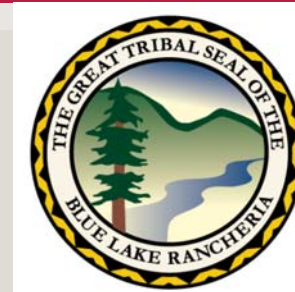


BLUE LAKE TRANSIT PLANNING SCENARIOS

INITIAL ANALYSIS OF POSSIBLE BLUE LAKE RANCHERIA ROUTE ALTERNATIVES
AND MOBILITY ON DEMAND OPTIONS

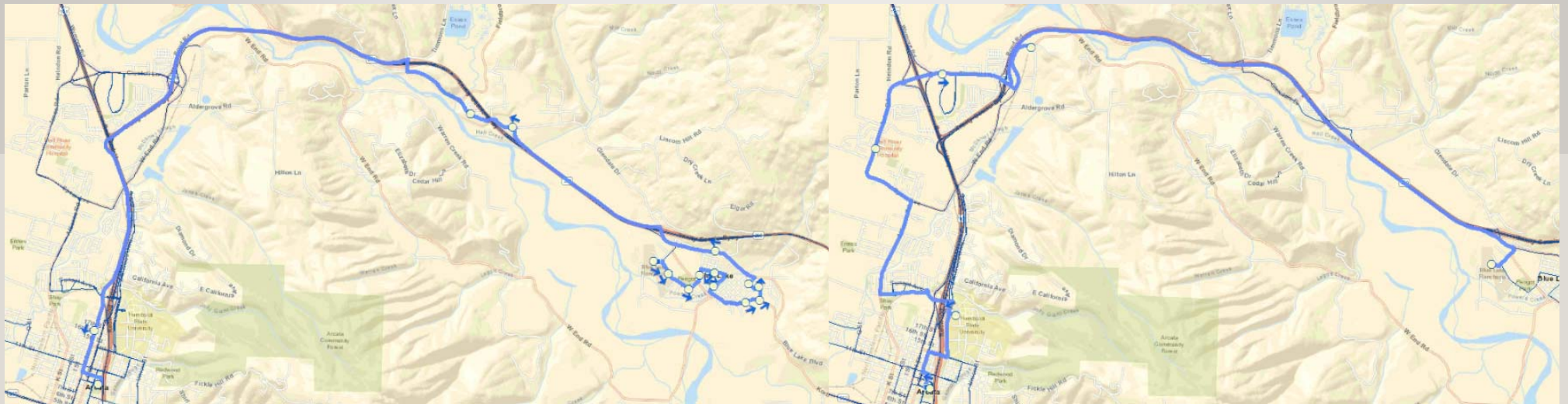
INTRODUCTION

- 2014 FTA Planning Grant provided funding
- Study goal: develop practical transit routes that include service to Fieldbrook, Glendale, and Korbel.
- Rancheria and HCAOG partnership



EXISTING CONDITIONS

Blue Lake Transit



EXISTING CONDITIONS

- Headways & service hours
- 800-1000 monthly BLRTS riders
- 10% farebox for FY 18/19
- \$90,000-\$140,000 Operating Cost (labor and fuel spikes)
- \$13,000 of the City of Blue Lake's LTF funds currently used on Streets
- No subsidies from Arcata or County
- No GTFS data
- Blue Lake inner-city stops on outbound only
- Valley West Stops on return only

SCHEDULE

The Transit Route begins and ends at the Blue Lake Rancheria.

OUTBOUND FROM BLUE LAKE	*Blue Lake Rancheria (Front of Casino)	7:05 AM	8:05 AM	9:05 AM	NO SERVICE 10am to 1pm	1:05 PM	2:05 PM	3:05 PM	4:05 PM	5:05 PM
	*Rancheria Road (East and by stop sign)	7:06 AM	8:06 AM	9:06 AM		1:06 PM	2:06 PM	3:06 PM	4:06 PM	5:06 PM
	Chartin & Broderick	7:07 AM	8:07 AM	9:07 AM		1:07 PM	2:07 PM	3:07 PM	4:07 PM	5:07 PM
	*Blue Lake City Hall (East side)	7:08 AM	8:08 AM	9:08 AM		1:08 PM	2:08 PM	3:08 PM	4:08 PM	5:08 PM
	*Post Office	7:09 AM	8:09 AM	9:09 AM		1:09 PM	2:09 PM	3:09 PM	4:09 PM	5:09 PM
	Railroad & Third Street (Bottom of hill)	7:11 AM	8:11 AM	9:11 AM		1:11 PM	2:11 PM	3:11 PM	4:11 PM	5:11 PM
	*Railroad & Raymar	7:12 AM	8:12 AM	9:12 AM		1:12 PM	2:12 PM	3:12 PM	4:12 PM	5:12 PM
	*J Street & Blue Lake Blvd.	7:14 AM	8:14 AM	9:14 AM		1:14 PM	2:14 PM	3:14 PM	4:14 PM	5:14 PM
	Blue Lake Blvd. & Patriot Station	7:15 AM	8:15 AM	9:15 AM		1:15 PM	2:15 PM	3:15 PM	4:15 PM	5:15 PM
	Liscomb Hill & Glendale Drive	7:17 AM	8:17 AM	9:17 AM		1:17 PM	2:17 PM	3:17 PM	4:17 PM	5:17 PM
	Murphy's Market at Glendale	7:19 AM	8:19 AM	9:19 AM		1:19 PM	2:19 PM	3:19 PM	4:19 PM	5:19 PM
	16th & H Street - Arcata	7:29 AM	8:29 AM	9:29 AM		1:29 PM	2:29 PM	3:29 PM	4:29 PM	5:29 PM
	Arcata Transit Center	7:35 AM	8:35 AM	9:35 AM		1:35 PM	2:35 PM	3:35 PM	4:35 PM	5:35 PM
	*Humboldt State University Library Circle	7:37 AM	8:37 AM	9:37 AM		1:37 PM	2:37 PM	3:37 PM	4:37 PM	5:37 PM
INBOUND TO BLUE LAKE	CALL STOP	PLEASE CALL FOR PICKUP (707) 668-5101 Ext. 1033 2 HOURS IN ADVANCE REQUIRED								
	Mad River Hospital									
	United Indian Health Services									
	Erickson Court									
	*Valley West & Guintoli Ln. (McDonalds)	7:45 AM	8:45 AM	9:45 AM	NO SERVICE 10am to 1pm	1:45 PM	2:45 PM	3:45 PM	4:45 PM	5:45 PM
*Valley East & Guintoli Ln. (Napa Auto)	7:46 AM	8:46 AM	9:46 AM	1:46 PM		2:46 PM	3:46 PM	4:46 PM	5:46 PM	
*Passenger Shelter										

OPERATION DAYS

FLAG STOPS

BLUE LAKE NEEDS & OPPORTUNITIES

Needs

- No service to Fieldbrook and Korbel
- Transportation to transfer stops needed
 - Existing: Arcata Transit Center
 - Potential:
 - McKinleyville Airport
 - McKinleyville High School
 - McKinleyville Shopping Center
- 50% decreased usage of transit since 2015 (1658 monthly riders 2015, 844 for March 2019, 898 June 2019)
- BLRTS now provides service to Glendale

Opportunities

- 50% decreased usage of transit since 2015 (1658 monthly riders 2015, 844 for March 2019, 898 June 2019)
- Willow Creek stop in Blue Lake recommended in HCAOG TDP (although fares are higher for WC route)
- BLRTS now provides service to Glendale

BLUE LAKE SURVEY RESULTS

Question 3 - In what Zip Code is your home located:

Answer Options	Response Percent	Response Count
95525 Blue Lake	100.0%	47
95519 Fieldbrook	0.0%	0
95519 Glendale	0.0%	0
95550 Korbelt	0.0%	0
95519 McKinleyville	0.0%	0
Other (please specify)	0.0%	0
<i>answered question</i>		47
<i>skipped question</i>		0

Question 7 - For Monday through Friday Service: Where would you begin your trip?

Answer Options	Response Percent	Response Count
Blue Lake	70.2%	33
Fieldbrook Road	4.3%	2
Glendale Drive	0.0%	0
Korbelt	0.0%	0
McKinleyville	0.0%	0
Will not use on Monday through Friday	17.0%	8
Other (please specify)	8.5%	4
<i>answered question</i>		47
<i>skipped question</i>		0

Other responses:

x2 No answer

Blue Lake / Fieldbrook

on my bicycle

BLUE LAKE SURVEY RESULTS

Question 8 - For Monday through Friday Service:What would be your destination point?

Answer Options	Response Percent	Response Count
Arcata	48.9%	23
Blue Lake	2.1%	1
Eureka	25.5%	12
Ferndale	0.0%	0
Fieldbrook Road	2.1%	1
Fortuna	0.0%	0
Glendale Drive	4.3%	2
Korbel	0.0%	0
McKinleyville	19.1%	9
Rio Dell	0.0%	0
Trinidad	0.0%	0
College of the Redwoods	2.1%	1
Humboldt State University	6.4%	3
Will not use service on Monday through Friday	19.1%	9
Other (please specify)	14.9%	7
	answered question	47
	skipped question	0
Other responses:		
Murray and Central		
x2 no answer		
Valley West, Transit Center		
Railroad & Raymar		
Murphys Market - work		
on my bicycle		

FLDDBROOK/MCKINLEYVILLE SURVEY RESULTS

Question 3 - In what Zip Code is your home located:

Answer Options	Response Percent	Response Count
95525 Blue Lake	0.0%	0
95519 Fieldbrook	55.6%	40
95519 Glendale	13.9%	10
95550 Korbel	0.0%	0
95519 McKinleyville	30.6%	22
Other (please specify)	0.0%	0
answered question		72
skipped question		0

Question 7 - For Monday through Friday Service: Where would you begin your trip?

Answer Options	Response Percent	Response Count
Blue Lake	0.0%	0
Fieldbrook Road	38.9%	28
Glendale Drive	6.9%	5
Korbel	0.0%	0
McKinleyville	5.6%	4
Will not use on Monday through Friday	31.9%	23
Other (please specify)	16.7%	12
answered question		72
skipped question		0
Other responses:		
Railroad Ave and Central		
Murray Rd and Central		
Near Market (Fieldbrook) / Firestation		
x2 Fieldbrook Store		
Blue Lake/Glendale/Hilltop		
Eureka		
Murray Road in Fieldbrook		
Glendale and Swanson		
Glendale/Murphy's Market		
Murphy's Market		
near Rock Pit Road		

Question 8 - For Monday through Friday Service:What would be your destination point?

Answer Options	Response Percent	Response Count
Arcata	36.1%	26
Blue Lake	4.2%	3
Eureka	33.3%	24
Ferndale	0.0%	0
Fieldbrook Road	0.0%	0
Fortuna	1.4%	1
Glendale Drive	1.4%	1
Korbel	0.0%	0
McKinleyville	23.6%	17
Rio Dell	0.0%	0
Trinidad	0.0%	0
College of the Redwoods	0.0%	0
Humboldt State University	5.6%	4
Will not use service on Monday through Friday	33.3%	24
Other (please specify)	12.5%	9
answered question		72
skipped question		0
Other responses:		
Arcata HSU, Mad Rvr Hospital		
Arcata Plaza and south Shopping Center		
Aquatic Center		
Arcata Transit Center, Bayshore Mall		
B Lake Post Office, or Casino Hotel		
It would vary.		
I do not want public transit anywhere near my neighborhood.		
Costco/Winco		
Dows Prairie, Morris and Mck Middle Schools		

KORBEL SURVEY RESULTS

Question 3 - In what Zip Code is your home located:

Answer Options	Response Percent	Response Count
95525 Blue Lake	0.0%	0
95519 Fieldbrook	0.0%	0
95519 Glendale	0.0%	0
95550 Korbel	100.0%	3
95519 McKinleyville	0.0%	0
Other (please specify)	0.0%	0
<i>answered question</i>		3
<i>skipped question</i>		0

Question 7 - For Monday through Friday Service: Where would you begin your trip?

Answer Options	Response Percent	Response Count
Blue Lake	33.3%	1
Fieldbrook Road	0.0%	0
Glendale Drive	0.0%	0
Korbel	66.7%	2
McKinleyville	0.0%	0
Will not use on Monday through Friday	0.0%	0
Other (please specify)	0.0%	0
<i>answered question</i>		3
<i>skipped question</i>		0

KORBEL SURVEY RESULTS

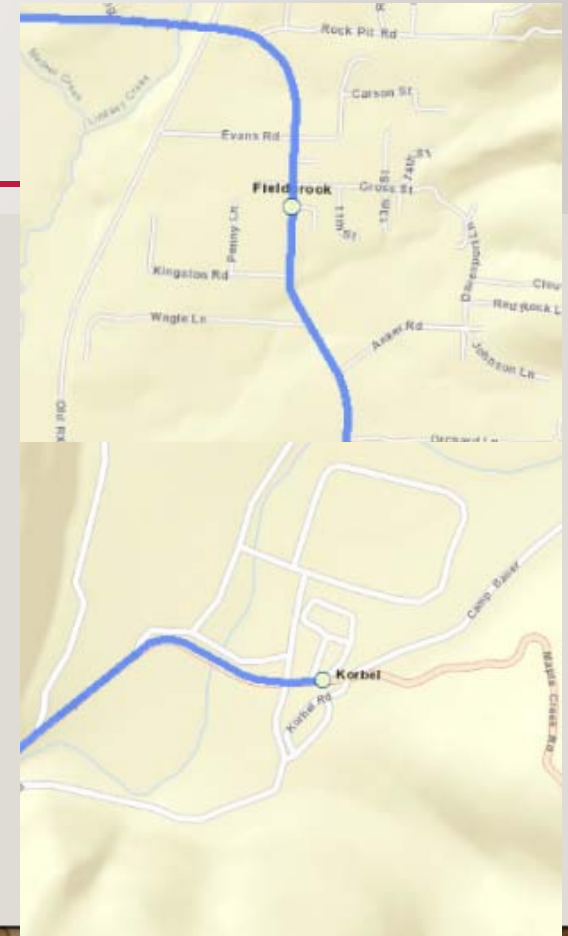
Question 8 - For Monday through Friday Service:What would be your destination point?

Answer Options	Response Percent	Response Count
Arcata	33.3%	1
Blue Lake	0.0%	0
Eureka	0.0%	0
Ferndale	0.0%	0
Fieldbrook Road	0.0%	0
Fortuna	0.0%	0
Glendale Drive	33.3%	1
Korbel	0.0%	0
McKinleyville	0.0%	0
Rio Dell	0.0%	0
Trinidad	0.0%	0
College of the Redwoods	0.0%	0
Humboldt State University	66.7%	2
Will not use service on Monday through Friday	0.0%	0
Other (please specify)	33.3%	1
answered question		3
skipped question		0
Other responses:		
E&O at Royal Gold.		

LAND USE AND SOCIOECONOMIC CHARACTERISTICS

	Blue Lake	Fieldbrook	Korbel	McKinleyville
Population of City and surrounding areas	1716	586	48	12908
Population with 3/4 mile of transit stops	1394	586	48	11654
Percentage in Poverty*	19.86%	18.94%	18.87%	16.00%
Percentage of senior population >65*	23.39%	21.33%	7.55%	12.68%
Carless Households*	2.86%	2.91%	0.00%	3.76%

*measuring those within 3/4 of a mile of the transit stops



TBEST USES

- Promising pre-validated results in delivered model
- Analyzes feasibility of potential route alternatives in scenario planning
- Strengthens data-based Unmet Transit Needs (UTN) process
- User-friendly
- Setup for Del Norte and Trinity Counties (no parcel data, but has SE data)

TBEST Pre-Validated Weekday Ridership

	Estimate	Actual
ETS	999	803
Willow Creek	27	48
A&MRTS	441	833
SHI	103	86
BLRTS	95	53
KT-NET	7	19
Tish-Non	15	13
RTS	2,291	1,920

SEEKING ANSWERS & FEEDBACK

- Keep in mind everything is on the table at this point
- Is Korbel viable?
- With Fieldbrook trip destinations, is BL a good fit for offering this service?
- What is a maximum acceptable trip time?
- When does a service become more of a lifeline option vs. a viable automobile alternative?
- Should a Fieldbrook/McKinleyville detour be on the outbound or return trip (think travel time to Arcata)
- Likes and dislikes about each scenario?
- Do you have a preference or recommendation?

SCENARIO INTRODUCTIONS

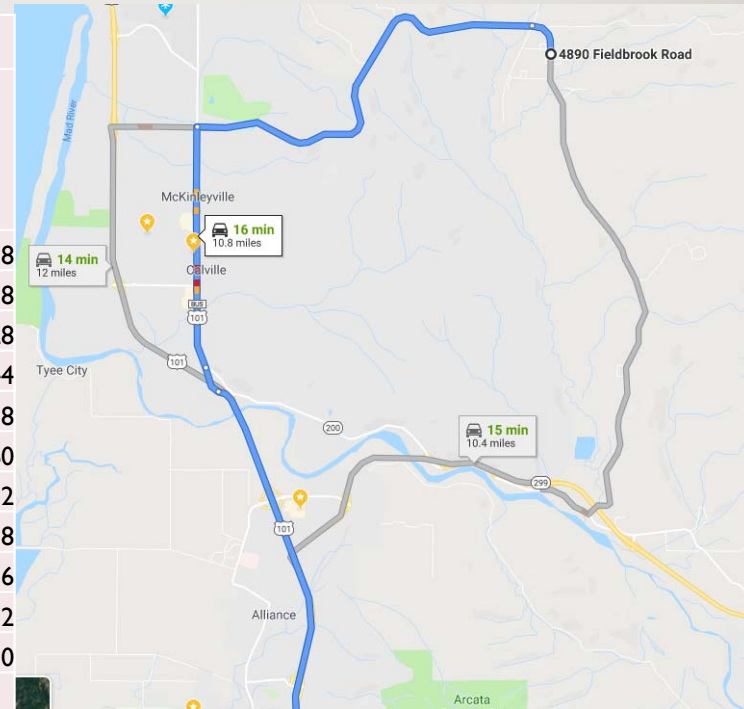
- Fieldbrook, McKinleyville, Korbelt options (County unincorporated areas)
 - Express return vs. full return
- Constrained vs. unconstrained (revenue neutral vs. cost increase)
- Blue Lake to Arcata trips
- Potential coordination with HTA's Willow Creek
- Fieldbrook and Korbelt Lifeline service
- Mobility on Demand (MoD)
- All scenarios, BL providing County service

TRAVEL TIMES

Bus Travel times from A to B

A	B	Travel Time (minutes)	Adj. bus travel time*
Blue Lake	Glendale	4	8
	Korbel	4	8
	Fieldbrook	14	28
	McKinleyville	22	44
	Arcata Transit Center	9	18
	Arcata via Fieldbrook	30	60
	Valley West via Fielbrook	26	52
Glendale	Fieldbrook	9	18
Fieldbrook	McKinleyville	8	16
	Arcata Transit Center via McKinleyville	16	32
	Arcata Transit Center via Glendale	15	30

*Less stops occur over longer periods

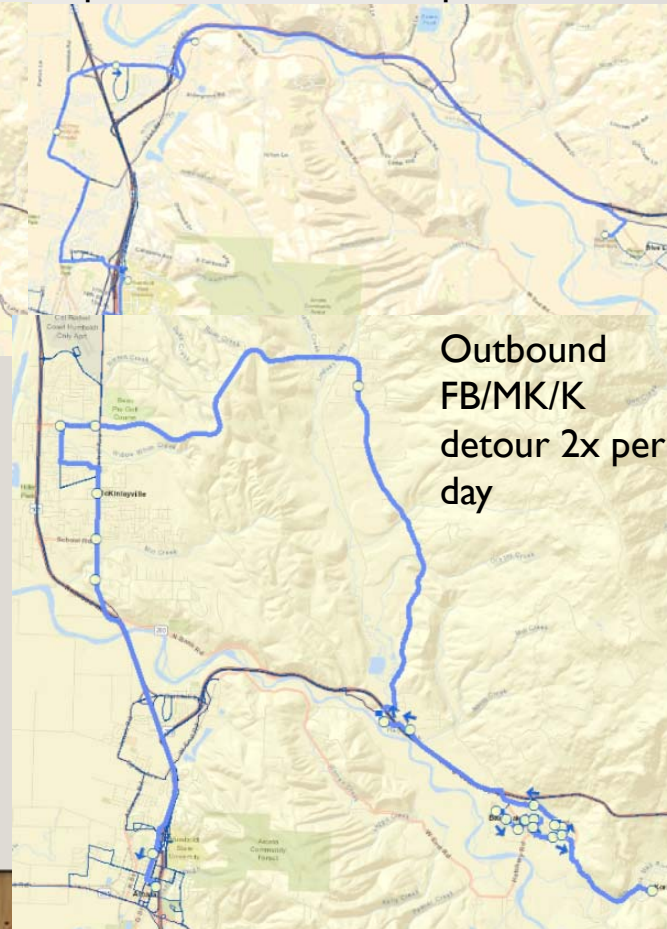


SCENARIO 2 & 2.1: FIELD BROOK, MCKINLEYVILLE, KORBEL, EXPRESS RETURN

Regular outbound



Express Return for all trips



- Key observations:
 - Original recommendation
 - Riders left in FB/K for long period
 - Feasible route cost
 - Constrained route: 9 Arcata runs, 2 detours
 - Unconstrained route: 7 Arcata runs, 2 detours

SCENARIO 3 & 3.1: FIELDBROOK, KORBEL, MCKINLEYVILLE, WITH FULL LOOP RETURN

Regular outbound

Express Return

Outbound
FB/K detour
2x per day

Return trip full
loop

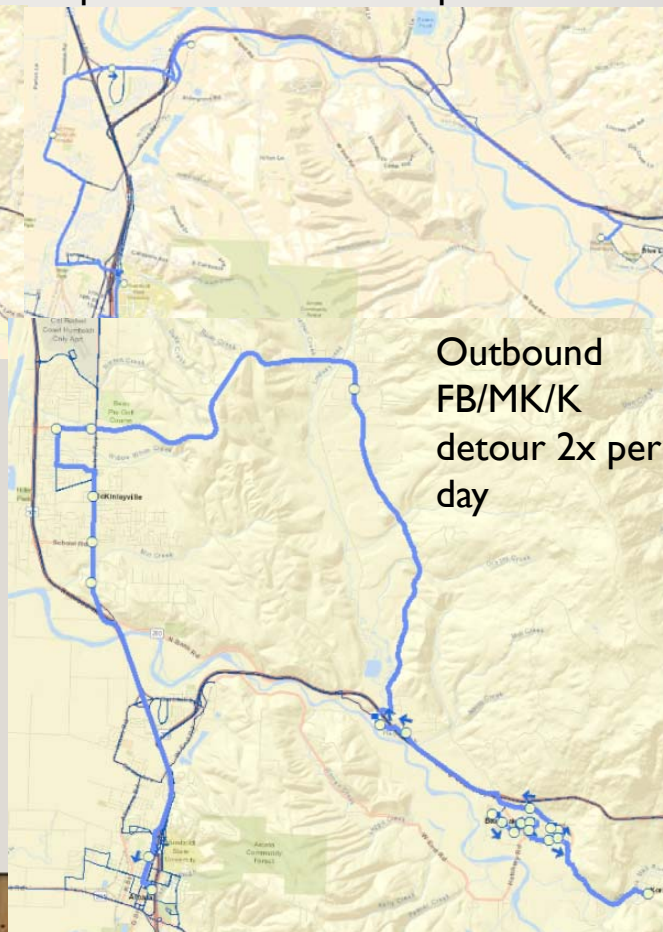
- Key observations:
 - 75 minute ride time on outbound and return detours
 - No riders left “stranded”
 - 7 daily runs to Arcata w/ 2 detour loops = 40% cost increase
 - Constrained version not feasible?
 - Constrained scenario has only 4 express trips to Arcata

SCENARIO 4 & 4.1: FIELDBROOK, MCKINLEYVILLE, KORBEL, EXPRESS RETURN LIFELINE SERVICE

Regular outbound



Express Return for all trips



Outbound
FB/MK/K
detour 2x per
day

- Key observations:
 - Fieldbrook, McKinleyville, and Korbel served 2 days per week, 2 times per day
 - Riders left in FB/K for long period
 - Feasible route costs
 - Constrained route: 6.8 Arcata runs, 2 detours
 - Unconstrained route: 6.2 Arcata runs, 2 detours

SCENARIO 5 & 5.1: PARTNERING: FIELDBROOK, KORBEL, MCKINLEYVILLE, EXPRESS RETURN, WILLOW CREEK COORDINATION

Regular outbound

Express Return

Outbound
FB/K detour
2x per day

Willow Creek
partnership &
coordination

- Key observations:
 - 20% Cost reduction
 - Still allows for 8 trips to Arcata from BL
 - 75 minute ride time on outbound and return detours
 - Riders left for long period in FB/K
 - Partnership

SCENARIO 6, 6.1, 6.2: MICKINLEYVILLE FULL SERVICE



- Key observations:
 - There are three scenarios here: A long zig-zag through McKinleyville on the inbound and outbound trip, a shorter zig-zag in McKinleyville only on the outbound trip, and a no-Arcata scenario (not pictured)
 - Trip times could be reduced to 90 minutes one-way, and likely 80 minutes for a no-Arcata scenario
 - This would need Willow Creek partnership
 - Note the amount of times BL travelers can reach Arcata

MOD OPTIONS

Zone	1	2	3	4
Drive Shed Minutes	5	10	15	20
Drive Shed MoD Minutes	7.5	15	22.5	30
Population	1388	4885	34833	39956
Seniors Pop. 65+	23.20%	18.90%	13.20%	14.10%
Pop. In Poverty	8.10%	14.90%	20.50%	20.50%
Zero Vehicle HH	2.90%	6.10%	6.80%	6.30%
Jobs	4.35	2933	13636.00	15170.00

