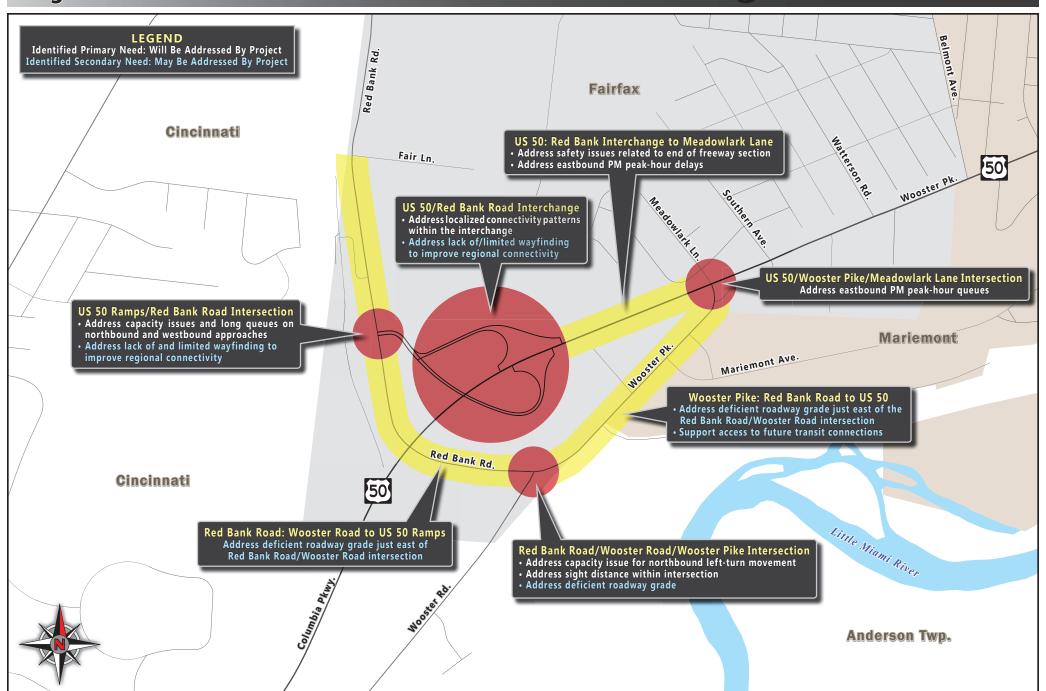


# Eastern Corridor Segments II and III US 50/Red Bank Interchange Focus Area



#### 2.5 US 50/RED BANK ROAD INTERCHANGE FOCUS AREA

The US 50/Red Bank Interchange Focus Area extends from the US 50/Red Bank Interchange area north to Fair Lane and east to Meadowlark Lane. This focus area is within the Village of Fairfax. A detailed roadway map of the US 50/Red Bank Interchange Focus Area is provided in **Appendix 5.** 

#### 2.5.1 Study Area Characteristics

Manufacturing is the predominant land use west of the US 50/Red Bank Road Interchange along Wooster Pike to Meadowlark Lane. There are residential areas along Meadowlark Lane and Nightingale Drive at the east end of the focus area. There are no planned or committed transportation projects for this focus area listed on ODOT's 2016-2019 Statewide Transportation Improvement Program (STIP) dated July 29,2016.

The community attributes for the US 50/Red Bank Interchange area that were identified in the Focus Area Workshop include the following: diverse community with community resources that are enjoyed including the Frisch's Mainliner, the Fairfax Community pool, and the Columbia Parkway. The neighborhoods are attractive with mature trees and a range of housing choices. The community has attracted young, educated people looking for a strong community with good schools. There are many options to get around in this area, including roadways and bike paths. Another attribute of the area is its proximity to nearby cultural opportunities including Music Hall, the theater in Downtown Cincinnati, and sporting events.

#### 2.5.2 Transportation Needs

**Stakeholder Input:** Transportation needs within the US 50/Red Bank Interchange Focus Area were identified during the Focus Area Workshop and the online interactive survey. These comments, which focus on safety, congestion, mobility, and access issues are included in the Needs Analysis Table (see **Appendix 5**) and summarized in the following sections.

<u>Technical Studies</u>: Technical data was collected for the roadway network within the US 50/Red Bank Interchange Focus Area to identify areas of high crash rates, congestion, geometric deficiencies, and pedestrian usage. This information is provided for the major roadway sections and intersections within the US 50/Red Bank Interchange in the Needs Analysis Table in <u>Appendix</u> 5 and summarized in the following sections.

#### 2.5.2.1 US 50/Red Bank Road Interchange

The SR 125/US 50 interchange is a partial cloverleaf interchange.



Figure 37. US 50/Red Bank Road Interchange

<u>Stakeholder Input</u>: Twenty-five comments address issues at the US 50/Red Bank Road Interchange. Representative comments include:

- The intersection is very inefficient and backs up during heavy traffic (4 comments)
- There are line of sight and merging issues (2 comments)
- The intersection has safety concerns/frequent accidents (2 comments)
- Peak-Hour congestion is an issue (6 comments)
- There is driver confusion due awkward interchange configuration (2 comments)
- Poor linkage to Beechmont Levee (SR 125) (1 comment)
- Confusing signage (2 comments)
- A safer, smoother transition from US 50 to Red Bank Road is needed (4 comments)
- Difficult to access I-71 from this area (2 comments)

#### Bike comments include:

- A bike path is needed (1 comment)
- Connections are needed between Madisonville and Fairfax to Wasson Way and Otto Armleder Park. (1 comment)

#### Three pedestrian comments are:

- Sidewalks are needed (1 comment)
- A sidewalk is needed between Fairfax and Red Bank Road (1 comment)
- A sidewalk/pedestrian path is needed to Ault Park from the Fairfax bike path (Murray Avenue Trail) (1 comment)

One public transit comment identifies the need for a train to Downtown which would connect with the Streetcar.

<u>Crash Data</u>: ODOT's crash screening did not identify this interchange as an area of high hazard. Crash data indicates that 15 crashes occurred over the three-year period (2013 – 2015).

LOS Analysis: An analysis of the merge/diverge operations of the ramps was performed using the HCS. All ramps are operating at LOS C or better during both the AM and PM peak hours in 2015 and for the No Build opening year (2022) and No Build design year (2042) conditions. No improvements are required for the existing, No Build opening year, and No Build design year conditions.

**Geometric Data**: No geometric deficiencies were identified for this segment.

**<u>Pedestrian Data</u>**: No pedestrian data is available for this segment.

#### 2.5.2.2 US 50: Red Bank Road to Meadowlark Lane

The section of US 50 between Red Bank Road and Meadowlark Lane is a four-lane divided limited-access roadway approximately 0.3 miles in length with a posted speed of 50 mph.

**Stakeholder Input**: Of the 16 roadway comments provided for the section of US 50 between Red Bank Road and Meadowlark Lane, 15 concern congestion. Representative comments include:

- Traffic lights cause delays; signal timing is not correct, particularly the Watterson intersection (4 comments)
- The road is only one lane; left turns cause delay and many side streets have been blocked (3 comments)
- The roadway should be widened (1 comment)
- There should be a consistent number of lanes on Wooster Pike all the way through Fairfax and Mariemont instead of alternating between one and two lanes (1 comment)

Three bike comments indicate that better bike access is needed along US 50 from Fairfax to Red Bank and that the Red Bank bike trail should connect to the Little Miami Trail.

Three pedestrian comments were provided which identify the following concerns:

- Safety is a general pedestrian concern in the area (1 comment)
- A sidewalk is needed to Ault Park (1 comment)
- US 50 is difficult to cross (1 comment)

Three comments identify the need for public transit, of which two identify the need for commuter rail to downtown.

<u>Crash Data</u>: ODOT's crash screening did not identify this segment as an area of high hazard. Crash data indicates that one crash occurred over the three-year period (2013 – 2015).

**LOS Analysis:** No level of service analysis was conducted for this segment; however, the travel time data indicates a 165% increase in the eastbound travel time during the PM peak-hour compared to the off-peak travel time indicating congestion during the PM peak-hour.

**Geometric Data:** No geometric deficiencies were identified for this segment.

**Pedestrian Data:** No pedestrian data is available for this segment.

#### 2.5.2.3 US 50/Meadowlark Lane Intersection

The US 50/Meadowlark Lane intersection is a signalized four-leg intersection.



Figure 38. US 50/Meadowlark Lane Intersection

<u>Stakeholder Input</u>: Of the 25 comments provided for the US 50/Meadow Lark Intersection, 24 identify congestion as an issue and one identifies speed. Representative comments include:

- Congestion at the stoplight is bad during the AM and PM peak hours (15 comments)
- Signal timing is an issue (3 comments)
- Drivers see back-ups at the intersection of US 50 and Old Wooster Pike and will bypass the left hand lane and use Dragon Way to jump ahead in line (1 comment)
- Commuters should be re-routed off US 50 (1 comment)
- Going from two to one lane is an issue (4 comments)

One public transit comment indicated that this would be a good place for a park and ride and rail service.

<u>Crash Data</u>: ODOT's crash screening did not identify this intersection as an area of high hazard. Crash data indicates that 31 crashes occurred over the three-year period (2013 – 2015). Of the 31 crashes, 17 were rear-end crashes. Eight of the 17 rear-end crashes occurred in the eastbound direction due to gueued traffic.

**LOS Analysis:** The HCS analysis indicates that the southbound shared left/through movement 95<sup>th</sup> percentile queue length exceeds the storage length during the AM peak-hour and northbound shared left/through movement 95<sup>th</sup> percentile queue length exceeds the storage length during



Eastbound US 50 at Meadowlark Lane (PM Peak)

the PM peak-hour. This occurs for the existing, the No Build opening year (2022), and No Build design year (2042) conditions. The LOS and v/c ratios are acceptable. It is anticipated that operational or minor intersection improvements are required for the existing, No Build opening year and No Build design year conditions.

To supplement the HCS analysis a queue study was conducted for the eastbound approach during the PM peak period. The number of cars in the queue was recorded at the end of green for 15 minutes prior to the peak hour to 15 minutes

after the peak-hour ended. The number of cars was translated to a length by assuming a queue length of 25 feet per vehicle. During the PM peak period the maximum eastbound queue extended 1,100 feet. The recorded queues during the PM peak period are shown in **Figure 39**:

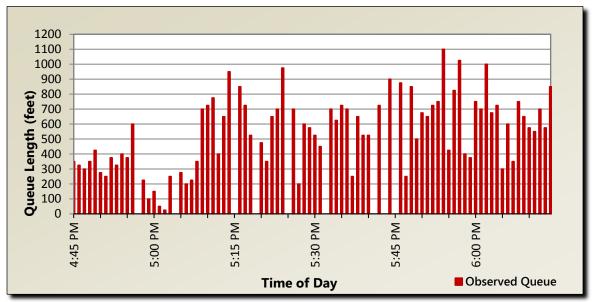


Figure 39. Eastbound US 50 PM Peak-Period Queues at Meadowlark Lane

**Geometric Data:** No geometric deficiencies were identified for this segment.

<u>Pedestrian Data</u>: Nine pedestrians were observed at the intersection during a 24-hour period recorded on November 19, 2015.

#### 2.5.2.4 Wooster Pike: Red Bank Road to US 50

The section of Wooster Pike between Red Bank Road and US 50 is a two-lane undivided roadway, approximately 0.5 miles in length, with a posted speed of 35 mph.

<u>Stakeholder Input</u>: Five comments identify the following concerns regarding Wooster Pike between Red Bank Road and US 50:

- The roadway needs repair (1 comment)
- There is congestion through Fairfax (3 comments)
- The roadway striping is hard to see (1 comment)

#### Five bike comments include:

- A path is needed along Wooster to Old Wooster Pike to connect to Otto Armleder Park (1 comment)
- A bike path and improved walking paths are needed to connect to business areas along Red Bank Road (1 comment)
- East-west bike paths are needed that avoid US 50 (1 comment)
- Need marked bike lanes (1 comment)
- A path is needed to connect Cincinnati with the Little Miami Trail (1 comment)

Four comments identify the following public transit needs:

- A bus stop shelter (1 comment)
- Rail transit with a park and ride (2 comments)
- Bus Rapid Transit (BRT), possibly along the Oasis line (1 comment)

<u>Crash Data</u>: ODOT's crash screening did not identify this segment as an area of high hazard. Crash data indicates that six crashes occurred over the three-year period (2013 – 2015).

**LOS Analysis:** No level of service analysis was conducted for this segment.

<u>Geometric Data</u>: A deficient sag vertical curve just east of the Red Bank Road intersection has a k-value of 24. The minimum allowable k-value for 35 mph is 49. The superelevation through this combination horizontal/vertical curve also does not meet current standards.

**Pedestrian Data:** No pedestrian data is available for this segment.

#### 2.5.2.5 Wooster Road/Wooster Pike/Red Bank Road Intersection

The Wooster Road/Wooster Pike/Red Bank Road intersection is a signalized three-leg intersection:



Figure 40: Wooster Road/Red Bank Road Intersection

<u>Stakeholder Input</u>: Public comments indicate that congestion and access are issues at the Wooster/Red Bank Intersection. Representative comments include:

- The intersection is very congested, especially in the AM peak (2 comments)
- There is poor signal detection (and alignment) at the Wooster Road/Red Bank Road intersection (1 comment)
- A better connection is needed from Red Bank Road to SR 32 (5 comments)
- A better connection is needed from SR 125 to Red Bank Road and a connection is needed between SR 125 via Columbia Parkway at Church Place (1 comment)

One bike comment indicates that a bike path is needed to connect Avoca and Lunken.

One public transit comment identifies a need for commuter rail into Cincinnati and beyond I-275.

<u>Crash Data</u>: ODOT's crash screening did not identify this intersection as an area of high hazard. Crash data indicates that five crashes occurred over the three-year period (2013 – 2015).

LOS Analysis: The HCS analysis indicates that the northbound left turn movement 95<sup>th</sup> percentile queue length exceeds the storage length during the AM peak-hour for the existing, the No Build opening year (2022), and No Build design year (2042) conditions. The LOS and v/c ratios are acceptable, but approaching capacity in the opening year and design year scenarios. If the existing signal timing was used instead of balancing the delays per the ODOT methodology, the northbound left turn movement would fail with v/c ratios greater than 1.0. This indicates that the failure of the northbound left turn movement is likely due to a signal timing issue. No intersection improvements are required for the exiting conditions, but it is anticipated that operational or minor intersection improvements are required for the No Build opening year and No Build design year conditions.

<u>Geometric Data</u>: One vertical curve is deficient through this intersection. The crest vertical curve has a k-value of 10 and the minimum required k-value is 29 for speed of 35 mph. In addition, the lane configuration on Red Bank Road (west of the intersection) and Wooster Pike (east of the intersection) are staggered; vehicles traveling east on Red Bank Road continuing through the intersection onto Wooster Pike must weave through the intersection to avoid collisions with westbound vehicles on Wooster Pike waiting to turn left onto Wooster Road.

**<u>Pedestrian Data</u>**: No pedestrians were observed at the intersection during a 24-hour period recorded on November 17, 2015.

#### 2.5.2.6 Red Bank Road: Wooster Road to the US 50 Interchange Ramps

The section of Red Bank Road between Wooster Road and the US 50 Interchange Ramps is a two-lane undivided roadway, approximately 0.4 miles in length, with a posted speed of 35 mph.

**Stakeholder Input:** Of nine comments concerning roadway issues on Red Bank Road between Wooster Road and the US 50 Ramps, five identify congestion as an issue. Access and connectivity issues were also cited. Representative comments include:

- Red Bank Road should cross the river and connect with SR 32 (2 comments)
- The Red Bank, Wooster Pike and US 50 connections are confusing for drivers and face constant delays. The road and ramp system should be upgraded and a better connection provided between SR 32 and SR 125 (1 comment)
- An easier access is needed to the Norwood Lateral (1 comment)

Ten comments identify bikeway concerns as follows:

- A bike path is needed (1 comment)
- A connection between Ault Park and other bike paths is needed (4 comments)
- Wasson Way should be connected to Fairfax/Mariemont/Little Miami Trail (3 comments)
- A bike lane is needed at this intersection (1 comment)
- Extend Wasson Way from Ault Park to the Newtown Road bridge (1 comment)

One public transit comment identifies the need to provide transit between the Red Bank area and Eastgate.



Figure 41: Frequency of Crashes by Crash Type Red Bank Road: Wooster Rd. to US 50 Ramps

Crash Data: The ODOT crash screening of the Segments II and III roadway network identified Red Bank Road from Wooster Road to the US 50 Ramps as a high hazard location through. As illustrated in Figure 41, there were 18 total crashes in this roadway section during the three-year period between 2013 and 2015. Rear-end crashes represent 45% of the total crashes.

Eight of the crashes occurred just south of the signalized intersection at the US 50 Ramps and

were related to vehicles queued from the signal at the US 50 Ramps. Six of the seven rear-end

crashes occurred in the northbound direction. Five crashes occurred at the vertical sag curve just east of the US 50 underpass. A geometric review indicates that the vertical curve is substandard. Refer to **Attachment A-2** for a plot of all 18 crashes.

**LOS Analysis:** No level of service analysis was conducted for this segment.

**Geometric Data:** A deficient sag vertical curve on this segment has a k-value of 45. The minimum required k-value is 49 for 35 mph.

**<u>Pedestrian Data</u>**: No pedestrian data is available for this segment.

#### 2.5.2.7 Red Bank Road/US 50 Ramps Intersection

The Red Bank Road/US 50 Ramps intersection is a signalized three-leg intersection:



Figure 42: Red Bank Road/US 50 Interchange Ramps Intersection

<u>Stakeholder Input</u>: One roadway comment for the Red Bank/US Ramp Intersection indicates that improved directional signage could improve the intersection.

<u>Crash Data</u>: An ODOT crash screening did not identify this intersection as an area of high hazard. Crash data indicates that 11 crashes occurred over the three-year period (2013 – 2015).

LOS Analysis: The HCS analysis indicates that this intersection is failing during the AM peak-hour under existing conditions. The two movements contributing to the overall intersection failure is the westbound right turn movement (v/c ratio of 1.26) and the failing northbound movement (v/c ratio of 1.10). These failures are exacerbated in the No Build opening year (2022) and No Build design year (2042) conditions. It is anticipated that major capacity improvements are required for the existing, No Build opening year, and No Build design year conditions.



Northbound Red Bank Road at Colbank (AM Peak)

To supplement the HCS analysis a queue study was conducted for the northbound and westbound approaches during the AM peak period. The number of cars in the queue was recorded at the end of green for 15 minutes prior to the peak hour to 15 minutes after the peak-hour ended. The number of cars was translated to a length by assuming a queue length of 25 feet per vehicle. During the AM peak period the maximum northbound queue extended 625 feet and the maximum westbound queue extended 600 feet. The recorded queues during the AM peak period are shown in Figures 43 and 44:

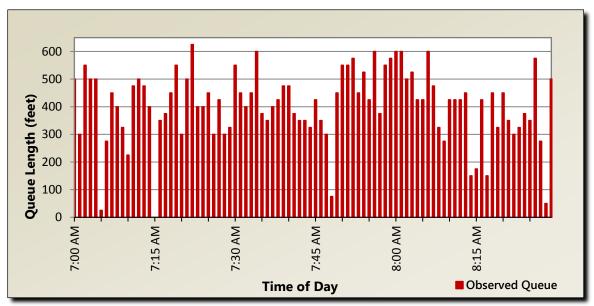


Figure 43: Northbound Red Bank Road AM Peak-Period Queues at Colbank Road

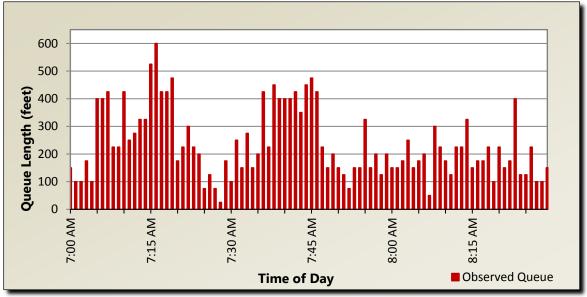


Figure 44. Westbound Colbank Road AM Peak-Period Queues at Red Bank Road

**Geometric Data:** No geometric deficiencies were identified at this intersection.

<u>Pedestrian Data</u>: No pedestrians were observed at the intersection during a 24-hour period recorded on February 17, 2016.

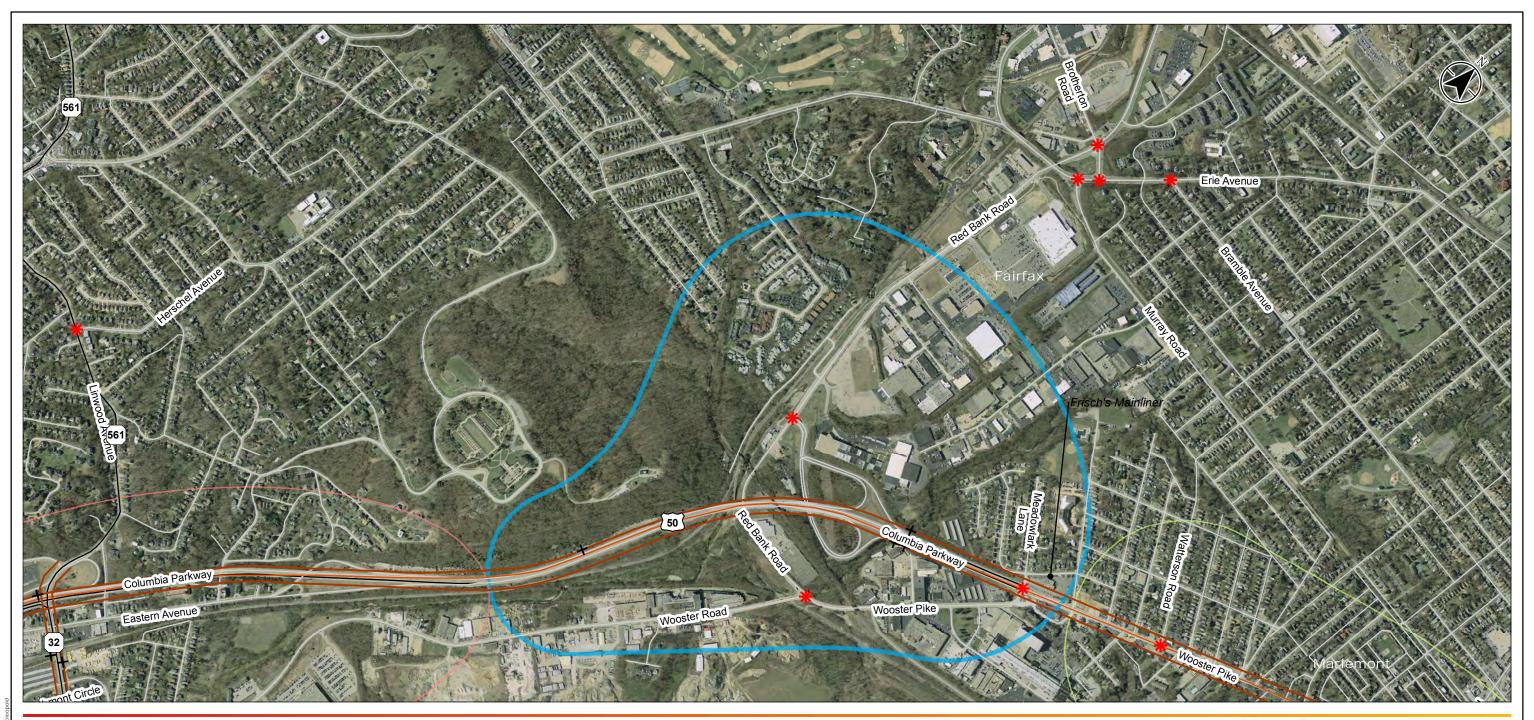
#### 2.5.3 US 50/Red Bank Road Interchange Focus Area Needs Analysis

Based on the results of the technical studies, as well as the extensive public input received from the Focus Area Workshops, online interactive survey, and other public outreach efforts, the primary and secondary needs of the transportation network within the US 50/Red Bank Interchange Focus Area were identified (primary needs are needs that will be addressed by this project; secondary needs are needs that may be addressed by this project). The input used in the needs analysis is presented in **Appendix 5**. The primary and secondary needs are presented in **Table 13**:

Table 13. US 50/Red Bank Road Interchange Focus Area Needs Analysis

Primary Needs	Secondary Needs					
US 50/Red Bank Road Interchange						
Address localized connectivity patterns within the interchange	Address lack of/limited wayfinding signage to improve regional connectivity					
US 50: Red Bank Road Interchange to Meadowlark La	ine					
Address safety issues related to end of freeway section	None					
Address eastbound PM peak-hour queues						
US 50 /Meadowlark Lane Intersection						
Address eastbound PM peak-hour queues	None					
Wooster Pike: Red Bank Road to US 50						
None	<ul> <li>Address deficient roadway grade just east of the Red Bank Road/Wooster Road intersection</li> <li>Support access to future transit connections</li> </ul>					
Red Bank Road/Wooster Road/Wooster Pike Intersection						
<ul> <li>Address capacity issue for northbound left-turn movement</li> <li>Address sight distance within intersection</li> </ul>	Address deficient roadway grade					
Red Bank Road: Wooster Road to US 50 Ramps						
Address deficient roadway grade just east of Red Bank Road/Wooster Road intersection	None					
Red Bank Road/US 50 Ramps Intersection						
Address capacity issues and long queues on northbound and westbound approaches	Address lack of/limited wayfinding to improve regional connectivity					
Red Bank Road: US 50 Ramps to Fair Lane						
None	None					

## APPENDIX 5 US 50/RED BANK INTERCHANGE AREA





Legend

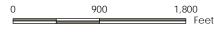
Linwood-Eastern Interchange Area

US 50 Corridor Area

US 50-Red Bank Interchange Area

**\*** LOS Analysis Intersection

++ LOS Analysis Roadway Segment



1:12,000 (At original document size of 11x17)



173620069 Prepared by BL on 2016-11-21

Client/Project
Ohio Department of Transportation, District 8
Transportation Needs Analysis
Eastern corridor Segments II and III

Focus Area Detail US 50/Red Bank Road Interchange

Coordinate System: NAD 1983 StatePlane Ohio South FIPS 3402 Feet
 Base features: produced from project design elements.
 Base Imagery: Ortholmagery - OGRIP-OSIP II, 2012.

5-1

#### Focus Area:

US 50 / Red Bank Interchange

### in the Focus Area Workshop:

Community Attributes Identified The US 50/Red Bank Interchange Focus Area extends along the US 50 (Wooster Pike) and manufacturing businesses, such as Kellogg's Snack Division, along Old Wooster Pike. The Frisch's Mainliner Restaurant, a historic restaurant dating from 1939, is located along US 50 (Wooster Pike), just west of Southern Avenue. The community attributes identified in the Focus Area Workshop for the Fairfax area include: walkability; great schools; safe; unique neighborhood; quiet (except for rush hour); beautiful with mature trees; diverse. The residents also indicated that Fairfax has been attracting young, educated people who are looking for a strong community.

**HCS Analysis** <u>Travel Time</u> <u>Queue Analysis</u> <u>Geometric Analysis</u> <u>Primary Needs</u> Transportation Concern MetroQuest Comments Workshop Comments **Existing Year 2015** Opening Year 2022 Design Year 2042 <u>Safety</u> Secondary Needs US 50 / Red Bank Interchange Congestion This whole intersection is very inefficient for traffic flow for At the intersection of Red Bank and Wooster, coming No deficiencies No deficiencies No deficiencies 15 crashes at interchange from 2013 n/a No deficiencies Address localized connectivity travel | Address lack of/limited wayfinding to out of Linwood, there is a bridge that creates poor patterns within the interchange. improve regional connectivity. both Red Bank access to 50 and vice a versa. Does not work through 2015. Not identified as a very well and backs up during heavy traffic times. (5 pins) alignment in the intersection. If you are driving down high hazard location by ODOT Red Bank Road and continuing onto Wooster, it screening. almost feels like you are driving into oncoming traffic. Redbank exit at 4:30pm is a nightmare - I usually take surface The layout is strange and should be addressed. The streets to avoid the backup! timing of the signals at this intersection should also be Needs repair. The interchange of US 50 and Red Bank Road could be Safety Frequent accidents. improved significantly. There are a lot of line of sight Intersection is dangerous. and merging issues. There should be an effort to Safer, smoother transition from US 50 to Red Bank reduce the left and right turns and lane changes to improve the flow. Hard to get to 50 when on Red Bank. Access VERY confusing signage for entrance to Columbia Parkway. Nowhere on Red Bank Road does it say "COLUMBIA" PARKWAY". This is incredibly confusing. Furthermore, the ramp is signed as "COLBANK" which doesn't make sense for those not from the area. Finish the interchange at Red Bank / Route 50 and Old | Wooster. There is already a business / industrial corridor that could be better utilized to allow for better traffic flow to and from the eastern areas. Do this before wasting any more money on the East [cut-off]. Access issue. Please link Beechmont levee more directly here. Interstate interchanges are unnecessary and inappropriate except on interstate highways. I really wish there was a more direct route to connect to I-71, without going further north. Missing connection. This is a strange interchange. A more continuous transition from 50 to Red Bank would be helpful. This whole intersection is very inefficient for traffic flow for both Red Bank Access to hwy 50 and vice versa. Does not work well and backs up during heavy traffic times. The Red Bank / US 50 is not really a connection - it is a cludgy mess that needs a complete redesign. No signage on Parkway at Red Bank to indicate access to Mobility Need bike path. none none none Access We need to connect Madisonville and Fairfax to the Wasson Way and Armleder Park in safe ways so families can enjoy these amenities Mobility Need sidewalk. Being able to walk from Fairfax to Redbank without walking around the back on Murray would be great. More pedestrian friendly pathways to Ault Park from the Fairfax bike path Mobility Train to downtown. Connect to street car. n/a n/a n/a n/a n/a none none US 50: Red Bank to Meadowlark (Note: Wooster Pike on the south side of US 50 opposite Medadowlark) Congestion Slow traffic. There are a number of signal issues. The timing of 1 crash along segment from 2013 165% increase PM peak-hour No deficiencies 1. Address safety issues related to Traffic lights cause delays. in the EB two signals on US 50 in Fairfax and the signals along through 2015. Not identified as a queues from the end of freeway section. Limited movement creating slow progress of traffic thru Red Bank Road/Expressway could be improved. high hazard location by ODOT travel time Meadowlark 2. Address eastbound PM peak-hour Currently, the traffic often backs up at each red light. screening. during the PM Lane peak-hour intersection One lane and left turns are a nightmare. Too many side There should be consistent lanes on Wooster Pike all 8 eastbound rear-end crashes were compared to impacts the streets have been blocked. the way through Fairfax and Mariemont, rather than reported at the Meadowlark Lane intersection due do traffic queued at the off-peak eastbound switching from two lanes to one, and then back again. Light's are not timed/synced correctly, bypass on Dragon's travel time. direction of this This would prevent people from jockeying for the intersection. way creates frustration and road rage. Using Red Bank as a segment. bypass increases congestion. Traffic backups in evening rush hours. (3 pins) This bottleneck is debilitating in the evening. Choke point during evening commute. Traffic backs up on 50 all the way under railroad bridge because of poorly timed traffic lights in Fairfax. The Waterson light is particularly bad. This was easier to travel at evening rush hour before dropping to one lane.

				<b>HCS Analysis</b>							
<u>Transportation Concern</u>	MetroQuest Comments	Workshop Comments	Existing Year 2015	Opening Year 2022	Design Year 2042	<u>Safety</u>	Travel Time	Queue Analysis	Geometric Analysis	Primary Needs	Secondary Needs
	Need to increase capacity, eliminate bottleneck, provide better traffic access.										
	You go from two lanes which travel is light and then clogs up										
	because for some reason Fairfax made it one lane and needs										
	to be two lanes										
Access	There needs to be a better way to connect drivers from Mt.										
	Washington/Anderson Township on Beechmont onto Red Bank Rd.										
Mobility	Establish safe bicycling corridor along US 50.		n/a	n/a	n/a	n/a	n/a	n/a	n/a	none	none
Wobility	Need bike access from Fairfax to Red Bank.		li/a	li/a	lil/ d	11/4	lii/ a	lil/a	lily a	none	none
Access	Redbank trail should connect to Newtown trail.										
Mobility	Need sidewalk To Ault Park.		n/a	n/a	n/a	n/a	n/a	n/a	n/a	none	none
Safety	Safety concern.	US 50 is difficult for pedestrians to traverse.									
Access	Wasson Way commuter rail to downtown.	Using the Oasis trail would help residents and	n/a	n/a	n/a	n/a	n/a	n/a	n/a	none	none
B 4 = h : l : h .	No od tvo o ovoti	commuters bypass many of the problems discussed.									
Mobility	Need transport!										
Meadowlark / US 50 Intersectio		<u></u>	I	I	I	Tax and the same	1 ,	In	I.,		
Congestion	The backup at this stoplight is horrible in the afternoon. It's								No deficiencies	· ·	none
	so bad, cars cut through parking lots to bypass the congestion. (It's also backed up in the morning from here		PIVI NBTL = Queue > Storage	PIVI NBTL = Queue > Storage	PM NBTL = Queue > Storage	through 2015. Not identified as a high hazard location by ODOT		Max Queue EB = 1,100'		queues.	
	all the way to Mariemont).	Meadowlark				screening.		1,100			
	Fairfax is the worst. The traffic here is awful ever since they					8 eastbound rear-end crashes due					
	went down to one lane. There are consistent wait times of					do traffic queued at the intersection					
	20 minutes just to get through this stretch of road! The										
	timing of the lights makes no sense. Take this back to two										
	Many drivers see traffic back up at the intersection of US 50										
	and Old Wooster Pike. They will bypass the left hand lane										
	that is back up for traffic through Fairfax and use Dragon										
	Way to jump ahead in line. This only exacerbates the traffic problem f [cut-off].										
	Traffic backs up due to poor traffic signal timing.										
	Congestion issue. (6 pins)										
	Re-route commuters off of US 50.	-									
	It's always super backed up because it goes from 2 lanes down to one and people cut through parking lots to cut										
	ahead.										
	Traffic backs up entering Fairfax/Mariemont area in front of										
	the Frisch's restaurant.										
	The brick center area looks nice, but results in fewer lanes. In										
	the morning, the traffic gets congested before the stoplight										
	(as you're going from Fairfax toward downtown), and makes										
	for a long backup. Conversely, in the evening, there's a long backup a [cut-off].										
	Always congested at rush hour.										
	Since creating a bottleneck on Columbia Parkway/Wooster										
	Pike in Fairfax, this area has become a nightmare at rush										
	hour. It should have never been narrowed to one lane in										
	each direction, there should be left turn lights at										
	Meadowlark (Frisch's) and Water. (4 pins)										
	Traffic lights cause delays.										
	This area consistently backs up in the evening.  The light here (and US 50) lacks the capacity to adequately	-									
	serve vehicles moving through here. Despite an idiot										
	consultant's claims to the opposite, the LOS (and the travel										
	time delay) are significantly worse than prior to the "road										
	diet".										
Congestion/Safety	Fairfax made a mess of things. Congestion is horrible which										
Safety	means air pollution is bad and tempers flare.  Speed.										
Access/Mobility	Ideal place for a park & ride, or RAIL SERVICE as this is the		n/a	n/a	n/a	n/a	n/a	n/a	n/a	none	none
.,	beginning of eastbound traffic turning into one-lane each										
	way.										
Wooster: Red Bank to US 50		Lui II	1	I /					la c		
Safety	Needs repair.	When you drive on Wooster, sometimes it feels like you are on the wrong road. One problem is the	in/a	in/a	ln/a	6 crashes along segment from 2013 through 2015. Not identified as a	in/a	n/a	Deficient vertical sag		Address deficient roadway grade just east of the Red Bank Road / Wooster
		striping of the road, which is hard to see and often				high hazard location by ODOT			curve just east of the Wooster Road		Road intersection.
		disappears.				screening.			intersection.		nodd intersection.
Congestion	Congestion through Fairfax. (3 pins)										
Mobility	Need marked bike lanes.	none	n/a	n/a	n/a	n/a	n/a	n/a	n/a	none	none
.,	Need bike path.										
	Path for Cincinnati cyclists getting to Little Miami and vice										
	versa.										
	Bike path along Wooster to Old Wooster Pike connecting to										
	Otto Armleder. Also, bike path, and improved walking paths										
	connecting to business areas along Red Bank Rd.  East-West cycle ways that avoid Route 50.										
	Last west eyele ways that avoid house so.		I and the second								

				<b>HCS Analysis</b>							
Transportation Concern	MetroQuest Comments	Workshop Comments	Existing Year 2015	Opening Year 2022	Design Year 2042	Safety		Queue Analysis	Geometric Analysis		Secondary Needs
Mobility	People walk in the grass and the road to get to the bus stop.	none	n/a	n/a	n/a	n/a	n/a	n/a	n/a	none	none
	A pedestrian path to Otto Armleder and/or the Little Miami										
	trail would be very helpful.										
Safety	Need bus stop shelter.	none	n/a	n/a	n/a	n/a	n/a	n/a	n/a	none	Support access to future transit
Access/Mobility	Rail transit with park and ride here would be amazing!								1.7.2		connections.
Mobility	Could be another good spot for a light rail stop. These need										
·	to be located in densely populated areas of mixed income										
	and with some business. On the eastside, I think of Eastgate,										
	Mt. Washington, Fairfax, and Columbia/Mt. Lookout.										
	Bus Rapid Transit, possibly along the Oasis Line, would be an	e									
	excellent mass transit option. In many countries around the										
	world, Bus Rapid Transit (BRT) has been transformative of										
	urban development. Taking unused rail lines and converting										
Mostor / Bad Bank Interception	them to bus-on [cut-off].										
Wooster / Red Bank Intersection	Often backs up in morning commute.	[there is] near signal detection (and alignment) at	AM NBL = Queue > Storage	AM NRI - Ougue > Storage	AM NBL = Queue > Storage	5 crashes at intersection from 2013	n/2	n/a	Deficient vertical	1. Address capacity issue for	Address deficient roadway grade
Congestion	The red light at Wooster Rd and Red Bank gets very backed		AIVI NDL - Queue > Storage	AIVI NDL - Queue > Storage	AWINDL - Queue > Storage	through 2015. Not identified as a	III/ a	II/a		northbound left- turn movement.	Address deficient roadway grade
	up because there is more traffic than this road was designed					high hazard location by ODOT			the intersection. The	morthbound left-turn movement.	
	to handle.					screening.				2. Address sight distance within	
Access	Connect Red Bank to 32.	none	-			Jer cermig.				intersection.	
Access	Poor connection for 125 to Red Bank due to businesses,								intersection is very	microccion.	
	traffic light, and road conditions. Improvement: Connect 125								poor. Existing crest		
	via Columbia Pkwy at Church Pl.								vertical curve limits		
	Wooster/Red Bank/US 50 needing realignment to increase								sight distance.		
	traffic flow.										
	Easier access to 71 from Anderson.										
	Why can't [you] build a connector from 32 or Beechmont										
	levee to bypass old Wooster to connect w/ Red Bank?? (3										
	pins)										
	Poor road and planning for easy access to Red Bank from										
	Wooster.										
	Need to connect Red Bank to Route 32										
Access	There needs to be a new dedicated bike path that connects		n/a	n/a	n/a	n/a	n/a	n/a	n/a	none	none
A A 1 1111	Avoca and Lunken.		. /:	. /:	. 1.		. 1.	. 1	. /.		
Mobility	Commuter rail into city and out past I275.		n/a	n/a	n/a	n/a	n/a	n/a	In/a	none	none
Red Bank: Wooster to US 50 Ra											
Congestion	1 0	none	n/a	n/a	n/a	18 total crashes from 2013 through				Address deficientroadway grade just	none
	Narrowing to one lane causes significant delays.					2015; the segment was identified as			S 50 Ramps US 50 underpass. Itersection inpacts the	e east of the Red Bank Road/Wooster Road intersection	
	Congestion issue.					a high hazard location.					
	Always gets backed up.					Rear-End = 45% of the crashes.					
	Limited movement creating slow progress of traffic thru					8 of the crashes occurred just south					
	area.					of the signalized intersection at the		northbound direction of this			
Access	Red Bank, Wooster Pike and Rt. 50 connections are a mess					US 50 Ramps and were related to		segment.			
	for drivers who face constant delays. This road and ramp					vehicles queued from the signal at the US 50 Ramps.  5 crashes occurred at the vertical sag curve just east of the US 50 underpass.					
	system badly needs to be re-engineered and upgraded, and										
	better connected to Rt. 32 and 125.										
	Red Bank should cross the river and hook up with Rt 32.						g				
	Connection from here to State Route 32 would be very										
	helpful.										
	Easier access to Norwood Lateral.										
Mobility	Need bike path.	none	n/a	n/a	n/a	n/a	n/a	n/a	n/a	none	none
	Connect Ault Park with other bike paths. (3 pins)					A					
	Way to get (from Ault Park) to Little Miami Trail safely on	7									
	I way to get (ITOITI Ault Fark) to Little Ivilatili ITali Salely Off										
	bike.										
	bike. Fund a significant portion of the Wasson Way trail.										
	bike. Fund a significant portion of the Wasson Way trail. Connect Wasson Way to Fairfax/Mariemont/Little Miami.										
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	bike.  Fund a significant portion of the Wasson Way trail.  Connect Wasson Way to Fairfax/Mariemont/Little Miami.  Need bike lanes and multi use throughout corridor.  Extend Wasson Way from Ault Park to the Newtown Road										
	bike.  Fund a significant portion of the Wasson Way trail.  Connect Wasson Way to Fairfax/Mariemont/Little Miami.  Need bike lanes and multi use throughout corridor.  Extend Wasson Way from Ault Park to the Newtown Road bridge.										
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	bike.  Fund a significant portion of the Wasson Way trail.  Connect Wasson Way to Fairfax/Mariemont/Little Miami.  Need bike lanes and multi use throughout corridor.  Extend Wasson Way from Ault Park to the Newtown Road bridge.  This intersection is in need in general, but the linework degrades fast because of road conditions and bikes need an										
Safety	bike. Fund a significant portion of the Wasson Way trail. Connect Wasson Way to Fairfax/Mariemont/Little Miami. Need bike lanes and multi use throughout corridor. Extend Wasson Way from Ault Park to the Newtown Road bridge. This intersection is in need in general, but the linework degrades fast because of road conditions and bikes need an independent lane at this intersection specifically.	none	n/a	n/a	n/a	n/a	n/a	n/a	n/a	none	none
Safety Access	bike. Fund a significant portion of the Wasson Way trail. Connect Wasson Way to Fairfax/Mariemont/Little Miami. Need bike lanes and multi use throughout corridor. Extend Wasson Way from Ault Park to the Newtown Road bridge. This intersection is in need in general, but the linework degrades fast because of road conditions and bikes need an independent lane at this intersection specifically.	none	n/a	n/a	n/a	n/a	n/a	n/a	n/a	none	none
	bike. Fund a significant portion of the Wasson Way trail. Connect Wasson Way to Fairfax/Mariemont/Little Miami. Need bike lanes and multi use throughout corridor. Extend Wasson Way from Ault Park to the Newtown Road bridge. This intersection is in need in general, but the linework degrades fast because of road conditions and bikes need an independent lane at this intersection specifically. Need crosswalk (Red Bank at US 50).		n/a	n/a	n/a	n/a	n/a	n/a	n/a	none	none
	bike. Fund a significant portion of the Wasson Way trail. Connect Wasson Way to Fairfax/Mariemont/Little Miami. Need bike lanes and multi use throughout corridor. Extend Wasson Way from Ault Park to the Newtown Road bridge. This intersection is in need in general, but the linework degrades fast because of road conditions and bikes need an independent lane at this intersection specifically. Need crosswalk (Red Bank at US 50). Connecting Ault Park to Fairfax and Mariemont via a		n/a	n/a	n/a	n/a	n/a	n/a	n/a	none	none
	bike. Fund a significant portion of the Wasson Way trail. Connect Wasson Way to Fairfax/Mariemont/Little Miami. Need bike lanes and multi use throughout corridor. Extend Wasson Way from Ault Park to the Newtown Road bridge. This intersection is in need in general, but the linework degrades fast because of road conditions and bikes need an independent lane at this intersection specifically. Need crosswalk (Red Bank at US 50). Connecting Ault Park to Fairfax and Mariemont via a bike/pedestrian path would open up opportunities to better		n/a	n/a	n/a	n/a	n/a n/a	n/a n/a	n/a	none	none
Access	bike. Fund a significant portion of the Wasson Way trail. Connect Wasson Way to Fairfax/Mariemont/Little Miami. Need bike lanes and multi use throughout corridor. Extend Wasson Way from Ault Park to the Newtown Road bridge. This intersection is in need in general, but the linework degrades fast because of road conditions and bikes need an independent lane at this intersection specifically. Need crosswalk (Red Bank at US 50). Connecting Ault Park to Fairfax and Mariemont via a bike/pedestrian path would open up opportunities to better connect those communities.				.,, 5	., -	., .				
Access  Mobility/Access	bike. Fund a significant portion of the Wasson Way trail. Connect Wasson Way to Fairfax/Mariemont/Little Miami. Need bike lanes and multi use throughout corridor. Extend Wasson Way from Ault Park to the Newtown Road bridge. This intersection is in need in general, but the linework degrades fast because of road conditions and bikes need an independent lane at this intersection specifically. Need crosswalk (Red Bank at US 50). Connecting Ault Park to Fairfax and Mariemont via a bike/pedestrian path would open up opportunities to better connect those communities. Would love to have public transit from the Eastgate area to this area of the city.				.,, 5	., -	., .				
Access  Mobility/Access  Red Bank / US 50 Ramp Intersec	bike. Fund a significant portion of the Wasson Way trail. Connect Wasson Way to Fairfax/Mariemont/Little Miami. Need bike lanes and multi use throughout corridor. Extend Wasson Way from Ault Park to the Newtown Road bridge. This intersection is in need in general, but the linework degrades fast because of road conditions and bikes need an independent lane at this intersection specifically. Need crosswalk (Red Bank at US 50). Connecting Ault Park to Fairfax and Mariemont via a bike/pedestrian path would open up opportunities to better connect those communities. Would love to have public transit from the Eastgate area to this area of the city.	none	n/a	n/a	n/a	n/a	n/a	n/a	n/a	none	none
Access  Mobility/Access  Red Bank / US 50 Ramp Intersec	bike. Fund a significant portion of the Wasson Way trail. Connect Wasson Way to Fairfax/Mariemont/Little Miami. Need bike lanes and multi use throughout corridor. Extend Wasson Way from Ault Park to the Newtown Road bridge. This intersection is in need in general, but the linework degrades fast because of road conditions and bikes need an independent lane at this intersection specifically.  Need crosswalk (Red Bank at US 50). Connecting Ault Park to Fairfax and Mariemont via a bike/pedestrian path would open up opportunities to better connect those communities.  Would love to have public transit from the Eastgate area to this area of the city.	none	n/a  AM Overall Intersection = F	n/a  AM Overall Intersection = F	n/a  AM Overall Intersection = F	n/a  11 crashes at intersection from 2013	n/a	n/a  AM Peak-Hour	n/a	none  Address capacity issues and long	none  Address lack of and limited
Access  Mobility/Access  Red Bank / US 50 Ramp Intersec	bike. Fund a significant portion of the Wasson Way trail. Connect Wasson Way to Fairfax/Mariemont/Little Miami. Need bike lanes and multi use throughout corridor. Extend Wasson Way from Ault Park to the Newtown Road bridge. This intersection is in need in general, but the linework degrades fast because of road conditions and bikes need an independent lane at this intersection specifically.  Need crosswalk (Red Bank at US 50). Connecting Ault Park to Fairfax and Mariemont via a bike/pedestrian path would open up opportunities to better connect those communities.  Would love to have public transit from the Eastgate area to this area of the city.  etion  Parkway entrance right here can be improved by designating each of the two left turn lanes from Redbank to a specific	none	n/a  AM Overall Intersection = F  AM WBR = Queue > Storage	n/a  AM Overall Intersection = F  AM WBR = Queue > Storage	n/a  AM Overall Intersection = F  AM WBR = Queue > Storage	n/a  11 crashes at intersection from 2013 through 2015. Not identified as a	n/a n/a	n/a  AM Peak-Hour  Max Queue	n/a No deficiencies	Address capacity issues and long queues on northbound and	Address lack of and limited wayfinding to improve regional
Access  Mobility/Access	bike.  Fund a significant portion of the Wasson Way trail.  Connect Wasson Way to Fairfax/Mariemont/Little Miami.  Need bike lanes and multi use throughout corridor.  Extend Wasson Way from Ault Park to the Newtown Road bridge.  This intersection is in need in general, but the linework degrades fast because of road conditions and bikes need an independent lane at this intersection specifically.  Need crosswalk (Red Bank at US 50).  Connecting Ault Park to Fairfax and Mariemont via a bike/pedestrian path would open up opportunities to better connect those communities.  Would love to have public transit from the Eastgate area to this area of the city.  Ition  Parkway entrance right here can be improved by designating each of the two left turn lanes from Redbank to a specific Direction. Left most turn lane should say Cincinnati above it.	none	n/a  AM Overall Intersection = F  AM WBR = Queue > Storage	n/a  AM Overall Intersection = F	n/a  AM Overall Intersection = F	n/a  11 crashes at intersection from 2013 through 2015. Not identified as a high hazard location by ODOT	n/a n/a	n/a  AM Peak-Hour  Max Queue  NB = 625'	n/a No deficiencies	none  Address capacity issues and long	none  Address lack of and limited
Access  Mobility/Access  Red Bank / US 50 Ramp Intersec	bike. Fund a significant portion of the Wasson Way trail. Connect Wasson Way to Fairfax/Mariemont/Little Miami. Need bike lanes and multi use throughout corridor. Extend Wasson Way from Ault Park to the Newtown Road bridge. This intersection is in need in general, but the linework degrades fast because of road conditions and bikes need an independent lane at this intersection specifically.  Need crosswalk (Red Bank at US 50). Connecting Ault Park to Fairfax and Mariemont via a bike/pedestrian path would open up opportunities to better connect those communities.  Would love to have public transit from the Eastgate area to this area of the city.  etion  Parkway entrance right here can be improved by designating each of the two left turn lanes from Redbank to a specific	none	n/a  AM Overall Intersection = F  AM WBR = Queue > Storage  AM WBR = LOS F, v/c 1.26	n/a  AM Overall Intersection = F  AM WBR = Queue > Storage	n/a  AM Overall Intersection = F  AM WBR = Queue > Storage	n/a  11 crashes at intersection from 2013 through 2015. Not identified as a	n/a n/a	n/a  AM Peak-Hour  Max Queue	n/a No deficiencies	Address capacity issues and long queues on northbound and	Address lack of and limited wayfinding to improve regional

**HCS Analysis** 

Transportation Concern	MetroQuest Comments	Workshop Comments	Existing Year 2015	HCS Analysis Opening Year 2022	Design Year 2042	Safety	Travel Time	Oueue Analysis	Geometric Analysis	Primary Needs	Secondary Needs
ed Bank: US 50 Ramps to Fai			<u>=====================================</u>	<u> </u>		<u> </u>		<del>Queue :</del>			
ongestion	Red Bank Road congestion in the morning and evening is bad. (5 pins)  Too many lights.  Red Bank is the WORST. I actually sold my house and moved	Near where the "Old Swallens" building used to be, there is an intersection where you can turn left, and the traffic light is much too long, causing delays.	n/a	n/a	n/a	10 crashes along segment from 2013 through 2015. Not identified as a high hazard location by ODOT screening.	n/a	n/a	No deficiencies	none	none
Safety	to avoid this traffic.  Area generates significant noise pollution. Previous road was asphalt. Replace road is grooved concrete which generate much more noise.  Reduce conflict points from too many access points along Red Bank Expressway. Expressways are not local streets with wide open access as the Cincinnati has allowed to occur.	south of Erie (by the new Children's Theatre of Cincinnati).									
Access	Red Bank Road/Expressway has become increasingly inhospitable to anyone but those behind the wheel of a car. This road should be rebuilt in a Complete Streets manner, and done in a way to reconnect communities split by its construction.  Reduce conflict points from too many access points along Red Bank Expressway. Expressways are not local streets with wide open access as the Cincinnati has allowed to occur.  Parkway entrance right here can be improved by designating each of the two left turn lanes from Redbank to a specific direction. Left most turn lane should say Cincinnati above it. Right most turn lane should say Mariemont [cut-off].										
<b>1</b> obility	Need bike path.  Extend trail that dead ends at this location to Wilmer.  A bike path from Fairfax into Oakley would be helpful.  Need a shared walk/bike path on both sides of Red Bank Expressway.  WASSON WAY As part of the Eastern Corridor project, this planned off-road walking/cycling trail should connect from the Norfolk Southern right-of-way at Ault Park down to the extended bike trail along Red Bank Road.	The path along Murray is great for biking and walking.	n/a	n/a	n/a	n/a	n/a	n/a	n/a	none	none
afety afety/Mobility	It is unpleasant and sometimes impossible to walk along Red Bank.  Shared sidewalk/bike paths. Also a pedestrian median in the middle of the road so a pedestrian can safely cross Red Bank	the Walmart on Red Bank Road. There are city stairs in Madisonville from Erie and	n/a	n/a	n/a	n/a	n/a	n/a	n/a	none	none
lobility	An easy walking path from Fairfax to Oakley is needed. It's a neighborhood, where folks should be seen, not cars.  Pedestrian access along Red Bank Road: As it stands now, sidewalks are limited along the entire distance of Red Bank Road. This project should make sure that pedestrians can walk safely along sidewalks the full length of Red Bank Road/Red Bank Expressway.										
1obility	Need bus service.  Park and ride express to downtown via 71, Blue Ash employment centers 71.	There are buses on US 50 that are well utilized, but none on Red Bank Road.	n/a	n/a	n/a	n/a	n/a	n/a	n/a	none	none

Roadway
Pedestrian
Bicycle
Transit