

## 10 FLEET AND FACILITIES

From buses to stops to maintenance facilities, capital assets are a critical component of making sure buses run as scheduled. This chapter documents the existing assets so that gaps or needs can be identified as the Short-Range Transit Plan is developed. For the Comprehensive Operations Analysis, this chapter will serve as a baseline account of the inventory.

### FLEET

The merger of MAX and StaRT brought 119 vehicles that had been owned either by the City of Modesto or Stanislaus County under the ownership of Ride the S. The fleet inventory as of December 2021 is shown in Figure 106 and Figure 107. They are divided into tables by former owner for readability.

In FY 2022, Ride the S documented a replacement plan that included 30 new vehicles. Of the eight new vehicles slated for paratransit service, five have been received and are in revenue service. The remaining three are expected to be in service by February 2022. On the fixed route side, twelve diesel Gilligs are expected to be replaced in September or October 2022. The remaining vehicles are either planned to be ordered in FY 2023 or have not been ordered yet.

More details on the replacement schedule will be documented over the course of this planning process and will be developed in the Short-Range Transit Plan.

**Figure 106 Fleet List for Vehicles Previously Owned by Stanislaus County**

Vehicle Number	Vehicle Year	Vehicle Make	Vehicle Description	Fuel Type	Original Date in Service	Actual Mileage as of July 1, 2021
321	2013	Champion	Defender	Diesel	01/10/13	120,270
475	2008	Daimler Bus NA	Orion VII - CNG	CNG	02/05/09	473,264
485	2008	Daimler Bus NA	Orion VII - CNG	CNG	02/05/09	24,083
601	2013	New Flyer - CNG	XN40	CNG	09/27/13	342,020
602	2013	New Flyer - CNG	XN40	CNG	09/27/13	366,190
603	2013	New Flyer - CNG	XN40	CNG	09/27/13	356,032
604	2013	New Flyer - CNG	XN40	CNG	09/27/13	375,436

Vehicle Number	Vehicle Year	Vehicle Make	Vehicle Description	Fuel Type	Original Date in Service	Actual Mileage as of July 1, 2021
605	2013	New Flyer - CNG	XN40	CNG	09/27/13	360,023
606	2014	New Flyer - CNG	XN35	CNG	03/28/14	325,636
607	2014	El Dorado National	EZ-Rider II	CNG	12/20/2013	107,560
608	2015	New Flyer - CNG	XN40	CNG	07/31/15	259,000
609	2015	New Flyer - CNG	XN40	CNG	07/31/15	270,025
610	2015	New Flyer - CNG	XN40	CNG	07/31/15	277,466
611	2016	New Flyer - CNG	XN40	CNG	01/28/16	251,352
612	2016	New Flyer - CNG	XN40	CNG	01/28/16	252,991
613	2016	New Flyer - CNG	XN40	CNG	01/28/16	228,884
614	2020	New Flyer - CNG	XN40	CNG	01/03/20	46,920
615	2020	New Flyer - CNG	XN40	CNG	01/03/20	59,623
616	2020	New Flyer - CNG	XN40	CNG	01/03/20	56,022
617	2020	New Flyer - CNG	XN40	CNG	01/14/20	51,116
618	2020	New Flyer - CNG	XN40	CNG	01/20/20	44,375
01-15	2015	Ford	El Dorado	CNG	01/22/16	64,477
01-16	2016	Ford	Starcraft	CNG	01/12/16	54,670
02-16	2016	Ford	Starcraft	CNG	02/10/16	43,542
03-16	2016	Ford	Starcraft	CNG	02/10/16	57,074
04-16	2016	Ford	Starcraft	CNG	02/10/16	40,569
05-16	2016	Ford	Starcraft	CNG	01/22/16	41,758
06-16	2016	Ford	Starcraft	CNG	03/22/16	71086.2
07-16	2016	Ford	Starcraft	CNG	03/22/16	80,454
08-16	2016	Ford	Starcraft	CNG	03/22/16	82,433
09-16	2016	Ford	Starcraft	CNG	03/22/16	71,049
10-17	2016	Ford	5-550	Diesel	06/30/17	174,785

Vehicle Number	Vehicle Year	Vehicle Make	Vehicle Description	Fuel Type	Original Date in Service	Actual Mileage as of July 1, 2021
90-16	2016	D-4500	MCI	Diesel	05/31/16	348,545

Source: Ride the S

**Figure 107 Fleet List for Vehicles Previously Owned by the City of Modesto**

Vehicle Number	Vehicle Year	Vehicle Make	Vehicle Description	Fuel Type	Original Date in Service	Actual Mileage as of July 1, 2021
20321	2003	GILLIG	LOW FLOOR 102" 35'	Diesel	9/12/2003	630,651
20322	2003	GILLIG	LOW FLOOR 102" 35'	Diesel	9/12/2003	669,438
20323	2003	GILLIG	LOW FLOOR 102" 35'	Diesel	9/16/2003	742,608
20324	2003	GILLIG	LOW FLOOR 102" 35'	Diesel	9/16/2003	630,761
20325	2003	GILLIG	LOW FLOOR 102" 35'	Diesel	9/18/2003	670,565
20326	2003	GILLIG	LOW FLOOR 102" 35'	Diesel	9/18/2003	649,688
20327	2003	GILLIG	LOW FLOOR 102" 35'	Diesel	9/18/2003	656,739
20328	2003	GILLIG	LOW FLOOR 102" 35'	Diesel	9/19/2003	4,169
20329	2003	GILLIG	LOW FLOOR 102" 40'	Diesel	9/19/2003	595,038
20330	2003	GILLIG	LOW FLOOR 102" 40'	Diesel	9/19/2003	700,038
20331	2003	GILLIG	LOW FLOOR 102" 40'	Diesel	9/24/2003	679,215
20332	2003	GILLIG	LOW FLOOR 102" 40'	Diesel	9/24/2003	607,388
20333	2003	GILLIG	LOW FLOOR 102" 40'	Diesel	9/24/2003	591,824
20334	2003	GILLIG	LOW FLOOR 102" 40'	Diesel	9/25/2003	566,318
20715	2007	MCI	COMMUTER 40'	Diesel	7/17/2006	816,568
20836	2008	GILLIG	STANDARD FLOOR 102" 40'	Diesel	4/14/2008	407,067
20838	2008	GILLIG	STANDARD FLOOR 102" 40'	Diesel	4/14/2008	402,216
20839	2008	GILLIG	STANDARD FLOOR 102" 40'	Diesel	4/14/2008	416,077
20940	2009	GILLIG	LOW FLOOR 102" 40'	Diesel	2/17/2010	418,594
20941	2009	GILLIG	LOW FLOOR 102" 40'	Diesel	3/22/2010	439,228

Vehicle Number	Vehicle Year	Vehicle Make	Vehicle Description	Fuel Type	Original Date in Service	Actual Mileage as of July 1, 2021
20942	2009	GILLIG	LOW FLOOR 102" 40'	Diesel	2/17/2010	430,452
20943	2009	GILLIG	LOW FLOOR 102" 40'	Diesel	2/17/2010	435,139
20944	2009	GILLIG	LOW FLOOR 102" 40'	Diesel	2/22/2010	455,880
20945	2009	GILLIG	LOW FLOOR 102" 40'	Diesel	2/25/2010	429,628
20946	2009	GILLIG	LOW FLOOR 102" 40'	Diesel	2/17/2010	434,889
20998	2009	CHEVROLET	C5500	CNG	1/1/2009	190,427
21102	2011	FORD	E450	Gasoline	1/1/2011	118,794
21217	2012	MCI	COMMUTER 45'	Diesel	3/6/2012	533,563
21401	2014	FORD	F550	CNG	1/1/2014	84,739
21499	2014	FORD	F550	CNG	1/1/2014	100,375
21448	2014	GILLIG	LOW FLOOR 102" 40'	Diesel	2/11/2015	248,443
21449	2014	GILLIG	LOW FLOOR 102" 40'	Diesel	2/13/2015	241,819
21450	2014	GILLIG	LOW FLOOR 102" 40'	Diesel	2/18/2015	275,117
21451	2014	GILLIG	LOW FLOOR 102" 40'	Diesel	2/18/2015	266,843
21452	2014	GILLIG	LOW FLOOR 102" 40'	Diesel	2/18/2015	266,624
21453	2014	GILLIG	LOW FLOOR 102" 40'	Diesel	2/20/2015	253,569
21454	2014	GILLIG	LOW FLOOR 102" 40'	Diesel	2/20/2015	265,380
21555	2015	GILLIG	LOW FLOOR 102" 40'	Diesel	6/29/2015	229,174
21556	2015	GILLIG	LOW FLOOR 102" 40'	Diesel	6/29/2015	262,866
21557	2015	GILLIG	LOW FLOOR 102" 40'	Diesel	6/29/2015	240,805
21558	2015	GILLIG	LOW FLOOR 102" 40'	Diesel	6/29/2015	247,450
21559	2015	GILLIG	LOW FLOOR 102" 40'	Diesel	6/29/2015	243,237
21560	2015	GILLIG	LOW FLOOR 102" 40'	Diesel	6/29/2015	240,609
21561	2015	GILLIG	LOW FLOOR 102" 40'	Diesel	7/1/2015	256,889
21562	2015	GILLIG	LOW FLOOR 102" 40'	Diesel	7/1/2015	249,923

Vehicle Number	Vehicle Year	Vehicle Make	Vehicle Description	Fuel Type	Original Date in Service	Actual Mileage as of July 1, 2021
21563	2015	GILLIG	LOW FLOOR 102" 40'	Diesel	6/29/2015	244,244
21564	2015	GILLIG	LOW FLOOR 102" 40'	Diesel	7/9/2015	254,921
21565	2015	GILLIG	LOW FLOOR 102" 40'	Diesel	7/9/2015	244,821
21566	2015	GILLIG	LOW FLOOR 102" 35'	Diesel	7/9/2015	249,447
21567	2015	GILLIG	LOW FLOOR 102" 35'	Diesel	7/9/2015	262,869
21568	2015	GILLIG	LOW FLOOR 102" 35'	Diesel	7/9/2015	241,406
21603	2016	DODGE	CARAVAN	Gasoline	1/1/2016	27,981
21769	2017	MCI	COMMUTER 45'	Diesel	7/20/2016	351,640
21770	2017	GILLIG	LOW FLOOR 102" 40'	Diesel	4/26/2017	176,042
21771	2017	GILLIG	LOW FLOOR 102" 40'	Diesel	4/26/2017	172,725
21772	2017	GILLIG	LOW FLOOR 102" 40'	Diesel	4/26/2017	185,447
21773	2017	GILLIG	LOW FLOOR 102" 40'	Diesel	4/26/2017	171,928
21874	2018	PROTERRA	CATALYST E2 102" 40' - ELECTRIC	Electric	1/21/2019	40,018
21875	2018	PROTERRA	CATALYST E2 102" 40' - ELECTRIC	Electric	1/21/2019	49,874
21876	2018	PROTERRA	CATALYST E2 102" 40' - ELECTRIC	Electric	1/21/2019	45,712
21877	2018	PROTERRA	CATALYST E2 102" 40' - ELECTRIC	Electric	1/21/2019	23,989
21878	2018	PROTERRA	CATALYST E2 102" 40' - ELECTRIC	Electric	1/21/2019	48,933
21904	2019	ARBOC	SPIRIT OF MOBILITY	Gasoline	1/1/2019	24,228
21981	2019	FORD	Starcraft	Gasoline	1/1/2022	158
21982	2019	FORD	Starcraft	Gasoline	1/1/2022	162
21983	2019	FORD	Starcraft	Gasoline	1/1/2022	197
21984	2019	FORD	Starcraft	Gasoline	1/1/2022	152
21985	2019	FORD	Starcraft	Gasoline	1/1/2022	138

Vehicle Number	Vehicle Year	Vehicle Make	Vehicle Description	Fuel Type	Original Date in Service	Actual Mileage as of July 1, 2021
21986	2019	FORD	Starcraft	Gasoline	1/1/2022	138
21987	2019	FORD	Starcraft	Gasoline	1/1/2022	149
21988	2019	FORD	Starcraft	Gasoline	1/1/2022	189
21989	2019	FORD	Starcraft	Gasoline	1/1/2022	152
21990	2019	FORD	Starcraft	Gasoline	1/1/2022	329
21991	2019	FORD	Starcraft	Gasoline	1/1/2022	134
21992	2019	FORD	Starcraft	Gasoline	1/1/2022	132
21993	2019	FORD	Starcraft	Gasoline	1/1/2022	181
21994	2019	FORD	Starcraft	Gasoline	1/1/2022	183
21995	2019	FORD	Starcraft	Gasoline	1/1/2022	175
21996	2019	FORD	Starcraft	Gasoline	1/1/2022	201
21997	2019	FORD	Starcraft	Gasoline	1/1/2022	182
22105	2021	GILLIG	LOW FLOOR 102" 40'	Diesel	4/1/2021	5,044
22106	2021	GILLIG	LOW FLOOR 102" 40'	Diesel	4/1/2021	5,808
22107	2021	GILLIG	LOW FLOOR 102" 40'	Diesel	4/1/2021	4,804
22179	2020	MCI	COMMUTER 45'	Diesel	3/1/2021	15,286
22180	2020	MCI	COMMUTER 45'	Diesel	3/1/2021	24,242
29914	1999	MCI	COMMUTER 40'	Diesel	6/17/1999	44,000

Source: Ride the S

# Vehicle Characteristics

## Models and Fuel Types

The average age of the fleet was just over seven years before the new paratransit vehicles were put into revenue service. Merging systems brought together many different types of vehicles of varying sizes, styles, and fuel type. As of January 2022, Ride the S had the following vehicles, broken down by fuel type:

- Compressed Natural Gas (CNG): 33
- Diesel: 64
- Electric: 5
- Gasoline: 25

## Seating

The fleet inventory does not list the original equipment manufacturer seated and standing capacities for each vehicle. The contractor that took over operations on January 1, 2022 is using HASTUS scheduling software, so this information should be available during the course of this planning process.

Understanding the seating capacity can help to ensure efficient bus scheduling to match rider demand with vehicle size, as well as to aid in vehicle purchase needs. At this time though, Ride the S has noted there are no capacity issues.

## Technology

The technology used onboard the vehicles varies depending on who the previous operator was. Efforts are underway to update vehicles with common technology with a new contract that commenced on January 1, 2022. Figure 108 lists the current technology being used.

**Figure 108 Technology Used in Ride the S Vehicles**

Technology	Systems Used
Automatic Vehicle Locator (AVL)	Avail, formerly also Connexionz, but those are being phased out of former StaRT vehicles
Automatic Passenger Counter (APC)	Ecolane
Fareboxes	Odyssey
Automatic Vehicle Announcements	Avail
Electronic signage onboard	Sunrise
Mobile Data Terminals (MDT)	Mslate
Surveillance System	Seon for former StaRT vehicles Angeltrax for former MAX vehicles

Source: Ride the S

## FACILITIES

### Bus Stops and Amenities

There are 809 bus stops in the Ride the S system today. Figure 109 summarizes the prevalence and types of amenities in the system. At 54%, just over half of all stops have a trash can, and nearly half of stops, 47%, have a bench.

There is no official policy for installing a new amenity, but Ride the S staff prioritize new features based on stops that have the highest boardings and available space. Ride the S will document the process, priorities, and thresholds for installing new amenities so that the public can understand how decisions are made and timelines for installation.

Figure 109 Summary of Bus Stop Characteristics

Amenity	Total	% of Total
Trash Cans	434	54%
Benches	377	47%
Shelters	164	20%
Solar Lighting	35	4%
Total Bus Stops	809	-

Source: Ride the S Bus Stop Inventory

### Major Transit Stations

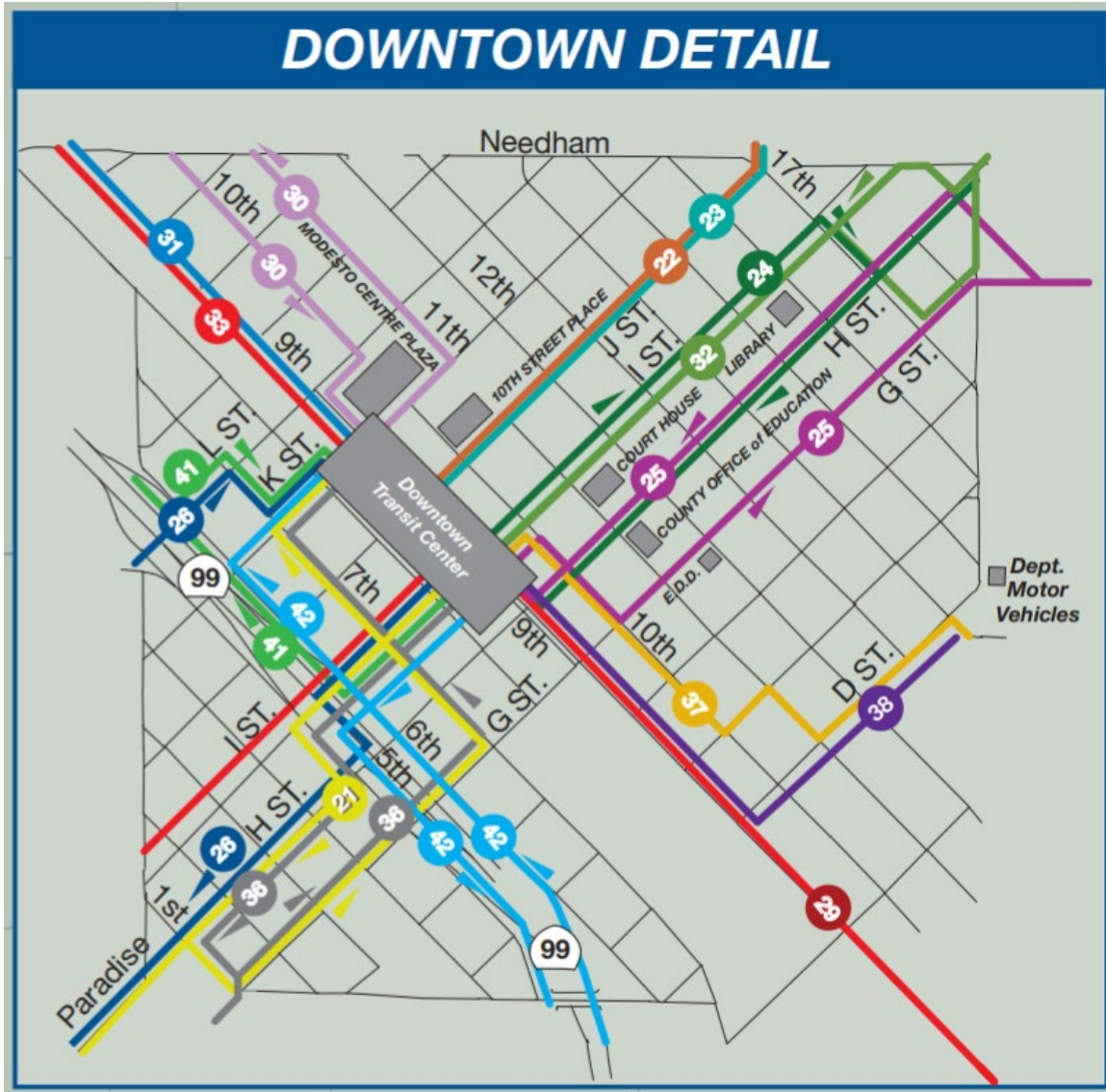
There are 144 stops in the system, which is 18% of total stops, that serve more than one route. The major transfer points within the Ride the S network are the Modesto Transit Center and Vintage Faire Mall. The Turlock Transit Station is another hub for regional trips but is outside the service area and is not included in this analysis.

#### Modesto Transit Center

A total of 22 routes serve the Modesto Transit Center. Those routes provide connections throughout Modesto and Stanislaus County, as well as limited destinations in San Joaquin and Alameda Counties. The specialized MediVan service to the Bay Area also leaves from the Modesto Transit Center. Figure 110 shows the location of the Modesto Transit Center, along with the former MAX routes that serve the station.



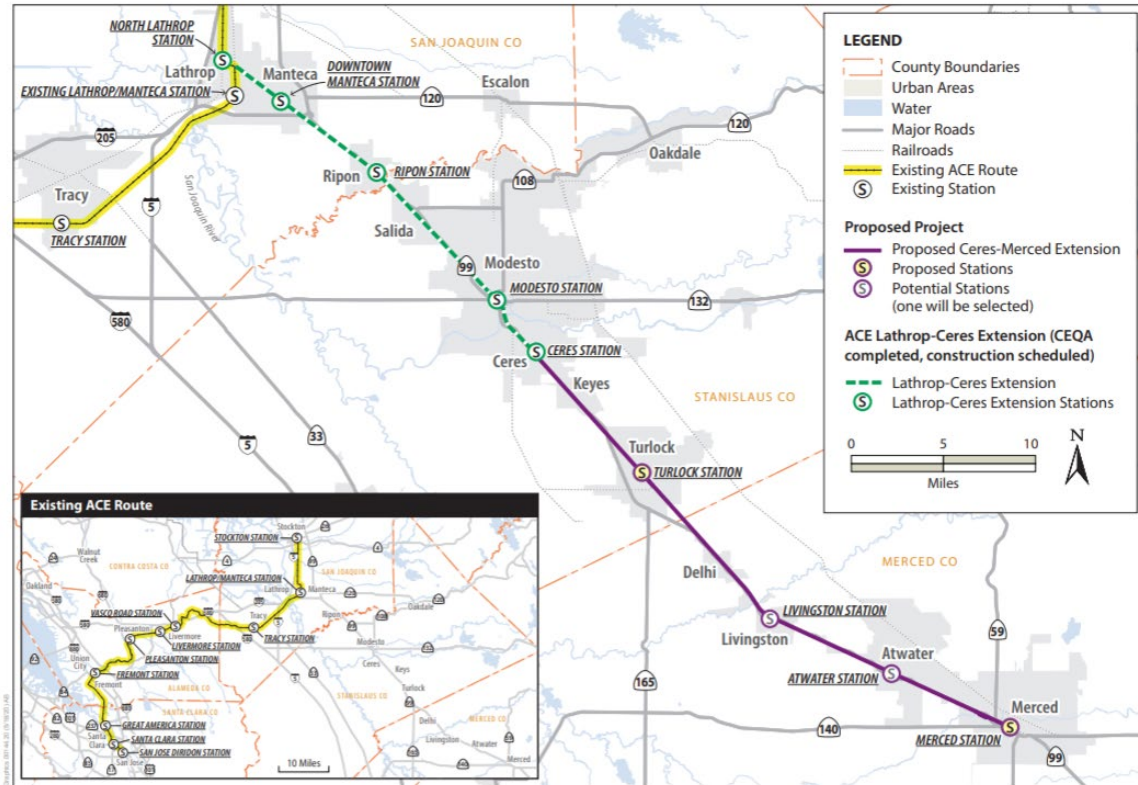
Figure 110 Fixed-Routes that Serve the Modesto Transit Center (Former MAX Routes Only)



### ACE Rail

The Modesto Transit Center is currently undergoing renovations today to prepare for the extension of ACE to Modesto, projected for the end of 2023. Figure 111 shows the ACE extension to Ceres, as well as a future phase extending the line to Merced. Although service is limited (currently four trips towards the Bay Area in the morning, and four trips back to the Central Valley in the evening), and the fares are higher than the bus, trains service in Modesto has the opportunity to shift demand on existing commuter buses in the Ride the S system.

Figure 111 Proposed ACE Rail Extension to Modesto and Ceres



Source: acerail.com, <https://acerail.com/wp-content/uploads/ACE-Ceres-Merced-Extension-Project-Map.pdf> Accessed 1/2022

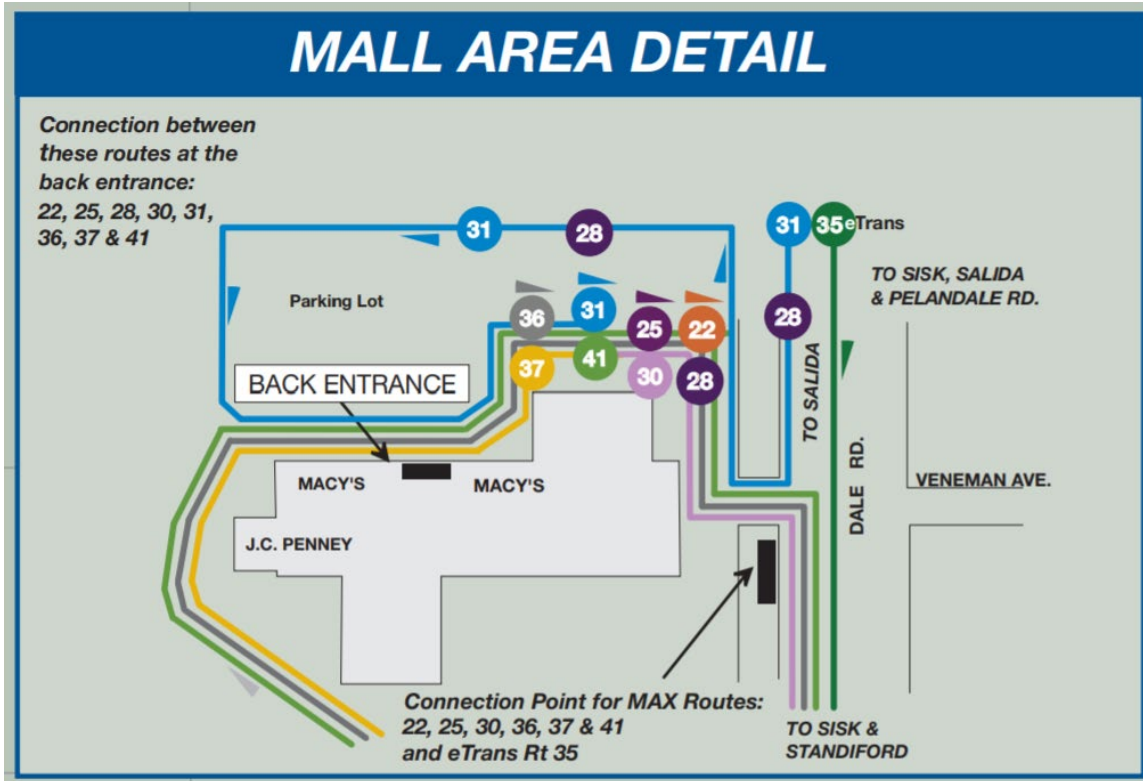
## Vintage Faire Mall

The Vintage Faire Mall is a major hub, with two stops. The main transfer point is on the north side, in the parking lot close to the entrance. A total of eight routes serve the primary stop at Vintage Faire Mall, seven days a week. Routes 40 and 60 also serve the mall on Saturdays, but not on weekdays. Figure 112 shows the Vintage Faire Mall with the former MAX-operated routes.

The second stop at Vintage Faire Mall is the stop on Dale Road, which serves seven routes on weekdays.

The City of Ripon Blossom Express comes as far south as the Vintage Faire Mall on Tuesdays and Thursdays.

Figure 112 Former MAX Fixed-Routes that Serve Vintage Faire Mall (Weekdays)



Source: MAX System Map 2021, accessed on website 12/2021

**Opportunities**

During the Christmas shopping season, traffic and pedestrian volumes at the mall are high enough that buses are rerouted for safety and to stay on schedule. Mall management does not have plans to permanently change traffic flow or the parking lot design, but they are open to alternative locations for a safe and useful bus stop.