Corrine Drive Study – Answers to Community Questions Part 2

Approximately 200 questions were submitted at the Corrine Drive Community Meeting May 1. About half were answered in Part 1, a document currently available www.corrinedrivestudy.org. This document answers the rest of the questions, plus additional questions asked since the May 1 meeting.

Many questions were similar in nature, so MetroPlan Orlando grouped them by topic and edited for clarification.

Access questions in categories you are interested in by clicking on them below.

Topics

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Bricks and Bumps

- Was there any consideration to brick, or speed bump, or additional traffic calming devices to help enforce 30mph speed limit? To make the road walkable 30mph is the absolute top for walkability and bikeability to be improved.
- Why not use speed bumps to maintain the 30 mph – similar to Lakemont thru Tanglewood where the speed limit is 25 and the speed bumps can be taken at 25 and they don’t knock your teeth out as do the speed bumps on Nebraska and the one on Bumby – saves brakes, maintains speed limit, and stops speeders.
- How come no physical speed limiters are being considered between General Rees east to Bennett? Living on E Corrine, I have been witness to several high speed accidents with parked vehicles and drivers seriously exceeding the speed limit to get to the choke point entrance to Baldwin Park which creates the race way it is today! Research your plan from other similar designs across the country narrow lanes do not slow traffic speed as well as a physical speed limiter?

Street design is a better enforcer of speed limits than temporary signs, like police speed limit signs that flash the current speed. The Orlando Police Department utilized temporary speed limit devices several times throughout the study. But it is better and a more efficient use of taxpayer resources for a street’s design speed to match the posted speed, from a public safety perspective.

MetroPlan Orlando combined several features such as raised intersections, medians, curb extensions, and street trees in the Recommended Design. All these features work together to encourage cars to drive at 30mph or less. These are the recommended features for a street with the amount of traffic volumes that Corrine experiences today. A brick street or speed bumps are not recommended for the type of street that Corrine Drive is. Additionally, these features would encourage cut-through traffic in residential neighborhoods.

At the Community Meeting, this question was answered by one of the panel members. Here is what was said:

“At the raised table and pedestrian mid-walk crossings, we did plan for patterned pavement, whether that is brick or stamped pavement could be decided down the road, but the idea was for those specific locations to include some patterned pavement. But not the full roadway section.”

Cars

- Why not improve the road for cars and traffic movement instead? Smaller road/lanes does not help the traffic. You’re trying to make it for walkers and cyclists. It’s not a “design” issue it’s a road!
- Why are you focused on “design” instead of traffic flow? The cars have to “Drive” the road, instead of the focus being on bike paths that have limited use.
- Why are we focused on the bikers and walkers instead of the cars and better traffic flow?
- Why not leave Corrine at 5 lanes instead of 5-3-5? Corrine is for cars, not pedestrians/cyclists.
A Complete Streets approach to redesign streets places an emphasis on ensuring a street can support multiple ways to travel – drive, walk, bike, or use transit. Right now, Corrine Drive only supports people who drive, especially those who want to drive at high speeds. Our approach from the beginning, was to improve transportation options on Corrine Drive for everyone who uses the road.

The feedback gathered in Phase 1 and Phase 2 confirmed this approach. There was an overwhelming desire for bicycle and pedestrian infrastructure and a street that makes people feel safe while walking on the sidewalk or riding their bike in a protected facility. That’s what the Recommended Design reflects.

The design does not prioritize any mode over another; instead, it balances the needs of all. There are tradeoffs required for this balancing act, but MetroPlan Orlando believes this design will make it easier for everyone to use Corrine Drive, no matter if they drive, walk, or bike.

### Changing the Speed Limit

- **How quickly can the lowered speed limit be placed into effect?** That’s free!
- **Why are you not lowering the speed to 25 mph?** Photo red light cameras at Winter Park Rd and General Rees, more raised crosswalks
- **On page 29, speed study can be conducted after implementation – why not before?**
- **When would the recommended 30 mph speed limit become enforceable- this is free so why can’t this be implemented now? Also, what is the enforcement plan?**

Current law requires a speed study to change the speed limit. A speed study will determine the speed limit. A speed study now is likely to result in a much higher speed limit, based on the high design speed for the street.

In order for a speed limit to be effective and promote safe vehicle travel, the Corrine Drive Recommended Design needs to be implemented first. For the speed limit to be lowered, cars must first travel slower than they are today. That’s why the new design has to be in place first. This is explained in more detail on page 29 of the Final Report.

### Cut-Through Traffic

- **In reality, not your study assumptions, how much more traffic will be diverted onto Fern Creek, Nebraska, and Bumby when Virginia is 3 laned?**
- **There is concern reducing lanes will encourage cut through in neighborhoods, however, with 60,000 people moving to metro Orlando last year and more coming every additional year, was it considered that “cut through” would occur anyway even if all lanes left? Pedestrians should be focus**
- **During the Q&A, the gentleman on the left specifically said part of the expectation is “all the roads will be used” when asked about cut thru traffic. That implies roads such as Merritt Park will see, and are expected to see increased volume, and that is acceptable. Did I hear him correctly?**
- **Given the Curry Ford road diet study, how many commuters do you predict will be cutting through neighborhoods during period demand times?**
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- Where will the cars go?
- How is cut-through traffic from Winter Park to Corrine Drive (both directions) along Marble Ave and Janice Drive being addressed? With the addition of a second light (crossing at Redlight pub) there will be even more cutting – through!

The Recommended Design supports Corrine Drive’s existing and expected traffic volumes, which means that it can carry the number of cars that use it safely and efficiently. This means that the design is not expected to increase the number of cars that cut-through residential neighborhoods. Our traffic modeling does not assume traffic diversion and the travel times stay similar with the Recommended Design as they are today. It is not accurate to assume there will be a chokepoint, cars cutting through residential neighborhoods, or increased congestion. The traffic operations analysis in the Appendix confirms this fact.

Forest Avenue

- Virginia and N Forest Avenue are completely residential with the exception of Leu Gardens. Why does the plan not keep those streets at 3 lanes with parking and start the 5 lanes heading east on Corrine from Leu Gardens?
- How was the decision made to make 2 lanes northbound between Virginia and Nebraska on N. Forest Avenue? The plan encourages acceleration and speeding and takes away parking on the east side. May those homeowners please have their parking back? This also cuts back dramatically on parking for Leu Gardens. Why?

The traffic volumes differ south of Nebraska. There are significantly fewer cars between Mills and Nebraska than Nebraska and Bennett. Approximately 20,000 cars use Forest/Corrine at the Leu Gardens curve, which makes a 3 lane section difficult to implement without several other changes, such as a roundabout, purchasing right of way, etc.

For the Virginia section of Corrine Drive, the Recommended Design can support efficient traffic flow of approximately 20,000 cars, per FHWA guidelines – about 25% more than the 16,000 cars that use that portion of the street today.

Please see the Part 1 Answers for a more thorough discussion on parking.

This question was answered during the Community Meeting Q&A. Here is what was said:

“If you are going north toward Leu Gardens, that is actually where you start to have higher traffic volumes, so the outside lane it will extend out to have two through lanes going north.

The drawings that you see are about a 15% complete design. What wasn’t included was a specific survey of exactly where the lines are. In the case you are talking about, we do need to transition from the five-lane section to the three-lane section. Based on what we could see, it was too narrow for the parking, but it could be that when the design is finalized, there is enough space to maintain the on-street parking around the driveways. There are absolutely some changes in the plan that will happen as it is finalized, and it is things like this that will change.”
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Garbage Pickups

- Did you consider the huge problem of one lane when public buses, garbage pickup, FedEx delivery, etc. would block the road with no way to get around it?
- The recommended design reduces Virginia to 3 lanes. What is the strategy to keep traffic moving during trash and recycle collection while the trucks are blocking the single lane road?

The Recommended Design is several years from becoming a reality. The impact to delivery trucks and garbage pickup is expected to be minimal, but all mitigation activities will be determined at a much later date by the City of Orlando.

Impact to Nebraska Street

- Shouldn’t Nebraska be widened to divert traffic bottlenecks away from the reduced lanes on Virginia?
- It would seem that by narrowing down going north on Forest as you approach Nebraska that having a dedicated lane to turn right on Nebraska will substantially increase traffic on Nebraska that would be unfortunate as the traffic is very heavy during “rush” hour now. What do your models show on this issue?
- You stated that the new 3-lane design can handle the traffic, but it is already backed up to Nebraska from Mills Ave to Nebraska at rush hour. How is this possible? Also, have you taken into consideration the increased traffic expected over time?
- For people driving down Corrine to Mills, are you worried that the shift from 5 lanes to 3 at Nebraska will encourage traffic into Nebraska to avoid congestion. This could cause more traffic intersection over the shared use path at Nebraska.
- Why are you pushing traffic onto Nebraska?
- Why would a road engineer think that creating a choke point between Nebraska and Mills? This makes absolutely no sense at all (Nebraska doesn’t want more traffic)
- How will chokepoint at Mills and Virginia affect traffic on Nebraska?
- Will the 3 lane design affect Nebraska’s traffic. Its already a busy street.

MetroPlan Orlando does not expect Nebraska St. to experience an increase in traffic volume. Nebraska, as it is today, has the capacity to support the number of cars who use it today and the number expected to use it in the future with the Recommended Design. Widening the street is not needed. There are a few reasons for this:

- The 3-Lane Design has the capacity to handle about 20,000 cars a day. About 16,000 cars use the street today. That’s space for an additional 4,000 cars each day.
- About 8,400 cars currently use Nebraska and these cars travel the speed limit.
- While Nebraska has two travel lanes, it does not have the same capacity as the Virginia Drive section of the Recommended Design. This is due to its lack of a center turn lane. But the street does have the capacity for at least 17,000 cars. This is double what it currently carries.
- About 40% of the cars that use Corrine Drive north of Nebraska, use Nebraska to reach Mills Ave.

The Traffic Counts Maps at the end of this FAQ highlight these traffic volumes as well.
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Lime Bikes

- Will the city allow 12 mph electric green bicycles to use bike/walking paths? Technically these are motorized vehicles.
- Will the city/county implement Lime Bike et al restriction to not allow bike parking on 12’ walkway?

This is the decision of the City of Orlando. These improvements will take several years to become a reality. It is too early to determine if Lime Bikes – or another type of dockless/electric micromobility device will be allowed on the shared use path.

Miscellaneous

- How will traffic speed be addressed on Bennett Rd for this residential area?

This is outside the scope of our study. It is the authority of local governments.

- Traffic is bad now at the intersection of Merritt Park Rd and Corrine Drive. It is very hard to make a left hand turn off Merritt Park Rd onto Corrine Drive. How will the new design improve this problem?

The new design encourages cars to travel slowly and adhere to the speed limit. A left turn onto Corrine Drive, from any street, is expected to become safer with this design.

- How much width will the trees in the 12’ shared use path take away? I’m concerned this could create a hazard for people on bikes if not implemented with care. (Other than this, the continuous protected/separated bikeway is greatly appreciated!)

This will be determined during the design phase. The concerns about the impact of trees on available space in the shared use path will be shared with the local government.

- How do you plan to protect medians and street trees?

Street trees and medians act as protection between cars and people who are using the shared use path, cycle track, and sidewalks. The trees and medians themselves do not need protection. Medians and trees will be separated by curbs from the travel lanes.

- Why were email notifications only send 1 day before meeting?

MetroPlan Orlando has provided frequent communications throughout the study, and multiple notifications were sent out in advance of the meeting. The first email regarding the Community Meeting was sent on April 2nd. Another notification email was sent on April 25th, which included a link to read the final report. A meeting reminder email was sent on April 30th.
Several messages about the meeting were posted on social media platforms from April 2-May 1, including Facebook, Twitter, and NextDoor.

Additionally, the Orlando Sentinel and every TV news station ran stories about the upcoming meeting in the week leading up to May 1.

- **After the failure (nightmare) of the Curry Ford bike lane experiment, why would we add a bike lane or throttle the road?**
  
  Corrine Drive and Curry Ford Rd are two streets with different contexts. Dedicated bicycling infrastructure was frequently requested by the community during the feedback surveys in Phase 1 and Phase 2. There is an obvious demand for this type of infrastructure by those who live, work, and/or play on Corrine Drive. The temporary, month-long, experiment on Curry Ford Rd. has no correlation to the Recommended Design.

- **Future planning? 3 lanes total?**
  
  The Recommended Design could be adapted a few different ways, but only if there is a significant shift in demand. Any changes would require tradeoffs, such as the removal of a travel lane to add on-street parking or more bicycle and pedestrian facilities. This is explained on page 35 of the report.

- **What are your thoughts on invasive species control the area?**
  
  This is outside MetroPlan Orlando’s authority. It is a local government issue.

- **Who was involved in the study who was not already committed to major changes?**

  Corrine Drive is in disrepair and needs a design that better matches the community’s needs. MetroPlan Orlando started this study with a clean slate to conduct our independent analysis. Each local government supported MetroPlan Orlando’s process to find a design that reflects the community’s needs, local government concerns, and addresses the significant technical deficiencies of the street. During Phase 2, we included a No-Build option as a concept and solicited public feedback. It was poorly received, with only 2.44% of respondents selecting this option.

- **Baldwin Park was approved by having the main artery of Corrine Drive as an important factor especially by the residents of Winter Park and now this artery will reduce to 2 lanes getting to downtown and especially I-4. Please explain your rational for this. Baldwin Park would never been approved reducing traffic to 2 lanes.**

  Baldwin Park, as a Planned Development, was approved with numerous entrance and exit points. Corrine Drive is just one of these points. Prior to Baldwin Park, Corrine Drive’s daily
traffic was approximately 31,000. Today, it is 23,000 and the volume has remained steady for several years.

Only ½ mile of the street between Mills Ave. and Nebraska St. will have two travel lanes, which connects to another two lane street. The design has enough capacity to handle the street’s expected traffic volume.

- What is used to create 2-way cycle track, it is partitioned?

This will be determined during the design phase, but it will have vertical elements to separate cyclists from the sidewalk and the on-street parking.

This question was answered during the Community Meeting Q&A panel. Here is what was said:

“Typically for a two-way cycle track it is a marking about halfway in the full cycle track space. In the instance we have here, it would separate the space we have into two five-foot bike paths. In addition to that there would probably be what we call trail-blazing, with an image of a bike and an arrow indicating the direction of cycle traffic. And between that and the sidewalk there might be a one-foot brick buffer or something that designates the sidewalk as separate from the bicycle track.

If you look on page 20 of your report you see the cycle track, and you will see that there is a buffer between the cycle track and the other facilities, so that offers an additional layer of protection.”

- Regarding section 6: Merritt Park Drive intersections are very dangerous in regards to traffic trying to turn on Corrine Drive either way. Can the traffic light on Leu Gardens be extended to service Merritt Park Dr?

This was presented as a Safety Solution during Phase 2 and received significant negative feedback from the community. It is not part of the final recommendations.

- How do we approach getting changes made between this proposal and the final installation? ie. Maintain lanes east from Mills as opposed to choking down to fewer lanes

Please take the survey by May 31. We will share all feedback with the local governments, who are responsible for implementation. They will lead the design phase, where further refinements to the design will be made.

- What would the health benefits of a more walkable, bikeable, Corrine Drive be when this redesign happens?

Overall, the Corrine Drive area has a lot of positive health-related attributes, but the street’s design does not support physical activity – a key public health intervention. The design features will reduce speed and encourage physical activity, like walking and biking.
Additionally, the safety improvements near the Audubon Park K-8 School make it much easier for kids to walk or bike to school. Physical activity at a young age has educational benefits and establishes long-term positive health behaviors.

Walkable neighborhoods make it easier to reach a destination on foot, contributing to more physical activity opportunities. The Centers for Disease Control and Prevention recommends 30 minutes of physical activity a day for an average person. Please see the Final Report for a health profile that was completed during the study.

Here are two health-specific resources that informed our study process:

FHWA Health in Transportation Corridor Planning Framework:  

Urban Land Institute’s Healthy Corridors Resources:  
https://americas.uli.org/research/centers-initiatives/building-healthy-places-initiative/healthy-corridors/

How was the final design determined – was this truly a community decision?

The recommendations included in the Corrine Drive Plan are a reflection of community input and technical considerations. More than 3,000 people shared their feedback during Phase 1 and 2. While the community’s desires are wide-ranging, it was clear that bicycle and pedestrian facilities – such as sidewalks – were a top priority for the people who live and work in the area and use Corrine Drive.

In Phase 2, MetroPlan Orlando presented six concepts. The six concepts represented various Complete Streets approaches that could be applied to Corrine Drive. Each highlighted the tradeoffs associated with implementation and balancing the multitude of desires in the community. Whether you walk, bike, or use motorized transportation, your travel experience on Corrine Drive should feel safe, and comfortable.

Elements from three of these concepts are in the recommended Corrine Drive redesign. The 5-Lane Concept, 5-Lane Variation, and 3-Lane Concept all included features that were incorporated into MetroPlan Orlando’s recommendation.

List of Features

- 5-Lane Concept: 4 travel lanes between Bennett Rd and Nebraska Street with landscaped medians
- 5-Lane Variation: Shared Use Path on north side between Bennett Rd and Nebraska Street, parallel on-street parking, and a sidewalk on the south side of the street
- 3-Lane Concept: 2 travel lanes between Nebraska Street and Belgrade with landscaped medians, parallel on-street parking and sidewalks on both sides

Street trees and lighting were featured in each of the six concepts and are included in the recommendation. The two-way cycle track between Nebraska and Belgrade was not featured in any of the concepts, but is the best technical option for providing enhanced bicycle connectivity between the Orlando Urban Trail and the dedicated bicycle facilities in Baldwin.
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Park and the city of Winter Park. This two-way cycle track addresses some of the community’s concerns about the design of the bike lanes in the 3-Lane Concept.

- **Can the city choose to create their own plan based on the safety needs of the district?**

  The Recommended Design has the support of each local government – Orange County, the City of Orlando, and the City of Winter Park. It reflects the community’s preferences while addressing Corrine Drive’s significant pedestrian and bicycle safety problems.

- **Has a diagonal crosswalk been considered for Corrine/Winter Park? Similar to South/Orange downtown. All lights are red and all pedestrians can cross at once.**

  This was considered during Phase 2 of the Corrine Drive Study. Ultimately, a raised intersection and a leading pedestrian interval were deemed more appropriate for the Winter Park Rd. intersection.

- **If the metroplan study says 3 lanes between Mills and Forest Ave is sufficient, why does Renzo Nastasi/Orange County refuse to consider making Corrine Drive 3 lanes?**

  The Recommended Design, which includes 3 lanes between Mills and Nebraska, has the support of each local government. This includes Orange County staff and elected officials.

- **Can a raised crossing area be added at Nebraska and Forrest or at the side for school children walking/riding to Audubon School?**

  We are not sure. We will include this request in the feedback that is shared with the local governments, who are responsible for the design phase.

- **How can we stop this horrible, invasive 10’ path from being placed next to my house on Corrine?**

  The Recommended Design has the support of each local government and the elected officials. The path will make it much easier for people to walk and bike as well as for kids to walk or bike to school. The path is in the existing right of way – replacing what is currently a parking or travel lane, not anyone’s front yard.

- **Why don’t you incorporate the parallel parking in front of both plazas into their existing parking lots? Their property did originally extend into the first driving lane of Corrine.**

  The Recommended Design utilizes all available right of way – 80 feet – to provide a safer street design for the area. The on-street parking spots belong to the public, and will be under the authority of the City of Orlando, not private entities.
I have lived here for 22 years and walk everyday. I see very few people walking. In my experience, it is too hot for most and too tiring for many. The 12 foot lane will not get the use you expect and will negatively affect many homeowners. I appreciate encouraging people to walk, but what makes you believe this will help?

Study after study shows that the design of a street affects how people use it. Through each phase, we heard over and over again that the community wanted safe places to walk and bike. The sidewalks, shared use path, and cycle track in the Recommended Design provide these safe places. Critically, these facilities connect to other sidewalks and bicycle lanes, which make them easier to use.

What efforts are being made to prevent homes from flooding with additional concrete to our yards?

Stormwater impacts will be determined during the design phase. Any impacts will require mitigation through techniques like green infrastructure. It was mentioned during the community meeting that some homes are experiencing flooding issues now. Orange County and the City of Orlando are working to address the problem.

This question was answered during the Community Meeting Q&A. Here is what was said:

“From the Orange County perspective, we are aware of a couple of areas where there are issues, and that is something that we will be discussing with City of Orlando, depending on how we move forward with how Corrine Avenue will be improved. So we are aware of those issues, and ultimately as the project moves forward to its final completion, drainage will be part of the process, so any alternations to the pavement that cause more impervious surface, the water has to go somewhere, so drainage will be part and parcel of that design phase at that point, but I know we have some immediate issues that we also have to deal with.”

Why the decision to separate the sidewalk and cycle track on some sections of the road and combine them with a shared use path in other areas?

The two different cross sections reflect the differences in travel characteristics on the street. Significantly more cars use Corrine Drive north of Nebraska than use the street between Mills and Nebraska. This necessitated a different design for the two sections.

The 3 lane section has more space for other things like parking, sidewalks, and a two-way cycle track. The 5-lane section requires more tradeoffs – a shared use path on the north side and on-street parking and a 5 ft. sidewalk on the south side are the only improvements that fit within the existing right of way. That’s why there are two different types of bicycle and pedestrian infrastructure.
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- **Can the pavement be anything other than black? It gets way too hot.**
  
  The pavement is expected to be asphalt, but the City of Orlando and Orange County, as the local governments, make the final determination.

- **Do you have to slow down at raised intersection or is it built for vehicles to maintain speed limit?**
  
  The raised intersections are design features to encourage vehicle travel at 30 mph. That means if you are traveling at 30 mph, you will not need to slow down if you are driving the speed limit. Slowing down or maintaining speed (if the light is green) is dependent on how fast a car is driving.

- **Winter Park put in bike trails by football field. However, many times the people on bikes are back in the street with the cars and not using the bike paths. Can they be fined for doing so?**
  
  Under Florida law, bicyclists are allowed to ride in the street and motorists are required to share the road. Cyclists are not required to use dedicated cycling facilities.

- **What is going to happen to the current sidewalk on Corrine. Will it get wider?**
  
  The existing sidewalks will be replaced with new ones compliant with the Americans with Disabilities Act and at least 5 feet wide.

- **The video advertised that the new shared use path will connect to the Orlando Urban Trail. Where will that connection be? Or will there be a gap?**
  
  The connection will occur just west of the Mills intersection. There is a wide sidewalk and sharrows for a couple hundred feet on Virginia, just west of Mills Ave. that provides space for a bicyclist to connect from the shared use path at the Mills intersection to the Orlando Urban Trail.

- **How does the safety on Corrine compare with other 5-lane roads in Orlando?**
  
  MetroPlan Orlando analyzed multiple types of data to assess Corrine Drive’s transportation safety problems. Each road – in the region, rural or urban – needs to be assessed by its own characteristics and surrounding environment. For Corrine Drive, we looked at vehicle, bicycle, and pedestrian crash data from 2011-2016 (data analyzed in 2017). We also analyzed speed data, and the condition of the street – presence (or lack thereof) of pedestrian and bicycle facilities. This objective data analysis identified safety problems on the street. This is presented in the Existing Conditions report.
  
  Perception is a key element to safety as well. During the Phase 1 Public Opinion Survey, most of the 1,705 people who responded said they felt unsafe walking or biking on Corrine Drive.
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The opinions shared were overwhelmingly that Corrine Drive is unsafe. The survey results are in the Phase 1 Community Survey Report.

- *Since the study showed 75% of cars speeding, could the city go ahead and enforce the speed limit immediately?*

  The Orlando Police Department has conducted speed enforcement several times. The most recent is January 2019. We have engaged OPD throughout the study. Additionally, OPD often places the speed limit trailers on Corrine Drive to notify drivers how fast they are going. These are usually in place for a week at a time, sometimes two weeks at a time.

  This recommended design includes features that encourage a driver to go 30mph - what is called the design speed. Design speed and its physical features are the best way to improve safety on the street. This is more effective and fiscally responsible than issuing speeding tickets.

- *Why are Nebraska and Falcon Dr – Chelsea to Bumby not included in the bike pathing?*

  Nebraska – Falcon Dr. – Chelsea to Bumby are included as bike boulevards on page 33 of the report.

- *Why isn’t the silly giant sidewalk on the south side of the street? And why is it so darn big?*

  The south side of Corrine Drive has a 5 or 6 foot sidewalk, depending on the section. There is a shared use path on the north side between Nebraska and Bennett. The north side has fewer driveways and less of an impact on on-street parking. It is 12’ wide to be shared by people who want to walk and bike.

- *As submitted the next phases would be data modeling, to consider options. How do we get that phase funded so we can all actually see the data for ourselves about how traffic flows will change?*

  The next phase is for a local government to become the implementing partner. This will be followed by finding the funds for design and construction, the design and construction itself. All data, including traffic modeling, is available on the study website:  
  [www.corrinedrivestudy.org](http://www.corrinedrivestudy.org)

- *Why not split the difference on both sides of Corrine creating an equal width path on both North and south side of Corrine Drive? i.e. 5 foot path on each side*

  At the beginning of the study, MetroPlan Orlando committed to only use the street’s existing 80’ of right of way. This is due to the complex history associated with the street’s widening in the 1960s. It is not feasible to have a shared use path on both sides of the street. These paths should be at least 12 feet if they include bi-directional bicycle traffic. If a protected
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bicycle lane and a sidewalk are included on both sides, all on-street parking or a travel lane would need to be removed between Nebraska St. to Bennett Rd.

- Will this new design with narrower lanes, keep car carriers, semis, and gasoline semis off Virginia – Forest- Corrine? Although this is supposed to be a no trucks zone, there are many of them...especially late at night.

MetroPlan Orlando cannot control the type of vehicle that uses Corrine Drive. This belongs to the City of Orlando.

- Speeding primary cause of accidents? Solution narrow lanes and reduced lanes?? I foresee more frustration – speeding – accidents!

289 crashes occurred directly on Corrine Drive from 2011 to 2016. The majority of these crashes were rear-end collisions and sideswipes. These types of crashes are associated with the high speeds of vehicles.

- What obligation is there to implement landscaping with approach 1?

Each implementation option includes the landscaping proposed in the Recommended Design. The full landscaping details will be determined during the design phase.

- Raised intersection at Bumby? What was the reasoning behind not raising the intersection at Bumby?

The Recommended Design makes the Corrine Drive- Bumby Ave. intersection look more like an intersection. This is in contrast with today. A 3rd raised intersection would be tough to do, especially so close to the curve and mid-block crossing. There is potential for one to be added during the design phase.

- There will be only 2 driving lanes?

There will be four driving lanes for the majority of the street – the 1.5 miles between Nebraska and Bennett. There will be 2 driving lanes between Belgrade and Nebraska. A median with specific locations for left turns is present for the entire 2 miles.

- Why is Metroplan still using traffic counts from 2016 (23,000) when in 2017 Orange County counts showed increase to 25,000 about 6 ½ years of 1.5% growth?

MetroPlan Orlando conducted its own traffic counts in May 2017. This was necessary to conduct our independent analysis of how to improve transportation options on the street. We conducted volume, vehicle class, and speed counts. Orange County conducts volume counts every year. These counts show stable volume counts since 2005.
• Who will maintain all the medians? No one does now, who will maintain trees and bump outs on south side of street?

  The City of Orlando is responsible for the street’s maintenance, per the existing interlocal agreement. A new agreement or ownership transfer is required to implement the design that would be the final determination of maintenance responsibilities.

• 16,000, as the number of residents using this road? Where did the number of residents affect come from? Did you consider all the residents of Baldwin Park, Merritt Park, Audubon Park, and the south side of Winter Park?

  16,000 is the approximate number of cars who drive on the section of Virginia Dr. from Mills Ave. to Nebraska St. About 15,000 people live in the study area – about 4 square miles surrounding Corrine Drive.

Palmers

• When there is a delivery at Palmers, what happens to traffic on the north side of Corrine?

  Palmer’s Nursery regularly (almost daily) has semis completely block the median to deliver plants. They use their forklift moving plants from a home they own on Corrine as “plant depot” running up and down the street. They will lose parking spaces in front of their business for customers. The city has allowed them to expand greatly. What will happen to them?

  We expect deliveries at Palmers will be similar to today. The Recommended Design is still several years from construction. During the construction period, the City of Orlando can work with Palmers on potential freight delivery strategies.

Pedestrian Crossings

• Do you think that these red lights hybrid crossing stations may significantly delay and unnecessarily delay vehicular progression once pedestrians have crossed, versus more traditional flashing yellow signs that are still button activated?

• How will the pedestrian light work if pedestrian traffic rising to levels where pedestrians are always trying to cross. Couldn’t this lock traffic or make it worse?

• Cross walk in front of Redlight to a deplilated building? Tenants okay with losing 3 entrances?

  The pedestrian hybrid beacons are recommended signals for Corrine Drive’s traffic volumes and travel speeds. These lights facilitate safe pedestrian movements, providing more protection from cars than a Rectangular Rapid Flashing Beacon (RRFB).

  The operations analysis do not factor the mid-block pedestrian crossings into the analysis. We expect more pedestrian crossings to be in the evenings and on weekends, based the existing conditions analysis in Phase 1. The operations analysis only reflects rush hour drive
times. On average, we do not anticipate significant delay due to the presence of the crossings. It is possible, though, that your drive could, on occasion, be longer if there is a lot of pedestrian activity. Without these signals in use, it is impossible to make that determination at the moment.

The exact type of signal will be determined during the Design phase. If it is to be a High-Intensity Activated Crosswalk (HAWK), the red light acts as a 4-way stop if a person is not crossing the street. This Youtube video shows how a HAWK works: https://www.youtube.com/watch?v=Ay4UPCwIi7A

Timeline

- How far out is the time before any work would begin? How many years out?
- Do you recommend Option 1 or Option 2? Do you consider the economy (i.e. future recession) to be a risk of option 2 in which a downturn could cause the project to not get done versus the quicker Option 1?
- When will the improvements be complete?

We do not have a definitive timeline for implementing the Recommended Design. Several things need to occur first. A local government, likely the City of Orlando, needs to be the implementing partner. Then, we need to find the funds for Design and Construction.

The timing and availability of the funds will determine the implementation schedule. The implementation options will be chosen by the local governments. MetroPlan Orlando recommends Option 1 or Option 2, but it is at the discretion of the local government to choose their next steps.

Traffic Operations/Travel Times

- Do your future models represent the large increase in large SUV use that we are experiencing today?
- How well do you models represent the current traffic jams?
- How can the travel time from Mills to Bennett be similar to today when there will be more vehicles, less number of lanes (less capacity), and improvements that will lower the speeds of the vehicles? Does this lack common sense?
- How much of a delay in commute is caused by the transition from 5 to 3 lanes (at Leu Gardens)?
- How did you come up with the 7-8 minute projected travel time?
- You stated that the new 3-lane design can handle the traffic, but it is already backed up to Nebraska from Mills Ave to Nebraska at rush hour. How is this possible? Also, have you taken into consideration the increased traffic expected over time?
- Given the recent Curry Ford Road diet study over ½ mile of another E/W artery, which showed 5 minutes of delay over ½ mile, how can you estimate 7-8 minutes driving from Mills to Bennett?
- During the PM peak, east bound traffic on Virginia west of Mills gets congested daily. What would convince a naysayer that a road diet wont have the same effect east of Mills?
- Travel time Mills to Bennett 7-8 minutes – “very similar to what it is today”. What is it today?
How much time will be added to inbound and outbound school bus ride times caused by narrowing of Virginia from Mills to Nebraska?

The Intersection Delay table does not include the two proposed pedestrian signals, near Old Winter Park Road. (3 signals within approximately 800 feet) Have the impacts of these two intersections been included in the analysis? If the numbers in the design column do not include the total delay on Corrine, can you provide me a “worst case” delay value....when pedestrians/bicyclists will actuate the proposed signals?

One improvement noted was a leading walk pedestrian timing at each intersection. How does the increased cycle length factor into the analysis to create the delay numbers in the table?

From the attached Intersection Delay table, the afternoon peak delay....in the peak direction....at Corrine/General Rees will significantly reduce to a LOS A condition (3.7 sec. delay). Is it realistic to think that adding 75 feet or so (3 cars) to the left turn lane storage will reduce the total approach delay 25 seconds? This 25 second reduction in intersection delay, over existing, enables MetroPlan to state that corridor delay will actually be less in the future. With all the improvements that will increase intersection delay, does MetroPlan want to claim that an additional 75 feet of left turn storage at one intersection.....will be the solution to combat this?

By your own admission, "narrower lane widths, roadside landscaping, raised intersections and curb extensions all reduce traffic speed". How or do these safety improvement get incorporated into the overall corridor total delay numbers shown in the table?

MetroPlan Orlando conducted a thorough traffic operations analysis for the Corrine Drive planning study. Kittleson and Associates was hired to conduct this analysis during each phase of the study. This analysis revealed that the time it takes one to travel the entire 2 miles from Mills to Bennett today is 6.4-7.5 minutes, if one is traveling the speed limit. With the Recommended Design, the analysis resulted in a travel time of 6.5-7.5 minutes for the 2 miles, if one is traveling at the speed limit.

The traffic operations analysis was performed using Synchro, a commonly used traffic analysis and optimization software. It utilizes the Highway Capacity Manual, 6th Edition. Local municipalities – in this case, Orange County – maintain base files with their network (or system) of streets. To conduct a traffic operations analysis, additional data relevant to a particular street or area is added to the base files.

The operations analysis do not factor the mid-block pedestrian crossings into the analysis. We expect more pedestrian crossings to be in the evenings and on weekends, based the existing conditions analysis in Phase 1. The operations analysis only reflects rush hour drive times. On average, we do not anticipate significant delay due to the presence of the crossings. It is possible, though, that your drive could, on occasion, be longer if there is a lot of pedestrian activity. Without these signals in use, it is impossible to make that determination at the moment.

Here are the steps we took to conduct the traffic operations for the Corrine Drive Study:

**Phase 1:**

1. Obtained Orange County’s existing Synchro files, which are the established base for analyzing traffic operations. This is the same base used for every traffic operations analysis in the county.
2. Performed quality assurance to ensure signal timings and speed limits were correct.
3. Analyzed data from the Orange County historical traffic count program, counts collected by MetroPlan Orlando in May 2017, and the turning movement count numbers from May 2017. The traffic counts and turning movement counts enable Synchro to determine how many cars can pass through each of the traffic signals.
4. Input traffic count data into the existing Synchro files.
5. Ran Synchro and its SimTraffic extension to determine the intersection level of service and travel times for Corrine Drive today. This analysis can be found at CorrineDriveStudy.org under Phase 1: Corrine Drive’s Transportation Story in Data, Images & Video.
6. Input growth rate for each segment of Corrine Drive between Mills Avenue and Bennett Road. The growth rate between Mills and Winter Park Road is 1.5%. It is 1% between Winter Park Road and Bennett.
7. Ran Synchro and its SimTraffic extension to determine the intersection level of service and travel times in the year 2040 if no changes are made. This analysis can be found at www.corrinedrivestudy.org.
8. Sent analysis to Orange County and the City of Orlando for review and validation of results. Each government independently reviewed and supported the analysis.

Phase 2:

1) Once the potential concepts were identified, MetroPlan Orlando determined the variables within each concept that affected traffic operations. At the beginning of this phase, we made the decision to not include the growth rate in our analysis. This is due to the relatively stable traffic volumes on the street for the last decade.
2) Changed the identified variables for each design concept, and ran Synchro and its SimTraffic extension for each concept.
3) Sent analysis to Orange County and the City of Orlando for review and validation of results. Each government independently reviewed and supported the analysis.

Phase 3:

1) Once the Phase 2 concepts were refined into the Recommended Design, MetroPlan Orlando determined the variables within each concept that affected traffic operations. Just like in Phase 2, MetroPlan Orlando made the decision to not use the growth rate during the operations analysis because of the stable traffic volumes.
2) Changed the identified variables, and ran Synchro and its SimTraffic extension for the Recommended Design. During this step, the decision was made to optimize particular intersections to improve their operational efficiency. Details on this are included in the table on page 18. These intersections were optimized:
   a. Forest & Nebraska
   b. Winter Park & Corrine
   c. General Rees & Corrine
   d. Bennett & Corrine
3) Sent analysis to Orange County and the City of Orlando for review and validation of results. Each government independently reviewed and supported the analysis.
The operations analysis for each phase can be found on www.corrinedrivestudy.org. The Final Report’s Appendix includes the traffic operations analysis for the Recommended Design.

List of Optimized Intersections and their Optimization Improvements

<table>
<thead>
<tr>
<th>Intersection</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forest &amp; Nebraska</td>
<td>Optimized to favor Forest Ave in the morning, and left turns from Nebraska onto Forest in the afternoon</td>
</tr>
<tr>
<td>Winter Park &amp; Corrine</td>
<td>Optimized to favor Corrine Drive</td>
</tr>
<tr>
<td>General Rees &amp; Corrine</td>
<td>Morning: optimized to favor right turns from General Rees onto Corrine; Afternoon: optimized to favor left turns onto General Rees from Corrine</td>
</tr>
<tr>
<td>Bennett &amp; Corrine</td>
<td>Morning: optimized to favor turns from Bennett onto Corrine; Afternoon: optimized to favor greater westbound traffic for entire 2 miles</td>
</tr>
</tbody>
</table>

The design features encourage cars to travel at a speed of 30mph or less. The addition of the safety improvements does not affect the current travel times, if one is traveling the speed limit.

A key determinant for travel time in a corridor is the time one spends stopped at a red light – what is known as intersection delay. Here is a chart of the delays one can expect at each intersection with the Recommended Design vs. with the existing design.
## Intersection Delays between Mills and Bennett

*measured in seconds

**Morning (7:30-8:30am)**

<table>
<thead>
<tr>
<th>Intersection</th>
<th>Eastbound</th>
<th>Westbound (Peak Direction)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Existing</td>
<td>Recommended</td>
</tr>
<tr>
<td>Mills Ave - Virginia Dr</td>
<td>57.8</td>
<td>61.5</td>
</tr>
<tr>
<td>Fern Creek Ave - Virginia Dr</td>
<td>7.3</td>
<td>8.3</td>
</tr>
<tr>
<td>Forest Ave - Nebraska St</td>
<td>5.1</td>
<td>5.2</td>
</tr>
<tr>
<td>Forest Ave - Corrine Dr</td>
<td>1.9</td>
<td>1.5</td>
</tr>
<tr>
<td>Bumby Ave - Corrine Dr</td>
<td>10.5</td>
<td>9.7</td>
</tr>
<tr>
<td>Winter Park Rd - Corrine Dr</td>
<td>6.7</td>
<td>13.3</td>
</tr>
<tr>
<td>Corrine Dr - General Rees Ave</td>
<td>3.8</td>
<td>8.4</td>
</tr>
<tr>
<td>Bennett Rd - Corrine Dr</td>
<td>1.7</td>
<td>4.6</td>
</tr>
<tr>
<td><strong>Total Delay on Corrine Dr</strong></td>
<td><strong>94.8</strong></td>
<td><strong>112.5</strong></td>
</tr>
</tbody>
</table>

**Afternoon (5-6pm)**

<table>
<thead>
<tr>
<th>Intersection</th>
<th>Eastbound (Peak Direction)</th>
<th>Westbound</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Existing</td>
<td>Recommended</td>
</tr>
<tr>
<td>Mills Ave - Virginia Dr</td>
<td>74.3</td>
<td>87.9</td>
</tr>
<tr>
<td>Fern Creek Ave - Virginia Dr</td>
<td>7.9</td>
<td>12</td>
</tr>
<tr>
<td>Forest Ave - Nebraska St</td>
<td>11.3</td>
<td>13.9</td>
</tr>
<tr>
<td>Forest Ave - Corrine Dr</td>
<td>3.1</td>
<td>3.1</td>
</tr>
<tr>
<td>Bumby Ave - Corrine Dr</td>
<td>26.1</td>
<td>24.8</td>
</tr>
<tr>
<td>Winter Park Rd - Corrine Dr</td>
<td>35.2</td>
<td>28.8</td>
</tr>
<tr>
<td>Corrine Dr - General Rees Ave</td>
<td>29.2</td>
<td>3.7</td>
</tr>
<tr>
<td>Bennett Rd - Corrine Dr</td>
<td>1.7</td>
<td>13.3</td>
</tr>
<tr>
<td><strong>Total Delay on Corrine Dr</strong></td>
<td><strong>188.8</strong></td>
<td><strong>187.5</strong></td>
</tr>
</tbody>
</table>
Corrine Drive Study – Answers to Community Questions Part 2

Traffic Volumes/Mitigating Traffic Impacts

- After creating a choke point, how will you be handling the safety of children on our side streets?
- How well do you models represent the current traffic jams?
- The intersection operational analysis show that the level of service in the PM peak hour is no worse than LOS C. There is no way that this is correct. No roadway capacity improvements are proposed so the level of service over time is only going to get worse. Can we keep or maintain roadway capacity yet implement safety improvements?
- The traffic study was completed in the summer of 2017. Why was a study completed at the least busy traffic volume in the entire year? Since the summer of 2017, 4 major senior living and apartment complexes have been built in Baldwin Park and we have added a new school. How do you explain reducing 2 lanes at Leu Gardens with the added volume of cars and traffic?
- Traffic backs up at peak times (its currently bad now). How are you mitigating that? Why not a curvilinear study [design]?
- How much has the speed of traffic been taken into consideration and has the safety of similar roads which have had a road diet performed been compared with the safety of Corrine Drive? Ex. Crash vs fatality data of Edgewater vs Corrine
- During the PM peak, east bound traffic on Virginia west of Mills gets congested daily. What would convince a naysayer that a road diet wont have the same effect east of Mills?

The Recommended Design makes Corrine Drive a Complete Street, which means it supports transportation options for all ages and abilities. A key part of Complete Streets is to make sure a street can support expected traffic volumes in a safe way. This is equal to ensuring that street makes walking, biking, and using transit the easiest choice.

Different segments of Corrine Drive have different amounts of cars that use the street daily. The design’s two different segments (a 5-Lane and a 3-Lane) have the amount of travel lanes (2 in each direction or 1 in each direction) that matches what is recommended for that segment’s traffic volume. For a segment with less than 20,000 (like Mills to Nebraska), one travel lane in each direction with a turn lane is sufficient to ensure smooth and safe traffic flow.

This ½ mile segment between Mills continues the similar travel lane design that exists of Mills Ave. This design does not create choke points, nor will it increase congestion. Simply, it’s a street design for today, correcting past decisions that are no longer relevant for today.

Transit

- Where are the 3 bus stations? Will there be a pull over area or will buses stop on main road?
- Why are there no bus stop bays so they can pull out of traffic?

Two LYNX routes currently operate on Corrine Drive, stopping at several locations. But there are very few transit riders in the area. The exact location of future LYNX routes and stops will be determined by LYNX as construction nears an end, several years from now. We expect the stops will be at bulbouts, which will be designed to accommodate increased transit usage.
Trees

- Can you double the number of trees (to 600)? That would make the design very special! Shade Shade Shade!
- How will the proposed additional trees and shrubbery enhance the community as a wildlife habitat community?
- How do trees provide safety?
- Can you please prioritize native plants and trees for 100% of trees?
- How are planted trees on the south side of Corrine (between Bumby and Winter Park Rd) going to interact with the overhead power lines? We don’t want “donut holes” cut into the mature canopy

Trees and landscaping are an important element to a Complete Street. The Recommended Design allocates as much space to trees as is feasible. The City of Orlando determine the exact type of tree that will be planted. The City also works with OUC regarding utilities and the maintenance of trees. Audubon Park became a wildlife habitat community very recently. MetroPlan Orlando has not conducted analysis to determine the impacts of this designation on the Corrine Drive Recommended Design.

Whose Needs Get Priority?

- Does the study consider the necessities of residents of each side of Corrine Drive?
- Did the study give priority to the necessities of Corrine Drive residents, more than other neighborhoods?
- It is my understanding that the City of Orlando specifically designed all the streets in Baldwin Park with narrow meandering streets with lots of trees to naturally slow traffic down and it clearly works. Baldwin Park benefitted – yet the very existence of all the traffic that neighborhood generated negatively impact Corrine Drive. Why was Corrine ignored completely during that project? Why are residents of Baldwin Park given greater weight that folks that live on and around Corrine?

The study considered the needs of all who use Corrine Drive – including residents, visitors, and commuters. More than 15,000 people live in the study area and more than 23,000 people use a portion of Corrine Drive daily. MetroPlan Orlando considered the diverse, and occasionally, divisive viewpoints of each equally. Baldwin Park – as a neighborhood – has changed trip patterns, but not increased traffic on the street. Trips are now more evenly spread across the day, instead of concentrated during rush hour.
Corrine Drive Study – Answers to Community Questions Part 2

Traffic Count Maps

**Total Number of Cars Per Day**

<table>
<thead>
<tr>
<th>Segment</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Virginia Drive between Mills and Forest</td>
<td>15,800-16,600</td>
</tr>
<tr>
<td>Forest between Virginia and Nebraska</td>
<td>12,800</td>
</tr>
<tr>
<td>Forest at the Leu Gardens curve</td>
<td>20,164</td>
</tr>
<tr>
<td>Corrine Drive between Bumby and General Rees</td>
<td>23,000</td>
</tr>
<tr>
<td>Nebraska Avenue</td>
<td>8,400</td>
</tr>
<tr>
<td>Bumby Avenue</td>
<td>5,785</td>
</tr>
</tbody>
</table>

**Cars During the Morning Rush (7-9am) Westbound (Peak Direction)**

<table>
<thead>
<tr>
<th>Segment</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrine Drive between Bumby and General Rees</td>
<td>2,594</td>
</tr>
<tr>
<td>Bumby (south of Corrine)</td>
<td>290</td>
</tr>
<tr>
<td>Forest (north of Nebraska)</td>
<td>1,371</td>
</tr>
<tr>
<td>Nebraska (west of Forest Ave)</td>
<td>676</td>
</tr>
<tr>
<td>Virginia Drive between Mills and Forest</td>
<td>984-1,092</td>
</tr>
</tbody>
</table>

[Map of traffic counts]
Cars During the Evening Rush (4-6pm)
Eastbound (Peak Direction)

<table>
<thead>
<tr>
<th>Segment</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Virginia Drive between Mills and Forest</td>
<td>948-1,044</td>
</tr>
<tr>
<td>Nebraska (west of Forest Ave.)</td>
<td>811</td>
</tr>
<tr>
<td>Forest (north of Nebraska)</td>
<td>2,133</td>
</tr>
<tr>
<td>Bumby (south of Corrine)</td>
<td>562</td>
</tr>
<tr>
<td>Corrine Drive (between Bumby and General Rees)</td>
<td>2,600</td>
</tr>
</tbody>
</table>