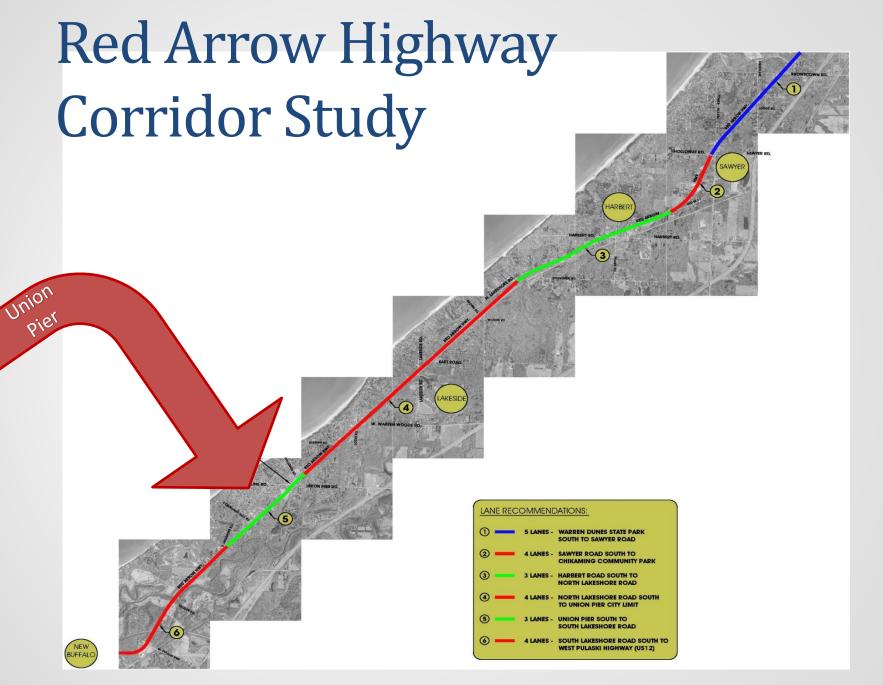
Red Arrow Highway Union Pier Corridor Improvement Project

Presented by Kevin Stack, PE







Project Location



Red Arrow Highway (RAH) in Chikaming Township and New Buffalo Township from Community Hall Road to Berrien Street and Union Pier Road/Townline Avenue approximately 350 feet west of the RAH intersection



Project Scope

- Road Diet
- Non-Motorized Path
- Storm sewer improvements
- Street Scape
- Trail head
- Pedestrian Control







Project Scope





Agencies Involved

- Berrien County Road Department (BCRD)
- Chikaming Township
- New Buffalo Township
- Michigan Department of Transportation
- The Pokagon Fund
- USDA
- Antero Group
- Wightman
- Kalin Construction
- Galien River Sanitary District Sewer Authority (GRSDS)
- Federal Highway Administration (FHWA)



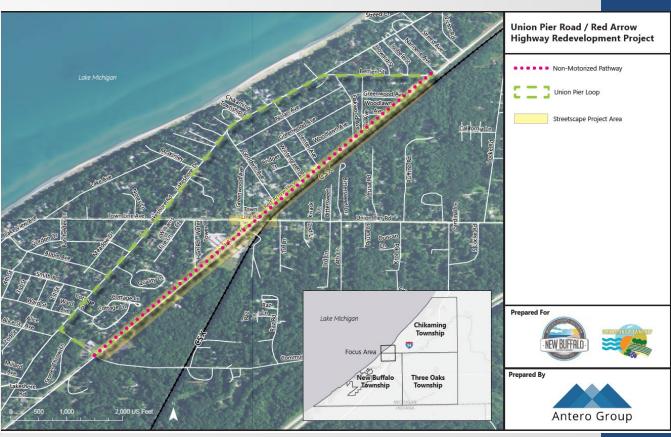




Target Groups/Beneficiaries

- Local businesses
 - Business owners
- Residents
- Pedestrians
- Cyclists
- Motoring public





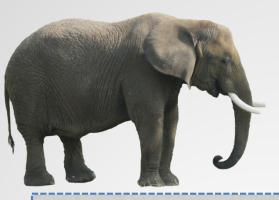
Timeline

- 2018: Planning and public outreach
- 2019: Project design
- 2020: Construction began
 - Phase 1: August Early October
 - Construction along east lanes of RAH
 - Reconstruction of intersection at Union Pier Road
 - Phase 2: Early October Mid November
 - Construction along west side of RAH
 - Sidewalks and Ramps
- 2021: Project completed
 - Phase 3: Spring 2021
 - Non-motorized path
 - Streetscaping elements









Road "Diets"

A6 - TUESDAY, January 15, 2019		OPINION	
The Herald-Palladium	DAVID HOLGATE	DAVE BROWN	DALE BREWER
Editorial Board:	Publisher	Managing Editor	Local News Editor

Road diets good for health and safety

tween New Buffalo and Bridg- crashes. Other benefits include ing in traffic back-ups. man from four to three lanes, fewer lanes for pedestrians to true, these events are known as a "road diet," to aca pedestrian/bike path is a good rated 10-foot-wide pedestrian/ sportation spidea, John Sytsma.

A road diet is the conversion During the 1950s and '60s, tions Engino' of a three-lane undivided road was on system motor vehicle quirity for a dedicated center two-way left sion from two-lane to four-

turn lane.

The Federal Highway Administration (FHWA-SA-17-066) three-lane rends because it stration (FHWA-SA-17-066) three-lane rends because its six lanes in this stretch with commodate a bike/pedicts being a 19-47 percent rethen norm. Despite this, the new adequate redundancy to the path would be a boon becomes apparent when a ve- ministration recommends that County Road Department to congestion, improve hicle in this lane slows down road diets be considered for keep traffic flowing during these and reduces fuel con

ane road, allowing the left turn-ing vehicle to be removed from Those who oppose a Red Ar- Also, Napier Avenue from the lane road, allowing the left turn- 20,000 threshold. the flow of traffic reducing rear- row Highway road diet argue St. Joseph River in St. Joseph

Revamping the stretch of lines and less sudden stopping rerouted off of 1-94 degree Red Arrow Highway be-movements that lead to left turn weather, accidents, etc. commodate the construction of other uses, in this case a sepa- Michigan Depart

to make a left hand turn-onto roads with traffic volumes of events. worst case, rear-end crash into on its website, the traffic volume seph was converted from four portunity if this bike/pedestrian the left turnling vehicle. on Red Arrow Highway from to three lanes. Though the bike sub-culd not be approved for A dedicated left turn lane New Buffalo to Bridgman variances on the shoulders of this lack of a road diet. on a three-lane road replaces ies from 1,000 to 10,000 vehicles stretch could be wider in places,

the two inner lanes on a four- per 24 hours, well within the the redesign opened the route

rripa, ministration has

duction of rear-end and leftturn crashes through the use of opted successfully for the past traditional four-lane road, the
turn crashes through the use of opted successfully for the past traditional four-lane road, the
turndinal four-lane road, the
munities to help balance the
teleft (inner) lane is also called needs of all roadway users.

the "fast" lane. Its design flaw

The Federal Highway Addeformed the state and focal law establishment on foot or bike in
the "fast" lane. Its design flaw

The Federal Highway Addeformed the Berrien
lieu of driving reduces vehicle and air emissions. The benefits a crossroad or business. Faster less than 2000 vehicles per 24

During the early to mid 1990s, far out-elissions, require the coolents as the coolents of the the slower right (outer) lane, or Traffic Volume Map available in Stevensville north to St. Jo- I-94. It would be a missed op-

"The Federal Highway Administration cites benefits of such road diets being a 19-47 percent reduction of rear-end and left turn crashes through the use of a dedicated left-turn lane."

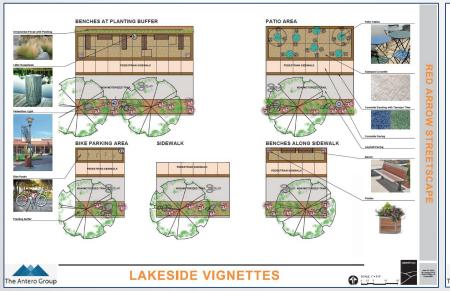
"...the estimated number of events requiring reroute from I-94 to this section of Red Arrow Highway is four two-hour events per year. This amounts to eight hours per year or 0.09 percent of the time."

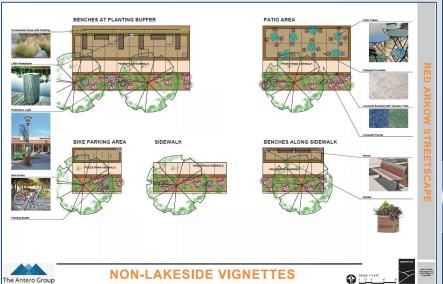


Distinctive Features

- Streetscaping and reconstruction of the road
 - Including reconstruction of stormwater infrastructure
- RAH road lane reconfiguration
- Sidewalks

- Lighting
- Pedestrian crossing system
- 10 foot wide non-motorized path
- Public restroom facility
- Parking area







COLOR PALETTE



PAVING

Main Walkway: Colored Concrete

Accent Paving: Colored Stamped Concrete. Ashlar pattern in tans with warm tones edge banding and accents of blue and green tiles.



LAYOUT Table Seating Area Planter Benches Concrete Walkway Pedestrian with Pathway Stamped Concrete Accent Areas Non-Motorized Pathway Linear Flush Planter with Rocks Light Post







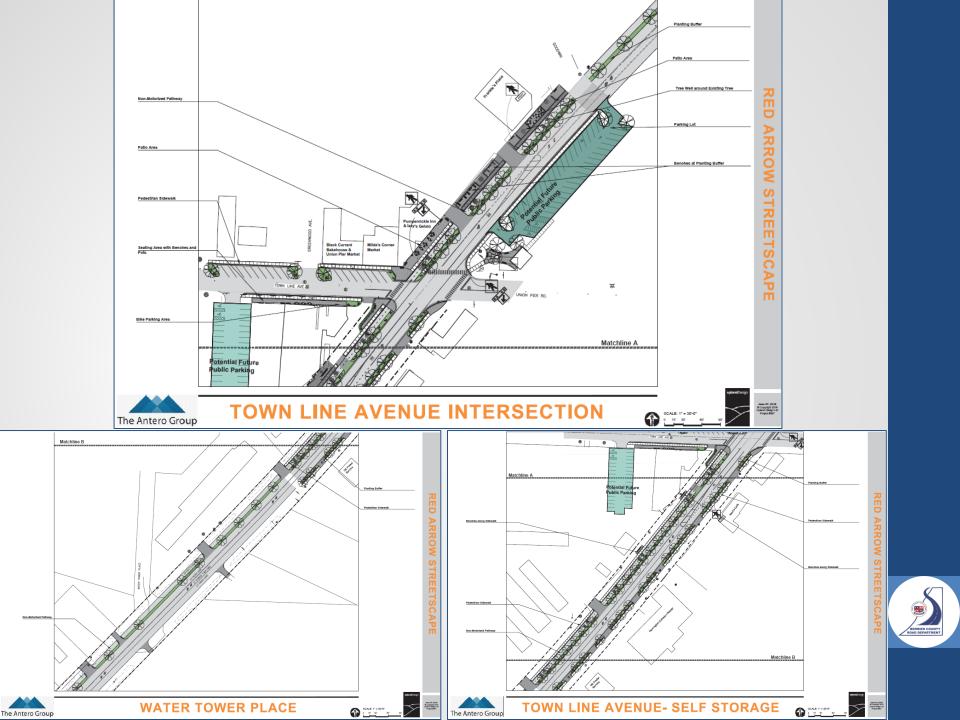




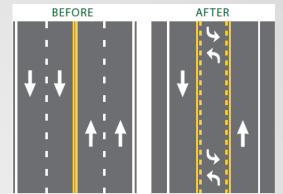
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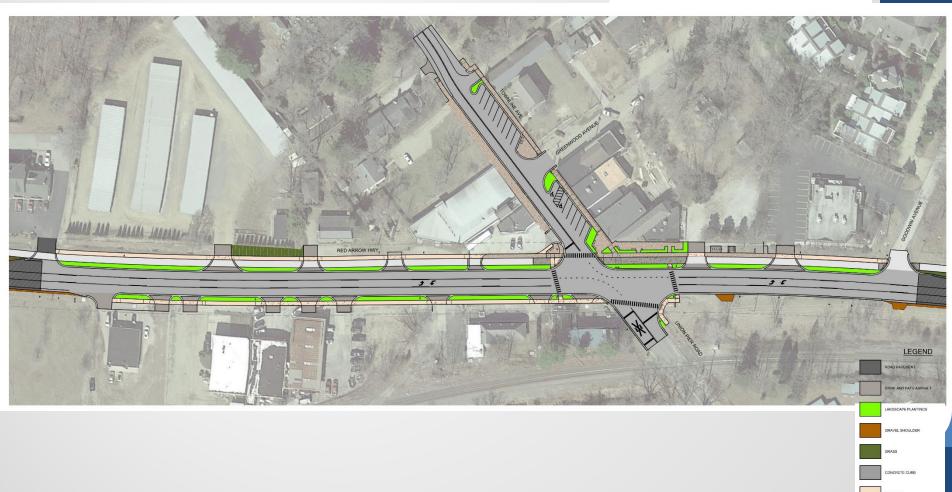
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Lane Reconfiguration

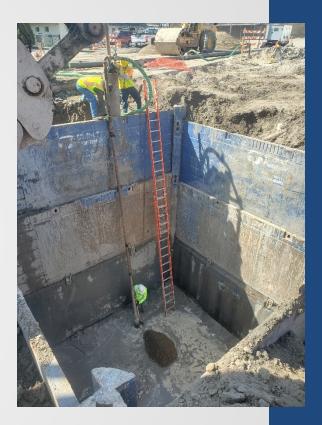




New Sewer Installation









Road Reconstruction



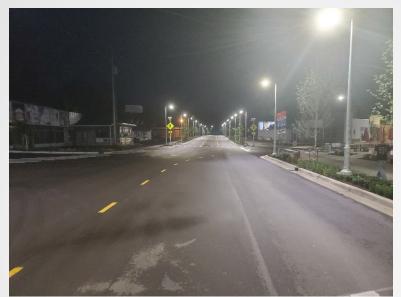




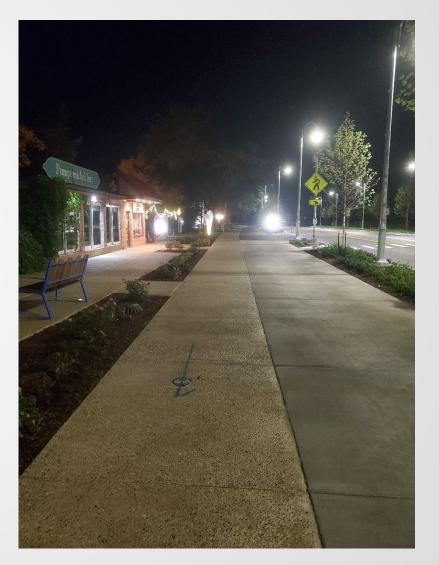




Lighting













Pedestrian Crossing System



Distinctive Features















Public Restroom Facility











Coordination

Funding Sources (Including Trailhead)	Amount
Berrien County Road Department	\$1,500,000
MDOT	\$900,000
Chikaming Township	\$600,000
New Buffalo Township	\$725,000
The Pokagon Fund (via the Township Share)*	\$850,000
USDA Rural Business Development Grant*	\$75,000
TOTAL (Including Trailhead)	\$3,725,000



2020 CRA IMPRESS Award Collaboration



Berrien County Road Department





Red Arrow Highway Union Pier Corridor Improvement Project

Berrien County Road Department partnered with Chikaming Township, New Buffalo Township, Michigan Department of Transportation, The Pokagon Fund and USDA Rural Business Development Grant, to make the Red Arrow Highway a safer area for pedestrians and the community by reconfiguring the road and inserting pedestrian walkways. Red Arrow Highway was formerly a state highway before I-94 was opened and in recent years has seen business development and increasing pedestrian and intersection traffic growth.



Q

Home + Trip Ideas

The 50 Best Places to Travel in 2022

From far-flung destinations to hometown favorites, 2022 is the year to get back out there and turn your dream trips into reality.

By Travel + Leisure December 09, 2021

44. Southwest Michigan "...Hop on the new pedestrian/bike trail in Union Pier..."

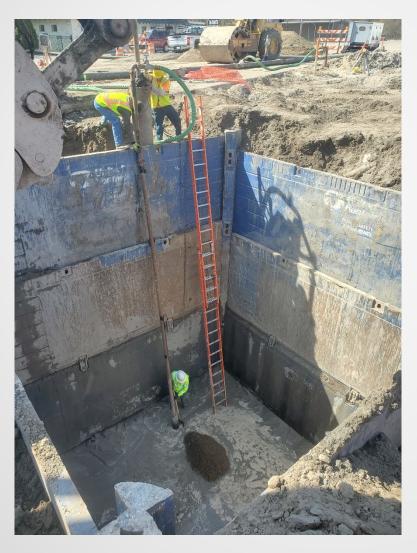
44. Southwest Michigan



Beaches with ocean-like views were once the main draw to Michigan's southwest coast, but new high-style accommodations and hyper-local experiences are giving us more reasons to go. Where to stay with so many options? Consider the cool new motel-turned-boutique Lake Shore Resort in Saugatuck; The Fields glamping retreat with new spa tents in South Haven; the revamped, modern Harbor Grand Hotel in New Buffalo; or anywhere along the coast with high-touch Bluefish Vacation Rentals, which has killer lakefront homes now stocked with handmade local goods. Hop on the new pedestrian/bike trail in Union Pier, and definitely shop two new woman-owned standouts: the beautifully curated Haven and Ariane Prewitt's AP Cottage, scheduled to open this spring. Women are showing off the culinary scene, too, with everything from a special saison ale - winner of the 2021 Great American Beer Festival - at woman-owned Waypost Brewing Co., to new herb-inspired cocktails at James Beard-winning chef Melissa Corey's Penny Royal Café & Provisions, to James Beard nominee Abra Beherns' Granor Farm, where dinners return this year in a new glass-enclosed barn. - Nina Kokotas Hahn



Challenges





- Installation of new sanitary sewer
 - Project fast-tracked by one year
 - Coordination with GRSDS
- Public Input
 - Community members
 - Residents
 - Business Owners
 - Townships
 - Consultants
- Potential Business Impact
 - During construction
 - After construction
 - Parking concerns



Construction **During** A **Pandemic**

FOR IMMEDIATE RELEASE

WEDNESDAY, APRIL 1ST, 2020

CONTACT: Adri Boone - Berrien County Road Department Administrative Assistant aboone@bcroad.org - 269-925-1196 ext. 4410

> UPDATE #2 - NEW START DATE FOR RED ARROW HIGHWAY CLOSURE

TOWNSHIP: Chikaming Township & New Buffalo Township

LOCATION: Red Arrow Highway between Community Hall and Berrien Street.

CLOSEST CITIES: New Buffalo, Union Pier, Lakeside

START DATE: Monday, April 20, 2020*



































































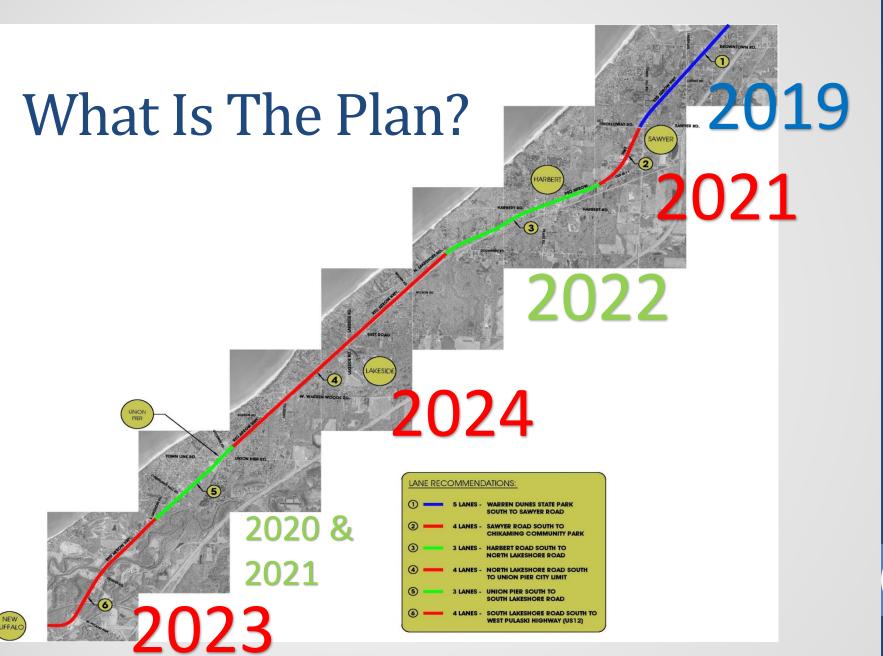






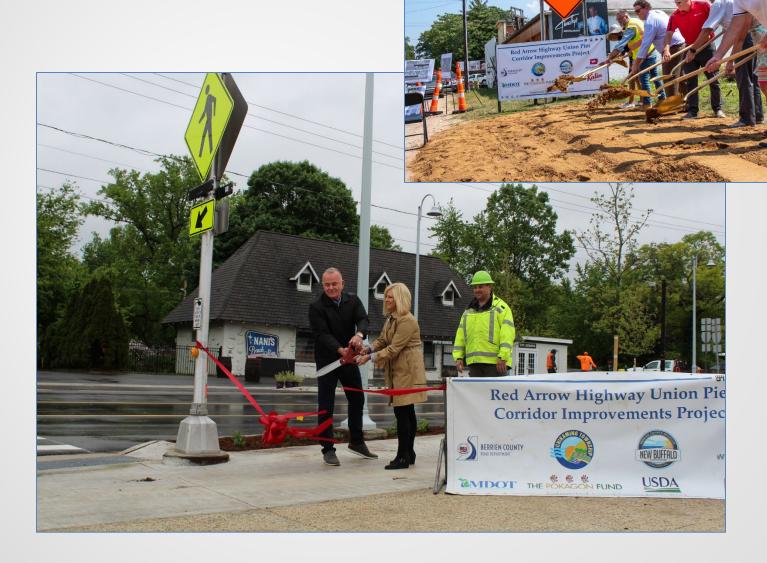








Questions?







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Interim Director

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