

IS PERCEPTION REALITY

2023 Tour da Yoop, Eh Safety Report

TOUR DA
YOOP, EH



Tour Da Yoop, Eh
3/21/2024
James Studinger

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PURPOSE BEHIND THE 2023 SAFETY REPORT

Each year I chat with other bikers while riding thousands of miles, and I work with safety planners throughout Michigan on issues and upcoming potential projects. It gives me a unique perspective to hear what bikers are thinking, experience what bikers are experiencing, and work with people that can and do implement changes to make biking safer.

This year I heard an overwhelming frustration in bikers who felt that the system was not looking out for their safety, and that there was nothing they could do about it. There were some horrific fatal bike accidents in 2023 around the nation that received national attention. The biking community is tight knit, and many bikers knew someone, or were close to someone who knew a rider involved in one of these accidents.

With that backdrop to this year's annual safety report, I hope to 1) Show where the "system" does have people who care and are working toward more safety; 2) Show some of the challenges within the system to implement logical bike safety measures and; 3) Show safety planners how bikers, from their perspective, plan their ride and evaluate the safety of cycling.

In this report I am emphasizing the lack of uniform standards concerning bike safety and road construction. I am not criticizing the people who strive for bike safety that are restrained while working within a lacking system. I am giving a shout out to encourage the people who can create and define bike standards to get it done. It's needed.

My goal is that the barriers, perceived and real, will continue to be lowered so that someday uniform safety standards that save lives are implemented on projects throughout our entire country.

Thank you for reading - James Studinger

THE PREMISE

[Tour Da Yoop, Eh](#) (TDY) is a 10-day 1,200-mile annual bike event that hugs the perimeter of Michigan's Upper Peninsula. It is the longest known bike event loop in the entire country. We are joined by riders from all around the USA to take on the "[Chasing Plaid](#)" challenge as we raise money for [UP Serve Lions Childhood Cancer](#). When riders complete all ten sections, they earn the right to wear Plaid and be memorialized in the [Hall of Plaid](#).



[Safety](#) is their number one concern, and Michigan's Upper Peninsula very well could be the safest place in the country to ride a bike. I started TDY in 2018 to showcase the thousands of miles of safe biking routes in the Upper Peninsula. My belief was that if more people trained for their bike events in the U.P., then less people would be injured or worse in vehicle/bike accidents. Bikers just needed to know where the safe routes were.

The TDY bikers may all live in different states but share one common belief - that "they" don't care about bikers. "They" are the powers that be. The ones that make the decisions and spend our infrastructure money. The ones, that in the bikers' mind, don't value the life or lifestyle of

non-motorized travelers as much as motorized traffic. There is an image used in many of the planning guides I've seen around the nation that illustrates the [types of bicyclists by stress tolerance](#). I vehemently oppose this illustration. It was made in 2012. Since then, around 12,000 bikers have been killed and hundreds of thousands have been injured. This illustration is out of date and out of touch. No biker, no matter how confident, wants their life at risk.

Bikers feel this way because they see road construction projects that put them in danger. One example all bikers are familiar with are the rumble (mumble) strips within narrow shoulders. This has been an increasing development especially because, if I understand it correctly, Federal money has been tied to having shoulders milled with corrugated strips. It did not matter how wide the shoulder was, or if the shoulder was cleaned sufficiently after the milling process for bikers to use. The result is that bikers, who prior to the construction had a shoulder to ride their bikes on, are now forced onto the main highway lane with RV's, trucks, semi's, SUVs, and all manner of cars traveling at 70mph merely a foot or more away.

That real life example has played out across our country. One can see why, from a biker's perception, they believe their life isn't valued as important.



IS THAT PERCEPTION REALITY?

In many cases, no – the perception is not reality. In some cases, maybe it’s true. But likely only because some people are not thinking about or understanding the various means of



transportation needs. It’s a system problem. But it’s a system built by people - and needs to be fixed by people.

By and large, unwavering safety standards for non-motorized people just don’t exist. It has not gone through the massive national standards put into law such as smoking and handicapped accessibility. And until it’s a standard, it’s a secondary consideration.

I was telling my boys about the days when smoking was allowed in restaurants. There was a “smoking section”, but the smoke filled the entire restaurant air. People smoked in offices, buildings, on the job, and the craziest of all - in airplanes. They couldn’t believe

it. It took many years to fully change our public acceptance of smoking, but it finally came. And my boys know no other way.

I remember the days of improved handicapped accessibility. In 1990 the [Americans with Disabilities Act](#) (ADA) was signed into law. This set requirements for all constructed or remodeled public facilities. The bathrooms in every building throughout the nation went through accessibility upgrades. It made so much sense. It didn't matter how large or small the percentage of our population was that needed the improved facilities. What mattered is that people were thought of, and their needs tried to be met.

Truncated dome mats, the raised round mesh of circles at curb ramps and flush transitions were also part of the 1990 ADA. That standard was suspended in 1994, but then reinstated in 2001. Now, these curb/transition methods are standard in every urban and rural town throughout our country. And even in other countries. We recently traveled to Australia, where we saw the same standards. Sidewalks with easy access, no curb on the corners, raised round bumps to indicate the street, noise and visual cues on the crosswalks. Why would it be any different?

And, if a construction project were completed that forgot to implement these standards, it would be fixed. They aren't a best practice hope that it fits within the budget. The standards are part of the budget.

Lacking national standards for bike safety, it requires groups of people to acquire the knowledge, discover the needs, and find ways to make safer biking methods fit within budgets. The portion of "they" that truly does care.

In Michigan, especially the U.P., I know who "they" are.

A team effort in the U.P. from staff of transportation service centers, regions, and statewide bureaus/offices have established what I've experienced to be, without a doubt, the most productive and action-oriented organization of diverse alignments that I have ever worked with. I'll refer to them as "The Superior Region Team". There are over 100 people on an email chain, located throughout the Upper Peninsula and Lansing, who all share the common purpose of saving lives. They meet in person, online, via email and phone throughout the year, determined to improve the safety and lives of non-motorized people.

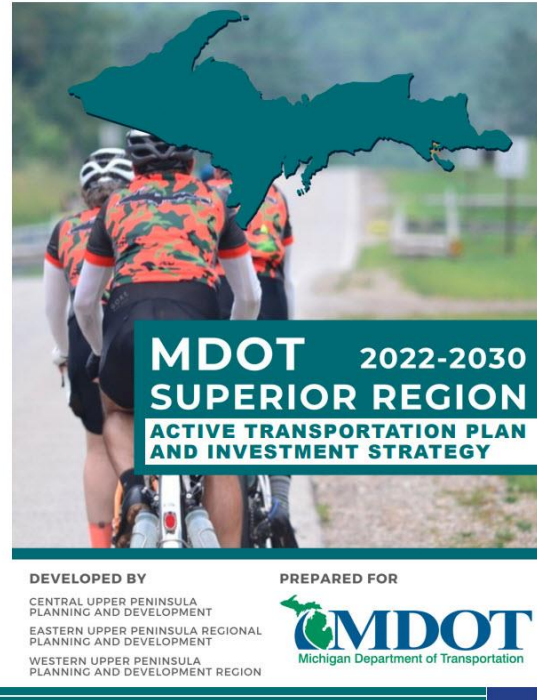
“They” produce the “[Superior Region Non-motorized Plan](#)”. This is an exhaustive study, a cumulative effort of ideas, facts, real life scenarios, dreams, targets, goals - gathered, organized, mapped - to design a pathway toward safer and better standards for our non-motorized lifestyle.

I know who “they” are, and these people are incredible. The Upper Peninsula sees only 29 vehicle related bike accidents on average per year for the past 10 years. Compare that to 1,572 accidents downstate. Information obtained using the [Michigan Traffic Crash Facts tool](#). Sure, the U.P. is more rural, and one would expect the accident number to be lower.

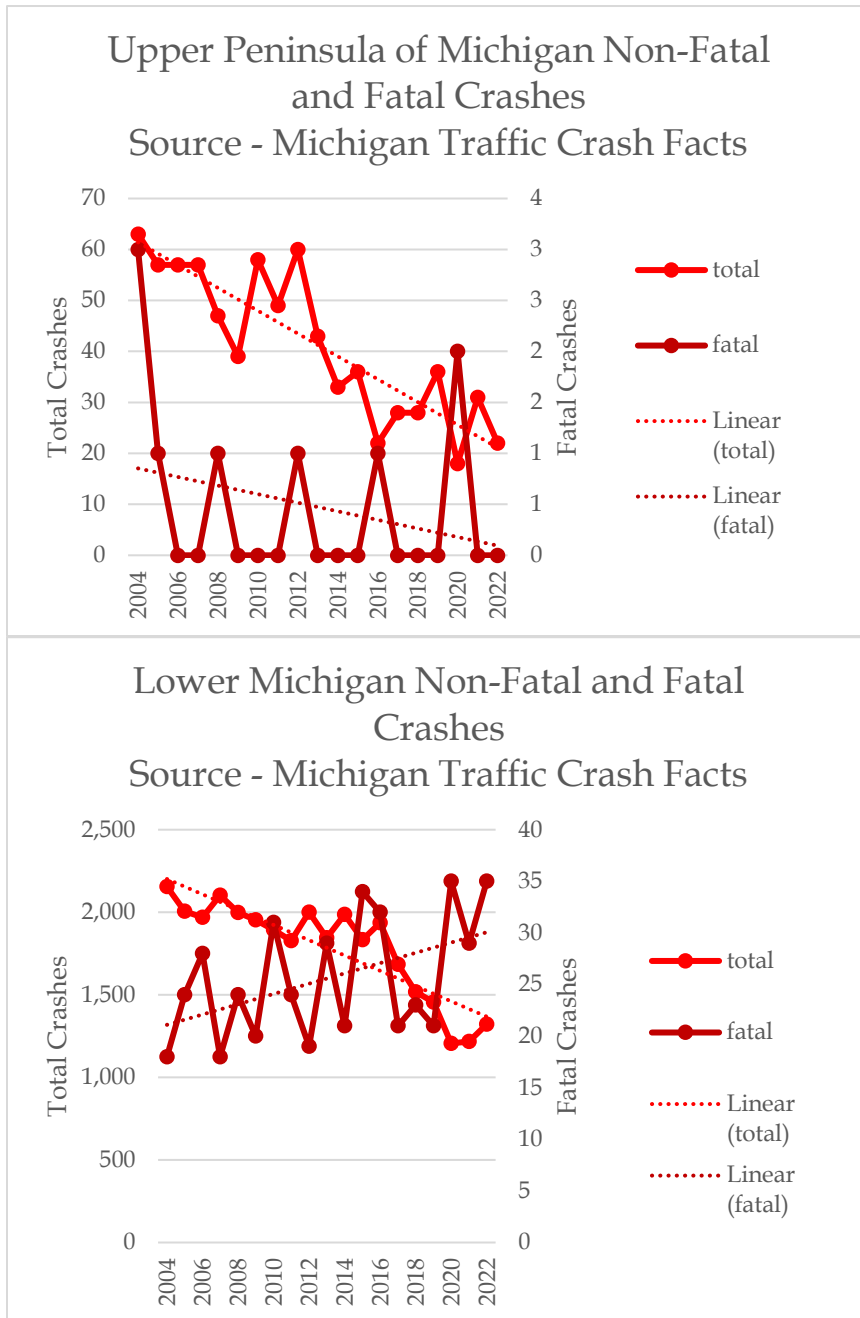
But the U.P. is a gem of the entire country, and millions of people visit it each year. The safety statistics throughout the U.P. are truly a testament to the care, planning, and actions taken by the Superior Region Team.

“They” are action orientated. M-123 is a highway north of Newberry extending toward Tahquamenon Falls and has been a major bike safety problem area. The falls are highly publicized as one of Michigan’s natural wonders. The parks are built to attract millions of people each year. There is only one road to get there, and it has narrow shoulders. Years ago, these shoulders were milled with rumble strips, thereby making it impossible for bikers to use.

This past TDY ride, 2023, a dream came true. The rumble strip shoulders were filled with new asphalt. Thank you very much Superior Region Team. Bikers who were riding for the first time and had no experience with the problems of the past years, relished the splendor of the ride and commented on how wonderful and safe this road felt. They were able to enjoy the scenery and joy of biking in such an incredible place without the constant fear of being hit. Personally, it brought tears of joy and gratitude. I knew the conscious effort people put forth to make this



journey safe for all non-motorized travelers. They spent the money and prioritized the project to make this happen.



Charts to the left show Upper Peninsula crash data above, and lower Michigan data below. The total number of accidents is declining in both regions. But unfortunately, fatalities are increasing in lower Michigan, exceeding the 10-year average of 28 each of the past 3 years.

Please bear in mind that I'm not criticizing the work and effort by safety planners in Lower Michigan. Praising the work of the people that I do know is not criticizing the work of everyone else. I use Lower Michigan data to compare against the Upper Peninsula because it is readily available and a likely representation of what is happening in the rest of the country.

Michigan has a tool for

analyzing crash data. Granular national crash data is much more difficult to find. The [US Dept of Transportation](#) has information up to 2021. They estimate 45,400 injury crashes per year and in 2021 show nearly 1,000 fatalities. The fatality trend has been steadily rising.

THE PROBLEM

So how is it that bikers feel like their lives don't matter to the powers that be? The problem is that non-motorized safety does not have national absolute guidelines like the changes to handicap accessibility put into law. There is no universal standard for the minimum width of "useable" condition shoulder for bikers on a road that sees "X" amount of daily traffic volume.

In this section I will - 1) Explain the math illustrating why bikers need a minimum useable shoulder; 2) Show the language within construction manuals along with widely recognized policy and standard suggestions to support safe cycling and 3) The challenge in fulfilling those standards.



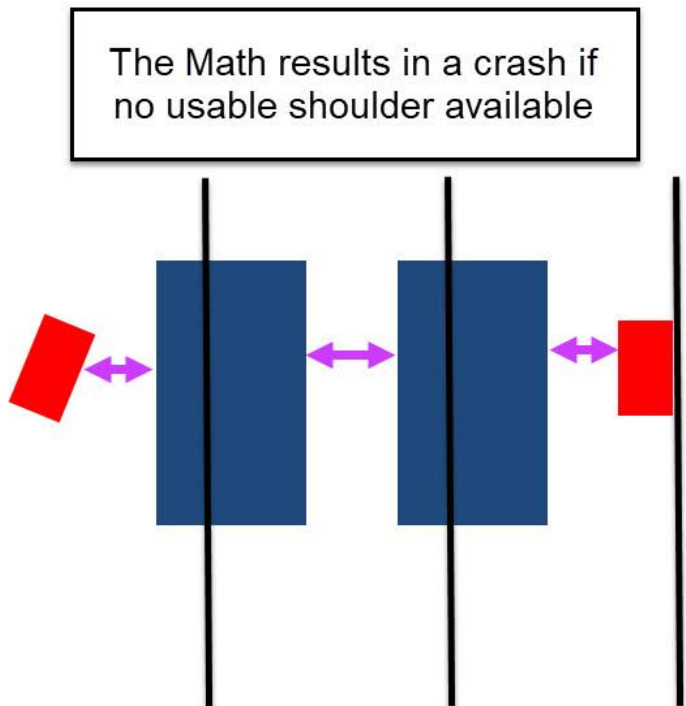
On many of the rural roads we ride during TDY, the bikers can safely ride within the lane. We sometimes ride for hours while only seeing a handful of cars. Generally, as we get closer to towns, traffic picks up and bikers must use a shoulder to allow for the steadier flow. A biker is roughly three feet wide and occupies between four and five feet of space while traveling. To stay out of the road “lane”, bikers make use of a paved shoulder. We need a minimum of three feet of shoulder for the bike and body to be out of the lane. And a larger shoulder of four to five feet helps ensure some space between us and vehicles.

The math for minimum usable shoulder width

Road lanes vary in width between ten and twelve feet, depending on daily average traffic volume (DAT). A Ford F-150 truck with mirrors is eight feet wide. RV's and other large trucks can be ten feet wide. Michigan state law requires vehicles to provide three feet of clearance when passing bicyclists.

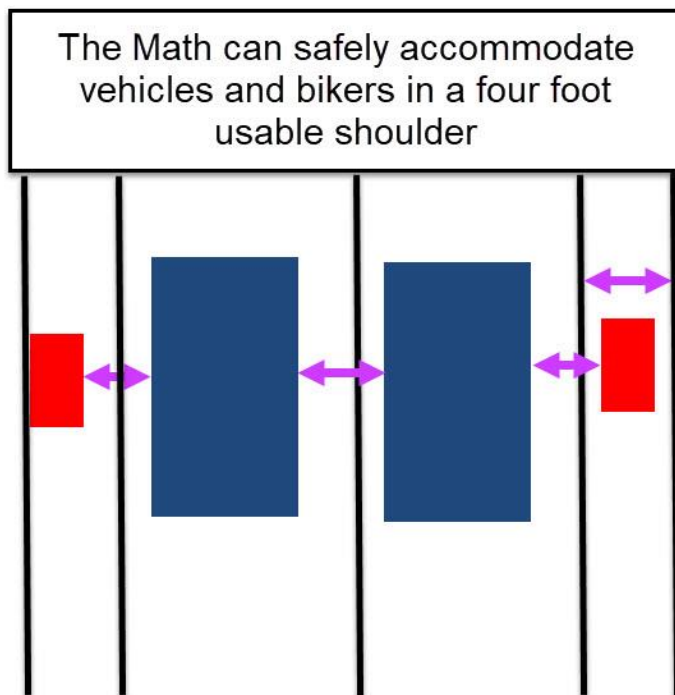
Assuming a twelve-foot lane, two opposing flow F-150s using the center of the lane have four feet between them. If a biker is on the outer edge of one lane, occupying three feet of space, and the vehicle gave the required three feet of space, they would occupy two feet of the opposing traffic lane. Leaving ten feet of lane available for opposing traffic. If the oncoming F-150 maintains the four feet of space between traffic, they would be two feet off the road. All this happens while the vehicles are traveling 60+ miles per hour. We

bikers experience it way too often. The math on a semi-truck or RV is much worse. Logging trucks can be especially dangerous as they are often pulling two trailers which can be somewhat offset, thereby occupying more space than their width. The math is also worse when in a ten- or eleven-foot-wide lane. Obviously, if there were bikers on the other side of the road at the same time, unless the vehicles come to a stop, someone is going to get hit. You must also keep in mind that the conditions are not always perfect with great visibility. Fog, rain, bright



sun, dust, and other conditions can make visibility extremely difficult to discern if bikers are in the road or using the shoulder.

Shoulders provide safety for motorized and non-motorized travelers, especially when the likelihood is greater that there will be opposing traffic. Now here is a critical component to shoulders - they must be useable. A useable portion of shoulder is paved, free of debris, has no rumble strips, and is in good condition. It's typically my experience that roads with increased traffic have paved shoulders. However, it's also common for those shoulders to not be useable by bicyclists.



The safety risks of a rumble strip milled into the middle of a three-foot shoulder is obvious. The outside edge of the shoulder erodes to gravel and isn't wide enough even if it was in great condition. Thereby putting the bicyclists on the traffic edge of the rumble strip and into the road lane. Restricted shoulder width, and even a technically wide enough shoulder, is also unusable by bikers when it has debris. This should seem obvious. But debris for a cyclist is much smaller than a vehicle. If there was a tree branch laying across the road lane, it would be removed for the safety of motorized traffic. However, if there is

a buildup of rocks, metal, logging truck wood scraps, and gravel scattered throughout a shoulder it can lay there for years - collecting more hazardous debris. The debris is dangerous when hit by a bike, pops tires, and the risks are elevated as bikers travel in groups. Only the lead biker can see the debris and it is sometimes difficult to communicate the location of debris to the following bikers. It takes great concentration, effort, universal signals, and communication to navigate bad shoulders. Often the bikers must exit the shoulder completely with little time to turn their head and make sure a vehicle isn't encroaching. Unusable

shoulders on higher volume roadways are one of the most frustrating and dangerous conditions for cyclists - and therefore motorized vehicles alike.

I recognize that road construction agencies have many objectives and a diverse group they serve while building our country's infrastructure. My focus is on bicycle safety.



In the above picture you can see the stones scattered throughout the shoulder. The shoulder is too narrow to safely navigate a group of bikes even if it was clean. But it's not clean, was full of stones and other debris, and bikers had to swerve in and out of the shoulder into the lane of traffic. There weren't sufficient gaps in the mumble strips, trapping bikers between soft gravel on the right, and harsh bumps on the left, with debris and hazards in the middle. This shoulder is too small for mumble strips and either way, ideally needs to be cleaned to be considered useable for bikers. This section of M94 is too busy to have an unusable shoulder. Road construction budgets prioritize motorized vehicle traffic, and don't portion sufficient money for non-motorized safety. There is a general desire to accommodate bikers, but unintentionally or accidentally, sometimes a road project does not get built to accommodate safe cycling. When does that mistake get fixed?

This image is taken along M94. The road has sufficient daily traffic that shoulders are necessary to accommodate bikers. The shoulder has soft gravel on the right, and a mumble strip on the left, with scattered stones and other debris throughout.



Looking at the image, many people could assume that the shoulder provides adequate space for bikers. But that is not the case. Bikers are surrounded on both sides and need to jump in and out of the shoulder to avoid hitting rocks and debris. All this must be accomplished while staying clear of vehicles passing by. The vehicles likely assume that the bikers can stay in the shoulder entirely and are not expecting to have them suddenly in the lane. Mumble strips are precarious to maneuver, where bikers need to completely cross them, with the action and momentum taking them further into the lane than if the mumble strips were not there. Think of it this way.

When was the last time you drove along freeway construction, where the cement dividers are moved to within a couple feet of the lane. Traffic is heavy, including large trucks and semis. You are driving at speeds surrounded on both sides by cement barriers and gigantic trucks. Now try driving like that and somehow also dodging logs and large rocks in the road for hours at a time. These bikers are being asked to perform superhuman feats while riding bikes and staying “on rails” and being able to remain completely focused on all their surroundings. It’s too much. No

road like this should have rumble strips on the shoulder unless the bikers have a minimum of 4 feet of usable shoulder. M94 has the topography to support it. The problem is in the budget. There is too much gravel shoulder, and not enough paved shoulder, to safely accommodate the [“Complete Streets”](#) policy.

Widely recognized minimum standards in construction manuals, policy, and guidance

MDOT, in its [road design manual](#), has guidelines for minimum shoulder width relative to average daily traffic (ADT). Search for “bicycle” within the document and you’ll find no less than 28 pages that include suggestions for safer bicycle accommodation. An often-mentioned reference is [Complete Streets](#). Listed on page 571 - In compliance with the State Transportation Commission Policy on Complete Streets, dated July 26, 2012, all projects regardless of scope, or length should be considered for the accommodation of bicyclists, pedestrians, and all legal users of the roadway. Public Act 135 of 2010 requires the development of a complete streets policy to promote safe and efficient travel for all legal users of the transportation network under the jurisdiction of the Michigan Department of Transportation (MDOT). Public Act 135 defines complete streets as “...roadways planned, designed, and constructed to provide appropriate access to all legal users in a manner that promotes safe and efficient movement of people and goods whether by car, truck, transit, assistive device, foot, or bicycle.”

The Complete Streets advisory council dissolved in 2015. In a sunset request letter written to the Michigan government on January 29, 2015, the council stated that they had met their charge, and “We also believe, as a group, that the Michigan Department of Transportation (MDOT), local road agencies and municipalities are capable of carrying the complete streets effort forward without further assistance from the council.”

Since 2015 thousands of miles of Michigan shoulders have had rumble strips milled, among other construction safety mishaps, that have eliminated shoulder use for cyclists and put them in danger.

A basis for design of bicycle integration with roadway construction is the AASHTO [“Guide for development of bicycle facilities, 4th edition, 2012”](#). It’s truly a great guide. The designers

represented all 50 states and developed a comprehensive design and methodology for implementing non-motorized traffic, mainly cyclists, within road construction projects. This guide is often cited as having the desired standards to follow. But they aren't adopted standards, they are suggestions. And as comprehensive as this publication is, it's twelve years old. Still, the drafters recognized and anticipated road construction challenges such as shoulder width and rumble/mumble strips milled into shoulders. They so clearly laid out the dangers of higher volume traffic roadways having insufficient shoulders, or shoulders that had been eliminated for use because of rumble strips. And even though this document is referenced as a guide for cyclists' safety within road projects, thousands of miles of roads have had rumble strips milled into their shoulders throughout Michigan and our country since it was published in 2012. Even when it made the shoulder unusable by cyclists and forced them to share the road lane with speeding traffic - exactly what the study cautioned not to do.

On page 290 of the MDOT [road design manual](#), it states that if safety concerns, such as bicycle, then the shoulder construction can be modified. "The Region or TSC should contact the MDOT non-motorized coordinator and non-motorized program staff when considering placing corrugations on shoulders paved less than 6' wide. When placing non-freeway sinusoidal shoulder corrugations, several modifications to the standard placement shown in standard plan R-112-Series may be applied, and when used must be detailed in the plans. Where the paved shoulder is 3' or less or where the paved shoulder is less than 6' and has bicycle traffic, the offset may be reduced to 0" from the standard 12".

These are allowed modifications to standards, and not standards in their own right. They require preemptive human thought and decision making, with follow up and inspection on the finished road construction project.

The challenges in fulfilling best practice standards

Organizations work within their constraints. Here is where the Superior Region Team transcend the boundaries with care, communication, and a master plan. But even they are ultimately restricted by money and jurisdiction.

Administrations have differing priorities. Governor Granholm wanted Michigan to be a movie hub. Governor Snyder did not. He wanted Michigan to be the Great Trails State. Governor Whitmer did not prioritize this.

Governor Snyder turbocharged much of the trails network we have in Michigan. They started the [Iron Belle Trail](#), first proposed in 2012. They were not able to finish it within his term, especially in the U.P. and US2 was tagged as the “trail” to complete the connection. Bikers don’t enjoy riding 300 miles on US2. And US2, while identified as a “trail” is in no condition to accommodate bikers. Especially on the Western side of the state.

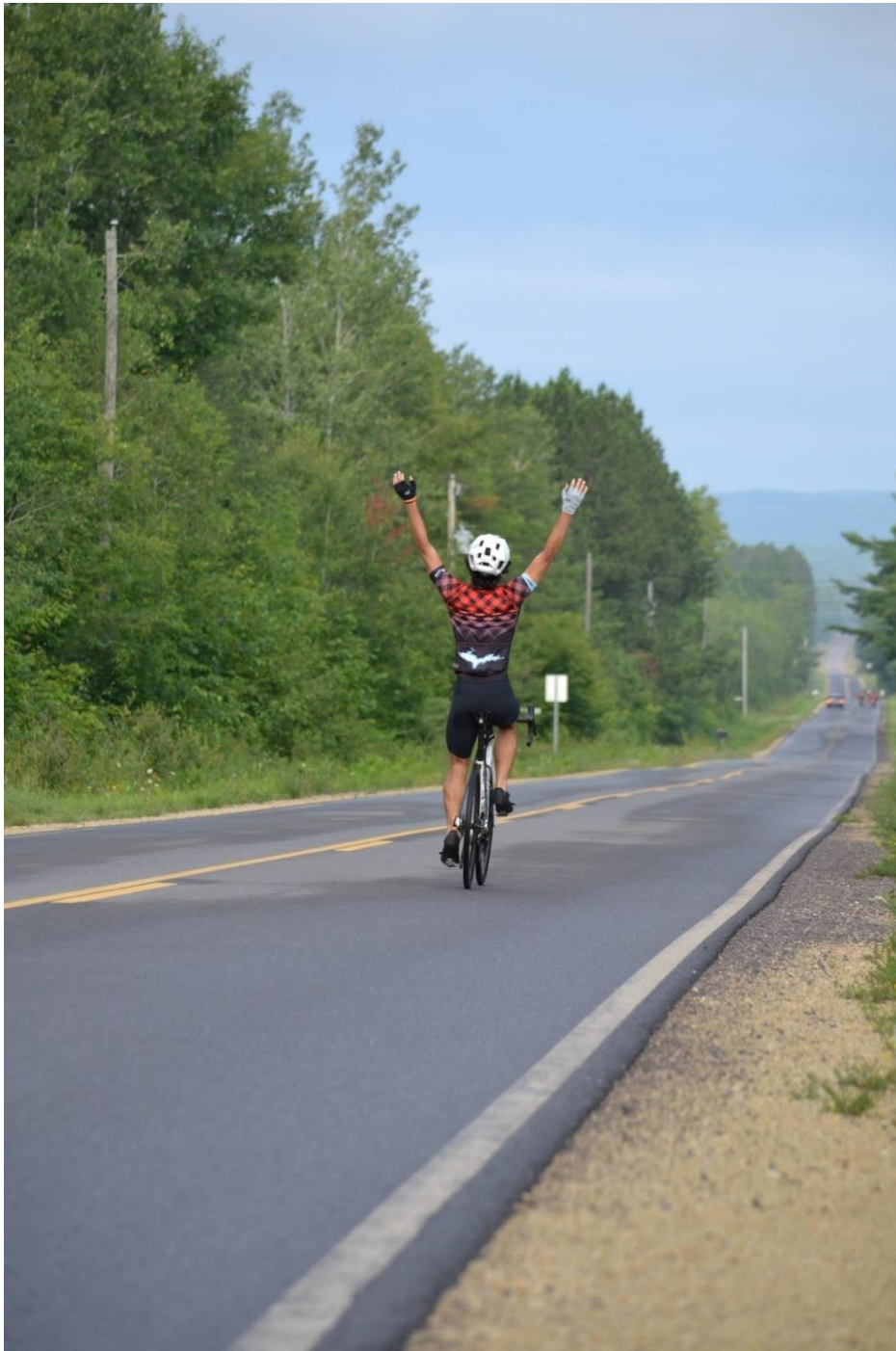
There are pockets of improvement, most notably from Ironwood to Ramsay. The local communities completed an incredible paved bicycle path that avoids US2 through the busiest sections. The trail currently ends at Ramsay, however there are wonderful, paved roads that cyclists can continue riding from Ramsay, through Bessemer north to the Porkies, or continuing eastward on rural roads.

But the development of the Iron Belle Trail lost much statewide momentum and money when Snyder left, keeping US2 listed as the northern portion of the bicycle trail. In fact, the map on Michigan’s website doesn’t even show the bicycle path from Ironwood to Ramsay. I designed a route alternative that only utilized US2 for 50 miles, using existing roads, has only modest improvements, and a total distance of 415 spectacular biking miles. this would be a route that bikers from around the country would love to experience.

As US2 stands today, I do not believe a State should advertise a route that is undesirable, dangerous, and not bike friendly as a destination bike ride. This is a perfect example of bikers’ perception being reality. When a biker arrives from out of town to ride US2, thinking they will be on a “trail” that has been modified to safely accommodate them, and experience the reality of US2 - they wonder, why am I told to bike here. Do “they” understand the needs of bikers? **I am by no means speaking negatively about the efforts and progress made through collaboration, design, and upcoming projects. I know firsthand that communities throughout the U.P. are working tirelessly to create an amazing and legitimate Iron Belle Trail. The Superior Region Team has a long list of improvements in the works. What I’m saying is in the meantime, if the State is advertising that we have a bike trail, then the State of Michigan should at least immediately, before bikers arrive in 2024, clean the existing shoulders of US2 – especially on the western side. Show bikers that Michigan cares for their safety.**

Our infrastructure manuals have bike safety suggestions, but we lack uniform unwavering standards. Some road projects implement safe cycling practices. Some don’t at all. Some

construction projects, and this is one that often frustrates cyclists reinforcing their belief that “they” don’t care, get close to being safe but leave something out that makes one wonder why. Bikers are often forced into a near tragic encounter and spend the next hour cycling that risky experience over and over in their head. Thankful they weren’t hit. But pondering why their life should be at risk in the first place.



SAFETY PLANNING AND ROUTE TIPS



Stay off busy highways

Money is being spent, appropriately so, making it safer to ride a bike along a busy highway. Sometimes a highway cannot be avoided. But that is not a desirable place to ride a bike. It's loud, windy, stressful, and no matter how wide the shoulder, feels dangerous. This is a place where rumble strips on the shoulder provide a great service for bikers and motorized vehicles, provided the shoulder has sufficient room to safely ride a bike and that the shoulder is useable - in good condition and free of debris.

However, whenever an alternate rural road is available, bikers should be routed to that road.

Road surface

It is important when designing a solution for biking connectivity that it accommodates the type of bike that will be used. If you connect roads with a bike path that goes from one town to another at a distance of just a mile or two, then a less expensive gravel option could work. But if the biker is traveling a further distance, like 40, 60 or 100 miles, they will avoid gravel. Gravel, especially soft gravel, is a difficult surface for the geometry of a road bike to handle. It increases the workload of the biker significantly. The problems are magnified if the weather is bad. Not only will the riding be difficult to impossible, but the wet dirt and grime could damage the bike components that they depend on for the remainder of their ride.

The ride from Houghton to Pelke is a great example of potentially dangerous road surfaces on rural roads. An amazing quiet and scenic bike route exists between Houghton and Bargara. The problem is that some of these roads are in bad condition with an array of potholes and hazards. They are unsafe for vehicles and bikers alike. They are probably also low priority for fixing, as they have very little traffic. The risk of serious accidents increases as bikers must consume the entire lane to find usable pavement surface. The risk is elevated in the hills, especially downhill, as bikers pick up speed, losing some control and visibility. Having a decently maintained surface, however, allows bikers to ride safely, completely avoiding US 41 from Houghton to Bargara.

Chips seal is a difficult surface for biking. It's sticky and coarse, which increases friction. Riding on a flat chip seal road is like riding up a hill. The situation is much worse if it's a busy chip seal road and riders must use a shoulder. A good example here is 123 North from St. Ignace. The lane portion of chip seal gets condensed overtime with vehicle traffic. But the shoulders don't, and the small pebbles are loose and scattered throughout the shoulder. If rumble strips are milled into the chip seal it deteriorates the shoulder. Debris collects more debris, quickly making it unusable by bikers.

Being seen

Bike safety planning needs to consider the worst weather conditions. If it's pouring rain, and a biker is forced onto the traffic lane because of a bad shoulder, the vehicle likely assumes they

are on the shoulder and can barely see through the downpour. Suddenly they happen across the biker, realize they are only inches from them and need to steer clear just in time.

Even with good shoulders, awareness through “share the road” bike signs remind motorized traffic to be alert to cyclists.

Getting into and out of towns

All towns, big and small, get busier the closer you get to them. Every town in the country can have a strategy for the best way for non-motorized to enter their community from all possible angles in the safest manner possible.

AASHTO’s Build for usable shoulder width

In [AASHTO’s Guild for the Development of Bicycle Facilities, 4th Edition, 2012](#), on page 71, they state, “Rumble strips are not recommended on shoulders used by bicyclists unless there is a minimum clear path of 4 feet from the rumble strip to the outside edge of a paved shoulder, or 5 feet to the adjacent curb, guardrail, or other obstacle. If existing conditions preclude achieving the minimum desirable clearance, the length of the rumble strip may be decreased or other alternative solutions considered. Placing a rumble strip under the edge line is one way to reduce its impact on the adjacent shoulder, while providing the additional advantage of increasing the visibility edge line at night.”

They recommend gaps in the rumble strips be provided for bicyclists to move across the rumble strip pattern as needed. With the gaps spaced at intervals of 40 to 60 feet and being at least 12 feet in length.

They also highlight the maintenance necessary for shoulders to be usable in chapter 7.

“Bicyclists often avoid shoulders and bike lanes filled with gravel, broken glass, and other debris...” They recommend a sweeping schedule for roadways including periodic inspections. Reduce presence of loose gravel. It also discusses chip sealing, suggesting to not use chip seal on shoulders. Or if chip seal must be used, that it’s a fine mix chip seal of 10mm or finer. They recommend maintenance on poor quality roads that are identified as likely bicycle routes.

FINDING SAFE ROUTES FROM A BIKERS PERSPECTIVE



I'll take you through all 10 days of TDY and point out where safety improvement areas exist, and solutions to fix them. These problems and solutions reside in roads and communities throughout America. So, the ideas we provide here are applicable to safety methods elsewhere. I hope that by taking you along my routes you can get a sense of how cyclists plan their routes. Thereby having more inside information and understanding for how infrastructure projects can transcend the boundaries of communities, and map out how non-motorized travelers can best connect from one town to the next in a safe and enjoyable manner.

The Tour Da Yoop, Eh is a 10-day 1,200-mile ride that hugs the perimeter of Michigan's Upper Peninsula. Our goal is to stay off the highways as much as possible, taking the longer quieter scenic route, favoring pavement, but utilizing multiple surfaces to make rural connections and keep bikers safe. We gain a unique experience in biking, sharing the road with vehicles, safety ideas, and connecting communities through non-motorized means.

My safety solutions evolve around two themes – 1) Separation and 2) In and Out of Towns.

Separation is keeping bikers away from vehicles. I focus on two methods of separation, 1) Separation by Volume, and 2) Separation by Space. **Separation by volume** means directing bikers to roads that are seldom traveled by vehicles. **Separation by space** applies when bikers share heavier trafficked roads. Separation by space means providing ample space between bikers and vehicles so that all are safe.

In and out of towns focusses on how bikers are intended to route in and out of communities. Most accidents happen within city limits. Therefore, if you want to save lives, towns can look at the bicycle flow coming into and out of their town, to make sure that people have safe routes.

Superior Region Team has work that is in progress

The Superior Region Team has a list of roughly 50 proposed and upcoming non-motorized projects. It also has a list of around 40 projects that have been completed since 2015. Some of the recommendations I list in this report are already in the works, or in consideration for future projects. Some of my recommendations could provide good alternatives until the money is received to fulfill other more comprehensive projects waiting in the grant/funding stage. Because of the scope of our ride, I have a unique perspective on connecting safely throughout the U.P. and entering and exiting towns. The people living locally within an area generally know best the infrastructure needs of their communities. I hope that my view helps to showcase connectivity opportunities at a macro level. Sometimes identifying problems and opportunities that might not be seen at a local level. But I'm not trying to take away from what projects are being worked on locally.

We start in my hometown of Manistique Michigan on the last Friday of July and return to Manistique 10 days later.

Day one - Manistique to Escanaba. By car - 55 miles. Our route - 115 miles.



Manistique is an easy town to ride a bike in and out of. Traveling west, you have three options to ride to Nahma. Go directly west through Cooks, and then jump on U.S. 2. Go west and then south, through Thompson, and ride through the Garden Peninsula. Or ride west and then north to Camp 7 road, then head south to Nahma.

The best option, if improvements were made, would be to ride through Thompson. But Little Harbor road turns to gravel, and it can be softer which is difficult for road bikes. Paving that approximate 6-mile section of road opens the entire Garden Peninsula for massive biking opportunities for the greater Manistique community.

Separating by volume, we get off US2 quickly after leaving the Nahma Peninsula, taking the first road south - County Rd. 503. It's a splendid road, but there are 6 miles of gravel. The gravel is

generally packed, and our road bikes manage it. While the gravel is not ideal, I believe the scenery and safety far outweigh traveling alongside US2.

If there was a greater master plan of keeping bikers away from cars, paving that section of Country Rd. 503 is the solution. Even chip seal would be a welcome alternative. It opens the entire peninsula all the way down to Peninsula Point Lighthouse.

Biking through Rapid River is the most difficult and dangerous section of the entire ride. Rapid River is busy with US2 running through its narrow town and connects to US 41 going to Marquette. The road is incredibly dirty, full of debris, which is very difficult and dangerous for bikers. There is no sidewalk. The bridge over Rapid River places bikers very close to traffic. Then there is the immense challenge of crossing US2 to go south on Bay Shore Dr. Once you can get to that road you are in biking paradise. You have great separation by volume all the way to Grape n Grain south of Gladstone just north of the Escanaba River bridge.

That one mile stretch through the town of Rapid River is the most dangerous of the entire 100 + mile journey. It is in desperate need of a bike path and a separate bridge over Rapid River alongside US2. The bike path could run from County 513 Rd east of Whitefish River. Or it could start around Rapid River Knifeworks just west of Whitefish River before traffic gets more congested in town.

There also needs to be a safe crossing method for bikers traveling to/from US 41 or bikers stuck on the north side of town, which could be a dedicated stop light, or overhead crosswalk with ramps.

While getting through Rapid River is the toughest problem. There is another difficult couple of miles getting to the Escanaba River bridge pathway from the bike path along the shore from Gladstone. A biker not from the area would be unaware of the side road they could take once the bike path ends. They would instead try to cross US2 to get to the far shoulder. That would be a huge mistake though. There is a side road that takes them to Grape n Grain, a store just a half mile from a bike path that crosses the Escanaba River bridge. But even if they did find the side road, they then must travel into oncoming traffic using the shoulder. It's safer than crossing US2, but it puts them close to vehicles that aren't expecting bikers to be coming toward them.

Once they reach the bridge, Escanaba offers great travel routes through the east side of town along the water.

Using the Little Harbor Road route, we are only on U.S. 2 for a total of 7.6 miles. With exception to Rapid River, the US2 shoulders we rode are large, and were clean enough to bike safely. I can't speak of the entire length of US 2 between Manistique and Escanaba as we only experience a small portion of it.

Improvement suggestions

Separation by volume

- Pave 9 miles of gravel on Little Harbor Rd. south of Thompson
- Pave 5.9 miles of County 503 CC road along Ogontz Bay.

Separation by space

- Bike path solution through 1.4 miles of Rapid River
- Signs to direct bikers from the bike path from Gladstone to the side roads to Grain n Grape.
- Bike path solution on the east side of US2 between Escanaba River bridge and Grain n Grape.

In and out of towns

- Same issue in Rapid River. Needs bike path solution and highway crossing solution so non-motorized traffic can safely cross US2 and US41 intersection.

Day Two - Escanaba to Iron Mountain. By car 52 miles. Our route - 121 miles.



Escanaba is an easy town to exit to the west. We are on US2 for just 3.8 miles. We use the bridge to cross Ford River. If Escanaba paved one of their trails that go west to 69, we'd probably take that instead and avoid US2 completely.

Once leaving Bark River, we don't see a gas station for 115 miles. We continue west and south along the Cedar River. We continue south till we see Lake Michigan, edging closer to Menominee. To get there, we rode over 4.2 miles of not ideal gravel, and some very empty, but pothole riddled farm roads. Bikers could avoid that gravel, if they wanted to cut the route short, and take a paved road west through Carney.

Norway is a safe and easy town to pass through south of US2. And they did a great job of posting bike route signs to help guide bikers along the ideal path. I have accessed Iron

Mountain by bike from various directions, all have been splendid. We currently ride around Lake Antoine. It's obvious that the greater Iron Mountain area has put thought into bike safety.

Improvement suggestions

Separation by Volume

- Paving a bike path from Escanaba to M69 would be a home run. But we use less than 4 miles of US2 to cross the Ford River, and the shoulder is wide and generally clean.
- Paving 4.2 miles of gravel along country roads 551 and 366 provides reliable biking passage for people traveling all the way to Lake Michigan and Menominee.
- Roads like Jimtown drive, which goes to Kleinke County Park, aren't traveled much by vehicles, it provides a great route for bikers. Keep that in mind when future road construction projects are available to improve those pothole riddled farm roads.

Separation by space

- There are times where 577 gets a little tight as the shoulder is very small. But the traffic was light enough where this continues to feel safe and be an enjoyable ride. Future projects done on that road would be wise to make the shoulder wider to align with complete streets objectives of safety for all road users.

In and out of towns

- We don't experience any problems getting to, through, or out of towns along our route. It's clear that people put thought into action and create or identify safe routes for bikers.

Day Three - Iron Mountain to Ironwood. By car 127 miles. Our route - 131 miles.



Iron Mountain has nice options to exit. We currently use Milwaukee Ave to Bass Lake Rd north before connecting with US2 for 3.5 miles.

After that, there are plenty of improvement options which include paving gravel roads, or paving bike paths, to keep people in Michigan cycling toward Crystal Falls or Alpha. Those options are best explored by local bicycle safety planners whom I know have a desired plan already mapped out.

Those improvements are not yet available, so we route into Wisconsin through Spread Eagle and Florence before we must get on US2 again. We travel 5.2 miles on US2, and exit left at Stager Lake road. Stager Lake is a wonderfully scenic ride, but the road surface is harsh. I'm not sure what the surface is made of, but whenever it's repaved, I sure hope it goes back to asphalt.

The next time we see US2 is in Iron River around mile 45. It's another short section, only 2.5 miles long.

Thus far, our brief stints on US2 are generally good. The shoulders are wide and have been free enough of debris that we don't experience many flat tires or hazardous experiences.

But then, at mile 54, travels along US2 deteriorate. We stayed on US2 for 21.4 miles all the way to Watersmeet. The shoulder of US2 is very bad and absolutely littered with debris. The shoulder surface is different than the road, almost gravel like. I'm not sure if it's old chip seal. It has collected years of debris, metal, and wood. The small crystal-like stones glisten and are difficult to discern between gravel or sharp metal objects. Bikers dance on and off the shoulder, constantly calling out hazards and often changing flat tires. It's a tiring and stressful ride.

The entire 21.4 miles of US2 could be avoided if 9 miles of Old US2 were paved between NF 16 and east of Watersmeet. That solution would create a first-class biking experience and amazing separation by volume.

Barring that improvement, we endure US2. Thankfully just outside of Watersmeet we have a fabulous ride on a paved Old US2 for 11.4 miles. This is spectacular and exactly what is needed after the stress of the previous 21 miles of highway. I hope that whenever Old US2 is repaved it remains asphalt and not chip seal. Old US2 does cross new US2, unfortunately the forest has reclaimed that road. If the state claimed it back it would separate bikers from traffic for another 4 miles.

Instead, we embark on the longest and most grueling section of highway on the entire 1,200-mile TDY ride around the Yoop. An unwelcome 25-mile experience of horrible shoulder, tons of debris, tire popping junk, and last year, half hazard construction cones caused a biker accident. They were traveling in a line and misplaced cones covered the entire shoulder causing bikers to disperse, with bikers in the back unable to see what was happening, and a biker ran right into a large cone. Her bike was inoperable, and she had plenty of scrapes, but thankfully nothing serious.

As you can imagine, the biker frustration and feeling that "they" don't care is reinforced by these experiences. Whoever placed the cones incorrectly certainly didn't do it with the

intention of harming a biker. But they also weren't thinking about bikers. Even though, as bad as the shoulder is, US2 is marked as the Iron Belle biking trail.

There might be an intention to eventually repave the entire shoulder along US2, as has been done on the eastern side of the U.P. But it's been years since US2 was declared a bike route, and years that the shoulder has been in disarray and full of hazards. I strongly recommend that the shoulder is at least cleaned in the meantime.

We exit US2 3.5 miles east of Wakefield and enjoy a spectacular ride the rest of the way into Ironwood.

Improvement suggestions

Separation by volume

- Have an awareness of the roads available to use besides the main US2 highway, and make sure that future construction projects include material that is favorable for biking. Mainly, don't replace everything with chip seal.
- Paving 9 miles of Old US2 east of Watersmeet is a spectacular way to keep bikers completely off 21.4 miles of US2. I'm not knowledgeable in the costs of road projects, but I'd hazard to guess that paving 9 miles of road is cheaper or at least comparable to the work necessary to improve 21.4 miles of US2 to make it suitable for biking. While chip seal is generally not favorable for biking, in this case, chip seal on Old US2 would be a welcome and much safer improvement over riding alongside the US2 highway.
- Reclaiming 4.2 miles of Old US2 that runs through Thayer. Again, chip seal would be a welcome sight compared to riding alongside US2 highway. But asphalt is preferred.

Separation by space

- If 9 miles of Old US2 is paved east of Watersmeet, then only the 25 miles of US2 shoulder east of Bessemer needs to be addressed.
- Otherwise, the US2 shoulders between Iron River and Bessemer are in desperate need of being made useable for bikers. I would go so far as to say that I recommend the state either spends the money to fix this, or they remove this section from the Iron-Belle trail. This section, as I've experienced it over the past 6 years, is not suitable to be advertised as a bike route by the State. I know there is a strong desire by those living and working

in the U.P. to improve safety in their community, who desperately want to see improvement, and are working toward it. But I also understand that they have been limited in what funds or priority the State has allocated toward this project.

In and out of towns

- We don't experience any difficulty biking to, through, and out of towns. It's clear along the ride that many communities welcome non-motorized users and make improvements to give bikers a safe and enjoyable experience.

Day Four - Ironwood to Houghton. By car 109 miles. Our route - 128 miles.



Leaving Ironwood to the east and north is a dream. They completed a paved bike Iron-Belle route all the way to Ramsay. The ride is safe and very enjoyable. Great job to all involved in that project!

At Ramsay, we use backroads to get to Bessemer and then travel north through the Porkies. The ride to Lake Superior is mostly great. But it is odd that there are cutouts in the road that have been filled with gravel at least since 2018 when I first did the ride. The Porkies, as you can imagine, has very large hills with incredibly fast descents. These gravel grooves are dangerous, and I would have thought these cutouts would be patched by now.

Once out of the Porkies, we take 64 to Ontonagan. The shoulder is wide enough, and generally clean enough. We use Firesteel for a quiet country road before joining M38, and then M26, all the way to Atlantic Mine. M26 was under construction last year, and the crews did an amazing job seeing us safely through. It sounds like the shoulder will have rumble strips in them, but the

intention was to provide sufficient useable space for bikers. I'm looking forward to riding this in 2024.

As shoulders do, things get dirtier with more debris the closer you get to towns. By South Range, you are experiencing more tire popping hazards, but soon thereafter we exit at Atlantic Mine and enjoy a spectacular ride the rest of the way into Houghton.

Improvement suggestions

Separation by volume

- The Porkies provide a spectacular biking experience. I recommend paving/filling the gravel cutouts on South Boundary Rd. to make it safer. The gravel is only a few feet wide, it's loose, and this has caused issues and dangerous experiences for some bikers.

Separation by space

- M26 could use shoulder cleaning, especially as you get closer to the populous areas surrounding Houghton. The debris becomes more persistent, and the hills descend toward the water with speed. Bikers sometimes need to dodge debris quickly, and this can put them into traffic.

In and out of towns

- We don't experience any problems getting to, through, or out of towns. It's clear Ironwood and the surrounding community put great thought and action into making wonderful pathways and routes for bikers.
- The Houghton community is wonderful once you are near shoreline. Cleaning the shoulder along 26 will make it safer as you approach the area.

Day Five - Copper Harbor Loop. By car 100 miles. Our route - 119 miles.



From Houghton, we cross the Portage Bridge and begin a counterclockwise loop around Copper Harbor. The shoulders along M26 have rumble strips, and they are dirty. They need to be cleaned if the intent is to keep bikers on the shoulders. Sections of the shoulder are currently unusable by bikers because of the debris.

Soon after Lake Linden we head east and follow the Lake Superior shoreline. It's a wonderful ride, although some sections of Gay Lac La Belle Rd. are so bad that they have a sign posted, at least since 2018, saying "Rough Road". I'm hopeful someday the sign will be removed and the road repaired. Even still, there is hardly any traffic and a spectacular ride.

We climb the hill past Mt. Bohemia and connect with US41. The shoulders on US41 through this area are narrow, the road is scenic and winding. It's a wonderful ride, except that it is also heavily used by vehicles. There are few safe options to pass, and vehicles stack up behind the bikers. The bikers have nowhere to go besides being in the lane and rely on patient drivers to

make good decisions when to pass. This section lasts 9 miles, and it's one of the few stretches along the 1,200-mile ride that we see bikers going in both directions.

Once in Copper Harbor, we quickly exited to climb Brockway Mountain. This exhilarating climb saves us from around 10 miles of M26, where the shoulders are too small to stay out of the lane of traffic. The descent from Brockway mountain is full of potholes and in desperate need of repair. Hopefully that project is in the books.

We get on M26 near Eagle Harbor and share the road with vehicles through Eagle River. At that point most vehicles continue on M26 and we take a wonderful quiet road. The nearly 13 miles of traffic on M26 is probably more frustrating for the vehicles than it is for the bikers. It's difficult for vehicles to pass, and there are few places for bikers to get out of the lane.

The sections of US41 and M26 are perfect places for bike "passing lanes". Bike passing lanes are a suggestion I have for when it's difficult to have wide shoulders throughout a road. Like vehicle passing lanes - bike passing lanes are a section of shoulder that is wider and allows vehicles to safely pass. The stress and danger of passing slower vehicles on roads like US2 have been lowered or even eliminated by the implementation of passing lanes. Signs indicate when the next one will be, and drivers wait patiently for that opportunity. The shoulders on M26 and US41 in this area are small because the topography doesn't lend to wide shoulders. However, there are sections where the shoulder could be wider for say a half mile, which would give vehicles enough room to safely pass. Instead, they get impatient, and take chances passing on double lines, closer than 3 feet from bikers, around curves, hills, and sometimes when opposing traffic is present.

The remainder of our journey back to Houghton is mostly quiet and incredibly scenic. This day is typically one of the favorite rides for many of the bikers.

Improvement suggestions

Separation by volume

- Bikers endure, but it sure would be nice if the "Rough Road" along Lac Labelle Road was repaired. I imagine the local traffic wouldn't mind either.

- Repair west side of Brockway Mountain. The climb is challenging, and some bikers may not venture up there. But the route does provide wonderful separation by volume from traffic on M26.

Separation by space

- Clean the 10 miles of shoulder from Portage bridge to Lake Linden. The shoulder has rumble strips milled, but it is generally wide enough to accommodate bikers. The problem is that it's very dirty with hazardous debris. Bikers are constantly moving in and out of the shoulder to avoid danger. Dirty shoulders increase the risk of accidents for bikers and vehicles alike.
- Provided wider shoulders cannot be constructed throughout, create bike passing lanes along the 9 miles of US41 from Lac La Belle Road to the golf course going east to Copper Harbor. And from Copper Harbor to the golf course heading uphill to the west. When riding downhill bicyclists go as fast as the vehicles.
- Provided wider shoulders on M26 are not possible between Copper Harbor and Eagle River, install bike passing lanes wherever available to allow vehicles safe passage around cyclists.

In and out of towns

- Aside from the dirty shoulders leading into Lake Linden, we don't experience any difficulty riding to, through, or out of any towns along our loop.

Day Six - Houghton to Marquette. By car 100 miles. Our route - 114 miles.



This is one of our wildest days as we ride through what I refer to as the “Hump” of the U.P. We leave Houghton climbing, and ride south through quiet roads and rolling hills all the way to M38. The roads are lightly traveled, and some are not in good condition. Because of the light traffic we can use the entire road to find the best path. However, the hills can make things challenging as you descend at high speed and encounter a series of potholes.

Once on M38, we find a shoulder with rumble strips that is too narrow to be used by bicyclists. Previous years the shoulder was useable, as it didn’t have the rumble strip. M38 is a busy connection for vehicle traffic and made the 3.5 miles more dangerous than before.

We connect with US41 between Bargara and L’Anse for only 3 miles. It’s new construction. The shoulder is a little dirty, but it’s wide enough that there is room to navigate. I remember this project and know there was great care by the L’Anse and Bargara communities to sufficiently accommodate bikers. However, as diligent as they were, there is a short section where the

eastbound lane has a passing lane opening and shoulder is all but eliminated for a short distance. The vehicles are not expecting the bikers to come onto the lane, but we are forced to, and get too close to the cars speeding up the hill. I hope this can be repaired as it puts risk in what was an otherwise wonderfully done project.

From there we headed through L'Anse and into the wild. We have an 11-mile hill climb on precarious gravel, then 2.5 miles of more sand than gravel that road bikes are not capable of riding, and finish with a flat 5 miles of decent gravel. It's a section people don't forget. They either love or hate it. Suffice to say, road bikes are not meant for this. But we do it anyway. After that it's smooth sailing all the way to Marquette. There are no rumble strips on Big Bay Road. We collect a bike path near Presque Isle and have a fantastic finish jumping into Lake Superior.

There is an alternate route other than "The Hump", but it is comprised of a patchwork of questionable roads and US41 for over 50 miles. I tell all the bikers the gravel is worth it. Some of them probably believe me.

Improvement suggestions

Separation by volume

- We travel about 30 miles south of Houghton to M38 and see very few cars. It's a perfect separation by volume by staying away from US41. However, the roads are not always in good condition, and some are bad. I suspect they aren't repaired frequently. The next time they are, I hope these backcountry roads are recognized as great separation by volume biking alternatives, and that they don't just get a chip seal project.
- Improve the gravel, especially the sandy section on AAA Road. If bikers didn't ride as part of my "route" during the event, they would NEVER bring their road bike up there. However, it is by far the largest separation by volume improvement that I'm aware of in the entire U.P. Putting a bike path on 2.5 miles, and some cleanup work on another 15 miles of gravel makes it a viable option for bikers to legitimately use. Doing so keeps people away from highway traffic for 50 miles.

Separation by space

- M38 to Bargara doesn't have a usable shoulder, and it's too busy of a road. It puts bikers in the lane. The mumble strips need to be filled in for the shoulder to accommodate bikes.
- Put down a little extra shoulder on US41 going east before L'Anse. I don't have an exact measurement of the problem. But it's obvious when you see it, and it might only be 40 feet or less. The shoulder goes from wonderful and wide to nothing, and then opens again to be useable. It's that small section of nothing that suddenly bikers are forced into the lane and frantically trying to look over their shoulder for traffic while not crashing at the same time. This seems like an easy fix.

In and out of towns

- Houghton is an easy town to ride to, through, and out of. So long as you don't mind climbing a hill when you leave to the south. They've done an excellent job accommodating the non-motorized community.
- Bargara is difficult to enter because of the lack of shoulders on M38.
- The distance between Bargara and L'Anse is good, with exception to the small problem spot mentioned above with the disappearing shoulder.
- L'Anse is wonderful with an abundance of biking available to the north and east.
- Marquette has done a stellar job all around providing connecting paved bike paths from all angles and access points into, through, and out of town.

Day Seven - Marquette to Grand Marais. By car 103 miles. Our route - 115 miles.



We leave Marquette and climb for 10 miles, passing Marquette Mountain heading toward Gwinn. The shoulder on 553 is dirty and likely hasn't been cleaned in years. The worse it gets the more bikes will be pushed into the lane. We then take M94 east. It's a beautiful newly paved road, but rumble strips were milled into a shoulder width that is too narrow. There is very little traffic on that stretch, and bikers fluctuate between trying to ride within the useable shoulder space and riding in the lane. We jump on US41 south for a mile, and then take M94 east toward Munising. M94 is a great biking alternative to M28. It gets far less traffic and is a much more enjoyable lower stress ride. However, rumble strips were milled into the shoulder which makes much of the shoulder unusable. Vehicles passing by can't tell from their vantage point why bikes aren't on the shoulder. Many people aren't even aware the rumble strips are there and wonder why bikers choose to ride in the road instead of the shoulder. It is frustrating and stressful for the drivers. The bikers don't appreciate it either.

We then exit M94, travel southeast past Buckhorn Lodge, and pick up NF 13 north. I avoid the town of Munising as it's extremely busy with limited roads in or out of town. The small town is overrun with Pictured Rocks vacationers.

We make our way to H58, which we take for the rest of the trip to Grand Marais. H58 is a wonderfully scenic road, but it carries significant Pictured Rocks traffic. Traffic begins to thin around Melstrand, as many drivers head toward Chapel Falls. While less, there remains a consistent flow of traffic most of the way to Grand Marais. H58 is the only road option along this portion of the route. A good rule of thumb for shoulder width would be, if there is only one road, and the area is heavily promoted for tourism, shoulders need to be wider than normal.

Improvement suggestions

Separation by volume

- You can get out of town on bike paths in Marquette, but it can be difficult going south and east to connect communities without using the highways or other main trunk lines. Further separation by volume would likely be paving a patchwork of current gravel roads. The biggest gain here is separation by space.

Separation by space

- There is a wide enough shoulder on 553 past Marquette Mountain toward Gwinn, but it's getting dirtier and hold more debris. It would be good to sweep this for biking use before it's so bad that bikers can't use it. The entire 10.7-mile section isn't bad, but there are obvious pockets with excess hazardous debris.
- M94 shoulders are not wide enough for rumble strips. Thankfully it's not very heavily used by traffic. But it's the primary biking route if staying off the extremely busy M28. So, it would make sense to have it function to accommodate bikers better than current.
- NF 13 is much busier than it was when I grew up. Most likely because of increased Picture Rocks traffic. The shoulders should be wider on this road all the way from M28 to US2.
- H58 from Munising to Melstrand is packed with speeding visitors rushing to get to the pictured rocks sights. This shoulder should be wider. If it ever gets rumble strips in the shoulder then it needs to be at least 5 feet wide.

- H58 from Melstrand to Grand Marais is not quite as busy, but still has a flow of traffic. Wider shoulders throughout would be ideal. But at a minimum it would be nice to see bike passing lanes in the curvier sections thereby allowing vehicles to safely pass.

In and out of towns

- Marquette does a brilliant job with bike paths getting people to, through, and out of town.
- Munising would be much more difficult to bike in and around. We avoid it completely.
- Grand Marais is a quaint town that once you get past the Pictured Rocks attractions has wonderful access from the west, and east. The south exit is complicated with rumble strips in the shoulders of M77.

Day Eight - Grand Marais to Sault Ste. Marie. By car 111. Our route - 134 miles.



It's an easy ride out of Grand Marais traveling east of H58 toward Deer Park. In 2023, 11 miles of Grand Marais Truck were improved to be a harder packed gravel. I'm excited to see how the project turned out and expect that we will be riding it this year on our road bikes. From there we travel south to M123, which we follow all the way to Lake Superior Shoreline Road. Shoreline Rd. is a fabulous ride past light houses, scenic views, Bay Mills, country roads, and into the town of Sault Ste. Marie from the west, riding our bikes under the International Bridge arriving at Soo Locks.

The only complicated section on this route is M123, where heavy traffic and narrower shoulders can make separation by space difficult. In 2023 the rumble strips from Newberry north toward Paradise were filled in. It was spectacular to see. Bikers were able to utilize the full shoulder. Even though the shoulder was still narrow, it provided a safe haven for bikers to stay out of the lane of traffic. Only a portion of M123 had the rumble strips covered over, so there remains a section, most notably from Paradise south to Shoreline Road, that still needs

fixing. However, the entire stretch of M123 all the way to Mackinac Trail near St. Ignace should have the shoulders widened or the rumble strips covered over. The road has become too busy to safely carry vehicles and non-motorized traffic without sufficient useable shoulders.

Improvement suggestions

Separation by volume

- Hopefully the improvements made to the Grand Marais Truck Trail were sufficient to provide a good road biking alternative for bikers traveling east or west. We will test it out this summer. If the gravel is packed enough, that will provide fantastic separation by volume. Although pavement is preferred for such a long stretch.

Separation by space

- M77 is a main north/south road from Lake Superior to Lake Michigan communities. It is the only road available for bikes or vehicles in the area. Being that there is no alternative, and it is heavily used by vehicles, it needs to have wider useable shoulders. A new construction project south of Grand Marais milled rumble strips in the middle of the shoulder, thereby making it unusable for bikers. South of M28 the shoulders are thankfully free of rumble strips, but they are too narrow to provide the necessary separation by space.
- M123 is another main road and the only access to connect Newberry, Tahquamenon Falls, Paradise, and Trout Lake. The shoulders have been milled with rumble strips and are not useable by bikers. The section north of Newberry was recently fixed.

In and out of towns

- Grand Marais is good with exception to the south, where they have M77 with unusable shoulders.
- Bay Mills and Brimley recently finished construction projects and did a wonderful job providing wide shoulders and safe passage through their communities.
- The Soo has fantastic access into town from the west, south, and east.

Day Nine - Sault Ste. Marie to St. Ignace. By car 51 miles. Our route - 122 miles.



We exit the Soo to the east and follow the St. Mary's river to Detour. There we picked up M134 and rode west to Mackinac Trail. We ride south through St. Ignace and Bridge View Park. Aside from some rough roads on Scenic Drive leaving the Soo, most of the pavement is in excellent shape throughout.

The only problem areas are along M134, where some early rumble strip methods were used on the shoulder. The eastern section of M134 is actually a picture of perfection with shoulder width and rumble strip method. The shoulder is clean and useable, the rumble strips are only 8 inches wide, and on the white line. The bikers were able to ride in a line, stay on the shoulder, didn't have to dodge hazards, and enjoyed a wonderful ride.

At Port Dolomite things changed. The gravel spills across the road as it is trained and trucked to the Port. The gravel is spread both east and west from the Port along M134. But even when you get past the Port, dirty shoulders persist. The gravel and debris continue to Cedarville and

through Hessel. Some of the debris is left over from poor sweeping after the rumble strips were milled. Gravel collects more debris. It's in need of a good cleaning. And it seems to reason that Port Dolomite should be responsible of keeping the shoulder clean within a half mile of either side of their operations.

There are rumble strips in Mackinac Trail closer to St. Ignace making the shoulder unusable for some sections.

Improvement suggestions

Separation by volume

- There are separation by volume routes the entire way with the exception to M134. The only suggestion would be to have Scenic Road east of the Soo in better road condition for safe riding. The roads used to Detour are free of rumble strips on the shoulders.

Separation by space

- Clean the shoulders from Port Dolomite through Hessel. I believe they were improperly cleaned at the time of milling the rumble strips.
- Have Port Dolomite clean the shoulders around their operations at least annually.
- The shoulders on Mackinac Trail are not wide enough to support rumble strips and remove useable shoulder for bikers.

In and out of towns

- The Soo has excellent routes to get to, through, and out of town.
- St. Ignace has excellent routes to the north and east. Be aware of rumble strip projects on narrow shoulders on Mackinac Trail and M123.
- St. Ignace has good exit to the west via Cheesman Rd. But it has difficult westerly access on the shoreline south of town.
- St. Ignace is ripe for a massive non-motorized project taking people from town and into Bridge View Park. I know this is a project they are discussing and working towards.

Day Ten - St. Ignace to Manistique. By car 85.8 miles. Our route - 126 miles.



On our final day of the ride where we headed west, back to where it all began in Manistique. We start at Bridge View Park and travel the shoreline on a hard packed gravel road for about 3.5 miles. We then follow the shoreline, having to get on US2 for less than a mile before passing Lehto's Pasties and traveling alongside US2 for 4 miles to Brevort Lake Rd. There is a small 1.5-mile section of gravel around Brevort Lake, but it helps to keep us away from US2 for a much longer period or going all the way up to Trout Lake via M123 instead of the shoreline route.

Once at Engadine we rode south on M117 and connected with US2. There is a 4.6-mile section of Hiawatha Trail west of Engadine that would be ideal to take instead of US2, but its softer gravel. Depending on the weather, it would be difficult for road bikes. By not riding on the gravel, we must connect with our longest stretch of US2 for the day at 8 miles. We route through Curtis, which gives a wonderful reprieve from US2. However, this means we travel M77 south for 8.1 miles, which is also a busier road and is lacking in sufficiently wide shoulders throughout. Back to US2 for 4 miles, and then nice quiet roads again all the way south to Lake

Michigan and along the shoreline. We get on US2 just briefly for another 2.8 miles east of Manistique before traveling along the back of town, through downtown and arriving in the Harbor at Flatiron Brewery for much deserved and welcomed pizza.

We use US2 six times for a total of 25 miles, with the longest stretch being 8 miles.

Improvement suggestions

Separation by space

- Pave the 3.6 miles of gravel by Bridge View Park going west. It is rideable, but gravel is a big deterrent for road bike users. Letting them start the journey on nice clean pavement would attract many more bikers to that area.
- Pave the 1.5 miles of gravel on Black Point Rd. by Brevort Lake. This gravel is a bit rough and tough for most road bikers. But the rest of the ride is lovely, and it would be a shame for road bikes to stay away from this much safer alternative to US2 just because of this small section of gravel.
- Pave the 4.6 miles of gravel on Hiawatha Trail from Engadine west to US2. You can see on Strava Heat Maps that bikers first attempt to bike on this road, but then turn around as the gravel is more difficult than they expected, and head south to US2. Paving this section keeps bikers away from cars and US2.

Separation by volume

- There has been impressive work done on the shoulders of US2 on the Eastern side of the UP. Much better than my experiences on the far west side of the state. New construction appeared to have much cleaner shoulders. But shoulders on construction from a couple years ago do still carry much debris. Some of it collected from not being thoroughly swept after the milling of the rumble strips. We had quite a few popped tires on US2 even though we weren't on it for very long. Popped tires are a huge problem for bikers as they can only carry a limited number of extra tubes in their gear bag. I would inspect the shoulder after each construction job to ensure they are free of debris. Sweeping would need to occur to clean up prior jobs.
- M77 needs wider shoulders all the way from Grand Marais to US2. It is a major trunk line for vehicles and the only option for bikers in the area. This is a road that necessitates the complete streets objectives be implemented.

In and out of towns

- St. Ignace is mostly good to the north, east, and northwest, but they have major problems with US2 traffic for cyclists traveling south and west along the shoreline. They are working on it and someday there will be a wonderful overhead crosswalk or some solution.
- Manistique is easily accessed from the east, north, and west. Bike route signs on Tannery Road would help direct bikers away from the busy US2 entrance into town.
- Manistique needs solutions for routing people from downtown to the harbors on the east and west side of Manistique River.



CONCLUSION

When my boys are older, and have kids of their own, they will tell stories that my grandkids will think are crazy. “Back when I was younger, we rode our bikes on busy roads right alongside huge trucks going 70 mph. And there wasn’t even enough room for everyone to fit on the road. Shoulders were unusable, and hundreds of people died, and thousands were seriously injured each year in our country getting hit by vehicles.” It will sound as insane as smoking cigarettes in an airplane, or thinking a person in a wheelchair could fit into a small bathroom stall.

People are trying to make things safer for bikers. And there is headway made in construction projects throughout our country. But there is not a standard that demands budgets fulfill minimum requirements for non-motorized use – even when on high volume traffic roads. And when mistakes are made, making the road more dangerous for bikers, they often aren’t fixed before the road goes through another construction project, which could take many years.

Is the perception of the bikers that I spoke with in 2023 correct, that “they” don’t care about cyclists’ safety? No, I don’t think that perception is accurate. But I think it’s complicated. Many people within our infrastructure machine do care about bicyclists’ safety. However they work within the confinements of the system, and they have many demands and objectives to meet.

We need the system to recognize there are safety standards that must be met and included within a construction budget. Not as a best practice objective. Or only if there is enough room in the budget. And not only because someone with foresight is overseeing the project recognizes this is a necessary bike use route and needs to accommodate that method of travel.

Regions can be mapped out, urban and rural, identifying the most likely and desirable routes bikers will take to get from point A to point B. And then through 1) separation by volume, 2) separation by space, 3) in and out of towns – a master plan drafted to earmark high value construction projects that are coordinated across multiple construction disciplines – federal, state, county, and township.

I believe someday that will be the case. And that is the future my boys’ kids will know.

James Studinger

Thank you!

Special thank you to all the people working on biking safety. Including those in Lansing, Mdot, DNR, road commissions, townships, and especially the Superior Region Team.

Thank you to the bikers of TDY who join us on our cycling adventure.

And a special thank you to all the wonderful people in the Upper Peninsula who have been so welcoming. We get to bike in your backyard and it's amazing!