### **CONGESTION MANAGEMENT COMMITTEE of the** COLLIER METROPOLITAN PLANNING ORGANIZATION

January 19, 2022 2:00 p.m. **Meeting Minutes** 

## 1. Call to Order

Mr. Khawaja called the meeting to order at 2:03 p.m.

## 2. Roll Call

Ms. Bates called the roll and confirmed a quorum was present in the room.

## **CMC Members Present In-Person**

Tony Khawaja, Chairman, Collier County Traffic Operations Omar DeLeon, County Public Transportation & Neighborhood Enhancement (PTNE) Karen Homiak, CAC Representative Michael Tisch, County Transportation Planning Don Scott, Lee MPO Dave Rivera, City of Naples

<u>CMC Members Absent</u> Dr. Mort Friedman, BPAC Representative Allison Bickett, City of Naples Dan Summers, County Emergency Management John Kasten, Collier County Public Schools Tim Pinter, City of Marco Island

## **MPO Staff**

Brandy Otero, Principal Planner Scott Philips, Principal Planner Danielle Bates, Administrative Assistant

#### **Others Present**

Lorraine Lantz, County Transportation Planning Ian, Debnam, Benesch/Tindale-Oliver & Associates, Inc Wally Blain, Benesch/Tindale-Oliver & Associates, Inc (virtually)

## 3. Approval of the Agenda

Mr. Rivera moved to approve the agenda. Ms. Homiak seconded. Carried unanimously.

# 4. Approval of the September 15, 2021 Meeting Minutes.

Mr. Khawaja: Don Scott was here but was listed as present and absent, Mort Friedman was not listed and was absent.

*Ms. Homiak* moved to approve the September 15, 2021 minutes with revisions. *Mr. Rivera* seconded. Carried unanimously.

#### 5. Public Comments for Items not on the Agenda

None.

6. Agency Updates

## A. FDOT

None.

## **B. MPO Executive Director**

None.

#### C. Other Agencies

**Mr. Rivera:** For the City of Naples, the director has left, in his place is Andy Holland in the interim, and Allison Bickett will be the deputy director.

**Mr. Tisch:** For Collier County, Florida Department of Transportation (FDOT) sent funding information for Fiscal Year (FY) 2023 projects to the county, including Pierre Beauvoir in Traffic Ops, for one sidewalk and one school light flashers and one IT project. Currently processing some paperwork to begin those.

**Ms. Lantz:** The Wilson Boulevard Widening from Immokalee to Golden Gate Boulevard is going to the Board of County Commissioners (BCC) on January 25. The conceptual study will transition into design quickly, and we will be handing it over asap.

## 7. Committee Action

## A. Elect Chair and Vice Chair

*Mr. Rivera* moved to keep Mr. Khawaja as Chair and Mr. Pinter as Vice-Chair. *Ms. Homiak* seconded. Carried unanimously.

## B. Endorse 2022 Congestion Management Process Update

**Ms. Otero:** The CMC adopted a report last year as part of the Congestion Management Process (CMP), this will fold that report into CMP.

**Mr. Debnam:** Presented the <u>Congestion Management Process Update</u>. Benesch, formally Tindale Oliver but they recently merged, it's the same people with a different name. <u>The CMP Update process started in December 2021</u> and will wrap up with Board Approval in September 2022. A CMP is guided by an 8-step framework from FHWA. There are three main components: 1) update the CMP document, 2) evaluate congested corridors and come back in March with a draft and in July with public friendly fact sheets, 3) county wide origin and destination study further down the road. The methodology will be brought to the committee in May with results in July, you will be able to comment in July. It was last updated in 2017, it will incorporate analysis for 2020, and include several new items: objectives, strategies, and evaluation criteria. The document will be reorganized to match the 8 step process and will be more user friendly. <u>The flowchart shows the process and will be in the document</u>. <u>Steps 1</u> through 8 <u>are meant to be a cycle, however the process doesn't always restart at 1 after 8. Asking for approval and feedback.</u>

Mr. Khawaja: Mr. Scott, do you have something like this?

**Mr. Scott:** We had a lot of criteria and did a state of the system report. Last time we did a Transportation Systems Management and Operations (TSMO) plan. SR 78 was identified and we're looking for improvements in that corridor. TSMO was similar.

Mr. Khawaja: You're going to evaluate whole network, what and how?

**Mr. Debnam:** It was done in the 2020 baseline condition report, the analysis looked at existing plus planned projects to 2023, to see how people experience congestions based on criteria. It will be revisited periodically to readdress congestion and incorporate programmed projects to address congestion and the use of performance measures to determine how it addresses congestion concerns and whether they need to be revisited. The evaluation is similar to LRTP modeling for future conditions and compared to baseline conditions.

Mr. Khawaja: What are you looking for from the committee?

**Mr. Debnam:** Looking for an endorsement of the draft, any changes. It's new in the way it's packaged but it's not new information. Everything from the previous baseline conditions and Transportation System Performance Report (TSPR) has been incorporated in the 2017 version. It's just integrated with previous CMPs.

**Mr. DeLeon:** The next stage, when you're looking at strategies, Table <u>6.2 is silved based</u> on mode, but when you're looking at evaluating strategies are you looking at different layers and modes, looking at pedestrians, single occupancy vehicles, and transit?

**Mr. Debnam:** Everything is on the table; those can be revisited if new strategies become popular or are recommended by federal or state governments. What's in there is a little of both, some is based on mode like transit, some spans multiple modes like safety. It's organized to do it in different ways, the key recommended strategies likely won't change much like transit vouchers or improved safety on sidewalks those might be put in a different category but looking at them individually they're well represented.

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**Mr. Blaine:** We asked questions about how the MPO is doing it, their using TSMO which uses those strategies, your process allows you to bring things forward every year or funding cycle. The framework here is saying we've looked at areas of congestion and identified many potential strategies in different modes too. Gives you the opportunity to look at strategies for hot spots as projects move through the CMC prioritization process.

**Mr. Debnam:** A good example is schools, there's a segment of strategies for areas with school traffic so if that applied to that corridor you could go to that section.

Mr. Khawaja: They can't store the demand for schools, they use roads to do that.

Ms. Homiak moved to endorse 2022 Congestion Management Process Update. Mr. DeLeon seconded. Carried unanimously.

## C. Endorse Congested Corridors Evaluation Methodology

**Mr. Debnam:** Presented the <u>Congested Corridors Evaluation Methodology</u>. There are the Tier 1 and Tier 2 Congested Corridors that came from <u>the</u> TSPR, these are the worst congested corridors based on analysis. These are the corridors that we will use existing data and sources to analyze conditions and congestion to see what's going wrong or causing congestion. The result is going to be 10 fact sheets that overview the top 10 congestion corridor. We had 15 corridors from Tier 1 and Tier 2 from the last process, so we consolidated the corridors <u>using segments</u> <u>located</u> on the same road. The best example is Immokalee Road, it had several segments but is now corridor 6. As we're doing analysis, we may need to look at the <u>corridor</u> segments <u>separately as</u> there could be different <u>issues creating congestion</u>, <u>however</u>, <u>we will</u> explain the <u>issues in a single</u> fact sheet for each corridor. They all touch end to end so it doesn't make sense to do one and not the other.

Mr. Khawaja: These 10 covered all 15?

Mr. Debnam: Yes

Mr. Rivera: Are they prioritized?

**Mr. Debnam:** They are not prioritized beyond Tiers 1, 2, and 3, they aren't ranked. Behind the scenes the main data source backbone is Regional Integrated Transportation Information System (RITIS) and Replica and use FDOT for supplementary data for roadway characteristics. The RITIS platform has been developed by the University of Maryland and works by feeding speed data from private vendors to allow users to look and use as an analysis tool with different outputs (graphs, tables, timelapse, etc.).

Mr. Khawaja: Does Benesch have license or FDOT?

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**Mr. Debnam:** FDOT has RITIS <u>and holds the license to provide</u> access to <u>each</u> district and MPQ, Replica is private and requires a subscription, <u>and</u> Benesch has <u>a Replica</u> <u>subscription</u>, <u>Replica's data is</u> only available through a consulting contract.

Ms. Otero: Anne granted them [Benesch] access to RITIS as our consultant.

**Mr. Debnam:** It's kind of confusing but basically the Project Manager at an agency sends an email vouching for the consultant.

**Mr. Rivera:** FDOT showed City of Naples and it showed certain sections of road were congestion but on the live cameras it wasn't congested.

**Mr. Debnam:** There could be reasons why it isn't accurate, it is transparent about that. Replica gives you a percentage of accuracy based on data sources. Rural areas with <u>fewer</u> signals may be less accurate, but a busy arterial in major area would have more activity to read and is more accurate. There's a learning curve to know when it's reliable versus when to take a second look. It's near real time data, it's not using three year old data, some is as recent as last week. We can use historic information for patterns. There's lots of flexible options, the proposed option is to use 2021 data. We were struggling with pre-COVID versus during COVID. 2019 was the last normal year, but now things are returning to more normal than 2020 and recency is more valuable.

Mr. Khawaja: Did you compare the two to see it?

**Mr. Debnam:** Some tools make it quick to snapshot, it's hard to do a full look, but preliminarily we can look at a couple indicators.

Mr. Khawaja: Do you look at speed?

**Mr. Debnam:** Yes. RITIS and Replica let us look at the time of day for peak travel times and days of the week, and time of the year for season and visitors etc. We're planning to do more detail about data sources. RITIS has the average travel time, congestion percentage, and <u>vehicle</u> speeds to see how the road is performing. We want to relay this in a way that's easy to understand for the public, <u>vehicle</u> speed is easy to understand. For example: at 5 pm the average speed is 36 mph versus 46 mph at other times, that is easier to understand. We can look at bottleneck data, traffic queues, length of queues, estimated number of cars, delay time, purpose of trips, recreational mode information, bike ped info, etc.

Mr. Khawaja: How?

**Mr. Debnam:** Different sources, it's not forthright but would they probably give it if asked, A lot is from cell phone apps, Replica does economic factors, jobs, industry lots of census information.

Mr. Khawaja: Do they track you like going to Publix?

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**Mr. Scott:** They probably searches in Publix. If you're going to place for 8 hours, it's probably work.

Mr. Debnam: I don't know the algorithms.

**Ms. Homiak:** I got a report from my Google phone of where I went all last year and miles and how long I spent there.

**Mr. Khawaja:** Google tracks everything, <u>with data coming from phones and cars. The</u> only thing missing is volume.

**Mr. Debnam:** RITIS is not the best with volume, it does speed and performance, but not the number of vehicles. We rely on an agency like FDOT or the planning department to feed them volume data. They [<u>RITIS</u>] put an assumption <u>factor</u>, but <u>include a</u> disclaimer that if an agency has more accurate data to send it. If you do traffic counts send <u>them</u> our way <u>so we may</u> Joad them into RITIS.

Mr. Khawaja: Mr. Blain has access to our traffic counts.

Mr. Scott: StreetLight does the same.

Mr. Khawaja: That's expensive and they massage the data.

**Mr. Debnam:** Traffic volumes are great for predicting and making statements about congestion, but we do not want to include a lot of volume information on the public factsheets, but the information is helpful to us. We lean toward providing speed and travel time information for members of the public.

Mr. Scott: It's still acceptable levels of service, which people hate to hear.

Mr. Debnam: It's typical for arterial roads.

Mr. Khawaja: Is this a corridor or a point? How do you do it?

**Mr. Debnam:** You can define the segment length, this is a segment, it's usually divided at major intersections.

**Mr. Blain:** I remember doing a System Performance Report with 6-month access to data, one of those observation is similar: Immokalee Road east of 951 as traffic comes in from the east but looking at that stretch to Wilson Boulevard or Oil Well Road the averages are high because of conditions, intersection congestion, travel speed. This doesn't dip below failing. The bottleneck tool pinpoints point level congestion.

**Mr. Khawaja:** We will need a graph of the whole road, to see smoothness, delays, drops etc to know what kind of delays or bottleneck spots.

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Mr. Scott: RITIS is better now, but there could be an incident out there or wrong data. Mr. Khawaja: That's the same as google. Mr. Debnam: Looking at an extended time period helps, one incident could skew the data, and there are pitfalls if the roadway is under construction. Deleted: but Mr. Khawaja: He's talking about real time, Mr. Debnam: RITIS is used by Traffic Operations. Mr. Khawaja: Sometimes it's not bad, you must understand data. Mr. Debnam: You can display different metrics with different colors. A lot of times its green (good) for the whole day, you can see what time the congestion starts and ends. Visuals help with patterns. You can export the data into Excel, and it is color coded. Replica is not as visual, it does provide data that can be transposed into a graph. We're looking for the committee Deleted: give to endorse this. Mr. Khawaja: We need someone to explain RITIS Ms. Otero: We talked about someone from FDOT to come in, but we didn't have time, we will follow up. Mr. Khawaja: Give us examples, it could help everyone: operations, planning, transit. Mr. Scott: If you asked me before this meeting about the average travel length on Airport Road north of Pine Ridge Road, I don't think I'd say 12 miles, it disproves our impact fees, that's a long trip. Mr. Debnam: These slides are Frankensteined, this may not be the information for this corridor. Mr. Scott: It proved some of the things we have problems with. Ms. Lantz: We recently did 2 studies, Pine Ridge Road from Livingston Road to I-75, which I think is Corridor 8, and Immokalee Road from Livingston Road to Logan Boulevard. We have-with those studies-made recommendations and are moving projects into the Work Deleted: we're Program. Now that you're doing analysis, how will that work? We're recommending an overpass, but if you come back with strategies, so hoping they don't replicate studies we already adopted. Mr. Debnam: We will look at planned projects and we should know about the TIP and LRTP and County and City projects, and we'll try not to duplicate, that's the goal.

Mr. Khawaja: There's good data you may want, counts, data etc.

**Mr. Scott:** The evaluation criteria has higher scores for things in the pipeline, FDOT gets crazy when you switch the order and cycle through.

Mr. Rivera: Vanderbilt Beach Road

Mr. Khawaja: Fighting it every year, finally lost or won, it's good for the community

*Mr. DeLeon* moved to endorse Congested Corridors Evaluation Methodology. *Mr. Rivera* seconded. Carried unanimously.

### 8. Reports and Presentations (May Require Committee Action)

#### A. CAT – Transit Signal Priority & Automatic Vehicle Location System Update

**Mr. DeLeon:** We are finalizing the contract for our CAT Automatic Vehicle Location (AVL) system and a computer aided dispatch and location system. The system we have now is about 10 years old, we had an assessment done for the technology and one of the recommendations was to update the AVL system. We put together a solicitation to either upgrade or replace the system. We made a recommendation and selection with a French company ENGIE. The project includes the hardware in the buses and the software that schedules and sees performance. This will give information on the number of riders, if there are delays or detours to keep people up to date. We're upgrading signage at the transfer stations; and we are adding kiosk signs so people who need more information can get it on the display board. We are also adding signage to show, which route is pulling into the bay. The software will help with scheduling the operators and business intelligence.

Mr. Khawaja: This is a total replacement?

**Mr. DeLeon:** Yes, and enhancements. In <u>addition to AVL we are enhancing our fare</u> boxes and mobile ticketing and <u>adding</u> separate software on the paratransit side. Th<u>ese systems</u>, will pull together the information <u>so we</u> have a better understanding of the data. We're working on Traffic Signal Prioritization (TSP), tied into this new technology. We're working with Mr. Khawaja and Leandro Goicoechea and others in Traffic Ops. We coordinated with them to vet the scope of work and assisted with the language. We are defining items. It is hardware in the bus and on the cabinets at intersections. There are different options for TSPs, infrared is the current system the firetrucks and ambulances use. We're looking at a GPS solution to see the location of the bus, how late is it running, how many people are on it. The system will send a request to lengthen or truncate the signal at a lower priority that emergency services. We're looking at 50 intersections to see how it performs based on current reliability and on time performance. Our hope is to share the data and how it's working. We're making sure that existing traffic signal and other technology work together and that nothing gets interrupted with this new system. Our plan is to finalize the contract in March and the project is 12 months.

Mr. Tisch: Is it part of a grant?

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Mr. DeLeon: Yes, grants are being used for portions of the project,	Deleted: s
<b>Mr. Khawaja:</b> The difference between preemption and low priority is that with preemption for emergency services we would interrupt the flow to give a green light fastest, the only that can't be terminated immediately is when it's in conflict with a walk signal just in case there's a wheelchair crossing. They will zigzag if needed. For low priority transit, the bus analyzes itself first—am I late? How far from the intersection am I? —and the bus decides and sends a request. The buses don't want to be ahead of schedule either. Ff signal is green and knows bus is 10 seconds away it will stay green longer than usual. If it's serving a side street it will cut the side street sooner. It doesn't interrupt or preempt a change.	
Mr. Rivera: If it gives 10 additional seconds, will it shorten the cycle?	
<b>Mr. Khawaja:</b> Yes, it will shorten it, depends on the time of day, how much time can I give up? But it will go back to normal.	
Mr. Rivera: How does the number of people matter?	
<b>Mr. DeLeon:</b> If its empty it doesn't matter if there's more people you won't want them to be late.	
<b>Mr. Khawaja:</b> They are weighted items, you can say if there's 20 people on the bus and it's running a minute late it's more critical to act, if there are only 5 people maybe it can be 3 minutes late. We are trying to code each firetruck using system and we're almost there, but it's hard because you need the code of each truck, but a lot are coded 000, they can preempt but are not identified. We'd would like to see report of trips and the time, are they emergencies, why is this one doing it 20 times when most are doing it 3 times? If there are units purchased online, we want to be able to shut them off.	
Mr. Tisch: Is the technology being used in other places in Florida?	
<b>Mr. DeLeon:</b> Orlando uses same <u>technology</u> combination. The technology is the same as	Deleted: for the technology
what's already existing in the cabinets in Collier, and they've done some of these with other bus systems. Next, we'll look at different thresholds, in some places transit has priority over	

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everything. There are different opportunities here. For mobile ticketing the QR code is live so it can't have a picture taken. Tampa's HART system is operating similarly. We're looking at working with Lee Tran for regional fares, LinC, Route 600 comes into Collier County.

Mr. Khawaja: They've done it for tolls, they can do it for transit. especially neighboring

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counties.

B. FDOT – US 41 FRAME Presentation

Tabled to next meeting.

9. Member Comments

Mr. Khawaja: Double check if Lorraine or Mike is the voting member.

## **10. Distribution Items**

## 11. Next Meeting Date

March 16, 2022 – 2:00 p.m.

# 12. Adjournment

There being no further comments or business to discuss, Mr. Khawaja adjourned the meeting at 3:18 p.m.