Crash Analysis Studio – Session 16 Transcript

Introductory Trailer

Chuck Marohn: I want to give you two scenarios. Scenario number one a plane crashes. Scenario number two, two cars collide. In scenario number one, we pull out all the stops – we bring in the NTSB, we try to figure out exactly what went wrong. Scenario number two – we send out the cops, we sweep up the mess, and we go on our way.

John Pattison: If we, collectively – everyone on this call and the broader Strong Towns movement – if we do this right, we're going to save thousands of lives.

Edward Erfurt: Mayors and local council members want to do the right thing. They have the ability to solve it. We're going to help provide those tools for them.

Session

Tony Harris: Well, I would like to welcome you to the Strong Towns Crash Analysis Studio. We are glad that you're here. My name is Tony Harris and I'm the Action Team Coordinator with Strong With Strong. And in a moment I'm going to introduce you to the rest of our expert panel. But first, let's talk about why we're here today. The National Safety Council estimates that over 44,000 people in the United States died in automobile crashes throughout 2023 hundreds of thousands more suffer traumatic injuries during these collisions. And despite the best efforts of public safety officials, these crashes are still happening and affecting all of our lives.

There's a prevalent misconception that car crashes are caused solely by mistakes that drivers make. Looking at your phone, changing the radio, drinking alcohol, speeding.

When a crash occurs, the North American response is to send out law enforcement and insurance agencies to assign blame. We ask questions like, who made the mistake that caused this crash? And who should we blame?

The reality is the crashes are caused by multiple factors, not just driver error. When a traumatic crash occurs, we need to identify all the contributing factors and learn all we can from the experience so that we can reduce the number of traumatic injuries and deaths in our communities.

So what you're going to see today is a crash analysis studio session, drawing from the best practices of the medical profession. We've convened a panel to review a crash that happened in East California. During this crash, a pedestrian was hit by an eastbound motorist while trying to cross a highway that runs through a residential area, the pedestrian did not survive the collision.

So today I'll start by introducing you to our panel, then review the facts of the crash. And with our guests, we will assess the design factors that contributed to this collision. And I want to emphasize our goal is not to assign blame. Rather, our objective is to learn as much as possible about what happened and identify the many factors that contributed to this unfortunate event.

So before we get into the details and speak with our experts, we need to begin with the fact that this tragedy resulted in the death of a pedestrian. So please take a moment of silence with me to honor and acknowledge her and the loss of her life.

Thank you. I'm now going to introduce our expert panel for today.

So first we have Don Kostelec, who has worked in the field of transportation planning and design for more than 20 years. This includes work in the public and private sector with clients ranging from state departments of transportation to cities to nationwide pro and nonprofits. His specialty areas include safe systems, design, complete Streets, a DA compliance, and overall traffic safety. Don is a host of the Planning Commission podcast and a frequent contributor to national planning and transportation news sites such as Streets Blog. Don has a Master of

Urban Planning and Policy from the University of Illinois at Chicago and a Bachelor of Political Science and Journalism from Western Carolina University.

Next we have Danny Wind, who is a resident of the neighboring city to Nice, which is the city of Lake Port. They are a student, motorcycle courier, and strong towns member. Danny has a deep interest in Lake County's community planning and the way people navigate the built environment. And Danny is also the person that nominated this crash for us to review. So welcome Danny.

Next we have Thomas Aceves, who has been a passionate road cyclist for three decades and a resident of NICE for 15 years. He's committed to making change in his local community and Thomas is a council member on the Western region Town Hall or Municipal Advisory Committee for Supervisor Crandell in the third district of Lake County. Thomas joined the Pedestrian and Bicycle Advisory Committee over a year ago and he volunteers with Vision of Hope Village and also regularly helps clean up debris and trash along roadways like the nice cutoff. He has also recently been asked to serve on the executive committee of the county chapter of the NAACP.

And then finally we have Edward Erfurt, who is the Director of Community Action at Strong Towns. He is a trained architect and urban designer with over 20 years of public sector and private sector experience. And Edward has a skilled eye when it comes to evaluating the safety issues posed by roads, streets, and intersections like the one that we'll be looking at today. So now I'm going to walk us through the details of this crash in Nice. And I'm gonna share my screen to do that.

Okay, so let's go ahead and start with what we know. We know that a 67-year-old woman was trying to cross to the north side of Highway 20 when she was struck by a motorist in the eastbound lane. Now they were situated just west of Benton Avenue when the crash happened.

The motorist was 56-year-old dawn Marie Johnson, and she was driving eastbound in a 1995 Buick.

The collision occurred at 7:38 PM on February 14th, 2024.

Now our nominator, Danny Wind, did not qualify as a party of interest since they were not a stakeholder involved in the collision and I believe under California state law. This made them ineligible to receive a copy of the crash report. Now weather reports tell us that it was dark and rainy and nice on the evening of this crash, and Danny also reported to me that there were multiple downpours and instances of adverse weather the week that this collision took place.

Now medics did show up to the scene of the collision and they attempted to save the pedestrian's life. Unfortunately, she succumbed to her injuries at the scene of the crash. Now, media coverage did not report her name unfortunately, and they also didn't make any mention of alcohol or drug usage.

So here we have a map where you can see the approximate crash location marked with a red pin on the side of Highway 20 there. And then next we have zoomed in on a visual of the crash location. So you can see that we are just west of Benton Avenue and I believe we're east of Howard Avenue.

And then what I've done here is I've depicted Dawn Marie Johnson, the motorist with orange, she is traveling eastbound. And then we depicted the pedestrian with yellow, crossing at what we believe is the approximate location of the collision based on the information we have been able to source.

And then I outlined where we believe their paths crossed in red.

So, the speed limit on this segment of Highway 20 is 40 miles per hour. And I did want to note that there are other areas along Highway 20 where the speed limit sometimes climbs to 50 miles an hour or maybe even higher.

And then I also wanted to note that additional information on this crash was not available via California statewide traffic record system as we were preparing for this session.

So, a little more on the overall conditions of the collision location. So, we see an eastbound and a westbound through traffic lane on Highway 20 as well as a center turn lane that's dedicated to turns in both directions. And then there are extra wide shoulders for stopping parking accessing businesses on both sides of the highway. And we'll look at those a little bit later in this presentation.

Now there are no bike lanes along Highway 20, at least at this segment, right? And the crash location is unsigned and does not appear to have crosswalks. And to my knowledge, the closest crosswalk is a little bit closer to Howard Avenue and we will cover that when we look at some photos coming up shortly.

So, Danny Wind was really thorough in gathering information for us and they managed to get some photos and footage that we're going to review. This first photo here is a shot of the crash location. So, in this image we're facing northeast and looking at the memorial that at least at the di, the time of data collection was still being maintained by some locals.

And then this next shot is also taken nearby, the collision location. We're just facing southeast here I believe. And then this slide shows a photo from Howard Avenue looking more northeast in the direction of the crash site. So, this would've been where the motorist was coming from prior to the collision.

And then this still shot is taken from nearby Howard Avenue just from a different angle. And I wanted to include this visual to give a better sense for roadway width at this area. And on this slide we have a photo that illustrates what this area might look like for more of a pedestrian perspective while standing near the collision location and looking sort of northwest.

And then here is another pedestrian view, but from this vantage point we're looking a little bit more southwest. And then this is a photo of the closest crosswalk to the crash location. So, this would be nearby Howard Avenue.

And this last still image here is an aerial shot that was taken from nearby the Howard Avenue area. So you're looking east and northeast toward the crash location here. And then I decided to include this short video clip just to illustrate what it's like for a pedestrian to cross this roadway.

So we're gonna start this clip here and you can see a pedestrian featured right up here hesitating to cross that first through traffic lane and now they're making their way across it toward the center lane and then continuing to cross the rest of the highway so that pedestrian is traveling in the opposite direction of the woman who was killed in the crash that we're looking at today. But still illustrates that the crossing here might not be the easiest experience, right?

So Danny Wind also helped us get measurements of the location where the crash happened. So you can see from this visual there are those two through traffic lanes that I've mentioned. Each of those are 10 feet wide. And then there is the center turn lane for both eastbound and westbound traffic that is 13 feet wide.

And on either side of the road are those large unmarked shoulders sometimes used for parking or accessing businesses. One of those is 26 and a half feet wide and the other is 24 feet wide. And without the planners and the sidewalk on either side, the road width comes out to 83 and

a half feet. And when you add those planters in the sidewalk in the total width jumps up to 92 and a half feet.

So I would describe the development pattern here as you know, suburban in the sense that there's kind of access to commercial and residential properties when you're looking up and down Highway 20. And this highway runs parallel to both Lakeview Drive 3 0 6 A and Lake Shore Boulevard, 3 0 6 s.

And when we look at the surrounding area map, which I'm going to pull up in just a moment, you can see a number of retail establishments and locations nearby. So there's a marina market, there are some restaurants, there's a Dollar General and some other establishments as well.

And then Danny also managed to conduct a speed study for us. And this study was conducted under typical free flow traffic circumstances. So here's what we found.

Out of the 543 cars tracked, 69% were going over the speed limit. And that speed limit is 40 miles per hour. Now 6% of the tracked cars were going 10 miles per hour or more over the limit, right? So they were going at 50 miles per hour or faster. And then 85% of the drivers that were tracked were calculated to be traveling at or below 48 miles per hour.

So I'm going to stop sharing my screen for now and I'd like to turn to our panel and start our talk just thinking about and talking through factors that might be at work here. So Don, if you wouldn't mind starting us off, could you tell us what you think might have contributed to this collision? And I'm gonna invite you if you feel the urge to do so to use Google Maps or screen share. If there's anything you'd like to point out,

let's get you off of mute if we can.

Don Kostelec: Sorry, I lost my navigation there. Yeah, thanks for having me. I'm Don Kostelec with Vitruvian Planning. I'm based in Boise, Idaho. Ironically we were in Napa County doing work with Blue Zones the week after this occurred. So I was certainly kind of there for all the weather you were experiencing with that. So, and one thanks to Danny for all the work they did in in getting some of the on the ground information and being able to use that. So and looking this, when I look at contributing factors for this, we can take a lot from a media report and you can find this as local advocates.

So if we just look at the things I've underlined here, a 67-year-old person, that's a factor. The time of day, as Tony mentioned at night it was raining, they were walking northbound across the highway, the driver was foregoing 40 miles an hour. And then here's kind of the disturbing line. The pedestrian walked into the eastbound lane directly into the path. And without getting too deep in victim blaming, that's a challenge in our crashes when there aren't witnesses because the driver's the only witness. And if we look at things about speed, things like seatbelt use, if I'm in a crash and I'm out of the vehicle, I'm tending the person and the police show up, they will say, were you wearing your seatbelt when driving?

And if you say yes, that gets tagged and it goes into our national database. So who's gonna tell the police that they weren't wearing their seatbelt? Those kind of the inside hardball in this stuff. So when we look at contributing factors, there were people walking and driving. Amazing right? Land use, as Tony talked about, they were going somewhere. Something you'll see in a lot of crash reports is we don't know why the pedestrian was there at that time of day. We never asked why the driver was there at that time of day, the night and rainy conditions, the age, the speed of the vehicle and then the design of the streets that I'll talk about later really don't mesh with the safety we wanna see.

So let's talk about the people of Nice as a population. You're older about 10 years older than the median age of the rest of California. You're also a tourism hub so you're gonna have people driving and walking that might not be familiar with the community. That's part of the people

factor. As Tony mentioned with the land uses, people are going somewhere. These are the areas where people live and stay. The blue areas are where people play and have fun. And the purple areas are where people shop dime and socialize in your community. So we shouldn't be surprised when someone wants to move about freely within these different zones.

And especially in a place that brags about having some of the cleanest air quality in California, we want them walking instead of driving these short distances, you can go out and Google what's called a sun graph for your community and you will get the lighting conditions for different times of year. So I took that Nic and backed it up to February 14th. And when we look in the bottom left, this was clearly nighttime, it wasn't even twilight and it had been night for 30 minutes. So when we look at a graph like this, you can go back months later and go out at the same time of day in terms of the lighting conditions to see what was there.

And if you've ever never done a walk audit at night, it completely changes your perspective. Weather was a factor. If it's raining, it takes longer for a vehicle to slow down. And this image shows at 35 miles an hour, we know this person was going faster than that California vehicle code. No person shall drive a vehicle at a speed greater than is reasonable and prudent, and I know many of you have heard this of two fast for conditions about rain and snow. It never gets applied to when pedestrians might be present in an area. Yet when you look at the law, that is definitely a piece of the code that is a responsibility here.

When we look at pedestrian rights and duties, every pedestrian at any point other than within a marked and an unmarked crosswalk, there are two marked crosswalks here, but I would argue where the person was crossing was also at a public street intersection with Highway 20. And it is an unmarked crosswalk. And pedestrians have the same rights in those unmarked crosswalks as marked crosswalks. And even without that, it is still the motorist duty to exercise do care for any pedestrian upon the roadway. That's the law. We will also oftentimes hear speed was not a factor and that'll come out in police reports.

Speed is always a factor in the death. But police and others will tend to look at this of, well, 40 miles an hour, the person was going 40 speeding or exceeding the speed limit was not a factor. But I would even question that. And here's why we know this. Tony showed you and and I think the graphic that Danny provided about the chance of death of a pedestrian at certain speeds.

It's also different for age. And this is a study done by triple A 15 years ago that looked at the average risk of a person, 70 years old versus 30 as it relates to the speed of the road. And if you're 30 you can withstand 10 miles an hour more of force than a 70-year-old. This person was 67 years old. So when we draw on this graph 40 miles an hour and go up to the 70 mile an hour curve or 70 years old curve, nearly a 75% chance of death had this person been 30 years old, we're looking about a 30% chance of death. And later I will talk about a target speed on this of 25 miles an hour. That's consistent with California policies.

Had we had a target speed that self-enforced a 25 mile an hour speed limit, we would've increased this person's chance of survival by more than 50%. That's the physics of this. So road design is contributing factor.

You can see there's not much there to restrain speeds in this corridor. And if you followed things like Strong Towns and stuff for a while, we're always talking about narrow travel lanes, 10 foot travel lanes. They're useless when the rest of this might as well be a runway for vehicles and things. So we have to talk about other factors in that, which we will get into with some of the design improvements. Some other factors here from street design, no sidewalks, nothing that's there for pedestrians to even move safely about this corridor. There's no curbing or other edge treatments. Not only does that nullify the 10 foot lanes that are there, there's infinite crash risk along this because there is no access control.

So why would a pedestrian want to cross there where the person is in the video instead of coming to the crosswalk? Well they're gonna run into dozens of other conflicts with turning

motorists because it's a wide open buffet for motorists to pull into this. There's no lighting on the corridor.

We don't even have connectivity to the crosswalk at this one location where the sidewalk is. So if we're gonna tell pedestrians to use crosswalks, we have to treat them as safe places to cross. There's no crosswalk signage at this crosswalk.

And, excuse me, so last factors here. I live in the blue house. I don't know where this person lived, I don't know where they were going or coming from, but we know we have stores here and we'll hear oftentimes we'll just go to the nearest crosswalk. Pedestrians, why are you so lazy? Just it's safer for you. Well we have 950 feet between these marked crosswalks. So if I wanna walk from my house to this store in the most direct line possible, I have about a two minute walk and it's 400 feet from home. Now a pedestrian moves at about three and a half feet per second.

Probably at this age that's about right. It might be a little slower. A motorist at 49 at 40 miles an hour is moving 59 feet per second. But just go to the nearest crosswalk. Pedestrians. Well, while it not may not seem onerous to take this blue line route, we almost triple our walk time and our walk distance. And why would we ask somebody to do that? What if we asked the motorist, what if we asked the motorist who just wanted to cross this street, Hey go five minutes out of your way to cross the street.

This is what it would look like in Nice. They would have to drive, I wanna say it was almost two miles to the west. You're probably familiar with where this roundabout is and make a U-turn to come back. We would never put that expectation on a motorist, but in this situation, that's the expectation we put on a pedestrian. So when we look at all these things together, the street design one, the street isn't designed for the people of nice, it's not designed for the land uses in nice, it suggests out of direction, travel for non motorists while giving pedestrians or motorists free reign and infinite access along it.

No facilities for pedestrians that are there. I would say the design of this isn't even done in consideration of the expectations of California's traffic laws and no lighting for street safety.

Tony Harris: Great, thank you Don. That was very thorough and I really appreciate the visuals. That makes it easier for me to follow along as we move through these points. Great. Maybe we can turn to Thomas next. Can we hear some of your thoughts on contributing factors?

Thomas Aceves: Well yeah I, I've actually lived in this community for 15 years and walked it and cycled a lot of it and know many people in that community and many people that work in that area that you just showed.

First off, I don't wanna be, I know we don't wanna victim blame here.

I use this corridor daily for going to the other side of the lake where I work at and I'm not trying to victim blame, but first off, if those are all factual circumstances that happened that night, it was dark. I go through there all the time. I know, you know, I keep up with the, with the lighting 'cause I cycle a lot. So I look at what's, when the sun's setting, when the sun's rising, when conditions of the weather. It's just something ingrained in me for my own needs, for my own lifestyle. But I think at that particular spot, I've actually crossed myself to go to the hardware, the hardware store on the other side and, and I was over there once parked and I said, well I'm gonna walk over instead of driving my car a hundred yards over.

And it just takes a lot of vigilance to cross that particular area during the day. We get a lot of traffic in that corridor from five to 101. It's a heavy corridor.

So that point in time was very dark.

That person probably was crossing over to go home or you know, wherever the needs they were going to.

And that car was, if that car was going at the, at the considerable speed limit, which is 40 'cause I know I go through there every day.

They weren't exceeding speed. We don't know what the driver was doing.

Were they on their phone? We don't have those factors. Were they looking down, were they scrolling, were they texting? So those factors are missing from this. I would assume probably possibly that driver probably was only because it's assumption. If they're going 40, they might've seen this person was the per, was the person wearing what was their clothing? You know, they're probably wearing dark clothing, I imagine people mostly don't wear bright clothing to eliminate themselves and it was raining. So there's a lot of visual impairment.

Those are the factors that are in this case. The big thing about Complete Streets, which Danny will talk about too and we had a discussion, is that they do plan to do road design improvements, but that's a further outlook. It's 2031 for nice, it's way down the line. How many people are we gonna continue to lose? What's the value of these people's lives? You know, why don't we get this sooner? You know, it's just, it's just frustrating.

The lighting is not on their agenda though. I asked them in that discussion last week or whatever it was. That's interesting. Yeah, I asked him, I said, are you gonna have more lighting overhead? And no we don't have that. That's a big, big factor.

It's even hard for me to see at night. But lighting is huge and I don't know, you know, getting, I, I sent, he goes well send a CSR customer service request is what they call it here in California for the DOT to try to give them a thought on, you know, give them advisement so that that, that's a

big thing for doing something right now. I, I guess they, they are gonna improve the crosswalk this year.

I haven't, that's gonna be this year at some point it went out for hopefully bidding, but that, I don't think there's gonna be a crosswalk there at that point.

So it, it's a definitely a difficult situation to that area.

I've tried to cycle across that area. I've been down that area during the daytime and it's traffic is just crazy. I have to really, if I want to cross over and go back to my house, which is down the ways from there, I really have to be vigilant, you know, so they don't, so I don't get clipped or killed or or or whatever. So those are just some initial thoughts. I might come back with some other stuff here shortly. Thank you. Yeah,

Tony Harris: Great. That's really helpful. I appreciate it. Danny, could we turn to you now on factors and what you see at work here?

Danny Wind: Absolutely. And thank you Thomas and Don. It's really nice to see the way Don was sort of mapping the sort of uses in this area. 'cause I think they're a, a big contributing factor.

If I could share my screen, I will just pull up Google Maps 'cause I kind of like being alright. I kinda like being here on the ground and obviously lighting I think was was a big thing we were talking about, you know, this being like during an Atmospheric River downpour event, whatever you wanna call it, it would've been very dark. And if you're driving, I've experienced this mostly as a driver and one of the first things I noticed when I was on the ground in this location was how many people were walking biking either across this street going long ways.

And so it makes a lot of sense. I'm sure you know, this was not super late in the evening. We do have those crashes, but you know, this was just shortly after dark.

This person could have been going to the corner mart here and getting cold medicine, you know, time of season, right? And, and that's not something where you would think of, you know, putting on your hi-vis vest to go to the corner store. This is something they probably do on a regular basis.

One thing I want to note, I'm actually gonna go back just a little bit further here is kind of the topography of this road as you come to the position where the pedestrian was sort of dips down closer to that Hudson Avenue there.

And so, and, and then of course it's also turning, right? So if I'm thinking about, when I've driven this corridor in the dark before you have illuminated signs here on the side, the Dollar General, you have the illuminated sign for the gas station and I think a lot of those things can contribute to the glare.

A couple other things that I noticed were that this, you know, wasn't some sort of massive vehicle. We hear a lot about like vehicle hood heights. But the reality is is that this was just a small sedan. There was a couple other incidents where people were going the speed limit in smaller vehicles. And I think the thing that's, I, I'd like to give myself empathy for the drivers because there's, there's a lot of glare in this area. You're getting a lot of light in weird places and, and colored lights and bright lights because these businesses want to attract people to, to their businesses essentially, right?

The Dollar General that you wanna see the gas prices and that's creating like a lot of contrast.

You know, if we're just like talking about like how humans interact in an environment, your eyes are gonna adjust to that light and that brighter light is gonna make it harder to see the things in the dark areas around those.

One of the things that I hear heard from like our Lake Area planning council is that people who are driving this are nervous that they're gonna hit pedestrians. You know, I'm the type of person that defaults towards going, you know, slightly below the speed limit and I'm one of those people that gets tailgated on this corridor. It, it happens. But what I was hearing, what I'm hearing from people that do drive this corridor who don't have the pedestrian perspective is that they, they're afraid to hit a pedestrian or a cyclist.

And I, I think that that like empathy needs to be shown. I know that obviously strong towns has talked about this in, in some other items, but I mean part of why this crash was, was interesting to me is 'cause it felt like something that it could have been me, right? I have a smaller car, I drive the speed limit, but you know, if someone's tailgating me tail behind me with their vehicle lights on, it's dark conditions, it's raining conditions.

I know we're told to slow down when someone is tailgating you, but 40 miles per hour on this street is so wide, doesn't even feel that fast. It can really feel like you're going pretty slow comparatively. Just if we go a little bit further down, closer to the crash site, you can see now that that other direction also dips down again. And I think as you're coming around the outside of this wide turn, people can see a lot farther. And that was kind of indicated when we did our traffic study. We noticed even when we were taking data from the eastbound traffic that the traffic going the other direction, the westbound traffic was going significantly faster.

And I think it's just because you have so much more of a wider angle on that other side of the road, whereas on this inside corner you're really getting cut off. And then furthermore, as a pedestrian, if you're over in this area in this turn, it's, it's exactly the opposite from the driver, right? You're gonna have glare from these illuminated signs here and here and then as you even

go from that picture that I took at the curb, you can see that this building really, and, and the sign here really blocks off the visibility for the pedestrian. So, and, and just thinking about the time that it takes to cross this, that shoulder is, you know, almost as wide as the road itself.

So if you check for traffic when you're down here at the curb, not only can you not see so far from that car coming in that direction, you, if you don't check again by the time you get to the road, like that person we saw in the aerial footage, you, you might be caught off guard.

And, and I think that's probably contributing factor. Again, we don't really have witnesses to this event.

And then just some other things that when we spoke with some people at Caltrans, they did note that there's some interesting stuff going on here with this little interesting park here.

I believe the county maintains this park, but you have a two-lane road here at Hudson and then you, you know, this here is a two-lane road also this stop sign gets rolled. There's another actual memorial in this little park here where I'm guessing someone was probably hit and and killed in this, in this area as well. So there's definitely some, there's definitely some like dysfunction from, from where the way the roads adjacent to this connect to the highway.

I think that's, that's mo- most of the things I wanted to highlight and like, yeah, like, like Thomas said, there might be stuff later, but I'd be happy to pass, pass off to Edward now.

Tony Harris: Great. Thank you Danny.

Edward Erfurt: Well, well Danny, I think you really kind of summed it up right there with this idea and your observation of dysfunction.

I, I think that we've seen it with these images and I I don't think you have to be a technical expert to see it.

Looking at and, and listening to Don and his thorough evaluation of this, what that shows me is we are in a really complex location and there's lots of complicated things happening trying to add order that in making the situation worse and, and listening to Thomas with the frustrations of, of driving here and the, the frustrations of, of the drivers not understanding why people would be here. So our response is, well we need to have pedestrians that are more visible.

And I know that at so times we just did a video on this with not only a high vis vest, not only a small orange flag, but an eight by eight orange flag crossing the street. If drivers aren't expecting pedestrians even with all of that, they're not gonna see pedestrians with that. And then also the frustration with pedestrians of where why can't the car see me? And, and I think in this crash, what, what I would assume and, and take an estimated like pretty strong guess on is at the time that the driver realized there was a pedestrian in the road was when the windshield was being fractured on their car. It was probably at the moment of impact.

I I've been, I'm gonna bounce around a couple of different things because I wanted to, I wanted to visualize this and one of the things that I think that really needs to occur is that Caltrans and the, the anybody advocating for workout here needs to walk this street.

If you look at my screen, there's a little red dot that is an eight-foot-tall person at 130 feet away. So if you're in a car and as Don showed us that you have 130 feet of stopping distance or 120 at at the speed, he's at 120 feet in a rainy condition at 35 miles per hour, let's say 130 or maybe maybe someone who's driving a little faster or the road was a little more slick on this particular road, I think that would be hard for a driver to see.

I think there is a expectation there that is, is broken as you enter into nice. I I can. And if you look at the map further out, I started to explore, 'cause I know there's lots of analysis

happening here, there, there are other things that are occurring in this area that are like roundabouts and road narrowing and more visibility on certain roadways.

But as you come into the town, you have the 40 miles per hour, you have the pedestrian signage, this stuff is non-compatible, 40 miles per hour in an area with lots of turn movements in and outta gas stations and convenience stores and then layering on pedestrians that's non-compatible.

The, the speed does not match all of the decision making that RO have to do here.

I also wanna look at the pedestrian because I, I always liked this good-willed effort that has said, well if only the pedestrian used the crosswalk and, and I really appreciate what others have shared on that.

If I have a decision that I have to make here and I look at this and, and mind you, I'm on the top of the Google car way high up, so maybe we can see things more clearly here.

These are all of the things, if I'm leaving that gas station to get to the crosswalk that I have to deal with, I don't know if a car's gonna pull in or back out of those parking spaces.

I don't, you know, whether they're in the parking lot or on the road.

I, I think this is where my first instinct of the work from the roadway engineers where they have failed us to allow the backing out of cars, not even with a pedestrian, but the head in parking on a 40 mile per hour road with a dedicated set of turn lanes is a issue for drivers. But as a pedestrian, I'm not gonna go there.

This is the closest crosswalk.

When I look at this, it infuriates me because there are at least three people that have failed to think of the safety of the users of this road.

We have a crosswalk that doesn't connect to a sidewalk or provide a safe pedestrian area. We have the stop sign in the middle of it. So somebody installed the stop sign at this location, which is arguably not in the right spot. It conflicts with the person that then striped the hi-vis crosswalk here.

And then there were some engineers that reviewed this and signed off on it either in a manual or in a field observation. They, they paid somebody to do this work.

If I look at this, we could kind of see just visually where this road really should be and where the stop sign should be. So when we start to talk about where people would go in this particular area, one from a driver's standpoint, I, I want to acknowledge that this is a very difficult street for drivers to drive on.

The, the cues on this road are telling you to go 40 miles an hour by signage, the comfort level, there may be a lot of visitors, but there are a lot of local people here with the amount of width of road, the amount of asphalt that is on this roadway with the wide lanes, the center turn lane to remove all the friction of somebody driving in. And then the super wide shoulders we have on the street.

So if I was to go out there and walk on this road, sure I get the right, if I'm driving on this road, it doesn't matter if it's nighttime or daytime, I have an expectation I'm gonna drive really fast down the street with zero friction.

If I wanna make a left turn, I have a whole area dedicated to me. If I wanna make a right turn into a parking lot, I have all this dedicated to me to slow down, speed up maneuver in those

areas. So as a driver, the last thing I would expect, daytime, nighttime in season, outta season is a pedestrian on the road.

And what I would expect is that I should be able to go more than 50 miles an hour. And frankly there's less friction in this section of road where there is adjacent land uses than other stretches of road, the other stretches of the same highway outside of of knees.

So we are, we are telling the driver that we can go really fast with no friction in the area where they're the most complicated decisions they have to make. So the fact that there'd be a pedestrian crossing the street or a cyclist in this area is something that is unexpected and the driver wouldn't expect that even with all that type of, with all those cues. So we've made an incompatible system for that as a pedestrian. We've made some token efforts to make them feel somewhat safe to cross the street. And frankly it's not.

And I even looked at some of the new things like, like maybe when I look at communities, sometimes I look at these roadways and I think that the contributing factors of stuff, what, what could we do and where are we going with that?

Just up the street is what looks like a new dollar general.

And when I look at that new Dollar General, they have, they have a sidewalk, they, they've added a sidewalk that, that connects and then it stops it, it has no interaction. It actually makes the highway worse, right? It's further from the roadway widening up the asphalt and like this, this is looks relatively new. So the latest thinking we could see, if I want to use the sidewalk, I have to come into the parking lot, then I have to conflict with the drivers and then I go out.

So, so we're missing something here with that.

So these are the sorts of things as I look through, through the town, I I, I can see, and this is, these things are being reinforced by the retrip being and and putting those pieces in.

So I I, these are the types of things as a, as a pedestrian would lead me to have confidence in crossing the street wherever I felt I needed to.

There's another spot and I where they put the bus stop in town and I can see where they did all that stuff.

We've not talked about PROWAG, we've not talked about accessibility and those federal requirements. So again, those contributing factors, many of this stuff we're missing that along this, this corridor. So even when they're doing new stuff, they're not, not filling that out where the new bus stop is. It's the same thing where stop signs are in the way and curb ramps aren't being put in for that. So as I went through, like all of Don's stuff, when you look at the numbers, the expectation for a driver, the ability to stop at a safe time, the risk of fatality at 40 miles per hour all contributed if, if, if the car was to drive at 25 miles per hour, we know that there is a lower risk of fatality.

We know that there is more time to stop more awareness of the roadway with that we know that a contributing factor is lighting. There's no lighting on this corridor. So at night in an a rainy condition, we know that you can only see within the, your headlights. So in a roadway that is super wide, that is a lot of black asphalt in a cloudy, rainy condition, you're not gonna, you're not gonna be aware of somebody there. And as we, as I showed you as a driver, you would, you, you wouldn't see them until it's too late.

And then looking at the, the things that Thomas has shared, yeah, the default thing is if if only the pedestrian was more visible, if only the driver was less distracted, I would argue that the physical environment is the loudest distraction in this corridor because of the way it has been designed.

And, and, and I love Danny's quote about dysfunction. 'cause dysfunction is more than just the street grid. It, it's all the other factors we've talked about,

Tony Harris: Right? Yeah, definitely the, the dysfunction and the incompatibilities here are really important to highlight and lay out. Thank you. Any responses or other thoughts on factors?

Don Kostelec: I think the point that Danny made, we've put, and this goes back to like me saying this road isn't even designed to fit the expectations of California law. You know, we've put a driver in a situation that makes it risky for them with this and one of the things that comes with this speed dynamic is our peripheral vision and our focus on the road. Next time you're driving on a higher speed highway 65, 70 miles an hour, focus on how your eyes are fixed on a point farther down the road and then do the same thing on your residential street. So whenever we hear something about the pedestrian came out of nowhere that tells me the driver's peripheral vision wasn't suited for the conditions because we're looking farther down the road at higher speeds.

And I think those are definitely some factors here on the things like the, the visibility.

I think it's fine if you do wear high vis clothing, but as Danny said, Hey I'm just gonna run over get some milk, I'm not gonna grab a vest. Hey Don, can you stay and work night shift? Somebody called in sick. Oh no I forgot my reflective vest. I can't. If we look at the number of pedestrian crashes that occur in parking lots, we don't ask drivers to keep a vest in their car and put it on to walk from their car to the front door. Yet we put these expectations on pedestrians. How good were the headlights on the vehicle?

1995 Buick we know from the housing crisis people are driving vehicles longer and if you're prioritizing housing, your vehicle may not be in its good of a shape. When was the last time the

brakes were maintained? How good were the tires? If we're gonna go in a police report and talk about a clothing color, let's talk about the vehicle's characteristics. Black cars are in a higher crash rate than brighter cars, but we never talk about that as maybe being a reason A pedestrian couldn't see them headlights tilt down so we don't blind other drivers. So even if I'm wearing something reflective on the top part of my body, I might not be seen for that.

Those are where these, all these things start to manifest themselves and I think with what you know Edward, you know Danny and and Thomas pointed out. So that's kind of my response to some of the wonderful things you guys added to that.

Tony Harris: Thank you. Thank you. Anything further before we move to recommendations?

Okay, well Don if we can start with you again, if you don't mind, recommendations or thoughts on improving safety in this area? I know I think we started to hit on 'em a little bit during factors but yeah, anything further?

Don Kostelec: Yeah, thanks. So we'll start with this runway concept we have that that I think Edward hit on in terms of the expectations we've set up. So finding something to define the road even in the short term and what can be done before 2031 is definitely part of that. We've got this wide open corridor. In looking at the parcel maps, you've got about 80 feet of right of way that seems to be pretty typical on most California state highways. So you've got a blank canvas to do a lot in this both in the short term and the long term.

In January, Caltrans issued this memo a design information bulletin on complete streets and context sensitive design. And it focuses on this next iteration of understanding places like this. We may have seen this as a 40 mile an hour pass through place, but I think while it might not look like our quintessential traditional main street, it is serving that function for this community. And we look at this document and the links there and I'll provide it to them. It talks

about transition areas transitioning from that higher speed environment to the slower one. People drive the design, they don't drive the sign.

And if we look at down on this proposed operating speed, that's not design speed, operating speed, rural main street, 25 to 35 miles an hour for that. The AASHTO green book, which Caltrans is a part of and they reference also has a section in it called target speed. A traditional engineering approach has been, well we'll design this street for a design speed of five miles an hour and oftentimes 10 miles an hour higher than the posted speed AASHTO, which is the state organization, national organization of state DOTs. Caltrans director is on the board. Caltrans staff sit on their technical committees, says the target speed is what we should be designing for in these areas and it should match the posted speed and encourage that.

So this is the foundation to have the conversation with Caltrans, with all this backing of AASHTO, their national organization and their own documents that get at this.

Aashto also released the pedestrian guide in 2021 and just showing you here within the front of that Caltrans is listed there. Their engineers were part of this. And I bring this up because it gets at this issue of crosswalk spacing, pedestrians cannot, now this is the engineers talking. Pedestrians cannot be expected to go more than a half block out of their way to take advantage of a controlled intersection. Pedestrians do not want to go out of their way any more than necessary to reach those destinations. And where should we be providing more frequent crossings where spacing between adjacent signaled intersections exceed 600 feet.

Granted that's an urban area, but I've already showed there's 900 feet between a crosswalk and that's just paint. There's no signal control there. And where natural path exists between pedestrian traffic generators, which I think we show that we have here. Again, this isn't me talking, this is AASHTO talking. So what are some of the short-term things we could do? One, let's try to get at this target speed of 25. There's a treatment called an extruded curb as a

walkway or a pathway. You could even do this to make a separated bike lane on this facility and pardon the crudeness of my drawings that are here. So what is extruded curbing?

This is what it looks like when we have to add stormwater facilities. We can ma, we can amplify the cost of something by a tenfold. Well we don't have to do that here. We've got all the pavement in the world to work with. In the short term extruded curbing is curbing like you would see on a sidewalk except you just extend the asphalt. In this case you don't have to extend the asphalt and you leave brakes in that curbing for the, for the drainage to go through. The top two are two that we have a lot of here where I live in the Boise Idaho region. The top right one was one that we were able to get a safe routes to school grant to do.

And you do have to consider some a DA things in here, but you could go out and do this in relatively simple. The bottom is two other applications with temporary materials, concrete parking wheel stops. You can go into any catalog and find these or the rubber ones. And on the right, this is what Idaho's DOT has done in a couple of small towns. These are what are called hard line delineators. These things are a whopping 30 bucks a piece. They don't take a lot to install. And on this bridge that you can see there were issues. They've added this hard line delineator to create a pedestrian space. And if you look at these closely, will they stop a speeding vehicle?

No, but I can tell you they provide a vertical element and it is pretty jarring to hit them and they're very durable. I've seen ones that have been beat to crap and they're still out there where I'm standing in this bottom right image, I'm on the side where a school is. So that's an example of the temporary stuff. Other things, rectangular rapid flashing beacons. These things, if you've seen them, these are the yellow flashing lights. They're set to the frequencies of emergency vehicle lights because we've been socially engineered over these many years that our brain now responds to that. And these help raise that visibility.

Even in the absence of lighting. These can be seen as Edward was showing in that visual distance. These can be seen from a long ways away where a person walking across the street cannot be seen. You can get them for solar powered, they can be $15,000 or so for a pair and make those improvements. You can see I've also defined some of those curb lines here a little bit more. And you could do these with including adding the crosswalk up here near where the person was hit for that. When we talk about lighting, I added this one after the conversation. Our traditional treatment has been put the lighting right over the crosswalk and unfortunately in the 16 years since FHWA published this guidebook in 2008 with their recommended treatment, we've still not moved toward that.

The moment we put lighting on both sides of a crosswalk, we then have light doing a V and bouncing off the pedestrian versus being overhead. So if you are thinking about lighting in this corridor, these are the recommended treatments, is it more expensive? Yeah, but if we're widening roads for motorists who won't exist for another 40 years, we can afford to do two traffic sig, two light poles in this situation. If you're a community like we have here in Idaho that like their dark skies, like it rural, there are options out there where the lighting can occur. When someone hits the button for something like a rapid flashing beacon, this company Tapco, if you look at a lot of the traffic signal stuff that's out there, you will find their logo everywhere.

This isn't some foreign company or anything. These are tools available to us here in the United States. Raised median islands. As Danny talked about this area here in this odd thing, there's no reason for a vehicle to be making a left turn into this area because you can make a left turn in this other spur. So you could put this median all the way up to the crosswalk here and add that for those visual purposes. And you can find other median island pockets either in a short term or in a long term example. You could even do these medians with some of the temporary materials that I, I showed for that. California has a main street guide for people centered state highway main streets that show a lot of these design concepts.

So again, you've got a really good DOT with good concepts to take. And there's other examples within that. I don't think I found one exactly in district one that had the landscape medians, but they are on other state highways in California.

So when we look at all of those things, that's to me the stuff that in some ways could be done within a year with temporary materials and done in the short term.

I would also then add things like speed feedback signs. Again, these are pretty inexpensive, but they are giving additional warning to people when they are exceeding the speed limit. And there's many varieties of these that are out there from a long range perspective. Like I said, you got a blank canvas, you could reorient some parking lanes, as Edward said, pull in and back out. It is just not safe for drivers median and access control should be something an agency like Caltrans wants. But they also are gonna be shy if the businesses are saying no. And that's why the local community, the citizens, the elected officials are important.

So they're not feeling like they're sticking their neck out for that. You could do a protected bike lane on one side, a pathway on another. There are just dozens and dozens of options to paint this canvas because it is so wide in this regard. It's kind of be lucky that you don't have 100-year-old curb and gutter because you might be more constrained in what can actually happen in this location. You could even do some drainage whales and things on the side from an environmental perspective and still have plenty of space to make this a more people oriented corridor. And I will certainly provide all of these options for the report that's strong towns is gonna develop for this.

Tony Harris: Great, thank you Don. That's really helpful to see and to be walked through. Thomas, can we come back to you on recommendations?

Thomas Aceves: Well, one great news for that was just recommended that they are gonna be establishing the rectangular rapid flashing crosswalks. Half of 'em are gonna be on the north

shore, half of 'em this year on the north shore, including niece. And then another half of 'em funded for next year.

So we were really happy about that. Now I know my district supervisor, who's probably hopefully listening today was really going for haw flashing at one in one in one in every town on the North Shore. But we don't know if that that's not planned. Just something we'd like to see that's more visible for the crosswalk at least one. He wanted to, he talked to someone in Caltrans in Sacramento. But right now the funding is for the rectangular rapid flashing crosswalks. I'm real happy to see that California is a slow struggle for funding. It takes a long time to, especially in the rural communities, especially in this rural community, we've been, you know, it takes a while.

We've kind of been, I think sometimes ignored because they feel we're such a low populated area of 60,000 people. But the understanding is, or misunderstanding is that the corridor's heavy on traffic from Highway five to a Highway 101. So that is coming. Some of the other factors, a again, some of this has been talked to with me and Danny from the, from Caltrans on their Complete Streets road design, which is gonna happen in 2031. It's not an immediate solution, but that is coming. They've proposed, I don't know if you've seen the proposal, but they proposed a bike lane… two lane bike lane in east and some other features to that sidewalks and, and some, some other things.

But I like all those great ideas. The lighting though is for me, the big factor here.

I love those lights that shine down to the street. Once you hit the, hit the button.

Again, I'm, the lighting itself over that corridor is, is not sufficient. It's, that's not an immediate solution. There's actually no solution to put more up at this point, so we're gonna have to push for that. But I just wanted to point out the crosswalks are on the agenda, so thank you.

Tony Harris: Yeah, thank you Thomas. Danny, anything from you in terms of recommendations?

Danny Wind: I'm glad Thomas mentioned the Rapid RFBs because yeah, those are, those are coming and I was curious if these are sort of a bandaid solution and I think that they, they are a little bit of a bandaid solution, but I like seeing sort of what Dawn had had. So like with some other temporary options that could enhance the use of those crosswalks.

And I, the other ones that are, are also really neat are the ones that project on the ground that seems like really great ideas as far as immediate solutions, I think that park is also very interesting and I know, I know Edward has talked about this in other sessions about just closing certain streets to through traffic and I think not both of those streets adjacent to that little triangle park there, which has probably not very much pedestrian usage, I think would go a long way to also like still allow for access on the businesses that are on the, I don't know, I guess street right of way, not the state right of way.

And, and that stuff was considered when I saw some of the plans for the east corridor. It's very much in, in the, in the drafting stage. So I, I didn't share that today, but in the future that stuff will be available. And Lucerne sort of the same similar thing where we're getting those bike lanes both sides protected.

What I kind of heard was is that maintenance doesn't like a lot of like little items that have to be replaced, which makes sense because you know, there's, there's a large geographic area that district one has to cover and it makes sense that, you know, the more little things that you have to replace is gonna drive up that cost. And, and I think that obviously from my perspective that's, that's such a little cost for such a big payoff that I think that's really something that needs to be heavily invested in. And so I like seeing things from Caltrans, you know, very recently and all the staff that I talk to is very much in this mindset of like, business as usual is not cutting it.

And so we have to start looking at these temporary solutions. There are like the pilot program, it's called the HM four pilot program. That's basically what got these RF bs to be planned and hopefully get installed over the next year.

But I, I don't think that those in and of themselves are gonna bring down that speed for a lot of the reasons that we talked about that, that long visi - that those long sight lines that you have along this corridor and, and also a lot of the, the lighting, yeah, we keep circling back to, but that's, that's all big factors. I was hearing things about backlighting from Caltran staff that I talked to. So again, I'm all super excited about that. As far as immediate stuff goes, I think that the short-term stuff is much more feasible from the state highway perspective because there's much more processes that you have to go through to get those actually on the ground.

As far as immediate stuff though, on those county roads adjacent, I feel like that is something that we can pay more attention to to get some immediate changes to like really change how this whole area functions.

I think that's all I have. One thing I did think of also that I keep forgetting about, but I saw the, the, the diagram of the street again and the one thing that the digital diagram doesn't display is how steep it is on that inside corner.

And it's just circles back to what Don said earlier. I know I'm going back to the contributing factors, but if you're in a wheelchair trying to get up this hill and then across like that's just so much effort. So I liked seeing the, the second one in between the two crosswalks because there are people traveling through that section.

That's I think all I have, so thank you.

Tony Harris: Yeah, absolutely. Thanks for pointing out that, that clarification about the depth and how steep that area is too. I appreciate that. Edward, anything on recommendations from you before we move to close? Yeah,

Edward Erfurt: Let me, let me walk through and let, let me throw in some really scrappy things too. Things that I don't think that we need to wait for Caltrans. We don't need to wait for a budget to, to get things moving forward.

I think there are things that could be done both on the private side and within the public realm that are within bounds but could be done immediately.

The, the first thing that should happen is that the folks at CalTrans plus residents need to go out and do a walking audit.

There shouldn't, there shouldn't be a wait on that. You need to all walk out there and walk just two blocks of this start, start at the park and the bus stop and just walk to the gas station.

I think that is something that has been missed in, in this because that gets that people on the ground experiencing this, we would see the grades that Danny's talking about. We'd see those sight line issues in other community action labs or I'm sorry, in other crash studio we've talked about a rapid response team. So as a result of that type of small group walking, what are the things in the back of Caltrans truck in public maintenance, in the fire department's toolkit, what are the things we have right now in town that we could put up to put that in it? We've seen in other communities things as simple as straw bales and house paint adding to those pieces.

So on this, on this corridor, getting that walk-in audit out there, getting the speed not only posted but the roadway designed so that in this particular town you're only going 25 miles per hour.

That should be the optimum long-term and short-term goals for this corridor. With all the things going on that just as logical when that is the design speed, when you start to think about that we want cars going at 25 miles per hour, which doesn't impact the capacity. Cars can get closer together so we can get the same capacity through. There's less of that hurry up and wait and frustration with that type of driving and you're in a town. So with bus service and all those pieces, I'm doing that I think doing as many temporary measures that do optically narrowing, lane narrowing and create mid-block refuges as possible.

This should be done not with the little dinky stuff that that Don has shown that's too modest.

Get the, get the high bright orange reflective jersey barriers, the wooden barricades, those should be implemented tomorrow.

There are key intersections where when we look at the long corridor of the whole center, if you were to add two or three of these mid-block islands with those orange jersey construction barriers or orange cones with the blinking reflectors on top, we would see a noticeable difference in speed because drivers would be now alerted that there are things in a vertical measure in that roadway.

So getting those out and on the road that would then, and they should be mobile and temporary. So you put them on the street and you can test it, you should move them every couple of weeks. Like for example, you put, put it that by one of the gas stations and you realize that's where the gas truck needs to turn. And we've made that mistake. We didn't know that was occurring at that location, but we could move it. So those could be put in very quickly. They could be accompanied by paint on the shoulders.

There are many locations here where people are parking on street, they may be parking the wrong way, they may, but what I'm, what I'm seeing is that they're parking all the way at the edge of the roadway.

So when we look at like in these conditions, we can see they're up against the property lines. I think in one of these crosswalks they're all the way back here.

These are area, these are things that begin to help with the optically narrowing up the street that get your cone of vision narrowed down and focus in that roadway that if they were moved up to the white line that would help drivers to be more aware. They have that more friction on this roadway. So simply by going out there and talking to property owners and adding an additional stripe at the edge. So we define where the parking is, would naturally allow folks to, to move along that corridor as temporary measures.

This leads me into this thing too that we need to start talking to the adjacent property owners walking out there. And I can tell you as somebody that was in city management, when you go and do roadway projects, I I, I will assure you nobody has gone out and talked to these property owners when this roadway design was put in.

Probably it was done in Sacramento by a very talented engineer or outsourced to a really talented engineering firm. They did this and what they did is they'd never talked to property owners about heading parking on the roadway about driveway cuts, all of those different things because what we provided is a center turn lane so everybody gets a left turn and an overly wider than the travel lane shoulder that the state is graciously paved all the way to private property. So you have like all of this extra asphalt. So talking to property owners to really find out where their driveways are and by using inexpensive things like cones, those delineators, those curbing and paint start to better define where their driveways are and help them to define where parallel or even angled parking could occur on this street.

'cause things like reverse angled parking could, if you really had that much parking demand like by the park, you could use reverse angle parking, which is easier to get in and out of than parallel. It's safer for all the users and it gets you 30% more parking on the corridor.

You could implement that very quickly and easily.

When you talk to the property owners, like the gas stations that have the large canopies and have the big marquees with all the electric already in it for that or the Dollar General with lighting already in the parking lots. Ask them to add a fixture that turns to the street. Now this is not gonna be perfect. It's not gonna meet the AASHTO manuals. It's, you know, it's not gonna be all those pieces.

But what this does is it starts to allow what probably is a design requirement that says no light shall leave a property.

Well we want lighting on our streets and if we can get a private property owner that already has a power pole that's adjacent to the right of way, it's not that expensive to add a fixture to that and and, and add it. 'cause I don't see any lampposts, I don't see any power lines out there that we could connect to easily. But if we talk to property owners and explain to what we're doing, they could easily add things to their buildings that we could help them with that would add lighting in front of their buildings and add safety visibility and all the benefits that we've talked about there.

We also long term at as a community talking about the street section, this needs to be switched from an ambiguous what whatever the terminology is that's being used that's resulting in the design. It's an ambiguous design that is seen as a, as a highway, as a through movement piece. The terminologies that need to be used describing this is a downtown urban street section.

So getting rid of the center turn lane, next time it gets repaved, we do it with paint next time there's repaving, you de pave probably 60 to 80% of the current asphalt. You just remove that because you don't need it to get that. All right sized and using, I loved what Don showed with the those extruded curbing. Those are things not only the extruded curbing but the delineators

jersey barriers, cones, those are all things that could be implemented immediately. That's the optical narrowing, but it also provides clear delineation of where people would be able to walk and do pedestrian activities in that right away.

And, and I wouldn't wait, I wouldn't wait for a big plan for this. Think about this, if your community had a broken pipe in the road, if a water waterline broke or if you were to have a parade, what tools would you go that moment to set that up to, to close the street? And, and I do love the things that Danny was saying about some of the streets we need to close and, and, and that is, that is okay to do on this particular road, especially if we start adding on street parking by that little triangular block.

What'll happen is the business owners will begin to not only utilize that space in front of them for more productive uses, they'll take that park space as part of their business, you know, part, part of their ownership of it. But going out and doing that and doing it now I think is really, really critical. Thank you.

Tony Harris: Thank you. It's very helpful. Any final thoughts before we move into closing out for the day?

Don Kostelec: I think I would just add even on the Jersey barrier side, they make some, some that are half the height. So if there's a concern of like in the middle of the road and site distance, those are there. And I would just also make the urgent safety case from a motorist perspective of the lack of access control. So being able to control access in front of the gas station and other places with either the jersey barriers or start with hay bales to test it. That's an immediate safety response that I think anyone in, in the transportation realm would agree with. Even if we weren't talking about pedestrian safety.

Edward Erfurt: That's a really good point. There are groups like the Graham project that I'm more familiar with here in, in near Baltimore. There are other groups that are actually doing

very cool painting projects on streets in conjunction with the not so pretty transportation pieces like the extruded curbs and the delineators getting more awareness in the corridor when people start to see color on the street. So like at the intersections, don't do a crosswalk on one side, do it on all four. It raises that awareness. If we can add things that are unique to this community that citizens can engage in that process, that raises the level of awareness of what is occurring on this roadway as a community far greater than any of the, the signs and blinkers we can put out on the roads.

Tony Harris: Absolutely.

Danny Wind: I just want to echo that just a little bit. We're doing a general, we're, we're redoing the general plan for all of Lake County except for the, the city districts. And that was something that I think that has come up multiple times is that these communities that are sitting along these highways don't have a unique feel to them. So as you're passing through or people that don't live here are passing through going 101 to five or five to 101, it just kind of feels like they're passing through little, little towns basically. But there's no real character to those towns and there's not, and especially with the speeds, it, you're just really passing through these areas and I think that all all of those little things would really give some uniqueness to the areas that you're driving and kind of build up that community identity as well.

Don Kostelec: And there's your carrot for the businesses, that same peripheral vision issue I talked about at speed. Slower speeds mean they're gonna notice those local businesses more and maybe make a decision to stop and eat there or, or do those kind of of things. So that's, if they have this fear of people going slower, well more people are gonna be able to see what the heck is actually here and give them a reason to stop and dwell. And when they do that, they spend money.

Tony Harris: That's a really great point. Okay, well I'm gonna go ahead and move us into our closing segment. I really appreciate everyone's participation and recommendations today.

I just wanna offer a few acknowledgements before we close out.

So I would like to say, you know, first and foremost thank you to our panelists. So Don, Danny, Thomas, and Edward, thank you very much for being here with us today and I want to thank Danny Wind in particular, who spent a lot of time pulling together resources and information for this session over the past several months.

We really appreciate all of your hard work and thank you to Lake County community members, municipal staff and other colleagues that have been supportive throughout the preparation process and showed up today. We also appreciate the sponsor of our event and anonymous donor and I'd like to thank Strong Town staff as well for the assistance I've had from them. Preparing for for today's recording so you can find a recording of this session and all of our crash analysis studio sessions by going to strong towns.org/crash studio. And our next virtual studio session will take place on May 31st and you can find more information about that on our website as well.

And then on our site, you can also find links to our free academy course for establishing a crash analysis studio in your own community. And if you're interested in having strong town staff, visit your community or city to co-host an in-person studio. You can also fill out an inquiry form through our site. So on behalf of my colleagues and the assembled panel, thank you very much for watching this session of the Crash Analysis Studio and keep doing what you can to build a strong town. Take care.