Identifying Transportation Improvement Priorities to Support Sustainable Growth in California's Humboldt County: *Final Report Draft*

Prepared by:

David Kack, Program Manager

Natalie Villwock-Witte, PhD, PE
Senior Research Engineer

Karalyn Clouser, Research Associate

Western Transportation Institute at Montana State University

and

Carrie Kissel
Associate Director

National Association of Development Organizations Research Foundation

April 2026

About WTI & the NADO Research Foundation

The Western Transportation Institute (WTI) was founded in 1994 by the Montana and California Departments of Transportation, in cooperation with Montana State University. WTI concentrates on rural transportation research; as stewards and champions of rural America, WTI also has a strong interest in sustainability. WTI research groups create solutions that work for clients, sponsors, and rural transportation research partners.

Founded in 1988, the NADO Research Foundation (NADORF) is the nonprofit research affiliate of the National Association of Development Organizations (NADO). The NADO Research Foundation identifies, studies, and promotes regional solutions and approaches to improving local prosperity and services through the nationwide network of regional development organizations (RDOs). The Research Foundation shares best practices, offers professional development training, analyzes the impact of federal policies and programs on RDOs, and examines the latest developments and trends in small metropolitan and rural America. Most importantly, the Research Foundation is helping bridge the communications gap among practitioners, researchers, and policymakers. Learn more at www.NADO.org and www.RuralTransportation.org.

Disclaimer

Any opinions, findings and conclusions, or recommendations expressed in this publication are those of the authors and do not necessarily reflect the views of the Humboldt County Association of Governments (HCAOG), the Humboldt Transit Authority (HTA), the National Association of Development Organizations (NADO), or the United States Department of Agriculture (USDA). USDA is an Equal Opportunity Provider.

The authors and sponsoring agencies do not endorse products of manufacturers. Trademarks or manufacturers' names appear herein only because they are considered essential to the subject of this document.

Acknowledgments

The authors thank Oona Smith of HCAOG, Greg Pratt of HTA, and Beth Burks, formerly of HCAOG. We also thank Dana May for technical editing and Neil Hetherington for creating some of the graphics found within; both are with WTI.

List of Acronyms

AARP	American Association of Retired Persons
ADA	Americans with Disabilities Act
CTSA	Consolidated Transportation Services Agency
DAR	Dial-A-Ride
ETS	Eureka Transit System
FTA	Federal Transit Administration
GRH	Guaranteed Ride Home
HCAOG	Humboldt County Association of Governments
HCAR	Humboldt Community Access and Resource Center
HTA	Humboldt Transit Authority
LOS	Level-of-Service
LTF	Local Transportation Funds
MnDOT	Minnesota Department of Transportation
NADO	National Association of Development Organizations
NADORF	National Association of Development Organization's Research Foundation
National RTAP	National Rural Transit Assistance Program
PSRC	Puget Sound Regional Council
RABA	Redding Area Bus Authority
RDO	Regional Development Organization
RFP	Request for Proposals
RTP	Regional Transportation Plan
RTPA	Regional Transportation Planning Agency
SR2S	Safe Routes to School
STA	State Transit Assistance
TDP	Transit Development Plan
TNC	Transportation Network Company
USDA	United States Department of Agriculture
VMT	Vehicle Miles Traveled
VROOM	Variety in Rural Options of Mobility
VTBC	Voluntary Travel Behavior Change
WTI	Western Transportation Institute

This page intentionally left blank

Table of Contents

List of Figures

List of Tables

1 Introduction

The Humboldt County Association of Governments (HCAOG) is a Joint Powers Agency among the County of Humboldt and seven incorporated cities (Arcata, Blue Lake, Eureka, Ferndale, Fortuna, Rio Dell, Trinidad); there are also two unincorporated communities within HCAOG: Garberville and McKinleyville (Figure 1). The 2020 U.S. Census noted a population of 136,463 for Humboldt County, which encompasses 4,052 square miles, of which 3,568 square miles is land and 484 square miles is water. Humboldt County features about 110 miles of coastline along the Pacific Ocean, more than any other county in California.

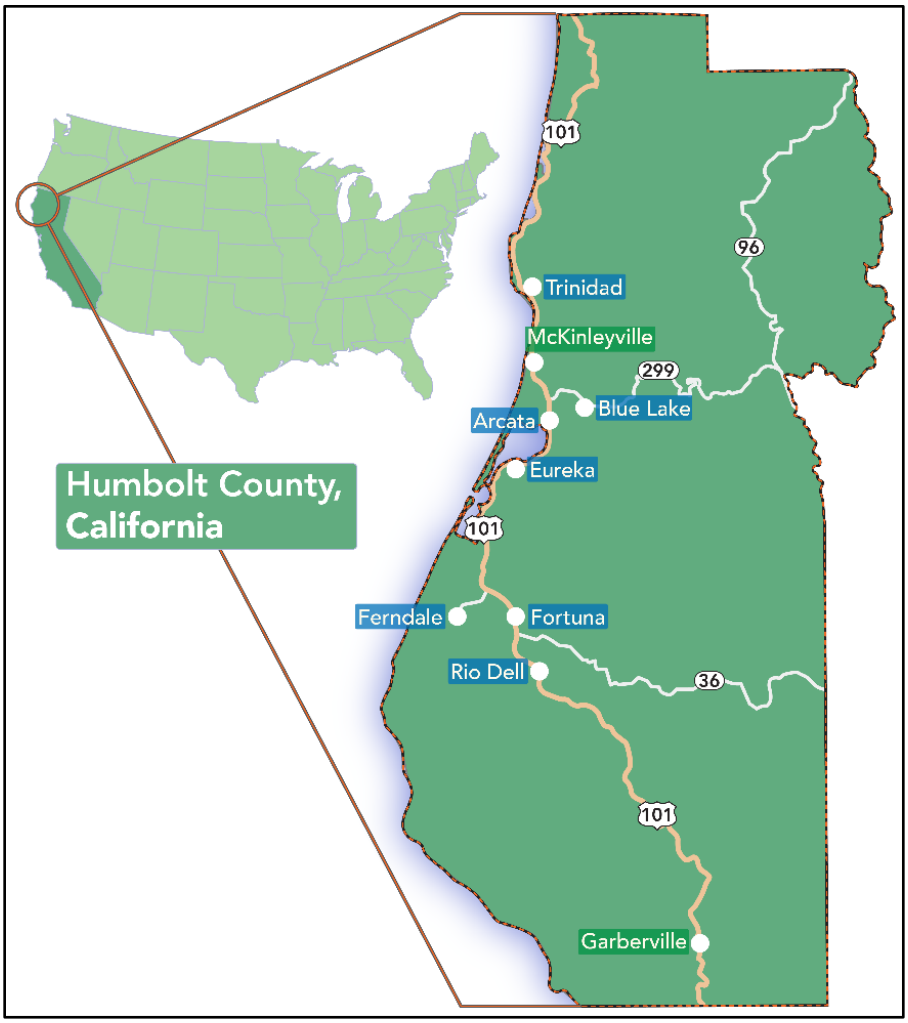

Figure 1: Humboldt County, California

HCAOG serves as the Regional Transportation Planning Agency, overseeing preparation and implementation of the Regional Transportation Plan (RTP) and is responsible for multimodal transportation programming, including highways, local streets and roads, and public transportation. HCAOG's mission is:

To develop, operate, and maintain a well-coordinated, balanced, countywide multimodal transportation system that is safe, efficient, and provides good access to all cities, communities, and recreational facilities, and into adjoining regions. A balanced multimodal transportation system includes but is not limited to highway, public transit, aviation, marine, railroads, recreation, bicycle, pedestrian, and utility systems. (1)

HCAOG oversees regional transit planning, including the short-range Transit Development Plan (TDP) for 2023-2027 and the annual Unmet Transit Needs assessment process, as well as multimodal planning efforts such as the Mobility-on-Demand Strategic Development Plan and the Eureka Broadway Multimodal Corridor Plan. HCAOG also supports collaborations such as the Humboldt County Safe Routes to School (SR2S) Task Force. However, HCAOG lacks the capacity to develop a cohesive strategy for decoupling regional population and economic change from growth in private vehicle travel. In short, HCAOG and close partners at the Humboldt Transit Authority (HTA) were seeking assistance in addressing gaps (service or organizational) that will help them better move residents within and between communities in Humboldt County without a private automobile.

Working in collaboration, the National Association of Development Organization's Research Foundation (NADORF) and the Western Transportation Institute (WTI) at Montana State University partnered to create a technical assistance project team to work with professionals at HCAOG, HTA, and related planning and community partners to identify transportation priorities capable of accommodating regional growth in a sustainable way not focused on single-occupancy auto/vehicle trips.

After initial consultation between the Technical Assistance team and HCAOG and HTA, four main project tasks were identified: 1) providing information regarding commuter trip reduction incentives; 2) researching the feasibility of vanpools; 3) reviewing the current dial-a-ride (demand-response) transit service; and 4) reviewing the Eureka Transit System (ETS).

The next section discusses commuter trip reduction incentives, followed by a section on the feasibility of vanpools, a review of the existing dial-a-ride transit service, and a review of the ETS.

2 Commute Trip Reduction Incentives

The Humboldt County Association of Governments (HCAOG) and Humboldt Transit Authority (HTA) are interested in encouraging new ridership. This is in part driven by California's regulatory targets to reduce per capita light-vehicle vehicle miles traveled (VMT) by 25 percent by 2030 and 30 percent by 2045 and requires government agencies to consider these targets in planning decisions (2). The cooperation between HCAOG and HTA reflects that, "Rural vehicle travel reduction strategies typically include improving walking and bicycling conditions, providing rural public transport services, and concentrating services and new housing in walkable villages and towns" (2).

HCAOG's Variety in Rural Options of Mobility ("VROOM") guides the "development of a sustainable transportation landscape in which people can safely, comfortably, and reliably get to the places they need to go" (3). VROOM states an overall goal to reduce single-occupancy vehicle trips thereby reducing VMT. As a part of performance measure, "Active Transportation Education," VROOM identifies the following regional target: "increase the number of programs that actively promote and incentivize multi-modal travel targeted to employers with over 20 employees, and government agencies."

Traditionally, mobility-based planning prioritized level-of-service (LOS) (2). More recently, there is a desire to shift to accessibility-based planning, which considers instead the total time and money required to reach services and activities. The former tends to favor automobile and air travel. The latter tends to favor walking, bicycling, public transit, and teleworking. VROOM discusses a desire to move away from mobility-based planning that prioritized LOS.

The following section reviews literature on the topic of trip reduction initiatives and the section after that concludes with a discussion on the topic.

2.1 Literature Review

This section consists of relevant succinct findings from Massachusetts, an example from Lake Forest Park in Washington State, findings from a study that reviewed the impacts of local actions on VMT, and a study that viewed local actions in Minnesota regarding VMT. The section then moves to a discussion of employer-based trip programs.

For Massachusetts, one study estimated that VMT reduction transit policies could reduce growth in daily VMT by 30% (4). VMT reduction transit policies include congestion charges, encouraging active transportation, expanding public transit, and implementing travel demand management policies.

2.1.1 Lake Forest Park, Washington State

Lake Forest Park in Washington State hired a consultant to recommend VMT reduction targets and strategies (5). At present, "Given Lake Forest Park's size and primarily

suburban residential character, most residents rely on personal vehicles for both work and non-work trips." To do their work, the consultant utilized VMT estimates developed by the Puget Sound Regional Council (PSRC). Furthermore, they made use of "big data" from a consultant (e.g., StreetLight Data). The consultant's analysis suggested that most trips are made to locations outside of the Lake Forest Park community. Furthermore, a significant VMT contributor is work trips made by Lake Forest Park residents, trips which are outside of the community (98% of Lake Forest Park residents work outside of the community), and are lengthy, ranging from 3 to 18 miles. The results seemed to suggest that trips with the greatest likelihood of being replaced by another mode are those which are non-work resident trips less than two miles (30% of non-work resident trips), and between 2 and 5 miles (40% of non-work resident trips). Lake Forest Park identified two strategies to reduce VMT: 1) reduce community wide driving, and 2) improve "last mile/first mile access." For the former, five actions were identified:

1) encourage transit-orientated development,
2) develop a pedestrian and bicycle network,
3) secure bike storage,
4) expand capacity of the Lake Forest Park Town Center to act as a **mobility hub**, and
5) collaborate with the cities of Shoreline and Kenmore as they adopt shared-use electric bicycle or scooter programs.

For the latter, four actions were identified:

1) build transit-orientated development,
2) expand the Metro Flex **on-demand transit service**,
3) support pedestrian infrastructure, and
4) increase transit ridership through **education and outreach**.

To achieve the community's desired objectives, the analysis highlighted that, "planned future transit service is a key element incorporated into future baseline estimates." Ridership of transit in Lake Forest Park dropped by 50% between 2019 and 2024. A supporting strategy for VMT reduction includes, "Construct high priority non-motorized projects identified in Safe Streets plans," detailed in the Lake Forest Park Safe Streets Plan, Lake Forest Park Safe Streets Town Connections Plan, and Lake Forest Park Safe Highways Report. One strategy that was identified for increasing transit use was real-time transit arrival information. Education and outreach were also identified as a key strategy. However, it was noted that it should be "tailored information, incentives and support." The consultants recommended that the community coordinate with a community-based group who can reach target populations and manage outreach events. The consultant suggested an interdependence of strategies where the effectiveness of one implemented in isolation from any others would reduce the overall effectiveness.

2.1.2 Impact to VMT as a Result of Local Actions

Salon et al. (6) offer 14 policies binned into five categories: 1) land use planning, 2) pricing, 3) public transport, 4) non-motorized transport, and 5) incentives and information (Table 1). VMT can be reduced by negating the need for travel, providing viable options besides one's private automobile, and disincentivizing the use of one's private vehicle. Salon et al. suggest that "the evidence on the effect of policies on factors is substantially thinner;" therefore, they focus only on the relationship.

Table 1: Policies for Reducing VMT (5).

Factor	Factor changes slowly	Delay in effect on VMT	Hard to identify treatment group	Hard to identify control group	Multiple variables represent factor	Residential self-selection concern	Other self-selection
Land use planning							
Residential density	X	X	X	X	X	X	
Land use mix	X	X	X	X	X	X	
Regional accessibility	X	X	X	X	X	X	
Jobs-housing balance	X	X	X	X		X	
Network connectivity	X		X	X	X	X	
Pricing							
Road pricing			X				
Parking pricing			X				
Public transport							
Distance to transit						X	
Transit service					X	X	
Non-motorized transport							
Pedestrian improvements		X			X	X	
Bicycling improvements		X			X	X	
Incentives and information							
Employer-based trip reduction							X
Telecommuting							X
Voluntary travel behavior change							X

Typical elements of employer-based trip reduction programs include "employer-provided alternative mode services, carsharing programs, guaranteed ride home for transit users, and financial incentives to encourage alternatives to single-occupant car commuting." Findings suggest a VMT commute reduction of 4% to 6% specific to participating companies. Regionally, the reduction was estimated at 1%.

Voluntary travel behavior change (VTBC) programs have found reductions of 5% to 8%. The concept behind VTBC is to "help individuals and groups rethink their travel choices in light of improved information about their transportation options." However, this is often built on the premise that other transportation options besides the use of one's private automobile already exist.

2.1.3 Minnesota

A field scan conducted in 2023 for the Minnesota Department of Transportation (MnDOT), suggested that the most growth in VMT will be in rural areas and those areas on the fringe of suburban growth (7). The scan identified which strategies can influence VMT, the strategy's impact to a household, and MnDOT's role in that strategy, conceptualized in Figure 2, (adapted from (6)).

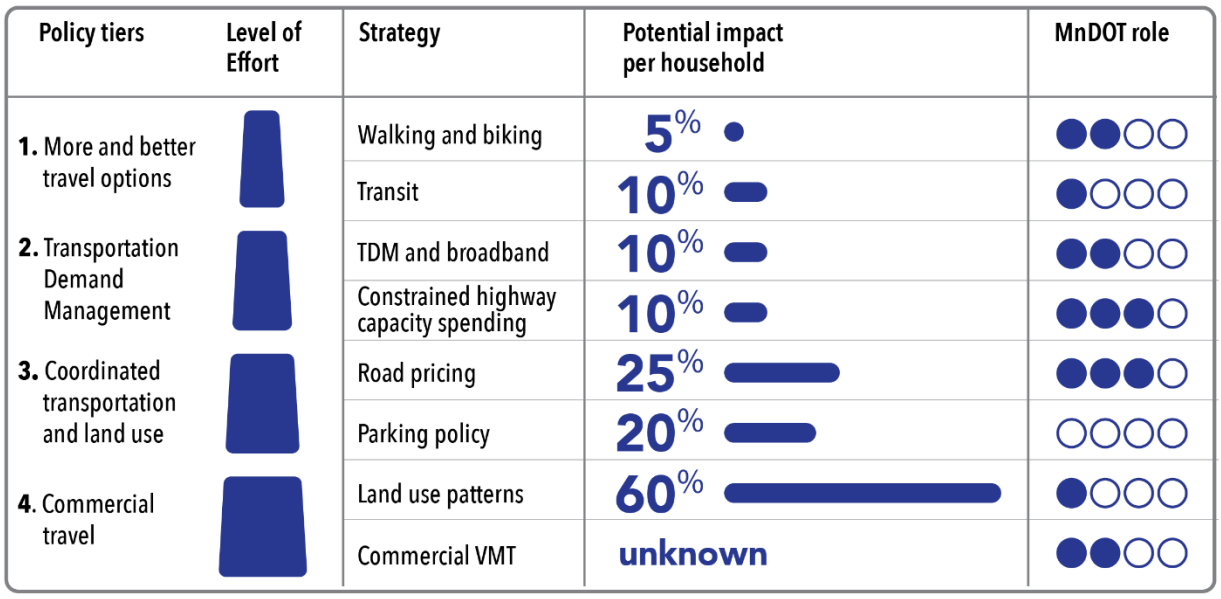

Figure 2: Policy Levers & Potential Impact on Household VMT and MnDOT Role

McCahill et al. (7) highlighted that the most impactful strategies to addressing VMT, parking policy and land use patterns, are those which MnDOT has the least control over (see Figure 2). These strategies are controlled at the local level.

"Transportation agencies can support local land-use decisions through technical support by aligning its planning and investment strategies and by managing and optimizing existing road capacity to limit induced demand."

In reviewing local agency efforts, the reviewers noted that some local agencies do not use VMT reductions, but rather overall emissions, transportation emissions, and greenhouse gas targets. They also looked for local agency discussions about advancing multimodal access and infrastructure, active transportation, and land use and zoning reform.

Local agencies reported a conflict between the goal of VMT reduction and attracting more businesses or tourism. VMT was seen as a "natural byproduct" of local economic development efforts. There is a perception that "VMT growth is necessary for a strong local economy."

Community feedback by small communities in Minnesota suggest value in improved connections of downtown areas. This is being achieved by adding sidewalks, bike lanes, and trail systems identified within a pedestrian plan.

McCahill et al. (7) reported that reducing VMT is believed by Minnesota organizations and residents to have something taken away. They recommended instead that the efforts be framed from a different viewpoint, highlighting the benefits of what the addition of multimodal infrastructure and active transportation can provide for a municipality. Furthermore, they suggested a need to move away from the language of "reduction," and instead focus on health and economic development benefits.

2.1.4 Employer-Based Trip Programs

Hsu et al. (8) were careful to differentiate between studies that reported on VMT impacts (e.g., reductions in vehicle use) to those that merely reported on changes in the commute mode (e.g., using transit instead of driving alone). Most studies typically used a before and after survey, although in some cases a transportation simulation model was leveraged. Other methods used to measure the impact included focus groups of local agencies (e.g., communities and counties), employer forums, and employee interviews.

One of the studies reviewed suggested that for every $10 increase in annual incentive cost per employee, single occupant driving decreased by 1.3%. One of the studies analyzed the impact of fare-free bus service. Regarding vanpools, one of the reviewed studies reported that when a subsidy is offered, the probability of choosing to participate in a vanpool more than doubled. One drawback of this review relevant to Humboldt County is that most efforts viewed seemed to be drawn from large metropolitan areas (e.g., Chicago, Washington DC).

Boarnet et al. (9) summarized policies related to employer-based trip reduction programs. Five elements reported include:

1. Employer-provided alternative mode services (e.g., carpool facilitation, preferential parking for carpools, vanpool service, carsharing programs, and guaranteed ride home (GRH) for transit commuters)
2. Financial incentives (e.g., up to $75 per month) (e.g., carpoolers, vanpool users, bicyclists, pedestrians; assistance with reducing or eliminating

costs associated with using public transit; and cash transportation allowance)
3. Worksite facilities (e.g., showers, lockers, bicycle racks)
4. Alternative work schedules (e.g., flexible work hours; compressed work week)
5. Information and marketing (e.g., transit promotion campaign)

They acknowledged that state-mandated employer commute trip reduction programs, "typically apply to large firms in highly populated areas." Overall, Boarnet et al. (9) suggested that from their review, employer-based trip reduction programs are more successful if they offer a greater number of assistance and incentives.

Some important caveats were identified by Boarnet et al. First, at the writing of their review (2014), there was no "direct evidence" of the effects of vanpool programs on VMT. Second, vanpool riders may not be shifting from single occupancy vehicles to a vanpool. Rather, they may shift from using transit or carpooling to vanpools. In addition, for employer-sponsored bus programs, Boarnet et al.'s (9) review of studies suggested that such offerings were implied as enabling employees to live further from work. Considering Humboldt County, something that these reviewed studies may not consider is that vanpool programs provide more employment options for Humboldt County residents and for Humboldt County employers. While Boarnet et al. (9) suggest that from an emissions perspective, it may be less preferable to have users switch from private vehicles to vanpools because of greater emissions from vans, in modern society, where some vans in vanpools or either hybrid or electric only vehicles, there could be significant benefit if the vanpool participant was previously driving a vehicle that has greater emissions (e.g., a pickup truck). Another caveat offered is that as VMT is reduced, induced travel may occur, in that people who previously did not travel during peak periods may now use those time frames because there is less congestion.

Boarnet et al. (9) suggested that there is "no evidence" of impacts of mandated employee trip reductions for employers with fewer than 100 employees. They suggest that smaller worksites are less likely to use vanpools, but with Boarnet et al.'s (9) focus being on large metropolitan areas, this experience may not transfer to the rural context. Of the 99 employers identified in Humboldt County, only 7 had more than 100 employees (Table 2). Section 3 provides information on the location of large employers in Humboldt County, and additional information on the feasibility of vanpools.

Shin (10) utilized data from the 2014 Puget Sound Regional Travel Survey to analyze the impact of parking benefits and transit subsidies. Shin acknowledged the potential uniqueness of the findings specific to the Puget Sound Region because of the regions' "well-developed transit systems and a less auto-centric spatial structure." Consequently, the results may be less likely to be replicated in other contexts. Parking cash-out is defined as providing the option of cash to employees instead of free or subsidized parking. The

results suggested that female workers, those with "relatively" long working hours, and low-educated workers were more likely to drive alone (not use transit or bike or walk). Those with transit benefits also reported shorter commutes. Non-commute trips originate from workplaces, so if one drives to work, it is more likely that they will drive for other non-work trips. Similarly, if one takes transit to work, it is more likely that they will use transit to conduct their non-work trips. Findings also suggest that transit benefits create spillover effects, prompting households to choose denser, transit-rich areas.

Shin (10) suggested that commuter benefits for transit use are more effective at reducing VMT since household members are impacted. "Transit benefits encourage workers to commute by public transit more" and consequently reduce their VMT. "Parking benefits facilitate their driving for commutes." Because of the identified spillover impacts, Shin suggests that surveys of employees also include non-commute travel questions and questions about household member travel behavior to understand the full impact of commuter benefits. To encourage companies to offer commuter benefits, Shin suggests that policymakers provide support to offset the administrative costs of providing pre-tax payroll deductions, particularly to smaller companies. Marketing strategies and outreach campaigns were also recommended.

2.2 Discussion

The reviewed studies offer some ideas and insight into things that HCAOG may want to consider as they seek to reduce VMT within Humboldt County. However, since many of the available studies are often from very large metropolitan areas, the exact impact may be different. For that reason, if it is possible, HCAOG should consider seeking to quantify impact to VMT made because of changes they pursue so they can share it with other rural regions.

Humboldt County is currently developing a mobility hub within Eureka, like that described in Lake Forest Park. Therefore, this effort should assist with VMT reduction. To understand the hub's impact, we can survey users to compare their past travel habits with their current ones.

Education and outreach was identified as a recommendation by three of the reviewed studies [(5), (6), (10)]. The first two concern more of the concept of providing information and education to the public regarding how to use public transit. Traditionally, a travel trainer or mobility manager has been used to conduct such a function (see https://www.nationalrtap.org/Resources/Best-Practices-Spotlight/Archive-Travel-Training for more information on travel training). HCAOG or HTA could set goals for the number of people engaged with such a service. Through this process, the individual conducting the travel training should be empowered to provide feedback to HTA and HCAOG regarding consistent challenges that they are hearing from the public regarding the transit system to determine if there are sort or long-term solutions that could address the identified problems. In addition, one recommendation from the literature worth considering is the

engagement of community-based organizations such as the Area 1 Agency on Aging, Coalition for Responsible Transportation Priorities, and/or the United Way of Northern California. As there are no current travel trainers, finding ways to amplify one's work is needed. Engaging with community-based organizations can help to do this. The other education and outreach identified was to encourage small employers to provide incentivization to their employees to use alternative commuting modes. While there is an education component as well, there is also the potential for a financial incentive. At smaller companies there are fewer people conducting administrative activities, so providing support to them may mean the difference between whether they pass along incentives to their employees.

More recent planning with HCAOG and HTA has looked at on-demand transit. The consultant that provided recommendations for Lake Forest Park identified on-demand transit as a strategy that can support VMT reduction.

Two of the reviewed studies also highlighted the need to build out the non-motorized network to support VMT reduction [(6), (7)]. In the Minnesota example, this seemed to be described as creating improved connections to the downtown area. It reminds the author of Walker, Minnesota. A case study of this community can be found here: https://westerntransportationinstitute.org/wp-content/uploads/2022/03/MN_Walker_CaseStudy_2022.pdf. While initially there was much local resistance to the idea of walking and bicycling in Walker, when the case study was developed, the community had an underpass beneath the main roadway running through the community which connected the residential area to the lake. Furthermore, a new concrete multi-use path was installed within the core of the community, providing better separated connections. An employee at a local hotel reported using the multi-use pathways to bike daily to and from work more than 10 miles away. Additional examples of desirable bicycle and pedestrian features can be found in the case study. For Humboldt County, US101 in Eureka serves as a barrier to non-motorized mobility. A walk from local lodging requires crossing three travel lanes and two parking lanes to appreciate the local murals and access a coffee shop (Figure 3). Continuing to look for ways to mitigate or ideally eliminate such barriers throughout communities in Humboldt County can improve non-motorized networks.

Figure 3: Five Lanes to Cross for a Pedestrian or Bicyclist
(source: Google Maps)

The above discussed topics, mobility hub, education and outreach, on-demand transit, and a non-motorized transportation network need to be implemented in tandem. As discussed in the literature, the effectiveness of implementing just one of the topics will reduce its influence. There is an "interdependence."

There are a few other facets that warrant highlighting related to the potential influence of incentives, vanpool, big data, considerations for surveying, and demographics reached. The literature suggested that for every $10 in incentives, there would be a 1.3% reduction in single occupancy vehicles. Of course, this is unlikely to translate to a rural area like Humboldt County. If it is possible for HCAOG to quantify how incentives influence solo driving, this would be of interest to other communities.

Vanpools typically need a subsidy to be effective, although the participants are more likely to be those already using transit than solo drivers based on the literature. If Humboldt County pilots a vanpool, this theory should be evaluated. As the Redding Area Bus Authority introduced the RABA Vanpool, it would be of value for HCAOG to reach out to obtain feedback from their peers regarding the benefits and challenges that they have encountered (11).

At least one of the studies used "big data" to draw their conclusions. As mentioned previously, many of these studies are urban-focused. One challenge with the rural context

is that data is limited. Some companies have addressed this by amplifying a single data source rather than drawing from unique individuals, which can create biases.

If HCAOG engages employers to offer incentives to their employees to reduce solo driving trips, as identified by Shin (10), there are spillover effects. Therefore, any surveys conducted should understand how potential changes may influence non-work trips and household trips, not just the commuter trip. As mentioned, this is because often one links non-work trips with work trips, as a trip chain.

One notable finding regarding the demographics of those that can be influenced by incentives is the lack of interest by female workers, those working long hours, and those with less education. Regarding female workers, this may be because of the influence of childcare or elder care responsibilities, which are largely still taken on by women. In addition, considering active modes of transportation, even with on-site provided facilities, some women may not feel comfortable, or the facilities may not provide the resources that one prefers. For individuals working long hours, public transit may be less available outside of more standard working hours (e.g., 8 am-5pm). There have been examples of where vanpools in rural areas can help to fill this gap (12).

Finally, regarding those with less education, it may be that their places of employment offer less flexibility regarding start and end times. Public transit can be viewed as being unreliable and one's personal vehicle as being more reliable. Therefore, if public transit does not function on a reliable schedule, or with limited frequency, with some workplaces being more intolerable to specific arrival times (e.g., shift work), the use of public transit would be inconvenient, and therefore used less by people with jobs with limited flexibility.

While the Eureka Transit System (ETS) is discussed further in Section 5, the next section focuses on another potential program to support the reduction of trips for employment purposes, that is the implementation of vanpools in Humboldt County.

This Page Is Intentionally Blank

3 Feasibility of Vanpools

(Note: this section borrows heavily from the report *Supporting Employment Transportation in Southern Georgia* by WTI and NADORF (12). Information was reviewed on six rural vanpool programs: Ben Franklin Transit Vanpool Program, Black Butte Ranch, CommuteInfo, Go NEWhere, iRide Vanpool, and Kings Area Rural Transit.

Employers and employees have a shared interest in ensuring that commuting to work is affordable and accessible. While many choose to commute to work using a private automobile, there are often economic or practical reasons that this may not be feasible, including high gas prices, congestion, or limited parking. Alternative modes exist for commuters and can be very beneficial for those facing long commutes to work. These include public transit, carpooling, and vanpooling.

Public transit can provide access to employment. However, this mode often does not exist in more rural areas or does not operate during certain hours (e.g., early morning, late night, weekends). Carpooling involves a group of people (at least two occupants) sharing a vehicle to commute to work. The 2022 Transportation Statistics Annual Report notes that nearly 7.79% of Americans carpool to work (13).

Vanpooling offers another reliable and affordable option to commute to work. Similar to carpooling, vanpooling allows larger groups of individuals (typically between 5-15 passengers) to share a ride to work in a common vehicle. This commute option can be extremely cost effective compared to commuting via a single occupancy vehicle, since vanpooling allows members to share all associated costs. Commute with Enterprise estimates that vanpool members can save around $6,000 per year by commuting via vanpool (14). Findings from a survey of vanpool users found that that drivers with an income of $25,000 to $75,000 are slightly more likely to consider a carpool or vanpool (15). Shift workers and those with limited access to a personal vehicle or public transit are more likely to consider a vanpool as well.

All these modes can be used together to improve access to employment and reduce the financial burden of commuting to work. For the Eureka area, public transit is available and can serve individuals going to work. The Eureka Transit Service (ETS), operated by the Humboldt Transit Authority (HTA) is available from 7 am to 6 pm, Monday through Friday, and on Saturdays from 9 am to 5 pm. Vanpooling is an option that could complement the current ETS and broader HTA public transit services in Humboldt County by helping to fill the gaps and provide service during the hours for second or third shift workers and those who work on weekends, especially on Sundays. Additionally, vanpooling is an efficient mode for those with long distance commutes. In fact, vanpools had the longest average trip length nationally of all modes at 39 miles (16).

3.1 Vanpool Models

A vanpool can be operated by one of the following four models:

- **Third Party** – a third-party would operate and lease vanpools and vanpool operations. The third party can engage in several services including acquiring vehicles, vehicle maintenance, vanpool invoicing, vanpool recruitment, driver checks/training, etc. This model is becoming increasingly popular; Commute with Enterprise is the most prevalent provider in this service option.
- **Employer Sponsored** – a company would purchase or lease vanpool vehicles for use by their employees. It can increase employee recruitment and retention by providing a cost-effective means to travel reliably to work.
- **Public Transit Operated** – a public transit system would operate the vanpool program as a part their services offered.
- **Owner Operator** – individuals would purchase or lease the vanpool vehicle and would collect fares from riders. This model is less common as it places the risk upon a private individual.

3.2 Vanpool Benefits

There are multiple benefits to the implementation and operation of vanpools, and those benefits can accrue to those who use the vanpools (both employees and employers), and benefits can accrue to the broader community as well. Some of the benefits are as follows:

- Cost Effectiveness
    - The costs of commuting via private vehicle can be costly, particularly for those in a rural area where commute distances are typically longer (17). Utilizing AAA's average ownership costs per mile from 2025 ($0.77), findings show that the average person commuting using a private vehicle to travel 50 miles roundtrip, five days a week, spends about $38.50 per day, about $808.50 per month, or $9,702 annually (18). This cost includes fixed and variable costs like fuel, maintenance, and insurance. The average vanpool member spends around $90-$120 per month. Therefore, the monthly cost savings are $680 or more.
    - Of all public transit modes reported in the National Transit Database, vanpool had the lowest reported cost to operate per hour at $39.49 in 2021 (19).
- Improves Personal Mobility
    - Vanpooling provides users with a cost effective and reliable form of transportation to work. A vanpool can open employment opportunities to those without access to a private vehicle or public transit.
- Increases Potential Employment Pool
    - A vanpool program can increase the pool of potential employees to employers by providing a reliable form of transportation to employment.
- Reduces Employee Absenteeism and Turnover

    - Providing a reliable form of transportation to work can reduce employee absenteeism and turnover. A 2016 study by the Center for Disease Control and Prevention estimated that companies lose around $1,685 per employee, per year due to absenteeism (20). Employee turnover is estimated to exceed 100% of an employee's annual salary. These costs include the need to train new employees, loss of organizational knowledge, and loss of productivity (21).
- Reduces Wear and Tear on Private Vehicles
    - Utilizing a vanpool program reduces the number of miles driven in a private vehicle. This not only reduces wear and tear on an individual's private vehicle but can also make that vehicle available to others in a household.
- Flexible
    - Vanpool programs provide flexibility to members when compared to fixed route public transit systems which have set stops and cannot deviate from a route. Vanpool members can decide where members can be picked up and dropped off (at home vs. at a park-n-ride or other shared destination) and even whether the pool will deviate on occasion (coffee run, late start at work, social gathering at the end of a week, etc.).

3.3 Funding Sources

Funding is needed for both capital and operating expenses. Capital expenses are related to the purchasing of the vans used in a vanpool program, while the operating expenses are related to the costs associated with operating the vans, including the costs for insurance, fuel, and maintenance (oil changes, tires, etc.).

Passenger or rider fees/fares are generally set based on the number of vanpool members and commute distance. These fees (or fares) typically pay the operating costs for the vanpool, but the passenger fares can be subsidized by employers or other local funds.

For the capital expenses related to purchasing the vans, there are three main sources of funding, which include:

- Federal Transit Administration (FTA) – Section 5307, Urbanized Area Formula Grants

  Section 5307 funding can be utilized by urbanized areas for transit capital, planning, and operating assistance and for transportation-related planning in urbanized areas (incorporated areas with a population of 50,000 or more). The program provides an 80% federal share for capital projects and a 50% share for operating assistance (22).

- FTA – Section 5311, Formula Grants for Rural Areas

  Section 5311 funding can be utilized for capital, planning, and operating assistance to support public transit in rural areas (population less than 50,000). The program provides an 80% federal share for capital projects and a 50% share for operating assistance (23).

- Congestion Mitigation and Air Quality (CMAQ) Funds

  CMAQ provides funding to areas that are in nonattainment or maintenance (former nonattainment areas) for greenhouse gas emissions. CMAQ funding can be used for capital expenses otherwise eligible for FTA funding as long as they provide benefits related to improving air quality (16). These funds are generally available to communities within a metropolitan planning organization (MPO) area.

3.4 Vanpool Considerations

When looking to implement and operate a vanpool program there are certain key elements to consider, which include:

- Organizational Control

  Local or regional control may provide better opportunities to tailor a program to fit area commuter needs, whereas state or third-party control may provide better visibility to a program and provide better access to resources (labor, funding, etc.).

- Vehicle Size

  While larger vans can help keep passenger fares lower, smaller vans are easier to maneuver and may also allow for more flexibility in where riders are picked up (door-to-door vs. van-and-ride).

- Fares/Fees

  Fares/fees are typically based on the number of riders and commute distance.

- Maintenance

  Who is responsible for maintenance on the van? When contracting with a third party, they often take care of the maintenance (oil changes, etc.) for the vehicles, while vans owned by an employer or other organization may require that the vanpool driver assist with ensuring that the van is properly maintained.

- Drivers

  Vanpool drivers are typically volunteers. Vanpool programs often utilize a single driver with one or two backup drivers identified in case they are needed, whereas other programs utilize a driver rotation. A driver often needs to take a driver safety or defensive driving course. A program should consider what incentives will be provided to vanpool drivers (vanpool drivers usually ride for free) and what requirements will be placed upon drivers (training, invoicing, etc.).

3.5 Keys to Success

While planning for the implementation of a vanpool program is important, for the program to continue, there are important factors to consider, including:

- Promoting the Program

  A vanpool program is not a one-and-done process. This type of program will require long-term promotion in order to remain successful. Employers can market the program as part of their recruitment package, through employee events, and through employee communications (newsletters, flyers in an employee breakroom, etc.). Unified branding, including an easily identifiable program logo, website, and branded vehicles, is common practice.

- Guaranteed Ride Home Programs

  A guaranteed ride home (GRH) program provides peace of mind for vanpool participants that they will be able to get a ride home in case of emergency. All programs reviewed had some form of GRH program. These programs had a set number of times per year that a participant could utilize a GRH. Example emergencies included illnesses, family emergencies, and working overtime. Although there may have been a few instances where a transportation network company (TNC) (e.g., Lyft, Uber) was utilized, overall, these programs utilized local taxi companies, company vehicles, or rental vehicles in order to provide rides, as TNCs often do not exist in the rural context.

- Employer Incentives

  Employers considered several incentives to promote vanpool use by employees. These included preferred parking, a vehicle made available for emergency trips, and employee subsidies. Additionally, under the IRS Transportation Fringe Benefits, employees can use pre-tax salary towards public transit or vanpool commuting costs (Internal Revenue Service, 2023). Currently, an employee can set aside up to $300 per month to pay for combined commuter highway vehicle transportation (which includes vanpool) and transit passes and an additional $300 per month for qualified parking (Internal Revenue Service, 2023).

3.6 General Steps to Establish a Vanpool Program

A basic outline of steps required to initiate a vanpool program are as follows:

1. Identify Resources

   Consider funding and staff available to support a program.

2. Identify Employee Transportation Needs

   Gather information on employee needs through surveys, focus groups, or lunch sessions. This feedback can help an agency understand how employees commute to work and at what time, potential commuting challenges including a

lack of transportation options or lack of reliable options, and what could compel an employee to change their current commute mode.

3. Review Commute Mode Alternatives and Determine Which Option(s) Can Best Fit the Needs of Employees (and potential employees), Employers, and the Community

   Alternatives could include things like vanpool, rideshare, public transit, and other modes of transportation. Consider which options are available in your region and which can best meet your needs.

4. Set Program Goals

   Some examples include increased pool of potential employees, reduced employee absenteeism, improving the economics of the region's residents and consequently the region by putting more money back into residents' monthly budgets.

5. Market and Launch Program

   Consider how you will tell people about the program. A variety of methods is best. Marketing can include brochures, posters, emails, lunch presentations, resource fairs, employee onboarding guides, and more. Once you launch the program, continue to market the program.

6. Evaluate the Program

   Evaluate the program periodically, perhaps annually, using employee surveys or focus groups to gather feedback on what's working and what may need improvement.

3.7 Humboldt County and Eureka Employers

A few of the key factors in being able to establish vanpools are that there are employees who commute distances of 20 to 25 miles (or more) one-way, each day, and that there are larger employers, who are employing 100 or more people. These factors are important, as most people will not consider joining a vanpool unless they have a relatively long commute, and most employers will not consider implementing a vanpool program, or promoting vanpooling, unless they expect that they can create three, four, or more vanpools. It should be noted that smaller employers with facilities close to one another could coordinate their efforts to create vanpools.

In reviewing employment information from the Humboldt County area, Figure 4 shows the location of employers and the relative size (number of employees) at each location, while

Figure 5 shows that information for employers in the Eureka area.

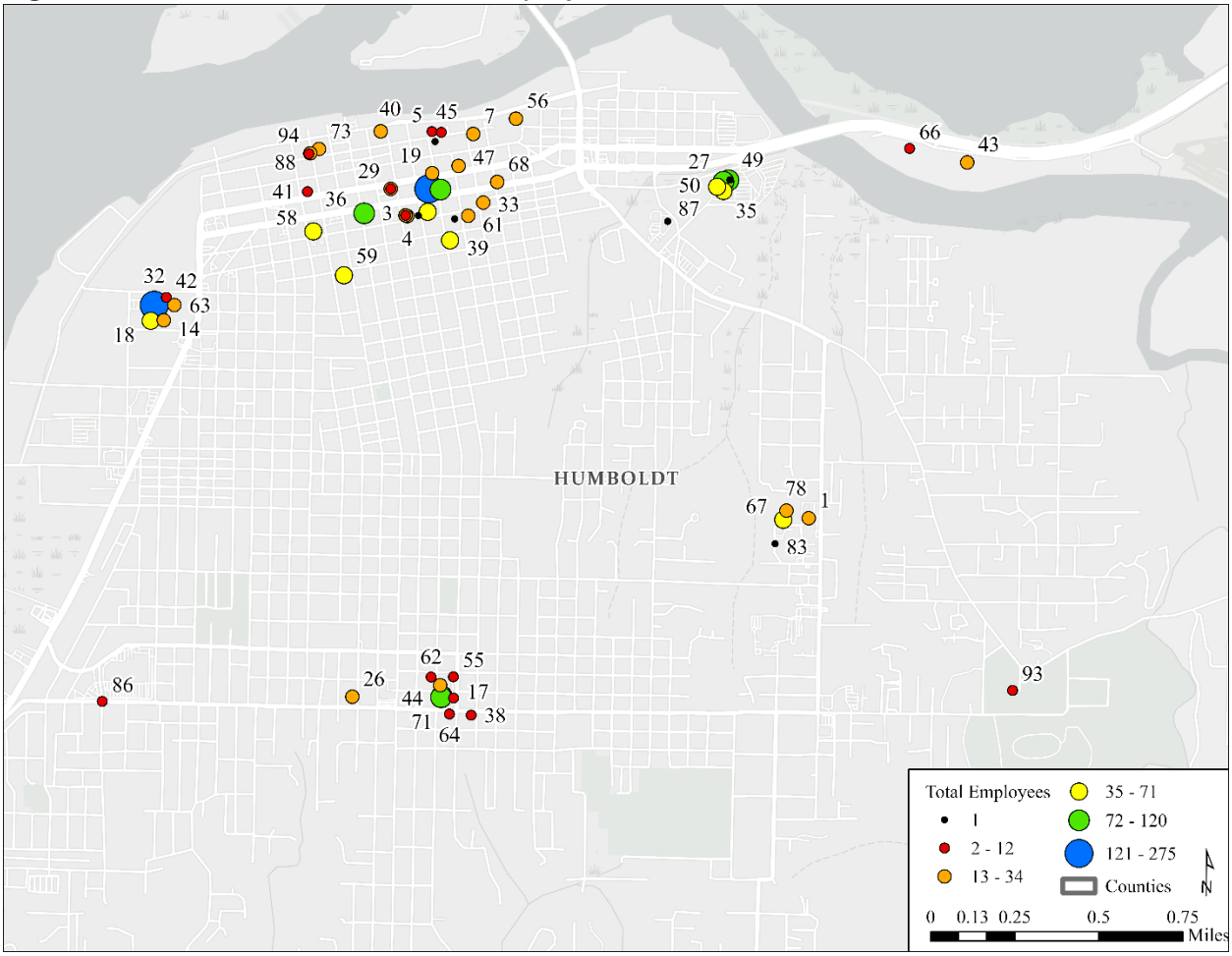

Figure 5: Employers in the Eureka Area

Table 2 provides information regarding the number of employees at each location (employer) noted in Figure 4 and Figure 5. While Table 2 identifies only a few employers with over 100 employees, as noted in Figure 4 and Figure 5, some smaller employers are close to one another, and these employers could potentially collaborate on establishing vanpools.

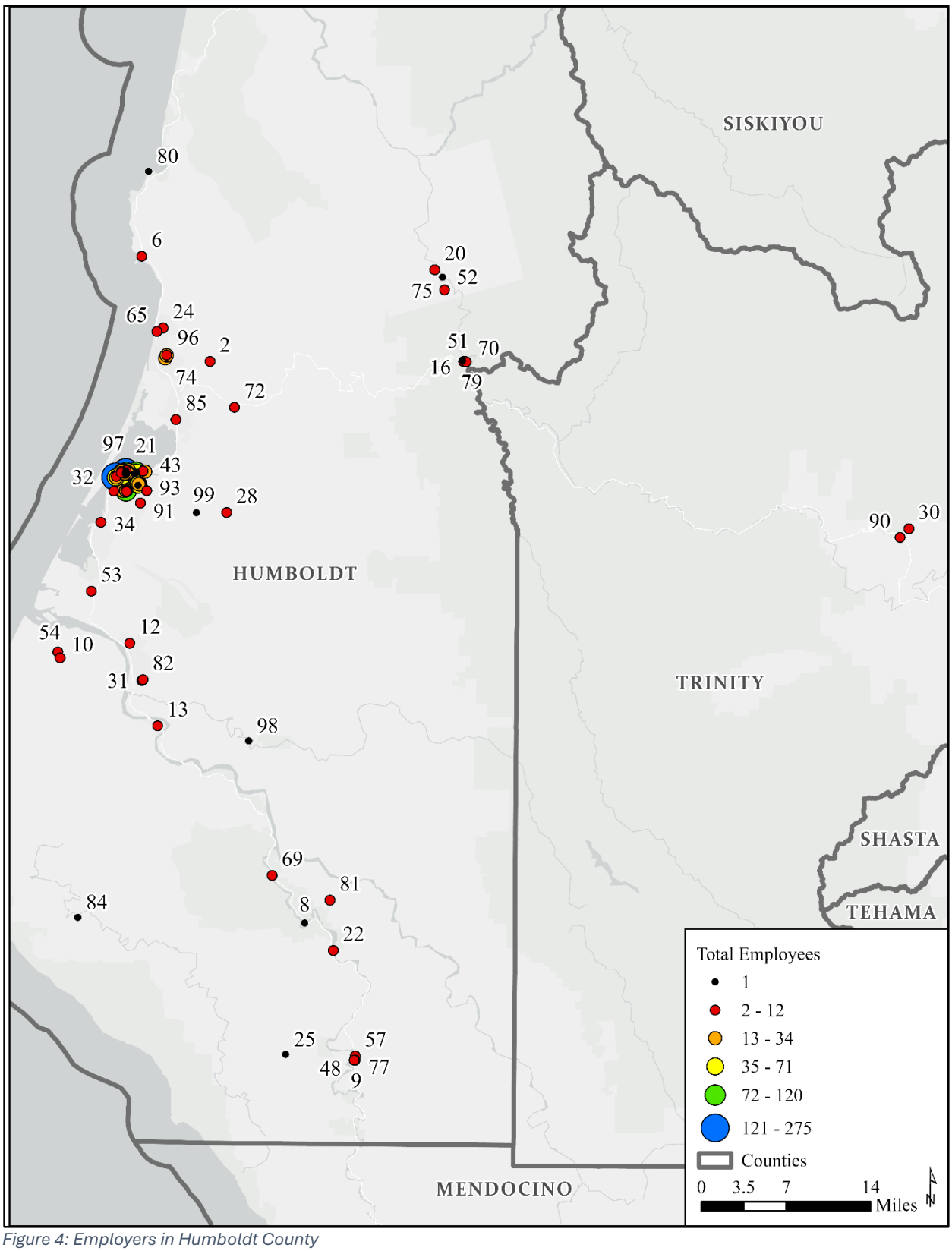

Figure 4: Employers in Humboldt County

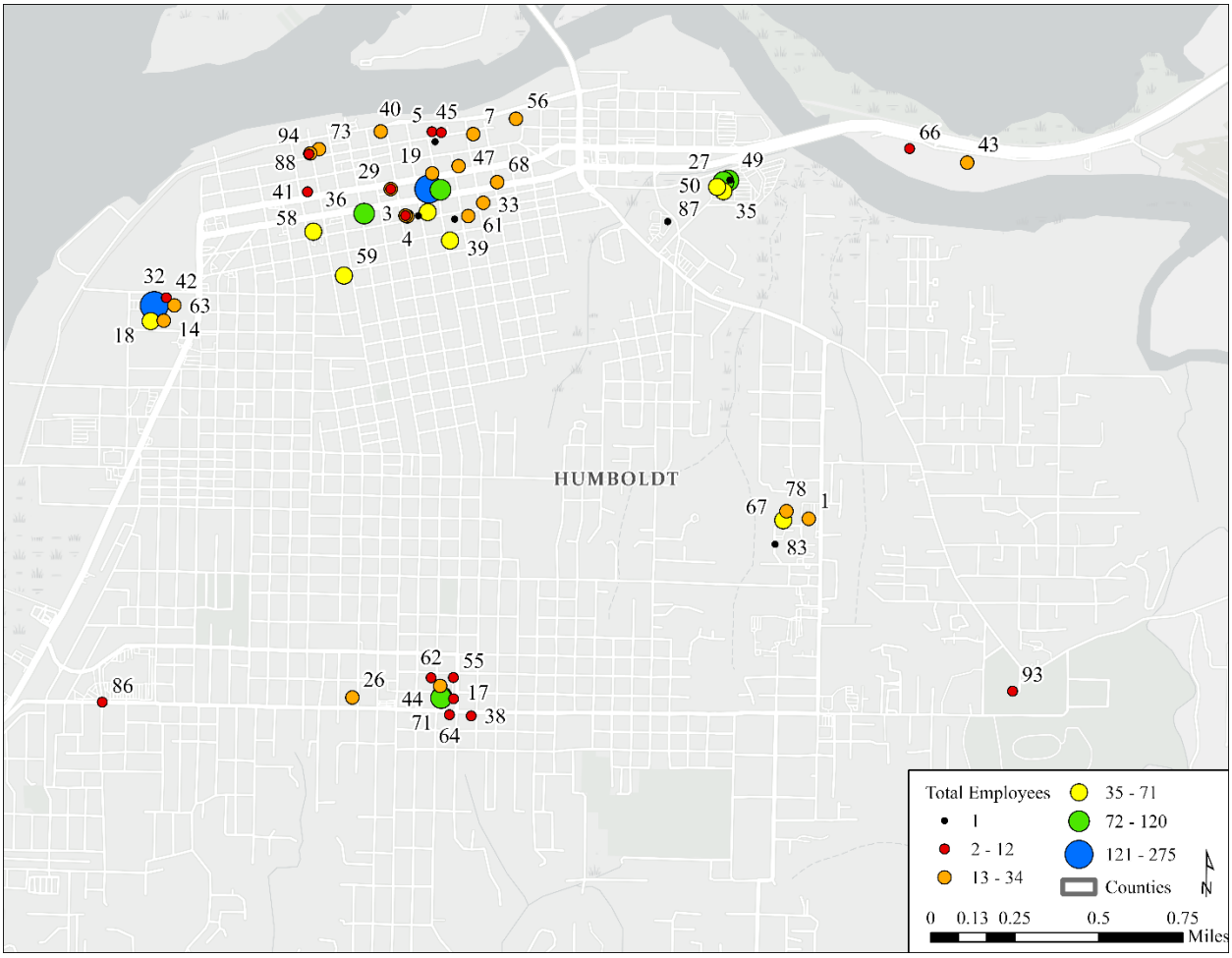

Figure 5: Employers in the Eureka Area

Table 2: List of Humboldt County Departments/Employers with # of Employees

1	No. CA Regional Ctr	30	51	Library - Willow Creek	2
2	McKinleyville Road Barn	8	52	Hoopa Road Barn	6
3	Probation	7	53	Public Works Sign Shop/Bridge Road Barn	10
4	Probation	16	54	Public Works Ferndale Road Barn	6
5	Public Works Building Maintenance	12	55	Alcohol and Other Drugs Prevention Administration	9
6	Library - Trinidad	2	56	Main Library	30
7	Public Works Department	34	57	Public Works Garberville Road Barn	7
8	Myers Flat Fire Protection District	1	58	Humboldt Bay Fire JPA	59
9	Library - Garberville	5	59	Adult Services	51
10	Library - Ferndale	2	60	Library - McKinleyville	4
11	Motor Pool	1	61	DHHS Eligibility Training and Public Authority	28
12	Library - Fortuna	5	62	Healthy Moms/Parent Visitation Facility	8
13	Library - Rio Dell	2	63	Social Services #2	30
14	Social Service - Strg Leased	20	64	Behavioral Health	4
15	Public Health Office	52	65	Animal Shelter	12
16	Willow Creek Fire Protection District	1	66	Murray Field Terminal	4
17	Coroner's Office	6	67	Probation - Juvenile Hall	37
18	Social Services #2	38	68	Transitioned Age Youth	24
19	Information Technology	22	69	Weott Community Services District	5
20	Library - Hoopa	2	70	DHHS - Willow Creek	2
21	County Courthouse	275	71	Clark Complex	77
22	Miranda Community Services District	4	72	Library - Blue Lake	2
23	Probation	14	73	Field Nursing	29
24	Arcata-Eureka Airport Terminal Building	12	74	DHHS	18
25	Briceland Volunteer Fire Department	1	75	DHHS	1
26	Parent Visitation and Mental Health Improvement	20	76	DHHS	1
27	HHS	110	77	DHHS - Admin	5
28	Public Works Freshwater Road Barn	6	78	Probation - Juvenile	17
29	Community Corrections Resource Center, Adult Drug Court & DHHS - Probation	17	79	Sheriff - Willow Creek Substation	8
30	Trinity County Health and Human Services	2	80	Public Works - Parks	1
31	Public Works Rohnerville Road Barn	7	81	Public Works - Office	3
32	Welfare Office	187	82	Sheriff - Swap Farm	5
33	Natural Resources, Public Guardian, Veteran's Services	16	83	Sheriff - Jail	1
34	Agriculture Building	8	84	Public Work s- A. W. Way C. Park	1
35	Elections	71	85	Library - Arcata	7
36	DHHS Admin - Professional Building	118	86	Public Works - Office Trailer	9
37	County Jail	120	87	DHHS	1
38	Behavioral Health Admin	7	88	DHHS - SS - Fam Vis Center	7
39	Wellness Center	57	89	Dhhs	1
40	Environmental Health Offices	30	90	DCSS - Trinity County HHS	2
41	DHHS Call Center	2	91	DHHS	4
42	Welfare Office	11	92	DHHS	1
43	Motor Pool Equipment Maintenance	22	93	Sheriff - Boat Storage	8
44	Clark Complex	95	94	DHHS - SS - Fam Vis Center	17
45	Public Works Materials Lab	12	95	DHHS	3
46	Mental Health Day Treatment (Hope Center)	14	96	Sheriff - McKinleyville Sub	17
47	Public Defender's Office	19	97	Jail	196
48	Garberville Sheriff's Substation	2	98	Public Works - Mtnc Shop	1
49	HHS	112	99	Public Works - Parks	1
50	Child Support Services	54			

Note: The numbers 1-99, in the non-colored columns, reference the locations of the employers as noted on Figure 4 and Figure 5.

3.8 Lessons Learned

Several key lessons learned were identified in the vanpool program case studies which were conducted as part of *Rural Vanpools: Lessons Learned and Their Importance to Rural Employment and Mobility* (12) and can be considered when looking to implement a similar program, such as for Humboldt County.

- Vanpool is often implemented to fill in operational gaps of public transit, including, but not limited to, where public transit does not exist (e.g., often in rural areas), and during times when public transit does not operate (e.g., for second and third shift employees and for those working during the weekend).
- Vanpool seems particularly suited to the following types of employers:
    - Manufacturing/Processing/Industrial Employers
    - Seasonal Employers (ski and snowboard resorts)
    - Federal Employers (military bases)
    - Large "Campus" Employers (casinos, colleges)
- Vanpool program growth takes time, and the use of vanpools can be expected to change over time. When doing employer outreach, finding the appropriate person is often time consuming. Often, a human resource representative or high-level decision maker is the right person to start with. Outreach can take persistence.
- Word of mouth is your best form of marketing. Several vanpool programs noted that once one employer sees the benefits of vanpooling, there tends to be a snowball effect where others want to join. Therefore, perhaps consider partnering with an employer that is interested in providing this mobility to existing and potential employees, as it can help to work out any challenges.
- Marketing efforts should use a consistent brand. Vehicle wraps or vinyl lettering were considered a best practice amongst all vanpool programs interviewed. This also helped remove the stigma that can be associated with a plain-colored van.
- Third-party operators can reduce staffing needs for day-to-day operations of a vanpool program.
- When developing a Request for Proposals (RFP) to implement a vanpool program, consider your region's unique needs and whether any special provisions must be included. Several vanpool programs noted the need for special provisions including American with Disabilities Act (ADA) requirements and snow tires during the winter.
- Do not forget about your users. Ensuring that vanpools remain as convenient as possible is key. Reducing the requirements related to fare collection, reporting, and vehicle maintenance is a good practice. Some vanpool programs offer incentives to drivers (e.g., free fares) to help to compensate them for driving the van.

While this section focused on the potential for implementing vanpools in Humboldt County, the next section focuses on an analysis of the Dial-A-Ride system in the County.

This Page Is Intentionally Blank

4 Dial-A-Ride Analysis

This section highlights the dial-a-ride analysis that was conducted as part of this project. Dial-A-Ride (DAR) systems/services are also known as demand-response systems/services, in that a DAR vehicle will not move unless there is a scheduled ride. This is unlike a fixed-route transit system, where vehicles/buses move around a route at set times, regardless of the number of customers/riders on the bus.

In general, the purpose of this section is to provide a high-level analysis of HTA's DAR system and provide a review of how the cost of the service is divided among certain jurisdictions (governmental entities) in the area, and how the distribution of the costs may be modified moving forward.

4.1 Dial-A-Ride Overview

DAR (demand-response) systems can be open to the public or can be limited to certain "qualified" riders. Because HTA operates fixed-route services in Arcata and Eureka, by law (49 CFR Part 37, see Appendix A) they must provide paratransit services. According to 49 CFR Part 37, "Paratransit means comparable transportation service required by the ADA for individuals with disabilities who are unable to use fixed route transportation systems." (24). The current DAR service is open to persons with a disability "or those who apply for and are determined to be eligible for the service."

In addition to who is served by the DAR service, it is important to know where such service must be provided. Regarding the area to be served, 49 CFR Part 37 (§ 37.131 Service criteria for complementary paratransit) notes the following:

> "(i) The entity shall provide complementary paratransit service to origins and destinations within corridors with a width of three-fourths of a mile on each side of each fixed route. The corridor shall include an area with a three-fourths of a mile radius at the ends of each fixed route.
> (ii) Within the core service area, the entity also shall provide service to small areas not inside any of the corridors, but which are surrounded by corridors.
> (iii) Outside the core service area, the entity may designate corridors with widths from three-fourths of a mile up to one-and one-half miles on each side of a fixed route, based on local circumstances.
> (iv) For purposes of this paragraph, the core service area is that area in which corridors with a width of three-fourths of a mile on each side of each fixed route merge together such that, with few and small exceptions, all origins and destinations within the area would be served." (24)

These definitions of who needs to receive service, and where service needs to be provided, are important aspects as the current DAR system is analyzed.

4.2 History of DAR in Humboldt County

The Humboldt County Association of Governments (HCAOG) has a long history of supporting and working towards efficiencies in paratransit services throughout Humboldt County. For decades, paratransit throughout Humboldt County has been provided by a complex network of public and private organizations. HCAOG has funded DAR service since the early 1990's.

In March of 1990 HCAOG voted to appoint the Humboldt County Association for the Retarded (note this organization has since changed their name to Humboldt Community Access and Resource Center but retained the acronym HCAR), as the Consolidated Transportation Agency (CTSA). At the time, HCAR was one of the private organizations providing paratransit services and served more passengers than the others combined. Appointing HCAR as the CTSA made them eligible to receive State Transportation Act Funds.

Shortly after HCAR was appointed as the CTSA, in July of 1990, the Americans with Disabilities Act (ADA) was passed. This Act had wide-reaching effects including requirements for paratransit services as noted above and in Appendix A. The ADA required transit agencies to submit Complimentary Paratransit Plans. However, even with these planning efforts, there were still gaps in service for those areas where fixed route services did not exist, and the mosaic of providers was still necessary to meet the need.

From 1990 through 2015, HCAOG contracted directly with HCAR, for a portion of the cost to provide paratransit services along the Arcata/Eureka corridor and greater Humboldt Bay region. HCAOG's contribution came through State Transit Assistance (STA) funds.

In April of 1992, HCAOG commissioned the report: Humboldt County Paratransit Coordination and Consolidation Plan Report No. 1. This report found that quality of paratransit service available to an individual in Humboldt County varied widely depending on where they lived, what kind of disability they had, and what social service agencies they may be affiliated with. The greater Humboldt Bay region was particularly concerning because even though it had high population levels, there were a lot of limitations on paratransit. Most notably, Arcata and Eureka DAR services would not go between communities or serve areas outside city limits such as Humboldt Hill, McKinleyville, and Cutten. The following chart (

Table 3) was included in the report:

Table 3: Summary of Paratransit Providers

Agency	Service Area	Type of Service	Hours of Service	Eligible Riders	Estimated Ridership (Monthly)	Operating Cost
Arcata DAL	Arcata City Limits	Demand Response	Mon-Fri 8am-5pm	Only those unable to use Public Transit	50	$23,000
Arcata DAR	Arcata-McKinleyville	Demand response	Mon-Sat Variable	Only those unable to use Public Transit	321	$41,559
Eureka DAL/DAR	Greater Eureka Area	Demand Response	Mon-Sat 7:30am-5:30pm	Only those unable to use Public Transit	4500	$197,192
Fortuna Senior Bus	Fortuna City Limits	Demand Response	Mon-Fri: 9am-4pm Sat-Sun: 10am-3pm	Seniors (60+) or Disabled	1055	$17,493
Quail/RSVP	Highway 101 from Benbow to Weott	Deviated Fixed Route	Mon-Fri: 8am-5pm	Seniors (60+) or Disabled	32	$51,529
Redwood Care Centers	Eureka, Arcata, & Fortuna	Demand Response	Mon-Sun 7:30am-6pm	Facility Clients	160	$3,700
United Indian Lodge	Humboldt County	Demand Response	Mon-Fri: 7am-9pm	Native Americans	N/A	$4,583
Kings View Mental Health	Arcata, King Salmon	Demand Response	Mon-Fri: 8:30am-4:30pm	Program Clients	220	$7,984
Adult Day Health Care	Arcata-McKinleyville	Deviated Fixed Route	Mon-Fri: 8:30am-10:30am, 2pm-5pm	Day Care Clients	760	$33,885
HCAR	Greater Humboldt Bay	Deviated Fixed Route	Mon-Fri: 5:30am-7pm Sat: 7:30am-6:30pm	Seniors & Disabled	16,800	$319,843
Humboldt Senior Center	Eureka to Ferndale	Deviated Fixed Route	Mon-Fri: 8:30am-10:30am, 1:30pm-4pm	Disabled (18+)	2,112	$81,943

Source: Humboldt County Paratransit Coordination and Consolidation Plan Report No. 1

While HCAR was the only private organization contracting directly with HCAOG, other private organizations such as the Humboldt Senior Resource Center were receiving Transit Development Act Funds through contracts with various cities.

From 1990 to 2016, HCAR remained the CTSA and received funding to provide the supplemental DAR/paratransit services in the greater Humboldt Bay area. During this same period, concerns regarding the overall efficiency of the DAR program, areas of service and costs came up several times.

In the Transit Development Act Performance Audit for Fiscal Years 2004 through 2007, it was recommended that HCAOG sponsor a study to improve coordination of demand-response services and review alternative transportation options, including the consolidation of DAR and other paratransit services. In 2010, HCAOG sponsored a consolidation study, which concluded that consolidation was not necessarily required but that a further study was needed to standardize some administrative functions such as data reporting protocols and responsibilities for uniform service throughout the region.

In 2015, another study, the Dial-A-Ride Contracting Review, was conducted. Key recommendations stemming from this study related to consolidating DAR contracts and management, better defining the role of CTSA, and tying costs more closely to performance.

In 2017, HTA became the CTSA, and DAR services were consolidated and contracted out to City Ambulance of Eureka. HCAOG entered into the funding agreement for DAR using STA funds. Based on the review of the DAR service as a part of this effort, which was initially shared with HTA in November 2024, HTA brought the DAR service "in house" starting July 1, 2025. Thereafter, a discussion on the funding of the DAR services commenced.

The Humboldt County Transit Development Plan 2023-2028, adopted by HCAOG in October 2023 (25), called attention to funding issues with the current allocation for the DAR program. The FY 2023-24 DAR funding agreement based on the established formula results in the following total funding allocations:

- City of Eureka (HTA) – 58 percent
- County of Humboldt – 18 percent
- HCAOG – 14 percent
- City of Arcata – 10 percent

However, the report notes that a key issue with this funding allocation is that it does not reflect that the cost of service varies substantially between various communities and service areas. This issue has real ramifications for overall transit services. As Eureka expends all Local Transportation Funds (LTF) for transit purposes, any additional funds required for DAR limits Eureka's ability to fund other transit service expansions. The recommendations included a detailed evaluation of the DAR program.

4.3 Examples of Typical DAR (or Transit) Cost Allocations

In a presentation about cost allocation, the National Aging and Disability Transportation Center notes that whatever cost allocation model is used, it should be: "Logical, Defensible, Consistent, and In Writing." (26). The National Rural Transit Assistance Program (National RTAP) noted that, "Cost Allocation (is) the act of taking a sum of operating costs and distributing that sum to individual transit routes, transit services, or jurisdictions" (27). In fact, National RTAP has a Cost Allocation Calculator that could be used to calculate and allocate the costs for HTA's DAR service (services). While not enough information was received to do a robust analysis herein, a couple of key points can be noted.

The costs of a transit system can be fixed or variable. Fixed costs, such as insurance and administrative costs, typically remain the same in broad ranges of service levels. Variable costs change directly with the amount of service provided and can be tied to either the number of hours of service provided (drivers' wages) or the mileage of the service (fuel and maintenance). In general, the:

Annual Cost for a System or Route = (Unit cost of mileage related expenses x miles) + (Unit cost of hour related expenses x hours) + (Fixed expense % of total vehicle expenses)

As noted above and herein, no costs are allocated based on the number of rides. This is because a "ride" can be short or long, both in terms of mileage (distance/length of the ride) and of the time of the ride. In addition, as noted herein, it is important to remember that some of the current DAR service is "required," while much of the service is "not required," or could be considered additional or "extra" service, as it goes above the ADA requirements.

4.4 HTA DAR Information/Data

LSC Transportation Consultants, Inc. (LSC), provided an overview of the DAR system in the Humboldt County Transit Development Plan (TDP) 2023-2028 [(25) pages 118-121]. In addition, LSC highlighted where transit services and DAR services may be especially needed by analyzing census tract data through the Transit Needs Index (see Table 4, Page 11 and Figure 2, Page 13 of the TDP, also included in Appendix B of this report).

In addition to the information provided by the TDP, the technical assistance team received three months (March, April, and May of 2023) of DAR ridership information from HTA. This information was analyzed to determine general ridership patterns and served as a basis for how to potentially allocate the costs of the DAR service. The full analysis can be found in Appendix C, but some of the highlights of the analysis for the three-month period include the following:

- Of the 4,012 completed rides, only 26% of the hours and mileage associated with those rides remained within the same jurisdiction (a "jurisdiction" being either Arcata,

Eureka, or Humboldt County). That is to say that most rides (74%) crossed jurisdictions (jurisdictional boundaries).

- Rides within Eureka accounted for 44.84% of the total completed rides, but those rides accounted for only 22.6% of the total hours, and 14.6% of the miles.
- Rides within Arcata accounted for 5.16% of the total completed rides, 2.25% of the hours, and 1.78% of the miles.
- Rides between Arcata and Eureka (and Eureka to Arcata) accounted for 19.02% of the rides, 27.98% of the hours, and 31.68% of the miles.

When analyzing the rides and their origins and destinations, it is important to remember where the DAR service (or complementary paratransit services) needs to "legally" operate. Figure 6 shows the Arcata fixed route transit system and provides the legally required ¾ mile buffer around the fixed routes. Figure 7 provides the same information for the Eureka fixed route service.

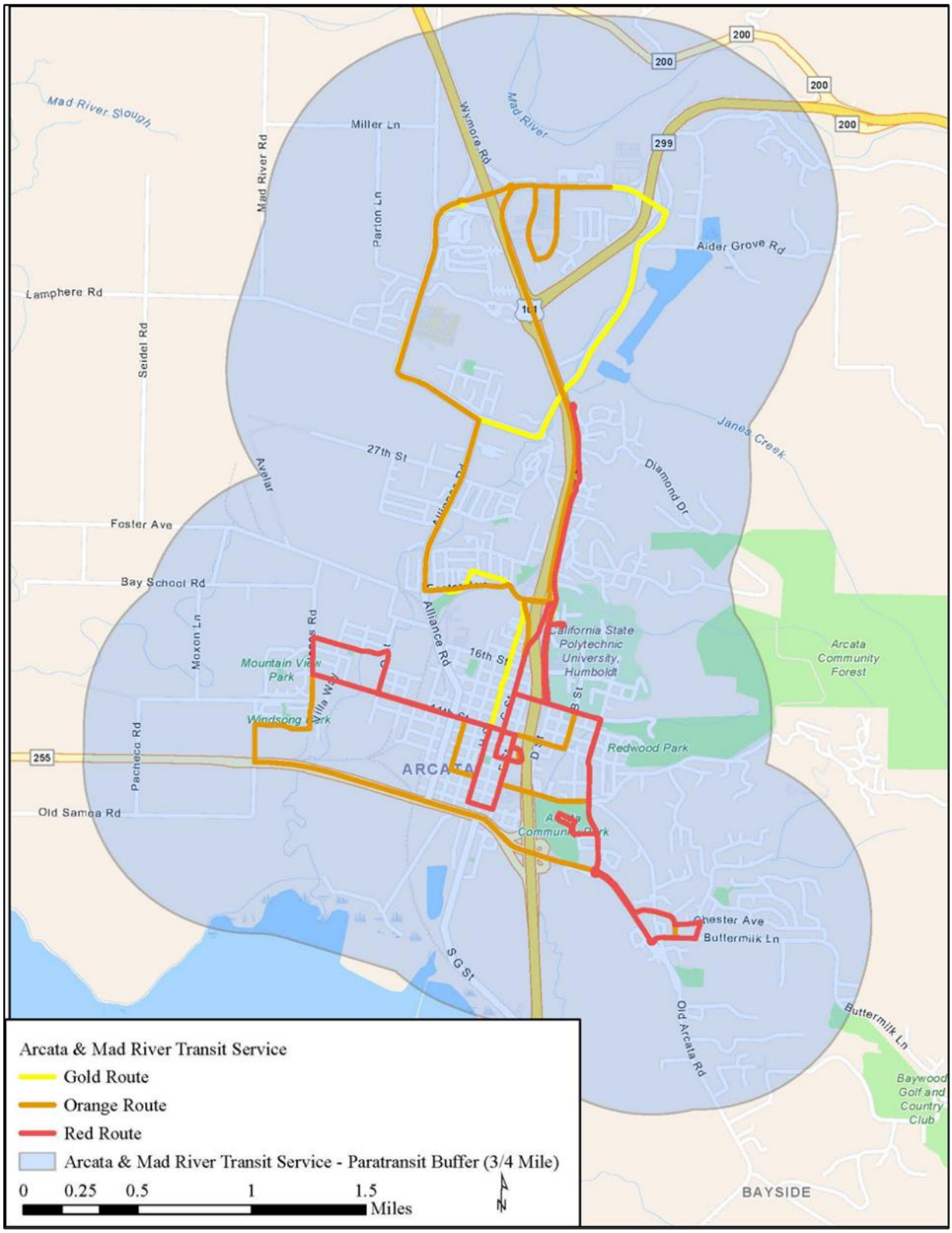

Figure 6: Required Paratransit Service Area for Arcata/Mad River Transit Service

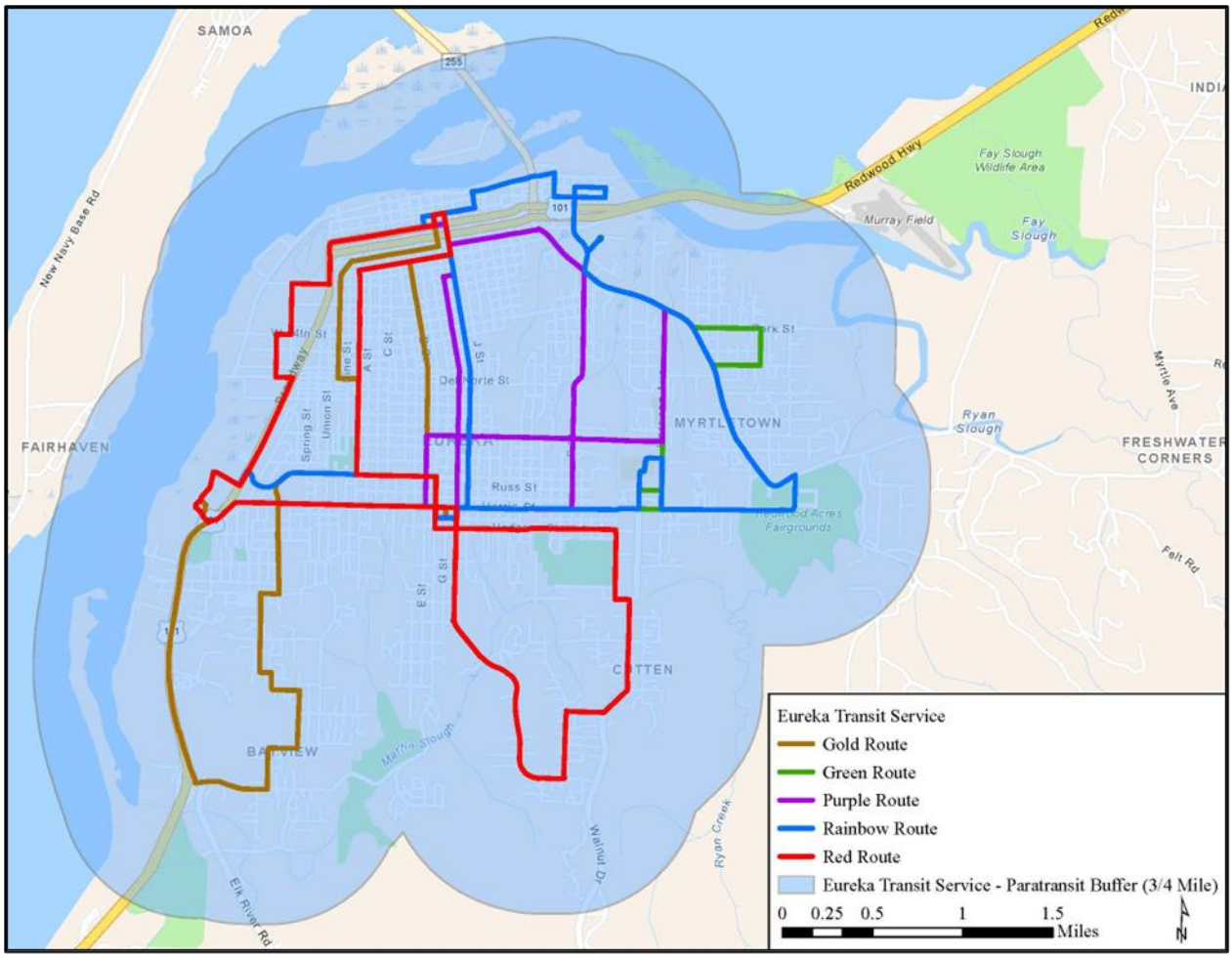

Figure 7: Required Paratransit Service Area for Eureka Transit Service

The required areas of service overlap largely with the areas (census tracts) that have the highest scores (a score of "5") related to the Transit Needs Index (Table 4 and Table 5). The only census tracts that fall outside of the area that would be covered by the required paratransit service are two tracts in the McKinleyville area (Central McKinleyville and West McKinleyville) and two tracts in Fortuna (Fortuna/Newburg and South Fortuna). The two tracts in Fortuna would be covered by Fortuna Transit, although there may be slight differences between the city limits (the boundary for Fortuna Transit) and the two noted census tracts. It is important to remember that the Transit Needs Index looks at five factors (Table 4), while required paratransit services are based/required only where a transit service's fixed route(s) operates and the needs of persons with a disability (Table 5).

Table 4: Transit Needs Index Sorted by Overall Score

Census Tract		Persons with a Disability Rank	Senior Adults (65+) Rank	Persons Below Poverty Level Rank	Zero Vehicle Households Rank	Youth (Under 18 Years) Rank	Overall Transit Needs Index Rank
5	Eureka/Old Town	5	5	5	5	5	25
3	Eureka/Rosewood	5	5	4	4	4	22
2	Eureka/Henderson Center	5	4	3	4	5	21
1	Eureka/Old Town	4	3	4	5	3	19
6	Eureka	5	4	2	2	4	17
105.03	Central McKinleyville	3	3	3	3	4	16
10.01	Arcata/Downtown	2	3	5	3	2	15
7	Eureka/Zoo	3	4	2	1	3	13
10.02	Arcata/HSU	2	1	3	4	1	11
11.02	Arcata/Alliance	2	2	4	1	2	11
11.03	Arcata	2	2	3	2	2	11
4	Eureka/Herrick Ave	3	2	2	1	2	10
109.01	Fortuna/Newburg	2	2	2	2	2	10
105.04	W. McKinleyville	2	2	2	1	2	9
110	S. Fortuna	2	2	1	1	3	9
8	Myrtletown	2	2	1	1	1	7
9	Bayside/Jacoby Creek	1	1	1	1	1	5
12	Arcata/Blue Lake	1	1	1	1	1	5
13	Arcata/Samoa	1	1	1	1	1	5
101.02	Willow Creek	1	1	1	1	1	5
102	Trinidad/Big Lagoon	1	1	1	1	1	5
103	Blue Lake	1	1	1	1	1	5
104	Clam Beach	1	1	1	1	1	5
105.02	E. McKinleyville	1	1	1	1	1	5
106	Freshwater	1	1	1	1	1	5
107.01	Humboldt Hill	1	1	1	1	1	5
107.02	Pine Hills/Fields Landing	1	1	1	1	1	5
108	Fortuna/Loleta	1	1	1	1	1	5
109.02	Fortuna/Hydesville	1	1	1	1	1	5
111	Rio Dell/Scotia	1	1	1	1	1	5
112	Petrollia/Ferndale	1	1	1	1	1	5
115.01	Garberville/Redway	1	1	1	1	1	5
115.02	Shelter Cove	1	1	1	1	1	5
116	Garberville/Alderpoint	1	1	1	1	1	5
9400	Hoopa	1	1	1	1	1	5

Table 5: Transit Needs Index Sorted by Score/Rank of Persons with a Disability

Census Tract		Persons with a Disability Rank	Senior Adults (65+) Rank	Persons Below Poverty Level Rank	Zero Vehicle Households Rank	Youth (Under 18 Years) Rank	Overall Transit Needs Index Rank
2	Eureka/Henderson Center	5	4	3	4	5	21
3	Eureka/Rosewood	5	5	4	4	4	22
5	Eureka/Old Town	5	5	5	5	5	25
6	Eureka	5	4	2	2	4	17
1	Eureka/Old Town	4	3	4	5	3	19
4	Eureka/Herrick Ave	3	2	2	1	2	10
7	Eureka/Zoo	3	4	2	1	3	13
105.03	Central McKinleyville	3	3	3	3	4	16
8	Myrtletown	2	2	1	1	1	7
10.01	Arcata/Downtown	2	3	5	3	2	15
10.02	Arcata/HSU	2	1	3	4	1	11
11.02	Arcata/Alliance	2	2	4	1	2	11
11.03	Arcata	2	2	3	2	2	11
105.04	W. McKinleyville	2	2	2	1	2	9
109.01	Fortuna/Newburg	2	2	2	2	2	10
110	S. Fortuna	2	2	1	1	3	9
9	Bayside/Jacoby Creek	1	1	1	1	1	5
12	Arcata/Blue Lake	1	1	1	1	1	5
13	Arcata/Samoa	1	1	1	1	1	5
101.02	Willow Creek	1	1	1	1	1	5
102	Trinidad/Big Lagoon	1	1	1	1	1	5
103	Blue Lake	1	1	1	1	1	5
104	Clam Beach	1	1	1	1	1	5
105.02	E. McKinleyville	1	1	1	1	1	5
106	Freshwater	1	1	1	1	1	5
107.01	Humboldt Hill	1	1	1	1	1	5
107.02	Pine Hills/Fields Landing	1	1	1	1	1	5
108	Fortuna/Loleta	1	1	1	1	1	5
109.02	Fortuna/Hydesville	1	1	1	1	1	5
111	Rio Dell/Scotia	1	1	1	1	1	5
112	Petrollia/Ferndale	1	1	1	1	1	5
115.01	Garberville/Redway	1	1	1	1	1	5
115.02	Shelter Cove	1	1	1	1	1	5
116	Garberville/Alderpoint	1	1	1	1	1	5
9400	Hoopa	1	1	1	1	1	5

4.5 Funding the DAR Service

As we analyze the funding of the DAR service, it is important to consider what services are required, and what services go beyond the requirements. The latter could be thought of as "premium service."

Appendix A notes the requirements for the Americans with Disabilities Act (ADA) complimentary paratransit service in Arcata and Eureka. It includes information from FTA Circular 4710.1 ADA: Guidance (28). As previously discussed, the current DAR service exceeds what is required by 49 CFR Part 37 based on where it provides service. Therefore, as noted in the Circular [Chapter 8, Section 8.7 Exceeding Minimum Requirements (Premium Service)], the following are examples of services that can be viewed as a form of premium service:

- Same-day trips
- "Will-call" trips
- Trips beyond the defined service area
- Trips before or after the established service hours

Because premium services are optional under 49 CFR 37.131(g) and otherwise do not fall under the complementary paratransit requirements, transit agencies may charge higher fares for premium service trips. For example, agencies may charge higher fares for trips requested on the same day of service. The exact fare to be charged for this extra service is a local decision.

FTA Circular 4710.1 also describes the rules regarding fares for paratransit services. Section 8.4.6 Fares, notes, "The fare for a trip charged to an ADA paratransit eligible user of the complementary paratransit service shall not exceed twice the fare that would be charged to an individual paying full fare (i.e., without regard to discounts) for a trip of similar length, at a similar time of day, on the entity's fixed route system" (28). With the Arcata/Mad River and Eureka transit systems charging $1.75 and $1.70, respectively, for a ride on their fixed route services, a paratransit (or DAR) ride could be no more than $3.50 or $3.40 per ride. This is slightly more than the current $3 per ride fare being charged.

It is important to remember that fare revenue typically covers a small percentage of the overall costs of a transit system. In general, HTA has an overall farebox recovery (the percentage of overall costs covered by fares) of around 15 percent. Therefore, Federal, State, and local funds need to cover the remaining costs of the transit system.

In the agreement between the Humboldt Transit Authority, City of Arcata, County of Humboldt and the Humboldt County Association of Governments (HCAOG) covering FY24 (July 1, 2023 – June 30, 2024), the cost of the DAR service (a not to exceed amount of $889,073) was divided between the City of Arcata (10.03%), Humboldt Transit Authority (57.97%), County of Humboldt (18.37%) and HCAOG (13.63%). In the Humboldt County

Transit Development Plan 2023-2028 (25), LSC Transportation Consultants, Inc. provided two scenarios for allocating the cost of the DAR service, which showed the allocations as noted in Table 6.

Table 6: Current and Potential DAR Cost Allocations

Total Cost Allocation	Existing Allocation	Example Scenario 1	Example Scenario 2
Eureka/HTA	58%	29%	46%
Arcata	10%	6%	12%
Humboldt County	18%	18%	15%
HCAOG	14%	47%	26%

As noted by LSC, Scenario 1 would be to simply apply the percentage of vehicle hours in each trip category. Another scenario (Scenario 2) would be to use the vehicle hour data as one factor and weigh it equally with the proportion of ADA-certified passengers in each jurisdictional area.

When researching a method to allocate the costs for the service, it is important to remember that a "ride" or "trip" or an "unlinked passenger trip" does not by itself generate a significant cost. Rather, it is a combination of the mileage and time used by that trip that creates the cost. For example, one "ride" may mean taking one person five or six blocks in one or two minutes. Another "ride" could entail taking one person 14 miles, taking 45 to 60 minutes of time. Costs for the drivers, typically the single highest operating expense for a transit system, are typically based on hours of service. Other operating costs, such as fuel and maintenance, are based on milage. Therefore, allocating costs on a combination of hours and mileage is the way most systems allocate costs (although there can be very elaborate equations used to allocate costs).

An analysis of the completed rides from the HTA DAR service for the March – May 2023 period (Appendix C) provides the information noted in Table 7.

Table 7: DAR Service Analysis

Origin-Destination	% of Rides	% of Miles	% of Hours	Avg % Hours + Miles
A to A	5.16%	1.78%	2.25%	2.02%
A to E	9.75%	15.77%	13.85%	14.81%
A to O	5.63%	9.25%	8.72%	8.99%
E to E	44.84%	14.60%	22.60%	18.60%
E to A	9.27%	15.91%	14.13%	15.02%
E to O	7.05%	12.80%	11.60%	12.20%
O to A	5.28%	9.13%	8.15%	8.64%
O to E	8.33%	15.36%	13.22%	14.29%
O to O	4.69%	5.40%	5.48%	5.44%
TOTAL	100%	100%	100%	100%

Note: "A" is Arcata, "E" is Eureka and "O" is other or Humboldt County

The service within Arcata ("A to A") constitutes just over 2 percent of the hours and miles of the total, and service within Eureka ("E to E") is approximately 18.6 percent of the hours and mileage of the DAR total. These two "required" paratransit/DAR services account for 50 percent of the DAR rides (completed rides), yet account for only 20.6 percent of the hours and mileage of the DAR service. Putting it another way, nearly 80 percent of the expenses of the DAR service are for "extra" or "non-required" services. Of note is that the service between Arcata and Eureka, which is not required, accounts for 19 percent of the ridership and 30 percent of the expenses. Based on the information in Table 7, these "extra" services would be considered the hours and mileage outside of the areas required by the paratransit requirements, which constitutes 80 percent of the cost of the current DAR service. It could be argued, therefore, that Humboldt County, and/or HCAOG should fund these services.

When deciding whether HCAOG should be part of the funding mix, it is important to remember that HCAOG is a Joint Powers Agency composed of the seven incorporated cities (Arcata, Blue Lake, Eureka, Ferndale, Fortuna, Rio Dell, Trinidad), and the County of Humboldt. It is the designated Regional Transportation Planning Agency (RTPA) as well as the Service Authority for Freeway Emergencies (SAFE). HCAOG's activities carry out the policies and implement actions that the Board adopts in the Regional Transportation Plan (RTP). HCAOG's regional transportation goal is for Humboldt County to have a carbon-neutral, multi-modal transportation system that is comprehensive, safe, sustainable, and equitable for all. The agency is responsible for programming specific public funds to improve local streets, roads, and state highways, as well as multi-use trails, public transportation, and active transportation amenities. The agency performs planning activities to encourage more sustainable transportation, accessible destinations, and more walkable neighborhoods. Therefore, HCAOG has a vested interest in providing a sustainable connection between communities, like Arcata and Eureka, with public transit.

As noted in Table 6, Scenarios 1 and 2, HCAOG funding to the DAR service would significantly increase. The source of funds that HCAOG uses to pay their share of DAR is Local Transportation Funds. These regional funds are used to partially support HCAOG operations and are a major source of transit funding. When HCAOG uses these funds for DAR, there is less to allocate to general transit operations. Therefore, unless HCAOG can access funds that would otherwise not be available to Humbolt County, HCAOG should not be involved in the funding of the DAR service, which would leave dividing up the costs between Arcata, Eureka, and Humboldt County.

Based on the potential funding scenarios noted in Table 6 and the analysis of rides noted in Table 7, a funding/cost allocation for the existing DAR service should be more like that shown in the rightmost column of Table 8 (allocating costs based on both hours and miles).

Table 8: Updated DAR Funding/Cost Allocation

Total Cost Allocation	Existing Allocation	Example Scenario 1	Example Scenario 2	Based on Hours/Miles
Eureka/HTA	58%	29%	46%	19%
Arcata	10%	6%	12%	2%
Humboldt County	18%	18%	15%	79%
HCAOG	14%	47%	26%	

Note: "Example Scenarios" from Humboldt County 2023 TDP

While allocating the funding/costs of the DAR service based on hours and mileage would be a departure from how the costs have been allocated in the past, it highlights the fact that most of the costs associated with the DAR service are for rides/services that go beyond what is required by law (regulations). Table 8 also highlights the fact that Eureka (the City of Eureka) is currently paying more than what may be considered its "fair share" based on hours and miles, and that this detracts from their overall Eureka Transit Service (ETS) fixed-route service. Because so much of Eureka's budget goes to DAR, it may be difficult for them to address unmet fixed route transit needs, which include running later into the evening/night, and increasing frequency/reducing headways on the fixed-route service.

4.6 Conclusions and Recommendations

Based on the information received and analyzed, it is apparent that HTA's DAR service goes above and beyond what is required by law of a complementary paratransit service. Primarily, the DAR service goes farther into areas (into the county and unincorporated areas) than is required. This is not necessarily unique to a rural area like Humboldt County, as in many rural areas/counties, populations are dispersed, and services are often expected to cover large areas (service areas). This does become a challenge in providing and funding a service that goes beyond what is required by ADA, however.

In reviewing information from the recent TDP, it would appear that limiting the DAR service to the required areas would address the needs of the majority of people with disabilities as highlighted in Table 4 and Table 5, and **Error! Reference source not found.** (Appendix B). However, limiting the service may cause issues for those with disabilities in the McKinleyville area. Providing DAR services beyond what is required does lead to additional expenses, with roughly 79% of the expenses (hours and mileage) being spent on non-required service.

As noted in the analysis of DAR ridership for the months of March – May 2023 (details in Appendix C), 50 percent of the rides occur within the areas where DAR (or paratransit) services occur (within Arcata or Eureka), but those rides account for only approximately 21 percent of the expenses (the hours and mileage of the DAR service). Therefore, the costs of the DAR service and how those costs are shared among the various jurisdictions/governmental entities should be reevaluated, and the distribution/sharing of the expenses should be based on the hours and mileage associated with the service, and

not on the number of rides provided, nor population of persons with a disability within the jurisdiction.

While the analysis was based on only three months of data, if the patterns noted are indicative of annual travel patterns, 80 percent of the cost of the DAR service is spent on rides (or on service to areas) that are not required by law/regulation. As noted, these "premium services" could continue to be provided, but with a higher fare for those who choose to ride on those non-required services. It is noted, however, that many of the people who rely on DAR services are likely to be on a fixed or limited income, thus an increase in fares may be a challenge. It would need to be decided if the various jurisdictions wanted the customers/riders to pay the increased fare for the "premium service" or would want to subsidize the fare for the premium or "non-required" service.

Further, while this analysis did not investigate the performance of the contractor currently providing the DAR service, the analysis noted that the current performance of just over three rides per hour is just above the contract minimum. Based to an extent on the analysis herein, which was provided to HTA in November 2024, the decision was made to bring the DAR services "in-house." In other words, as of July 1, 2025, HTA operates the DAR.

Finally, while this effort was not meant to be an extensive review of the DAR operations, this limited analysis highlights a few key points:

- Providing supplemental DAR services beyond those legally required is creating cost imbalances between jurisdictions and emphasizes the fact that 80% of DAR costs are generated by non-required services. This limits resources for improving general transit services within Eureka and other communities.
- Continuing DAR services at the current levels and with the current fare structure is not fiscally sustainable.
- HCAOG should be removed from DAR contributions, consistent with how DAR operates in other regions.
- A working group should be convened to make recommendations on how to best align services and financial resources. The working group would advise on:
    - The costs of the DAR service and how those costs are shared among the various jurisdictions/governmental entities. The distribution/sharing of the expenses should be based on the hours and mileage associated with the service, and not on the number of rides provided, nor population of people with a disability within the jurisdiction.
    - If non-required supplemental services should be provided, and if so, should premium rates be applied?
    - Are there other more cost-effective ways that individuals in premium service areas can access transportation other than DAR?
    - Are there other state funding sources that could be leveraged to provide service that connects the communities?

While this section provided a high-level overview of the DAR service in Humboldt County, the next section focuses on the fixed route services in part of the County, the City of Eureka.

5 Eureka Transit Service Analysis

While the Humboldt Transit Authority (HTA) operates many routes and services in the Humboldt County area, there was a request to focus an analysis on the fixed routes (fixed route services) in Eureka (the Eureka Transit Service, or "ETS"). This section summarizes the current Eureka system and provides recommendations on modifications that can be made to improve services and potentially increase ridership.

5.1 Current System

As of the review in 2025, ETS operates six days per week, with weekday services (Monday – Friday) available from 7:00 am – 6:00 pm, and Saturday service available from 9:00 am - 5:00 pm. Three routes, the Green, Purple, and Red, operate during weekdays, with the Gold Route operating on weekdays and Saturdays, and the Rainbow route operating only on Saturdays. All routes, except the Green Route, utilize the downtown Eureka Transit Center stop at 3rd Street and H Street as a transfer point. All routes are currently hour long "loop routes," in that the buses (routes) do not remain on one or two roads but utilize multiple roads as they wander through parts of the community to serve multiple stops.

5.2 Current Service Analysis

HTA provided six months of ridership data (November 2024 – April 2025) from ETS to analyze the weekday and Saturday services (see Appendix D for additional information). Therefore, 130 weekdays and 26 Saturdays of service were available for analysis. For each route, data from bus stops on the route included the number of people getting on or off at each stop, as well as the total number of "activities" at each stop.

The first task once the data was received was to sort the stops based on the total number of activities, the number of people boarding or de-boarding at each stop. Stops that were served by multiple routes were combined to show their relative importance to the system, knowing that there were certain stops where transfers took place between routes, so that the travelers could get to their destination(s).

There are 128 stops, in total, on the four routes that comprise the ETS weekday service. The analysis indicates that only about 26 percent of all stops have 10 or more activities per day. That is to say that only 33 of the 128 bus stops have ten or more people getting on or off at that stop. A similar number of stops, 30 of 128 bus stops, have only one activity per day. So, while one-quarter of all weekday bus stops are heavily used, nearly one-quarter of bus stops are rarely used, with the rest of the stops somewhere in between these two levels of use.

The bus stop analysis goes on to indicate that 58 of 128 (45%) weekday bus stops account for just under 90% of all activities. This is to say that 55% of bus stops could be eliminated, with potentially only 10% of ridership being lost. It is noted that some of the lower performing stops are in between higher performing stops, so it may not make too much of a

difference in timing to eliminate these lower performing stops unless significant changes are made to the routes, which is noted later in this section.

For the service provided on Saturdays, there are a total of 69 stops, and 32 of those stops, or 46% of the stops, account for 88% of all activities. So, as with the weekday service, over half of the stops could be reduced and only about 10 percent of the ridership may be lost. As with the weekday service, the Saturday service has lower performing bus stops located between higher performing stops. However, unlike the weekday service, a geographic analysis of Saturday bus stops was not conducted. This was based on the limited number of routes on Saturdays, as well as input from HTA's General Manager.

5.2.1 Geographic Analysis of Weekday Bus Stops

To determine if lower performing bus stops could be eliminated, and bus routes modified, Google Earth was utilized to first map all bus stops, and then lower performing stops were eliminated to see what stops remained. Stops were eliminated to reflect stops that allowed 95%, 90%, 85% and 80% of analyzed activity levels (current ridership). It is important to note that for this analysis no information was known about the people getting on or off the bus at the lower performing stops. No information was gathered regarding whether any of the riders at these stops have a disability that would make it difficult for them to get to another stop, or if a rider may have to request DAR services if a bus stop were eliminated. The analysis simply looked at the number of activities (people getting on or off) at each bus stop for the period analyzed (more information in Appendix D).

For example, Figure 8 indicates which bus stops need to receive service to achieve 95% of current ridership, based on the analysis of the November 2024- April 2025 ridership data. The corresponding weekday bus routes that serve those stops are also included in Figure 8. Figure 9, Figure 10, and Figure 11 highlight the bus stops needed to retain 90%, 85% and 80%, respectively, of current ridership. This analysis assumes that ridership would not decrease from bus stops being eliminated. While it may be difficult to note all the stops being eliminated based on the size of the figures in this document, one item that is easier to see from reviewing Figure 8 - Figure 11 is that many of the bus stops in the southern part of the routes (the Eureka community) are eliminated as potential ridership decreases from 95% to 80% of current ridership. In Figure 11, only three stops remain south of Harris Street, providing a visual cue that most of the stops in the southern part of the community, and the southern parts of the Gold, Green and Red Routes, are those with limited ridership.

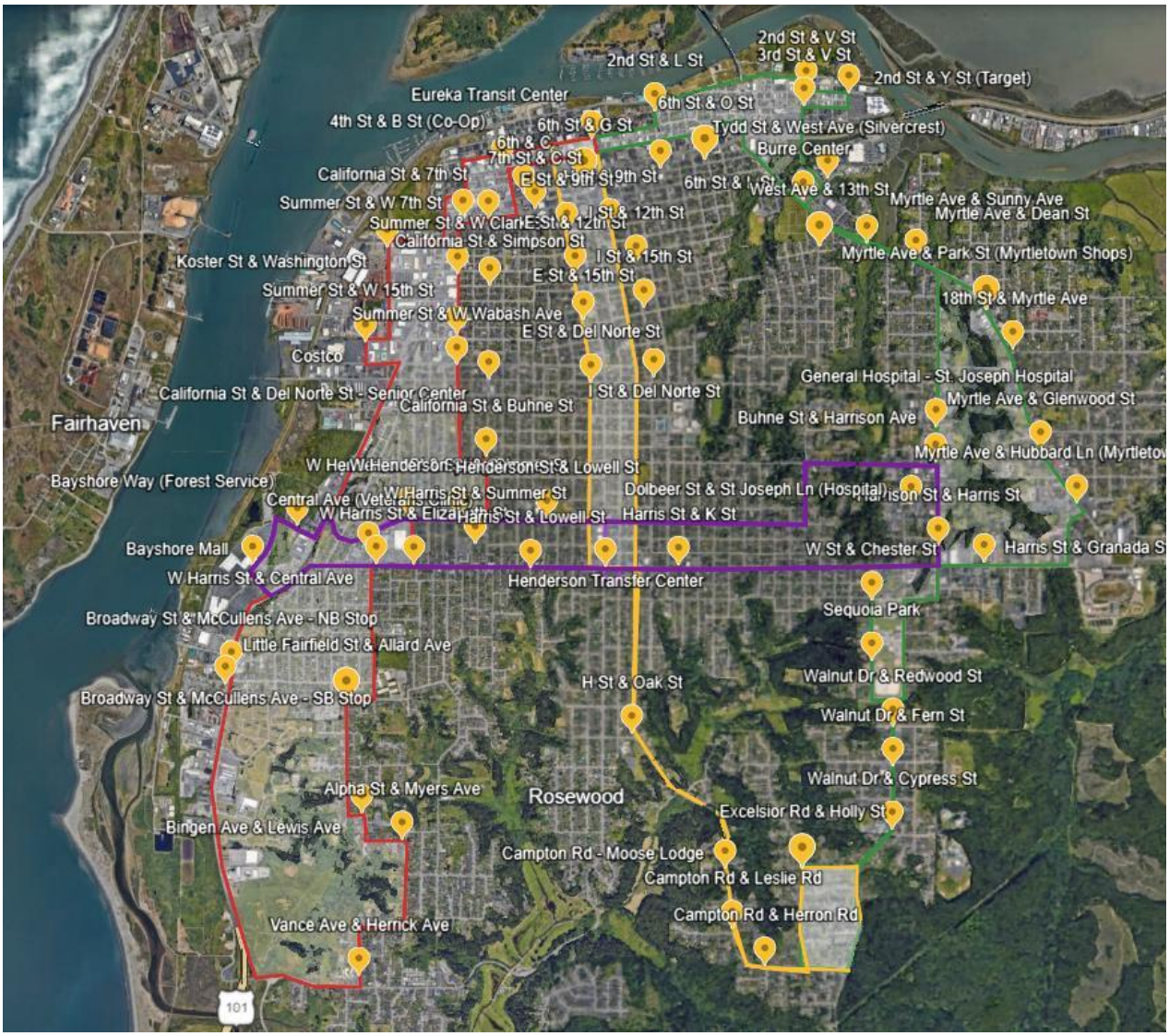

Figure 8: Bus Stops Needed to Achieve 95% of Current Ridership

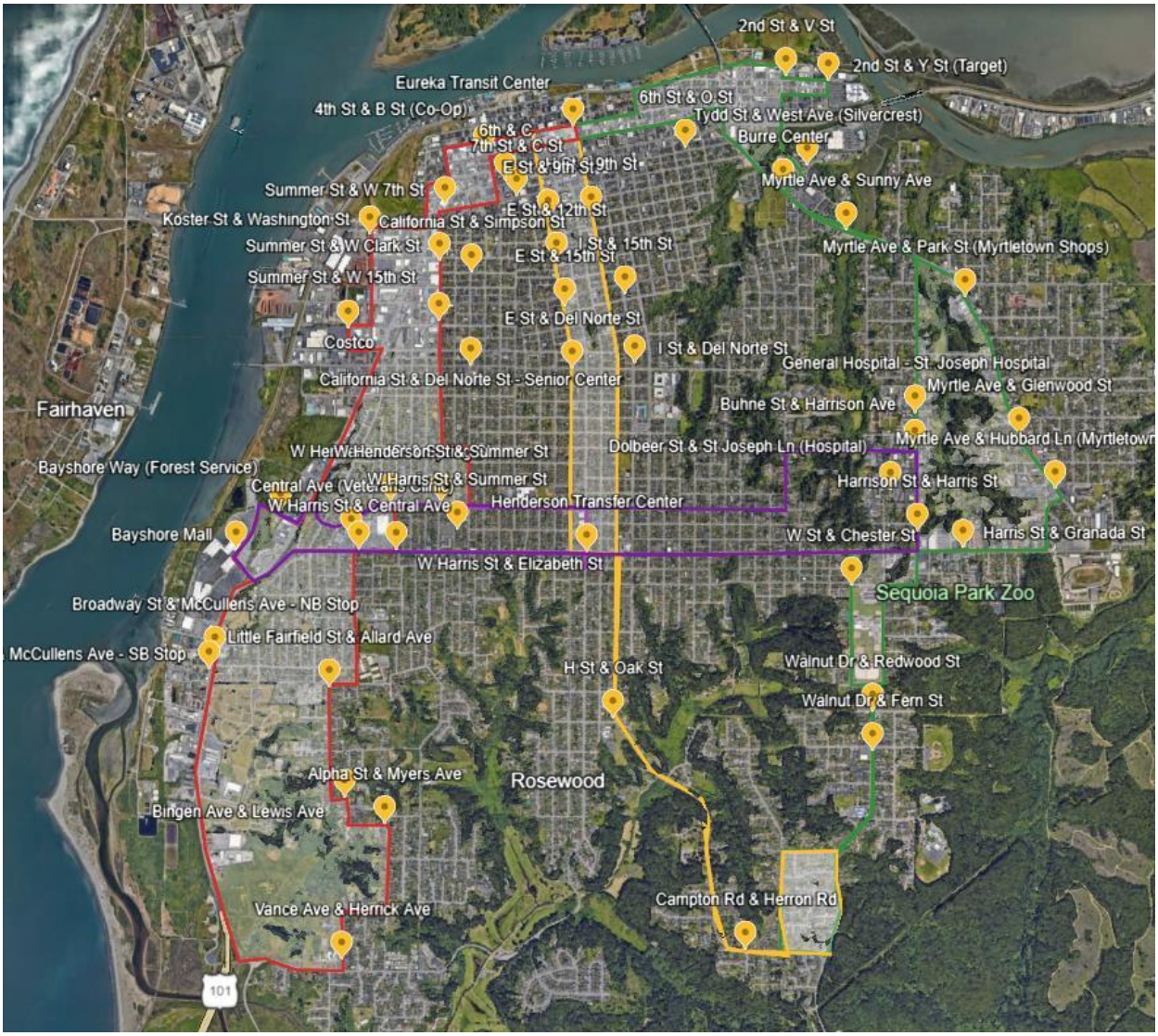

Figure 9: Bus Stops Needed to Achieve 90% of Current Ridership

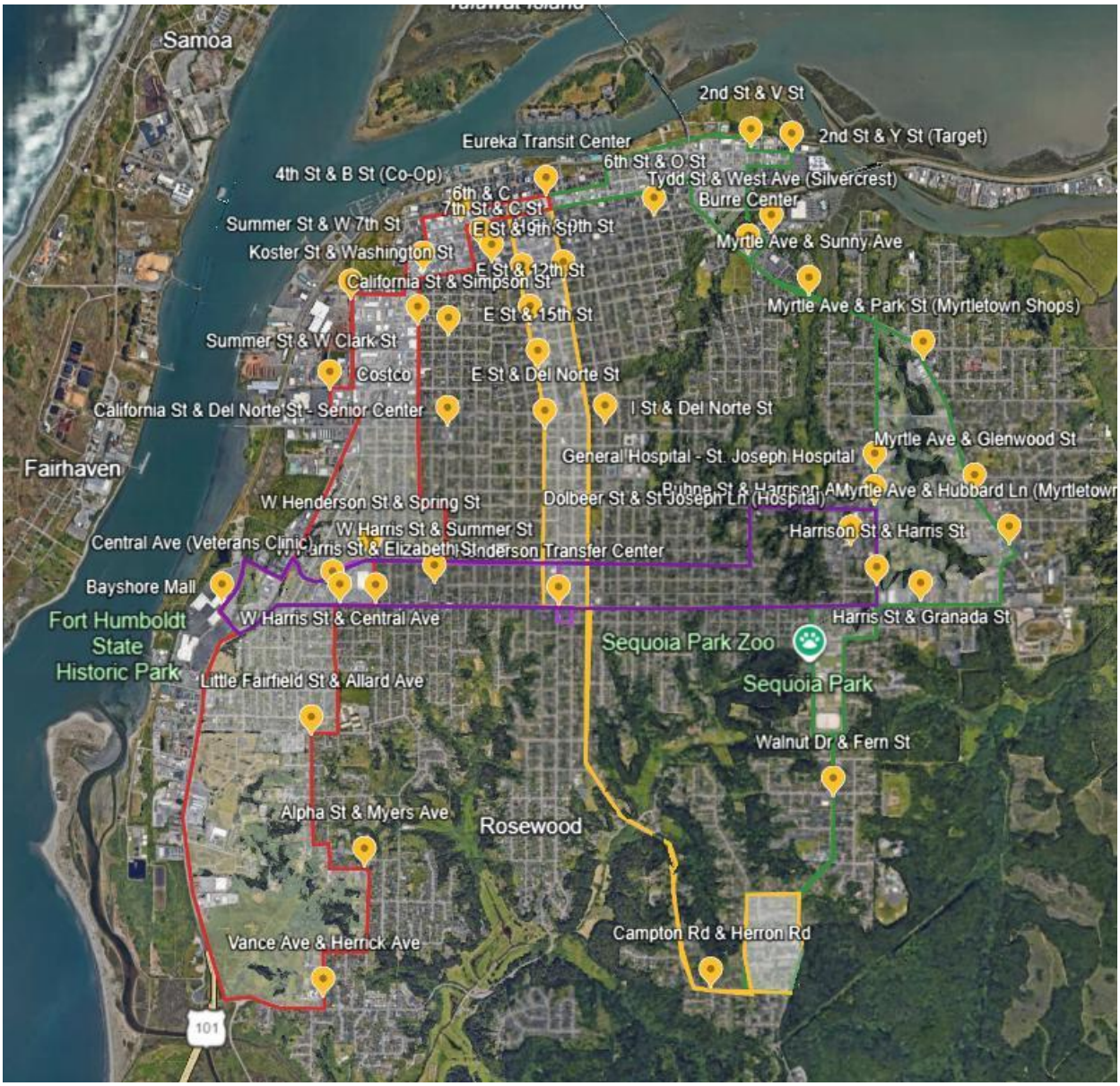

Figure 10: Bus Stops Needed to Achieve 85% of Current Ridership

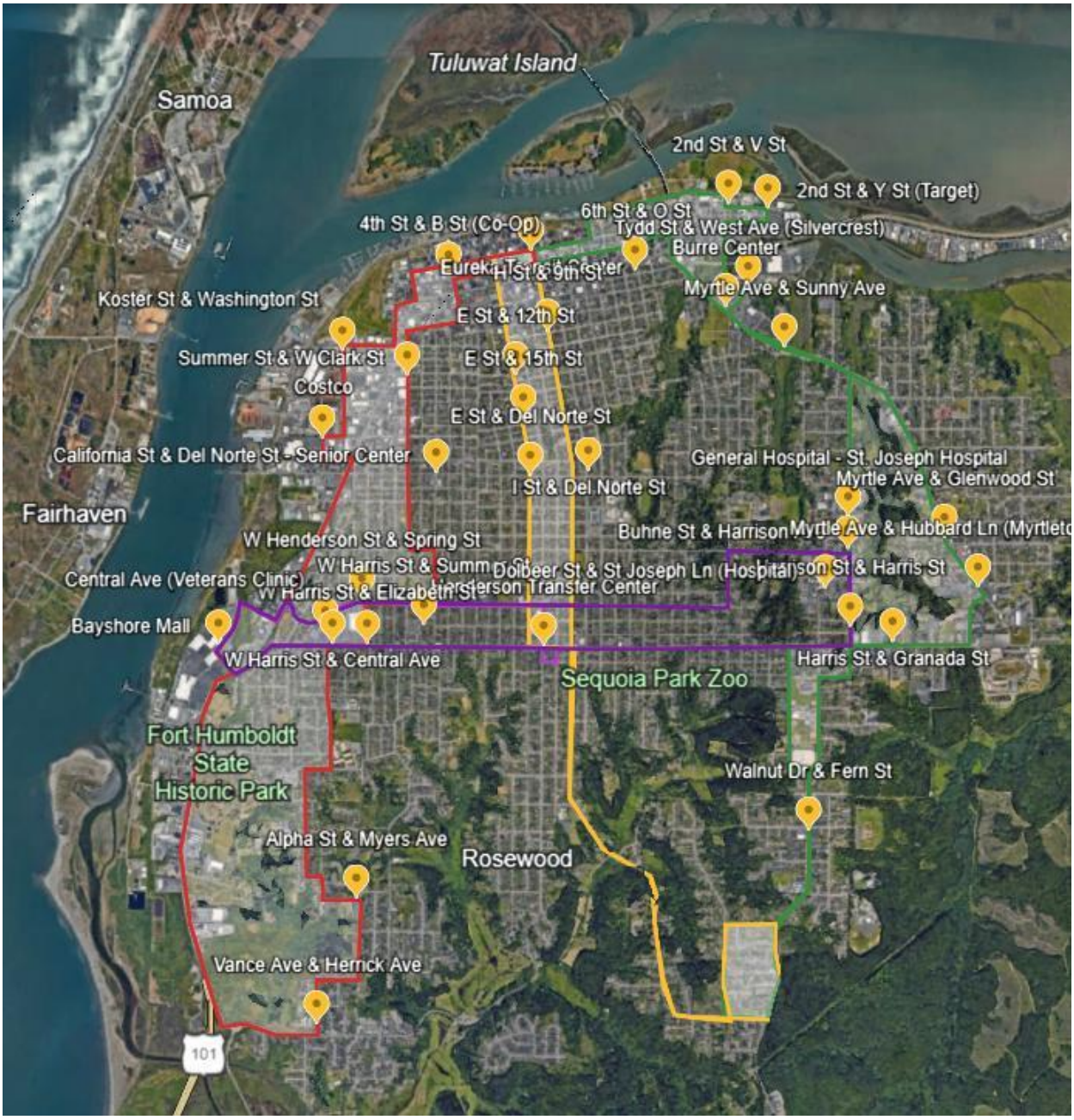

Figure 11: Bus Stops Needed to Achieve 80% of Current Ridership

If the stops south of Harris Street accounted for 20% of all ridership, then the question then becomes how to modify routes to provide more frequent service to the northern part of the Eureka community, while still providing some service to the southern part of the community.

5.3 Fixed Route Transit and Operational Factors

Jarrett Walker, author of *Human Transit* (29), notes the importance of frequency on fixed route bus service:

"Frequency has three independent benefits for the customer, which helps to explain why high frequency is so critical to sustained high ridership:

- It reduces waiting, which is everyone's least favorite part of a trip. (No, a smartphone that tells you when the bus comes doesn't solve the problem of waiting; we are still talking about time when you're not where you want to be.) The basic sensation of being able to go when you want to go is the essence of frequency.
- It makes connections easy, which makes it possible for a pile of transit lines to become a network. In transit, this is huge. A transit line without good connections is useful for travelling in one dimension, along that line. A network of frequent lines makes it easy to travel in two dimensions – all over the city, or at least all over the part of it that supports frequent service. This network effect massively expands the usefulness of every line in the network, thus increasing each line's ridership potential.
- Finally, frequency is a backstop for problems of reliability. If a vehicle breaks down or is late, frequency means another will be along soon.

If you think about how these three things govern the real usefulness of transit, you can begin to see why frequency is such a ferocious ridership-driver. Notice that these three mechanisms are logically independent of each other, so they represent three different ways that a frequency change transforms the usefulness of transit for the better. So, it helps to think of frequency as cubed value; its benefits tend to be exponential, up to a point, because improving frequency is actually three different improvements at once."

Therefore, if the routes could be modified to have higher frequency, it is likely that ridership would increase, as the routes would become more useful. In addition to increased frequency on the fixed routes, it was desired that some transit services would be available to those who live south of Harris Street, which meant the possible introduction of microtransit services for HTA.

The Federal Transit Administration defines microtransit as, "A technology-enabled service that uses multi-passenger vehicles to provide on-demand services with dynamically generated routing. Microtransit services are traditionally provided in designated service areas. Service models include first mile/last mile connections to fixed route services; hub to hub zone-based services; the commingling of ADA complementary paratransit services with general transit service; and point-to-point service within a specific zone or geography" (30). Microtransit is a demand-response service because vehicles do not move unless there is a request for a ride. Such requests are typically made through an app, like the apps used by Lyft or Uber. A call-in number is also offered for those who do not have access to a smartphone, or prefer to call for a ride, as opposed to using an app.

Microtransit services are typically confined within a zone, with the zones limited to a small geographic area, such as two, three, or four square miles. The larger the microtransit zone, the longer a person may have to wait for a ride or the greater the number of vehicles are needed for the service. Average wait times should not exceed 20 minutes. Therefore, microtransit services are a balance of the frequency of the service (or how long a person would wait for a ride), as well as the area or zone to be covered by the service.

After analysis of the current weekday fixed routes and their stops and discussions with the HTA General Manager, a revised route network was drafted, as shown in Figure 12. The revised route network includes a microtransit zone south of Harris Street, which would allow people in that area to connect to the fixed routes. Riders originating from this area would still be able to reach destinations in the northern and northeastern parts of the community. It is noted that the revised routes and microtransit zone are based on stops that would allow 100% of the current ridership (100% of activities or boardings and de-boardings). Figure 13 provides a view focused on the potential new fixed routes. It may be hard to see in Figure 13, but there are two options for the Purple Line, a "Long Purple Route" and a "Short Purple Route." The two options for the Purple Route have different lengths, as noted below, and therefore would have different travel times. The Short Purple Route only travels from the Bayshore Mall to the Henderson Transfer Center, where people could connect with the Gold Route, and then returns to the mall. The Long Purple Route travels as far east as Harrison Avenue, stopping by the Providence St. Joseph Hospital, before making its way back to the west, primarily along Henderson Street.

In general, fixed route transit services operate at a speed of 12 to 13 miles per hour. This timing (or speed) accounts for making stops, boarding, and de-boarding riders. A route that was 12 miles long would be a one-hour route (having a one-hour headway/frequency). Additional factors (e.g., number of controlled versus uncontrolled intersections) can have an impact on the real timing of routes.

Therefore, when a new route or a modification of an existing route is proposed, it is always necessary to drive the route to determine the actual timing/speed of the route. While there needs to be a more detailed review of the proposed revisions to the routes (Figure 12), they do appear to be half-hour routes (with the Gold and Purple (Short Route) potentially closer to 20 minutes), as the length of the routes are as follows:

- Gold: 3.81 miles
- Green: 6.96 miles
- Purple (Long Route): 6.13 miles
- Purple (Short Route): 3.42 miles
- Red: 6.07 miles

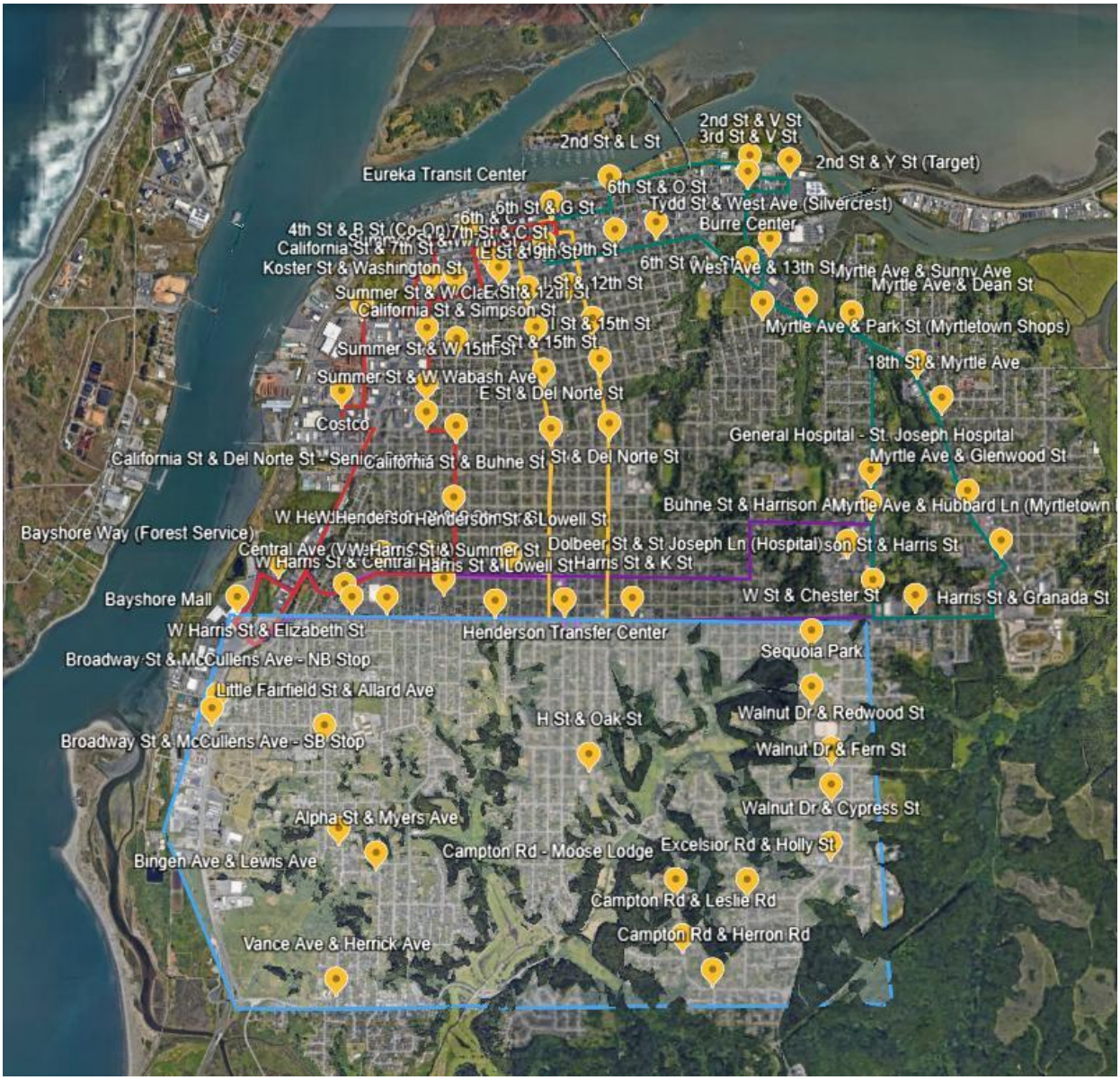

Figure 12: Revised Weekday Service (Fixed Routes with a Microtransit Zone) to Achieve 100% of Current Ridership

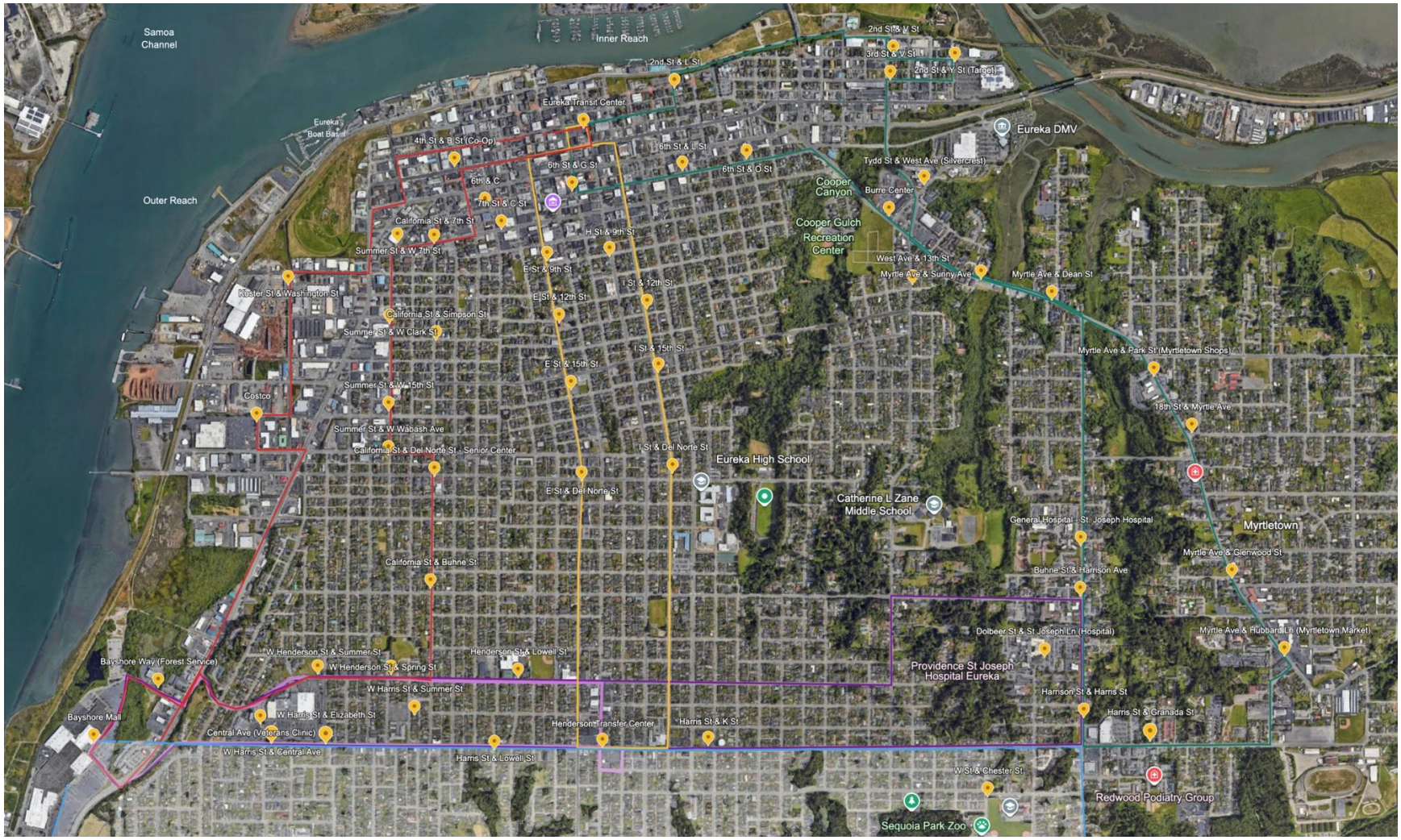

Figure 13: Revised Weekday Service (with an emphasis on the fixed routes)

With the potential to increase the frequency of the fixed routes, and add a new microtransit service, HTA should further analyze the potential new routes to determine if they are half-hour routes, or if additional modifications would be needed to get them to be half-hour routes. There is also the possibility that the Gold and "Short Purple" routes may be 20-minute routes, which warrants further analysis of all the proposed routes.

Finally, if the proposed changes to the weekday routes were further analyzed, it would be important to determine where the microtransit service would connect with the fixed routes. For example, the microtransit service could connect with the Purple and Red Routes at the Bayshore Mall, or the service could connect with the Gold and Purple Routes at the Henderson Transfer Center. Other connections may be possible and desired. Some of this information may become more apparent after the potential service is implemented, as ridership data would indicate the connections/transfers being requested.

This section provided an analysis of the ETS fixed route transit system, with an emphasis on the weekday (Monday-Friday) service. The next section concludes this report and provides conclusions and recommendations of the technical assistance team.

This Page is Intentionally Blank

6 Conclusions & Recommendations

The Western Transportation Institute (WTI) at Montana State University and the National Association of Development Organization's Research Foundation (NADORF) teamed up to provide technical assistance to the Humboldt County Association of Governments (HCAOG) and the Humboldt Transit Authority (HTA). After initial consultation between the Technical Assistance team and HCAOG and HTA, four main project tasks were identified: 1) providing information regarding commuter trip reduction incentives; 2) researching the feasibility of vanpools; 3) reviewing the current dial-a-ride (demand-response) transit service; and 4) reviewing the Eureka Transit System (ETS). This section summarizes the conclusions and recommendations from the technical assistance process.

6.1 Commuter Trip Reduction Incentives

To reduce vehicle miles traveled (VMT) in Humboldt County, and thereby, hopefully, improving air quality and supporting state-level VMT reduction goals and legislation, incentives may have to be provided to get people to use travel modes other than a single occupancy vehicle. These incentives can take several forms, from simply encouraging the use of active modes such as walking and biking, to encouraging the use of transit, or to implementing new modes, such as creating vanpools to get people to their places of work.

To evaluate out the concept of commuter trip reduction incentives, HCAOG could reach out to businesses in Humboldt County to determine if any might be willing to work cooperatively with HCAOG to implement a trial commuter trip reduction incentives program. Lessons learned from such a partnership could suggest if the concept is viable, or if HCAOG should concentrate its time on other opportunities to diversify transportation options in Humboldt County, like a vanpool program.

Humboldt County/HCAOG does not currently have a travel trainer. To help reduce the barrier to the use of public transit, HCAOG could add a part-time position, or as a pilot, develop a travel training program. Such a program would highlight the cost savings that could be achieved from using transit and offer to work one-on-one with interested Humboldt County residents regarding how to use transit for a specific trip or trips. The pilot could inform if such a program could be pursued further, and if yes, the staffing level that may be needed to support such a program.

Public transit and a non-motorized network work in tandem. An intern or a short-term effort could review the non-motorized network in proximity to the most popular bus stops to determine if improvements (e.g., road crossings, curb ramps) are needed. Any identified improvements and potential funding sources could be identified to support this work. There is the AARP Community Challenge grant, whose intent is to fund "local projects that help make communities more livable for people of all ages" (31). There is T-Mobile's Hometown Grants, which have been used to revitalize parks, upgrade technology, support public safety, expand access and more, although 2026 is the last year (32). And Outride

has three grant options: 1) Riding for Focus, 2) Community Impact Grant, and 3) Research Partnership Grant (33).

6.2 Feasibility of Vanpools

A review of several vanpool programs was provided, along with a list and location of County of Humboldt departments. While our information did not highlight a significant number of employers with 100 or more employees, the analysis did note that a group of smaller employers could join to form a vanpool program. HCAOG will need to work with the Chamber of Commerce or other employer group to discuss the interest in developing a vanpool program.

A vanpool program would both help HCAOG reach its VMT/Air Quality goals and help employees save money on their transportation costs. In addition, employers could attract a broader pool of potential employees and retain existing employees who may have transportation challenges. There are two approaches that HCAOG could use to pursue this. First, they could contract with a provider (e.g., Commute with Enterprise) for a short-term to evaluate the feasibility of providing vanpools in Humboldt County. As an alternative, HCAOG could collaborate with an interested employer in piloting a program.

6.3 Dial-A-Ride System Analysis

The Dial-A-Ride (DAR) or demand-response system in Humboldt County was analyzed to review the service and its funding. The analysis indicated that most of the expenses/costs were for service that went beyond what is required by the Americans with Disabilities Act (ADA). As providing DAR is costly, providing service beyond what is required without recouping the total costs is problematic to ensure that public transit is provided to as high a service quality to as many potential users as possible.

In general, 80 percent of the expenses of the DAR service was for rides (or services) outside of the required service area. While this highlights the demand that exists in connecting residents between communities within Humboldt County, it emphasizes how much funding is being spent on "premium" or "extra" services. The analysis provided a revised cost allocation plan, based on the hours and miles used in each jurisdiction, which noted that 2 percent of the costs should be allocated to Arcata, 19 percent to Eureka, and 79 percent to Humboldt County. Further, the analysis indicated that the service provider was meeting the minimum contract requirement of three rides per hour. Based on the DAR analysis shared with HTA in November 2024, the decision was made to bring the DAR system "in-house" and HTA has operated the DAR service since July 1, 2025.

6.4 Eureka Transit System Analysis

The final task of the technical assistance project was to review the Eureka Transit System (ETS). The analysis focused primarily on the weekday (Monday-Friday) service, which consists of four main routes. The analysis indicated that of the 128 bus stops on the weekday routes, 33 of the stops had ten or more activities (people getting on or off the

bus). These 33 stops (about 26% of all stops) accounted for roughly 78% of the weekday activities (ridership).

The analysis further indicated that most stops with limited activities were south of Harris Street. Therefore, if routes were to be modified, most routes would not need to travel to the southern part of the community. A revised route network was proposed, which included the introduction of microtransit services in the southern part of Eureka. This design would ensure that the southern part of Eureka would still receive transit services, just not by fixed route. The remaining fixed routes were modified with an anticipated headway of 30 minutes as compared to their current 60-minute (hourly) headways. There is the potential that two of the routes may end up being 20-minute routes, although further analysis is needed to determine the exact timing of all the proposed routes.

6.5 Summary

The Technical Assistance Team (WTI and NADORF) hopes that the information provided herein helps HCAOG and HTA to reach their mobility goals for Humboldt County and the communities within the County.

This Page is Intentionally Blank

7 References

1. Humboldt County Association of Governments (HCAOG). Humboldt County Association of Governments. *HCAOG*. [Online] [Cited: April 10, 2024.] https://www.hcaog.net/.

2. *VMT as a Metric of Sustainbility: Why and How to Implement Vehicle Travel Reduction Targets*. Litman, Todd, Shebeeb, Ousama and Milam, Ronald T. July 2024, ITE Journal, pp. 31-36.

3. Humboldt County Association of Governments (HCAOG). Long-Range Planning. [Online] 2021. [Cited: January 13, 2026.] https://www.hcaog.net/programs-projects/long-range-planning.

4. Eastern Research Group Inc. Climate Action Fact Sheet: Reduce vehicle miles traveled. [Online] [Cited: November 25, 2025.] https://capecodcommission.org/resource-library/file/?url=/dept/commission/team/Website_Resources/CAP/tool/Climate%20Action%20Fact%20Sheet-Reduce%20Vehicle%20Miles%20Traveled.pdf.

5. Fehr & Peers. *VMT Reduction Target & Strategies*. 2025.

6. *How do local actions affect VMT? A critical review of the empirical evidence*. Salon, Deborah, et al. 2012, Transportation Research Part D, Vol. 17, pp. 495-508.

7. McCahill, Chris, Westling, Aaron and Link, Megan. *Transportation Options & VMT Reduction Field Scan*. Office of Research & Innovation. s.l. : Minnesota Department of Transportation, 2023.

8. Hsu, Hsin-Ping, Boarnet, Marlon and Handy, Susan. *Impacts of Employer-Based Trip Reduction Programs and Vanpools on Passenger Vehicle Use and Greenhouse Gas Emissions*. s.l. : California Environmental Protection Agency, 2014.

9. Boarnet, Marlon G., Hsu, Hsin-Ping and Handy, Susan. *Impacts of Employer-Based Trip Reduction Programs and Vanpools on Passenger Vehicle Use and Greenhouse Gas Emissions*. s.l. : California Environmental Protection Agency, 2014.

10. *Commuter benefits programs: Impacts on mode choice, VMT, and spillover effects*. Shin, Eun Jin. 2020, Transport Policy, Vol. 94, pp. 11-22.

11. City of Redding. The Redding Area Bus Authority Introduces RABA Vanpool to Encourage Shared Rides for Commuters in Shasta County. *City of Redding*. [Online] April 2, 2024. [Cited: January 14, 2026.] https://www.cityofredding.gov/_T18_R128.php.

12. *Rural Vanpools: Lessons Learned and Their Importance to Rural Employment and Mobility*. Clouser, Karalyn, et al. 2024.

13. Hu, P., Schmitt, R.R., Robinson, R., Nguyen, L., Morre, W.H., Baunee, A.,...Wingfield, A. *Transportation Statistics Annual Report 2022*. s.l. : Bureau of Transportation Statistics, 2022.

14. Commute with Enterprise. A Smarter Way to Commute to Work. [Online] [Cited: June 30, 2022.] https://www.commutewithenterprise.com/#show-me-math-commuters.

15. Deitrick, S. Impacts of Vanpooling in Pennsylvania and Future Opportunities: Final Report. [Online] 2010. [Cited: July 19, 2023.] https://ucsur.pitt.edu/files/center/Impacts_of_Vanpooling_2010.pdf.

16. Flexible Funding Programs-Congestion Mitigation and Air Quality Program-23USC149. [Online] [Cited: June 30, 2022.] https://www.transit.dot.gov/funding/grants/grant-programs/flexible-funding-programs-congestion-mitigation-and-air-quality.

17. Commutes Across America: Where are the longest trips to work? *StreetLight Data*. [Online] [Cited: June 30, 2022.] https://www.streetlightdata.com/wp-content/uploads/2018/03/Commutes-Across-America_180201.pdf.

18. Your Driving Costs 2025. *American Automobile Association (AAA).* [Online] [Cited: February 25, 2026.] https://newsroom.aaa.com/wp-content/uploads/2025/09/UPDATE-AAA-Fact-Sheet-Your-Driving-Cost-9.2025-1.pdf.

19. National Transit Database - National Summaries and Trends. *2021 National Transit Summaries and Trends (NTST).* [Online] [Cited: July 13, 2023.] https://www.transit.dot.gov/sites/fta.dot.gov/files/2022-11/2021%20National%20Transit%20Summaries%20and%20Trends_1-1.pdf.

20. Vanpool-Connecting the Workforce to Work. [Online] 2019. [Cited: June 30, 2022.] https://documentstndot.s3.amazonaws.com/NDOR_Documents/vanpool+infographic.pdf.

21. Bryant, P.C., & Allen, D.G. *Compensation, Benefits, and Employee Turnover: HR Strategies for Retaining Top Talent.* s.l. : Compenstation Benefits and Review, 2013.

22. Urbanized Area Formula Grants. [Online] Federal Transit Administration. [Cited: June 30, 2022.] https://www.transit.dot.gov/funding/grants/urbanized-area-formula-grants-5307.

23. Formula Grants for Rural Areas - 5311. [Online] Federal Transit Administration. [Cited: June 30, 2022.] https://www.transit.dot.gov/rural-formula-grants-5311.

24. Part 37--Transportation Services for Individuals with Disabilities. [Online] Federal Transit Administration. [Cited: February 25, 2026.] https://www.transit.dot.gov/regulations-and-guidance/civil-rights-ada/part-37-transportation-services-individuals-disabilities.

25. LSC Transportation Consultants, Inc. Humboldt County Transit Development Plan 2023-2028. [Online] October 20, 2023. [Cited: January 30, 2024.] https://www.hcaog.net/sites/default/files/humboldt_county_transit_development_plan_-_final_report_no_appendices_compressed_0.pdf.

26. National Aging and Disability Training Center. Cost Allocation Meets Coordination - Module 1. [Online] [Cited: October 15, 2024.] https://www.nadtc.org/wp-content/uploads/NADTCCostAllocation-Module1.pdf.

27. National Rural Technical Assistance Program . Cost Allocation Calculator Support. [Online] [Cited: October 15, 2024.] https://www.nationalrtap.org/Technology-Tools/Cost-

Allocation-Calculator/Support#:~:text=Cost%20Allocation:%20the%20act%20of,with%20a%20few%20basic%20concepts.

28. Americans with Disabilities Act: Guidance (FTA Circular 4710.1). *Federal Transit Administration*. [Online] November 4, 2015. [Cited: October 15, 2024.] https://www.transit.dot.gov/regulations-and-programs/fta-circulars/americans-disabilities-act-guidance.

29. Walker, Jarrett. *Human Transit (Revised Edition)*. s.l. : Island Press, 2024. 1642833053.

30. Shared Mobility Definitions. [Online] Federal Transit Administration. [Cited: January 9, 2026.] https://www.transit.dot.gov/regulations-and-guidance/shared-mobility-definitions.

31. AARP. AARP Community Challenge. [Online] [Cited: March 18, 2026.] https://www.aarp.org/livable-communities/community-challenge/.

32. T-Mobile. Hometown Grants. [Online] [Cited: March 18, 2026.] https://www.t-mobile.com/brand/hometown-grants.

33. Bicycle Rider. Outride Opens Applications for Three Grants Supporting Brain Health for Youth and Older Adults through Cycling. [Online] [Cited: March 18, 2026.] https://www.bicycleretailer.com/announcements/2026/03/03/outride-opens-applications-three-grants-supporting-brain-health-youth-and.

34. Humboldt County Assocation of Governments. *HCAOG*. [Online] https://www.hcaog.net/.

This Page is Intentionally Blank

8 Appendix A: ADA Information

Information from 49 CFR Part 37, Transportation Services for People with Disabilities (24) and FTA Circular 4710.1 Americans with Disabilities Act: Guidance (28).

49 CFR PART 37—TRANSPORTATION SERVICES FOR INDIVIDUALS WITH DISABILITIES (ADA) - Definitions

Commuter bus service means fixed route bus service, characterized by service predominantly in one direction during peak periods, limited stops, use of multi-ride tickets, and routes of extended length, usually between the central business district and outlying suburbs. Commuter bus service may also include other service, characterized by a limited route structure, limited stops, and a coordinated relationship to another mode of transportation.

Demand responsive system means any system of transporting individuals, including the provision of designated public transportation service by public entities and the provision of transportation service by private entities, including but not limited to specified public transportation service, which is not a fixed route system.

Fixed route system means a system of transporting individuals (other than by aircraft), including the provision of designated public transportation service by public entities and the provision of transportation service by private entities, including, but not limited to, specified public transportation service, on which a vehicle is operated along a prescribed route according to a fixed schedule.

Origin-to-destination service means providing service from a passenger's origin to the passenger's destination. A provider may provide ADA complementary paratransit in a curb-to-curb or door-to-door mode. When an ADA paratransit operator chooses curb-to-curb as its primary means of providing service, it must provide assistance to those passengers who need assistance beyond the curb in order to use the service unless such assistance would result in a fundamental alteration or direct threat.

Paratransit means comparable transportation service required by the ADA for individuals with disabilities who are unable to use fixed route transportation systems.

SUBPART F—PARATRANSIT as a COMPLEMENT to FIXED ROUTE SERVICE
§ 37.121 Requirement for comparable complementary paratransit service.
(a) Except as provided in paragraph (c) of this section, each public entity operating a fixed route system shall provide paratransit or other special service to individuals with disabilities that is comparable to the level of service provided to individuals without disabilities who use the fixed route system.

(b) To be deemed comparable to fixed route service, a complementary paratransit system shall meet the requirements of §§ 37.123-37.133 of this subpart. The requirement to comply with § 37.131 may be modified in accordance with the provisions of this subpart relating to undue financial burden.

(c) Requirements for complementary paratransit do not apply to commuter bus, commuter rail, or intercity rail systems.

§ 37.131 Service criteria for complementary paratransit.

The following service criteria apply to complementary paratransit required by § 37.121 of this part.
(a) Service Area —
(1) Bus.
(i) The entity shall provide complementary paratransit service to origins and destinations within corridors with a width of three-fourths of a mile on each side of each fixed route. The corridor shall include an area with a three-fourths of a mile radius at the ends of each fixed route.
(ii) Within the core service area, the entity also shall provide service to small areas not inside any of the corridors but which are surrounded by corridors.
(iii) Outside the core service area, the entity may designate corridors with widths from three-fourths of a mile up to one and one half miles on each side of a fixed route, based on local circumstances.
(iv) For purposes of this paragraph, the core service area is that area in which corridors with a width of three-fourths of a mile on each side of each fixed route merge together such that, with few and small exceptions, all origins and destinations within the area would be served.

"Premium Charges" for Paratransit Services (https://www.transit.dot.gov/regulations-and-guidance/civil-rights-ada/premium-charges-paratransit-services)
Is a transit operator permitted to establish "premium charges" for complementary paratransit services that exceed the minimum requirements established by the Department of Transportation's ADA regulations?

In general, any paratransit services that a transit operator provides above and beyond its regulatory obligations, including service to individuals who do not fall under one of the three categories of eligibility established under the ADA, are not subject to the service criteria for ADA complementary paratransit (i.e., service area, response time, fares, trip purpose, hours and days, and capacity constraints). Transit operators may therefore elect to establish "premium charges" for such services.

Under the ADA, paratransit functions as a "safety net" for people with disabilities who are unable to make use of the fixed-route – e.g., "mainstream" – transit system (bus or rail). It is not intended to be a comprehensive system of transportation that meets all of the travel needs of persons with disabilities. As such, the level of service is required to be comparable to the fixed-route system, and service is required only for individuals whose disability – permanent or temporary – prevents them from using the fixed-route system.

The eligibility requirements are incorporated into §37.123 of the Department's regulations, and the service criteria are established by §37.131.

Section 37.131 establishes the minimum requirements for complementary paratransit provided under the ADA; transit operators are free to provide any level of additional service that they or their communities find necessary. This could include providing paratransit service to individuals who do not meet the eligibility criteria, operating paratransit service beyond the fixed-route service area, providing service when the fixed-route system is not running, or by exceeding the basic next-day service requirement. In such cases, the operator would not be bound by the service criteria for ADA complementary paratransit, including the requirement that limits the fare to no more than twice the fare for a comparable trip on the fixed-route system.

While "premium charges" would therefore be permitted for such services, transit operators who wish to do so are strongly advised to thoroughly review Subpart F of the Department's ADA implementing regulations before making any changes to the operations, eligibility, or fare structure of their existing ADA complementary paratransit systems. Not only must transit operators ensure that any proposed changes are consistent with the basic ADA requirements, but they must also meet the applicable public participation requirements.

With regard to public participation, §37.137(c) requires a paratransit operator to create an "ongoing mechanism" for the participation of individuals with disabilities in the continued development and assessment of services to persons with disabilities. While this provision does not require a transit operator to conduct a public hearing for minor adjustments to its ADA paratransit service, the use of some form of public participation process in the establishment of "premium services" is strongly advised.

A public hearing is required, however, for changes to the paratransit reservations system. Under §37.131(b)(4), any changes to the reservation system must comply with the public participation requirements in §§37.137(b) and (c) of the Department's ADA implementing regulations.* These require that public participation include: outreach, consultation with individuals with disabilities, opportunity for public comment, a public hearing and the creation of a mechanism for continued participation of persons with disabilities in the development and assessment of services to persons with disabilities.

Transit operators are also advised that they must still meet the basic ADA paratransit service criteria and should avoid any practice by which eligible riders are "steered" into a service category to which "premium charges" are applied. Furthermore, transit operators should not look to "premium services" as a means of relieving demand for ADA complementary paratransit services by eligible riders.

*Note: §37.131(b)(4) of the Department's ADA regulations, as amended, contains a typographical error; reference to §37.131(b) and (c) should read "37.137 (b) and (c)."
Last updated: Thursday, February 27, 2020

9 Appendix B: Transit Needs Information

The following information comes from the Humboldt County Transit Development Plan 2023-2028 by LSC Transportation Consultants (25).

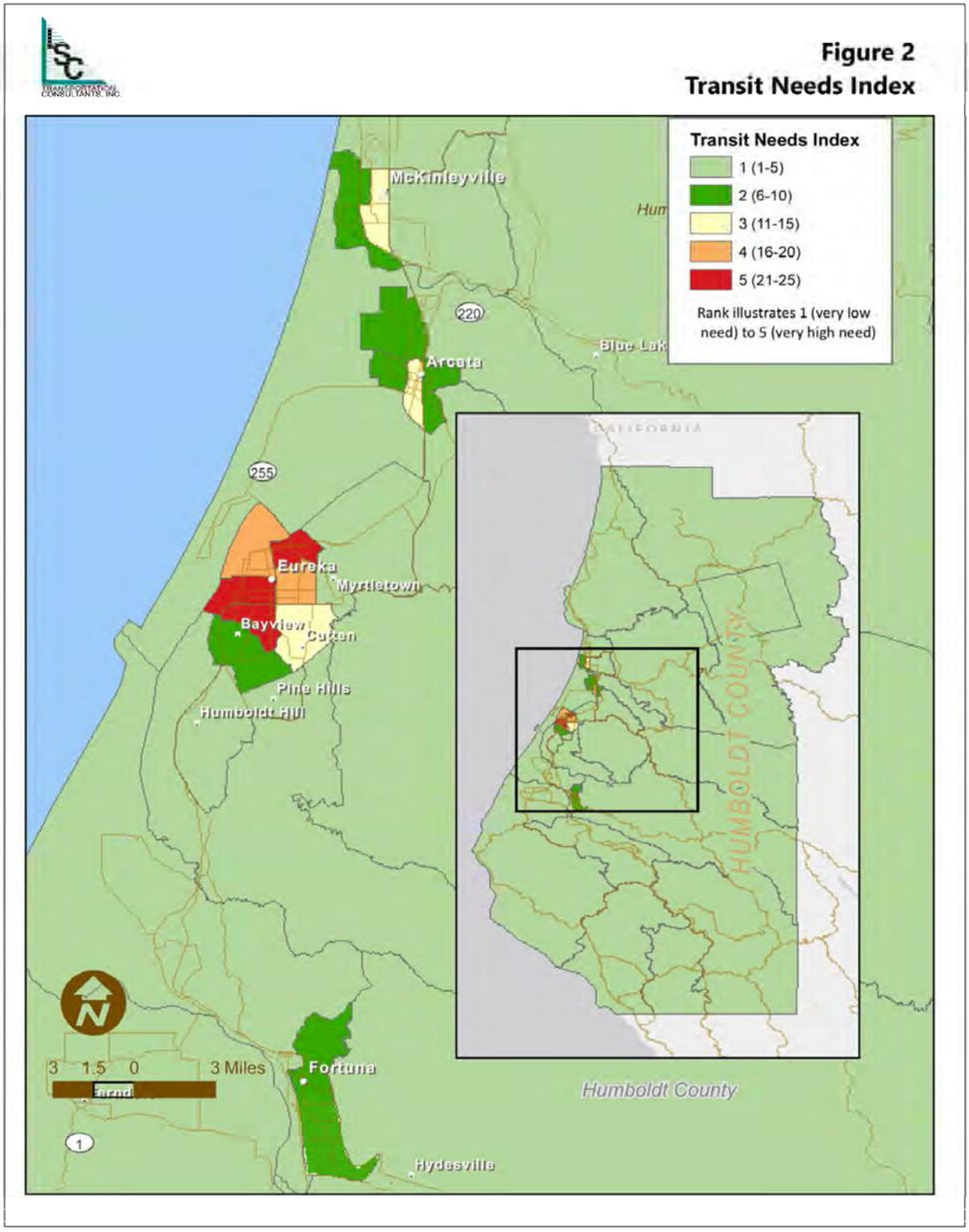
Figure 2
Transit Needs Index
Transit Needs Index
1 (1-5)
2 (6-10)
3 (11-15)
4 (16-20)
5 (21-25)
Rank illustrates 1 (very low need) to 5 (very high need)
McKinleyville
Arcata
Blue Lak
Eureka
Myrtletown
Bayview
Cutten
Pine Hills
Humboldt Hill
Fortuna
Hydesville
Humboldt County
HUMBOLDT COUNTY
220
255
1
3 1.5 0 3 Miles

Table 3: Humboldt County Demographic Characteristics

Census Tract	Area Description	Total Persons	Total Households	Youth (Under 18 Years)		Seniors (65+)		Persons with a Disability		Persons Below Poverty Level		Zero-Vehicle Households	
				#	%	#	%	#	%	#	%	#	%
1	Eureka / Old Town	4,337	1,957	670	2.6%	540	2.2%	902	4.0%	1,397	5.3%	396	**10.1%**
2	Eureka / Henderson Center	5,981	2,443	1,223	4.7%	693	2.9%	1,005	4.4%	661	2.5%	269	6.9%
3	Eureka / Rosewood	5,097	2,370	951	3.7%	996	4.1%	906	4.0%	1,037	4.0%	215	5.5%
4	Eureka / Herrick Ave	4,245	1,514	888	3.4%	770	3.2%	970	4.3%	1,017	3.9%	139	3.6%
5	Eureka / Old Town	4,361	1,716	832	3.2%	818	3.4%	742	3.3%	1,099	4.2%	270	6.9%
6	Eureka	5,253	2,041	970	3.7%	755	3.1%	1,041	4.6%	618	2.4%	139	3.6%
7	Eureka / Zoo	5,521	2,156	1,109	4.3%	1,383	**5.7%**	892	3.9%	679	2.6%	90	2.3%
8	Myrtletown	5,186	2,155	897	3.5%	1193	4.9%	1,117	**4.9%**	818	3.1%	87	2.2%
9	Bayside / Jacoby Creek	5,325	2,240	796	3.1%	1209	5.0%	504	2.2%	723	2.8%	19	0.5%
10.01	Arcata / Downtown	3,355	1,226	187	0.7%	401	1.7%	185	0.8%	997	3.8%	88	2.3%
10.02	Arcata / HSU	2,962	934	205	0.8%	213	0.9%	332	1.5%	832	3.2%	223	5.7%
11.02	Arcata / Alliance	4,496	1,950	756	2.9%	549	2.3%	604	2.7%	2,242	**8.6%**	99	2.5%
11.03	Arcata	2,152	784	266	1.0%	215	0.9%	249	1.1%	489	1.9%	89	2.3%
12	Arcata / Blue Lake	4,815	1,813	654	2.5%	639	2.6%	585	2.6%	1,188	4.5%	114	2.9%
13	Arcata / Samoa	1,423	627	250	1.0%	289	1.2%	291	1.3%	207	0.8%	25	0.6%
101.02	Willow Creek	2,382	917	748	2.9%	449	1.8%	465	2.0%	450	1.7%	56	1.4%
102	Trinidad / Big Lagoon	2,989	1,213	705	2.7%	623	2.6%	457	2.0%	500	1.9%	32	0.8%
103	Blue Lake	3,223	1,415	517	2.0%	740	3.0%	452	2.0%	498	1.9%	70	1.8%
104	Clam Beach	3,644	1,411	742	2.9%	611	2.5%	711	3.1%	199	0.8%	51	1.3%
105.02	E. McKinleyville	5,626	2,253	1,381	**5.3%**	823	3.4%	1,021	4.5%	1,013	3.9%	42	1.1%
105.03	Central McKinleyville	2,987	1,478	1,043	4.0%	534	2.2%	549	2.4%	899	3.4%	189	4.8%
105.04	W. McKinleyville	3,844	1,483	811	3.1%	700	2.9%	583	2.6%	714	2.7%	116	3.0%
106	Freshwater	1,992	769	328	1.3%	463	1.9%	254	1.1%	229	0.9%	6	0.2%
107.01	Humboldt Hill	4,644	1,704	1,159	4.5%	794	3.3%	417	1.8%	709	2.7%	33	0.8%
107.02	Pine Hills / Fields Landing	2,882	1,013	292	1.1%	593	2.4%	668	2.9%	540	2.1%	146	3.7%
108	Fortuna / Loleta	4,748	1,818	954	3.7%	661	2.7%	940	4.1%	1,176	4.5%	114	2.9%
109.01	Fortuna / Newburg	4,635	1,816	1,042	4.0%	683	2.8%	881	3.9%	868	3.3%	193	4.9%
109.02	Fortuna/Hydesville	4,096	1,643	698	2.7%	898	3.7%	683	3.0%	579	2.2%	43	1.1%
110	S. Fortuna	4,941	1,878	1,208	4.7%	898	3.7%	902	4.0%	586	2.2%	15	0.4%
111	Rio Dell/Scotia	4,405	1,909	1,034	4.0%	743	3.1%	750	3.3%	574	2.2%	96	2.5%
112	Petrolia/Ferndale	3,435	1,331	736	2.8%	928	3.8%	699	3.1%	391	1.5%	37	0.9%
115.01	Garberville/Redway	2,177	935	395	1.5%	663	2.7%	258	1.1%	122	0.5%	41	1.1%
115.02	Shelter Cove	1,120	653	0	0.0%	442	1.8%	244	1.1%	354	1.4%	20	0.5%
116	Garberville/Alderpoint	3,431	1,525	566	2.2%	709	2.9%	575	2.5%	657	2.5%	124	3.2%
9400	Hoopa	3,348	1,030	932	3.6%	669	2.8%	877	3.9%	1,148	4.4%	217	5.6%
	Total	**135,058**	**54,120**	**25,945**	**19%**	**24,287**	**18%**	**22,711**	**17%**	**26,210**	**19%**	**3,903**	**7%**

Source: US Census Bureau American Community Survey 2020-2021.

X% *= (bolded) tracts with the highest percentage of population type.*

Table 4: Humboldt County Transit Needs Index

Census Tract		Youth (Under 18 Years) Rank	Senior Adults (65+) Rank	Persons with a Disability Rank	Persons Below Poverty Level Rank	Zero-Vehicle Households Rank	Overall Transit Needs Index Rank
1	Eureka / Old Town	3	3	4	4	5	19
2	Eureka / Henderson Center	5	4	5	3	4	21
3	Eureka / Rosewood	4	5	5	4	4	22
4	Eureka / Herrick Ave	2	2	3	2	1	10
5	Eureka / Old Town	5	5	5	5	5	25
6	Eureka	4	4	5	2	2	17
7	Eureka / Zoo	3	4	3	2	1	13
8	Myrtletown	1	2	2	1	1	7
9	Bayside / Jacoby Creek	1	1	1	1	1	5
10.01	Arcata / Downtown	2	3	2	5	3	15
10.02	Arcata / HSU	1	1	2	3	4	11
11.02	Arcata / Alliance	2	2	2	4	1	11
11.03	Arcata	2	2	2	3	2	11
12	Arcata / Blue Lake	1	1	1	1	1	5
13	Arcata / Samoa	1	1	1	1	1	5
101.02	Willow Creek	1	1	1	1	1	5
102	Trinidad / Big Lagoon	1	1	1	1	1	5
103	Blue Lake	1	1	1	1	1	5
104	Clam Beach	1	1	1	1	1	5
105.02	E. McKinleyville	1	1	1	1	1	5
105.03	Central McKinleyville	4	3	3	3	3	16
105.04	W. McKinleyville	2	2	2	2	1	9
106	Freshwater	1	1	1	1	1	5
107.01	Humboldt Hill	1	1	1	1	1	5
107.02	Pine Hills / Fields Landing	1	1	1	1	1	5
108	Fortuna / Loleta	1	1	1	1	1	5
109.01	Fortuna / Newburg	2	2	2	2	2	10
109.02	Fortuna/Hydesville	1	1	1	1	1	5
110	S. Fortuna	3	2	2	1	1	9
111	Rio Dell/Scotia	1	1	1	1	1	5
112	Petrolia/Ferndale	1	1	1	1	1	5
115.01	Garberville/Redway	1	1	1	1	1	5
115.02	Shelter Cove	1	1	1	1	1	5
116	Garberville/Alderpoint	1	1	1	1	1	5
9400	Hoopa	1	1	1	1	1	5

Source: LSC Transportation Consultants, Inc.

10 Appendix C: DAR Analysis Information

The following comes from an analysis of the HTA DAR rides for the months of March, April, and May 2023. "Others" refers to the rides that were outside of Arcata and Eureka.

Hours

Destination	Arcata	Eureka	Others	Totals
Origin				
Arcata	28.6	175.6	110.6	314.8
Eureka	179.2	286.6	147.1	612.9
Others	103.4	167.7	69.5	340.6
Totals	311.2	629.9	327.2	1268.3

Percentage of Hours

Destination	Arcata	Eureka	Others	Totals
Origin				
Arcata	2.25%	13.85%	8.72%	24.82%
Eureka	14.13%	22.60%	11.60%	48.32%
Others	8.15%	13.22%	5.48%	26.85%
Totals	24.54%	49.66%	25.80%	100.00%

Mileage

Destination	Arcata	Eureka	Others	Totals
Origin				
Arcata	719.6	6381.5	3744.7	10845.8
Eureka	6439.5	5906.6	5181	17527.1
Others	3694.8	6215.4	2185.8	12096
Totals	10853.9	18503.5	11111.5	40468.9

Percentage of Mileage

Destination	Arcata	Eureka	Others	Totals
Origin				
Arcata	1.78%	15.77%	9.25%	26.80%
Eureka	15.91%	14.60%	12.80%	43.31%
Others	9.13%	15.36%	5.40%	29.89%
Totals	26.82%	45.72%	27.46%	100.00%

Completed Rides

Destination	Arcata	Eureka	Others	Totals
Origin				
Arcata	207	391	226	824
Eureka	372	1799	283	2454
Others	212	334	188	734
Totals	791	2524	697	4012

Percentage of Completed Rides

Destination	Arcata	Eureka	Others	Totals
Origin				
Arcata	5.16%	9.75%	5.63%	20.54%
Eureka	9.27%	44.84%	7.05%	61.17%
Others	5.28%	8.33%	4.69%	18.30%
Totals	19.72%	62.91%	17.37%	100.00%

Cancelled Rides

Destination	Arcata	Eureka	Others	Totals
Origin				
Arcata	72	158	122	352
Eureka	179	970	153	1302
Others	112	167	142	421
Totals	363	1295	417	2075

Percentage of Cancelled Rides

Destination	Arcata	Eureka	Others	Totals
Origin				
Arcata	3.47%	7.61%	5.88%	16.96%
Eureka	8.63%	46.75%	7.37%	62.75%
Others	5.40%	8.05%	6.84%	20.29%
Totals	17.49%	62.41%	20.10%	100.00%

No Shows

Destination	Arcata	Eureka	Others	Totals
Origin				
Arcata	12	13	6	31
Eureka	9	63	9	81
Others	10	8	3	21
Totals	31	84	18	133

Percentage of No Shows

Destination	Arcata	Eureka	Others	Totals
Origin				
Arcata	9.02%	9.77%	4.51%	23.31%
Eureka	6.77%	47.37%	6.77%	60.90%
Others	7.52%	6.02%	2.26%	15.79%
Totals	23.31%	63.16%	13.53%	100.00%

Highlights from the statistics not noted in the main body of the document:

- Of all the rides originally booked, approximately 1/3 or 33.3% were canceled before the ride was scheduled to take place.
- Approximately 2% of the rides were a "no-show," which means that the vehicle had arrived to pick up a customer/rider, but the person was not there for the ride.
- Overall, there were 3.16 rides per hour, which was just above the contract minimum of three rides per hour.

This Page Is Intentionally Blank

11Appendix D: ETS Ridership Analysis

The following analysis is based on six months of ridership data (November 2024 – April 2025) provided by HTA.

Some stops are highlighted to indicate service by multiple routes.

The percentage shown in right most column is the percentage of total activities (on and off) at the bus stops. For example, at the bottom of the first page below (Page 75), the 79.76% indicates that approximately 80% of ridership (boardings) would occur at the stops listed above this point.

ETS Weekday Service Stop Analysis					
Stop ID	Stop Name	Total On	Total Off	Total Activity	
1252	BAYSHORE MALL	78	81	158	
1367	F ST AND HARRIS ST	75	75	151	
758981	HARRIS ST AND F ST	37	54	91	
759024	HARRIS ST AND F ST	43	34	77	
1415	H ST AND 3RD ST	27	25	52	
2383147	3RD ST AND H ST	12	9	21	
1355	HARRIS ST AND ELIZABETH ST	24	16	41	
1309	SILVERCREST	14	18	32	
1340	HENDERSON ST AND SPRING ST	5	16	21	
758984	GENERAL HOSPITAL CAMPUS	8	13	21	
1365	GENERAL HOSPITAL CAMPUS	5	5	10	
759007	HARRIS ST AND CENTRAL AVE	8	13	21	
1321	MYRTLE AVE AND GLENWOOD ST	11	10	21	
1254	4TH ST AND B ST - CO-OP	14	7	21	
1398	ALPHA ST AND MYERS AVE	12	7	18	
1410	2ND ST AND V ST	7	10	17	
29440	VETERANS CLINIC	9	8	17	
1394	BUHNE ST AND HARRISON AVE	6	10	16	
758969	BUHNE ST AND HARRISON AVE	2	4	6	
1295	WALNUT DR AND FERN ST	7	7	14	
1331	I ST AND DEL NORTE ST	8	7	14	
759004	HARRIS ST AND GRANADA ST	8	7	14	
1317	MYRTLETOWN MARKET	9	5	14	
1380	EUREKA COSTCO	5	8	13	
1390	BURRE CENTER	6	7	13	
1319	MYRTLE AVE AND SUNNY AVE	7	6	13	
1304	SUMMER ST AND CLARK ST	8	5	13	
1361	H ST AND 9TH ST	3	9	12	
1345	HARRISON ST AND HARRIS ST	4	8	12	
1349	HARRIS ST AND SUMMER ST	6	6	12	
2607	DEL NORTE ST AND CALIFORNIA	6	5	11	
29509	CALIFORNIA ST AND DEL NORTE	7	5	11	
1375	E ST AND 12TH ST	5	6	10	
1298	VANCE ST AND HERRICK AVE	6	5	10	
1307	ST. JOSEPH'S HOSPITAL	3	5	9	
1329	KOSTER ST AND WASHINGTON ST	4	5	9	
1401	6TH ST AND O ST	4	5	9	79.76%

1376	E ST AND 9TH ST	3	5	8	
1305	SUMMER ST AND 7TH ST	4	4	8	
1326	LITTLE FAIRFIELD ST AND ALLA	4	4	8	
1409	TARGET	4	4	8	
1377	E ST AND 15TH ST	5	3	8	
1400	7TH ST AND C ST	1	6	7	
1374	E ST AND DEL NORTE ST	2	5	7	
1315	PARK ST AND MYRTLE AVE	3	4	7	
1343	HENDERSON ST AND A ST	3	3	6	
1383	CALIFORNIA ST AND SIMPSON ST	3	3	6	
1382	CAMPTON RD AND HERRON RD	3	2	6	
1403	6TH ST AND C ST	5	1	6	86.38%
1366	BAYSHORE WAY (FOREST SERVICE	1	4	5	
1297	W ST AND CHESTER ST	2	3	5	
1339	HENDERSON ST AND SUMMER ST	2	3	5	
1358	H ST AND OAK ST	3	3	5	
1396	BINGEN AVE AND LEWIS AVE	3	3	5	
1251	BROADWAY ST. AND MCCULLENS A	3	2	5	
1294	WALNUT DR AND REDWOOD ST	3	2	5	
1306	SUMMER ST AND 15TH ST	3	2	5	
1332	I ST AND 15TH ST	3	2	5	89.88%
1323	CAMPTON RD - MOOSE LODGE	1	3	4	
1341	HENDERSON ST AND LOWELL ST	1	3	4	
1402	6TH ST AND L ST	1	3	4	
1386	CALIFORNIA ST AND 7TH ST	2	2	4	
1405	3RD ST AND V ST	2	2	4	
1411	18TH ST AND MYRTLE AVE	2	2	4	
758983	HARRIS ST AND K ST	1	2	4	
1368	EXCELSIOR RD AND HOLLY ST	2	1	4	
1296	WALNUT DR AND CYPRESS ST	2	2	3	
1303	SUMMER ST AND WABASH ST	1	2	3	
1353	HARRIS ST AND LOWELL ST	0	2	3	
1387	CALIFORNIA ST AND BUHNE ST	1	2	3	
1416	2ND ST AND L ST	1	2	3	
1293	WEST AVE AND 13TH ST	2	1	3	
1310	SEQUOIA PARK	1	1	3	
1322	MYRTLE AVE AND DEAN ST	2	1	3	
1333	I ST AND 12TH ST	2	1	3	
1381	CAMPTON RD AND LESLIE RD	2	1	3	
1404	6TH ST AND G ST	2	1	3	94.94%

1279	5TH ST AND U ST	0	2	2	
1342	HENDERSON ST AND CENTRAL AVE	1	2	2	
1346	HARRISON AVE AND 18TH ST	0	2	2	
1385	CALIFORNIA ST AND DOLLISON S	1	2	2	
1393	BUHNE ST AND J ST	0	2	2	
1291	ZANE JUNIOR HIGH	1	1	2	
1313	S ST AND CARSON ST	1	1	2	
1316	NEDRA AVE AND 18TH ST	1	1	2	
1325	LITTLE FAIRFIELD ST AND SEA	1	1	2	
1327	LAFAYETTE SCHOOL	1	1	2	
1330	I ST AND HUNTOON ST	1	1	2	
1334	HOLLY ST AND WALNUT DR	1	1	2	
1357	H ST AND RUSS ST	1	1	2	
1362	H ST AND DEL NORTE ST	1	1	2	
1371	EUREKA ST AND LEONARD DR	1	1	2	
1388	CALIFORNIA ST AND 15TH ST	1	1	2	
1406	3RD ST AND T ST	1	1	2	
3987	BROADWAY ST. AND W. HAWTHORN	2	1	2	
29439	UTAH ST AND ALLARD AVE	1	1	2	
758985	HARRISON AVE AND 18TH ST	1	1	2	
759033	E ST AND DOLLISON ST	0	1	2	
1314	PARK ST AND NEDRA AVE	0	1	1	
1318	MYRTLE TOWN SHOPS	0	1	1	
1348	HARRIS ST AND U ST	0	1	1	
1351	HARRIS ST AND P ST	0	1	1	
1354	HARRIS ST AND K ST	1	1	1	
1356	REDWOOD ACRES	1	1	1	
1364	H ST AND 12TH ST	1	1	1	
1370	EXCELSIOR RD AND CAMPTON RD	0	1	1	
1391	BUHNE ST AND S ST	1	1	1	
1395	BUHNE ST AND F ST	0	1	1	
29438	UTAH ST AND SOUTH AVE	0	1	1	
2322273	S ST AND WOOD ST	1	1	1	
1292	WEST AVE AND 17TH ST	1	0	1	
1320	MYRTLE AVE AND HALL AVE	1	0	1	
1336	HODGSON ST AND Q ST	0	0	1	
1350	HARRIS ST AND Q ST	1	0	1	
1360	H ST AND HUNTOON ST	1	0	1	
1363	H ST AND 15TH ST	1	0	1	
1372	E ST AND HUNTOON ST	0	0	1	
1373	E ST AND DOLLISON ST	1	0	1	
1384	CALIFORNIA ST AND LONG ST	1	0	1	
759023	HARRIS ST AND U ST	1	0	1	
2750735	I ST AND 8TH ST	1	0	1	
1335	HODGSON ST AND T ST	0	0	0	
1337	HODGSON ST AND J ST	0	0	0	
1338	HERRICK AVE AND ELK RIVER RD	0	0	0	
1359	H ST AND MANZANITA AVE	0	0	0	
1392	BUHNE ST AND N ST	0	0	0	
3968	BROADWAY ST. AND MCCULLENS	0	0	0	
2752387	4TH ST AND O ST	0	0	0	

At least 10 on/off activities			998
Percentage of on/off activities			77.67%
33 of 128 stops			25.78%
At least 5 on/off activities			1155
Percentage of on/off activities			89.88%
58 of 128 stops			45.31%
At least 3 on/off activities			1220
Percentage of on/off activities			94.94%
77 of 128 stops			60.16%
30 stops (of 128 stops, or 23.4% of stops)			
have only one total activity per day			

ETS Saturday Service Stop Analysis					
Stop ID	**Stop Name**	**Total On**	**Total Off**	**Total Activity**	
1252	BAYSHORE MALL	36	41	77	
1367	F ST AND HARRIS ST	26	32	58	
759024	HARRIS ST AND F ST	18	13	31	
1355	HARRIS ST AND ELIZABETH ST	12	6	18	
1309	SILVERCREST	9	8	17	
1415	H ST AND 3RD ST	9	8	17	
29440	VETERANS CLINIC	10	6	16	
1340	HENDERSON ST AND SPRING ST	2	13	15	
2729389	H ST AND 3RD ST	6	6	12	
759007	HARRIS ST AND CENTRAL AVE	5	6	11	
1331	I ST AND DEL NORTE ST	5	5	10	61.40%
1304	SUMMER ST AND CLARK ST	6	3	9	
759004	HARRIS ST AND GRANADA ST	4	4	8	
1409	TARGET	5	3	8	
1326	LITTLE FAIRFIELD ST AND ALLA	3	4	7	
1375	E ST AND 12TH ST	3	4	7	
1317	MYRTLETOWN MARKET	4	3	7	
2607	DEL NORTE ST AND CALIFORNIA	5	2	7	
1374	E ST AND DEL NORTE ST	2	4	6	
1321	MYRTLE AVE AND GLENWOOD ST	3	3	6	
1332	I ST AND 15TH ST	3	3	6	
1377	E ST AND 15TH ST	3	2	6	
1305	SUMMER ST AND 7TH ST	3	2	5	
1398	ALPHA ST AND MYERS AVE	3	2	5	
1403	6TH ST AND C ST	3	1	5	
1376	E ST AND 9TH ST	2	3	4	
1416	2ND ST AND L ST	2	3	4	
1251	BROADWAY ST. AND MCCULLENS A	2	2	4	
1318	MYRTLE TOWN SHOPS	2	2	4	
1345	HARRISON ST AND HARRIS ST	2	2	4	
1349	HARRIS ST AND SUMMER ST	2	2	4	
1406	3RD ST AND T ST	2	2	4	87.6%

1297	W ST AND CHESTER ST	1	2	3	
1298	VANCE ST AND HERRICK AVE	2	2	3	
1333	I ST AND 12TH ST	1	2	3	
1339	HENDERSON ST AND SUMMER ST	2	2	3	
1366	BAYSHORE WAY (FOREST SERVICE	1	2	3	
2750735	I ST AND 8TH ST	1	2	3	
1307	ST. JOSEPH S HOSPITAL	1	1	3	
1330	I ST AND HUNTOON ST	2	1	3	
759023	HARRIS ST AND U ST	1	1	3	
2322272	MYRTLE AVE AND 18TH ST	2	1	3	94.1%
1342	HENDERSON ST AND CENTRAL AVE	1	1	2	
1347	HARRISON ST AND ERIE ST	0	1	2	
1396	BINGEN AVE AND LEWIS AVE	1	1	2	
1404	6TH ST AND G ST	2	1	2	95.9%
1303	SUMMER ST AND WABASH ST	1	1	1	
1320	MYRTLE AVE AND HALL AVE	0	1	1	
1341	HENDERSON ST AND LOWELL ST	0	1	1	
1343	HENDERSON ST AND A ST	0	1	1	
1351	HARRIS ST AND P ST	1	1	1	
1385	CALIFORNIA ST AND DOLLISON S	0	1	1	
1387	CALIFORNIA ST AND BUHNE ST	0	1	1	
1410	2ND ST AND V ST	1	1	1	
29438	UTAH ST AND SOUTH AVE	0	1	1	
758983	HARRIS ST AND K ST	0	1	1	
1306	SUMMER ST AND 15TH ST	1	0	1	
1319	MYRTLE AVE AND SUNNY AVE	1	0	1	
1322	MYRTLE AVE AND DEAN ST	0	0	1	
1325	LITTLE FAIRFIELD ST AND SEA	0	0	1	
1356	REDWOOD ACRES	1	0	1	
1373	E ST AND DOLLISON ST	1	0	1	
1405	3RD ST AND V ST	0	0	1	
29439	UTAH ST AND ALLARD AVE	0	0	1	
758981	HARRIS ST AND F ST	1	0	1	
1338	HERRICK AVE AND ELK RIVER RD	0	0	0	
1353	HARRIS ST AND LOWELL ST	0	0	0	
1371	EUREKA ST AND LEONARD DR	0	0	0	
1372	E ST AND HUNTOON ST	0	0	0	

Of 69 stops on the Saturday Service, the top 11 stops account for 61.4%				
of the activity				
The bottom 23 stops (only 1 activity per day) account for only 4.1%				
of the activity				