

This attachment provides the correspondence between NJDOT and the other agencies within the geographic area regarding the deployment of C-V2X RSUs within the 5.9 GHz band. This attachment includes a draft letter that was sent to each agency along with the response for each agency providing approval for NJDOT to deploy this technology.



## State of New Jersey

DEPARTMENT OF TRANSPORTATION

P.O. Box 600

Trenton, New Jersey 08625-0600

PHILIP D. MURPHY  
*Governor*

DIANE GUTIERREZ-SCACCETTI  
*Commissioner*

SHEILA Y. OLIVER  
*Lt. Governor*

July 27, 2022

Mr. Gene Donaldson – Manager  
TMC Operations  
Delaware Department of Transportation  
169 Brickstore Landing Rd | Smyrna, DE 19977

Dear Mr. Donaldson,

This revised letter is notification that the New Jersey Department of Transportation (NJDOT) is planning on deploying Cellular Vehicle-to-Everything (C-V2X) Connected Vehicle (CV) Technology/Hardware by the end of the year. Please ignore the previous letter that was sent to you.

The Federal Communications Commission (FCC) released a public notice on August 6, 2021 (DA 21-962) that provided guidance for the waiver process to permit the use of C-V2X technology in the 5.895-5.925 GHz Band. A copy of this public notice can be found [here](#).

NJDOT is planning to submit a waiver to supplement its existing FCC license (FCC Call Sign #WRFR820) to utilize C-V2X communications, within the 5.895-5.925 GHz band, to deploy CV Road-Side Units (RSU) for the purposes of broadcasting various transportation and public safety related data broadcasts and applications. NJDOT plans to use this hardware to broadcast or receive the following data:

- Traffic Signal Phasing and Timing (SPaT) data;
- Traveler Information Message (TIM) data;
- Intersection Geometry (MAP) data;
- Basic Safety Message (BSM) data; and
- Pedestrian Safety Message (PSM) data

Based on the requirements noted in the public notice and the feedback received from the FCC, NJDOT is required to notify and coordinate with every existing Intelligent Transportation Service (ITS) license holder within its geographic area to ensure NJDOT's C-V2X RSU operations will not interfere with any existing Dedicated Short-Range Communications (DSRC) based roadside units currently operating within the 5.895-5.925 GHz band.

“IMPROVING LIVES BY IMPROVING TRANSPORTATION”

New Jersey Is An Equal Opportunity Employer • Printed on Recycled and Recyclable Paper

Since the Delaware Department of Transportation (DelDOT) is currently a licensed user of Dedicated Short-Range Communications (DSRC) hardware and its roadway network is considered within the same geographic area as NJDOT's roadways, NJDOT would like to verify if DelDOT has any existing DSRC based roadside units operating within 1,000 feet of NJDOT's proposed deployment locations. For your reference, NJDOT has included an attachment with this letter providing the proposed deployment locations for the C-V2X RSUs, along with technical specifications for the proposed C-V2X RSUs. The proposed locations include 47 locations along Route U.S. 322 and Route U.S. 40/322 in Atlantic County, and 74 locations along Route I-295 and Route U.S. 1 In Middlesex and Mercer Counties.

NJDOT is requesting a response of acknowledgement no later than August 5, 2022. If no response is received from DelDOT prior to the August 5<sup>TH</sup> deadline, NJDOT will assume there are no existing DSRC based roadside units operating within 1,000 feet of NJDOT's proposed deployment locations.

Please feel free to contact me at [wasif.mirza@dot.nj.gov](mailto:wasif.mirza@dot.nj.gov) or 609-963-1402 with any questions or if you would like additional information.

Respectfully,

*Wasif Mirza*

Wasif Mirza

Director of Mobility Engineering

New Jersey Department of Transportation

1035 Parkway Avenue | Trenton, NJ 08625

Horgan, Drew

---

**From:** Donaldson, Gene (DeIDOT) <Gene.Donaldson@delaware.gov>  
**Sent:** Tuesday, August 2, 2022 10:52 AM  
**To:** Horgan, Drew  
**Cc:** Mirza, Wasif (DOT); Jave, Janet [DOT]; Hayes, Kevin; Patel, Hirenkumar  
**Subject:** [EXTERNAL] RE: NJDOT C-V2X Deployment Notification

Drew:

We have reviewed the NJDOT proposed C-V2X locations and have determined that said locations will not interfere with existing or planned Delaware Department of Transportation (DeIDOT) DSRC Roadside Unit (RSU) sites. Thank you for the opportunity to review, should you have further questions I can be reached on my cell at 302-222-5907.

Thank You  
Gene

---

**From:** Horgan, Drew <Drew.Horgan@jacobs.com>  
**Sent:** Wednesday, July 27, 2022 2:03 PM  
**To:** Donaldson, Gene (DeIDOT) <Gene.Donaldson@delaware.gov>  
**Cc:** Mirza, Wasif (DOT) <Wasif.Mirza@dot.nj.gov>; Jave, Janet [DOT] <Janet.Jave@dot.nj.gov>; Hayes, Kevin <Kevin.Hayes@jacobs.com>; Patel, Hirenkumar <Hirenkumar.Patel@dot.nj.gov>  
**Subject:** NJDOT C-V2X Deployment Notification  
**Importance:** High

Gene,

I am reaching out to you on behalf of the NJDOT Mobility Engineering Unit. As a part of the FCC guidance for obtaining a waiver to deploy C-V2X, NJDOT is required to notify and coordinate with every existing 5.9 GHz license holder within its geographic area. Please see the attached notification letter with the specific deployment information for NJDOT. NJDOT is asking for acknowledgement that your agency has no existing DSRC RSU's deployed within 1,000' feet of NJDOT's proposed deployment location by Friday August 5<sup>th</sup>, 2022. Please note that you may have received a similar letter last week. Please ignore any previous letters as it relates to this subject.

I have attached a google earth file showing the proposed deployment locations along with the RSU technical specifications NJDOT used as a part of its construction project for your reference.

Please let us know if you have any questions.

Thanks,

Drew  
**Drew Horgan, PE, PTOE** | [Jacobs](#) | Project Manager  
M:267.688.8207 | [drew.horgan@jacobs.com](mailto:drew.horgan@jacobs.com)  
2001 Market St, Suite 900 | Philadelphia, PA 19103

Horgan, Drew

---

**From:** Michael Venuto <mpvenuto@DRPA.ORG>  
**Sent:** Friday, July 29, 2022 10:11 AM  
**To:** Horgan, Drew  
**Cc:** Mirza, Wasif (DOT); Jave, Janet [DOT]; Hayes, Kevin; Patel, Hirenkumar  
**Subject:** [EXTERNAL] RE: EXTERNAL - NJDOT C-V2X Deployment Notification

Drew,

We have an expired license (call sign WQDS612, expired 10/20/2015) for ITS operation in the mentioned frequency band. The only geographical information on the license is "States of NJ and PA." Unfortunately, there is no way to tell from the license whether we have anything within 1000' of NJDOT's proposed locations.

We take no exception to your proposed project. If we encounter any adverse effects in the future, we can collaborate to work through them.

Thank you,  
Mike

---

**From:** Horgan, Drew <Drew.Horgan@jacobs.com>  
**Sent:** Wednesday, July 27, 2022 2:01 PM  
**To:** Michael Venuto <mpvenuto@DRPA.ORG>  
**Cc:** Mirza, Wasif (DOT) <Wasif.Mirza@dot.nj.gov>; Jave, Janet [DOT] <Janet.Jave@dot.nj.gov>; Hayes, Kevin <Kevin.Hayes@jacobs.com>; Patel, Hirenkumar <Hirenkumar.Patel@dot.nj.gov>  
**Subject:** EXTERNAL - NJDOT C-V2X Deployment Notification  
**Importance:** High

**Caution:** This email originated from outside the organization. Do not click links or open attachments unless you have verified the sender and know the content is safe.

Mike,

I am reaching out to you on behalf of the NJDOT Mobility Engineering Unit. As a part of the FCC guidance for obtaining a waiver to deploy C-V2X, NJDOT is required to notify and coordinate with every existing 5.9 GHz license holder within its geographic area. Please see the attached notification letter with the specific deployment information for NJDOT. NJDOT is asking for acknowledgement that your agency has no existing DSRC RSU's deployed within 1,000' feet of NJDOT's proposed deployment location by Friday August 5<sup>th</sup>, 2022. Please note that you may have received a similar letter last week. Please ignore any previous letters as it relates to this subject.

I have attached a google earth file showing the proposed deployment locations along with the RSU technical specifications NJDOT used as a part of its construction project for your reference.

Please let us know if you have any questions.

Thanks,

MTA Bridges and Tunnels Approval  
Call Sign # WQBY914

Horgan, Drew

---

**From:** Andral, Randy <RAndal@mtabt.org>  
**Sent:** Thursday, July 28, 2022 12:26 PM  
**To:** Horgan, Drew  
**Subject:** [EXTERNAL] RE: NJDOT C-V2X Deployment Notification

Hi Drew,

MTA does not have any DSRC equipment w/in 1000' ft of the proposed locations provided in Google earth.

Thanks,

**Randy H. Andral** | Tolling Technology  
**MTA Bridges and Tunnels** | Randall's Island, NY 10035  
Office 212-360-2835 | Cell 347-610-6014  
[randal@mtabt.org](mailto:randal@mtabt.org) | <http://www.mta.info/>



---

**From:** Horgan, Drew <Drew.Horgan@jacobs.com>  
**Sent:** Thursday, July 28, 2022 10:58 AM  
**To:** Andral, Randy <RAndal@mtabt.org>  
**Subject:** FW: NJDOT C-V2X Deployment Notification  
**Importance:** High

Randy,

It looks like I didn't have the correct email for you. I am trying an updated email to see if that works. Please let me know if you received this.

Thanks,

Drew  
**Drew Horgan, PE, PTOE** | [Jacobs](#) | Project Manager  
M:267.688.8207 | [drew.horgan@jacobs.com](mailto:drew.horgan@jacobs.com)  
2001 Market St, Suite 900 | Philadelphia, PA 19103

---

**From:** Horgan, Drew  
**Sent:** Wednesday, July 27, 2022 3:22 PM  
**To:** [Randal@mpa.org](mailto:Randal@mpa.org)  
**Cc:** Mirza, Wasif <[wasif.mirza@dot.nj.gov](mailto:wasif.mirza@dot.nj.gov)>; Jave, Janet [DOT] <[Janet.Jave@dot.nj.gov](mailto:Janet.Jave@dot.nj.gov)>; Hayes, Kevin <[Kevin.Hayes@jacobs.com](mailto:Kevin.Hayes@jacobs.com)>; Patel, Hirenkumar <[hirenkumar.patel@dot.nj.gov](mailto:hirenkumar.patel@dot.nj.gov)>  
**Subject:** NJDOT C-V2X Deployment Notification  
**Importance:** High

Randy,

**MTA Bridges and Tunnels Approval  
Call Sign # WQBY914**

I am reaching out to you on behalf of the NJDOT Mobility Engineering Unit. As a part of the FCC guidance for obtaining a waiver to deploy C-V2X, NJDOT is required to notify and coordinate with every existing 5.9 GHz license holder within its geographic area. Please see the attached notification letter with the specific deployment information for NJDOT. NJDOT is asking for acknowledgement that your agency has no existing DSRC RSU's deployed within 1,000' feet of NJDOT's proposed deployment location by Friday August 5<sup>th</sup>, 2022. Please note that you may have received a similar letter last week. Please ignore any previous letters as it relates to this subject.

I have attached a google earth file showing the proposed deployment locations along with the RSU technical specifications NJDOT used as a part of its construction project for your reference.

Please let us know if you have any questions.

Thanks,

Drew

**Drew Horgan, PE, PTOE** | [Jacobs](#) | Project Manager  
M:267.688.8207 | [drew.horgan@jacobs.com](mailto:drew.horgan@jacobs.com)  
2001 Market St, Suite 900 | Philadelphia, PA 19103

---

NOTICE - This communication may contain confidential and privileged information that is for the sole use of the intended recipient. Any viewing, copying or distribution of, or reliance on this message by unintended recipients is strictly prohibited. If you have received this message in error, please notify us immediately by replying to the message and deleting it from your computer.

**Confidentiality Note:** This e-mail, and any attachment to it, may contain privileged and confidential information and is intended for the use of the individual(s) or entity named on the e-mail. Unauthorized disclosure of this message is prohibited. If you have received this message in error, please notify the sender immediately by return e-mail and destroy this message and all copies thereof, including all attachments.

**Horgan, Drew**

---

**From:** Yurman, Joseph <Joseph.Yurman@mtacd.org>  
**Sent:** Tuesday, August 2, 2022 1:20 PM  
**To:** Horgan, Drew  
**Cc:** Mirza, Wasif (DOT); Jave, Janet [DOT]; Hayes, Kevin; Patel, Hirenkumar  
**Subject:** [EXTERNAL] RE: NJDOT C-V2X Deployment Notification

Drew,

I have assessed the information given me and this implementation does not appear to cause any potential interference to our licensed area.

Please let me know how your deployment progresses and if there are any expansions beyond the locations given me, please let me know so I can reassess the situation.

Thank you,  
Joe Yurman

**Joseph L. Yurman, P.E.**

Assistant VP & Chief Communications Engineer  
Delivery – DSO Design Technical Services  
Metropolitan Transportation Authority  
Construction & Development  
2 Broadway, 3<sup>rd</sup> Floor D3.84  
New York, NY 10004  
O: 646-252-3231  
Email: joseph.yurman@mtacd.org



---

**From:** Horgan, Drew <Drew.Horgan@jacobs.com>  
**Sent:** Thursday, July 28, 2022 10:46 AM  
**To:** Yurman, Joseph <Joseph.Yurman@mtacd.org>  
**Cc:** Mirza, Wasif (DOT) <Wasif.Mirza@dot.nj.gov>; Jave, Janet [DOT] <Janet.Jave@dot.nj.gov>; Hayes, Kevin <Kevin.Hayes@jacobs.com>; Patel, Hirenkumar <Hirenkumar.Patel@dot.nj.gov>  
**Subject:** RE: NJDOT C-V2X Deployment Notification

Joseph,

Please see the attached files and responses in red below for the additional information you need. Please let me know if this answers all your questions.

- 1a.1 Site Name **Please see attached spreadsheet for site names for each deployment location**
- 1a.5 Transmitter Latitude **Please see attached spreadsheet for coordinates of each location**



**MTA / NYC Transit Authority  
Call Sign # WQBK348**

- 1a.9 Overall Height AGL w/Appurtenances (m) Overall height varies per location depending on the type of structure it is mounted on. Please see attached 3 PDFs for mounting details. In general our 3 scenarios for mounting heights are summarized in the sub-bullets below. The specific site height information will be submitted by the contractor as a part of the project requirements, but has not been submitted to date.
  - Traffic Pole Installation – Height is 20-25' above the ground (see detail 352)
  - S pole Installation is 21' above the ground (see detail t11)
  - SC pole installation is 27' above the ground (see detail t13)
- 1b.3 Transmitter Gain (dBi) 6 dBi
- 1b.4 Transmitter Beamwidth (degrees) 360 degrees
- 1b.5 Transmitter Center line (meters – above road) See previous response for 1a.9 overall the height of the RSU is 10.7 inches
- 1b.6 Transmitter Antenna Azimuth (degrees) 90 degrees
- 1c.2 Channel Number We will be using Channels 180 , 182 and 184 based on the message type. Please see attached PDF for additional information on what messages which channel.
- 1c.4 EIRP (dBm) 23.0 dBm

Thanks,

Drew

**Drew Horgan, PE, PTOE** | [Jacobs](#) | Project Manager  
M:267.688.8207 | [drew.horgan@jacobs.com](mailto:drew.horgan@jacobs.com)  
2001 Market St, Suite 900 | Philadelphia, PA 19103

---

**From:** Yurman, Joseph <[Joseph.Yurman@mtacd.org](mailto:Joseph.Yurman@mtacd.org)>  
**Sent:** Wednesday, July 27, 2022 3:35 PM  
**To:** Horgan, Drew <[Drew.Horgan@jacobs.com](mailto:Drew.Horgan@jacobs.com)>  
**Cc:** Mirza, Wasif (DOT) <[Wasif.Mirza@dot.nj.gov](mailto:Wasif.Mirza@dot.nj.gov)>; Jave, Janet [DOT] <[Janet.Jave@dot.nj.gov](mailto:Janet.Jave@dot.nj.gov)>; Hayes, Kevin <[Kevin.Hayes@jacobs.com](mailto:Kevin.Hayes@jacobs.com)>; Patel, Hirenkumar <[Hirenkumar.Patel@dot.nj.gov](mailto:Hirenkumar.Patel@dot.nj.gov)>  
**Subject:** [EXTERNAL] RE: NJDOT C-V2X Deployment Notification

Drew,

Please provide me with the following parameters from the list below, preferably in an excel spreadsheet.

1a: 1, 5, 9,

1b: 3, 4, 5, 6

1c: 2(actual center frequency and bandwidth) & 4

1. Based upon the contract plans and specifications, obtain the following information for use by the Department in obtaining the required FCC broadcast license(s) or registration of the RSU for C-V2X Communication Equipment:
  - a. Site Data.
    1. Site Name
    2. City
    3. County
    4. State
    5. Transmitter Latitude (in DD-MM-SS.S, NAD 83)
    6. Transmitter Longitude (in DD-MM-SS.S, NAD 83)
    7. Elevation of Antenna Site AMSL (m)
    8. Overall Height AGL w/o Appurtenances (m)
    9. Overall Height AGL w/ Appurtenances (m)
    10. Support Structure Type
  - b. Antenna Data.
    1. Transmitter Antenna Manufacturer
    2. Transmitter Antenna Model number
    3. Transmitter Antenna Gain (dBi)
    4. Transmitter Antenna Beamwidth (degrees)
    5. Transmitter Antenna Center Line (meters - above road)
    6. Transmitter Antenna Azimuth (degrees)
    7. Transmitter Antenna Elevation Angle (degrees)
  - c. Equipment Data.
    1. Transmitter Station Class
    2. Channel Number
    3. Maximum Transmitter Output Power (dBm)
    4. Effective Radiated Power (EIRP) (dBm)

Thank you,  
Joseph Yurman

---

**From:** Horgan, Drew <[Drew.Horgan@jacobs.com](mailto:Drew.Horgan@jacobs.com)>  
**Sent:** Wednesday, July 27, 2022 2:37 PM  
**To:** Yurman, Joseph <[Joseph.Yurman@mtacd.org](mailto:Joseph.Yurman@mtacd.org)>  
**Cc:** Mirza, Wasif (DOT) <[Wasif.Mirza@dot.nj.gov](mailto:Wasif.Mirza@dot.nj.gov)>; Jave, Janet [DOT] <[Janet.Jave@dot.nj.gov](mailto:Janet.Jave@dot.nj.gov)>; Hayes, Kevin <[Kevin.Hayes@jacobs.com](mailto:Kevin.Hayes@jacobs.com)>; Patel, Hirenkumar <[Hirenkumar.Patel@dot.nj.gov](mailto:Hirenkumar.Patel@dot.nj.gov)>  
**Subject:** NJDOT C-V2X Deployment Notification  
**Importance:** High

Joseph,

I am reaching out to you on behalf of the NJDOT Mobility Engineering Unit. As a part of the FCC guidance for obtaining a waiver to deploy C-V2X, NJDOT is required to notify and coordinate with every existing 5.9 GHz license holder within its geographic area. Please see the attached notification letter with the specific deployment information for NJDOT. NJDOT is asking for acknowledgement that your agency has no existing DSRC RSU's deployed within 1,000' feet of NJDOT's proposed deployment location by Friday August 5<sup>th</sup>, 2022. Please note that you may have received a similar letter last week. Please ignore any previous letters as it relates to this subject.

**MTA / NYC Transit Authority**  
**Call Sign # WQBK348**

I have attached a google earth file showing the proposed deployment locations along with the RSU technical specifications NJDOT used as a part of its construction project for your reference.

Please let us know if you have any questions.

Thanks,

Drew

**Drew Horgan, PE, PTOE** | [Jacobs](#) | Project Manager  
M:267.688.8207 | [drew.horgan@jacobs.com](mailto:drew.horgan@jacobs.com)  
2001 Market St, Suite 900 | Philadelphia, PA 19103

---

NOTICE - This communication may contain confidential and privileged information that is for the sole use of the intended recipient. Any viewing, copying or distribution of, or reliance on this message by unintended recipients is strictly prohibited. If you have received this message in error, please notify us immediately by replying to the message and deleting it from your computer.

**Confidentiality Note:** This e-mail, and any attachment to it, may contain privileged and confidential information and is intended for the use of the individual(s) or entity named on the e-mail. Unauthorized disclosure of this message is prohibited. If you have received this message in error, please notify the sender immediately by return e-mail and destroy this message and all copies thereof, including all attachments.

---

NOTICE - This communication may contain confidential and privileged information that is for the sole use of the intended recipient. Any viewing, copying or distribution of, or reliance on this message by unintended recipients is strictly prohibited. If you have received this message in error, please notify us immediately by replying to the message and deleting it from your computer.

**Horgan, Drew**

---

**From:** Jo Lee <jo02@njit.edu>  
**Sent:** Monday, August 1, 2022 11:28 AM  
**To:** Horgan, Drew  
**Cc:** Mirza, Wasif (DOT); Jave, Janet [DOT]; Hayes, Kevin; Patel, Hirenkumar  
**Subject:** [EXTERNAL] Re: NJDOT C-V2X Deployment Notification

**Importance:** High

Dear Drew,

Thank you for reaching me out.

Reviewing the map you provided, I confirm you that we have no DSRC RSUs near the NJDOT's proposed deployment locations.

We wish NJDOT all the best in the deployment and if we can assist in any way, we would be more than happy to do.

Should you have any further questions, please feel free to contact me.

Best,  
Joyoung Lee

On Jul 27, 2022, at 2:00 PM, Horgan, Drew <[Drew.Horgan@jacobs.com](mailto:Drew.Horgan@jacobs.com)> wrote:

Dr. Lee,

I am reaching out to you on behalf of the NJDOT Mobility Engineering Unit. As a part of the FCC guidance for obtaining a waiver to deploy C-V2X, NJDOT is required to notify and coordinate with every existing 5.9 GHz license holder within its geographic area. Please see the attached notification letter with the specific deployment information for NJDOT. NJDOT is asking for acknowledgement that your agency has no existing DSRC RSU's deployed within 1,000' feet of NJDOT's proposed deployment location by Friday August 5<sup>th</sup>, 2022. Please note that you may have received a similar letter last week. Please ignore any previous letters as it relates to this subject.

I have attached a google earth file showing the proposed deployment locations along with the RSU technical specifications NJDOT used as a part of its construction project for your reference.

Please let us know if you have any questions.

Thanks,

Drew  
**Drew Horgan, PE, PTOE** | [Jacobs](https://www.jacobs.com) | Project Manager  
M:267.688.8207 | [drew.horgan@jacobs.com](mailto:drew.horgan@jacobs.com)  
2001 Market St, Suite 900 | Philadelphia, PA 19103

NJTA Approval  
Call Sign # WRDK393



# New Jersey Turnpike Authority

1 TURNPIKE PLAZA - P.O. BOX 5042 - WOODBRIDGE, NEW JERSEY 07095  
TELEPHONE (732) 750-5300

PHILIP D. MURPHY  
GOVERNOR

SHEILA Y. OLIVER  
LIEUTENANT GOVERNOR

DIANE GUTIERREZ-SCACCETTI, Chair  
ULISES E. DIAZ, *Vice Chair*  
MICHAEL R. DuPONT, *Treasurer*  
RONALD GRAVINO, *Commissioner*  
JOHN D. MINELLA, *Commissioner*  
RAPHAEL SALERMO, *Commissioner*  
JOHN M. KELLER, *Executive Director*

August 4, 2022

Mr. Wasif Mirza

Director of Mobility Engineering  
New Jersey Department of Transportation  
1035 Parkway Avenue  
Trenton, NJ 08625

Dear Mr. Mirza,

In response to your letter regarding the C-V2X technology that NJDOT plans on deploying at (74) locations throughout New Jersey, the New Jersey Turnpike Authority has no existing DSCR / C-V2X technology within 1000' of your projects. We currently have an existing Woodbridge, NJ site at our STMC location. Our plans are to grow our C-V2X projects in near future. We look forward to working with NJDOT in resolving any conflicts if they should occur.

Gerry Minneci

New Jersey Turnpike Authority

Electrical Engineer

1 Turnpike Plaza

Woodbridge, NJ 07095

Cc: Jose Dios

NYS Thruway Approval  
Call Sign # WQNG700

**Horgan, Drew**

---

**From:** Divirgilio, Aldo D <Aldo.DiVirgilio@thruway.ny.gov>  
**Sent:** Tuesday, August 2, 2022 10:11 AM  
**To:** Horgan, Drew; Cody, Matthew  
**Subject:** [EXTERNAL] RE: NJDOT C-V2X Deployment Notification

Hi Drew, this is to confirm that the NYS Thruway Authority does not operate any DSRC RSU units along its controlled roadway. Please note for your records.

Thanks,  
Aldo

---

**From:** Horgan, Drew <Drew.Horgan@jacobs.com>  
**Sent:** Tuesday, August 2, 2022 10:01 AM  
**To:** Divirgilio, Aldo D <Aldo.DiVirgilio@thruway.ny.gov>; Cody, Matthew <Matthew.Cody@thruway.ny.gov>  
**Subject:** RE: NJDOT C-V2X Deployment Notification

ATTENTION: Email messages can contain fraudulent links or attachments leading to malicious software. Do not open attachments or click on links from unknown senders or in unsolicited emails.

Matthew/Aldo,

I wanted to follow up to confirm if this was the information you were looking for and if you had any other questions. Based on your previous email, it appears NYS Thruway does not have any RSUs so we don't believe there should be any conflict, but we would still like to have that in an email to include in our FCC waiver application.

Please let me know if you need anything else.

Thanks,

Drew  
**Drew Horgan, PE, PTOE** | [Jacobs](#) | Project Manager  
M:267.688.8207 | [drew.horgan@jacobs.com](mailto:drew.horgan@jacobs.com)  
2001 Market St, Suite 900 | Philadelphia, PA 19103

---

**From:** Horgan, Drew  
**Sent:** Monday, August 1, 2022 8:28 AM  
**To:** Divirgilio, Aldo D <[Aldo.DiVirgilio@thruway.ny.gov](mailto:Aldo.DiVirgilio@thruway.ny.gov)>; Cody, Matthew <[Matthew.Cody@thruway.ny.gov](mailto:Matthew.Cody@thruway.ny.gov)>  
**Subject:** RE: NJDOT C-V2X Deployment Notification

Aldo/Matthew,

Below is the information I believe you are looking for. Based on your email, it appears that NJDOT will not be conflicting with any existing NYS Thruway DSRC RSUs. If that is the case and the information below is what you are looking for, are you able to send an email stating NYS Thruway has no exception to our proposed locations?

**NYS Thruway Approval  
Call Sign # WQNG700**

- Transmitter Station Class – FB (this is the only valid station class for ITS applications)
- Channel Number – We plan to use channels 180, 182, 184 based on the message type outlined in the letter. See attachment for additional information.
- Maximum Transmitter Output Power (dBm) – 18.0 dBm
- Effective Radiated Power (EIRP) (dBm) – 23.0 dBm

Please let me know if you need any additional information.

Thanks,

Drew  
**Drew Horgan, PE, PTOE** | [Jacobs](#) | Project Manager  
M:267.688.8207 | [drew.horgan@jacobs.com](mailto:drew.horgan@jacobs.com)  
2001 Market St, Suite 900 | Philadelphia, PA 19103

---

**From:** Divirgilio, Aldo D <[Aldo.DiVirgilio@thruway.ny.gov](mailto:Aldo.DiVirgilio@thruway.ny.gov)>  
**Sent:** Monday, August 1, 2022 8:20 AM  
**To:** Horgan, Drew <[Drew.Horgan@jacobs.com](mailto:Drew.Horgan@jacobs.com)>; Cody, Matthew <[Matthew.Cody@thruway.ny.gov](mailto:Matthew.Cody@thruway.ny.gov)>  
**Subject:** [EXTERNAL] RE: NJDOT C-V2X Deployment Notification

Hello Drew, Matt Cody is the Thruway Authority's radio engineer who perform all frequency coordination (typically for our Public Safety Radio system). We participated with the NYS Dept of Transportation approximately 10 years ago in the development of a DSRC (Connected Vehicle) test bed both on I-87 Spring Valley area and I-495 in Long Island. From the Thruway's perspective our participation has long since been completed and equipment has been dismantled. We would like to know more about the specifics of 701.03.01 as you state "Comply with the requirements as specified in 701.03.01" and in particular for 1. Transmitter Station Class 2. Channel Number, 3. Maximum Transmitter Output Power (dBm), 4. Effective Radiated Power (EIRP) (dBm). As I recall DRSC is very low power (Output and ERP), do you have the specs for that?

Thanks,  
Aldo

---

**From:** Horgan, Drew <[Drew.Horgan@jacobs.com](mailto:Drew.Horgan@jacobs.com)>  
**Sent:** Thursday, July 28, 2022 12:07 PM  
**To:** Cody, Matthew <[Matthew.Cody@thruway.ny.gov](mailto:Matthew.Cody@thruway.ny.gov)>; Divirgilio, Aldo D <[Aldo.DiVirgilio@thruway.ny.gov](mailto:Aldo.DiVirgilio@thruway.ny.gov)>  
**Subject:** FW: NJDOT C-V2X Deployment Notification  
**Importance:** High

**ATTENTION:** Email messages can contain fraudulent links or attachments leading to malicious software. Do not open attachments or click on links from unknown senders or in unsolicited emails.

Matthew/Aldo,

I am trying to get in touch with Roy Sifert in relation to FCC license coordination in the 5.9 GHz band for connected vehicles. It appears the email I was provided was not correct. Would you be able to provide me with his correct email or point me in the direction if I should be coordinating with someone else from NY Thruway?

Thanks,

**Horgan, Drew**

---

**From:** Lukacik, Henry <hlukacik@oti.nyc.gov>  
**Sent:** Friday, August 5, 2022 10:26 AM  
**To:** Horgan, Drew  
**Cc:** Mirza, Wasif (DOT); Jave, Janet [DOT]; Hayes, Kevin; Patel, Hirenkumar  
**Subject:** RE: [EXTERNAL] NJDOT C-V2X Deployment Notification

Drew,

NYC OTI has reviewed data submitted by NJDOT against OTI's 5.9GHz callsign and see no spacing issues (<1000') between the DSRC RSU's. Please acknowledge this message and indicate if this message is sufficient for your effort.

**Henry Lukacik**

**PMP, ITILv3, COBIT5, Lean 6σ, CCDP, CCNP, FCC GROL+RDR/GMDSS DM+DO, DHS COML COMT**

Public Safety Engineering Manager

NYC Office of Technology and Innovation

2mtc 4<sup>th</sup> fl Brooklyn NY 11201

718-804-4868

[hlukacik@oti.nyc.gov](mailto:hlukacik@oti.nyc.gov)



---

**From:** Horgan, Drew <Drew.Horgan@jacobs.com>  
**Sent:** Wednesday, July 27, 2022 3:12 PM  
**To:** Lukacik, Henry <hlukacik@oti.nyc.gov>  
**Cc:** Mirza, Wasif (DOT) <Wasif.Mirza@dot.nj.gov>; Jave, Janet [DOT] <Janet.Jave@dot.nj.gov>; Hayes, Kevin <Kevin.Hayes@jacobs.com>; Patel, Hirenkumar <Hirenkumar.Patel@dot.nj.gov>  
**Subject:** [EXTERNAL] NJDOT C-V2X Deployment Notification  
**Importance:** High

You don't often get email from [drew.horgan@jacobs.com](mailto:drew.horgan@jacobs.com). [Learn why this is important](#)

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe. Forward suspect email to [phish@cyber.nyc.gov](mailto:phish@cyber.nyc.gov) as an attachment (Click the More button, then forward as attachment).

Henry,

I am reaching out to you on behalf of the NJDOT Mobility Engineering Unit. As a part of the FCC guidance for obtaining a waiver to deploy C-V2X, NJDOT is required to notify and coordinate with every existing 5.9 GHz license holder within its geographic area. Please see the attached notification letter with the specific deployment information for NJDOT. NJDOT is asking for acknowledgement that your agency has no existing DSRC RSU's deployed within 1,000' feet of NJDOT's proposed deployment location by Friday August 5<sup>th</sup>, 2022. Please note that you may have received a similar letter last week. Please ignore any previous letters as it relates to this subject.

I have attached a google earth file showing the proposed deployment locations along with the RSU technical specifications NJDOT used as a part of its construction project for your reference.



**Horgan, Drew**

**NY State DOT  
Call Sign # WQBG981**

---

**From:** Terry, Bob S. (DOT) <Bob.Terry@dot.ny.gov>  
**Sent:** Tuesday, August 2, 2022 10:21 AM  
**To:** Horgan, Drew  
**Cc:** Mirza, Wasif (DOT); Jave, Janet [DOT]; Hayes, Kevin; Patel, Hirenkumar  
**Subject:** [EXTERNAL] RE: NJDOT C-V2X Deployment Notification

NYSDOT does not have any deployments within 1000' of NJDOT's proposed deployments.

**Robert S. Terry**  
Radio/Wireless Engineer  
**New York State Department of Transportation**  
50 Wolf Road/POD 5-3  
Albany, NY 12232  
518-457-1584 Desk  
518-528-1476 Cell  
[bob.terry@dot.ny.gov](mailto:bob.terry@dot.ny.gov)  
[www.dot.ny.gov](http://www.dot.ny.gov)



---

**From:** Horgan, Drew <Drew.Horgan@jacobs.com>  
**Sent:** Wednesday, July 27, 2022 2:50 PM  
**To:** Terry, Bob S. (DOT) <Bob.Terry@dot.ny.gov>  
**Cc:** Mirza, Wasif (DOT) <Wasif.Mirza@dot.nj.gov>; Jave, Janet [DOT] <Janet.Jave@dot.nj.gov>; Hayes, Kevin <Kevin.Hayes@jacobs.com>; Patel, Hirenkumar <Hirenkumar.Patel@dot.nj.gov>  
**Subject:** NJDOT C-V2X Deployment Notification  
**Importance:** High

**ATTENTION: This email came from an external source. Do not open attachments or click on links from unknown senders or unexpected emails.**

Robert,

I am reaching out to you on behalf of the NJDOT Mobility Engineering Unit. As a part of the FCC guidance for obtaining a waiver to deploy C-V2X, NJDOT is required to notify and coordinate with every existing 5.9 GHz license holder within its geographic area. Please see the attached notification letter with the specific deployment information for NJDOT. NJDOT is asking for acknowledgement that your agency has no existing DSRC RSU's deployed within 1,000' feet of NJDOT's proposed deployment location by Friday August 5<sup>th</sup>, 2022. Please note that you may have received a similar letter last week. Please ignore any previous letters as it relates to this subject.

I have attached a google earth file showing the proposed deployment locations along with the RSU technical specifications NJDOT used as a part of its construction project for your reference.

Please let us know if you have any questions.

July 29, 2022

Wasif Mirza, Director of Mobility Engineering  
New Jersey Department of Transportation  
1035 Parkway Avenue | Trenton, NJ 08625

Dear Mr. Mirza:

In response to your letter, dated July 27, 2022, in which you notify The Port Authority of New York and New Jersey (the "Port Authority") that the New Jersey Department of Transportation (NJDOT) is planning to deploy Cellular Vehicle-to-Everything (C-V2X) Connected Vehicle (CV) Technology/Hardware by the end of calendar year, 2022, we raise no objection to that deployment.

An attachment was included with this letter providing the proposed deployment locations for the C-V2X RSUs, along with technical specifications for the proposed C-V2X RSUs. The proposed locations include 47 locations along Route U.S. 322 and Route U.S. 40/322 in Atlantic County, and 74 locations along Route I-295 and Route U.S. 1 in Middlesex and Mercer Counties. In response to your request for verification, the Port Authority confirms that we have no existing DSRC-based roadside units operating within 1,000 feet of NJDOT's proposed deployment locations.

Please feel free to contact me at [cclinton@panynj.gov](mailto:cclinton@panynj.gov) or 201-783-4787 with any questions regarding this response.

Sincerely,



Charles Clinton, PE  
Senior Principal Engineer  
Engineering Department

**Horgan, Drew**

---

**From:** Kopko, Mark C <markopko@pa.gov>  
**Sent:** Thursday, July 28, 2022 4:24 PM  
**To:** Horgan, Drew  
**Cc:** Mirza, Wasif (DOT); Jave, Janet [DOT]; Hayes, Kevin; Patel, Hirenkumar  
**Subject:** RE: [External] NJDOT C-V2X Deployment Notification

Hey Drew,

Sorry for the delay getting back to you. We do not have any devices deployed on the eastern side of the state (Harrisburg is the closest).

**Mark C. Kopko** | Director  
Office of Transformational Technology  
PA Department of Transportation  
400 North Street, 6th Floor | Harrisburg, PA 17120  
Phone 717.783.1903  
[www.PennDOT.pa.gov](http://www.PennDOT.pa.gov)

---

**From:** Horgan, Drew <Drew.Horgan@jacobs.com>  
**Sent:** Wednesday, July 27, 2022 2:05 PM  
**To:** Kopko, Mark C <markopko@pa.gov>  
**Cc:** Mirza, Wasif (DOT) <Wasif.Mirza@dot.nj.gov>; Jave, Janet [DOT] <Janet.Jave@dot.nj.gov>; Hayes, Kevin <Kevin.Hayes@jacobs.com>; Patel, Hirenkumar <Hirenkumar.Patel@dot.nj.gov>  
**Subject:** [External] NJDOT C-V2X Deployment Notification  
**Importance:** High

**ATTENTION:** This email message is from an external sender. Do not open links or attachments from unknown senders. To report suspicious email, use the [Report Phishing button in Outlook](#).

Mark,

I am reaching out to you on behalf of the NJDOT Mobility Engineering Unit. As a part of the FCC guidance for obtaining a waiver to deploy C-V2X, NJDOT is required to notify and coordinate with every existing 5.9 GHz license holder within its geographic area. Please see the attached notification letter with the specific deployment information for NJDOT. NJDOT is asking for acknowledgement that your agency has no existing DSRC RSU's deployed within 1,000' feet of NJDOT's proposed deployment location by Friday August 5<sup>th</sup>, 2022. Please note that you may have received a similar letter last week. Please ignore any previous letters as it relates to this subject.

I have attached a google earth file showing the proposed deployment locations along with the RSU technical specifications NJDOT used as a part of its construction project for your reference.

Please let us know if you have any questions.

Thanks,

Drew

PTC  
Call Sign # WRAL269

**Horgan, Drew**

---

**From:** Pack, Michael <mpack@paturndpike.com>  
**Sent:** Thursday, July 28, 2022 9:05 AM  
**To:** Horgan, Drew  
**Cc:** Metz, Michael  
**Subject:** [EXTERNAL] FW: NJDOT C-V2X Deployment Notification

FYI...see Mike Metz confirmation below. He was in receipt of Janet's request. Is this email sufficient for response?

*Thanks,  
Mike*

**Michael Pack**  
**Manager of Incident Management & Traffic Operations**  
Pennsylvania Turnpike Commission  
2850 Turnpike Industrial Park Road  
Middletown, PA 17057  
**Phone 717.831.7659**  
[www.paturndpike.com](http://www.paturndpike.com)

---

**From:** Metz, Michael <mmez@paturndpike.com>  
**Sent:** Thursday, July 28, 2022 9:03 AM  
**To:** Pack, Michael <mpack@paturndpike.com>  
**Subject:** RE: NJDOT C-V2X Deployment Notification

I am 100% sure we are unaffected. I did receive a similar letter from Janet Jave, with a typo mistakenly referencing us as DRPA, that I hadn't responded to yet. Since we have now received this, I will not respond to Janet's email other than to state we are responding to Drew's email.

You can provide Drew confirmation. Copy me please for my email records.

Mike

---

**From:** Pack, Michael <[mpack@paturndpike.com](mailto:mpack@paturndpike.com)>  
**Sent:** Wednesday, July 27, 2022 4:22 PM  
**To:** Metz, Michael <[mmez@paturndpike.com](mailto:mmez@paturndpike.com)>  
**Subject:** Fwd: NJDOT C-V2X Deployment Notification

I'm 99.9% sure we're in the clear. Are you 100% sure?

Sent from my iPhone

Begin forwarded message:

**From:** "Horgan, Drew" <[drew.horgan@jacobs.com](mailto:drew.horgan@jacobs.com)>  
**Date:** July 27, 2022 at 3:36:31 PM EDT

PTC  
Call Sign # WRAL269

To: "Pack, Michael" <[mpack@paturnpike.com](mailto:mpack@paturnpike.com)>  
Cc: "Mirza, Wasif (DOT)" <[Wasif.Mirza@dot.nj.gov](mailto:Wasif.Mirza@dot.nj.gov)>, "Jave, Janet [DOT]" <[Janet.Jave@dot.nj.gov](mailto:Janet.Jave@dot.nj.gov)>, "Hayes, Kevin" <[Kevin.Hayes@jacobs.com](mailto:Kevin.Hayes@jacobs.com)>, "Patel, Hirenkumar" <[Hirenkumar.Patel@dot.nj.gov](mailto:Hirenkumar.Patel@dot.nj.gov)>  
Subject: NJDOT C-V2X Deployment Notification

**ALERT** - This email is from an **External Source**. Be careful opening attachments, clicking links or responding.

Mike,

I am reaching out to you on behalf of the NJDOT Mobility Engineering Unit. As a part of the FCC guidance for obtaining a waiver to deploy C-V2X, NJDOT is required to notify and coordinate with every existing 5.9 GHz license holder within its geographic area. Please see the attached notification letter with the specific deployment information for NJDOT. NJDOT is asking for acknowledgement that your agency has no existing DSRC RSU's deployed within 1,000' feet of NJDOT's proposed deployment location by Friday August 5<sup>th</sup>, 2022. Please note that you may have received a similar letter last week. Please ignore any previous letters as it relates to this subject.

I have attached a google earth file showing the proposed deployment locations along with the RSU technical specifications NJDOT used as a part of its construction project for your reference.

Please let us know if you have any questions.

Thanks,

Drew

**Drew Horgan, PE, PTOE** | [Jacobs](#) | Project Manager  
M:267.688.8207 | [drew.horgan@jacobs.com](mailto:drew.horgan@jacobs.com)  
2001 Market St, Suite 900 | Philadelphia, PA 19103

---

NOTICE - This communication may contain confidential and privileged information that is for the sole use of the intended recipient. Any viewing, copying or distribution of, or reliance on this message by unintended recipients is strictly prohibited. If you have received this message in error, please notify us immediately by replying to the message and deleting it from your computer.

This email and any attachments are intended for the review and use of the individual(s) to whom it is addressed. If you are not the intended recipient, you are hereby notified that any dissemination, use, transmission or copying of this e-mail is strictly prohibited. If you have received this email in error, please notify the sender immediately and delete the email from your email system.

Monroe County Approval  
Call Sign # WQBH923

**Horgan, Drew**

---

**From:** Fish, Christopher <CFish@monroecounty.gov>  
**Sent:** Wednesday, August 17, 2022 10:25 AM  
**To:** Horgan, Drew  
**Cc:** Mirza, Wasif (DOT); Jave, Janet [DOT]; Hayes, Kevin; Patel, Hirenkumar  
**Subject:** [EXTERNAL] RE: NJDOT C-V2X Deployment Notification

Good Day,

We have reviewed this and do not have any concerns at this time. Good luck with your project.

Very Respectfully,

Christopher Fish - COML  
Emergency Communications (911 Program Manager/Radio Center Administrator)  
Monroe County Public Safety Department  
1530 Highland Ave  
Rochester NY, 14618  
585-753-3682 (Radio Center Office Direct)

**From:** Horgan, Drew <Drew.Horgan@jacobs.com>  
**Sent:** Wednesday, August 3, 2022 10:34 AM  
**To:** Fish, Christopher <CFish@monroecounty.gov>  
**Cc:** Mirza, Wasif (DOT) <Wasif.Mirza@dot.nj.gov>; Jave, Janet [DOT] <Janet.Jave@dot.nj.gov>; Hayes, Kevin <Kevin.Hayes@jacobs.com>; Patel, Hirenkumar <Hirenkumar.Patel@dot.nj.gov>  
**Subject:** RE: NJDOT C-V2X Deployment Notification  
**Importance:** High

CAUTION: This email originated from outside Monroe County systems. Exercise caution when opening attachments or clicking links, especially from unknown senders.

~~~~~

Chris,

I wanted to follow up to see if you had a chance to review the information provided last week and if you had any questions or comments.

Thanks,

Drew  
**Drew Horgan, PE, PTOE** | [Jacobs](#) | Project Manager  
M:267.688.8207 | [drew.horgan@jacobs.com](mailto:drew.horgan@jacobs.com)  
2001 Market St, Suite 900 | Philadelphia, PA 19103