

Dan Hoffman:

Hello, and welcome to part two of the Rouss Review, the City Works portion of our program. Today we're going to talk about traffic management. We'll be answering all your questions about signals, and stop signs, and-

Amy Simmons:

Cameras.

Dan Hoffman:

Cameras, and why things work the way they work, and why you wait the time you wait at a light. All that kind of information we're going to cover today, with Justin Hall and Andy Dunn. So, let's bring them on in.

Dan Hoffman:

Okay, let's rock. Yes, let's rock, indeed, Justin. Welcome back. So, Justin Hall, who does kind of everything over in public services, don't tell everybody else that. You know, snow removal, leaf pickup, because solid waste is under you as well.

Justin Hall:

That's correct.

Dan Hoffman:

And, roads.

Justin Hall:

Streets, yep.

Dan Hoffman:

Streets. So a pretty wide set of things. And today though, we're going to talk about traffic. Not so much, just a section where we just complain about traffic and, "Whoa, traffic's bad. And I hate sitting in traffic." No, we're going to talk about why traffic signals work the way they do. Why we build things, and put signs in certain places, all that kind of stuff. And you've brought somebody with you today. Please introduce this person.

Justin Hall:

All right. I brought Andy Dunn with us today. He's our Traffic Manager for our Public Services team. And he oversees our traffic signals, signs and markings responsibilities.

Dan Hoffman:

Awesome. Welcome Andy. So Andy, what's a day-to-day, a day in the life of a traffic manager?

Andy Dunn:

We do everything from the traffic world. So, our trouble calls and assign those to the traffic signal technicians. Figure out where stop signs need to go. Replace stop signs, update the signs as needed.

Dan Hoffman:

Give me an example of a trouble call.

Andy Dunn:

A trouble call for a traffic signal could be anything from a complaint from a citizen, or the Police Department, they notice that a signal might not be operating correctly. So we go out, diagnose the situation, see if it's actually an issue. A signal could be on flash, so we could have a conflict in the traffic cabinet. It could be on flash. We could go out and see what caused the issue.

Dan Hoffman:

So for the average resident, you're sitting at a light and you feel like it's taking way too long, and you call it in. You get those with some frequency? Of, "Hey, this light's not working properly." How often is it that the light's working just fine?

Andy Dunn:

I'd say probably 85%, 90% of the time.

Dan Hoffman:

There you go. Which, I think is a good thing for people to understand. These signals, they're timed and coordinated. And the time you sit at a stoplight is a lot longer than it actually is.

Justin Hall:

That's correct.

Dan Hoffman:

Now, it's frustrating to sit at stoplight. However, it's timed that way for a particular reason, because we coordinate the lights, right?

Justin Hall:

Right.

Dan Hoffman:

Tells us, how do we go about doing that? We can't just go in and make one cycle shorter than all the others without creating effects. Talk about that a little bit.

Andy Dunn:

We have engineers we work with, that actually set up the timings for us. They tell us about how long each signal should be. And if you start at point A, and you're trying to get to point C, what that signal in the middle, point B, would be. So you can get through and not stop at point B. They come up with the timings, we implement the timings. They watch it, we watch it, and make changes as needed. We basically have three different types of systems running in the city. We have a fixed time base signal. That basically, if it's a standalone signal, we put our minimum times in there, and the signals just rotate around. The next system that we have is more of a coordinated system, where we're pre-programming the controllers to say, "This intersection is running this amount of time for a certain amount of time."

And that's it, nothing's going to change it. So, if you're finding yourself waiting on a side street, it's because we're telling it to hold for that amount of time. The other system that we have is an adaptive system. And this is fairly new... Well, we've had it for about five years, VDOT's running it as well. In real time, the traffic signals are adjusting based on traffic demand. So, each intersection's communicating to the next one, letting them know, "Hey, there's 10 vehicles in straight through lanes coming your way." And vehicles changing based on the demand. With that being said, some of our trouble calls are actually calls where people don't quite understand how the signal's supposed to work, because it's based off of volumes. Where you're used to that left turn lane coming up at the beginning, it might come up at the end.

Dan Hoffman:

Oh, really?

Justin Hall:

Yeah. So it's more about on-demand type system, which is-

Dan Hoffman:

Where do we have that system running in the city?

Justin Hall:

So, the Pleasant Valley Corridor, the Berryville Avenue Corridor. Amherst Valley Avenue is not running that. It's running a coordinated system. Every time you go out, it's not going to run exactly the same, because it's adapting in real time.

Dan Hoffman:

Interesting.

Justin Hall:

And it's going to get real interesting here in the future. Because as we move forward, more technology's coming out, to where we can do more of that, which is pretty exciting.

Dan Hoffman:

How does it know how many cars? How does it test volume?

Justin Hall:

It's counting the vehicles in real time, based off the cameras. Every time a vehicle goes in that zone, it's counting the vehicle.

Andy Dunn:

It tells that down the line, so down the line can predict what's coming towards it.

Dan Hoffman:

Can it tell when vehicles are going... You know, those 10 vehicles that are coming down the way. If one of them makes a left or right, or turns off into a parking lot. It knows that, or?

Justin Hall:

The next intersection knows that a vehicle's dropped off. At the next intersection, there's only nine coming instead of 10, because one turned off.

Dan Hoffman:

Interesting.

Justin Hall:

And this is all happening in real time. When we build our intersections, we build new traffic signals, we also look at the infrastructure to make sure we have what we need, as technology changes, to implement stuff like this.

Dan Hoffman:

When we build a new traffic signal... It's an intersection, we decide we need a traffic signal there. About how much does that cost?

Justin Hall:

These days?

Dan Hoffman:

Yeah.

Justin Hall:

Probably getting close to \$500,000 by the time it's all said and done.

Dan Hoffman:

Wow. \$500,000 for a new traffic signal. Now, a lot of times folks will say, "We need a traffic signal at this intersection. This intersection's dangerous. And we need a traffic signal there." How do we go about determining whether or not to make that half a million dollar investment?

Andy Dunn:

We actually have a traffic signal warrant program. You put out the traffic counters and they count the traffic. They're actual tube counters that go in the road. We do that for a week. Then we go out and actually manually hand count. It's three days, and you split them up. It's like a Monday, Wednesday, Friday. Or a Tuesday, Thursday, and the next Monday, so that it's split up different days. Hand count it. That goes into the traffic signal warrant program. That recommends if a signal goes, or not. But then Perry Eisenach and our engineers are the ones that actually decide if it goes to Council or not.

Justin Hall:

And we also have some guidelines, where the MUTCD is kind of...

Dan Hoffman:

What's MUTCD?

Justin Hall:

Manual Uniform Traffic Control Devices.

Dan Hoffman:

There you go.

Justin Hall:

That kind of gives you guidelines. So every municipality you go to, they base it off those same standards. And that's basically where the warrant study comes out of.

Dan Hoffman:

Gotcha.

Justin Hall:

So traffic volumes, the accident history?

Andy Dunn:

Yes, the accident history, we get.

Justin Hall:

Site distance, all those things come into play to see if the signal is warranted.

Dan Hoffman:

Got it. So let's say, study comes back, it's not warranted. We're not going to put a light there. People are like, "Well, you have to put a stop sign there." What's the decision matrix for a stop sign?

Andy Dunn:

We have a stop sign warrant, too.

Dan Hoffman:

Oh, okay.

Andy Dunn:

So it's basically the same thing, just kind of boiled down a little bit, slimmed down, so it's easier to do a stop sign warrant than a traffic signal warrant. We'll do that warrant, and then, that gets approved, whether we put it there or not.

Dan Hoffman:

And a stop sign costs us?

Andy Dunn:

There's \$65 just for the sign itself. Just the red sign is \$65. And then the post is... Altogether, it's probably about \$200 to put one up.

Dan Hoffman:

Yeah. We have a sign shop, right?

Andy Dunn:

Yes.

Dan Hoffman:

We're able to do pretty much everything in-house.

Andy Dunn:

Yes.

Justin Hall:

With stop signs, a lot of requests will come in, because a lot of people think that stop signs should control the speed on the street. And that's not what it's for. To put up a stop sign, it's not to control the speed or to slow people down. How many pedestrians are crossing? How many vehicles are using that intersection? Or else, you don't want to have a stop sign at every single intersection if it's not needed.

Dan Hoffman:

Yeah, of course. And then occasionally, if we are really planning ahead, we'll put a roundabout in. What triggers that? Is that more of a Planning decision, or is that just something that we now do as a matter of course?

Justin Hall:

Planning, engineering, making sure we have the space. Roundabouts can take up a lot of room. And I know that's something that our engineering team, Perry and Kelly, look at as an option when we need to put a traffic signal in. If a roundabout does make sense-

Dan Hoffman:

But if the physical conditions are good, we like roundabouts, right? Roundabouts are definitely safer than just a 4-way stop. And you can't get T-boned at a roundabout, so that's always good. When signals, stop signs, what other kind of traffic controls are we putting in place? Or any jurisdiction, really. I mean, it's not just Winchester, every jurisdiction in the country has traffic lights and stop signs. What other traffic control mechanisms do we put in that people might not immediately recognize as traffic control?

Andy Dunn:

Speed limit signs are a form of traffic control. And then a few areas in town, we have speed tables that control traffic.

Justin Hall:

Yeah. Another thing that we do within the city as well, you'll notice some of our traveling lanes, we bring down to 10 feet. We narrow the street, slows vehicles down, so it's more of a traffic calming...

Dan Hoffman:

Got it. All right, so I know that speed bumps are generally passe, we don't do those anymore. Why is that?

Justin Hall:

They're pretty hard on vehicles. And plowing. We do a lot of plowing in the city, so it's pretty hard to plow with a speed bump. But the speed tables are a lot easier, because you actually ride up and they flatten out more on the top. And that's what you'll see a lot in the city. We have some in the parks, along the Green Circle Trail, we have some.

Dan Hoffman:

Yeah. And they're a lot better for public safety vehicles, because if you're a police car, or a firetruck speeding to a scene. Yeah, you hit that speed bump and it is bad for the vehicles. So we don't do those anymore, but we get a lot of questions for those. The other thing we get a lot of questions about is the various cameras. And we referenced those earlier, with the signals. We don't issue any tickets with speed cameras, and we can't do that in Virginia, although they did just change that law. But, the cameras that are above an intersection, what are those? Those are for counting. What else do we use those for?

Andy Dunn:

We have two types of cameras at some of the traffic signals. We have detection cameras, those are the ones you see at every traffic signal. They're just used to detect traffic. The car pulls up inside our cabinet. There's a television screen that shows the intersection. They pull in. It detects them. That's what triggers the signals to go green. And then we also have point, tilt, zoom cameras, that we can use for special events and traffic backups, we can see it live. We can see the traffic that way. None of those cameras are set up to record. And the PTZ cameras, we just use basically to monitor the corridor.

Dan Hoffman:

And issuing speed tickets within Virginia, it's been not allowed. But recently, I think in this past session, they changed it so that we can now put speed cameras in school zones, I believe. But, we have not entertained that yet in Winchester. At least we haven't brought it to Council.

Dan Hoffman:

Okay. So we've got cameras, signals, speed bumps and tables, stop signs, road diets. We don't really have a lot of roads left to build in Winchester. We have a lot to maintain, but we don't really have a lot of roads. Although, we do occasionally have some new ones going in, like we just finished Crossover Boulevard, and some realignments of road around Hope Drive. Whenever something like that occurs, what do you guys do when you look at those new roads, to determine, "All right, what kind of signals, how should it be designed?" How does traffic go into planning a new road?

Justin Hall:

Well, on our end, we look at the overall... It really starts with our engineering, when they design it. And then we look at it, to make sure it really makes sense. And then, what we're predicting what traffic will do. Like, when we opened Crossover Boulevard, we're still seeing vehicles not using crossover probably as they should. We know, as it starts popping up on their GPS, stuff like that, that that road's going to take on more traffic. Once traffic shifts, now we have to shift our focus more on the Route 50 Corridor,

because those vehicles are no longer on that road, they're more over on Crossover. So, just looking at how it's going to impact the streets around the new road.

Dan Hoffman:

Got it. So wrapping up, what is the biggest misconception that people have about traffic, or their experience in traffic?

Justin Hall:

That they're waiting for five minutes.

Andy Dunn:

Yes. That's what I was going to say.

Dan Hoffman:

There you go. Okay.

Justin Hall:

Because typically, it's probably about a minute. And the one good thing we have as well, we can actually see how long the intersections are red for, and exactly when it happened.

Dan Hoffman:

So there's a log somewhere, that says, "All right, at this specific minute it was doing this." You can go back. How far back can we go?

Justin Hall:

We can go about 30 days.

Dan Hoffman:

30 days back?

Andy Dunn:

At least 30 days. Yes.

Dan Hoffman:

So if somebody says, "I was sitting at this intersection for five minutes and it didn't change at all." We can go back and for a certainty, say it did, or it did not.

Justin Hall:

The first question we ask, "What time did that happen?" And then it helps us narrow that down.

Dan Hoffman:

Yeah. So the big takeaway for everybody is, you're sitting at the light for a lot less than you think you are. That's the big takeaway. But, occasionally there are issues. And if they do have issues, where should they go?

Andy Dunn:

Call me, Public Services. Ask for me. If I'm not at my desk-

Dan Hoffman:

You, being Andy Dunn.

Andy Dunn:

Yes. Me being Andy Dunn. Ask for me. If I'm not at my desk, leave me a voicemail, and I'll return your call.

Dan Hoffman:

There you go. And you can find that on the City's website.

Andy Dunn:

Yes.

Dan Hoffman:

That's the degree of personal service you will get in a city like Winchester. Other jurisdictions, I can make no claims about. But if you're in a different jurisdiction, the traffic manager, which is normally in a Public Works Department, a Public Services Department. Whatever it is called in your city, you should find who the traffic manager is and contact that person. Don't just call your City Councilor about a traffic light. Call us directly.

Andy Dunn:

Yes.

Dan Hoffman:

Just like, if we miss your trash-

Andy Dunn:

Just call us.

Dan Hoffman:

Just call us, we'll take care of it. There's no need for you to call your Councilor, we'll take care of all that. Okay. Justin, Andy, thank you guys very much for coming in. And hey, if you don't like traffic, then... Oh, well. No one likes traffic, but we do our best to make it better for you. Thank you guys very much for coming in.

Andy Dunn:

Thanks for having me.

Justin Hall:

All right. Thanks.

Dan Hoffman:

Okay, so there go Justin and Andy.

Amy Simmons:

There they go.

Dan Hoffman:

Justin does so much. I mean-

Amy Simmons:

Always with a smile, too.

Dan Hoffman:

Always with a smile. And Andy, too. I've only had a chance to work with Andy a little bit. But, it's great. Again, I say this almost every time we have one of the staff in. We've got such good staff.

Amy Simmons:

They're so amazing.

Dan Hoffman:

Yes. And, if you want to come work for the City, or you want to-

Amy Simmons:

Join our great team.

Dan Hoffman:

Or, if thinking about working for the City, go check out our website. We always have some openings.

Amy Simmons:

Yeah. Public services always has a lot because we always are expanding, or training up those people so they can go on, and...

Dan Hoffman:

Exactly. It's a good way to launch your career, or land, or...

Amy Simmons:

Yeah. Stay with us forever.

Dan Hoffman:

This Rouss Review transcript was exported on Jul 11, 2022.

Stay with forever, so. But what doesn't last forever is this podcast, so thank you for those who listened to part two, we greatly appreciate it. And, do we know what we're talking about next time? Well, we're taking a break. Are we skipping one? Because we don't have a meeting later in July.

Amy Simmons:

Oh yeah, that's true. Let's skip it.

Dan Hoffman:

So, we're going to take a little hiatus, and we will pick back up with you guys in August. So thank you again for listening, and we'll see you around City Hall.