





North Coast US 101 Corridor Intercity Bus Consolidation Study – **Final Recommendations Report**

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Section 1: Introduction

Intercity bus service is critical to meeting the State's goals to reduce vehicle miles traveled (VMT) and greenhouse gas (GHG) emissions and provide mobility to all Californians. The California Department of Transportation (Caltrans) Division of Rail and Mass Transportation (DRMT) is advancing a vision to provide meaningful public transportation access to all parts of the state through the California State Rail Plan and California Intercity Bus Study (CIBS). Intercity bus service is a key element of this vision, providing access to locations that have limited or no rail service available.

California's North Coast US 101 corridor, defined for this report as the 300-mile corridor from Santa Rosa to Crescent City, is one of the largest and most populated corridors in the state that will not be directly served by intercity passenger rail service in the foreseeable future. Rail service currently terminates at Sonoma County Airport, just north of Santa Rosa, and will reach approximately 30 miles further north to Cloverdale in the Long Term Vision of the 2022 State Rail Plan. Thus, providing coordinated, convenient, and efficient bus service along the corridor will be important to keeping this region connected to the rest of the state.

Intercity public transit service along the North Coast US 101 corridor is currently limited due to gaps in service and missed connections. Intercity bus operators requested that DRMT convene a planning effort ("Study") with the goal to better understand barriers for coordinating service in the corridor and provide a basis for pursuing improvements requiring coordination across different operating agencies.

Responding to this request, Caltrans convened a group of stakeholders to determine current issues and potential solutions for better connectivity. The following agencies were included:

- San Joaquin Joint Powers Authority (SJJPA)
- Greyhound Lines, Inc.
- Redwood Coast Transit (RCT)
- Humboldt Transit Authority (HTA)
- Mendocino Transit Authority (MTA)
- Sonoma County Transit (SCT)
- Sonoma County Transportation Authority (SCTA)
- Golden Gate Transit
- Sonoma-Marin Area Rail Transit (SMART)

Additional stakeholders such as Lake Transit Authority, Tribal transit authorities, and others will be included as the effort moves forward. See Section 4 for further details.

This study serves as a complement to the in-progress CIBS. The CIBS was initiated in 2021 to identify a statewide vision network for intercity bus service, develop a business case for the network, and identify potential implementation models for further exploration. Draft deliverables were released in the summer of 2022 that are currently in the process of review and refinement.

STUDY OBJECTIVES

- Foster collaboration between Caltrans, SJJPA, Greyhound, and regional operators to provide a better passenger experience in the North Coast corridor.
- Make recommendations for better schedule coordination of bus services in the corridor to fill gaps in service and better meet inter-county and interregional travel needs in the corridor.
- Evaluate options to expand bus-only ticketing for SJJPA Route 7 in the corridor to realize opportunities for local connections on this route made possible by Senate Bill 742 (2019), which authorizes Thruway buses to transport passengers who are not connecting to a passenger rail service.
- Identify opportunities and barriers to participating in the California Integrated Travel Project (Cal ITP) and coordinating ticketing and fares in the corridor. Supported by the California State Transportation Agency (CalSTA) and the Caltrans through a grant from the California Transit and Intercity Rail Capital Program (TIRCP), Cal-ITP is a statewide solution to make travel simpler and cost-effective for everyone. Key goals of Cal-ITP include enabling contactless payments, automating customer discounts, and standardizing information for easy trip planning.

Section 2: Corridor Consolidation and Network Integration Needs



Intercity bus service is currently provided along the North Coast US 101 corridor by a number of regional transit and intercity bus operators. A schematic representation of existing operations and connections in the corridor is shown in Figure 2, and detailed existing conditions schedule is shown in Attachment A.

Two State-supported intercity services provide connections from Arcata to the San Francisco Bay Area: Amtrak Thruway Route 7 (Cal Poly Humboldt to Martinez) provided by SJJPA, and Greyhound service to San Francisco partially funded through the Federal Transit Administration's 5311(f) rural intercity bus funds. Regional operators Redwood Coast Transit (RCT), Humboldt Transit Authority (HTA), Mendocino Transit Authority (MTA), Sonoma County Transit (SCT), and Golden Gate Transit each serve smaller portions of the corridor and have discussed coordinating schedules to enable through service. Sonoma-Marin Area Rail Transit (SMART) also provides parallel rail service from Larkspur to Sonoma County Airport with planned extensions to Cloverdale.

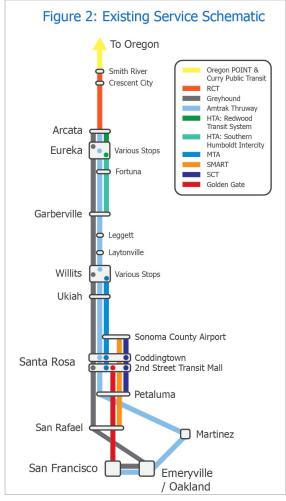


Figure 2

The overlapping but uncoordinated nature of existing service throughout the corridor creates barriers to long distance travel by transit and intercity bus, introduces confusion for customers in trip planning between many destination pairs, and limits the ridership potential for these long-distance travel alternatives to automobile trips. The most prominent barriers to optimal transit connectivity and passenger experiences on the North Coast 101 Corridor are described below.

SERVICE GAPS

- There is a service gap in regional transit between Garberville and Willits. Greyhound runs one round trip between these towns, but only Thursday through Monday.
- There is a major need among north coast residents for access to medical services in Mendocino, Sonoma, and the Bay Area, but transit service is lacking. To serve this market ticket pairs on Thruway Route 7 could be opened between all cities

- on the north coast, a new bus service could be run by HTA and MTA between Humboldt and Sonoma Counties, and Greyhound could ensure connections with local routes.
- Sacramento is another major market for the area but current services available are indirect. A new option could open up with Lake Transit Authority's proposed east/west connection on SR 20, connecting to Shasta Regional Transportation Authority's proposed Salmon Runner bus.
- Cal Poly Humboldt students come from all over the state to Arcata. Current enrollment of about 8,000 is projected to increase 50% within 3 years and 100% in 7 years.
- More transit and rail service are needed in general, especially to serve more communities like Cloverdale that are currently lacking connections to transit and rail.
- Amtrak Thruway only has certain city pairs open for bus-only ticket purchases, reducing the options available to transit users. A table of Thruway ticket pairs open for purchase is shown in Attachment B.
- Local transit operators mainly run service on weekdays, preventing connections to and from Amtrak and Greyhound on weekends

CONNECTION & TRANSFER ISSUES

 Lack of centralized transit center locations in places like Willits, Ukiah, Crescent City, and Eureka are a problem for transfers between local and intercity service, as well as for transfers between multiple intercity services. Passengers transferring between services must walk or pay for a taxi/rideshare between stops. In some cities Greyhound and Amtrak stations and stops are located far away from other providers and lack a connection to local or intercity transit. Figure 3 shows an example of a 600-foot distance between an Amtrak stop and local service in Willits.

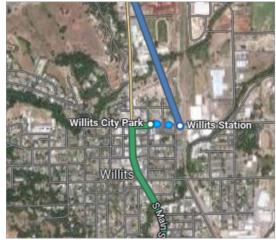


Figure 3

This distance is small, but may be an issue for people with disabilities and passengers with luggage. Additionally, short gaps in some locations may involve crossing dangerous roads or walking in areas with no sidewalk and frequent cold weather.

• Buses are not scheduled for efficient connections, wherein a passenger can transfer between one service to another at the same stop within a relatively short time. For rural intercity service, a transfer time of less than one hour is considered efficient. In some cases, such as for passengers on Redwood Coast Transit connecting to

Greyhound as in Figure 4, same-day connections cannot be made and an overnight stay in Arcata is required. Pre-pandemic, passengers could take Redwood Coast Transit from Smith River to Arcata and connect to the Bay Area in one day.

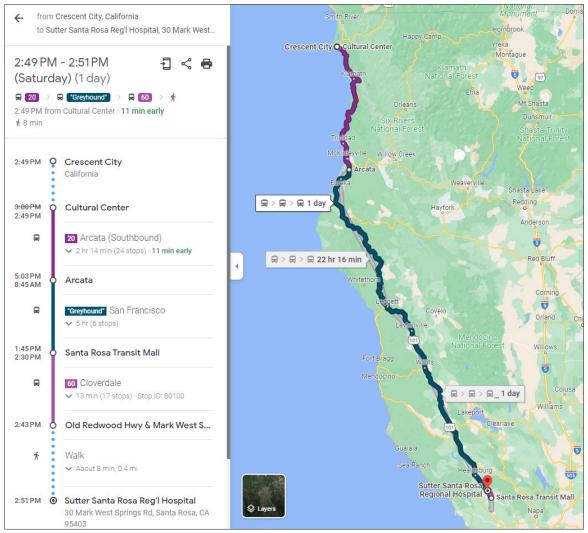


Figure 4

- Buses often lack optimal connections to SMART train stations. Buses stop at different locations than SMART or are not scheduled for timed connections. This is largely due to SMART being a relatively new service.
- A contractual relationship between MTA and SCT allows for MTA to serve transit stops outside of Mendocino County, but they are request-only, as the service is intended only for residents of Mendocino County. This prevents interregional travelers from using MTA service at Sonoma County stops and precludes open access to publicly funded bus service. Specifically, passengers cannot travel between the Sonoma County Airport SMART station and Santa Rosa's main transit centers at 2nd Street and Coddingtown Mall, or northbound from Windsor Depot to Ukiah.

- Most local transit doesn't run on weekends, especially Sundays, which is a peak day for Greyhound and Amtrak Thruway Route 7 ridership. Holidays are also key ridership days for Greyhound and Amtrak Thruway Route 7.
- Greyhound's schedule has changed frequently and without adequate notice to regional operators whose passengers rely on connections. Better communication and coordination is needed between Greyhound and local transit agencies to ensure passengers can transfer between services and rely on a consistent schedule.

PASSENGER EXPERIENCE

- Transit centers and stations have limited weekend hours which not ideal for the passenger experience. Passengers use stations to wait comfortably, purchase tickets, and find information. Weekends see the highest intercity ridership for some services.
- Many North Coast communities lack transit centers and stations in the first place.
- Stations and stops can be uncomfortable for passengers due to limited hours and lack of seats and shelter.
- Passengers can feel unsafe at stations and stops if they are unstaffed, have poor lighting, and/or require waiting for connections at late hours.
- Unsheltered homeless people frequently sleep at transit stations and stops, causing perceived safety concerns for some passengers.
- Stops do not always have accurate signage or wayfinding. Figure 5 shows Google reviews from 2019 through 2022 noting that there is no sign at the Eureka Greyhound stop.
- Passenger experience is confusing without coordination between operators. For example, due to Greyhound changing schedules without public outreach, passengers were upset to find out they could no longer transfer from Redwood Coast Transit to Greyhound for a same-day trip to the Bay Area.
- Integrated ticketing is needed to increase passenger flow between different transit services.

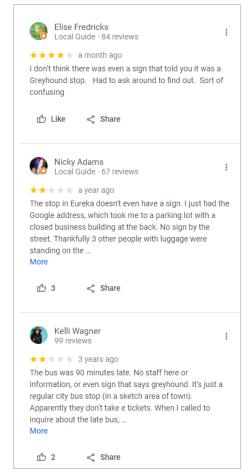


Figure 5

• Stations are not always shared between services, as shown in Figure 3 and discussed previously in this section. Frequently, Greyhound and Amtrak stops are located away from transit centers and other local transit stops.

OTHER ISSUES

- Funding is needed for operating services more frequently and in more locations. Operations funding is an ongoing challenge, while more grants are available to purchase vehicles.
- Shortages of drivers and mechanics are barriers to delivering and expanding service.
- North Coast agencies are concerned about the constraints posed by State requirements that future transit vehicles be zero-emission. Currently, there are no such vehicles available that can meet the physical demands of some routes. Specifically, rural routes in the North Coast tend to be long range, have varied topography, and need to use heaters while running due to cold weather, thereby reducing the effective range of zero-emission vehicles.

OPPORTUNITY: SENATE BILL (SB) 742

SB 742 was passed by the Legislature in September 2019, with the primary purpose to remove portions of the California Government Code that require state-supported Amtrak Thruway bus passengers to have a rail trip as part of their ticket. This allows rail JPAs, such as SJJPA, to sell "bus only" tickets on existing Thruway intercity routes including Route 7 on the North Coast.

Prior to opening an existing route to bus only ticketing, SB 742 requires the JPA to reach out to existing operators. The bill states that "funding pursuant to this measure should, to the greatest extent possible, enhance those services and damage to those services should be avoided if possible, and if not, limited to the extent practicable."

SJJPA took action in November 2021 to open some stop pairs on Route 7 to bus only ticketing, however some high demand origin/destination pairs such as Santa Rosa to Eureka or Santa Rosa to Ukiah have not been opened. A full table showing which stop pairs are currently open and not open is provided in **Attachment B**. An opportunity exists for SJJPA to coordinate with Greyhound and local operators as required and open additional stop pairs to improve mobility to North Coast residents

Section 3: Consolidated Corridor Concept and Implementation

The Study opened a conversation to allow for future collaboration between operators to understand existing issues and potential solutions for more coordinated service.

CONCEPTUAL NORTH COAST 101 TRANSIT SCHEDULE

A conceptual schedule of future intercity transit services on the North Coast 101 Corridor addressing study objectives is depicted in **Figure 6**. A detailed integrated service schedule is included in **Attachment A**. This concept was developed in response to comments from study stakeholders and an analysis of service and integration gaps in the existing operating pattern between Humboldt and Sonoma Counties. The corridor service concept intended for use as a guide for regional transit operators considering service changes to provide for long distance intercity travel by transit and intercity bus along the length of the corridor.

The significant features of the conceptual schedule are as follows:

 Conceptual schedules for new HTA and MTA services are included that would fill the regional service gap between Garberville and Willits and extend service south to Santa Rosa.

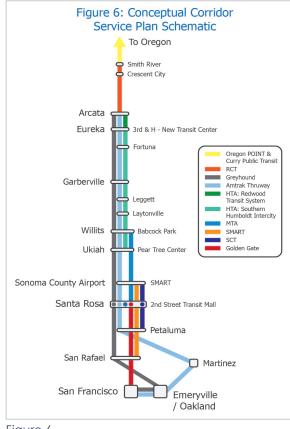


Figure 6

- The existing RCT Route 20 and HTA Southern Humboldt Intercity services have modified schedules to create a seamless transfer for same-day trips on the new HTA and MTA services.
- Connections with SMART are improved by adding stops to existing bus routes.
- MTA transit is open to all passengers at SMART stops instead of being request-only.
- Intercity services meet at hubs when possible to facilitate transfers. Future hubs to be determined in coordination with operators and stakeholders. A need to

improve transfers has been identified at the following locations, at minimum: Eureka, Willits, Ukiah, Sonoma County Airport, and Santa Rosa.

- All transit services run daily.
- All bus stop pairs on Amtrak Thruway Route 7 are open to bus-only passengers.

ACTIONS TO IMPLEMENT INTERCITY BUS CONSOLIDATION **IMPROVEMENTS**

Caltrans and intercity transit operators in the US 101 North Coast Corridor determined the following recommended actions for increasing connectivity and optimizing transit on the corridor.

Table 1. High Priority/Immediate Actions (to be initiated in 2023)								
Responsible Agency	Recommended Action							
Caltrans	DRMT to maintain corridor schedule on ongoing basis. District 1 to convene Corridor Working Group on quarterly/semi-annual basis with DRMT assistance. See Section 4 for further details.							
SJJPA	Open all Amtrak Thruway Route 7 ticket city pairs to bus-only ticketing. Outreach to Greyhound and local and regional operators when opening pairs is necessary.							
Greyhound	Notify Caltrans and local operators of schedule changes in a timely manner. Work to modify schedules to provide connections with local operators where feasible.							
HTA and MTA	Implement intercity bus to fill the service gap between Garberville and Willits.							

Table 2. Ongoing/ Funding-Dependent Actions							
Responsible Agency	Recommended Action						
SCT and MTA	Redesign transit services for better connections with SMART and open MTA services at SMART stops to all passengers.						
All Transit Operators	Open all Amtrak Thruway Route 7 ticket city pairs to bus-only ticketing. Outreach to Greyhound and local and regional operators when opening pairs is necessary.						
All Transit Operators	Relocate transit stops to provide better colocation of intercity bus and local transit services. Provide better wayfinding, information, and amenities at stations.						
Caltrans and All Operators	Joint marketing of intercity bus services should be funded.						
Caltrans District 1	Design a D1 regional network for intercity travel showing the hubs and local transit connectivity to these hubs. The Oregon DOT 2020 study could be used as an example.						
Caltrans Districts, Transit Operators, Local Govs	Ensure transit stops along the 101 corridor are served by complete streets infrastructure including safe crossings and sidewalks between stops. Need to prioritize first last mile connectivity to bus shelters, transit centers and other origin/destinations. An audit should be done to quantify the existing infrastructure and catalogue the deficits. Establish minimum set of standards for transit infrastructure similar to the role the MUTCD, and Highway design manual plays in planning for the automobile.						

Section 4: Conclusion and Next Steps for Coordination

This Study was a first step towards identifying intercity bus service needs and coordination opportunities in the North Coast US 101 Corridor. DRMT identified immediate and ongoing actions above to improve the quality of service and provide connectivity for passengers. Going forward, DRMT proposes ongoing coordination to share information and ensure that implementation continues.

ONGOING COORDINATION

DRMT proposes to host a public schedule of existing North Coast 101 bus services (as shown in Attachment A), to provide accurate information to passengers regarding the services that exist in the corridor. DRMT will coordinate regularly with bus operators to ensure the information in the schedule is accurate.

DRMT will engage in further implementation of connected intercity service as part of the CIBS through collaboration between local agencies and Caltrans. Caltrans will support through facilitating coordination and providing modeling services.

An ongoing coordination working group (quarterly or semi-annual, as needed) should be convened by Caltrans District 1 to facilitate implementation of service improvements and bus/station infrastructure with technical support from DRMT. These meetings can also be used to provide any updates needed for the public service schedule hosted by DRMT. This group will include additional stakeholders such as Lake County (planning east-west service to connect I-5 and US 101), the Yurok Tribe (planning transit services on SR 96), and others to be determined by Caltrans staff.

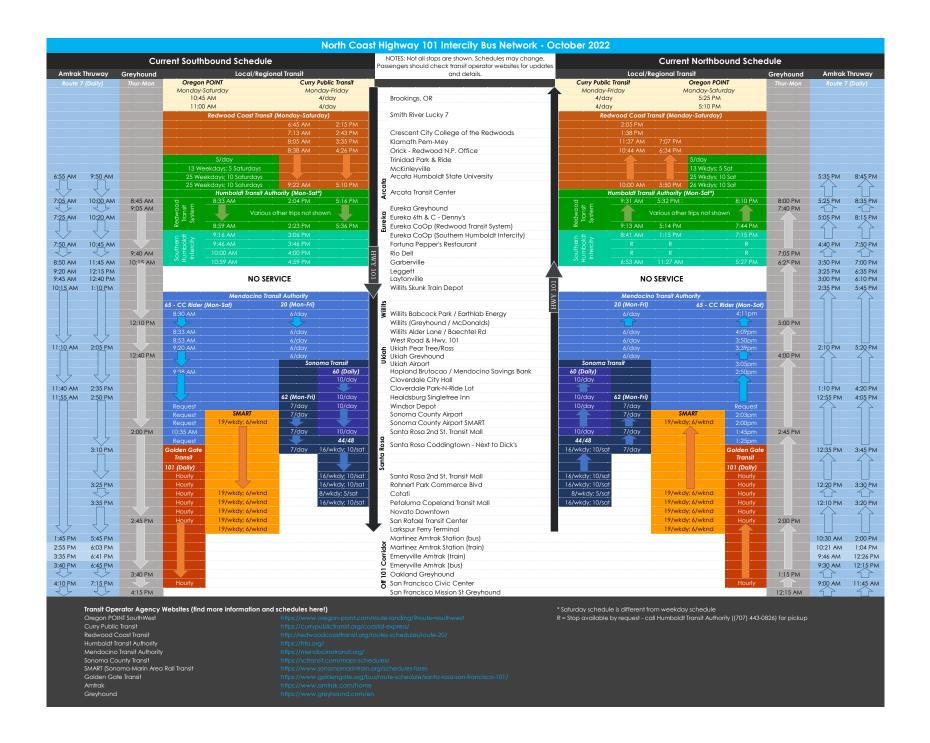
INTEGRATED TICKETING

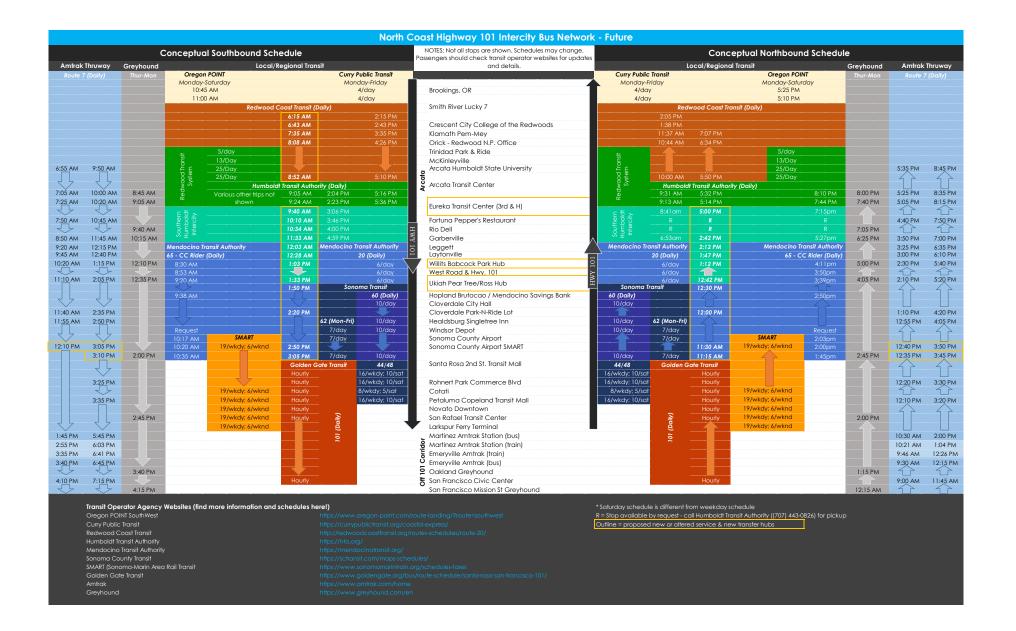
Integrated ticketing is necessary to maximize efficiency for passengers and operators. Currently, transit riders traveling between cities in the corridor need to purchase fares from multiple operators using different fare structures and payment methods. The State and bus operators should work together to adopt technology that allows the public to travel on Greyhound, Amtrak, and regional bus services on a single ticket.

Cal-ITP will benefit transit riders in the corridor by enabling simpler payment methods, automating customer discounts, and standardizing information for easy trip planning. Redwood Coast Transit, Humboldt Transit Authority, Lake Transit Authority, and Mendocino Transit Authority have worked with Cal-ITP on a fare integration pilot project to provide credit card validators and fare capping for equitable transportation



Attachment A: Existing Conditions Schedule and Conceptual Schedule





Attachment B: Thruway Route 7 City to City Pairs (As of June 2023)

Route7

City to City Pairs

Martinez • I	Martinez	Discovery	Vallejo	Napa	Petaluma	Rohnert	Santa Rosa	Healdsburg	Cloverdale	Ukiah	Willits	Laytonville	Leggett	Garberville	Fortuna	Eureka	Arcata	нѕи
	mar tinez	Kingdom	- Tamojo	Тири	T Gtalalla	Park	ounta nosa	Treatusburg	Giovernale	- CKIGH	-	Luytoniii	Loggett	Garber vine	Tortuna	- Lui Gra	Aroutu	1.00
Martinez																		
Discovery Kingdom	V			V	V	V			V		V					V		
Vallejo	V	V		V	V	V	V	\checkmark	\	V	V	\checkmark	\checkmark	\checkmark	V	V	V	V
Napa	V	V	V		V	V	V	V	V	V	V	V	V	V	V	V	V	V
Petaluma	V	V	\checkmark	V		V	V	V	\	\	V	V	\checkmark	V	\	\	V	V
Rohnert Park	V	V	V	V	V		V	V	V	√	V	\	V	V	√		V	V
Santa Rosa	V	V	\checkmark	V	\	V		V	\			V	\checkmark		V			
Healdsburg	V	V	V	V	1	V	V		V	√	V	V	V	V	√			V
Cloverdale	V	V	\checkmark	V	\	\	V	V		V	1	V	V	V	\	\	\	V
Ukiah	V	V	V	1	1	V		V	V				✓		√			
Willits	\	\	V	\	\	\		V	V				\checkmark		\checkmark			
Laytonville	V	V	V	V	V	V	V	V	V	V	V		✓	V	√			V
Leggett	V	V	V	1	\	\	V	V	V	V	\	\		V	V	\	\	V
Garberville	V	V	V	V	V	V		V	V				V		√			
Fortuna	V	V	V	V	V	V	\checkmark	\checkmark	V	V	V	\checkmark	V	\checkmark		V	V	V
Eureka	V	V	V	V	V	V		V	V				✓		√			
Arcata	\checkmark		V	V	V	V		\checkmark	V				\		V			
HSU	V	V	\	V	V	V		V	V				√		V			