

Technical Memo #3

Five-Year Action Plan

Technical Memo #3 provides a five-year action plan for the continued development of public transit service in Beaumont. In addition to detailing 15 recommendations provided for implementation across the next five years, this technical memo includes operations, financial, capital, and implementation plans reflective of those recommendations.

The COVID-19 pandemic has affected not only how transit is operated now, but also anticipates how transit will be provided in the future. Uncertainties regarding when we can expect to return to “normal” – as well as what “normal” will actually be – often results in more questions than answers. In response to the pandemic, Beaumont Transit has been operating a reduced service schedule and has limited capacity on its vehicles. The City plans to return to full operation in October 2020. Therefore, the first phase of the Five-Year Action Plan focuses on supporting the return to full operation and optimizing service delivery, while subsequent phases seek to address various challenges, from introducing service to new locations to improving the historic farebox recovery ratio.

Phase I: Short-Term Recommendations (through June 30, 2021)

The impacts of COVID-19 have affected the anticipated implementation of a number of recommendations arising from this Comprehensive Operational Analysis. Therefore, short-term recommendations (through the end of the current fiscal year) focus primarily on supporting Beaumont Transit’s return to normal operations and helping to define what the “new normal” will be moving forward.

There are four ongoing activities that tie into the short-term recommendations.

1. **Farebox waiver through June 30, 2021.** California State Assembly Bill 90, passed in June 2020, waives the farebox recovery ratio requirement for Transportation Development Act (TDA) funding recipients for FY 2019/20 and FY 2020/21. This provides the City with some flexibility in how it responds to COVID-19 and allows additional time to identify solutions for meeting the required ratio beginning in FY 2021/22. This will allow the City to postpone any potential fare increase and stabilize its operating costs before being responsible for farebox recovery ratio compliance.
2. **Fare-free promotion.** The City recently received LCTOP funding, which it is using for a fare-free promotion. This should help to support the social distancing recommendation still in place (by limiting contact with the driver and farebox as well as enabling rear-door boarding) while providing additional operating revenue.
3. **Free fares for seniors, persons with disabilities, and veterans.** In addition to providing free rides for the general public, LCTOP funding is also expected to allow continued free rides for seniors, persons with disabilities, and veterans once the fare-free promotion has ended.
4. **Postpone resumption of Routes 7 and 9 (school routes).** The City has determined it is unable to operate Routes 7 and 9 during COVID. Even once schools return to in-person instruction, the maximum vehicle load of 10 riders allowed under social distancing guidelines will not provide the



capacity needed on those routes, or on Routes 3 or 4 which are also providing school transportation.

Through the end of FY 2020/21 (June 20, 2021), we recommend the City focus on the following five short-term action items:

1. **Support Fall 2020 return to regular service.** Beaumont Transit could resume its normal operations as early as October 1, 2020. While the service may nominally be back to “normal,” in reality it will continue to be quite different. Vehicle capacity would be affected by onboard social distancing, while ridership would likely be affected by reductions in persons traveling to work as well as the use of distance learning.

We recommend the City follow the guidance provided by the Centers for Disease Control (CDC), federal, and state government in determining whether any additional cleaning or Personal Protective Equipment (PPE) is required for the return to normal operations, as well as whether or when any protective measures can be loosened. Vehicle capacity is expected to be the biggest challenge moving forward, and there may be greater demand than socially distanced vehicles can accommodate on some routes and for peak-hour operation as more things open up. The City should have a plan in place to address excess demand as it arises. This may include using Dial-A-Ride vehicles to pick up riders left at a stop or using “sweeper” buses to cover a route once the assigned bus has reached capacity. It is unknown at this point how long it will take for this to occur once the City returns to normal service. Another California transit operator reported this happening within the second full month of normal operations, so it is worth developing a plan prior to restarting normal service.

Fiscal impact:

For the cost estimate, we assumed 60 additional hours per month of supplemental service, for a period of six months, occurring during FY 2020/21 at a cost of \$110.36 per hour.

Exhibit 1 Recommendation #1 – Fiscal Impact

	VSH per month	Cost per VSH	Monthly cost	Cost for six months
Recommendation #1	60	\$110.36	\$6,621.60	\$39,279.60

2. **Work with the school district regarding future resumption of Routes 7 and 9.** As mentioned above, these routes are not operating due to virtual e-learning, and are unlikely to be able to be operated safely for some time. Resumption of service on these routes must be postponed until the point at which the constraints of COVID-19 can be removed. At such time, the City should consider the preliminary recommendation regarding elimination of the school routes.





Fiscal impact:

For the cost estimate, we assumed the elimination of school-day routes 7 and 9 would result in the reduction of daily vehicle service hours by 4.76. This would result in an annual cost reduction of nearly \$95,000.

Exhibit 2 Recommendation #2 – Fiscal Impact

	VSH per school day (eliminated)	Cost per VSH	Daily cost	Annual cost reduction
Recommendation #2	-4.76	\$110.36	-\$525.31	-\$94,556.45

3. **Improve on-time performance by updating mid-trip fueling, driver break, and other policies.** During the ridecheck, we observed several instances where driver breaks or fueling stops resulted in late trips. In some cases, the delay caused by the break or fueling stop exacerbated a trip that was already running behind. This often resulted in a cascading effect whereby subsequent trips were never able to catch up and the service ran late for the balance of the day. These delays were often made worse by periodic traffic congestion or the time required to load wheelchair customers, over which the City has no control. We recommend the City implement the following policies to avoid these internal contributors to late service:

- Require vehicle fueling to be completed prior to the start of revenue service. If drivers are responsible for fueling, they should be doing so as part of their post-trip (so they leave the vehicle with a full tank) or their pre-trip (so they start with a full tank). If mid-day fueling is necessary, the bus could be replaced by one that is fully fueled so that the first bus can be fueled outside revenue service. Riders, especially on local routes, should not be subject to delays due to vehicle fueling. If mid-trip refueling is necessary for CommuterLink routes, we recommend incorporating a layover period into the schedule between arrival and departure at the San Bernardino Metrolink Station. Doing so would allow the driver sufficient time to fuel the vehicle while there are no passengers onboard. A driver break could be built into the schedule here as well.
- Build sufficient breaks into driver schedules so drivers do not normally have to take an unscheduled restroom break in the middle of a trip. In addition, adding a layover/recovery time in a location where drivers can use the restroom can help mitigate the impact on on-time performance when an unscheduled/emergency restroom break is required.
- The City may also wish to consider a policy that deploys a second bus on a route when the first falls significantly behind schedule. In this case, a subsequent trip would be started on time, even though the current trip had yet to finish. While the current trip would still be late, the next trip would depart on time. A strategy such as this would break the cycle of cascading late trips. This is especially useful if significant delays occur early in the day. It does, however, depend upon the availability of a driver and vehicle to be deployed on short notice.
- Operationally, all stops should be served reflective of the published schedule. The City should ensure its drivers follow this guidance. If desired, the City can adjust its policy to designate some stops (particularly those at the end of a route during the last trip of the





day) as “drop-off only.” The affected stops should be marked as such on the published timetables. This would give drivers the flexibility to skip those stops if no passengers are onboard at that time.

Fiscal impact:

For the cost estimate, we assumed four additional hours per month of supplemental service (when a bus falls significantly behind schedule), for a period of six months, occurring during FY 2020/21 at a cost of \$110.36 per hour. Beginning in FY 2022, the cost per hour would increase by three percent per year and the total cost would include 12 months of supplemental service.

Exhibit 3 Recommendation #3 – Fiscal Impact

	VSH per month	Cost per VSH	Monthly cost	Total cost
Recommendation #3 (FY 2021)	4	\$110.36	\$441.44	\$3,972.96 (6 months)
Recommendation #3 (FY 2022+)	4	\$113.67	\$441.44	\$8,184.30 (12 months)

4. **Improve on-time performance by adjusting schedules.** During the pandemic recovery period is the ideal time to make modest adjustments to routes intended to improve system on-time performance. These short-term recommendations can be implemented immediately to realize improved on-time performance.

The primary issue with on-time performance is the system’s ability to react to delays external to the route. In many cases, the routes can be completed as timed, as long as nothing happens to cause a delay. Delays can be internal (due to boarding or alighting of a wheelchair customer, a driver restroom stop, or in some cases, vehicle fueling). External delays are generally caused by traffic congestion. For some trips, late departure from the first stop results in a cascading effect that affects all subsequent trips. For these reasons, it is essential to have extra time built into the schedule, even if it requires the bus to lay over at designated locations during trips when everything goes as planned. While staying on a clock-face schedule is preferred, it is not always possible.

Based on our observations, wherein drivers took restroom breaks at San Geronio Hospital, we have utilized the hospital as a layover point for these short-term schedule adjustments. This would combine an opportunity to recover lost time with access to a restroom. An alternative could be scheduling layovers at Walmart, but at this time the store is too far from the bus stop to make it a practical restroom stop.

The following route-specific recommendations are schedule-based so as to address on-time performance and are designed to be implemented quickly as Beaumont Transit recovers from the impacts of COVID-19. Recommendations contained in subsequent phases may call for additional route and/or schedule changes intended to improve service coordination and/or introduce transit service to additional persons of the community.



Route 2. Route 2, with the fewest instances of late service, may be able to retain its current 90-minute headways. However, during weekday afternoons, it would benefit from five additional minutes in the schedule. This could be achieved by adding a five-minute recovery period at the hospital. This expands the headway to 95 minutes, which makes a clockface schedule impossible.

Exhibit 4 shows what the schedule would be if a five-minute layover is inserted at the hospital. This layover should be viewed as recovery time, not as a driver break. As a result, if the route is running late, the driver should depart as close to the departure time as possible to support on-time operation. If the route is running on time and the full five minutes (or more) will be spent at the stop, it may offer drivers the opportunity to take a brief restroom break.

In order to accommodate the additional five minutes per trip within roughly the same service span, the last trip would end at Walmart following service to the casino, rather than continuing. This would add five minutes to operating time (ending at 6:35 p.m. rather than 6:30 p.m.)

Route 3. During the ridecheck, Route 3 experienced some significantly late performance despite an 18-minute layover at the beginning of each trip. The catalyst for much of the late running was a fueling stop or a driver break, which had a cascading effect from which subsequent trips could not recover. For example, during one trip, a driver made a 10-minute fueling stop despite already running seven minutes behind. During another trip, a driver took a restroom break even though the trip was already 21 minutes behind schedule. That trip ended 22 minutes behind schedule and was subsequently five minutes late starting the next trip.

For Route 3, the 18-minute layover is more than sufficient, assuming long unscheduled breaks (such as fueling stops) can be avoided (see Recommendation 6). We recommend moving some of the layover time to the hospital, which could better accommodate driver restroom breaks as well as provide recovery time mid-route. If the route is running late, the driver should depart as close to the departure time as possible to make up some time. If the route is running on time and the full eight minutes (or more) would be spent at the stop, it may offer drivers the opportunity to take a brief restroom break.

While no time is being added to the schedule, dividing the layover time does extend operating time by eight minutes. This could be mitigated by eliminating the mid-trip layover during the first trip of the day. Exhibit 5 shows what the schedule would be if eight minutes of the 18-minute layover is inserted at the hospital. The mid-trip layover is eliminated during the first trip of the day. In this schedule, the clockface schedule is maintained for all trips except the first.

Route 4. The most significant issue on Route 4 is trips departing the first timepoint late, which causes a cascading effect throughout the day. In most cases, this is due to short delays throughout the route due to loading/unloading wheelchair passengers, assisting customers with boarding or alighting, selling passes, or breaks. Once the route is at the point where it is departing more than five minutes after the scheduled departure time (and is considered late), it is impossible to catch back up. During our ridecheck, this occurred during the 11:35 a.m. trip, which departed at 11:42 a.m. and experienced further delays. All subsequent trips departed the first stop late, which affected on-time performance at every stop. The last trip (scheduled for 5:35 p.m.) departed at 6:15 p.m., a full 40 minutes after the published schedule.

If all trips depart the first stop on time, many of the late performance issues would be resolved. Therefore, additional time needs to be inserted into the schedule which would allow a delayed trip to “catch up.” We believe including a five-minute layover in the schedule would add sufficient recovery time to accommodate most minor delays.

Exhibit 6 includes a five-minute layover at the hospital. The first (Route 4 – Alternate) trip is unchanged (i.e., there is no layover at this hospital during the trip). This expands the headway to 65 minutes, which makes a clockface schedule impossible. Under this schedule, the service span is unchanged. However, the number of daily trips on this route would be reduced by one.

Route 3/4. While the route remained on schedule during Saturday service, numerous instances of late performance were noted on Sunday.

During Saturday service, the route generally performed on time, in that service occurred within five minutes of the published schedule. However, a closer look at performance showed that when a trip started late, it continued late throughout the trip. These initial late departures were typically two to three minutes, which fell beyond the threshold for “late.” It is likely adding a few minutes to the running time will help keep the route operating closer to schedule on Saturday.

On Sunday, the late departures tended to be greater than five minutes and were counted as late. In one case, a driver change-out during the 11:00 a.m. trip added seven minutes to a trip that had been running on time, and arrival at the last stop was 10 minutes late. This caused the next three trips to start late, although the last two trips started on time (just one or two minutes after the scheduled time).

On several trips, had the trip started on time, it would have arrived at the last stop just two to three minutes late. This underscores the need for additional running time.

Exhibit 7 includes a five-minute layover at the hospital. This expands the headway to 65 minutes, which makes a clockface schedule impossible. Currently, the route ends at Beaumont High School. Maintaining this as the last stop would reduce the service span by 13 minutes. Ending service at Walmart would extend the service by 10 minutes. This schedule would reduce the number of daily trips on this route by one.





Exhibit 4 Route 2 Schedule with San Gorgonio Hospital Layover

Cougar Way/Beaumont Ave	6:30 AM	8:05 AM	9:40 AM	11:15 AM	12:50 PM	2:25 PM	4:00 PM	5:35 PM
6th St/Beaumont Ave @ Wells Fargo	6:40 AM	8:15 AM	9:50 AM	11:25 AM	1:00 PM	2:35 PM	4:10 PM	5:45 PM
Beaumont Walmart	6:50 AM	8:25 AM	10:00 AM	11:35 AM	1:10 PM	2:45 PM	4:20 PM	5:55 PM
Casino Morongo	7:10 AM	8:45 AM	10:20 AM	11:55 AM	1:30 PM	3:05 PM	4:40 PM	6:15 PM
Beaumont Walmart	7:30 AM	9:05 AM	10:40 AM	12:15 PM	1:50 PM	3:25 PM	5:00 PM	6:35 PM
Arrive San Gorgonio Hospital	7:45 AM	9:20 AM	10:55 AM	12:30 PM	2:05 PM	3:40 PM	5:15 PM	---
Depart San Gorgonio Hospital	7:50 AM	9:25 AM	11:00 AM	12:35 PM	2:10 PM	3:45 PM	5:20 PM	---
6th St @ Beaumont Civic Center	7:55 AM	9:30 AM	11:05 AM	12:40 PM	2:15 PM	3:50 PM	5:25 PM	---
Cougar Way/Beaumont Ave	8:05 AM	9:40 AM	11:15 AM	12:50 PM	2:25 PM	4:00 PM	5:35 PM	---

Exhibit 5 Route 3 Schedule with San Gorgonio Hospital Layover

Cherry Valley Blvd @ BHS	6:24 AM	7:16 AM	8:16 AM	9:16 AM	10:16 AM	11:16 AM	12:16 PM	1:16 PM	2:16 PM	3:16 PM	4:16 PM
Cougar Way/Beaumont Ave	6:28 AM	7:20 AM	8:20 AM	9:20 AM	10:20 AM	11:20 AM	12:20 PM	1:20 PM	2:20 PM	3:20 PM	4:20 PM
Oak Valley Pkwy & Cherry Ave @ Country Highlands	6:31 AM	7:23 AM	8:23 AM	9:23 AM	10:23 AM	11:23 AM	12:23 PM	1:23 PM	2:23 PM	3:23 PM	4:23 PM
Xenia Ave @ Noble Creek Apts	6:33 AM	7:25 AM	8:25 AM	9:25 AM	10:25 AM	11:25 AM	12:25 PM	1:25 PM	2:25 PM	3:25 PM	4:25 PM
Beaumont Walmart	6:40 AM	7:32 AM	8:32 AM	9:32 AM	10:32 AM	11:32 AM	12:32 PM	1:32 PM	2:32 PM	3:32 PM	4:32 PM
Arrive San Gorgonio Hospital	6:52 AM	7:44 AM	8:44 AM	9:44 AM	10:44 AM	11:44 AM	12:44 PM	1:44 PM	2:44 PM	3:44 PM	4:44 PM
Depart San Gorgonio Hospital	6:52 AM	7:52 AM	8:52 AM	9:52 AM	10:52 AM	11:52 AM	12:52 PM	1:52 PM	2:52 PM	3:52 PM	4:52 PM
Chatigny Recreation Center	6:58 AM	7:58 AM	8:58 AM	9:58 AM	10:58 AM	11:58 AM	12:58 PM	1:58 PM	2:58 PM	3:58 PM	4:58 PM
Cougar Way/Beaumont Ave @ Orchard Park Apts	7:02 AM	8:02 AM	9:02 AM	10:02 AM	11:02 AM	12:02 PM	1:02 PM	2:02 PM	3:02 PM	4:02 PM	5:02 PM
Cherry Valley Blvd @ BHS	7:06 AM	8:06 AM	9:06 AM	10:06 AM	11:06 AM	12:06 PM	1:06 PM	2:06 PM	3:06 PM	4:06 PM	5:06 PM





Exhibit 6 Route 4 Schedule with San Gorgonio Hospital Layover

Depart Beaumont Walmart	---	7:35 AM	8:40 AM	9:45 AM	10:50 AM	11:55 AM	1:00 PM	2:05 PM	3:10 PM	4:15 PM	5:20 PM
Arrive San Gorgonio Hospital	6:35 AM	7:50 AM	8:55 AM	10:00 AM	11:05 AM	12:10 PM	1:15 PM	2:20 PM	3:25 PM	4:30 PM	5:35 PM
Depart San Gorgonio Hospital	6:35 AM	7:55 AM	9:00 AM	10:05 AM	11:10 AM	12:15 PM	1:20 PM	2:25 PM	3:30 PM	4:35 PM	5:40 PM
Beaumont Civic Center	6:48 AM	---	---	---	---	---	---	---	---	---	---
Three Rings Ranch Park	6:52 AM	8:06 AM	9:11 AM	10:16 AM	11:21 AM	12:26 PM	1:31 PM	2:36 PM	3:41 PM	4:46 PM	5:51 PM
Beaumont High School	7:09 AM	---	---	---	---	---	---	---	---	---	---
Cougar Way & Beaumont Ave. @ Orchard Park Apts	7:13 AM	8:20 AM	9:25 AM	10:30 AM	11:35 AM	12:40 PM	1:45 PM	2:50 PM	3:55 PM	5:00 PM	6:05 PM
Pennsylvania Ave & 8th St.	7:25 AM	8:30 AM	9:35 AM	10:40 AM	11:45 AM	12:50 PM	1:55 PM	3:00 PM	4:05 PM	5:10 PM	6:15 PM
Arrive Beaumont Walmart	7:35 AM	8:40 AM	9:45 AM	10:50 AM	11:55 AM	1:00 PM	2:05 PM	3:10 PM	4:15 PM	5:20 PM	6:25 PM

Exhibit 7 Route 3/4 Schedule with San Gorgonio Hospital Layover

Cougar Way & Beaumont Ave.	8:00 AM	9:05 AM	10:10 AM	11:15 AM	12:20 PM	1:25 PM	2:30 PM	3:35 PM	4:40 PM
Beaumont HS	8:07 AM	9:12 AM	10:17 AM	11:22 AM	12:27 PM	1:32 PM	2:37 PM	3:42 PM	4:47 PM
Cherry Ave & Oak Valley Pkwy	8:15 AM	9:20 AM	10:25 AM	11:30 AM	12:35 PM	1:40 PM	2:45 PM	3:50 PM	4:55 PM
8th St & Pennsylvania Ave.	8:18 AM	9:23 AM	10:28 AM	11:33 AM	12:38 PM	1:43 PM	2:48 PM	3:53 PM	4:58 PM
Beaumont Walmart	8:30 AM	9:35 AM	10:40 AM	11:45 AM	12:50 PM	1:55 PM	3:00 PM	4:05 PM	5:10 PM
Arrive San Gorgonio Hospital	8:43 AM	9:48 AM	10:53 AM	11:58 AM	1:03 PM	2:08 PM	3:13 PM	4:18 PM	---
Depart San Gorgonio Hospital	8:48 AM	9:53 AM	10:58 AM	12:03 PM	1:08 PM	2:13 PM	3:18 PM	4:23 PM	---
Beaumont Civic Center	8:54 AM	9:59 AM	11:04 AM	12:09 PM	1:14 PM	2:19 PM	3:24 PM	4:29 PM	---
Elm & W. 8th St.	8:58 AM	10:03 AM	11:08 AM	12:13 PM	1:18 PM	2:23 PM	3:28 PM	4:33 PM	---
Cougar Way & Beaumont Ave.	9:05 AM	10:10 AM	11:15 AM	12:20 PM	1:25 PM	2:30 PM	3:35 PM	4:40 PM	---



CommuterLink 120. The current CommuterLink 120 schedule is highly variable, with travel time between timepoints likely based largely on typical traffic conditions. The 4:40 a.m. trip observed during our ridecheck has a fuel stop built into the schedule during the return trip from San Bernardino. While the stop did not cause the trip to run late due to the timing of the schedule, this is the only trip with a scheduled hour-long travel time between the San Bernardino Transit Center (SBTC) and Calimesa. Reflective of the proposed fueling policy in Recommendation 6, we encourage the City to fuel the vehicle either prior to going into service at the beginning of the day or during a layover at the SBTC. The 12:25 p.m. trip also has more than an hour of travel time between SBTC and Calimesa built into the schedule. However, on the trip we observed, no fueling stop was needed, so the driver and passenger killed time in Calimesa for 37 minutes.

The revised schedule in Exhibit 8 includes a 15-minute layover at the SBTC on every other trip for each vehicle, which could be used for fueling when mid-trip fueling is necessary. Each trip also includes a 35-minute travel time between SBTC and Calimesa, which appears to be the standard travel time when a fuel stop is not included in the schedule. Fueling could also occur when the buses go out of service at 11:25 a.m. and 1:05 p.m., respectively.

During the ridecheck, service on the weekends typically started on time but began running late during the observed trip. The revised schedule in Exhibit 9 adds five minutes of recovery time between trips (at Walmart). However, it reduces the break between trips three and four to 60 minutes and extends the service day by 15 minutes.





Exhibit 8 CommuterLink 120 Weekday Schedule with Variable SBTC Layover

Depart Beaumont Walmart	4:40 AM	6:00 AM	7:10 AM	8:35 AM	9:35 AM	11:05 AM	12:30 PM	1:45 PM	2:25 PM	4:10 PM	5:00 PM	6:45 PM
Beaumont Civic Center	4:45 AM	6:05 AM	7:15 AM	8:40 AM	9:40 AM	11:10 AM	12:35 PM	1:50 PM	2:30 PM	4:15 PM	5:05 PM	6:50 PM
Calimesa @ Stater Brothers	4:55 AM	6:15 AM	7:25 AM	8:50 AM	9:50 AM	11:20 AM	12:45 PM	2:00 PM	2:40 PM	4:25 PM	5:15 PM	7:00 PM
Arrive San Bernardino Transit Center	5:20 AM	6:45 AM	7:55 AM	9:25 AM	10:20 AM	11:55 AM	1:15 PM	2:30 PM	3:10 PM	4:55 PM	5:45 PM	7:30 PM
Depart San Bernardino Transit Center	5:35 AM	7:00 AM	8:00 AM	9:30 AM	10:35 AM	12:10 PM	1:20 PM	2:35 PM	3:25 PM	5:10 PM	5:50 PM	7:35 PM
Calimesa Blvd @ Dollar Tree	6:10 AM	7:35 AM	8:35 AM	10:05 AM	11:10 AM	12:45 PM	1:55 PM	3:10 PM	4:00 PM	5:45 PM	6:25 PM	8:10 PM
Wells Fargo	6:20 AM	7:45 AM	8:45 AM	10:15 AM	11:20 AM	12:55 PM	2:10 PM	3:20 PM	4:10 PM	5:55 PM	6:30 PM	8:20 PM
Beaumont Walmart	6:25 AM	7:50 AM	8:50 AM	10:20 AM	11:25 AM	1:05 PM	2:25 PM	3:25 PM	4:15 PM	6:00 PM	6:40 PM	8:25 PM
Casino Morongo	6:45 AM	8:10 AM	9:10 AM	10:40 AM	---	---	---	3:45 PM	4:35 PM	6:20 PM	---	---
Arrive Beaumont Walmart	7:10 AM	8:35 AM	9:35 AM	11:05 AM	---	---	---	4:10 PM	5:00 PM	6:45 PM	---	---

Exhibit 9 CommuterLink 120 Weekend Schedule with End-of-Trip Layover

Depart Beaumont Walmart	7:15 AM	9:40 AM	12:05 PM	3:15 PM	5:25 PM
Beaumont Civic Center	7:20 AM	9:45 AM	12:10 PM	3:20 PM	5:30 PM
Calimesa @ Stater Brothers	7:30 AM	9:55 AM	12:20 PM	3:25 PM	5:40 PM
Arrive San Bernardino Transit Center	8:00 AM	10:25 AM	12:45 PM	3:55 PM	6:05 PM
Depart San Bernardino Transit Center	8:05 AM	10:30 AM	12:50 PM	4:00 PM	6:10 PM
Calimesa Blvd @ Dollar Tree	8:35 AM	11:00 AM	1:15 PM	4:30 PM	6:40 PM
Wells Fargo	8:45 AM	11:10 AM	1:25 PM	4:40 PM	6:50 PM
Beaumont Walmart	8:50 AM	11:15 AM	1:30 PM	4:50 PM	6:55 PM
Casino Morongo	9:10 AM	11:35 AM	1:50 PM	4:55 PM	7:15 PM
Beaumont Walmart	9:35 AM	12:00 PM	2:15 PM	5:20 PM	7:40 PM





CommuterLink 125. CommuterLink 125 appears to have sufficient time in the schedule to support normal operations. However, external conditions (such as a traffic accident) can cause it to run late, with a cascading effect on the balance of the service day. This occurred during our ridecheck, when a car accident on the freeway between Loma Linda VA and Calimesa during the 1:45 p.m. trip added a 15-minute delay. The observed trip ended 12 minutes late, which caused the 3:20 p.m. trip to depart late. This trip was further impacted by traffic, causing the 5:10 p.m. trip to depart at 5:29 p.m. Given traffic accidents cannot be predicted, and given the current schedule appears to be able to accommodate modest delays, we do not recommend any changes to the schedule. However, this is a situation whereby, when significant delays are present earlier in the day, it may warrant deploying an additional vehicle to start the next trip on time (as discussed in Recommendation 6).

Impact of Schedule Changes on Connectivity. Beaumont Transit does not currently offer timed transfers between routes at either Walmart or San Geronio Hospital. While all three routes may arrive within a 10-minute time period, this creates a short wait for some customers and a much longer wait for others. For example, Route 2 serves Walmart at 10:30 a.m., Route 4 at 10:35 a.m., and Route 3 at 10:40 a.m. Riders connecting between Route 2 and either of the other routes, or Route 4 and Route 3, ensuring a wait of five to ten minutes. Riders connecting to Route 2, however, must wait 50 to 55 minutes. With the proposed schedules, connection times vary, and layovers at key transfer points could result in improved connectivity.

Connectivity with Banning Transit currently varies as well. Some inter-community trips have short wait-times, while others can require a long wait. However, given Banning Transit does not utilize a clockface schedule, connection times are highly variable. Two of the three Banning Transit routes have a 10-minute layover scheduled at the hospital, which offers opportunities for effective inter-service transfers. If Beaumont Transit also offers a layover at the hospital, this further expands transfer opportunities.

Fiscal impact:

This recommendation would result in an additional 170.76 vehicle service hours annually, resulting in an additional cost of nearly \$19,000. If this recommendation were implemented for only six months, the total cost would be halved (\$9,422.54).

Exhibit 10 Recommendation #4 – Fiscal Impact

	Additional VSH per year	Cost per VSH	Total cost (annually)
Recommendation #4	170.76	\$110.36	\$18,845.07



5. **Update the City’s Bus Stop Placement Policy.** The City should update the bus stop policy to clearly define how far apart bus stops should be placed, activity level “trigger points” for the addition of amenities such as shelters and benches, and guidelines for the addition or removal of bus stops. As part of the bus stop policy, we recommend the City discontinue its policy of allowing “flag stops.” Allowing “flag stops” can erode on-time performance by adding unplanned stops to the route. Appropriate placement of bus stops should provide a reasonable level of access to transit. Individuals who are unable to access a route via a regular bus stop may seek ADA certification in order to use the Dial-A-Ride service, or use the service based on age eligibility.

Fiscal impact:

None.



Phase II: Mid-Term Recommendations (July 1, 2021 – December 31, 2022)

Mid-term recommendations are intended to begin moving Beaumont Transit into the future. By July 1, 2021, it is hoped the effects of the COVID-19 pandemic will have diminished and conditions return to their pre-pandemic state. In addition, July 1, 2021 marks the beginning of the next fiscal year during which the City will be responsible for meeting the TDA farebox recovery ratio threshold.

6. **Eliminate service to Calimesa.** Once transit service has largely returned to normal, the City should eliminate service to Calimesa (currently provided via CommuterLink 120). During the ridechecks and public outreach, few unique individuals indicated traveling to or from Calimesa using the CommuterLink 120 service. While this service is convenient for these individuals, it primarily serves to slow down the commuter route, whose primary purpose is linking Beaumont to San Bernardino.

While Calimesa lies along the route between Beaumont and San Bernardino, neither the City of Calimesa or the Riverside Transit Authority (RTA) has historically shown any interest in providing any funding support for this route. While eliminating service to Calimesa may affect a numerically modest number of Beaumont residents traveling to and from Calimesa, continuing to provide the commuter service to Calimesa residents with no contribution from Calimesa or RTA sets a bad precedent.

Fiscal impact:
None.

7. **Fare adjustment.** Phase II of the Comprehensive Operational Analysis included a fare equity analysis and recommended a 20 percent fare increase. The fare equity analysis, using data from FY 2018/19, estimated an increase in fare revenues system-wide of 12 percent, even taking into account a 6.67 percent ridership decrease due to fare elasticity. (Fare elasticity, following the Simpson-Curtin Rule, assumes each three percent fare increase will reduce ridership by one percent.)

The consultant believes it is important for Beaumont Transit to resolve its on-time performance issues before introducing a fare increase. To that end, adjustments to route timings are included as short-term recommendations. Improving the reliability of the service is important, increases public perception of “service value,” and therefore more “worthy” of a fare increase. This is expected to minimize the potential loss of ridership associated with a fare increase.

The impact of the proposed 20 percent fare increase is shown in Exhibit 11.





Exhibit 11 Proposed Fare Schedule

Fare Category	Current fare	Proposed fare
Local fixed-route service		
<i>One-way cash fares</i>		
Base one-way fare (adult/general public)	\$1.25	\$1.50
Reduced one-way fare (senior/disabled/Medicare)	\$0.75	\$0.90
Military veteran fare	\$0.75	\$0.90
Active military fare	Free	Free
College student fare	Free (MSJC GoPass)	\$1.50
Children under 46" tall	\$0.25	\$0.30
Route deviation	\$0.50	\$0.60
<i>Multi-ride fare options</i>		
Day pass (adult/general public)	\$3.10	\$3.75
Day pass (senior/disabled/ Medicare cardholder)	\$1.90	\$2.25
Day pass (military veteran)	\$1.90	\$2.25
10-ride book/pass (adult/general public)	\$12.50	\$15.00
10-ride book/pass (senior/ disabled/Medicare)	\$7.50	\$9.00
10-ride book/pass (military veteran)	\$7.50	\$9.00
31-day/monthly pass (adult/ general public)	\$39.13	\$47.00
31-day/monthly pass (senior/ disabled/Medicare)	\$24.80	\$29.75
31-day/monthly pass (military veteran)	\$24.80	\$29.75
Commuter service		
<i>One-way cash fares</i>		
Adult/general public fare	\$3.50	\$4.25
Child fare	\$2.50	\$3.00
Senior/disabled/Medicare cardholder	\$2.50	\$3.00
Military veteran fare	\$2.50	\$3.00
Active military fare	Free	Free
<i>Multi-ride fare options</i>		
10-ride card (adult/ general public)	\$31.50	\$37.75
10-ride card (child)	\$22.50	\$27.00
10-ride card (senior/ disabled/Medicare cardholder)	\$22.50	\$27.00
10-ride card (military veteran)	\$22.50	\$27.00
Day pass (adult/general public)	\$8.00 (local + CommuterLink)	\$9.50 (local + CommuterLink)
Day pass (child)	\$6.00 (local + CommuterLink)	\$7.25 (local + CommuterLink)
Day pass (senior/disabled/ Medicare cardholder)	\$6.00 (local + CommuterLink)	\$7.25 (local + CommuterLink)
Day pass (military veteran)	\$6.00 (local + CommuterLink)	\$7.25 (local + CommuterLink)

Beaumont Transit does not currently receive a fare subsidy from Mount San Jacinto College (MSJC), but continues to offer free fares to MSJC students (as do RTA and Banning) through the GoPass program. This has been included as a finding in the City’s last two TDA Triennial Performance Audits. In the most recent audit, the auditor stated a vote by the associated student body regarding a separate fare revenue agreement with the City of Beaumont was expected in early 2018, but that vote never took place.

In Fall 2020, RTA began funding the GoPass program through an LCTOP grant rather than through the school’s six-dollar transportation fee. As a result, there are no transportation fee revenues being collected. Instead, college students download a free mobile pass through Token Transit. It



is unclear as to whether the college is still issuing Pass Transit stickers on student identification cards. It is also unclear as to whether RTA will continue to fund the program using LCTOP funds or if MSJC's six-dollar transportation fee will be re-instituted in future years.

Given these changes in RTA's GoPass program, we recommend the City either identify separate funding (such as through the LCTOP program) to fund its own college student fare program or eliminate the program altogether. In this case, we recommend charging college students the same as the base (adult) fare. We do not recommend the City continue providing free rides to MSJC students without some type of revenue sharing agreement with the college.

Fiscal impact:

Assuming the fare increase is accompanied by the implementation of other recommendations that improve service performance and reliability, we anticipate a 12 percent fare revenue increase (based on pre-COVID ridership) during the year of implementation (FY 2021/22), followed by a three percent annual increase.

8. [Enhance commute options for persons employed in the Crossroads Logistics Center/Rolling Hills Business Park](#). Phase II of the COA project included discussions with Amazon regarding its new distribution center, yet the demand for transit service cannot be fully estimated until Amazon completes its hiring process and opens the facility. While the initial recommendations assumed much of the demand would be local, later communications indicated the top areas for recruitment included Beaumont, Banning, Hemet, San Jacinto, Yucaipa, the east side of the Moreno Valley, Redlands, and Perris (see Exhibit 12).

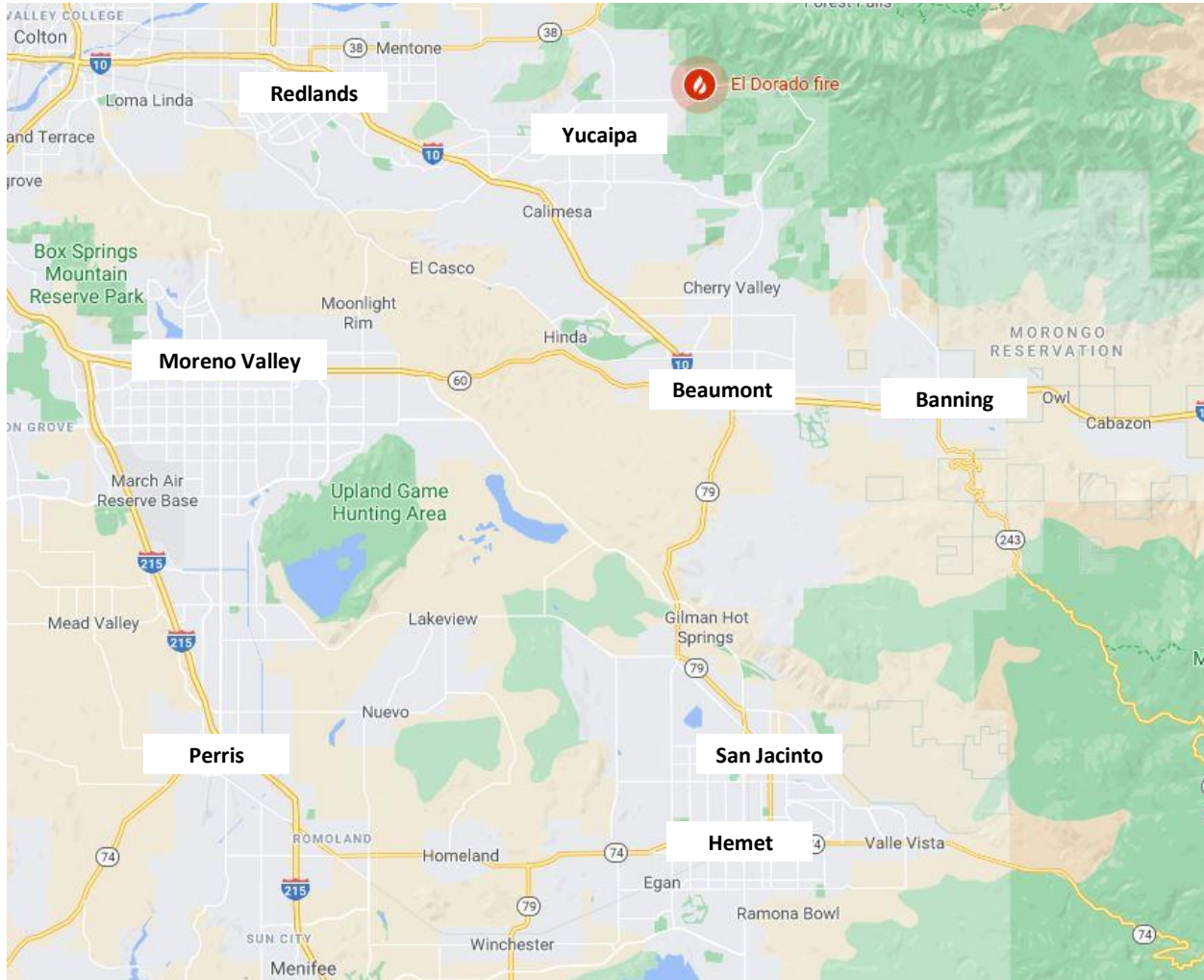
Once Amazon staffing is stable, the City would need to determine two things: Whether Amazon employees (and those employed at other locations within the business park) would be likely to commute to work via transit if it were available, and where those employees are traveling from. It is unlikely a simple expansion of the City's local transit service to the business park would be effective, as riders would need to travel to Walmart to access the bus before traveling to work. In addition, the current service span would allow the City to provide transit service to the day shift alone, as the other two shifts would start or end outside the current Beaumont Transit service day.

For local employees, alternatives to fixed-route bus service are likely to be most effective in this situation. Assuming there is sufficient demand for transportation from one or more central location within Beaumont to the business park, a shuttle or microtransit service may provide a more efficient solution. This would be operated separately from the fixed-route service. If the shuttle or service is focused on the business park, we recommend working with business park employers to contribute to the service, either by subsidizing individual rides or providing an annual contribution.

Another option that would be more feasible to bring employees from outlying areas (especially to the south) is vanpools. The City could set up a vanpool program through a qualified provider (such as Enterprise). Vanpools could be subsidized either by the City and/or the employer. At a later date, demand for vanpools can be evaluated to determine whether a traditional commuter bus route is warranted.



Exhibit 12 Amazon Recruitment Area

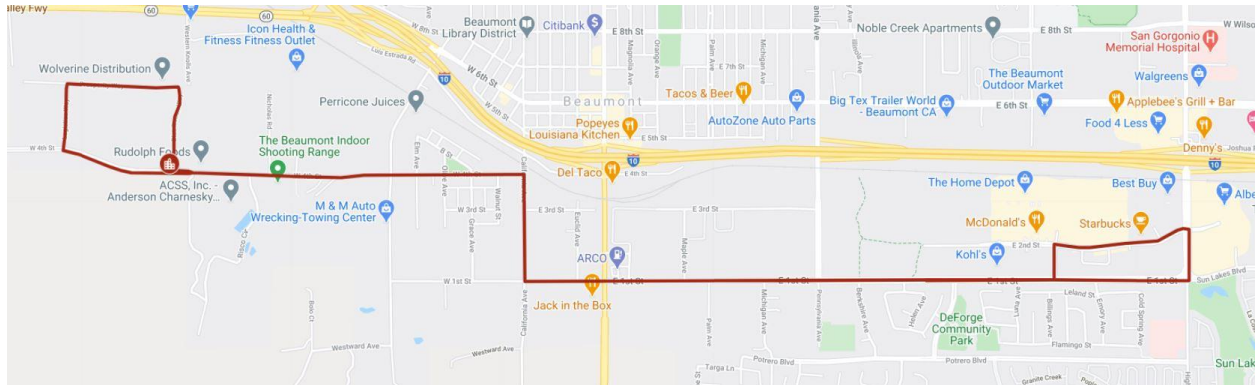


Once the Amazon facility is fully operational, we recommend the City conduct a survey of Amazon employees as well as employees of other companies within the business park. The survey should seek to determine where employees are commuting from, typical work hours, and whether they would be likely to use public transit or a vanpool to commute to work.

Should the City decide to implement a shuttle between the Beaumont Walmart and the business park would require a 25-minute running time, round-trip (as shown in Exhibit 13). As such, one morning and one afternoon trip would comprise just one vehicle service hour, while two round trips each morning and afternoon would comprise two vehicle service hours.



Exhibit 13 Potential Amazon shuttle route



Fiscal impact:

The overall cost to implement this recommendation depends on the number of trips per day and whether the service operations Monday through Friday only or seven days per week. Exhibit 14 identifies the cost of each option using a cost per hour of \$110.36. Monday through Friday service assumes 255 operating days annually, while Monday through Sunday service assumes 360 operating days annually.

Exhibit 14 Recommendation #8 – Fiscal Impact

	VSH per day	Cost per VSH	Cost per day	Annual cost
Recommendation #8 (Monday – Friday, one hour per day) (FY 2022)	1	\$110.36	\$110.36	\$28,141.80
Recommendation #8 (Monday – Friday, two hours per day) (FY 2022)	2	\$110.36	\$220.72	\$56,283.60
Recommendation #8 (Monday – Sunday, one hour per day) (FY 2022)	1	\$110.36	\$110.36	\$39,729.60
Recommendation #8 (Monday – Sunday, two hours per day) (FY 2022)	2	\$110.36	\$220.72	\$79,459.20

- Integration of the new transit operations and maintenance facility.** At present, the City’s transit administrative offices and operations and fleet maintenance facility are located at the Beaumont Civic Center (E. 6th Street and Magnolia Ave.). This location is served by Route 2, Route 3/4, Route 4 alternate, and both CommuterLink routes. The City is planning to construct a new administrative, operations, and fleet maintenance in an industrial area in southern Beaumont. The new location is located at 4th Street and Viele Ave., south of Interstate 10 and west of CA 79, in an area not currently served by transit. Given the transit administrative offices will be located there, this presents an opportunity to introduce transit service in this area.

There are a couple of options for providing transit access to the new location. The first is to realign Route 4 to serve the transit facility. We anticipate this would add approximately one mile and three minutes of travel time to the route. If the City transitions to a non-clockface schedule for



Route 4 (as recommended under Phase I), adding another three minutes to the route would lengthen the travel time and change the wait-time for connecting service at transfer points. In addition, the last trip would terminate at the transit facility (rather than continuing on to Walmart) to minimize deadhead time and stay within the original span of service. Exhibit 15 illustrates the proposed route map, while Exhibit 16 offers a potential service schedule.

A second option is to serve the new transit facility using an on-demand service departing from the Civic Center or Walmart. Persons wishing to travel to the transit facility could request a ride from a new microtransit service. If a similar solution is used to address travel to the Amazon facility, the service could be provided by the same vehicle and driver.

Fiscal impact:

None if Route 4 is rerouted to serve the transit facility within its existing running time. Costs for a new on-demand microtransit service would be similar to the costs for the Amazon shuttle in Recommendation #8.

Exhibit 15 Route 4 Extension to New Transit Facility – Map

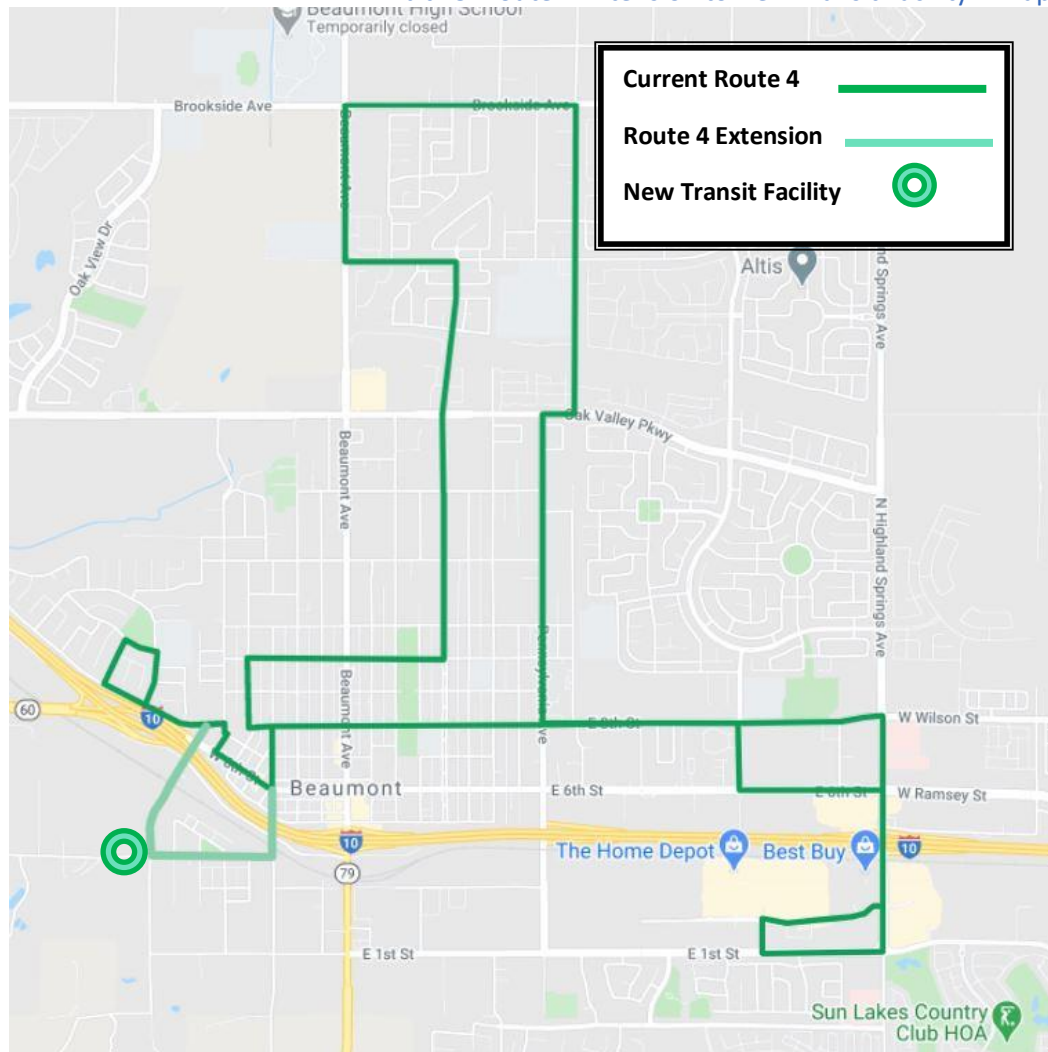




Exhibit 16 Route 4 Extension to New Transit Facility – Schedule

Depart Beaumont Walmart	---	7:35 AM	8:43 AM	9:51 AM	10:59 AM	12:07 PM	1:15 PM	2:23 PM	3:31 PM	4:39 PM	5:47 PM
Arrive San Gorgonio Hospital	6:35 AM	7:50 AM	8:58 AM	10:06 AM	11:14 AM	12:22 PM	1:30 PM	2:38 PM	3:46 PM	4:54 PM	6:02 PM
Depart San Gorgonio Hospital	6:35 AM	7:55 AM	9:03 AM	10:11 AM	11:19 AM	12:27 PM	1:35 PM	2:43 PM	3:51 PM	4:59 PM	6:07 PM
Beaumont Civic Center	6:48 AM	---	---	---	---	---	---	---	---	---	---
Three Rings Ranch Park	6:52 AM	8:06 AM	9:14 AM	10:22 AM	11:30 AM	12:38 PM	1:46 PM	2:54 PM	4:02 PM	5:10 PM	6:18 PM
New transit facility	---	8:10 AM	9:18 AM	10:26 AM	11:34 AM	12:42 PM	1:50 PM	2:58 PM	4:06 PM	5:14 PM	6:22 PM
Beaumont High School	7:09 AM	---	---	---	---	---	---	---	---	---	---
Cougar Way & Beaumont Ave.	7:13 AM	8:23 AM	9:31 AM	10:39 AM	11:47 AM	12:55 PM	2:03 PM	3:11 PM	4:19 PM	5:27 PM	---
Pennsylvania Ave & 8th St.	7:25 AM	8:33 AM	9:41 AM	10:49 AM	11:57 AM	1:05 PM	2:13 PM	3:21 PM	4:29 PM	5:37 PM	---
Arrive Beaumont Walmart	7:35 AM	8:43 AM	9:51 AM	10:59 AM	12:07 PM	1:15 PM	2:23 PM	3:31 PM	4:39 PM	5:47 PM	---





10. **Enhance connectivity with Banning Transit and RTA.** It can be difficult to coordinate connections between different transit providers when routes do not operate on the same headways or serve the transfer point at the same time each trip. While Beaumont Transit has historically operated on a clockface schedule, the recommendations included in Phase I to improve service reliability and on-time performance would take two of the three routes off a clockface schedule. RTA Route 31 does not serve the Walmart stop at consistent intervals. For example, it provides northbound service every 68 to 73 minutes, and southbound service every 65 to 78 minutes¹. Banning Transit Route 1 operates on a clockface schedule, but Routes 5 and 6 do not. Routes 5 and 6, however, include a 10-minute layover at the hospital, while Route 1 does not.

With all these moving parts, it is impossible to provide seamless connections both within Beaumont Transit and with other operators. Returning Beaumont Transit to a clockface schedule would improve connectivity by providing service to key connection points at a specific time each hour as well as facilitating timed-transfers between routes. However, the more consistent the Beaumont Transit schedule, the easier the trip planning and better the connectivity. As noted in Recommendation 4 under Phase I, the current routes do not have enough time in the schedule to operate on a clockface schedule. Therefore, future route adjustments should focus on returning to a clockface schedule, even if the routes themselves must be redesigned in order to keep the routes under a 50- to 60-minute running time. This option is discussed under Phase III.

The City already has existing interagency fare agreements with the City of Banning and RTA.

Fiscal impact:
 None.

11. **Bus Stop Improvement Plan.** Building on the bus stop placement policy identified in Recommendation 5, a Bus Stop Improvement Plan (BSIP) will provide recommendations for improving amenities and conditions at bus stops in Beaumont. The BSIP would include an inventory of all bus stops served by Beaumont Transit, including location, existing condition and amenities, and signage. It would then include a plan for purchasing and installing amenities such as shelters, benches, trash cans, lighting, etc. at bus stops based on activity level and addressed across a ten-year period.

Fiscal impact:

This recommendation includes an annual budget for bus stop improvements and the addition of bus stop amenities.

Exhibit 17 Recommendation #11 – Fiscal Impact

	FY 2022	FY 2023	FY 2024	FY 2025
Bus stop improvements	\$10,000	\$10,000	\$10,000	\$10,000
Bus stop amenities	\$20,000	\$20,000	\$20,000	\$20,000
Total	\$30,000	\$30,000	\$30,000	\$30,000

¹ RTA Route 31 was only operating a Sunday schedule at the time this report was prepared.



Phase III: Longer-Term Recommendations (January 1, 2023 – June 30, 2025)

Phase III includes longer-term recommendations which may require a significant amount of time to implement due to complexity or capital considerations. They build upon the recommendations included in Phases I and II, but are not dependent upon the implementation of prior recommendations. Planning for the final two recommendations can be started at any point during the first three years of this planning horizon.

12. **Expand local service to include emerging residential neighborhoods.** Ideally, this recommendation would be included under Phase II. However, we believe incorporating service to this area as part of a larger route redesign would be more effective than attempting to extend service on an existing route. Given additional time is needed to operate the existing routes on time, adding service to an existing route would reduce service frequency further. The revised local routes discussed in Recommendation 13 incorporate service to new residential neighborhoods in the northeastern portion of Beaumont. A new route serving the eastern portion of the city could travel north on Highland Springs Ave. before turning west on Cougar Way, then south on Cherry Ave. This route would directly connect residential areas with San Gorgonio Middle School, Civic Center, and San Gorgonio Hospital, and could offer timed transfers at the Civic Center.

Fiscal impact:

Included under Recommendation #13.

13. **Realign routes to provide timed-transfers at a more centralized transfer location.** Beaumont Transit currently uses the Walmart and San Gorgonio Hospital as transfer locations for both intra-system transfers and intra-agency transfers. However, given its location at the extreme southeastern portion of the service area, this requires all routes to navigate along the same route segment, and resulting in longer travel times for routes to reach the northern and western portions of Beaumont. While the Walmart location includes a bus pull-out, it does not feature access to restrooms for driver breaks. During the ridecheck, we observed drivers using the restroom at the hospital. Buses typically dwell to the south of the bus stop and do not block the northbound traffic lane. This provides sufficient space for the bus to move into the left turn lane before reaching the intersection. (Banning Transit buses turn right upon departing the hospital, and may block the right turn only lane.)

One option the City should consider is relocation of the primary intra-system transfer location to the Beaumont Civic Center. With existing stops located on both sides of E. 6th Street (at the Civic Center and Wells Fargo) and with nearly 300 feet of red curbing, this location would also offer access to restrooms. Given its more central location, routes could more efficiently serve different sectors of Beaumont while maintaining service to Walmart and the hospital (and connectivity with Banning). In addition, its proximity to the location of the new transit operations facility would minimize deadhead time and allow for easier vehicle and driver swaps. Both CommuterLink routes already serve this location as well as Walmart.



Another strategy that would optimize service delivery and facilitate timed-transfers would be to realign the local routes. This could be done by eliminating the Casino Morongo portion of Route 2. Employing no more than a 50-minute headway for each local route and a 10-minute layover/recovery period at the Civic Center would significantly enhance connectivity. A separate Casino Morongo route could be added to replace the service being removed from Route 2 as well as eliminate that portion of CommuterLink 120. This route could also run on a 60-minute frequency, allowing it to “pulse” at the transfer point at the same time as the local routes.

We recommend this routing realignment be conducted in concert with two “trigger” points: 1) the completion of the new transit operations and maintenance facility, and 2) the introduction of battery-electric buses. Postponing this significant transition until both trigger points have been reached will enable the City to incorporate the desired level of service to the new transit facility (some service will be necessary given administrative offices will be located there) as well as accommodate the charging needs of battery-electric vehicles.

Examples of potential new routes are included on the following pages. Three local routes (East, West, and South) would serve separate portions of Beaumont and offer timed-transfers at the Civic Center. A separate Casino Morongo route would take over the aforementioned portions of Route 2 and CommuterLink 120.

Exhibit 18 Potential Local Route Network

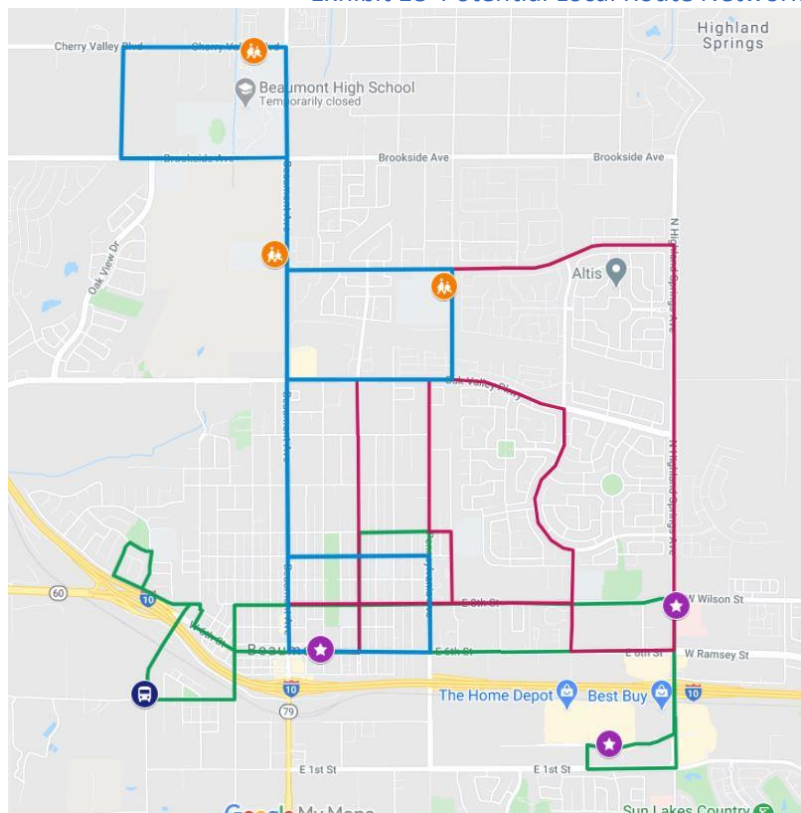


Exhibit 93 Potential South Route

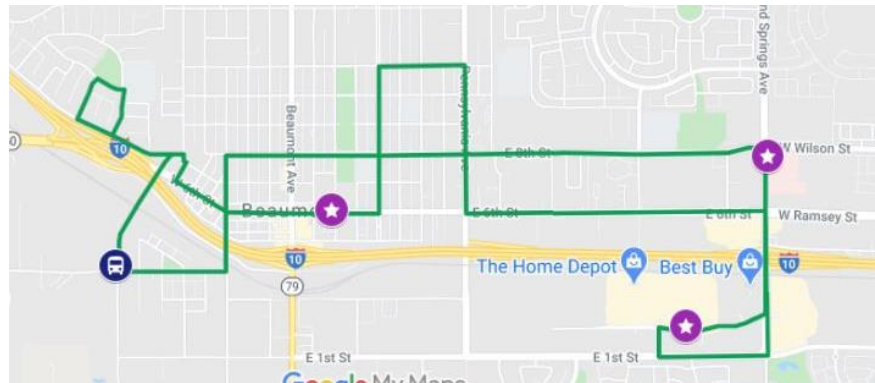


Exhibit 20 Potential East Route



Exhibit 21 Potential West Route

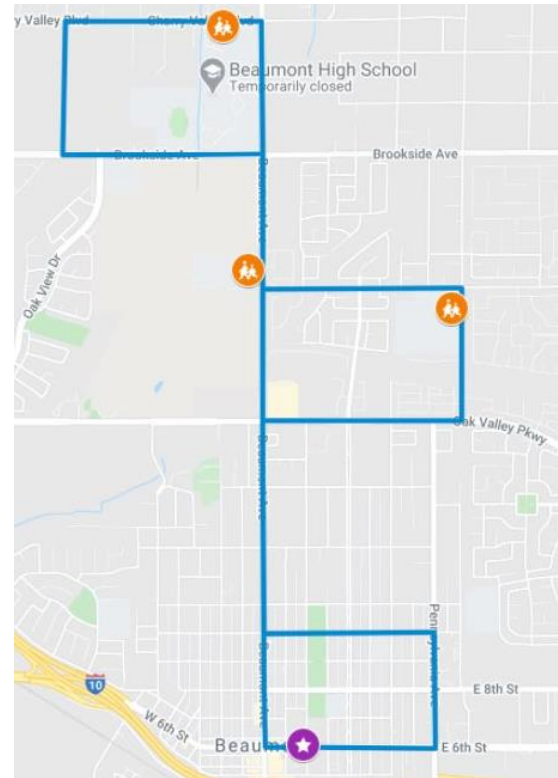
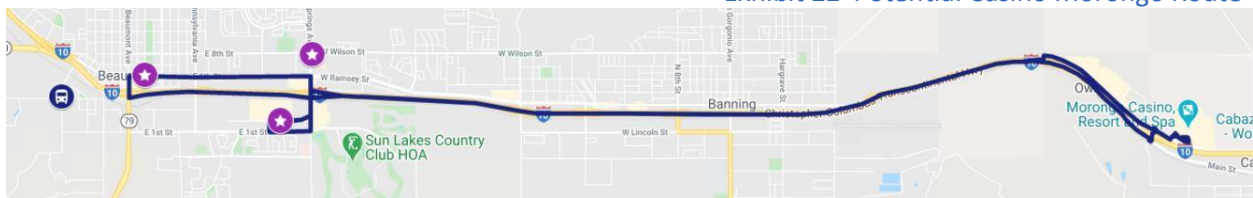


Exhibit 22 Potential Casino Morongo Route



Fiscal impact:

This recommendation would increase overall service hours by nearly nine percent, and would also incur additional capital costs for the establishment of new bus stops. The cost estimate assumes the new system would be implemented in FY 2023/24, with funding for bus stops needed the prior fiscal year.

Exhibit 23 Recommendation #13 – Fiscal Impact

	Annual cost
Recommendation #13 – Operating cost	\$3,300,581
Recommendation #13 – Capital costs (bus stop signage, poles, etc.)	\$26,000
Total	\$3,325,581

14. **Transition to an alternative fuel transit fleet and infrastructure.** The City’s current fixed-route fleet includes a combination of gasoline- and CNG-powered vehicles. All paratransit vehicles are gasoline-fueled. CNG vehicles must be fueled after-hours in Hemet, Moreno Valley, and/or Redlands, which contributes to additional mileage accrual. Gasoline vehicles are fueled at various commercial gas stations throughout the city, but primarily at a fleet fueling station located near Highland Springs Avenue. Replacement of the three gasoline-fueled paratransit vehicles (all of which are ten years old with more than 330,000 miles) with CNG-fueled vehicles was budgeted for FY 2019/20.

The City is currently planning the funding and construction of a CNG station and new administrative, fleet maintenance, and operations facility co-located at Viele Avenue and Fourth Street. This will concentrate all administrative, maintenance, fueling, and vehicle storage activities in one area. The CNG station is expected to be completed by December 2021, while the administrative, maintenance, and operations facility will be completed by June 2023. The current capital plan, as discussed in the City’s 2019 Short Range Transit Plan, involves beginning the transition to battery-electric buses as the gasoline-fueled vehicles are replaced. Given the age of the gas-fueled vehicles (between nine and 12 years old), should any need to be replaced within the next couple of years, they can be replaced by battery-electric vehicles, as the electric vehicle charging station (located in the Civic Center parking lot) is currently operational.

A formal fleet replacement plan would include the City’s definition of useful life for each asset type, project the likely replacement year for all rolling stock, and detail its plan for transition to battery-electric vehicles. Depending on the types of vehicles to be purchased, the City should also determine what kind of impact vehicle charging needs will have on its current route and scheduling structure.

Fiscal impact:

We anticipate fleet replacement incurring \$1,060,000 in capital costs between FY 2021/22 and FY 2024/25.



15. **Introduce technology so as to offer predictive arrival features.** Providing real-time information to riders can significantly increase customer satisfaction as well as improve reliability. It can also help decrease the number of call center inquiries regarding the status of individual routes. In order to offer customer-facing real-time information, GPS-based Automatic Vehicle Location (AVL) technology is required. AVL technology provides benefits to both the transit provider and the transit rider. The transit provider can monitor on-time performance using the geographic data together with the scheduled and actual time at each stop. AVL technology is available as part of a unified software platform supporting operations and maintenance, such as Avail Technologies and Ecolane. Other platforms, such as Swiftly, provide Software as a Service (SaaS) which offer vehicle tracking and trip planning.

AVL can be combined with predictive arrival technology to offer real-time service information. Predictive arrival technology is typically tied to a mobile app, which updates vehicle arrival times based on actual performance even if a trip gets off schedule. Platforms include Nextbus, myStop, OneBusAway, and TripShot.

While the City's existing Doublemap platform may offer an alternative to introducing additional technology, it must be both up to date and effectively promoted. The only link on the City's webpage is a text link in the sidebar titled "Where's the Bus?" There is no information about how to use the feature. If the City prefers to continue use of this feature, it should launch a marketing campaign to educate riders on how to use it.

Fiscal impact:

We estimated costs for real-time technology using a recent cost proposal for the City of Banning. Costs for the first year (which include several one-time costs for hardware and software set-up) are estimated at approximately \$27,000, while costs for subsequent years would be about 25 percent lower. Costs for updating and promoting Doublemap would be significantly lower.



Operations Plan

The Operations Plan reflects all recommendations identified in the preceding section. It includes three components: Financial Plan, Capital Plan, and Implementation Plan. The Financial Plan sets forth a series of assumptions used in the development of the Plan. The Capital Plan focuses on capital components, including those that are already planned/programmed as well as those arising from this Action Plan. Finally, a comprehensive Implementation Plan details the steps required for implementing each of the recommendations contained herein as well as a timeline for doing so.

Financial Plan

The Financial Plan uses the status quo (baseline) budget developed as part of Technical Memo #2 and applies the fiscal effects of the recommendations contained herein. The Financial Plan is based on the following assumptions:

- The Financial Plan utilizes the most current information available at the time it was prepared.
- LTF Emergency Contingency Funds will not continue past FY 2019/20.
- Interest and Other Income is expected to increase at a rate of one percent per annum.
- TDA Article 4 (LTF) funds are expected to increase at a rate of two percent per annum.
- Farebox revenues will be significantly lower in FY 2020/21 due to planned free-fare programs. Farebox revenues following the proposed fare increase are estimated based on Beaumont Transit's ability to return to full service and retain ridership as it recovers from the COVID-19 pandemic. Following the fare increase, fare revenues are expected to increase at a rate of three percent per annum.
- Future vehicle purchases are expected to be funded using State Transit Assistance funds.
- A per-hour operating cost of \$110.36 is used for estimating initial costs during FY 2020/21. This rate is increased by three percent per annum to adjust for cost increases.
- Recommendation #1 budgets up to 60 hours per month, for a period of six months, to be used to provide supplemental service to address issues related to capacity constraints due to social distancing measures.
- Recommendation #2 assumes Routes 7 and 9 will be eliminated and reduces their cost to operate from the budgeted operating expenses.
- Recommendation #3 budgets up to four hours per month to dispatch an additional vehicle to take over a route due to late running caused by unforeseen circumstances. This covers six months during FY 2020/21 and 12 months during subsequent years.
- Recommendation #4 increases fixed-route vehicle service hours by 170.76 VSH annually as part of the adjustments to improve on-time performance. It would be implemented during FY 2020/21. The budgeted amount for FY 2020/21 also includes costs to update service information.
- Recommendation #5 is not expected to have a financial impact.
- Recommendation #6 is not expected to have a financial impact.
- Recommendation #7 adjusts fare revenue as discussed in Technical Memo #2, taking into account fare elasticity as well as reductions in fare revenue due to COVID. The fare increase would be implemented during FY 2021/22.



- Recommendation #8 assumes employers would cover 50 percent of operating costs for Amazon-area shuttle operating two trips per day, seven days a week. This service would be implemented in FY 2021/22.
- Recommendation #9 is expected to be accomplished within the footprint of an existing route. As such, there is no separate financial impact. It would be implemented when administrative offices are relocated to the new transit operations facility.
- The financial impact of Recommendation #10 cannot be estimated or budgeted for at this time.
- Recommendation #11 includes capital costs for ongoing bus stop improvements.
- All costs related to Recommendation #12 are included within Recommendation #13.
- Recommendation #13 proposes a significant route redesign expected to increase the total vehicle service hours by nine percent annually. A capital component is also included for the installation of additional bus stops. This recommendation would be implemented beginning in FY 2023/24, though the capital component may take place during the latter part of FY 2022/23. The budgeted amount for FY 2023/24 also includes costs to update service information.
- Recommendation #14 offers a vehicle replacement plan during the five-year planning horizon. Future vehicle costs (not currently programmed) are based on average anticipated costs for individual vehicle types, adjusted for inflation at three percent per annum. Vehicles not slated for replacement during the five-year period are not budgeted.
- Recommendation #15 budgets for a modest real-time technology program similar to that purchased by the City of Banning (i.e., Swiftly). It would be implemented in FY 2023/24. If the City determines the existing Doublemap platform provides the level of technology it needs, this cost would be largely eliminated.





Exhibit 24 Financial Plan

Item	Budget					
	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25
Operating revenues						
Interest and other income	\$6,200	\$6,262	\$6,325	\$6,388	\$6,452	\$6,516
LCTOP	\$16,899	\$0	\$0	\$0	\$0	\$0
TDA Article 4 - Transit	\$2,735,230	\$2,789,935	\$2,845,733	\$2,902,648	\$2,960,701	\$3,019,915
LTF Emergency Contingency Funds	\$154,000	\$0	\$0	\$0	\$0	\$0
Farebox revenue (status quo)	\$127,000	\$90,950	\$0	\$0	\$0	\$0
Fare revenue (Recommendation #7)	\$0	\$0	\$239,680	\$246,870	\$254,277	\$261,905
Employer contribution (Recommendation #8)	\$0	\$0	\$19,865	\$20,262	\$20,668	\$21,081
Transfer in for FBRR	\$0	\$0	\$27,715	\$25,963	\$52,445	\$51,016
Total operating revenues	\$3,039,329	\$2,887,147	\$3,139,318	\$3,202,132	\$3,294,542	\$3,360,433
Capital revenues						
State Transit Assistance	\$2,840,000	\$5,200,000	\$5,000,000	\$401,000	\$415,000	\$412,000
Proposition 1B	\$0	\$0	\$0	\$0	\$0	\$0
State of Good Repair	\$0	\$59,290	\$0	\$0	\$0	\$0
LCTOP	\$129,943	\$0	\$0	\$0	\$0	\$0
MSRC	\$0	\$0	\$0	\$0	\$0	\$0
Reprogrammed	\$100,000	\$0	\$0	\$0	\$0	\$0
Total capital revenues	\$3,069,943	\$5,259,290	\$5,000,000	\$401,000	\$415,000	\$412,000
Total revenues	\$6,109,272	\$8,146,437	\$8,139,318	\$3,603,132	\$3,709,542	\$3,772,433





Exhibit 24 Financial Plan (continued)

Item	Budget					
	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25
Operating expenses (status quo)						
Salaries and wages	\$2,146,742	\$2,189,677	\$2,233,470	\$2,278,140	\$0	\$0
Supplies and services	\$188,653	\$192,426	\$196,275	\$200,200	\$0	\$0
Vehicle maintenance	\$154,419	\$157,507	\$160,657	\$163,870	\$0	\$0
Allocated vehicle maintenance	(\$53,615)	(\$54,688)	(\$55,781)	(\$56,897)	\$0	\$0
Fuel	\$312,180	\$318,424	\$324,792	\$331,288	\$0	\$0
Planning/studies	\$125,000	\$0	\$0	\$0	\$0	\$0
Administrative overhead	\$102,000	\$104,040	\$106,121	\$108,243	\$0	\$0
Total operating expenses (status quo)	\$2,975,379	\$2,907,386	\$2,965,534	\$3,024,845	\$0	\$0
Cost of operating recommendations						
Recommendation #1 (Phase I)	\$0	\$39,800	\$0	\$0	\$0	\$0
Recommendation #2 (Phase I)	\$0	(\$94,556)	(\$96,447)	(\$98,376)	\$0	\$0
Recommendation #3 (Phase I)	\$0	\$3,973	\$8,184	\$8,430	\$0	\$0
Recommendation #4 (additional cost) (Phase I)	\$0	\$11,922	\$18,845	\$19,410	\$0	\$0
Recommendation #8 (Phase II)	\$0	\$0	\$39,730	\$40,525	\$41,335	\$42,162
Recommendation #13 (Phase III)	\$0	\$0	\$0	\$0	\$3,300,581	\$3,363,023
Total cost of recommendations	\$0	(\$38,861)	(\$29,688)	(\$30,011)	\$3,341,916	\$3,405,184
Total operating expenses	\$2,975,379	\$2,868,525	\$2,935,846	\$2,994,833	\$3,341,916	\$3,405,184



Exhibit 24 Financial Plan (continued)

Item	Budget					
	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25
Capital expenses (status quo)						
CNG station	\$1,500,000	\$200,000	\$0	\$0	\$0	\$0
Transit security	\$0	\$0	\$0	\$0	\$0	\$0
Type H EZ Rider II vehicle replacement	\$0	\$0	\$0	\$0	\$0	\$0
Maintenance facility modernization	\$0	\$0	\$0	\$0	\$0	\$0
Administrative, operations, and maintenance facility	\$500,000	\$5,000,000	\$0	\$0	\$0	\$0
Brand and logo update	\$100,000	\$0	\$0	\$0	\$0	\$0
Passenger amenities	\$129,943	\$0	\$0	\$0	\$0	\$0
Shop tools	\$40,000	\$0	\$0	\$0	\$0	\$0
Ford F350 Entourage Type E cutaway replacement (CNG)	\$233,333	\$0	\$0	\$0	\$0	\$0
Ford F350 Entourage Type E cutaway replacement (CNG)	\$233,333	\$0	\$0	\$0	\$0	\$0
Ford F350 Entourage Type E cutaway replacement (CNG)	\$233,333	\$0	\$0	\$0	\$0	\$0
Electric vehicle charging station	\$100,000	\$0	\$0	\$0	\$0	\$0
Electric vehicles, buses, and infrastructure	\$0	\$0	\$5,000,000	\$0	\$0	\$0
Total capital expenses (status quo)	\$3,069,942	\$5,200,000	\$5,000,000	\$0	\$0	\$0
Cost of capital recommendations						
Recommendation #11 (Phase II)	\$0	\$0	\$30,000	\$30,000	\$30,000	\$30,000
Recommendation #13 (Phase III)	\$0	\$0	\$0	\$26,000	\$0	\$0
Recommendation #14 (Phase III)	\$0	\$0	\$0	\$345,000	\$355,000	\$360,000
Recommendation #15 (Phase III)	\$0	\$0	\$0	\$0	\$30,000	\$22,000
Total cost of recommendations	\$0	\$0	\$30,000	\$401,000	\$415,000	\$412,000
Total capital expenses	\$3,069,942	\$5,200,000	\$5,030,000	\$401,000	\$415,000	\$412,000
Total expenses	\$6,045,321	\$8,068,525	\$7,965,846	\$3,395,833	\$3,756,916	\$3,817,184
Annual surplus (deficit)	\$63,951	\$77,911	\$173,472	\$207,298	(\$47,074)	(\$44,752)





Capital Plan

The capital plan includes items included within the City’s most recent SRTP as well as capital recommendations arising from this COA. Items identified under FY 2019/20 are as indicated within the SRTP document.

Exhibit 25 Capital Plan

	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25
24' Cutaway (CNG) (5)	\$700,000	\$0	\$0	\$0	\$0	\$0
32' Cutaway (Electric) (4)	\$0	\$0	\$0	\$345,000	\$355,000	\$0
33' Cutaway (Electric) (2)	\$0	\$0	\$0	\$0	\$0	\$360,000
CNG station	\$1,500,000	\$200,000	\$0	\$0	\$0	\$0
Transit operations facility	\$500,000	\$5,000,000	\$0	\$0	\$0	\$0
Brand and logo update	\$100,000	\$0	\$0	\$0	\$0	\$0
Passenger amenities	\$129,943	\$0	\$0	\$0	\$0	\$0
Shop tools	\$40,000	\$0	\$0	\$0	\$0	\$0
Electric vehicle charging station	\$100,000	\$0	\$0	\$0	\$0	\$0
Electric vehicles, buses, and infrastructure	\$0	\$0	\$5,000,000	\$0	\$0	\$0
Bus stop improvements (annual)	\$0	\$0	\$10,000	\$10,000	\$10,000	\$10,000
Bus stop amenities (annual)	\$0	\$0	\$20,000	\$20,000	\$20,000	\$20,000
Bus stop signs and poles	\$0	\$0	\$0	\$22,000	\$0	\$0
Bus stop info-post units	\$0	\$0	\$0	\$4,000	\$0	\$0
Technology (real-time arrival software)	\$0	\$0	\$0	\$0	\$30,000	\$22,000
Total	\$3,069,942	\$5,200,000	\$5,030,000	\$401,000	\$415,000	\$412,000

Implementation Plan

The following matrix (Exhibit 26) details the steps required in order to implement each of the recommendations cited above. Each recommendation includes one or more action items, a timeline, and any pre-requisites or “triggers.”





Exhibit 26 Implementation Plan

Recommendation	Priority	Action Item	Timeframe	Pre-requisites/"Triggers"
#1 - Support Fall 2020 return to full service.	Phase I	Prepare a policy consisting of steps that can be taken to accommodate demand that cannot be addressed with reduced-capacity buses. This may include deploying a new bus to take over a route or to pick up a single rider that cannot be accommodated onboard. The City must also determine if this is a feasible action for the CommuterLink routes.	Policy should be prepared and decision-makers identified within two weeks of a return to normal operations.	Return to normal operations.
#2 - Work with school district regarding future resumption of Routes 7 and 9.	Phase I	Coordinate with the school district regarding anticipated timelines for a return to in-person classes. Continue to coordinate as social distancing guidance is lifted. The City should also consider whether it wishes to continue to operate school routes in the future.	Discussions with the school district should take place regularly until all students have returned to campus, and as new guidance regarding social distancing is issued.	Return to normal operations, return to in-person schooling, lifting of capacity constraints due to social distancing.
#3 - Improve on-time performance by updating mid-trip fueling, driver break, and other policies.	Phase I	Prepare a policy requiring fueling to be completed prior to going into service or during a layover period where riders are not impacted, if mid-trip fueling is required.	As soon as possible.	None.
#3 - Improve on-time performance by updating mid-trip fueling, driver break, and other policies.	Phase I	Prepare a policy which enables a second vehicle to be deployed when a route falls significantly behind schedule so as to prevent "cascading" late trips through the balance of the day.	As soon as possible.	None.



Comprehensive Operational Analysis

City of Beaumont

Technical Memo #3 – Five-Year Action Plan



Recommendation	Priority	Action Item	Timeframe	Pre-requisites/"Triggers"
#3 - Improve on-time performance by updating mid-trip fueling, driver break, and other policies.	Phase I	Determine whether stops at the end of a route should be designated as "drop-off only" during the last trip of the day, and revise service information to reflect this.	As soon as possible.	None.
#4 - Improve on-time performance by adjusting schedules.	Phase I	Verify proposed schedules to ensure their accuracy and make minor adjustments where appropriate. Determine there is sufficient space for layovers/recovery time to occur at San Gorgonio Hospital.	As soon as possible.	Return to normal operations.
#4 - Improve on-time performance by adjusting schedules.	Phase I	Update printed service information and website to reflect new schedule.	As soon as possible.	Verify route timing.
#5 - Update the City's Bus Stop Placement Policy.	Phase I	Update the City's Bus Stop Placement Policy.	Second half of FY 2020/21.	None.
#6 - Eliminate service to Calimesa.	Phase II	Notify RCTC and the City of Calimesa at least six weeks prior to the elimination of the Calimesa stops.	Implement the change on or about July 1, 2021. Notify RCTC and Calimesa no later than May 24, 2021.	None.
#7 - Fare adjustment.	Phase II	Finalize the fare schedule for a 20% fare increase.	At least 12 weeks prior to the implementation date (by April 5, 2021).	None.
#7 - Fare adjustment.	Phase II	Notify the public regarding the fare change and hold a public hearing as appropriate.	Conduct any necessary public hearings or notifications no later than May 10, 2021 (eight weeks before implementation).	Finalize fare schedule.
#7 - Fare adjustment.	Phase II	Update service information and website to reflect new fares	As soon as fares are finalized. Available to the public no less than two weeks prior to the fare change.	Finalize fare schedule.





Recommendation	Priority	Action Item	Timeframe	Pre-requisites/"Triggers"
#7 - Fare adjustment.	Phase II	Implement new fares.	For ease of recordkeeping, we recommend implementing the fare change as close to the beginning of the fiscal year as possible, on or about July 1, 2021.	Finalize fare schedule, hold public hearing, update service information.
#8 - Enhance commute options for persons employed in the Crossroads Logistics Center/Rolling Hills Business Park.	Phase II	Work with Amazon and other employers in the business park to survey employees regarding their propensity to use a scheduled or on-demand shuttle.	Sixteen weeks prior to the proposed shuttle launch, no later than March 1, 2021.	None.
#8 - Enhance commute options for persons employed in the Crossroads Logistics Center/Rolling Hills Business Park.	Phase II	If demand exists, negotiate with employers to subsidize a portion of the operating costs of the shuttle.	Eight weeks prior to the proposed shuttle launch, no later than May 1, 2021.	Meet with employers and conduct employee survey.
#8 - Enhance commute options for persons employed in the Crossroads Logistics Center/Rolling Hills Business Park.	Phase II	Finalize the shuttle route, stops, schedule, and fare.	Four weeks prior to the shuttle launch, no later than June 1, 2021.	Negotiate employer subsidy.
#8 - Enhance commute options for persons employed in the Crossroads Logistics Center/Rolling Hills Business Park.	Phase II	Market the shuttle to employees at the business park.	Two weeks prior to the shuttle launch, no later than June 14, 2021.	Finalize service details.
#8 - Enhance commute options for persons employed in the Crossroads Logistics Center/Rolling Hills Business Park.	Phase II	Launch the shuttle service.	Launch the shuttle service on or about July 1, 2021.	Market shuttle to employees.





Recommendation	Priority	Action Item	Timeframe	Pre-requisites/"Triggers"
#8 - Enhance commute options for persons employed in the Crossroads Logistics Center/Rolling Hills Business Park.	Phase II	Evaluate ridership and other performance metrics regularly.	Evaluate the program after two, four, and six weeks of operation, then at least monthly thereafter.	Launch employer shuttle.
#9 - Integration of the new transit operations and maintenance center into the route.	Phase II	Once a date for the relocation of the administrative offices to the new facility has been finalized, identify a date to introduce the proposed extension to Route 4.	Dependent upon construction timeline of the new facility.	Complete new transit facility.
#9 - Integration of the new transit operations and maintenance center into the route.	Phase II	Finalize timing and routing for Route 4 extension.	Four weeks prior to the route change.	Identify implementation date.
#9 - Integration of the new transit operations and maintenance center into the route.	Phase II	Notify the public regarding the route change at least two weeks prior to its implementation.	Two weeks prior to the route change.	Finalize timing and routing.
#9 - Integration of the new transit operations and maintenance center into the route.	Phase II	Update service information and website to reflect the route revision.	Two weeks prior to the route change.	Notify the public.
#10 - Enhance connectivity with Banning Transit and RTA.	Phase II	Meet with RTA and Banning Transit to identify ways to offer better connectivity between transit services.	During FY 2021/22.	None.
#10 - Enhance connectivity with Banning Transit and RTA.	Phase II	Identify a date to implement coordination measures.	During the second half of FY 2021/22 or the first half of FY 2022/23.	Meet with Banning and RTA.
#10 - Enhance connectivity with Banning Transit and RTA.	Phase II	If appropriate, prepare inter-agency agreements for approval by the various governing bodies.	At least 12 weeks prior to implementation.	Identify implementation date.



Recommendation	Priority	Action Item	Timeframe	Pre-requisites/"Triggers"
#10 - Enhance connectivity with Banning Transit and RTA.	Phase II	Update service information and website to reflect new policies and practices.	Two weeks prior to implementation.	Prepare interagency agreements.
#11 - Bus Stop Improvement Plan.	Phase II	Create or update an inventory of existing bus stops, including documenting condition and amenities at each stop.	FY 2021/22.	None.
#11 - Bus Stop Improvement Plan.	Phase II	Prioritize bus stop improvements based on condition (repair and remediation) and stop activity.	Beginning first quarter of FY 2022/23 and continuing annually.	Bus stop inventory.
#12 - Expand local service to include emerging residential neighborhoods.	Phase III	Included within Recommendation #13.	None.	None.
#13 - Realign routes to provide timed-transfers at a more centralized transfer location.	Phase III	Determine if the Civic Center is an appropriate central transfer location, or identify another appropriate location.	First quarter of FY 2022/23.	None.
#13 - Realign routes to provide timed-transfers at a more centralized transfer location.	Phase III	Refine routes and schedules and make adjustments where necessary.	At least 16 weeks prior to launch.	Determine transfer location.
#13 - Realign routes to provide timed-transfers at a more centralized transfer location.	Phase III	Conduct a public hearing to get feedback on the new routes.	No less than 12 weeks prior to launch.	Refine routes and schedules.
#13 - Realign routes to provide timed-transfers at a more centralized transfer location.	Phase III	Finalize routes and schedules.	Six weeks prior to launch.	Conduct public hearing.
#13 - Realign routes to provide timed-transfers at a more centralized transfer location.	Phase III	Prepare new driver bids.	Four weeks prior to launch, or according to internal policies.	Finalize routes and schedules.





Recommendation	Priority	Action Item	Timeframe	Pre-requisites/"Triggers"
#13 - Realign routes to provide timed-transfers at a more centralized transfer location.	Phase III	Promote service changes to riders and the community at-large.	Beginning four weeks prior to launch and continuing post-launch.	Prepare new driver bids.
#13 - Realign routes to provide timed-transfers at a more centralized transfer location.	Phase III	Install bus stop signs, poles, and other information where new stops exist.	Two weeks prior to launch. Keep signs at new bus stops covered until service launch.	Promote service changes.
#13 - Realign routes to provide timed-transfers at a more centralized transfer location.	Phase III	Update printed service information and website to reflect new schedule.	Two weeks prior to launch.	Install bus stop signage, etc.
#13 - Realign routes to provide timed-transfers at a more centralized transfer location.	Phase III	Launch revised service.	For ease of recordkeeping, we recommend implementing the service change as close to the beginning of the fiscal year as possible, on or about July 1, 2023.	Update service information.
#13 - Realign routes to provide timed-transfers at a more centralized transfer location.	Phase III	Remove bus stop amenities at stops no longer being served.	Within two weeks following launch, though signs at inactive stops should be covered just prior to the service change.	Launch revised service.
#14 - Transition to an alternative fuel transit fleet and infrastructure.	Phase III	Prepare a comprehensive fleet replacement plan that takes into account the completion of electric vehicle charging infrastructure.	FY 2022/23.	Preliminary completion schedule for electric vehicle infrastructure.
#15 - Introduce technology so as to offer "predictive arrival" features.	Phase III	Determine if the City needs predictive arrival or other real-time technology beyond Doublemap.	FY 2021/22.	None.





Recommendation	Priority	Action Item	Timeframe	Pre-requisites/"Triggers"
#15 - Introduce technology so as to offer "predictive arrival" features.	Phase III	If no new technology is desired, promote features available through Doublemap.	FY 2021/22.	Determination of whether new technology is desired or needed.
#15 - Introduce technology so as to offer "predictive arrival" features.	Phase III	If new technology is desired, identify potential technology platforms and get quotes from vendors.	FY 2022/23.	Determination of whether new technology is desired or needed.
#15 - Introduce technology so as to offer "predictive arrival" features.	Phase III	Identify a date to launch the real-time function.	Dependent upon funding and other priorities.	Obtain vendor quotes.
#15 - Introduce technology so as to offer "predictive arrival" features.	Phase III	Promote the real-time function.	Four weeks prior to launch and continuing post-launch.	Establish date for implementation.

