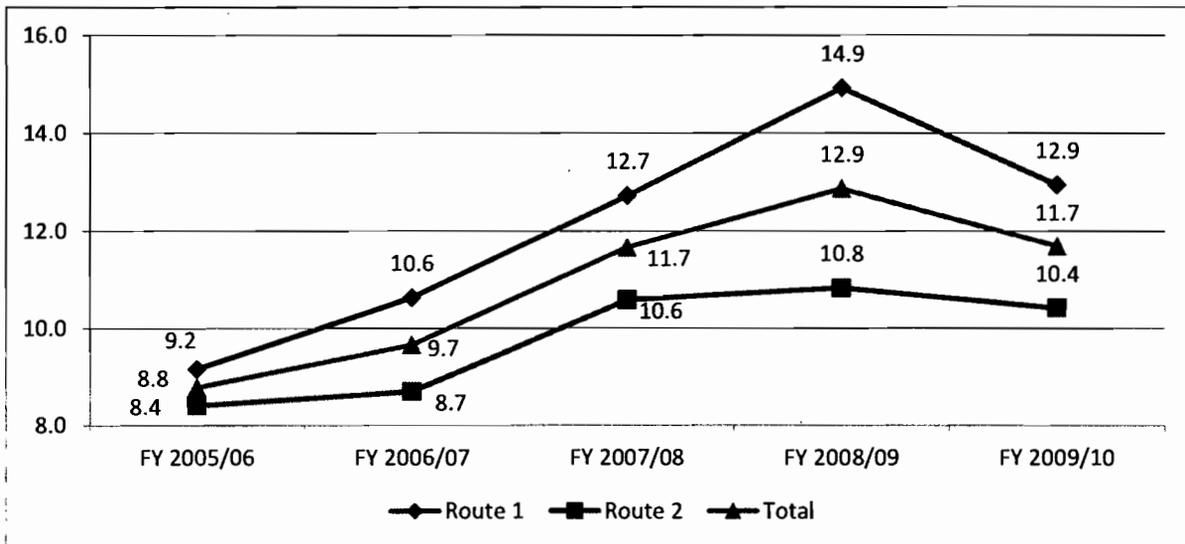


Passengers/Vehicle Service Hour

One of the most commonly used yardsticks for assessing public transit performance is Passengers/VSH. MCT’s Vehicle Service Hours indicator remained relatively static across the five-year evaluation period despite significant increases in the number of Passengers/Vehicle Service Hour. The system indicator increased 33 percent. Route 1’s indicator increased 41 percent, while Route 2 increased 24 percent. This trend suggests MCT is increasing its overall efficiency.

To place Moorpark City Transit’s performance in perspective, the City of Lompoc’s transit program carried 10.3 Passengers/VSH in FY 2007/08. Lompoc has a resident population of nearly 42,000 and like Moorpark, includes many actual and potential trip generators. The City of Lompoc operates a significantly larger program, providing a much greater level of service per capita.

Exhibit 2.6 Passengers/VSH

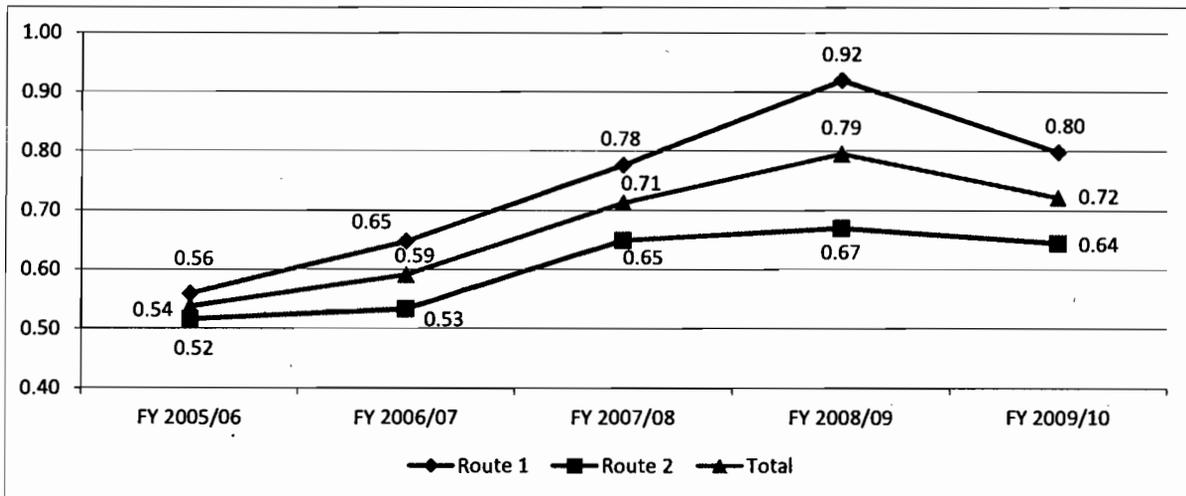


Passengers/Vehicle Service Mile

The Passengers/VSM metric is another method commonly used to evaluate a public transit service’s effectiveness. It calculates the ratio of passengers transported for each service mile traveled.

The Passengers/VSM trend mirrors that of the Passengers/VSH across the last five fiscal years. The system indicator increased 33 percent. Route 1’s increased 43 percent while Route 2 increased 23 percent. The City of Lompoc’s transit program performed slightly better posting 0.83 Passengers/VSM in FY 2007/08.

Exhibit 2.7 Passengers/VSM

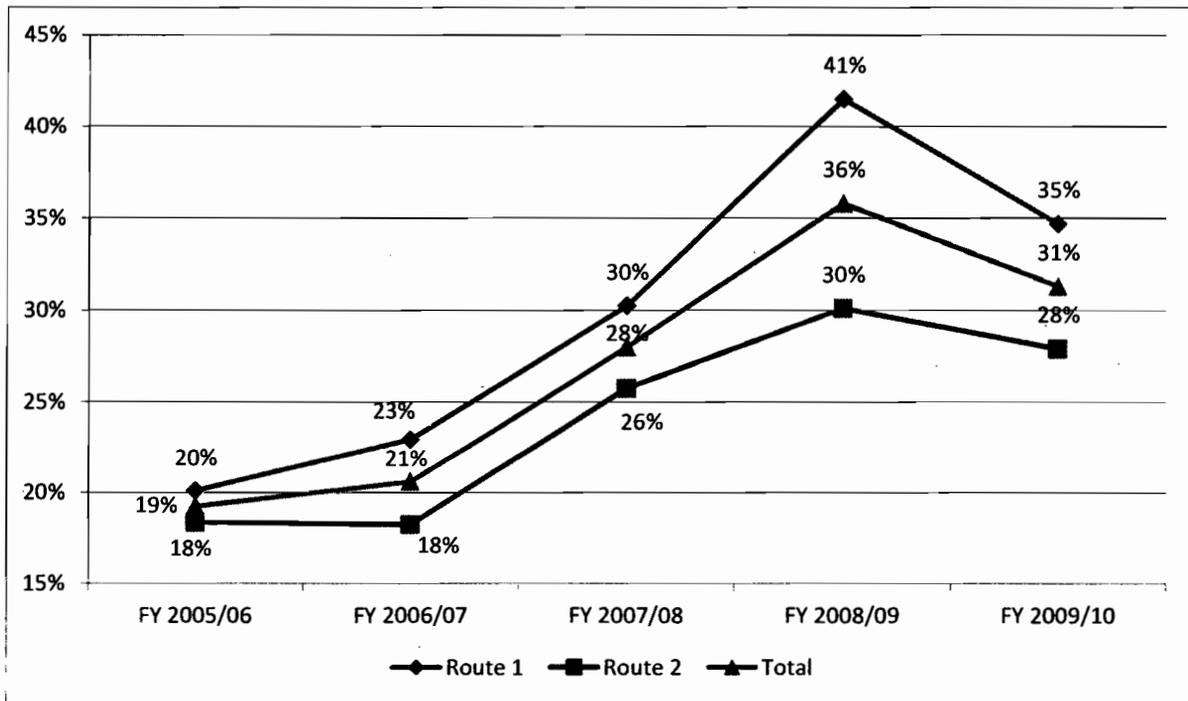


Farebox Recovery

Farebox recovery calculates the ratio of operating cost “recovered” through passenger fares. It is the most common measure of public subsidy of a transit service. Fixed-route programs serving areas comparable to Moorpark typically have a recovery threshold of not less than 20 percent.

The City has exceeded the TDA-required 20-percent farebox recovery standard in every fiscal year except FY 2005/06. The current ratio of 31 percent is greater than many small community operations, and reflects a 63 percent increase since FY 2005/06.

Exhibit 2.8 Farebox Recovery

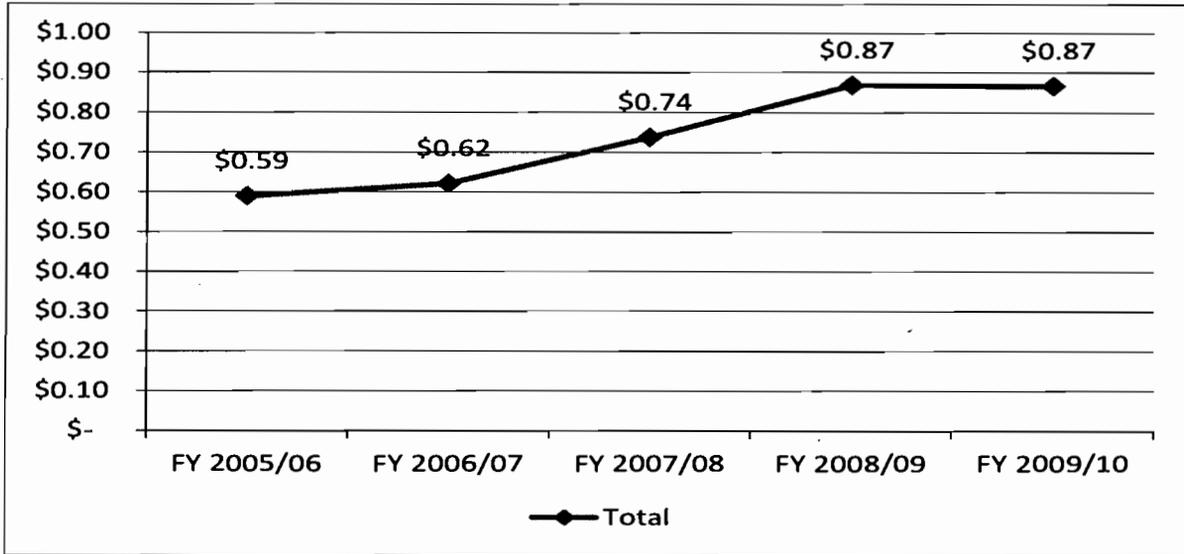


Fare/Passenger

This metric calculates the average fare paid for each unlinked trip onboard Moorpark City Transit.

Growth in fare revenue has outpaced growth in ridership. This has resulted in the significant increase in overall fare revenue, as well as an increase in "average paid fare" (approximately 47 percent) since FY 2005/06.

Exhibit 2.9 Fare/Passenger



3

3. SERVICE
RECOMMENDATIONS

CHAPTER 3 – SERVICE RECOMMENDATIONS

In crafting the following service scenarios, Moore & Associates drew upon the ride checks conducted onboard Moorpark City Transit (MCT), discussions with City staff, site visits to the MCT service area, and our professional experience. We sought to identify service gaps as well as “less productive” route segments. In summary, our goal was to identify strategies for optimizing Moorpark City Transit resources as well as present practical recommendations for sustainable service development.

Moore & Associates developed recommendations to address three potential service configurations: weekday daytime, weekday evening, and weekend. For each configuration, we present two possible scenarios including route maps, timetables, and supporting narrative.

Weekday: Daytime Service Scenarios

Two distinct service scenarios were crafted. Each represents a “blueprint” consisting of routing and timetable:

- **Scenario A:** Minor changes to select route segments to streamline operations, respond to input from customers and City staff, while also addressing emerging and forecast demand.
- **Scenario B:** Significant revision in service delivery aimed at reducing service duplication, expanding the MCT service area, and supporting future program growth.

The relative merits of each service alternative are discussed below. The City has chosen Scenario A as the Preferred Scenario for Weekday Daytime service. As such, timetables have been

developed for that Scenario and not Scenario B, which is included solely as a point of reference.

Scenario A

Scenario A recommends modifying existing MCT alignments to increase system efficiency. These changes include route realignments, removing non-critical vehicle travel, establishing new bus stop locations, and deleting low-use stop locations. These recommendations are intended to improve overall on-time performance, while also increasing service to potential trip generators, in particular retail centers within city limits.

Proposed Changes (system-wide)

- Modify existing alignments.
 - Reduce service along Countrywood Drive and Spring Road (Route 2).
 - Introduce service to Moorpark Marketplace (Route 1).
 - Reduce service within northwest section of Moorpark (Route 1).
- Modify existing bus stop locations (Route 1 and Route 2).
 - Additional stops at Moorpark Marketplace and Patriot Drive.
 - Eliminate stops along Shasta Avenue, Goldman Avenue, Maureen Lane, and Countrywood Drive.
- Update timetables to reflect actual running times and prevailing operating conditions (i.e., ridership, traffic conditions, etc).

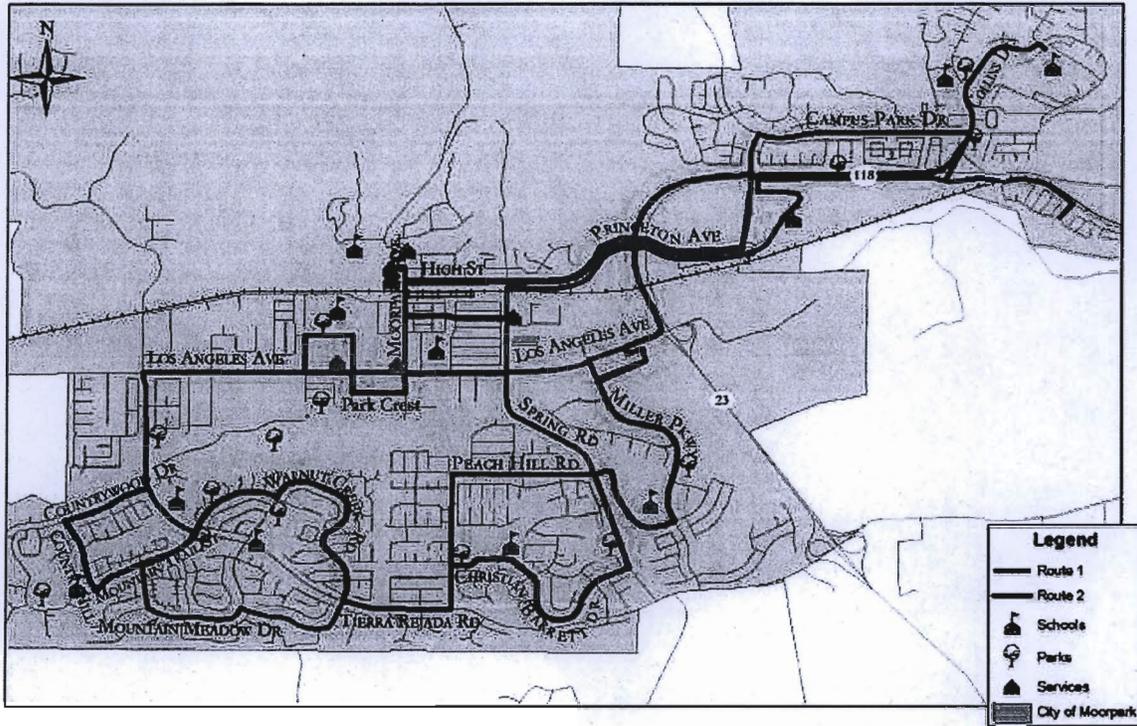
Advantages

- Increased system efficiency.
- Probable increase in annual ridership.
- Service retains overall familiarity for existing patrons.
- Increased service to key trip generators (i.e., Moorpark Marketplace, Mountain Meadows Plaza).
- Transit “footprint” is focused on key arterials.

Disadvantages

- Some existing transit infrastructure becomes obsolete.
- Elimination of service along Goldman and Hertz Avenues.
- Elimination of direct service to Country Trail Park.
- One-time expense for installation of new bus stops.

Exhibit 3.1 Scenario A



The proposed modifications to Route 1 are intended to improve overall system efficiency as well as increase service levels within areas of historic higher ridership. Route 1 retains its counter-clockwise direction, yet eliminates the current bus entry into Moorpark Estates. This service change would see the vehicle continue west along Los Angeles Avenue, no longer deviating north to Goldman and Hertz Avenues, allowing for the route to later travel into Moorpark Marketplace.

After turning northbound along Spring Road from Los Angeles Avenue, Route 1 heads east on Princeton Avenue to serve the Campus Park, Moorpark College, and Virginia Colony areas. The route then returns to the Civic Center via High Street.

The City is currently evaluating various options to eliminate the need to make a three-point turn at the Civic Center.

Exhibit 3.2 Scenario A Route 1

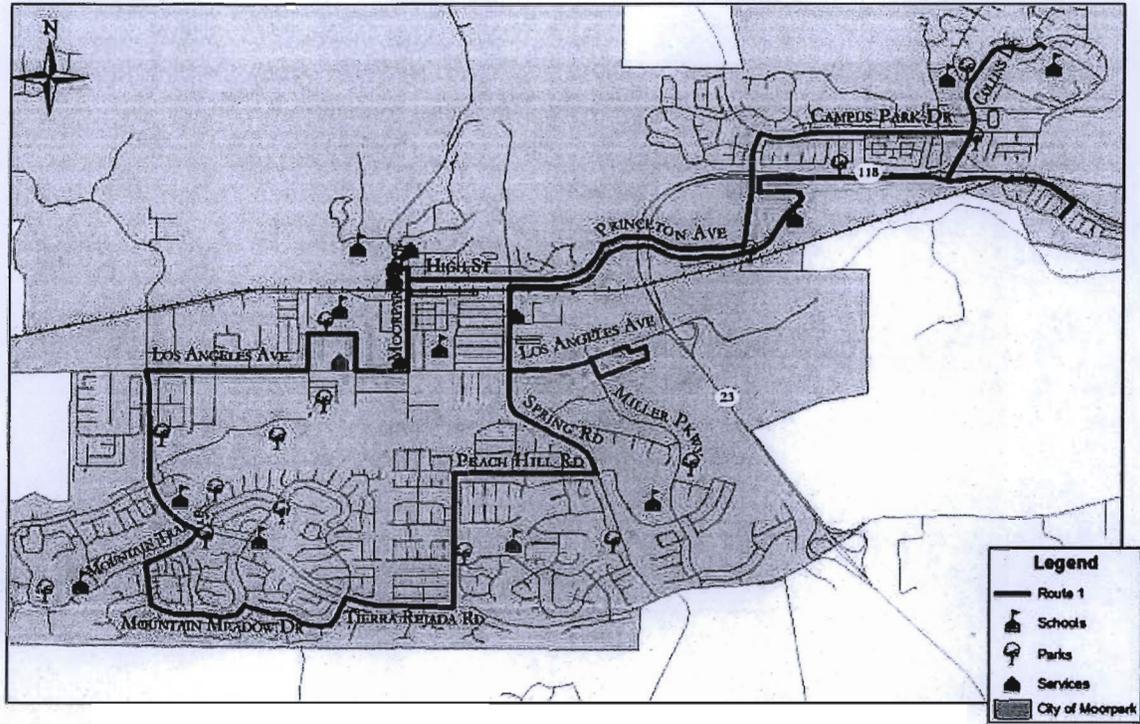
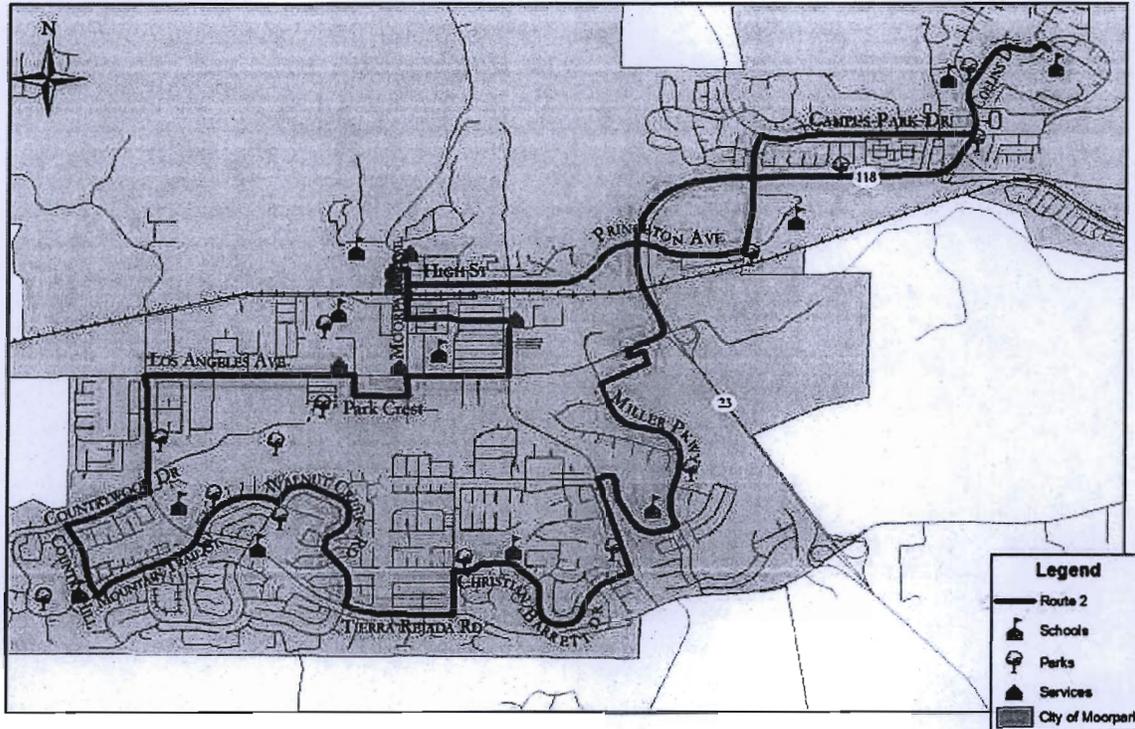


Exhibit 3.3 Scenario A Route 1 Timetable

ROUTE 1 BUS STOPS Major stop departure times in bold. All other times approximate.		Trip 1	Trip 2	Trip 3	Trip 4	Trip 5	Trip 6	Trip 7	Trip 8	Trip 9	Trip 10	Trip 11
1	Civic Center: Front of Community Center	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:30 PM	1:30 PM	2:30 PM	3:30 PM	4:30 PM
2	Moorpark Ave. & Poindexter: SW corner	6:01 AM	7:01 AM	8:01 AM	9:01 AM	10:01 AM	11:01 AM	12:31 PM	1:31 PM	2:31 PM	3:31 PM	4:31 PM
3	Town Center: Ralph's	6:04 AM	7:04 AM	8:04 AM	9:04 AM	10:04 AM	11:04 AM	12:34 PM	1:34 PM	2:34 PM	3:34 PM	4:34 PM
4	Mission Bell Plaza (Albertson's)	6:06 AM	7:06 AM	8:06 AM	9:06 AM	10:06 AM	11:06 AM	12:36 PM	1:36 PM	2:36 PM	3:36 PM	4:36 PM
5	Tierra Rejada & Courtney: SW corner	6:09 AM	7:09 AM	8:09 AM	9:09 AM	10:09 AM	11:09 AM	12:39 PM	1:39 PM	2:39 PM	3:39 PM	4:39 PM
6	Tierra Rejada across from Harvester: SW corner	6:10 AM	7:10 AM	8:10 AM	9:10 AM	10:10 AM	11:10 AM	12:40 PM	1:40 PM	2:40 PM	3:40 PM	4:40 PM
7	Tierra Rejada & Countrywood: SW corner	6:12 AM	7:12 AM	8:12 AM	9:12 AM	10:12 AM	11:12 AM	12:42 PM	1:42 PM	2:42 PM	3:42 PM	4:42 PM
8	Mtn. Trail & Tierra Rejada: Mtn. Meadows Plaza across H.S.	6:12 AM	7:12 AM	8:12 AM	9:12 AM	10:12 AM	11:12 AM	12:42 PM	1:42 PM	2:42 PM	3:42 PM	4:42 PM
9	Mountain Meadows & Mountain Trail: SW corner	6:13 AM	7:13 AM	8:13 AM	9:13 AM	10:13 AM	11:13 AM	12:43 PM	1:43 PM	2:43 PM	3:43 PM	4:43 PM
10	Mountain Meadows & Blossomwood @ turnout	6:14 AM	7:14 AM	8:14 AM	9:14 AM	10:14 AM	11:14 AM	12:44 PM	1:44 PM	2:44 PM	3:44 PM	4:44 PM
11	Walnut Creek & Havencrest @ turnout	6:15 AM	7:15 AM	8:15 AM	9:15 AM	10:15 AM	11:15 AM	12:45 PM	1:45 PM	2:45 PM	3:45 PM	4:45 PM
12	Walnut Creek & Coral Crest	6:15 AM	7:15 AM	8:15 AM	9:15 AM	10:15 AM	11:15 AM	12:45 PM	1:45 PM	2:45 PM	3:45 PM	4:45 PM
13	Tierra Rejada & Pheasant Run: SE corner @ turnout	6:16 AM	7:16 AM	8:16 AM	9:16 AM	10:16 AM	11:16 AM	12:46 PM	1:46 PM	2:46 PM	3:46 PM	4:46 PM
14	Peach Hill Park (by restrooms)	6:18 AM	7:18 AM	8:18 AM	9:18 AM	10:18 AM	11:18 AM	12:48 PM	1:48 PM	2:48 PM	3:48 PM	4:48 PM
15	Peach Hill Rd. across from Bella Vista	6:19 AM	7:19 AM	8:19 AM	9:19 AM	10:19 AM	11:19 AM	12:49 PM	1:49 PM	2:49 PM	3:49 PM	4:49 PM
16	Peach Hill & Rolling Knoll: SE corner	6:20 AM	7:20 AM	8:20 AM	9:20 AM	10:20 AM	11:20 AM	12:50 PM	1:50 PM	2:50 PM	3:50 PM	4:50 PM
17	Spring Rd. & Peach Hill: NE corner (Mesa Verde School)	6:21 AM	7:21 AM	8:21 AM	9:21 AM	10:21 AM	11:21 AM	12:51 PM	1:51 PM	2:51 PM	3:51 PM	4:51 PM
18	Spring Rd. @ 7-11 Market Plaza	6:22 AM	7:22 AM	8:22 AM	9:22 AM	10:22 AM	11:22 AM	12:52 PM	1:52 PM	2:52 PM	3:52 PM	4:52 PM
19	Moorpark Marketplace: Behind Famous Footwear	6:26 AM	7:26 AM	8:26 AM	9:26 AM	10:26 AM	11:26 AM	12:56 PM	1:56 PM	2:56 PM	3:56 PM	4:56 PM
20	Patriot Drive (@ turnout)	6:27 AM	7:27 AM	8:27 AM	9:27 AM	10:27 AM	11:27 AM	12:57 PM	1:57 PM	2:57 PM	3:57 PM	4:57 PM
21	Spring Rd. @ Woodcreek Apartments @ turnout	6:30 AM	7:30 AM	8:30 AM	9:30 AM	10:30 AM	11:30 AM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM
22	Spring Rd. @ Police Services Center @ turnout	6:30 AM	7:30 AM	8:30 AM	9:30 AM	10:30 AM	11:30 AM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM
23	Princeton & Spring Rd. - Moorpark 76	6:31 AM	7:31 AM	8:31 AM	9:31 AM	10:31 AM	11:31 AM	1:01 PM	2:01 PM	3:01 PM	4:01 PM	5:01 PM
24	Across from Kavlico, near Virginia Colony Park	6:32 AM	7:32 AM	8:32 AM	9:32 AM	10:32 AM	11:32 AM	1:02 PM	2:02 PM	3:02 PM	4:02 PM	5:02 PM
25	Condor @ Harley Davidson	6:34 AM	7:34 AM	8:34 AM	9:34 AM	10:34 AM	11:34 AM	1:04 PM	2:04 PM	3:04 PM	4:04 PM	5:04 PM
26	Collins & Campus Park: NE corner	6:39 AM	7:39 AM	8:39 AM	9:39 AM	10:39 AM	11:39 AM	1:09 PM	2:09 PM	3:09 PM	4:09 PM	5:09 PM
27	Moorpark College: Communications Bldg.-VISTA	6:43 AM	7:43 AM	8:43 AM	9:43 AM	10:43 AM	11:43 AM	1:13 PM	2:13 PM	3:13 PM	4:13 PM	5:13 PM
28	Collins & Hearson: Campus Canyon Park	6:44 AM	7:44 AM	8:44 AM	9:44 AM	10:44 AM	11:44 AM	1:14 PM	2:14 PM	3:14 PM	4:14 PM	5:14 PM
29	Campus Park & Marquette: NW corner	6:45 AM	7:45 AM	8:45 AM	9:45 AM	10:45 AM	11:45 AM	1:15 PM	2:15 PM	3:15 PM	4:15 PM	5:15 PM
30	Campus Park & Penn: N. side of street	6:46 AM	7:46 AM	8:46 AM	9:46 AM	10:46 AM	11:46 AM	1:16 PM	2:16 PM	3:16 PM	4:16 PM	5:16 PM
31	Princeton & Campus Park: Varsity Park Plaza	6:47 AM	7:47 AM	8:47 AM	9:47 AM	10:47 AM	11:47 AM	1:17 PM	2:17 PM	3:17 PM	4:17 PM	5:17 PM
32	Kavlico across from Condor Dr.	6:49 AM	7:49 AM	8:49 AM	9:49 AM	10:49 AM	11:49 AM	1:19 PM	2:19 PM	3:19 PM	4:19 PM	5:19 PM
33	High St. & Spring Rd.: NW corner	6:50 AM	7:50 AM	8:50 AM	9:50 AM	10:50 AM	11:50 AM	1:20 PM	2:20 PM	3:20 PM	4:20 PM	5:20 PM
34	High St. across from Metrolink/Amtrak Station-VISTA	6:51 AM	7:51 AM	8:51 AM	9:51 AM	10:51 AM	11:51 AM	1:21 PM	2:21 PM	3:21 PM	4:21 PM	5:21 PM
35	Arrive at Civic Center: Front of Community Center	6:54 AM	7:54 AM	8:54 AM	9:54 AM	10:54 AM	11:54 AM	1:24 PM	2:24 PM	3:24 PM	4:24 PM	5:24 PM

Route 2 retains its clockwise-running alignment. Slight deviations are recommended to remove underutilized bus stops along Countrywood Drive and at Spring Road and Tierra Rejada Road. The ten-minute breaks between trips should be monitored to determine if they can be combined to add an additional trip to the route.

Exhibit 3.4 Scenario A Route 2



CITY OF MOORPARK – TRANSIT EVALUATION

Exhibit 3.5 Scenario A Route 2 Timetable

	Trip 1	Trip 2	Trip 3	Trip 4	Trip 5	Trip 6	Trip 7	Trip 8	Trip 9	Trip 10	Trip 11
ROUTE 2 BUS STOPS											
Major stop departure times in bold.											
All other times approximate.											
1 Civic Center: Front of Community Center	6:40 AM	7:40 AM	8:40 AM	9:40 AM	10:40 AM	11:40 AM	1:10 PM	2:10 PM	3:10 PM	4:10 PM	5:10 PM
2 High St. @ Moorpark Metrolink/Amtrak Station-VISTA	6:42 AM	7:42 AM	8:42 AM	9:42 AM	10:42 AM	11:42 AM	1:12 PM	2:12 PM	3:12 PM	4:12 PM	5:12 PM
3 High St. & Spring Rd. - Moorpark 76	6:43 AM	7:43 AM	8:43 AM	9:43 AM	10:43 AM	11:43 AM	1:13 PM	2:13 PM	3:13 PM	4:13 PM	5:13 PM
4 Across from Kavlico, near Virginia Colony Park	6:44 AM	7:44 AM	8:44 AM	9:44 AM	10:44 AM	11:44 AM	1:14 PM	2:14 PM	3:14 PM	4:14 PM	5:14 PM
5 Princeton across from Varsity Park Plaza	6:46 AM	7:46 AM	8:46 AM	9:46 AM	10:46 AM	11:46 AM	1:16 PM	2:16 PM	3:16 PM	4:16 PM	5:16 PM
6 Campus Park & Penn: SE corner	6:47 AM	7:47 AM	8:47 AM	9:47 AM	10:47 AM	11:47 AM	1:17 PM	2:17 PM	3:17 PM	4:17 PM	5:17 PM
7 Campus Park & Marquette: SW corner	6:47 AM	7:47 AM	8:47 AM	9:47 AM	10:47 AM	11:47 AM	1:17 PM	2:17 PM	3:17 PM	4:17 PM	5:17 PM
8 Collins & Campus Park: NE corner	6:49 AM	7:48 AM	8:48 AM	9:48 AM	10:48 AM	11:48 AM	1:18 PM	2:18 PM	3:22 PM	4:22 PM	5:22 PM
9 Moorpark College: Communications Bldg.-VISTA	6:52 AM	7:52 AM	8:52 AM	9:52 AM	10:52 AM	11:52 AM	1:22 PM	2:22 PM	3:22 PM	4:22 PM	5:22 PM
10 Collins & Hearon: Campus Canyon Park	6:53 AM	7:53 AM	8:53 AM	9:53 AM	10:53 AM	11:53 AM	1:23 PM	2:23 PM	3:23 PM	4:23 PM	5:23 PM
11 Moorpark Marketplace: Behind Famous Footwear	6:59 AM	7:59 AM	8:59 AM	9:59 AM	10:59 AM	11:59 AM	1:29 PM	2:29 PM	3:29 PM	4:29 PM	5:29 PM
12 Miller Parkway & Southfork: SW corner	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:30 PM	2:30 PM	3:30 PM	4:30 PM	5:30 PM
13 Miller Parkway across from Miller Park	7:01 AM	8:01 AM	9:01 AM	10:01 AM	11:01 AM	12:01 PM	1:31 PM	2:31 PM	3:31 PM	4:31 PM	5:31 PM
14 Peach Hill Rd. @ Mesa Verde School	7:02 AM	8:02 AM	9:02 AM	10:02 AM	11:02 AM	12:02 PM	1:32 PM	2:32 PM	3:32 PM	4:32 PM	5:32 PM
15 Spring Rd. & Peach Hill: SW corner	7:03 AM	8:03 AM	9:03 AM	10:03 AM	11:03 AM	12:03 PM	1:33 PM	2:33 PM	3:33 PM	4:33 PM	5:33 PM
16 Spring Rd. & Christian Barrett: NW corner	7:04 AM	8:04 AM	9:04 AM	10:04 AM	11:04 AM	12:04 PM	1:34 PM	2:34 PM	3:34 PM	4:34 PM	5:34 PM
17 Southampton & Christian Barrett: NE corner	7:04 AM	8:04 AM	9:04 AM	10:04 AM	11:04 AM	12:04 PM	1:34 PM	2:34 PM	3:34 PM	4:34 PM	5:34 PM
18 Christian Barrett & Cedarpine: SE corner	7:05 AM	8:05 AM	9:05 AM	10:05 AM	11:05 AM	12:05 PM	1:35 PM	2:35 PM	3:35 PM	4:35 PM	5:35 PM
19 Christian Barrett @ Peach Hill Park	7:07 AM	8:07 AM	9:07 AM	10:07 AM	11:07 AM	12:07 PM	1:37 PM	2:37 PM	3:37 PM	4:37 PM	5:37 PM
20 Peach Hill & Tierra Rejada: NW corner @ turnout	7:08 AM	8:08 AM	9:08 AM	10:08 AM	11:08 AM	12:08 PM	1:38 PM	2:38 PM	3:38 PM	4:38 PM	5:38 PM
21 Walnut Creek across from Westmont	7:10 AM	8:10 AM	9:10 AM	10:10 AM	11:10 AM	12:10 PM	1:40 PM	2:40 PM	3:40 PM	4:40 PM	5:40 PM
22 Walnut Creek & Crescentmeadow: SE corner	7:12 AM	8:12 AM	9:12 AM	10:12 AM	11:12 AM	12:12 PM	1:42 PM	2:42 PM	3:42 PM	4:42 PM	5:42 PM
23 Mountain Trail & Walnut Creek: NW corner	7:13 AM	8:13 AM	9:13 AM	10:13 AM	11:13 AM	12:13 PM	1:43 PM	2:43 PM	3:43 PM	4:43 PM	5:43 PM
24 Mtn. Trail & Tierra Rejada: Mtn. Meadows Plaza across H.S.	7:14 AM	8:14 AM	9:14 AM	10:14 AM	11:14 AM	12:14 PM	1:44 PM	2:44 PM	3:44 PM	4:44 PM	5:44 PM
25 Mountain Trail & Mountain Meadows: (Traditions)	7:14 AM	8:14 AM	9:14 AM	10:14 AM	11:14 AM	12:14 PM	1:44 PM	2:44 PM	3:44 PM	4:44 PM	5:44 PM
26 Mountain Trail & Country Hill Rd. (NE corner)	7:14 AM	8:14 AM	9:14 AM	10:14 AM	11:14 AM	12:14 PM	1:44 PM	2:44 PM	3:44 PM	4:44 PM	5:44 PM
27 Countrywood between Broadview & Timberdale	7:15 AM	8:15 AM	9:15 AM	10:15 AM	11:15 AM	12:15 PM	1:45 PM	2:45 PM	3:45 PM	4:45 PM	5:45 PM
28 Tierra Rejada & Harvester: Glenwood Park	7:16 AM	8:16 AM	9:16 AM	10:16 AM	11:16 AM	12:16 PM	1:46 PM	2:46 PM	3:46 PM	4:46 PM	5:46 PM
29 Tierra Rejada & Courtney: NE corner	7:16 AM	8:16 AM	9:16 AM	10:16 AM	11:16 AM	12:16 PM	1:46 PM	2:46 PM	3:46 PM	4:46 PM	5:46 PM
30 L.A. Ave. & Maureen: SE corner	7:18 AM	8:18 AM	9:18 AM	10:18 AM	11:18 AM	12:18 PM	1:48 PM	2:48 PM	3:48 PM	4:48 PM	5:48 PM
31 L.A. Ave. & Leta Yancy: SE corner	7:18 AM	8:18 AM	9:18 AM	10:18 AM	11:18 AM	12:18 PM	1:48 PM	2:48 PM	3:48 PM	4:48 PM	5:48 PM
32 L.A. Ave. & Park Lane: SW corner	7:19 AM	8:19 AM	9:19 AM	10:19 AM	11:19 AM	12:19 PM	1:49 PM	2:49 PM	3:49 PM	4:49 PM	5:49 PM
33 Park Ln. @ Vintage Crest Apartments	7:19 AM	8:19 AM	9:19 AM	10:19 AM	11:19 AM	12:19 PM	1:49 PM	2:49 PM	3:49 PM	4:49 PM	5:49 PM
34 Park Crest Lane	7:19 AM	8:19 AM	9:19 AM	10:19 AM	11:19 AM	12:19 PM	1:49 PM	2:49 PM	3:49 PM	4:49 PM	5:49 PM
35 L.A. Ave. & Moorpark Ave.: (The Fountains)	7:20 AM	8:20 AM	9:20 AM	10:20 AM	11:20 AM	12:20 PM	1:50 PM	2:50 PM	3:50 PM	4:50 PM	5:50 PM
36 Spring Rd. @ Woodcreek Apartments @ turnout	7:24 AM	8:24 AM	9:24 AM	10:24 AM	11:24 AM	12:24 PM	1:54 PM	2:54 PM	3:54 PM	4:54 PM	5:54 PM
37 2nd St. & Millard: NW corner	7:26 AM	8:26 AM	9:26 AM	10:26 AM	11:26 AM	12:26 PM	1:56 PM	2:56 PM	3:56 PM	4:56 PM	5:56 PM
38 2nd St. & Moorpark Ave.: NE corner	7:28 AM	8:28 AM	9:28 AM	10:28 AM	11:28 AM	12:28 PM	1:58 PM	2:58 PM	3:58 PM	4:58 PM	5:58 PM
39 Arrive at Civic Center: Front of Community Center	7:30 AM	8:30 AM	9:30 AM	10:30 AM	11:30 AM	12:30 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM

Scenario B

Scenario B recommends modifying the current MCT fixed-route routing to streamline operation and reduce service duplication. Modifications include significant routing realignments, separating the two routes into distinct lobes: Route 1 serving the western portion of the community and Route 2 the east. This new approach would result in slightly less coverage to some neighborhoods currently receiving “double coverage” in exchange for expanded coverage to other portions of the service area.

Proposed Changes (system-wide)

- Modify existing alignments.
 - Introduce service to Country Hill Road.
 - Introduce service to Cedar Springs Road.
 - Introduce service to Pardee Homes and Meridian Hills
- Modify existing bus stop locations (Route 1 and Route 2).
 - Additional stops along Park Crest Lane, Los Angeles Avenue, Country Hill Road, Cedar Springs Road, Tierra Rejada, Walnut Canyon Road, Spring Road, Miller Parkway, Peach Hill Road, and Moorpark Avenue.
- Update timetables to reflect actual running times and prevailing operating conditions (i.e., ridership, traffic conditions, etc).

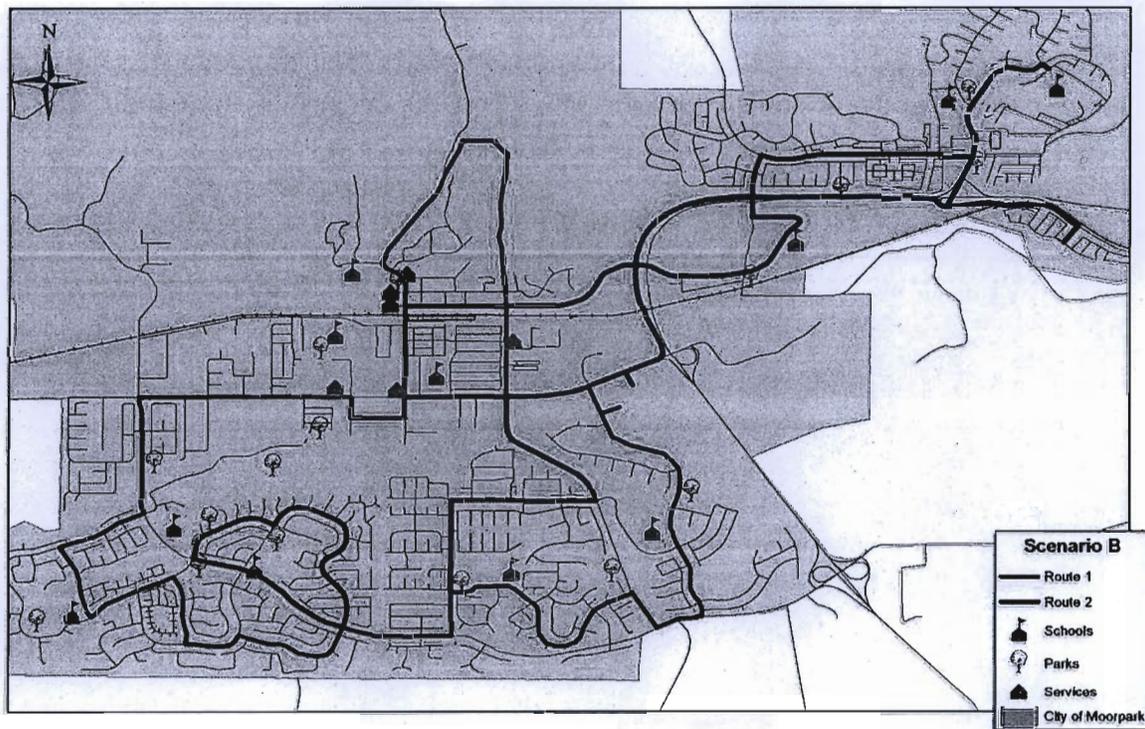
Advantages

- Reduced service duplication.
- Forecast increase in ridership and fare revenue.
- Reduced average travel time.

Disadvantages

- Some existing transit stop amenities become obsolete.
- Elimination of service along Goldman and Hertz Avenues.
- Elimination of direct service to Country Trail Park.
- One-time expense for the installation of new bus stops.
- Elimination of bi-directional service in some areas.

Exhibit 3.6 Scenario B



Route 1 would continue to run in a counter-clockwise pattern. The current “jog” through the Moorpark Town Center would be eliminated, thereby streamlining the alignment. New bus stops would be installed along Los Angeles Avenue near the Moorpark Town Center. The resulting path would have the bus continue west along Los Angeles Avenue without deviating north to Goldman and Hertz Avenues. This has been an area of historic low ridership.

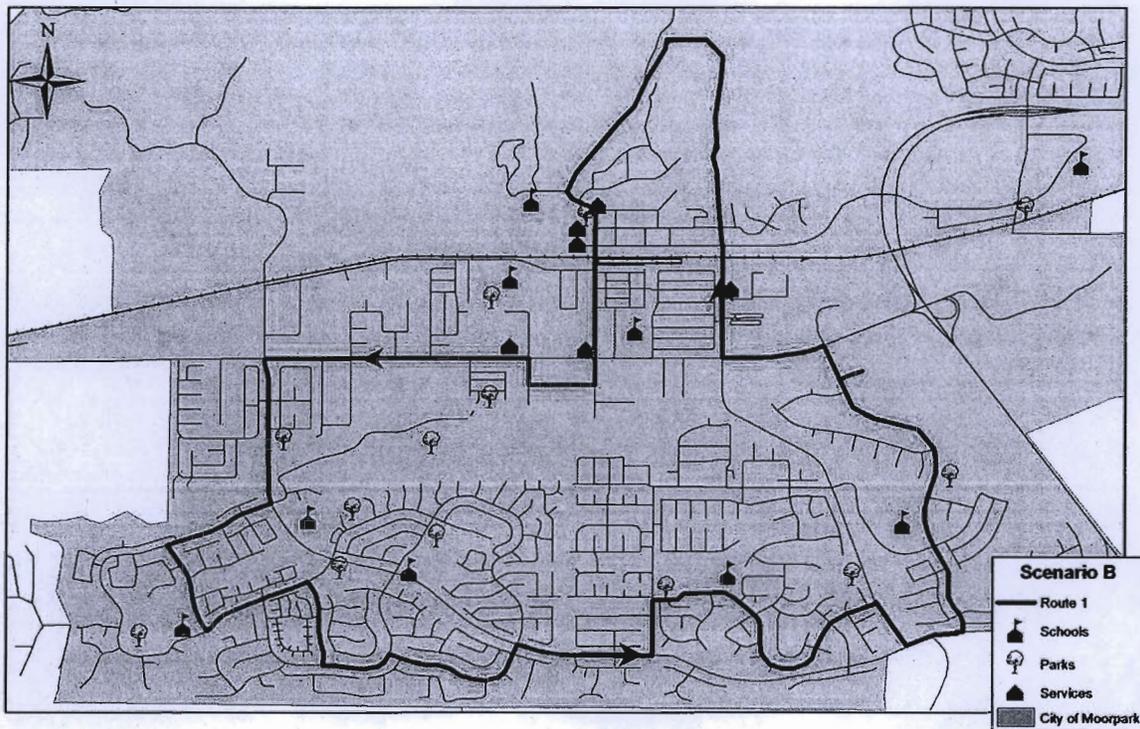
Route 1 would turn west along Countrywood Drive to serve Moorpark High School. In doing so, the City would have enhanced service to Arroyo West School via travel south along Country Hill Road. This new routing would require a slightly longer walk to/from Country Trail Park as well as the western portions of Countrywood Drive/Mountain Trail Street.

As proposed, Route 1 would turn east from Peach Hill Road onto Christian Barrett Drive which it would follow until reaching Spring Road. It would then travel southbound along Spring Road east on Tierra Rejada Road before heading northbound along Miller Parkway. The segment of the route from Tierra Rejada Road to the Mesa Verde School (along Miller Parkway) reflects a service expansion.

Route 1 would travel along Miller Parkway/Science Drive before stopping at Moorpark Marketplace and turning westbound along Los Angeles Avenue. It would then travel northbound along Spring Road serving new residential neighborhoods north of the downtown area. The proposed alignment would follow Spring

Road before turning southbound along Walnut Canyon Road to the Civic Center, its termination point.

Exhibit 3.7 Scenario B Route 1

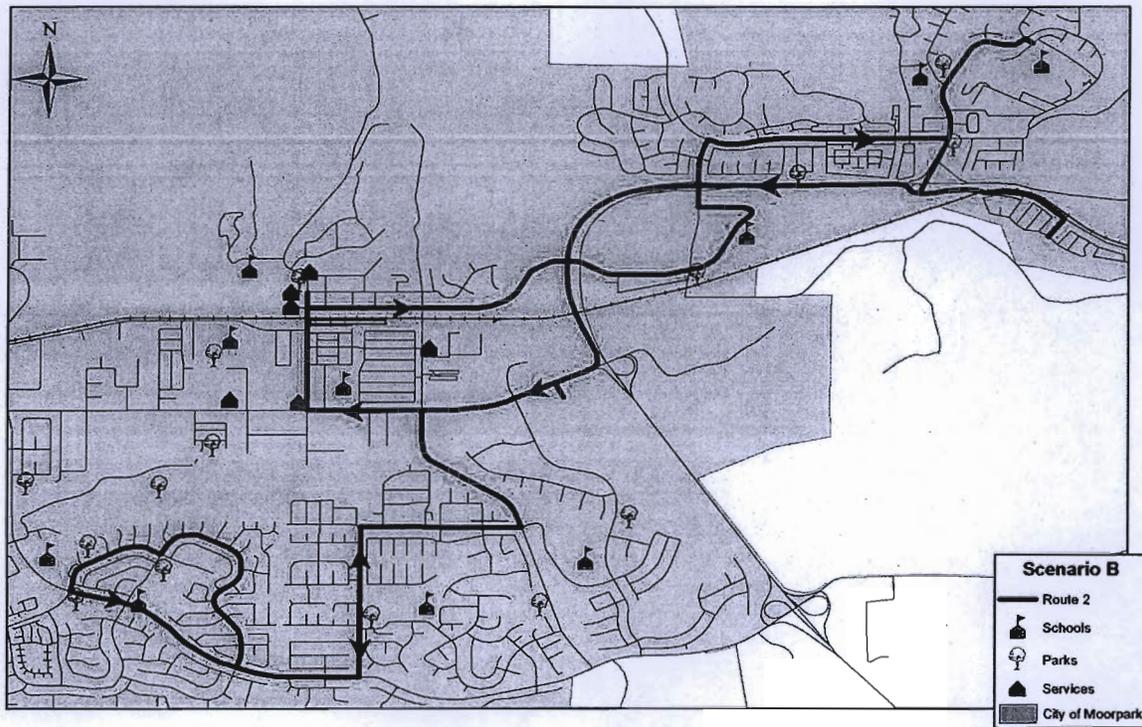


Route 2 provides service to the eastern portion of the community, including Moorpark College. Its path of travel begins on Moorpark Avenue outside the library. It then travels south along Moorpark Avenue before turning eastbound along High Street, serving the Virginia Colony, Campus Park, and Moorpark College neighborhoods.

Route 2 then travels westbound on State Route 118 to Los Angeles Avenue, stopping at Moorpark Marketplace before turning south along Spring Road (at the Gateway Plaza). The route

then travels westbound along Peach Hill Road until it reaches Tierra Rejada along the southern edge of the service area. It would take Tierra Rejada westbound up to Walnut Creek Road, where it would begin a loop bringing it along Mountain Trail Street and Tierra Rejada before returning to Peach Hill Road. The route would then reverse, providing bidirectional service until it reaches Los Angeles Avenue, at which point it would return to the Civic Center via Los Angeles and Moorpark Avenues.

Exhibit 3.8 Scenario B Route 2



Weekday: Evening Service Scenarios

Three distinct service scenarios were crafted for evening service on weekdays. Each includes a recommended routing and timetable:

- **Scenario A:** Same service delivery structure as daytime Scenario A.
- **Scenario B:** Significant revision in service delivery aimed at reducing service duplication, expanding the MCT service area, and supporting future program growth.
- **Scenario C:** Modify operation to include a single route (Route 1) for the evening and weekend service.

The relative merits of each service alternative are discussed below. The City has chosen Scenario C as the Preferred Scenario for evening service. As such, timetables have been developed for that Scenario and not Scenarios A or B, which are included solely as a point of reference.

The City could also consider a non-fixed route service for weekend and evening service hours. Moorpark City Transit is likely to see a substantial drop in ridership during any evening or weekend services compared to its regular fixed-transit service. For example, ridership decreased 73 percent during winter 2008/09 while grades K-12 and Moorpark College were out of session. Ridership remained 10 percent lower during the week in January when grades K-12 were back in session but Moorpark College was still out of session. During summer months (June through August), Moorpark City Transit averages a 20-percent drop in ridership while summer school is in session, compared to ridership during regular school sessions in the fall and spring.

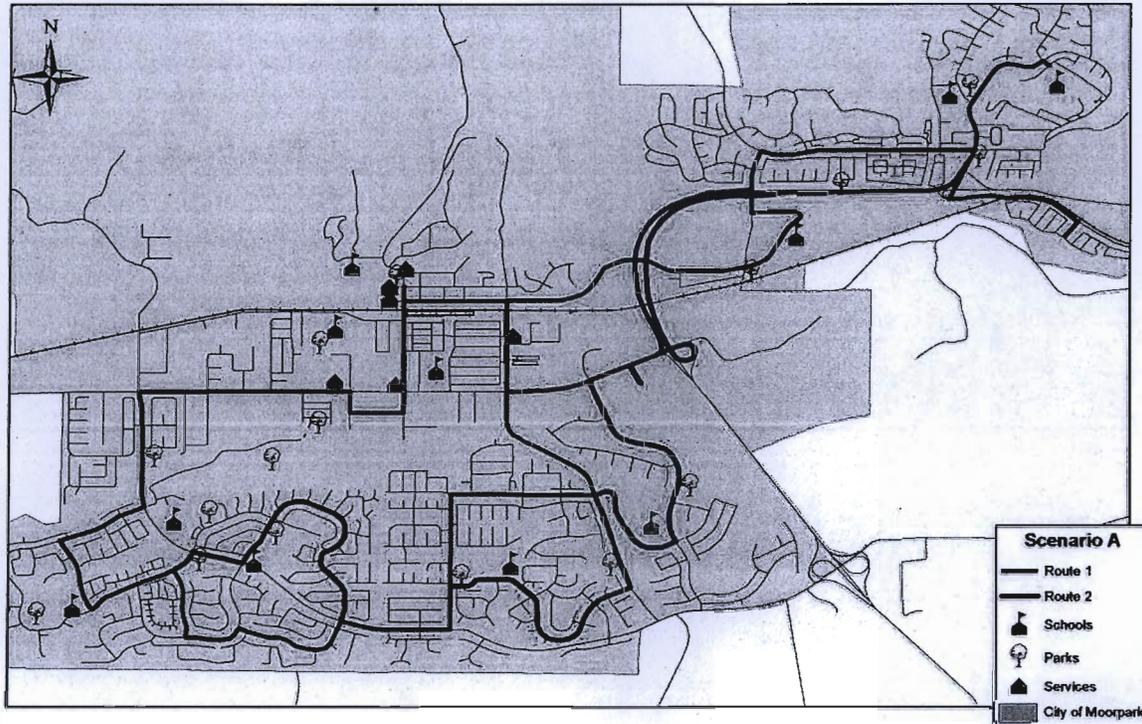
Other transit agencies see similar decreases in ridership during weekend services. The VISTA East County Inter-City bus route average an 87-percent decrease in ridership on Saturday, compared to its regular Monday through Friday ridership. Simi Valley Transit reported that its weekend service is "...substantially lower" than its regular Monday through Friday ridership. The City of Thousand Oaks does not offer weekend service for its fixed-transit service at this time, citing that there is not enough ridership demand to offer the service.

Due to the estimated lower ridership that is anticipated during evening and weekend hours for Moorpark City Transit, the City could consider establishing a General Dial-A-Ride (General DAR) transit service for evening and weekend service rather than fixed-route weekend service. A General DAR service would work similarly to the existing Intra-City Senior DAR and ADA Paratransit systems. The General DAR system would utilize ADA accessible vehicles. The benefit of establishing a General DAR system is that it removes the requirement to operate a separate ADA Paratransit program at the same time that a fixed-route system operates. Fares would be established for the service, perhaps \$2.00 per trip for students/adults and \$1.00 per trip for seniors/disabled. The City could apply for Jobs Access/Reverse Commute funding for the program, which would fund 50% of the program. The extended service hours would also be eligible for Congestion Mitigation and Air Quality (CMAQ) funds.

Scenario A

Scenario A is identical to that proposed within the "weekday daytime" recommendations.

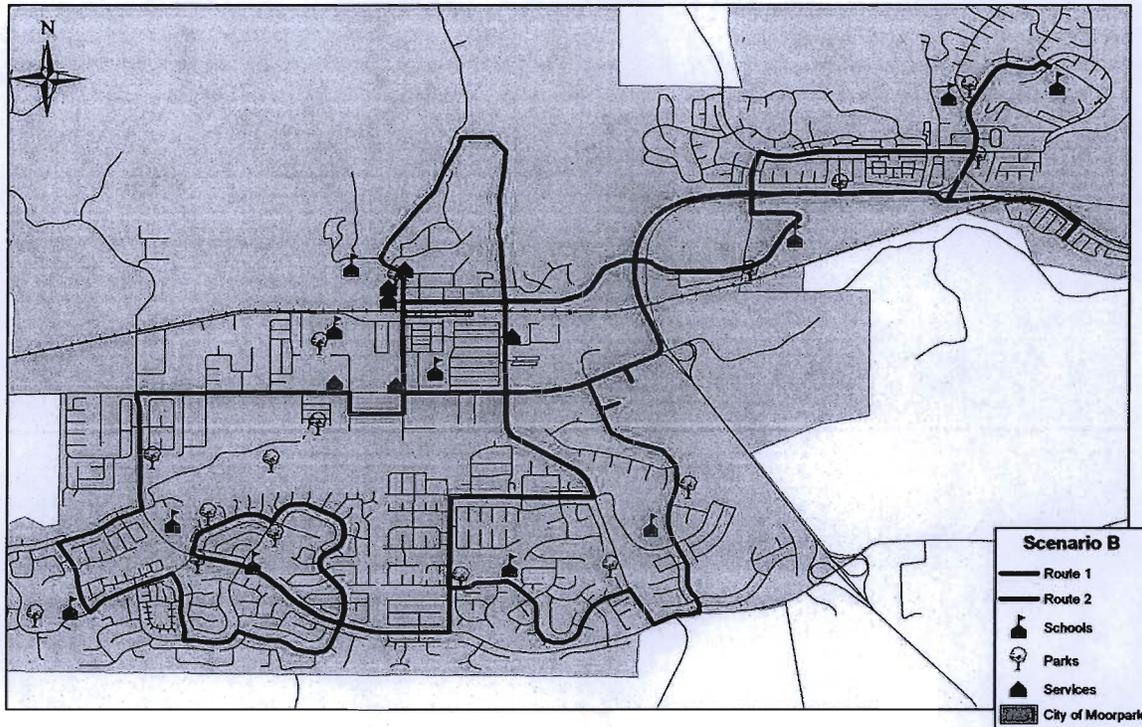
Exhibit 3.9 Scenario A



Scenario B

Scenario B is identical to that proposed within the “weekday daytime” recommendations.

Exhibit 3.10 Scenario B



Scenario C

In this scenario, we recommend the City remove Route 2 from service; leaving only Route 1 operating during evenings and on the weekend.

Proposed Changes

- Reduce MCT to a single route.
- Update timetables to reflect actual running times and prevailing operating conditions (i.e., ridership, traffic conditions, etc).

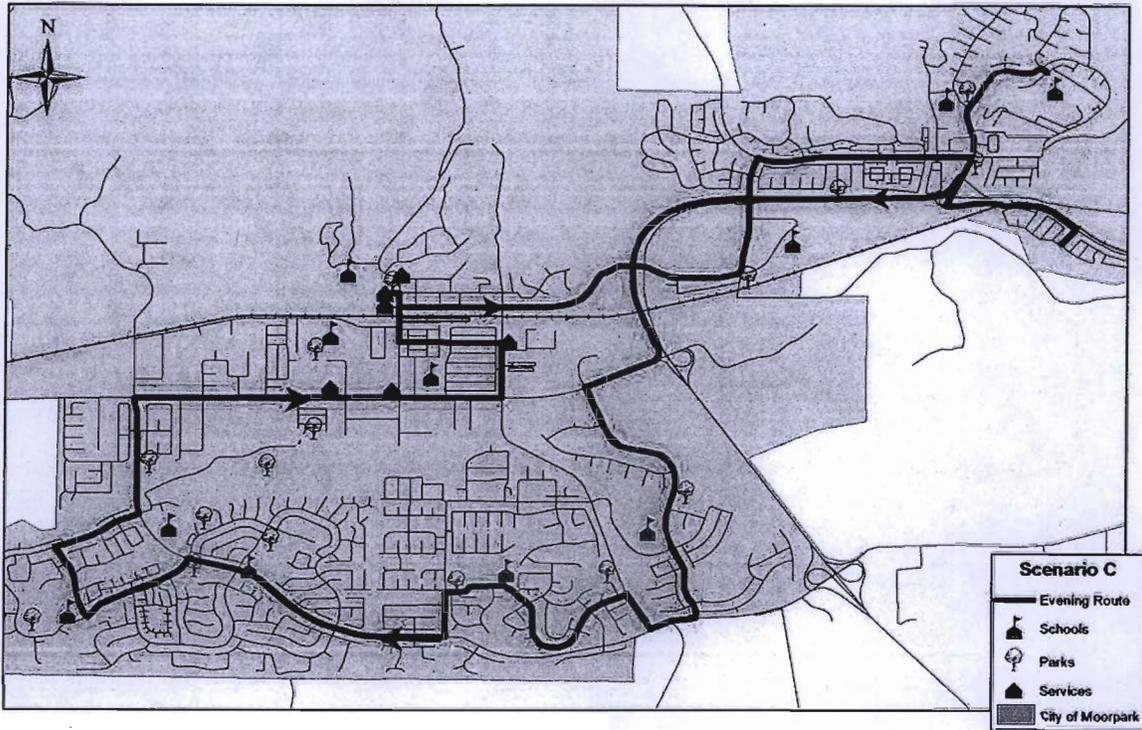
Advantages

- Increased efficiency through the elimination of service duplication.
- Reduced annual operating cost.

Disadvantages

- Some bus stops could become obsolete.
- Elimination of bidirectional service.
- Probable reduction in annual ridership and fare revenue.

Exhibit 3.11 Scenario C



The following timetable serves as the operating schedule for Scenario C during evening service.

Exhibit 3.12 Scenario C Timetable

Timepoint	Trip 1	Trip 2	Trip 3	Trip 4	Trip 5
Tierra Rejada & Countrywood, SW corner	5:30 PM	6:30 PM	7:30 PM	8:30 PM	9:30 PM
Mtn. Trail & Tierra Rejada: Mtn. Meadows Plaza across H.S.	5:42 PM	6:42 PM	7:42 PM	8:42 PM	9:42 PM
Peach Hill Park (by restrooms)	5:48 PM	6:48 PM	7:48 PM	8:48 PM	9:48 PM
Moorpark Marketplace Behind Famous Footwear	5:56 PM	6:56 PM	7:56 PM	8:56 PM	9:56 PM
Moorpark College: Communications Bldg. VISTA	6:13 PM	7:13 PM	8:13 PM	9:13 PM	10:13 PM
Arrive at Civic Center: Front of Community Center	6:24 PM	7:24 PM	8:24 PM	9:24 PM	10:24 PM

Weekend Service Scenarios

Three distinct service scenarios were crafted for weekend service. Each includes a recommended alignment and timetable:

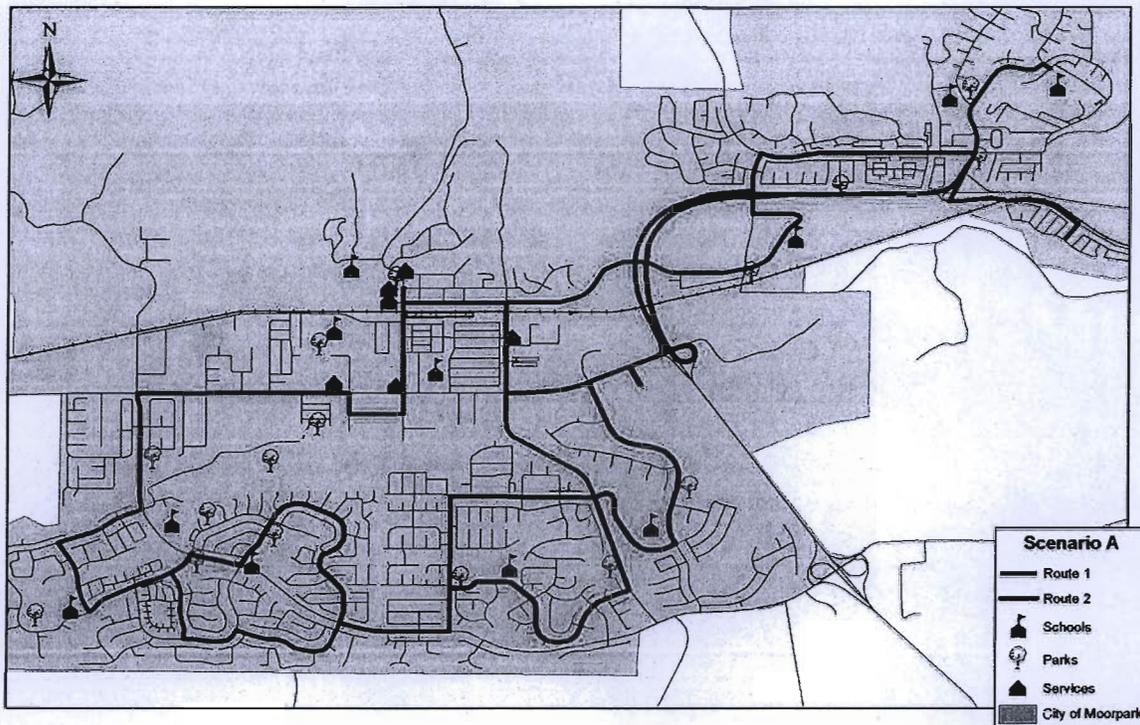
- **Scenario A:** Minor changes to select route segments to streamline operation, respond to input from customers and City, while also addressing emerging and forecast demand.
- **Scenario B:** Significant revision in service delivery aimed at reducing service duplication, expanding the MCT service area, and supporting future program growth.
- **Scenario C:** Modify operation to include a single route, operating in a clockwise manner, serving major corridors within the community.

The relative merits of each service alternative are discussed below. The City has chosen Scenario C as the Preferred Scenario for weekend service. As such, timetables have been developed for that Scenario and not Scenarios A or B, which are included solely as points of reference.

Scenario A

Scenario A is identical to that proposed within the “weekday daytime” recommendations.

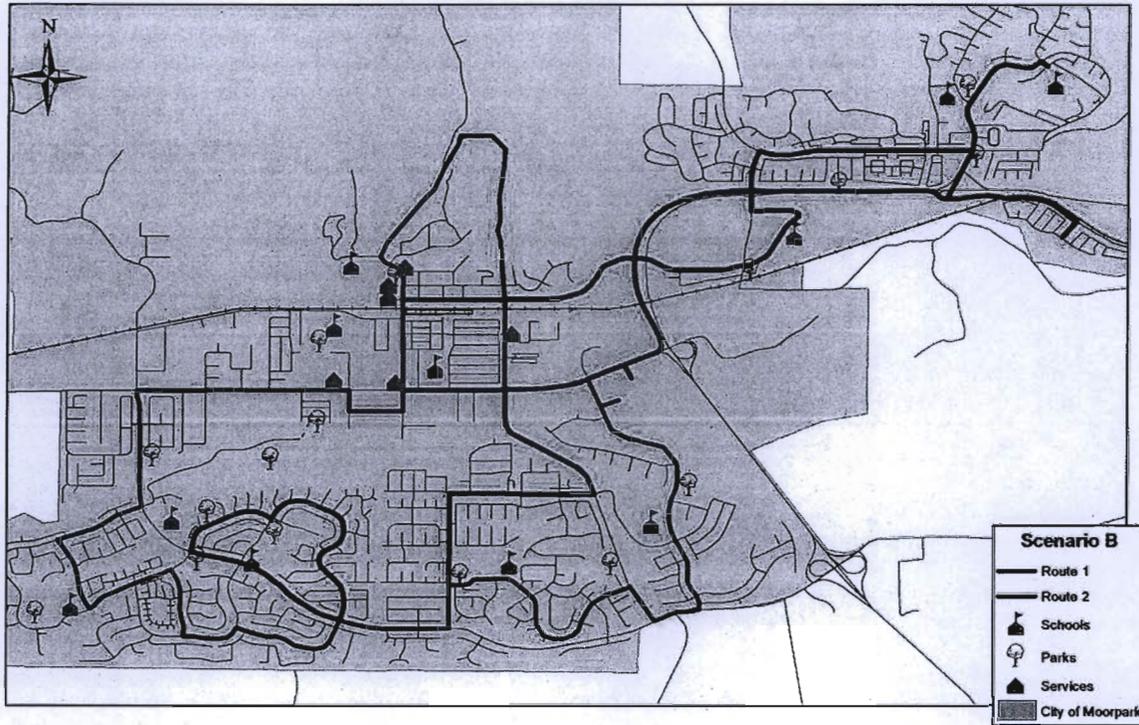
Exhibit 3.13 Scenario A



Scenario B

Scenario B is identical to that proposed within the “weekday daytime” recommendations.

Exhibit 3.14 Scenario B



CITY OF MOORPARK – TRANSIT EVALUATION

Exhibit 3.16 Scenario C Timetable

Timepoint	Trip 1	Trip 2	Trip 3	Trip 4	Trip 5	Trip 6	Trip 7	Trip 8	Trip 9
Tierra Rejada & Countrywood SW corner	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:30 PM	1:30 PM	2:30 PM	3:30 PM	4:30 PM
Mtn. Trail & Tierra Rejada Mtn Meadows Plaza across H.S.	8:12 AM	9:12 AM	10:12 AM	11:12 AM	12:42 PM	1:42 PM	2:42 PM	3:42 PM	4:42 PM
Peach Hill Park (by restrooms)	8:18 AM	9:18 AM	10:18 AM	11:18 AM	12:48 PM	1:48 PM	2:48 PM	3:48 PM	4:48 PM
Moorpark Marketplace Behind Famous Footwear	8:26 AM	9:26 AM	10:26 AM	11:26 AM	12:56 PM	1:56 PM	2:56 PM	3:56 PM	4:56 PM
Moorpark College Communications Bldg. VISTA	8:43 AM	9:43 AM	10:43 AM	11:43 AM	1:13 PM	2:13 PM	3:13 PM	4:13 PM	5:13 PM
Arrive at Civic Center Front of Community Center	8:54 AM	9:54 AM	10:54 AM	11:54 AM	1:24 PM	2:24 PM	3:24 PM	4:24 PM	5:24 PM