

Crash Analysis Studio – Session 7 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: Alright. Hello, everyone. I see we have attendees filing into the webinar now. I'm expecting a big crowd, so I'm going to give a moment for people to join us and then we'll get started.

Okay. Welcome to the Strong Towns Crash Analysis Studio. We're glad that you're here. I'm Tony Harris, the Action Team Coordinator with Strong Towns. And in a moment, I'll introduce you to the rest of our expert panel, but first let's take a moment to talk about why we're here. Last year, over 40,000 people died in automobile crashes in the United States alone. Hundreds of thousands more suffered traumatic injuries and despite the best efforts of public safety officials, these numbers have been increasing and they affect all 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. Who made the mistake that caused this crash? Who should we blame? The reality is that



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 that we can so we can reduce the number of traumatic injuries and deaths in our communities.

What you're going to see now is a crash analysis studio. Drawing from the best practices of the medical profession, we've convened a panel to review a crash that happened in Brandon, Manitoba, where a driver hit a cyclist named Grant Hamilton. Grant survived, but he suffered multiple injuries and lost one of his fingers during the collision. Grant was actually the person who nominated this crash for us, and he's in our audience today, and he's been a huge help in planning this session. So I'll start by introducing you to our panel and then review the facts of the crash, and with our guests we'll assess the design factors that contributed to the collision. Our goal is not to assign blame or objective is to learn as much as possible about what happened and identify the many factors that contributed to this unfortunate event.

So I'm going to introduce our expert panel for today. I'd like to start with Tristan Cleveland. Tristan currently works with Happy Cities as an Urban Planner and Research Specialist. Tristan's PhD research focused on finding solutions to operationalize healthy communities. He uses his expertise to advise clients on how to design more walkable and complete places. He's a respected commentator on urban planning and design with work published in Star Metro, Spacing, and of course, Strong Towns. He's led projects with national and municipal governments in Canada, the United Arab Emirates and beyond - helping to activate health research as an integral component of design and policy.

We have Michelle Lam, who is the Director of the Center for Applied Research and Education in Indigenous Rural and Remote settings and a faculty member in the Curriculum and Pedagogy department at Brandon University. She lives with her family approximately a half mile from the crash site and cycles to and from work on a regular basis. Michelle is becoming even more interested in transportation and pedestrian safety as she watches her children grow into independent young adults.



Next, we have Areta Donnelly, who is the Campaign Drector of Brandon and Area United Way. Areta serves alongside Grant Hamilton on the city's Vision Zero Task Force and she also sits on the Age Friendly Committee. Areta is enthusiastic about transportation safety within her neighborhood and Brandon at large. She's aware of how on-street parking, road design, sidewalks and community infrastructure are all factors that can increase and decrease the likelihood of automobile crashes. Areta lives a couple blocks away from the crash location.

And then finally we have Edward Erfurt, our director of community action at Strong Towns. Edward is a trained architect and urban designer with over 20 years of public sector and private sector experience. Edward has a skilled eye when it comes to evaluating safety issues posed by streets, roads and intersections like the ones that we're going to look at today.

So now I'll go ahead and walk us through the details of this crash in Brandon. I'm going to go ahead and share my screen. Okay, perfect.

So we know that Grant Hamilton was cycling eastbound when he was struck by a vehicle at the intersection of Lorne Avenue and Park Street. We know that the crash occurred shortly after 10 p.m. on June 27, 2022. The crash report listed that the initiation time was 10:05 p.m., and the collision occurrence time was 10 22 p.m. We know that Grant flipped over the hood and he lost his pinky finger, had a separated shoulder, and a torn meniscus in his knee. Grant was treated at the Winnipeg Health Sciences Center where his hand was reshaped and he received 25 stitches. Grant reported to us that the street lights were on at the time of the collision.

We know that the motorist was driving a gray Nissan Versa westbound on Lorne and turning left to go south onto Park Street. Media indicates that the motorist was fined under the Highway Traffic Act for driving without a valid license. And though the crash report indicated that there were no witnesses, and no video surveillance, Grant informed us that he was cycling with his wife at the time of the crash.



So here we have a map to illustrate where the crash location is with the red pin. You can see we're at the northwest corner of Rideau Park. And then this is an aerial view of the intersection that Grant gathered for us. And we wanted to show this just to give you a feel for the crash location that we're looking at. You'll see that we've illustrated Grant in blue here cycling east. And then we've illustrated the motorist in yellow headed west and taking that left hand turn to go south onto Park Street with the approximate crash location outlined in red. So a few more details on the crash - like we just went over, it occurred at the intersection of Lorne and Park. The report did in fact state that the motorist failed to yield right away to oncoming traffic while making a left turn. And -of course - that oncoming traffic was Grant cycling in a marked shared lane. The motorist did stay on the scene after the crash occurred. And we know that the motorist and Grant communicated after the collision by chance at the scene on July 13, 2022. And at the time of the collision, no impairment tests were administered or conducted.

So a little bit more about the site conditions. We know that Lorne Avenue and Park Street are two-way streets consisting of two shared travel lanes - shared meaning for automobiles and bicycles - with accommodations for parallel parking. You could describe, you know, this street section as a yield street. There are Sharrows painted on to Lorne Avenue along with street signs indicating that motorists should expect to share the lane with bicycles. The posted speed limit at the time of the crash was 50 kilometers per hour or approximately 31 miles per hour. We know that the intersection is unsignalized and there are no marked crosswalks at the crash location. And then we also wanted to note that southbound Park Street has a slight road grade decline from the intersection.

So Grant gathered a few shots and photos to help us understand the location a little bit better. So here you can see as we're moving kind of westbound on Lorne from a motorist perspective, we're coming through these intersections with Franklin Street and Rideau Street. And then we also have a motorist point of view approaching the intersection with Park. And then another similar shot here showing the Sharrows lanes and then Park Street being right up here. Now



this is a wide angle shot looking southeast toward Rideau Park and the area where the crash would have occurred.

And now when we're looking at measurements of Lorne Avenue, we can see that the total width is about 39 feet. That includes sidewalks that are five and a half feet wide, a north parking lane that's about seven feet wide and then two travel lanes that are about 10 and a half feet wide. And then depending on where you're standing and looking at Park Street, you're looking at a total width of about 33 or 34 feet. And then the sidewalks on either side are between five feet and five and a half feet each, the parking lanes on either side are between five and a half and five and three quarter feet each, and then the travel lanes are six feet each. And here we have an aerial shot again from Grant illustrating a westbound car making that turn to go south on Park. And then two more shots to show cyclists and motorists sharing Lorne and as they're approaching the intersection - that's on the left hand side - and then as they're moving through the intersection, that's on the right hand side.

So a little bit more on the side conditions. We're looking at a suburban residential development pattern. The are regular street grids with alleys. We see small single unit homes on narrow lots. We see streets that have sidewalks with limited curb cuts. We wanted to note that Rideau park is sort of the center of the neighborhood, right? There's playgrounds, there's a sports field, there's a pool and community buildings. It fronts, Lorne Avenue, and the crash location. There's also proximity to provincial road 457 and then two highways, highway 1A and highway 10, which is 18th Street. We're looking at the crash location and we see that it's nearby Brandon University and Assiniboine Community College. And then another thing that we wanted to note, you know, at the time of the crash, the speed limit was 50 kilometers per hour, but as of July 1st of this year, the city has piloted a reduced speed 30 kilometer per hour perimeter around the park. And we know that this wasn't a direct result of the crash, but we figured it was an important piece of information to include.



So Grant also conducted a speed study for us, and we want to note that he gathered the data over a three hour period before the reduced speed pilot began and it also happened that construction was taking place during this three hour period. So, we know that that might have influenced motorist speed and could have potentially encouraged lower than usual driving. So we found that 18.5% of drivers were speeding and that would mean they were going faster than the 50 kilometer or 31 mile per hour speed limit. And we also found that 85% of drivers were going at 32 miles per hour or below. Grant tallied that there were 12 pedestrians and 14 cyclists during this three hour period that he was tracking traffic. And then we wanted to also illustrate what this data would look like with the new speed limit that has been put into place with the pilot speed reduction. So when we look at the same data with the new lower speed limit that's around 19 miles an hour here, we see that 88% of drivers would have been considered speeding, right? So we just felt it was really important to include this information to help us think about what speed reduction might practically look like in this area.

So now I think I'd like to turn to our panel, I'll stop sharing my screen. Yeah, I'd like to turn to our panel and kind of ask us to walk through, talk through the factors that we see at work here. So Tristan, if we could start with you, could you tell us what you think might have contributed to this crash? And if you have Google Street view up and you'd like to screen share at any point feel free, I also have the Google Street view up on the crash location as well if you need it.

Tristan Cleveland: Thank you. So some things do immediately jump out at me. One is that on the street mix diagram, on the diagram of the cross section of the street, it seems like there is quite a narrow travel area because and there would be if there are cars parked on both sides, especially for Park Street. But you know, on all of the aerial photographs I've looked at, there is very rarely that much parked cars on that street. And that means that even though theoretically the street would be narrow - and naturally so, to end traffic - that's not happening due to the lack of on street parking. So you'd expect to see a lot of speeding there, a lot of dangerous driving and that means people can take the corner sharper too, which is going to contribute to this problem. The I saw that there were some discussions of putting protected - a protected



bike lane on Lorne Avenue and instead the street only has sharrows. So 10 years ago, sharrows were considered best practice. Research since then has really shown that they really don't achieve anything in terms of reducing speeds, in terms of making things safer, in terms of changing behavior. And now, my understanding is that the transportation profession as a whole is moving away from those as an approach. We really need more a thorough going redesigns of streets to achieve changes in behavior. So I would like to see what I would like to see come out of this ideally is a fundamental redesign of this intersection that uses physical barriers to reduce speed to make drivers feel that it's not safe to drive fast, which is ultimately how we achieve slow speeds and to make sure that they're paying attention. So is this a good time to suggest ideas or shall we wait on that?

Tony Harris: Yeah, I think we we could wait on recommendations until a little bit later on and focus on factors for now, but please keep them in mind for a little bit later on in the session.

Tristan Cleveland: Yeah. The event happened as it was getting dark, but I guess I would discourage people from placing too much focus on that because when - with the correct design you would not have a situation where a driver going past a cyclist can suddenly turn directly into the cyclist. Now cyclists certainly going to see the car coming and could react if they had time to see that the car is making a turn. But if you're in a situation where a car and a driver doesn't think anyone else is on the street and decides to make that turn, then suddenly they're turning directly into the cyclist when the cyclist doesn't have time to respond. With different street designs you can have a situation where it's much more obvious that a car is turning and that they actually have to slow down before making a turn which also indicates that they're slowing down and that would also mean that the driver would have more time while taking the turn and be forced to pay more attention while making that turn which means they're more likely to see someone who is walking or biking on that street. Last thing I'm going to mention, I'm going to keep my comments very short.



The fact that this park is a center of the community means it is all the more important to really design it around people - and the streets really are not designed for people right now and it should be possible for people to let - for families to let their children walk or bike to that park having full confidence that they're going to be safe doing that. Everyone deserves that, especially in a neighborhood like this and I don't think the current designs of this are fulfilling that need and this one accident underlying that, and I do hope it will lead to change. That's my my initial comments.

Tony Harris: Thank you. Perfect. Thank you. Yeah, I appreciate what you had to say about the sharrow and looking at best practices now, versus 10 years ago, 10 years from now can be really illuminating. Michelle, can we ask you any of your thoughts on contributing factors?

Michelle Lam: Sure, thanks so much and thanks for that really comprehensive overview. I think it's a really good segue actually what Tristan just said about children playing in that park because that is the park where my children play and bike to and so I live - and I live right on Third Street. And so my children will often bike to Rideau and then I personally bike to Brandon University which is the other direction but also a straight shot down Lorne and you saw I'm very familiar with what Tristan was describing about the seemingly wide road that has parking on both sides that isn't so wide when there are our cars parked there but there are very, very lead cars parked on both sides. So what that can contribute to is sometimes either like Tristan said cars thinking like here's this freeway that I can just barrel down or bicyclists who maybe don't aren't as familiar with rules of the road - whatever it may be - going in and out of parked cars which can also be a dangerous situation. Ironically I - on my way here when I was biking, they're repainting the sharrows and I just had to drive around today so I appreciate that we're bringing that out, presenting issue those sharrows, and the very regularly placed sort of "share the road" signs don't accomplish very much other than it gives me something to point to when I get cut off or when someone is you know judging me out of the road I can kind of point to the share the road side you know this is what you're supposed to be doing. Another factor that we haven't mentioned yet is that on the sides of Lorne not in that particular intersection but very



close to it a lot of the sides where the road is designated for parking have quite significant pot holes. And so that can also mean that bicyclists can't go in that parking side of the road or that cars will park farther up or that sometimes when you're biking in the transportation part of the road vehicles will drive by thinking, "Why doesn't that person just move over there's this space there's no cars parked there," but you can't safely cycle there because of potholes so potholes lining the edges also is an issue on Lorne. I think that I think that we've covered most of the things that I wanted to bring up there isn't really like tall shrubs or anything in that intersection in terms of blind spots. There are quite a few on Lorne so I often feel really insecure about my children biking alone. They're old enough to do it but I don't let them just because of cars barreling out of alleyways and so on so even on the "Share The Road" thoroughfare that's supposed to be designated for bikes it's not really safe so yeah I'm really glad we're having this conversation and thank you for the time.

Tony Harris: Yeah thank you I appreciate what you said about visual clutter because I think it can be easy to - to forget but that's a factor, right, if you're if you're used to seeing it all the time it's kind of just the way things are. Okay, Areta can we go to you anything in the way of contributing factors?

Areta Donnelly: Yeah Tristan and Michelle mentioned a few things as well that I agree - I also live only two blocks from the crash site. Parking is an issue but usually only on one side of the street and during off-hours okay so the photos you saw there were no cars parked there because people were at work but usually after five o'clock the north side of the street usually is full of parked cars um the south side not so much because it's right up against the park. Another factor that I want to mention too is on Lorne and all the parallel streets in that neighborhood they have one stop sign for from First Street and the next one would be probably eight or nine blocks before you hit another stop sign and that's on Douglas and then you go another eight nine ten blocks before you hit another stop sign so in the twenty block distance there's only two stop signs so even regardless of what speed limit is lowering speed limit definitely helps but people get complacent especially if they know the neighborhood. Most of

the residents know that during the park area itself you do 20 kilometers an hour just to be on

the safe side because kids are using that park on a regular basis, and it is a very it's a residential

neighborhood so you're gonna have children you're gonna have cyclists, you're gonna have

people walking their dogs so, personally, in my view, I think the city needs to take a look at

controlling some of those intersections a little bit better the north-south streets only have yield

signs, none of them they don't even have stop signs.

I myself was in a car accident one block away from where this one was for that very reason - it

was a yield intersection and they just blew right through it and again I think in some factors

people do get complacent especially when it's their own neighborhood

Tony Harris: Yeah understood, thank you for pointing out the in particular the stop and yield

sign -

Areta Donnelly: I mean we have discussed it in the community of council how to control those

intersections a little bit better and calm the traffic down. They have also rolled out on Princess

which is parallel to Lorne and they reduce the speed there to 40 kilometers an hour I myself

have not seen anybody abide by it, there's still traveling usually at 45, 50 or more.

Tony Harris: I think that's good to know as we think about what the what the impact of this

pilot speed reduction might be if there is any impact.

Areta Donnelly: Right.

Tony Harris: Ed, can I ask you to weigh in on any contributing factors?

Edward Erfurt: Yeah fascinating with what everybody else has said just just starting with Areta

on the - and I didn't see it myself - the idea at this intersection they're not stop signs they're

yield signs. This leads into some of the things that we see in communities I don't know what



folks say about this in their neighborhoods but in my neighborhood if there's a stop sign they say, "That's not for the locals, that's only for visitors" and what we realize is this this is a residential neighborhood so I understand people may go through the neighborhood but they're normally folks from within the neighborhood or familiar with it going to the park. And we get into a behavior - in a pattern that, we're comfortable with stuff and we don't pay attention to what we do, even if we see some traffic calming, you get comfortable with that type of speed as a driver you drive it - what is comfortable to you.

And identifying some of the things Tristan was saying with the streets these are very wide streets without any cars on it. With cars on it there's you know apparently friction people would go slower there's a street type this that this is reminiscent of which is a yield street. If we look at the dimensions, if you park a car on both sides of the street, the traffic engineers get nervous because the remaining lanes divided by two is smaller than the width of a car but it adds natural congestion where you are in a slow speed and can see the other car coming and it allows for that friction. So you naturally have to stop. In neighborhoods where you don't have on street parking and you're not filling that throughout the day - which you probably wouldn't have at the park unless there was a giant event and since so many people are close to it as Michelle described they probably opt to ride a bike or walk to the park you're not going to have the friction there that would really need to slow that street down, so seeing that is interesting.

Also as Michelle pointed out and I think we had in some of our reporting identified that there are things in the road that make it difficult for cyclists more so you don't feel the bumps and pot holes necessarily in your car but as a cyclist you do and that results in cyclists riding in different locations I could see on this street and as Michelle described as a cyclist one of the things that you might do to be defensive and to protect yourself is to hug the curb line so you hug the curb line knowing that there may be an oncoming car or cars coming up behind you too fast but when there is a parked car or a pot hole and you have to move or shift to your left, you're moving out and area you may not turn around and see so because of those types of



conditions speed is resulting in people hugging the curb when they're a bicycle and then when a parked car is there we could see that.

The other thing with this neighborhood is I would fully expect lots of pedestrian activity, lots of cycling activity, residents like Michelle that are talking about her children it is a concern and my you know observing from here that it's a neighborhood that there's there's some fear and concern of children walking or riding to this park. I live a block from a park and I have the same fears and concerns on the street because it's wide and cars go way too fast on it but knowing it's a neighborhood looking at those conditions, understanding that characteristic and looking at the map almost all the streets are about the same width.

From somebody that's done a lot of master planning and a lot of street development, this would be a street section that we would encourage new developments to follow this would be a street pattern we would recommend for development to occur where garages are on the back the curb cuts are reduced to increase the ease of pedestrians but in this neighborhood clearly it's a little too good there's a little bit too much off street parking there's a little bit too much walking and too much cycling. Because in south of the border we would have a city like this where people may have five or six cars at a house and that natural congestion would be parked on street. Here, outside of the evenings you can see that there aren't all those excess cars adding that congestion so even though this may be a touted as an appropriate street section from urban design side for a new community or residential neighborhood it's not been dialed in and to attribute to the actual contextual issues in this neighborhood all of that contributing to these higher speeds and I think we see that with the really wide intersections the really wide turn radius and intersection that you potentially have parking on and then put in the yield signs instead of stop signs it just it just contributes to something - that I can easily go through the neighborhood at a high speed with very little attention to what I'm doing because I'm too comfortable.

Tony Harris: Thank you those are some really helpful comments. Michelle?



Michelle Lam: I just wanted to check and maybe Areta would be able to speak to this I think you live a bit closer I believe that on the south side of Lorne by the park there there's no more parking anymore I think about - right - so it's just parking on the north side now okay I just wanted to double check

Tristan Cleveland: Yeah that's actually what the street sections show and I think I misspoke earlier so I'm good to clarify that there's only parking allowed on the one side of the street – same issue though that side of the street would need to have parking to slow down traffic.

Tony Harris: Right, right okay any other any other thoughts on factors before we move into recommendations?

Tristan Cleveland: Nope.

Tony Harris: Okay, perfect alright, well um Tristan if we can start with you again recommendations on how to how to make this place safer and um less likely to have crashes happening like this?

Tristan Cleveland: Sure great so I'd like to start by building on something that Edward said I think that as urban designers when we're designing new communities or working on old ones we actually do need to start to make a habit of really analyzing whether people will be parking on streets or not. We're learning that in more and more suburban contexts there's just not enough on-street parking to slow down traffic so you have to accomplish more through the design of your curb, you have to use more neckdowns — I'll also call it a bump out - to make sure that you're creating that friction and slowing traffic through design because often you just won't have enough cars there to achieve the same thing. In a downtown, you don't have the worry about that as much and so we have to be aware of that contextual difference so I'll just share my screen because I want to um I don't want to offer these as "the solution" but to offer



some options. So NACTO¹ calls these not just roundabouts but neighborhood traffic circles I believe and um what these are is you know in North America for a long time we're only designing these really massive roundabouts to allow people to travel at high speed or to handle major traffic but in Britain and Australia, they've had these much more smaller scale roundabouts that fit right into existing intersections for decades and they work really well. Now if this roundabout existed at that intersection, I believe that this crash would not have happened. Because that car would not have turned directly left onto the other street, the driver would have been forced to slow down, go all the way around the circle it would have been obvious to the cyclist that they're turning onto that street it wouldn't be a sudden thing that happened at full speed suddenly into the cyclist. So this would be, I think a very helpful solution and I think appropriate for this part - you could fit it right in that intersection I don't think you'd need to expand the intersection at all. This was recently put in at Halifax, we've never had these before and the reaction so far has been positive.

Then I just have two more taken straight from NACTO so you have to excuse me because this is a small image here but um if the community does instead want to go with bump outs or neckdowns to slow traffic I would encourage the community to focus on keeping space for cyclists to be able to go right through directly. In my community we recently redesigned a street to make them friendly or full bikes and put in bump outs to slow down traffic and a lot of cyclists have commented actually they feel less safe than they did before so it's counterproductive because what's happened is they're pushed out into traffic at these intersections. It would be better and this is recommended by NACTO and they say both are fine but they do recommend, if possible, to let cyclists go straight on through and this is especially easy to accomplish um on a street that doesn't have parking on one side and that's how to the street without parking you can have an island that slows down traffic but maintain the path for cyclists to go directly through without having to turn into traffic and then back out again. Even on the side with parking, you can still leave this gap for those situations where there doesn't

¹ National Association of City Transportation Officials



happen to be parking there at that time of day allowing that cyclist to stay on the curb on the side of the street, it's going to be more comfortable.

And then I guess um I don't think anything else I want to share from NACTO here um oh this was another option so yeah taking this directly from the um Urban Bikeway Design Guide yeah where you could also create two small islands like this again it maintains that through route for cyclists but really slows traffic. Now in this diagram it's a one-way street but you could see how you could accomplish this for two-way street as well so these are these are some options

I'd encourage then the last point um people mentioned that there were pot holes on the edge of the street um let's get rid of those pot holes. Maintenance is very important on cycling streets uh if a street is considered a local street bikeway of the city is put in those shallows and that comes with a responsibility to ensure that that street is maintained in a way that's appropriate for outdoor transportation there needs to be a higher priority placed on maintenance and cleaning on the edge of the street that the city is designated for biking so that's a third recommendation. Um and then fourth um I didn't - I was surprised when someone pointed out that yeah there's not a stop sign at any side of that intersection um so this issue with stop signs is really important to underline um having eight intersections that you could go without ever hitting a stop sign, having the other side only controlled by a yield it just encourages um drivers to get going and really picking up a pace. When you're going through a neighborhood. You should be picking up speeds, slowing, picking up speeds, slowing and forced to really pay attention to your surroundings. So uh I would like to see more stop signs there, so those are my thoughts. Thank you.

Tony Harris: Those are great, very constructive, thank you. Um maybe Areta would you like to go to go next and tell us your thoughts on recommendations for, for this area?

Areta Donnelly: Well, first of all I would like to see four-way stops at the intersections that surround that park, okay? No more yield signs, four-way stops. That controls the traffic right



then and there around the park area. It's not – it's especially safety factors for children and uh elderly people up there walking their dogs I think it would just enahnace that sense of security um and also in the um east-west uh traffic um they need to have more stop signs. You can't go eight or nine blocks before you have one that's just - they need to put in more stop signs and perhaps replace some of those yield signs with stop signs.

Tony Harris: Great, thank you. Michelle, any thoughts on recommendations?

Michelle Lam: Yeah I have a few and um agree with what's been said, wholeheartedly, already. Um I would try to think about it in terms of the planning like short-term, medium-term long-term. Um short-term I think it would make a lot of sense right down Lorne so that whole thoroughfare that's designated as a "share the space" lane it would make sense if there's not very much parking on one side to just put some temporary maybe traffic cones or those poles or something that can sort of set aside a lane for biking or for walking. And then in the medium-term turn those into something more permanent like what Tristan has shared in, in his screenshare. And of course the potholes, so that people can actually use that one side of the street. And then in in the longer term, I think it makes sense in Brandon more as a whole um to create more of the - so rather than one grade or one street going through the city having an upgrade that's interconnected to places where people like to go like parks or places where we see more active transportation than building this into something that's sustainable across the city for this kind of transportation that would be what I'd like to see long-term. thank you.

Tony Harris: That's great, thank you, yeah the point about interconnectivity resonates with me a lot. Um Edward thoughts on recommendations?

Edward Erfurt: Yeah, I want to just reinforce what everybody else has said because um the only thing that was said that was that would take more than a few hours to do is to convert an entire lane to a dedicated bikeway. Every other uh item that was discussed, if you go and you look at taking the yield just going up tomorrow and switching the yield signs to stop signs. We



already know you know usually when you talk about something like that, the transportation engineers get kind of worked up about using stop signs for traffic calming or doing that without an extensive study, but within the neighborhood they've already made an arbitrary decision to go and reduce the speed despite the data showing otherwise. So they've already made one kind of arbitrary piece. I'm not convinced that just putting up a new sign would reduce the speeds of the neighborhood. I'd encourage the neighbors to go out in the next few weeks and do another speed study with the new posted speeds and see what happens and share that with the city to build pressure that we need to do more than just a sign. So the first thing getting the yield signs converted to stop signs and then adding those, and to even add on to what Areta is saying about that - add paint to that. Put the stop bars in put some more awareness on the ground. It could start with inexpensive paint not the expensive plastic or more plastic stuff it could start with simple house paint that is somewhat temporary that will last over a month so people are used to that and we can get it right. So I definitely think that is something that can occur tomorrow.

Looking at the bump outs and and both what Michelle and Tristan were saying - on the street we need to reallocate what has been utilized in that right of way. Right now the allocation is heavily to cars with the afterthought of cyclists but looking at those curb extensions and bulbouts, I love the term that Tristan uses describing the design of the curb. I think that gets us thinking completely different about the street. There are areas if you don't have parked cars and it's a shame that they've limited the parking along the park side. If you're going to do that my experience has been to offset, so on one block it's on the north side and the next block is on the south side to give that natural offset but to take back the street by adding some curb extensions or adding some bulb-outs. We've seen these at Strong Towns where communities have done this in a test fashion with things as simple as straw bales. There's a great book out there on tactical urbanism and it gives you all of the tools. Basically you can go to a hardware store that delineators that they have the highway department there's a there's a kit in there in that book to show you how to do that with toilet plungers you can buy those like at the dollar store and you can paint them white and they look like the same thing. Getting that out to take



back the street again to what we described is to add some congestion within that street add some friction because the fastest the cyclist is going to be able to ride is 17 miles an hour. Most are going to be at that maybe 12 miles an hour. Getting the cars to that accommodating speed so that the differential between the speed of the car and the cyclist it is almost neck and neck. That lower speed that friction in the neighborhood, in a year's time in that neighborhood, you may have spent another three minutes on the road driving.

Really in this type of neighborhood condition you shouldn't be able to get to these high speeds this is not about speeding through the neighborhood so I really like the idea of those bulb-outs and curb extensions and those are things we see in communities all the time that folks are able to do as a demonstration project, they do it through tactical urbanism they can do it with paint and chalk and do an experiment with it. As we describe in Strong Towns, our four-step process for public investment it's the first humbly observe and listening to two residents here about their experiences - we know there's an issue there's a place where somebody is struggling and we can look at the next smallest thing. These seem like changing the stop signs out which is something that the public works in the city would have on the shelf or be able to get easily. Putting curb extensions out again we you can utilize materials that are inexpensive they probably have barriers and cones at the city that they used for the construction of roads that could be put up in a temporary fashion to explore how that works.

I really love that the circle the traffic circle idea too, and I've seen that in communities especially these are really big intersections. That can be done initially with paint and some delineators again it's a weekend it's a few hours of Public Works time to do and then when it's time to go and resurface the road you put the mountable curbing up that's really great for streets because you can for a car it's uncomfortable to drive over but for a moving truck or a bus that may go down the street they can drive over that with no problem so it doesn't impact the mobility of the community but increases the safety. The idea of carrying the Level of Service of the road if the city feels that this is the road for cycling making sure that that's maintained I think that's important and again that's something that as a as a city these are things they're



doing all throughout the year in the city, this is not a foreign thing so keeping up on that maintenance and identifying that I think is really important.

Long-term. Once all of these small experiments are done. There's a conversation that really needs to happen about where the curbs are really placed in the future this is something that could happen over time as water lines get fixed on streets, as repaving schedules come up, as sidewalks get fixed there's an opportunity to re-allocate what's in the right of way. Knowing the design, getting enough congestion getting the driver to feel that they need to go at a slower speed. The questions of how the cyclists are accommodated within that lane or adjacent to the lane, of how pedestrians are accommodated not only through the corridor through the street but at intersections. the turning radius, the curb radii at all these intersections can be almost zero can almost be a point because you have so much extra area to turn in those pieces. So as maintenance occurs and, you can see in some of the photographs that accessibility access hasn't been fully accounted for in all of these streets. So when it's time to go and put in the ramps for all users it's an opportunity then to make that bigger investment on the street. But the amazing ideas from everyone on here that I really support because I think 90% of these are things that the community residents or the city could engage tomorrow on that would make this a safer and more livable place within Brandon.

Tristan Cleveland: Oh yeah that's the put up my hand.

Tony Harris: Yeah so maybe Michelle and then Tristan –

Michelle Lam: Thanks. I just have a quick question about stop signs. So in I can see the benefit of stop signs for slowing traffic but I'm curious as a cyclist if you have some information about the impact on cyclists just thinking about if we're starting, stopping, starting stopping as cyclists that can be also difficult. So just wondered if it might be better to have stop signs facing certain directions or if that's where the traffic circle might come in just thought I'd raise that issue.



Tristan Cleveland: I can comment on that - I'm trying to think of what it's called maybe one of our other panelists remember is the term off the top of their head. But there's a city in the United States - and this is the way it is across Europe - for cyclists stop signs are treated as yield signs. And that is appropriate from a safety perspective because cyclists first are going slower but also have greater visibility greater ability to hear what's going on around them, it's perfectly safe. Thank you someone in the comments said it's an "Idaho Stop" I appreciate that because in Idaho this is how they treat it and it really works well. Even in places that don't have Idaho Stops on the books this is what everybody does. Very few cyclists actually come to a full stop, at a stop sign so be better to change the laws to match actual behavior especially since it is safe and better for cyclists.

I wanted to build on also on stop signs something else Edward mentioned which is that the traffic department, the Public Works department they feel that they need to do a series of studies before they'd be willing to put in a stop sign and I think you know - we're making recommendations here. One recommendation I would offer is that we reassess what should be considered the default. The default in a neighborhood should not be that cars can drive through at high speeds - you should need to do a study to prove that that is safe and not putting people at danger and we know what the result of that study would be. The default should be that cars are required to stop at all intersections and anything else that would ensure that they travel slowly and protect children and residents that live locally.

One positive thing about the fact that the city has reduced the speed limit is that it's gotten rid of a chicken and egg problem that often dogs efforts to redesign streets. Often when people ask to redesign a street to reduce travel speeds transportation engineers respond we can't do that because the speed limit here is too fast and if people are driving that, the supposed speed limit with these you know narrow designs, then they could run into something. And then you say well maybe we could reduce the speed limit they say well we can't reduce the speed limit because the street is designed for fast speeds so it's this crazy logic that somehow only justifies maintaining high speed roads through neighborhoods. So we need to get out of that chicken



and egg problem everywhere and make the default slow speeds everywhere. But in this case it's really great that they've already reduced the speed limit so now there's a very strong case to be made for redesigning that street for that slow speed.

Edward Erfurt: And they've already gone through an observational study to reduce the speed like so the traffic engineers have already identified there's a problem in the community. The other piece to it is using the strengths of residents like Areta to go out there and work with the engineering department. Don't rely on the streets, the Public Works, rely on the engineers that - we can find locations that are logical to put up a four-way stop like something logical of a fourway stop would be at the four corners of the park site, right? So when you're at the intersection by one of the parks we should be thinking about those because that's the area that are most likely to have pedestrians and cyclists because they're coming and going from the park. And you don't have to hit every street you can hit some of them. The other kind of low hanging fruit that I've used in the past is that maybe I can't get a four-way stop at an intersection but I wanted to increase driver awareness - using a lot of the pedestrian crossing painting techniques and reflectors is an opportunity to get visual awareness on the ground. That again, when you're talking about the paint - a five gallon drum of street paint is \$200. That, it's something they already have on the shelf and already have the stencils for and get a six inch roller by painting in those types of crosswalks, the most visible ones, it again it adds to driver awareness especially in neighborhoods where I suspect the many the families have lived here for many years so it's very familiar and it doesn't take very much of a, of a slight change for something to trigger differently in their minds. So doing all of that I think that I think already the city is taking the step to lower the speed which is great it allows us to look at different facts. It's also opened the door to identify that they can do some experiments and some pilot programs to do things to the neighborhood without going through an extensive study. At Strong Towns we would talk about these things through either tactical urbanism or the next smallest step, something that we can do as a pilot to try it out. Little investment, little risk and then we observe to see how that plays out. And then engaging residents that are there to be the champions for this that can be the ambassadors of the neighborhood to support the moves of the city is making it definitely



sounds here that there is community support for safer neighborhood. And we clearly have two residents in there that are great champions that can speak to this in a way that a city staff member may not be able to in that neighborhood.

Tony Harris: Really well-put, thank you Edward. Any other thoughts on recommendations? Okay, perfect well in that case I'd like to move us into our closing segment. I just want to offer a few acknowledgments before we close out today. So I want to say thank you to our panelists Michelle, Areta, Tristan, and Edward of course. And a big thank you to our nominator Grant Hamilton for pulling together all of the resources that were necessary to put the session on today. Thank you to the other Brandon community members and friends of our team that assisted over the past couple of months in getting the session ready. And of course thank you to our sponsor for this event an anonymous donor, and thank you to Strong Towns staff. You can find a recording of the session and all of our Crash Analysis Studio sessions by going to strongtowns.org/crash-studio There you'll also soon find resources for establishing a Crash Analysis Studio in your own communities. I'd like to close out today by saying our next session is going to be on August 25th and you'll be able to find more information on that on our website as well. I think that's everything from us, thank you and please keep doing what you can to build a strong town. Take care.

Tristan Cleveland: Thank you.