



# 1st Avenue Citizens' Corridor Planning Task Force



Thursday, September 19, 2024, 6:00 pm

Satori School

3727 N. 1st Ave

Tucson, AZ 85719

## MEETING MINUTES

### 1. Call to Order and Roll Call

Meeting facilitator Kristi Ross called the 1st Avenue Citizens' Corridor Planning Task (1ACCPTF) meeting to order at 6:05 p.m. on Thursday, September 19, 2024, and the quorum was established through roll call.

<b>PRESENT</b>	<b>PRESENT</b>
Jon Barger	Sofia Morago Franco
Caroline Bartelme	A.M. Rivers
Dave Boston	Melissa Noshay-Petro
Mindy Gutzmer	Ruben Robles
Mark Hatchel	
Kathleen (Susan) O'Brien	
Karl Peterson	
Nancy Reid	<b>ABSENT</b>
Marci-Caballero-Reynolds	Dana Higgins
Maxine Dunkelman	

### 2. Approval of August 22, 2024, Meeting Minutes

Krist Ross asked 1ACCPTF members if they had an opportunity to review the minutes from the previous meeting on Thursday, August 22, 2024. All 1ACCPTF members had reviewed the minutes, and it was moved by Mindy Gutzmer, duly seconded by Jon Barger and Mark Hatchel, to approve the minutes. The 1ACCPTF reached a Consensus Decision and approved the August 22, 2024, meeting minutes.

### 3. Opening Remarks

Jon Barger opened the meeting by saying that he would like to keep the meeting tighter tonight since many members arrived early.

### 4. Call to Audience

No members of the public are present in-person or online.

## 5. Crash Analysis

HDR Project Manager, Brent Kirkman, and Kittleson & Associates Principal Engineer, Felipe Ladron de Guevara, PhD, led this conversation. Brent mentioned that the project is at the starting point. Brent mentioned that they presented the overview of the Design Concept to the task force last month and now things are focused on the two starting goals of the project: Existing Analysis Conditions and Concept Alignment, which is the roadway itself. Felipe then spoke about the Existing Conditions Analysis going on along the corridor. Next month he will talk about existing operations, how the signals work for the corridor, and what the traffic volumes are. The goal is to propose a justification for the challenges of the corridor. Once the team has those justifications, they can start finding solutions to those challenges. Felipe then turned it over to Kittleson & Associates Engineering Associate, Morgan Dean, PhD. Morgan then began her presentation on safety, which is summarized below.

### What is safety?

- Morgan explained that safety is protecting ourselves from risk and injury. Transportation is simply doing that on the roadway.
- Several federal organizations work together to improve safety for us across transportation. Some examples include the United States Department of Transportation, the National Highway Safety Administration, and the Federal Highway Administration. These groups work together for a common goal. Because in the US transportation safety is a public health crisis.
- Morgan also shared several statistics related to safety which included:
  - There are over 40,000 roadway fatalities every year. The increase in fatalities is not just because there are more people driving or more driving done per year.
  - Arizona has over 1,200 fatalities in Arizona every year. Every year on 1<sup>st</sup> Avenue there are about 153 crashes and about 10 fatal and serious injury crashes.
- A serious injury refers to an injury that alters the way someone is able to live their life, for the rest of their life.

### Questions from CTF Members:

- Mark asked if this was vehicle on vehicle data for safety
  - Morgan said no this is combined
- Nancy – are pedestrians shown in this?
  - Yes, we will break that down next

Morgan explained that in late 2022 the US adopted the National Roadway Safety Strategy (NRSS), also called the “Safe System Approach”.

- The “Safe System Approach” is made up of five elements and six principles. The six principles include:
  - Death and serious injuries are unacceptable
  - Humans make mistakes
  - Humans are vulnerable
  - Responsibility is shared
  - Safety is proactive

- Redundancy is crucial

These six principles are used when designing a roadway to increase safety.

- Then there are five elements in the “Safe System Approach”:
  - Safer speed
  - Safer people
  - Safer vehicles
  - Safer roads
  - Post crash care
- Morgan then described that these elements work together to decrease the number of crashes and decrease the crashes with injuries. The “Safe System Approach” uses both design and educational components to make roadways safer, this includes designing the system to encourage people to use it, the way we want them to use it, and we also need to educate them to use the system. Then Morgan presented an analogy to show that we already employ the “Safe System Approach” in many aspects of our lives already.
- She explained that the 1<sup>st</sup> Avenue Improvement Project is a “Complete Streets” project and its approach to planning and design that creates a safe, equitable, and connected network for everyone. She also noted that we must assess safety with different types of data and the first point the project uses is interviews and engagement. This task force meeting is a part of this component.
- Another data point described is replicated data, which gives us travel trends and tells us how people are traveling and why they are traveling. The last point, and the one we are focusing on, are the field observations and crash data and then using video to assess near misses. This is because crashes are rare, but looking at misses, which happen more frequently, allows the team to take a proactive approach to safety by looking at the near misses and what movements people are making.
- Morgan shared that there were two rounds of field studies done in May during peak travel hours during the day and then again at nighttime. They did field studies at two intersections: 1<sup>st</sup> Avenue and Fort Lowell Road and 1<sup>st</sup> Avenue and Wetmore Road. They observed a few different behaviors trying to figure out if people are exhibiting certain patterns or trends. This included:
  - Multimodal facilities
  - Roadway design and traffic operations
  - Lighting

Morgan shared the following results for Fort Lowell Road and 1<sup>st</sup> Avenue:

- The roadway has a lot of midblock crossings for pedestrians.
- Bike facilities being used by bicyclists, but they were high stress facilities.
- Noted slower moving pedestrians and wondered if they had enough time to cross the road safely.
- At nighttime there are low lighting levels and there were people crossing in crosswalks at the “don’t walk” phase.
- There are areas where the number of signal heads varied and that could cause issues with visibility.

- Faded pavement markings, push button accessibility, and for the eastbound vehicles there is a utility pole that does limit driver visibility and pedestrians on that crosswalk

Morgan shared the next results are the findings from Wetmore and 1st Avenue:

- Low lighting levels,
- Push button accessibility
- Faded pavement markings
- Need for more crosswalks on curved areas.

### **Crash Data**

The crash data source is the Arizona Department of Transportation (ADOT), and they used the five most recent years of data, 2019 to 2023. This data was compared to the Tucson Police Department dashboard of the first four months of 2024 to compare it to the most recent five years to see how things are trending this year. The ADOT data comes includes things like injury severity, the type of crash, weather and lighting conditions, and any contributing factors. The data summary shows that in the past five years, showed 765 crashes, 48 resulting in serious injury. A major number of those killed or seriously injured did involve a pedestrian or bicyclist. They also mapped the crashes, and the data showed that 75% of the crashes were occurring at an intersection and there are a sizable number of intersections along the corridor. They then looked at which intersections on the corridor had the greatest number of crashes.

### **Questions from CTF Members:**

- Mark asked when it says 75% of crashes occur at the intersection, how much of the intersection is considered “intersection”.
  - There is a 250-foot buffer.

They also looked at annual trends of crashes, there are an average of 153 crashes per year, seven serious injury or fatal crashes per year, and fifteen pedestrian or bicyclist crashes. Knowing that pedestrian and bicyclist crashes are more likely to be serious injury or fatal crashes, this is a relatively large number.

They then took the annual average crash information and compared it to the crash information from the first four months of 2024. In the first four months of 2024, there have been 63 crashes, one serious crash, and one fatal crash, and nine involving a pedestrian or bicyclist. If these numbers stay constant for the rest of 2024 and multiplying them by three it shows that there is an uptick in the number of total crashes, the same number of fatal or serious injury crashes, and an uptick in the number of crashes involving pedestrians and bicyclists.

### **Questions from CTF Members:**

- Marci asked: can you pull data on a hit and run?
  - That may be in the data but a lot of that is missing because it's not reported
- Dave asked why are bike and ped combined?
  - We do sometimes and sometimes we don't. We usually combine them as vulnerable populations.
- Dave commented that there is a big difference between bikes and pedestrians, and bikes are more part of traffic than pedestrians and we should reflect.
  - Morgan answered that, yes, there are key differences in behavior between

bicyclists and pedestrians and noted that she will present some of these differences on a later slide.

Morgan then presented the five-year data on crash severity and crash mode.

The key differences are:

- In vehicle-only crashes 60% do not result in injury or fatality.
- In both bicyclist and pedestrian crashes, 100% involve at least a possible injury.
- Only 1% of vehicle-only crashes result in a fatality, while 7% of bicyclist crashes result in a fatality, and 20% of pedestrian crashes result in a fatality.
- This is one place where you see the difference between the bicyclist and the pedestrian populations. In this case, the data set shows that pedestrians are two times more likely to sustain a fatal injury.

#### **Questions from CTF Members:**

- Mark asked if there is a vision of peds and bikes and if they are obeying the traffic laws, but this is not the case. There was an unsafe bicyclist that I saw last week, and his behavior would be seen as a bike accident that maybe caused it and not a car. This can be misleading when they do not obey, and they cause an accident (bike and peds).
  - Morgan responded by saying that they are working on an approach study that will show different trajectories of those different pedestrians crossing further away from the intersections and they are hoping to analyze that also. Later, they will look at some of those more contributing factors and talk about the fact that compliance could be one of the major contributing factors to pedestrian crashes. Morgan continued making the point that we can't control behavior and that we need to separate the group and provide them with safer options for travel, highlighting that redundancy is a crucial part of safety.
- Nancy asked if in your study of pedestrians have you talked about or addressed traffic suicide
  - Morgan answered that she did not believe that they included suicide in the data set.

#### **Crash Type**

This crash data shows

- Single-vehicle crashes, the type where a vehicle hits some sort of object; pedestrian, bicyclist, or head-on crashes, while rarer, tend to result in higher severity.
- Angle crashes and left turn crashes which also tend to be more severe.

#### **Contributing Factors:**

- Failure to yield
- Speeding
- Not using a crosswalk to cross the roadway

They also looked at lighting, which was also done in the field, as well as in the data and it shows that lighting nationwide is showing very jarring trends where pedestrian crashes are very overrepresented at nighttime. In addition, on 1<sup>st</sup> Avenue, the unhoused population is more likely to be moving around at nighttime leading to heightened pedestrian activity when those lighting conditions are hindered. They also looked at impairment and found that a comprehensive approach should be considered to enhance safety because not everyone

behaves the same way and there are external factors that can affect those behaviors.

### **Key Findings from Crash Data:**

- A high number of road users are involved in fatal and injury crashes.
- Pedestrian and bicyclist collisions are 6-12 times more likely to result in fatal or serious injury
- Pedestrian, bicyclist, head-on, and single-vehicle crashes are more likely to be more severe. Other common crash types, like left turn and angle crashes, can still result in high-severity injuries.
- Speeding, not yielding, and not crossing at crosswalks were the three most common contributing factors.
- Dark lighting is contributing to pedestrian crashes.
- A comprehensive approach should be considered to enhance safety, safer roadways, speeds, people, and emergency response.

### **Questions from CTF Members:**

- CTF member: you are looking at an individual, each intersection is so unique, so when you think about whether to look at each intersection individually or do you group them?
- When we get to that point, we will look at them uniquely and give us a tailored approach. Karl: Are there lighting solutions that are available and don't contribute to light pollution?
  - FHWA has guidance on pedestrian and street lighting
- Nancy: will this be available online?
  - yes
- Karl: How long was this?
  - This was a 24-hour study.

### **Near Miss Video Data**

The near-miss video data was collected over a 24-hour period on Tuesday, March 26, 2024, and Wednesday, March 27, 2024. It was collected, like the field observations at two intersections, Fort Lowell Road at 1<sup>st</sup> Avenue and Wetmore Road at 1<sup>st</sup> Avenue.

A near miss is when two road users pass through the same point in space with a small window of time between their two arrivals (less than 5 seconds). The severity of the near miss is measured by the post-encroachment time (PET).

Videos of the Fort Lowell Road and 1<sup>st</sup> Avenue and Wetmore Road and 1<sup>st</sup> Avenue intersections with near misses at two different PET times were presented. One at 4.9 seconds and one at 0.4 seconds to show the differences.

Near Miss Data Summary:

- "Critical Near Miss": PET of 0.1 – 1.9 seconds
- "Potential Near Miss": PET 2.0 – 4.9 seconds.

There was a total of 1,948 near misses between the two intersections, 956 at Fort Lowell

Road intersection and 992 at the Wetmore Road intersection.

Critical near misses seen were 127 at Fort Lowell Road and 156 at Wetmore Road. They then looked at the PET distribution by mode – vehicle, bike, or pedestrian and did not see much difference. Next, they compared whether it was different if the bicyclist or pedestrian arrives first versus the vehicle arriving first. They did see that it appears that pedestrians and bicyclists are strategically timing their arrival to avoid near misses with vehicles. The takeaway is that the Vehicle arriving first scenarios lead to more severe outcomes.

They then looked at vehicle speed and movement during near misses and discovered that there are near misses between both vehicles traveling straight and vehicles turning left or right therefore, they must include multiple countermeasures to address near misses. The other takeaway is that vehicle-only near misses involve vehicles traveling at higher speeds. Near miss time of day was then looked at and they discovered that at both intersections there were more near misses during off-peak travel times. This is probably due to less congestion, allowing vehicles to travel at a higher speed.

Morgan then showed two more crosswalk near-miss videos, and the takeaway is that right-turning vehicles are involved in more near misses at both intersections, specifically, the north leg at Fort Lowell Road and the South leg at Wetmore Road.

The next videos are of left turn vehicle vs vehicle near misses. Most of the near misses involved a moving-through vehicle and a left-turning vehicle.

Several critical near misses involve:

- NB through – SB left (Fort Lowell Road)
- SB through – NB left (Wetmore Road)
- Critical Near Miss Rate taking the 24-hour data and extrapolating it out for a year/365 day a NB left at Wetmore Road and over 35,000 vehicles making a NB left at Fort Lowell Road will be involved in a critical near miss or a PET less than 2 seconds.

The next Critical Near Miss Rate looked at an event with a pedestrian or bicyclist. Taking the 24-hour data and extrapolating it out for a year/365 days, over 2,000 EB right turn vehicles at Wetmore Road, over 350 NB right turn vehicles at Wetmore Road, over 700 EB right turn vehicles at Fort Lowell Road, and over 11,000 WB right turn vehicles at Fort Lowell Road will be involved in a critical near miss event or a PET less than 2 seconds with a pedestrian or bicyclist.

### **Key Findings from Critical Near Miss Data:**

Near Misses:

- increase during daytime at off-peak periods.

Pedestrian and bicyclist near misses:

- Vary in severity depending on order of arrival.
- This must be addressed through a variety of countermeasures.
- Often occur at the Fort Lowell Road north crosswalk and the Wetmore Road south crosswalk.
- Often involves a right-turning vehicle.

Vehicle-only near misses:

- Involve higher speeds.
- Often involve a through vehicle and a left-turning vehicle.
- Often involves a NB left-turning vehicle.

A few of the countermeasures they are looking at using are:

- Leading Pedestrian Interval
- Enhanced Street Lighting
- Channelized Turn Lanes
- Enhanced Bike Facilities
- Enhanced Sidewalk Network
- Raised Medians and Refuge Island
- Speed Management
- HAWK/Bike HAWK
- Protected Only Phasing

**Questions/Comments from CTF Members:**

- CTF member: When you say northbound left are you saying they are turning left and going north, or they are north bound turning left?
- CTF member: Channelized right hand turn lane. Can you explain how this enhances safety?
  - Cars won't make the turn so fast, it reduces pedestrian exposure and reduces speed, but it depends on the design.
- CTF member: Is there data on how the channelized right turn lane is safer?
- Mark: Let's talk about raised medians. Will they be islands or median throughout the entire corridor?
  - We are looking at both
- Mark: I don't see how this solves the problem, and it causes a more inconvenience for residents if they must make a U-turn or if people are accessing a businesses
- Susan: pedestrian crossed at an intersection, she tripped and fell and had no safe space, the median can give safe space to cross.
- Mark: HAWK crossing on Campbell make sense and I want to make sure we think about the residents and businesses in addition to pedestrians and bicyclists

At this time Patrick said that at the next meeting, we're going to have a board discussion about the building blocks and the kind of countermeasures that could be used on the corridor, and it will set the stage, probably in the spring to come together and evaluate the trade-offs of these different pieces of the corridor.

Morgan said that she is happy to see that people are thinking about these things looking at the benefits and trade-offs that come with each of these pieces. This will be helpful in future conversations.

Morgan then brought up her last slide asking if anyone had any lingering concerns or questions.



### **Questions from CTF Members:**

- Mindy: what about using a quick build scenario to see how different measures affect the flow?
  - We probably won't be doing experimentation because our ROW is fully constrained

Patrick talked about a protected intersection and pulled up a picture from the internet. He mentioned its benefits and that the City of Tucson currently has two of these protected intersections in design. One will be coming to Grant Road and Alvernon Road and one to Grant Road and Mountain Road.

Felipe then asked the task force members to go online and look at the online map and make any comments they might have and to please keep looking along the corridor for other safety issues they may see and report them back.

The project team then thanked the Task Force Members for all their great questions and comments.

No action was taken.

## **5. Public Outreach Effort**

HDR Strategic Communications Manager, Kristi Ross, summarized the public outreach effort.

- The online survey launched on September 18, 2024, and as of September 19, 2024, they already had 68 survey responses, and the team will keep pushing that out.
- Main Street's Jan Waukon and Steve Taylor have been going around to the businesses on the corridor and doing a lot of outreach.
- Digital ads on Tucson.com targeted to the corridor in both English and Spanish.
- Direct mailers, social media, press releases that will push the survey.
- Open houses both in-person on Wednesday, October 9, 2024, at Donna Liggins Recreational Center from 6 to 7:30 pm and virtual on Thursday, October 10, 2024.
- A series of pop-up events happening over the next two months including:
  - The Heirloom Farmers Market on October 20th and another in November,
  - Woods Memorial Library on October 23rd and another in November, and more to follow.
  - U of A Center and they are going to assist in pushing things out.

### **Questions from CTF Members:**

- CTF member: How can we help with social media and how to help spread it?
  - You can visit the City of Tucson Department of Transportation & Mobility Facebook and Instagram pages and share and like from there.
- Xxx: Will the pop-up events be listed on the website?
  - They will be added right away to the events calendar on the website. She also mentioned that we are still trying to nail down some specific dates but when those are locked in, we will add them to the calendar as well.

Kristi mentioned that they are also talking to Sun Tran to possibly get their help with surveys on Route 6 and, they are also working with the Pima County Health Department to help share the survey and information.

### **Questions from CTF Members:**

- CTF member: where are the mailers are being sent?
  - They are going to everyone within a quarter mile in each direction of the project corridor, and Tucson Rapid Transit project on Stone Avenue is also assisting with pushing out information for the 1st Avenue project.
- CTF member: what was going to happen at the in-person Open House?
  - There will be a brief presentation by Brent and then a series of display boards that talk a lot about the current conditions on the corridor, things related to general project overview, timeline, a lot of traffic information that was discussed today, so it's really a way for us to collect more information from people who live, work and travel the corridor. There will be areas where people can share their comments and thoughts and people working on the project to answer questions and make surveys available for people to take.

Patrick added that this Open House is our first open house, and it is the “listening phase”. We want to know how people are experiencing the corridor today before we start proposing anything.

### **Questions from CTF Members:**

- CTF member: When survey closes?
  - It closes November 22nd.

Discussion was held, but no subsequent action was taken.

## **6. 1<sup>st</sup> Avenue Roll Plot Exercise**

HDR Project Manager, Brent Kirkman explained to the 1ACCPTF members that he wants to give them a feel for what will be happening at the in-person Open House meeting. He brought a large roll plot of the 1st Avenue project area and asked 1ACCPTF members to use the markers that are available to go through the project corridor on the roll plots and highlight those areas where they have seen bad behavior or anything that is missing, anything that is a concern. Brent also mentioned that he brought a few translucent pieces that are to scale so that when you place it on the map it will show you the corridor width. This will help members understand the areas where there are constraints. Brent mentioned that the plot images are very detailed and should give you a good feel for the whole project.

Patrick then asked everyone to take a quick break so they could move tables around and lay the role plots out on three separate tables.

The next part of the meeting was 1ACCPTF members walking around the plot rolls asking questions, team members answering questions, etc.

Discussion was held, but no subsequent action was taken.

## **7. Adjournment**

Chair Jon Barger adjourned the meeting at 7:48 p.m.