

AGREEMENT

GOODS AND SERVICES AGREEMENT

THIS GOODS AND SERVICES AGREEMENT is made as of Click or tap to enter a date. (effective date). By and between Pinellas County, a political subdivision of the State of Florida ("County"), and Kapsch TrafficCom USA, Inc. DE, ("Contractor"), (individually, "Party," collectively, "Parties").

WITNESSETH:

WHEREAS, the County requested proposals pursuant to 23-0029-P for; Pinellas Connected Community project – ATCMTD and

WHEREAS, based upon the County's assessment of Contractor's proposal, the County selected the Contractor to provide the Services as defined herein; and

WHEREAS, Contractor represents that it has the experience and expertise to provide Goods and perform the Services as set forth in this Agreement.

NOW, THEREFORE, in consideration of the above recitals, the mutual covenants, agreements, terms, and conditions herein, and other good and valuable consideration, the receipt and sufficiency of which is hereby mutually acknowledged, the Parties agree as follows:

1. Definitions

- A. **"Agreement"** means this Agreement, including all Exhibits, which are expressly incorporated herein by reference, and any amendments thereto.
- B. **"County Confidential Information"** means any County information deemed confidential and/or exempt from Section 119.07, Florida Statutes, and Section 24(a), Article 1 of the Florida Constitution, or other applicable law, including, but not limited to data or information referenced and any other information designated in writing by the County as County Confidential Information.
- C. **"Contractor Confidential Information"** means any Contractor information that is designated as confidential and/or exempt by Florida's public records law, including information that constitutes a trade secret pursuant to Chapter 688, Florida Statutes, and is designated in this Agreement or in writing as a trade secret by Contractor (unless otherwise determined to be a public record by applicable Florida law). Notwithstanding the foregoing, Contractor Confidential Information does not include information that: (i) becomes public other than as a result of a disclosure by the County in breach of the Agreement; (ii) becomes available to the County on a non-confidential basis from a source other than Contractor, which is not prohibited from disclosing such information by obligation to Contractor; (iii) is known by the County prior to its receipt from Contractor without any obligation or confidentiality with respect thereto; or (iv) is developed by the County independently of any disclosures made by Contractor.
- D. **"Contractor Personnel"** means all employees of Contractor, and all employees of subcontractors of Contractor, including, but not limited to temporary and/or leased employees, who are providing the Services at any time during the project term.
- E. **"Project Manager"** means the person designated by the County to direct the work performed under this Agreement.
- F. **"Services"** means the work, duties, and obligations to be carried out and performed safely by Contractor under this Agreement, as described throughout this Agreement and as specifically described in the Statement of Work Exhibit attached hereto and incorporated herein by reference. As used in this Agreement, Services shall include any component task, subtask, service, or function inherent, necessary, or a customary part of the Services, but not specifically described in this Agreement, and shall include the provision of all standard day-to-day administrative, overhead, and internal expenses, including costs of bonds and insurance as required herein, labor, materials, equipment, safety equipment, products, office supplies, consumables, tools, postage, computer hardware/software, telephone charges, copier usage, fax charges, travel, lodging, and per diem and all other costs required to perform Services except as otherwise specifically provided in this Agreement.



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2. Execution of Agreement

The execution of this Agreement is expressly limited by the Terms and Conditions hereon. County and the Contractor are not bound by additional provisions or provisions at variance herewith that may appear in the Contractor's quotation, estimate, scope of work, or any other such related documents, acknowledgement in force, or any other communication from Contractor to or from County unless such provision is expressly set forth herein.

3. Conditions Precedent

This Agreement, and the Parties' rights and obligations herein, are contingent upon and subject to the Contractor securing and/or providing the performance security, if required, and the insurance coverage(s) required, within 10 days of the Effective Date. No Services shall be performed by the Contractor and the County shall not incur any obligations of any type until Contractor satisfies these conditions. Unless waived in writing by the County, in the event the Contractor fails to satisfy the conditions precedent within the time required herein, the Agreement shall be deemed not to have been entered into and shall be null and void.

4. Services

- A. **Services** - The County retains Contractor, and Contractor agrees to provide the Services. All Services shall be performed to the satisfaction of the County and shall be subject to the provisions and terms contained herein and the Exhibits attached hereto.
- B. **Services Requiring Prior Approval** - Contractor shall not commence work on any Services requiring prior written authorization in the Statement of Work without approval from Project Manager.
- C. **Optional Services** - From the Effective Date and for the duration of the project, the County may elect to have Contractor perform Services that are not specifically described in the Statement of Work attached hereto but are related to the Services ("Optional Services"), in which event Contractor shall perform such Optional Services for the compensation specified in the Statement of Work attached hereto. Contractor shall commence performing the applicable Optional Services promptly upon receipt of written approval as provided herein.
- D. **De-scoping of Services** - The County reserves the right, in its sole discretion, to de-scope Services upon written notification to the Contractor by the County. Upon issuance and receipt of the notification, the Contractor and the County shall enter into a written amendment reducing the appropriate Services Fee for the impacted Services by a sum equal to the amount associated with the de-scoped Services as defined in the payment schedule in this Agreement, if applicable, or as determined by mutual written consent of both Parties based upon the scope of work performed prior to issuance of notification.
- E. **Independent Contractor Status and Compliance with the Immigration Reform and Control Act** - Contractor is and shall remain an independent contractor and is neither agent, employee, partner, nor joint venturer of County. Contractor acknowledges that it is responsible for complying with the provisions of the Immigration Reform and Control Act of 1986 located at 8 U.S.C. 1324, et seq, and regulations relating thereto, as either may be amended from time to time. Failure to comply with the above provisions shall be considered a material breach of the Agreement.
- F. **Non-Exclusive Services** - Award of this Agreement imposes no obligation on the County to utilize the Contractor for all goods and/or services of this type, which may develop during the agreement period. This is a non-exclusive Agreement. During the term of this Agreement, and any extensions thereof, the County reserves the right to contract for another provider for similar goods and/or services as it determines necessary in its sole discretion.
- G. **Project Monitoring** - During the term of the Agreement, Contractor shall cooperate with the County, either directly or through its representatives, in monitoring Contractor's progress and performance of this Agreement.

5. Term of Agreement

- A. **Initial Term** - The term of this Agreement shall commence on **the Effective Date** and shall remain in full force and for 3 years, or until termination of the Agreement, whichever occurs first.

B. Term Extension -

The Parties may extend the term of this Agreement for two (2) additional one (1) year period(s) pursuant to the same terms, conditions, and pricing set forth in the Agreement by mutually executing an amendment to this Agreement, as provided herein.



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6. Orders

Within the term of this Agreement, County may place one or more orders for goods and/or services at the prices listed in **Exhibit C ("Payment Schedule")** attached hereto, and which is incorporated by reference hereto.

7. Delivery / Claims

Prices on the Payment Schedule are F.O.B. Destination, FREIGHT INCLUDED and unloaded to location(s) within Pinellas County. Actual delivery address(es) will be identified at time of order. Contractor will be responsible for making any and all claims against carriers for missing or damaged items.

8. Inspection

In County's sole discretion, goods rejected due to inferior quality or workmanship will be returned to Contractor at Contractor's expense and are not to be replaced except upon receipt of written instructions from County.

9. Material Quality

All goods and materials purchased and delivered pursuant to this Agreement will be of first quality and not damaged and/or factory seconds. Any materials damaged or not in first quality condition upon receipt must be exchanged within 24 hours of notice to the Contractor at no charge to County.

10. Material Safety Data

In accordance with OSHA Hazardous Communications Standards, it is the Contractor seller's duty to advise if a product is a toxic substance and to provide a Material Safety Data Sheet at time of delivery.

11. Purchase Order Number

Each order will contain the Purchase Order Number applicable to this Agreement, and such Purchase Order Number must appear on all packing slips, invoices and all correspondence relating to the Order. County will not be responsible for goods delivered without a Purchase Order Number.

12. Variation in Quantity

County assumes no liability for goods or materials produced, processed or shipped in excess of the amounts ordered pursuant to the terms of this Agreement.

13. Warranty

Seller warrants that the goods are of first quality and as described in the Payment Schedule. All manufacturer, producer or seller warranties offered to any other purchaser are expressly available and applicable to County.

EXCEPT AS EXPRESSLY SET FORTH IN THIS AGREEMENT, CONTRACTOR DOES NOT MAKE ANY REPRESENTATIONS OR WARRANTIES WHATSOEVER, WHETHER ORAL OR WRITTEN, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION AND AS PERMITTED BY LAW, WARRANTIES AS TO SATISFACTORY QUALITY, MERCHANTABILITY, ACCURACY OF RESULTS, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT, ALL OF WHICH ARE EXPRESSLY DISCLAIMED. CONTRACTOR DOES NOT WARRANT THAT THE APPLICATION PLATFORM OR THE SAAS SERVICES WILL BE COMPLETELY ERROR FREE OR THAT THE USE OF THE APPLICATION PLATFORM WILL BE UNINTERRUPTED OR PROBLEM OR ERROR-FREE.

14. Compensation and Method of Payment

A. **Goods and Services Fee** - As total compensation for the Goods and Services, the County shall pay the Contractor the sums as provided in this Section Compensation and Method Payment ("Goods and Services Fee"), pursuant to the terms and conditions as provided in this Agreement. It is acknowledged and agreed by Contractor that this compensation constitutes a limitation upon County's obligation to compensate Contractor for such Goods and Services required by this Agreement but does not constitute a limitation upon Contractor's obligation to provide Goods and perform all of the Services required by this Agreement. In no event will the Goods and Services Fee paid exceed the not-to-exceed sums set out in subsections below, unless the Parties agree to increase this sum by written amendment as authorized in the Amendment Section of this Agreement.

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- B. **Spending Cap and Payment Structure** - The County agrees to pay the Contractor the total not-to-exceed sum of \$3,500,000.00, for Goods and Services completed and accepted herein, payable per the rates set out in Exhibit C attached hereto, upon submittal of an invoice as required herein.
- C. **Travel Expenses** - The Services Fee includes all travel, lodging and per diem expenses incurred by Contractor in performing the Services.
- D. **Taxes** - Contractor acknowledges that the County is not subject to any state or federal sales, use, transportation and certain excise taxes.
- E. **Payments and Invoicing** - Contractor must submit invoices for payments due as provided herein and authorized reimbursable expenses incurred with such documentation as required by County. Invoices shall be submitted as provided in Exhibit D attached hereto.

For time and materials Services, all Contractor Personnel shall maintain logs of time worked, and each invoice shall state the date and number of hours worked for Services authorized to be billed on a time and materials basis.

All payments shall be made in accordance with the requirements of Section 218.70 et seq., Florida Statutes, "The Local Government Prompt Payment Act." The County may dispute any payments invoiced by Contractor in accordance with the County's Invoice Payments Dispute Resolution Process established in accordance with Section 218.76, Florida Statutes, and any such disputes shall be resolved in accordance with the County's Dispute Resolution Process.

- F. As stated in the Pricing Table (Exhibit C), County agrees that it is responsible for the cloud hosting price, which will be the Azure hosting costs charged to Kapsch. County agrees that the \$9,500 shown in Exhibit C is an estimated amount and could increase or decrease throughout the life of the Agreement. For the purpose of clarity, County is responsible to Kapsch for any increase in hosting costs. The Parties agree to work in good faith to minimize the cost of cloud hosting.

15. Acceptance of Services

For all document deliverables that require County acceptance as provided in the Statement of Work, the County, through the Project Manager or designee, will have 10 calendar days to review the document deliverable(s) after receipt or completion of same by Contractor, and either accept or reject the deliverable(s) by written notice to Kapsch TrafficCom USA, Inc. If a document deliverable is rejected, the written notice from the County will specify any required changes, deficiencies, and/or additions necessary. Contractor shall then have 10 calendar days to revise the deliverable(s) to resubmit and/or complete the document deliverable(s) for review and approval by the County, who will then have 10 calendar days to review and approve, or reject the document deliverable(s); provided however, that Contractor shall not be responsible for any delays in the overall project schedule that result from the County's failure to timely approve or reject document deliverable(s) as provided herein. Upon final acceptance of the document deliverable(s), the County will accept the document deliverable(s) in writing. All time requirements in this section may be altered upon mutual agreement of the Parties.

16. Discounts

Delay in receiving an invoice, invoicing for materials shipped ahead of specified schedule, or invoices rendered with errors or omissions will be considered just cause for County to withhold payment without losing discount privileges. Discount privilege will apply from date of scheduled delivery, the date of receipt of goods, or the date of approved invoice, whichever is later.

17. Subcontracting/Assignment.

- A. **Subcontracting** - Contractor is fully responsible for completion of the Services required by this Agreement and for completion of all subcontractor work, if authorized as provided herein. Contractor shall not subcontract any work under this Agreement to any subcontractor other than the subcontractors specified in the proposal and previously approved by the County, without the prior written consent of the County, which shall be determined by the County in its sole discretion.



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B. Assignment -

This Agreement, and all rights or obligations hereunder, shall not be assigned, transferred, or delegated in whole or in part, including by acquisition of assets, merger, consolidation, dissolution, operation of law, change in effective control of the Contractor, or any other assignment, transfer, or delegation of rights or obligations, without the prior written consent of the County. The Contractor shall provide written notice to the County within fifteen (15) calendar days of any action or occurrence assigning the Agreement or any rights or obligations hereunder as described in this section. In the event the County does not consent to the assignment, as determined in its sole discretion, the purported assignment in violation of this section shall be null and void, and the County may elect to terminate this Agreement by providing written notice of its election to terminate pursuant to this provision upon fifteen (15) days' notice to Contractor.

18. Personnel

- A. **E-Verify** - The contractor and subcontractor must register with and use the E-verify system in accordance with Florida Statute 448.095. A contractor and subcontractor may not enter into a contract with the County unless each party registers with and uses the E-verify system.

If a contractor enters a contract with a subcontractor, the subcontractor must provide the contractor with an affidavit stating that the Subcontractor does not employ, contract with, or subcontract with unauthorized aliens. The contractor must maintain a copy of the affidavit for the duration of the contract.

If the County, Contractor, or Subcontractor has a good faith belief that a person or entity with which it is contracting has knowingly violated Florida Statute 448.09(1) shall immediately terminate the contract with the person or entity.

If the County has a good faith belief that a Subcontractor knowingly violated this provision, but the Contractor otherwise complied with this provision, the County will notify the Contractor and order that the Contractor immediately terminate the contract with the Subcontractor.

A contract terminated under the provisions of this section is not a breach of contract and may not be considered such. Any contract termination under the provisions of this section may be challenged to Section 448.095(2)(d), Florida Statute. Contractor acknowledges upon termination of this agreement by the County for violation of this section by Contractor, Contractor may not be awarded a public contract for at least one (1) year. Contractor acknowledges that Contractor is liable for any additional costs incurred by the County as a result of termination of any contract for a violation of this section.

Contractor or Subcontractor shall insert in any subcontracts the clauses set forth in this section, requiring the subcontracts to include these clauses in any lower tier subcontracts. Contractor shall be responsible for compliance by any Subcontractor or Lower Tier Subcontractor with the clause set for in this section.

- B. **Qualified Personnel** - Contractor agrees that each person performing Services in connection with this Agreement shall have the qualifications and shall fulfill the requirements set forth in this Agreement.
- C. **Approval and Replacement of Personnel** - The County shall have the right to approve all Contractor Personnel assigned to provide the Services, which approval shall not be unreasonably withheld. Prior to commencing the Services, the Contractor shall provide at least ten (10) days written notice of the names and qualifications of the Contractor Personnel assigned to perform Services pursuant to the Agreement. Thereafter, during the term of this Agreement, the Contractor shall promptly and as required by the County provide written notice of the names and qualifications of any additional Contractor Personnel assigned to perform Services. The County, on a reasonable basis, shall have the right to require the removal and replacement of any of the Contractor Personnel performing Services, at any time during the term of the Agreement. The County will notify Contractor in writing in the event the County requires such action. Contractor shall accomplish any such removal within forty-eight (48) hours after receipt of notice from the County and shall promptly replace such person with another person, acceptable to the County, with sufficient knowledge and expertise to perform the Services assigned to such individual in accordance with this Agreement. In situations where individual Contractor Personnel are prohibited by applicable law from providing Services, removal and replacement of such Contractor Personnel shall be immediate and not subject to such forty-eight (48) hour replacement timeframe and the provisions of the Termination Section of this Agreement shall apply if minimum required staffing is not maintained.

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19. Name Changes

The Contractor is responsible for immediately notifying the County of any company name change, which would cause invoicing to change from the name used at the time of the original Agreement.

20. Compliance with Laws

Contractor shall comply with all applicable federal, state, county and local laws, ordinances, rules and regulations in the performance of its obligations under this Agreement, including the procurement of permits and certificates where required, and including but not limited to laws related to Workers Compensation, Americans with Disabilities Act (ADA), Section 504 of the Rehabilitation Act of 1973, Minority Business Enterprise (MBE), occupational safety and health and the environment, equal employment opportunity, privacy of medical records and information, as applicable. Failure to comply with any of the above provisions shall be considered a material breach of the Agreement.

21. Applicable Law and Venue

This Agreement and any and all purchases made hereunder shall be governed by and construed in accordance with the laws of the State of Florida (without regard to principles of conflicts of laws). The Parties agree that all actions or proceedings arising in connection with this Agreement shall be tried and litigated exclusively in the state or federal (if permitted by law and a Party elects to file an action in federal court) courts located in or for Pinellas County, Florida. This choice of venue is intended by the Parties to be mandatory and not permissive in nature, and to preclude the possibility of litigation between the Parties with respect to, or arising out of, this Agreement in any jurisdiction other than that specified in this section. Each Party waives any right it may have to assert the doctrine of forum non-conveniens or similar doctrine or to object to venue with respect to any proceeding brought in accordance with this section.

22. Public Entities Crimes

Contractor is directed to the Florida Public Entities Crime Act, Section 287.133, Florida Statutes, as well as Florida Statute 287.135 regarding Scrutinized Companies, and represents to County that Contractor is qualified to transact business with public entities in Florida, and to enter into and fully perform this Agreement subject to the provisions stated therein. Failure to comply with any of the above provisions shall be considered a material breach of the Agreement.

23. Waiver

No waiver by either Party of any breach or violation of any covenant, term, condition, or provision of this Agreement or of the provisions of any ordinance or law, shall be construed to waive any other term, covenant, condition, provisions, ordinance or law, or of any subsequent breach or violation of the same.

24. Due Authority

Each Party to this Agreement represents and warrants that: (i) it has the full right and authority and has obtained all necessary approvals to enter into this Agreement; (ii) each person executing this Agreement on behalf of the Party is authorized to do so; (iii) this Agreement constitutes a valid and legally binding obligation of the Party, enforceable in accordance with its terms.

25. Termination

A. Contractor Default Provisions and Remedies of County

1. **Events of Default** - Any of the following shall constitute a "Contractor Event of Default" hereunder:
 - i. Contractor fails to perform the Services as specified in the Agreement, or fails to complete the Services within the completion dates as specified in the Agreement;
 - ii. Contractor breaches Confidential Information Section of this Agreement;
 - iii. Contractor fails to gain acceptance of goods and/or services deliverable, for 2 consecutive iterations; or
 - iv. Contractor fails to perform or observe any of the other material provisions of this Agreement.



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2. **Cure Provisions** - Upon the occurrence of a Contractor Event of Default as set out above, the County shall provide written notice of such Contractor Event of Default to Contractor ("Notice to Cure"), and Contractor shall have 30 calendar days after the date of a Notice to Cure to correct, cure, and/or remedy the Contractor Event of Default described in the written notice.
3. **Termination for Cause by the County** - In the event that Contractor fails to cure a Contractor Event of Default as authorized herein, or upon the occurrence of a Contractor Event of Default as specified in Termination – Contractor Default Provisions and Remedies of County – Events of Default Section of this Agreement, the County may terminate this Agreement in whole or in part, effective upon receipt by Contractor of written notice of termination pursuant to this provision, and may pursue such remedies at law or in equity as may be available to the County.

B. County Default Provisions and Remedies of Contractor

1. **Events of Default** - Any of the following shall constitute a "County Event of Default" hereunder:
 - i. the County fails to make timely undisputed payments as described in this Agreement;
 - ii. the County breaches Confidential Information Section of this Agreement; or the County fails to perform any of the other material provisions of this Agreement.
2. **Cure Provisions** - Upon the occurrence of a County Event of Default as set out above, Contractor shall provide written notice of such County Event of Default to the County ("Notice to Cure"), and the County shall have thirty (30) calendar days after the date of a Notice to Cure to correct, cure, and/or remedy the County Event of Default described in the written notice.
3. **Termination for Cause by the Contractor** - In the event the County fails to cure a County Event of Default as authorized herein, Contractor may terminate this Agreement in whole or in part effective on receipt by the County of written notice of termination pursuant to this provision, and may pursue such remedies at law or in equity as may be available to the Contractor.

C. Termination for Convenience

Notwithstanding any other provision herein, the County may terminate this Agreement, without cause, by giving 30 days advance written notice to the Contractor of its election to terminate this Agreement pursuant to this provision. provided, however, that Contractor shall be entitled to payment for any and all goods, services, and work performed provided or completed before termination.

- D. Effect of Termination** - Upon any termination or expiration of this Agreement: (a) all licenses granted by Contractor hereunder shall immediately terminate and, (b) each Party shall return to the other Party any Confidential Information of the other Party in such Party's possession, and such party shall purge all of the other Party's Confidential Information from such Party's electronic systems; and (c) Contractor shall return and delete all County Data. Contractor acknowledges that the County is subject to public records legislation, including but not limited to Chapter 119, Florida Statutes, and the Florida Rules of Judicial Administration, and that any of the County's obligations under this Section may be superseded by its obligations under any requirements of said laws.

26. Time is of the Essence

Time is of the essence with respect to all provisions of this Agreement that specify a time for performance, including the Services as described in the Exhibits attached hereto; provided, however, that the foregoing shall not be construed to limit a Party's cure period allowed in the Agreement.

27. Confidential Information and Public Records

- A. **County Confidential Information** - Contractor shall not disclose to any third-party County Confidential Information that Contractor, through its Contractor Personnel, has access to or has received from the County pursuant to its performance of Services pursuant to the Agreement, unless approved in writing by the County Contract Manager. All such County Confidential Information will be held in trust and confidence from the date of disclosure by the County, and discussions involving such County Confidential Information shall be limited to Contractor Personnel as is necessary to complete the Services.
- B. **Contractor Confidential Information** - All Contractor Confidential Information received by the County from Contractor will be held in trust and confidence from the date of disclosure by Contractor and discussions involving such Contractor Confidential Information shall be limited to the members of the County's staff and the County's subcontractors who require such information in the performance of this Agreement.

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The County acknowledges and agrees to respect the copyrights, registrations, trade secrets and other proprietary rights of Contractor in the Contractor Confidential Information during and after the term of the Agreement and shall at all times maintain the confidentiality of the Contractor Confidential Information provided to the County, subject to federal law and the laws of the State of Florida related to public records disclosure. Contractor shall be solely responsible for taking any and all action it deems necessary to protect its Contractor Confidential Information except as provided herein. Contractor acknowledges that the County is subject to public records legislation, including but not limited to Chapter 119, Florida Statutes, and the Florida Rules of Judicial Administration, and that any of the County's obligations under this Section may be superseded by its obligations under any requirements of said laws.

- C. **Public Records** - Contractor acknowledges that information and data it manages as part of the services may be public records in accordance with Chapter 119, Florida Statutes and Pinellas County public records policies. Contractor agrees that prior to providing services it will implement policies and procedures to maintain, produce, secure, and retain public records in accordance with applicable laws, regulations, and County policies, including but not limited to the Section 119.0701, Florida Statutes. Notwithstanding any other provision of this Agreement relating to compensation, the Contractor agrees to charge the County, and/or any third parties requesting public records only such fees allowed by Section 119.07, Florida Statutes, and County policy for locating and producing public records during the term of this Agreement.

If the contractor has questions regarding the application of Chapter 119, Florida Statutes, to the contractor's duty to provide public records relating to this agreement, the contractor shall contact:

**Pinellas County Board of County Commissioners
Purchasing and Risk Management Division
400 S. Ft. Harrison Ave, 6th Floor,
Clearwater, FL 33756
Public Records Liaison
Phone: 727-464-3237
Email: mcchartier@pinellascounty.org**

28. Audit

Contractor shall retain all records relating to this Agreement for a period of at least 5 years after final payment is made. All records shall be kept in such a way as will permit their inspection pursuant to Chapter 119, Florida Statutes. In addition, County reserves the right to examine and/or audit such records.

29. Liability and Insurance

- A. **Insurance** - Contractor shall comply with the insurance requirements set out in the Insurance Exhibit, attached hereto and incorporated herein by reference.
- B. **Indemnification** - Contractor agrees to indemnify, pay the cost of defense, including reasonable attorney's fees, and hold harmless the County, its officers, employees and agents from all damages, suits, actions or claims, incurred by the County, of any character brought on account of any injuries or damages received or sustained by any person, persons, or property, or in any way relating to or arising from the Agreement; or on account of any act or omission, neglect or misconduct of Contractor; or arising from or by reason of any actual or claimed trademark, patent or copyright infringement or litigation based thereon; except when such injury, damage, or violation was caused by the sole negligence of the County.
- C. **Liability** - Neither the County nor Contractor shall make any express or implied agreements, guaranties or representations, or incur any debt, in the name of or on behalf of the other Party. Neither the County nor Contractor shall be obligated by or have any liability under any agreements or representations made by the other that are not expressly authorized hereunder. The County shall have no liability or obligation for any damages to any person or property directly or indirectly arising out of the operation by Contractor of its business, whether caused by Contractor's negligence or willful action or failure to act.

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D. **Contractor's Taxes** - The County will have no liability for any sales, service, value added, use, excise, gross receipts, property, workers' compensation, unemployment compensation, withholding or other taxes, whether levied upon Contractor or Contractor's assets, or upon the County in connection with Services performed or business conducted by Contractor. Payment of all such taxes and liabilities shall be the responsibility of Contractor.

E. **Limitation of Liability** - In no event will contractor's aggregate liability to county under this contract, regardless of the form of action, whether in contract, tort, negligence, strict liability or by statute or otherwise, for any claim related to or arising under this contract, exceed the maximum amount of fees payable under this contract.

30. County's Funding

The Agreement is not a general obligation of the County. It is understood that neither this Agreement nor any representation by any County employee or officer creates any obligation to appropriate or make monies available for the purpose of the Agreement beyond the fiscal year in which this Agreement is executed. No liability shall be incurred by the County, or any department, beyond the monies budgeted and available for this purpose. If funds are not appropriated by the County for any or all of this Agreement, the County shall not be obligated to pay any sums provided pursuant to this Agreement beyond the portion for which funds are appropriated. The County agrees to promptly notify Contractor in writing of such failure of appropriation, and upon receipt of such notice, this Agreement, and all rights and obligations contained herein, shall terminate without liability or penalty to the County.

31. Survival

The provisions of this Agreement shall survive the expiration or termination of this Agreement.

32. Notices

All notices, authorizations, and requests in connection with this Agreement shall be deemed given on the day they are: (1) deposited in the U.S. mail, postage prepaid, certified or registered, return receipt requested; or (2) sent by air express courier (e.g., Federal Express, Airborne, etc.), charges prepaid, return receipt requested; or (3) sent via email and addressed as set forth below, which designated person(s) may be amended by either Party by giving written notice to the other Party:

For County:

Attn: Tom Washburn, P.E.
Transportation Division Director
Pinellas County Public Works
22211 US Highway 19 N.
Clearwater, FL 33765
twashburn@pinellas.gov
727.464.8804

with a copy to:

Attn: Merry Celeste
Purchasing and Risk Management Division Director
Pinellas County Purchasing Department
400 South Fort Harrison Avenue
Clearwater, FL 33756

For Contractor:

Attn: Jeff Adler
VP, Solutions Consulting
1390 Piccard Dr. Suite 200
Rockville, MD 20850
Kapsch TrafficCom USA, Inc.
Jeff.adler@kapsch.net
301-906-3693

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With a copy to:

Attn: Brooke Chaplain
Senior Corporate Counsel
2855 Premiere PARKWAY, Suite F
Duluth, GA 30097

33. Conflict of Interest

- A. The Contractor represents that it presently has no interest and shall acquire no interest, either direct or indirect, which would conflict in any manner with the performance of the Services required hereunder, and that no person having any such interest shall be employed by Contractor during the agreement term and any extensions.
- B. The Contractor shall promptly notify the County in writing of any business association, interest, or other circumstance which constitutes a conflict of interest as provided herein. If the Contractor is in doubt as to whether a prospective business association, interest, or other circumstance constitutes a conflict of interest, the Contractor may identify the prospective business association, interest or circumstance, the nature of work that the Contractor may undertake and request an opinion as to whether the business association, interest or circumstance constitutes a conflict of interest if entered into by the Contractor. The County agrees to notify the Contractor of its opinion within (10) calendar days of receipt of notification by the Contractor, which shall be binding on the Contractor.

34. Right to Ownership

Except for the license and other rights granted to County in this SaaS Agreement, Kapsch retains all right, title and interest in and to the Application Platform, Documentation and Kapsch's Confidential Information, including all Intellectual Property Rights therein. Further, Client acknowledges and agrees that the Application Platform, derivatives thereof, ideas, methods of operation, modifications, changes, enhancements, conversions, upgrades, additions, sub-systems and modules included in the Application Platform are proprietary material which contain valuable trade secrets of Kapsch. Additionally, County agrees that, subject to the confidentiality provisions provided herein, Kapsch shall be free to use any general concepts, techniques, feedback, and know-how provided to it, used by it, or developed in the course of this relationship. Notwithstanding, Kapsch acknowledges that certain records made or received by the County under this Agreement may be subject to disclosure under F.S. Section 119.

35. Amendment

This Agreement may be amended by mutual written agreement of the Parties hereto.

36. Severability

The terms and conditions of this Agreement shall be deemed to be severable. Consequently, if any clause, term, or condition hereof shall be held to be illegal or void, such determination shall not affect the validity or legality of the remaining terms and conditions, and notwithstanding any such determination, this Agreement shall continue in full force and effect unless the particular clause, term, or condition held to be illegal or void renders the balance of the Agreement impossible to perform.

37. No Third-Party Beneficiary

The Parties hereto acknowledge and agree that there are no third-party beneficiaries to this Agreement. Persons or entities not a party to this Agreement may not claim any benefit from this Agreement or as third-party beneficiaries hereto.

38. Force Majeure

"Force Majeure Event" means any act or event that (i) prevents a Party (the "Nonperforming Party") from performing its obligations or satisfying a condition to the other Party's (the "Performing Party") obligations under this Agreement, (ii) is beyond the reasonable control of and not the fault of the Nonperforming Party, and (iii) the Nonperforming Party has not, through commercially reasonable efforts, been able to avoid or overcome. Force Majeure Event(s) do not include economic hardship, changes in market conditions or insufficiency of funds.

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If a Force Majeure Event occurs, the Nonperforming Party is excused from the performance and thereby prevented from satisfying any conditions precedent to the Performing Party's performance that cannot be satisfied, in each case to the extent limited or prevented by the Force Majeure Event. The Nonperforming Party must promptly notify the Performing Party upon the occurrence of a Force Majeure Event. When the Nonperforming Party is able to resume its performance or satisfy the conditions precedent to the Performing Party's obligations, the Nonperforming Party will resume performance under this Agreement without undue delay. Each Party will use commercially reasonable efforts to mitigate the effect of a Force Majeure Event.

39. Order of Precedence

All Exhibits attached and listed below are incorporated in their entirety into, and form part of this Agreement and will have priority in the order listed.

- A. Pinellas County Agreement
- B. Exhibit A: Statement of Work
- C. Exhibit B: Insurance Requirements
- D. Exhibit C: Payment Schedule
- E. Exhibit D: Payment/ Invoice
- F. Exhibit E: Dispute Resolution For Pinellas County Board Of County Commissioners In Matters Of Invoice Payments
- G. Exhibit F: Pinellas Connected Community Software as a Service Agreement (PCC-SaaS)
- H. Exhibit G: PCC ATCMTD System Required Matrix

In the event of an inconsistency in this Agreement and any of the attached Exhibits, the terms set forth in this Agreement will prevail.

40. Entirety

This Agreement constitutes the entire Agreement between the Parties and supersedes all prior negotiations, representations or agreements either oral or written.

(Signature Page Follows)



AGREEMENT

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement the day and year first written.

PINELLAS COUNTY, FLORIDA
By and through its
Board of County Commissioners

Kapsch TrafficCom USA, Inc.

By _____

Name of Firm

By: _____

Signature

W. Daniel Lohrey

Print Name

Senior Vice President

Title

APPROVED AS TO FORM

By: Keiah Townsend
Office of the County Attorney

MD7

AGREEMENT

EXHIBIT A - STATEMENT OF WORK

OVERVIEW:

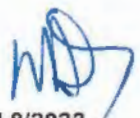
Pinellas County Public Works Department is establishing this contract to provide for all software upgrades, field equipment, project management installation and integration services necessary to fully implement the ATCMTD project, also titled the Pinellas Connected Community (PCC) project. This project adds new technology, field and computer hardware and software solutions to existing transportation systems and infrastructure to improve mobility and safety within the region. The project builds upon several platforms and technologies that have been deployed over the past several years. The Contractor shall be required to provide all labor, supervision, materials, tools, components and support necessary for the proper performance and completion of the project per the requirements stated below.

A. DEFINITIONS:

1. API – Application Programming Interface
2. ATCMTD - Advanced Transportation and Congestion Management Technologies Deployment
3. ConOps – Concept of Operations
4. COTS – Commercial off the Shelf
5. FDD – Functional Design Document
6. ICD – Interface Control Document
7. ITS – Intelligent Transportation System
8. IVA – Intersection Video Analytics
9. NEPA – National Environmental Policy Act
10. PCC – Pinellas Connected Community
11. PMP – Project Management Plan
12. RSU – Roadside Unit
13. RTVM – Requirements Traceability Verification Matrix
14. SAT – System Acceptance Testing
15. SDD – System Design Document
16. SEMP – Systems Engineering Management Plan
17. SyRS – System Requirements Specification

B. PROJECT MANAGEMENT AND PLANNING:

1. Contractor will update the existing PMP and add sections on change control, risk management, and configuration management. Initial draft will be delivered prior to the kickoff meeting and shall include but not be limited to:
 - a) Project Management Plan updates
 - b) Provide updates to the County for items requiring change.
 - c) Revise, as needed, develop, or update.
 - d) Contractor will utilize tools to manage configuration of software development activities.
2. The ConOps and SEMP will be reviewed by Contractor and the County during project kickoff. It is the responsibility of HNTB to own and update these documents with support and inputs from Contractor:
 - a) .
3. Contractor will create a draft baseline schedule for the kickoff meeting and will manage the schedule throughout the project. Schedule will be created in Microsoft Project and shall include:
 - a) Project Schedule shall include monthly updates throughout the project.
4. During the initiation phase Contractor and County will do a final review of the System Requirements Specification and Requirements Traceability Verification Matrix requirements. Contractor will create the initial RTVM after this review. Contractor will manage the SyRS and RTVM throughout the project.
5. Contractor will provide a verification plan as part of the planning documents.



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6. As part of the project design phase, Contractor will create both a functional and technical design document. The functional design document (FDD) will include business-oriented details on the system design including business solution architecture, description of major subsystems, systems to be integrated, functional design of new features to the COTS subsystems, workflows, business rules, and development plans. The System Design Document (SDD) will provide technical details of the systems including networking, systems integration, hosting platform. This includes but not limited to:
 - a) Develop the Preliminary System Design Document
 - b) Develop Hardware and Software Recommendation Report and Hardware and COTS Specification Plan.
 - c) Contractor will be the main developer of custom software and interfaces, and integration of existing systems.
 - d) Revise the FDD as needed, develop, or update in conjunction with County Representative and HNTB.
7. HNTB will develop and update Regional ITS Architecture documentation with input from Contractor.
8. Contractor will create, revise, and update as required an Interface Control Document (ICD) to be delivered after go-live. This document will summarize the APIs and integration points for external systems.

C. CONSTRUCTION REQUIREMENTS:

1. The County shall be responsible for reviewing and complying with the approved NEPA documentation including any and all required permits.
2. The County will be responsible for field device installation and will manage these requirements.

D. SOFTWARE PROCUREMENT/DEVELOPMENT:

These are the new subsystems to be developed and implemented by Contractor:

- Decision Support System - Develop and integrate into the Smart City Data Platform
- Predictive Analytics Module - Develop and integrate into the Smart City Data Platform
- Demand Management Module - Develop and integrate into the Smart City Data Platform

E. MOBILE APPLICATIONS:

These mobile apps will be implemented and deployed by Contractor:

- Cellular On-Board Unit - Develop new or modify existing smartphone-based applications.
- Personal Information Device - Develop new or modify existing smartphone-based applications.
- Virtual Dynamic Message Sign - Develop new or modify existing smartphone-based applications.

F. FIELD HARDWARE PROCUREMENT:

Roadside Units and Intersection Video Analytics / Machine Learning Detection Systems are listed in Exhibit C.

G. SYSTEM HARDWARE PROCUREMENT:

- I. System Computer Hardware and System Computer Licensing will be delivered by Contractor as Software as a Service, more specifically defined in Exhibit F: Pinellas Connected Community Software as a Service Agreement (PCC-SaaS), with County having a right to use license. Contractor will own all intellectual property rights of the solution and must provide support to the County.

H. IMPLEMENTATION, INTEGRATION, TESTING AND TRAINING:

- Contractor will integrate all new data sources and field devices into the Existing System.
- Early deployment will include new data sources and RSU/IVA along with:
 - Connected Vehicle RSU deployment and integration into the Connected Vehicle Management Software platform.



AGREEMENT

- Intersection Video Analytics configuration and training
- Mobile Routing Application interface to the Decision Support System
- Technical Special Provisions (TSPs)
- Contractor will provide a cybersecurity plan during the planning phase.
- Contractor will provide 2 environments within the cloud hosted platform.
- Contractor will support SAT and work with County's evaluation team.
- Contractor will provide full training for County users to include:
 - Training Plan
 - Complete System Training
- .
- Contractor will provide a full set of user manuals for the County.
 - As-Built Operating Manuals
 - Warranty Transfer to Pinellas County

I. OPERATIONS & MAINTENANCE:

Soft Launch Phase - Contractor and the County will monitor the system performance for 6 months and make any final changes to the system before entering the full Operations and Management (O&M) phase.

Hard Launch Phase - Maintain the PCC platform and all hardware during the 6 months O&M phase of the project. Maintenance on the PCC platform will include both preventative and emergency maintenance.

J. DETAILED PROJECT WORK PLAN AND SCHEDULE:

Contractor will provide a detailed schedule for the project and deliver to the County Representative prior to the kickoff meeting.



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EXHIBIT B - INSURANCE REQUIREMENTS

1. INSURANCE:

The Contractor must provide a certificate of insurance and endorsement in accordance with the insurance requirements listed below, prior to recommendation for award.

The Contractor shall obtain and maintain and require any subcontractor to obtain and maintain, at all times during its performance of the Agreement, insurance of the types and in the amounts set forth. For projects with a Completed Operations exposure, Contractor shall maintain coverage and provide evidence of insurance for two (2) years beyond final acceptance. All insurance policies shall be from responsible companies duly authorized to do business in the State of Florida and have an AM Best rating of A- VIII or better.

The Contractor shall provide certificate that is compliant with the insurance requirements. If the certificate received is compliant, no further action may be necessary. The Certificate(s) of Insurance shall be signed by authorized representatives of the insurance companies shown on the Certificate(s). **The Certificate holder section shall indicate Pinellas County, a Subdivision of the State of Florida, 400 S Fort Harrison Ave, Clearwater, FL 33756. Pinellas County shall be named as an Additional Insured for General Liability. A Waiver of Subrogation for Workers Compensation shall be provided if Workers Compensation coverage is a requirement.**

- A. Approval by the County of any Certificate(s) of Insurance does not constitute verification by the County that the insurance requirements have been satisfied or that the insurance policy shown on the Certificate(s) of Insurance is in compliance with the requirements of the Agreement. The County reserves the right to require a certified copy of the entire insurance policy, including endorsement(s), at any time during the RFP and/or contract period.
- B. If any insurance provided pursuant to the Agreement expires or cancels prior to the completion of the work you will be notified by CTrax, the authorized Contractor of Pinellas County. Upon notification, renewal certificate(s) of Insurance and endorsement(s) should be furnished to Pinellas County Risk Management at InsuranceCerts@pinellascounty.org and to CTrax c/o JDi Data at PinellasSupport@jdidata.com by the Contractor or their agent prior to the expiration date.
 - 1) The Contractor shall also notify the County within twenty-four (72) hours after receipt, of any notices of expiration, cancellation, nonrenewal or adverse material change in coverage received by said Contractor from its insurer. Notice shall be given by email to Pinellas County Risk Management at InsuranceCerts@pinellascounty.org. Nothing contained herein shall absolve Contractor of this requirement to provide notice.
 - 2) Should the Contractor, at any time, not maintain the insurance coverages required herein, the County may terminate the Agreement.
- C. If subcontracting is allowed under this RFP, the Primary Contractor shall obtain and maintain, at all times during its performance of the Agreement, insurance of the types and in the amounts set forth; and require any Subcontractors to obtain and maintain, at all times during its performance of the Agreement, insurance limits as it may apply to the portion of the Work performed by the Subcontractor; but in no event will the insurance limits be less than \$500,000 for Workers' Compensation/Employers' Liability, and \$1,000,000 for General Liability and Auto Liability if required below.

All subcontracts between the Contractor and its Subcontractors shall be in writing and are subject to the County's prior written approval. Further, all subcontracts shall

- 1) Require each Subcontractor to be bound to the Contractor to the same extent the Contractor is bound to the County by the terms of the Contract Documents, as those terms may apply to the portion of the Work to be performed by the Subcontractor.
- 2) Provide for the assignment of the subcontracts from the Contractor to the County at the election of Owner upon termination of the Contract.
- 3) Provide that County will be an additional indemnified party of the subcontract.



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- 4) Provide that the County will be an additional insured on all insurance policies required to be provided by the Subcontractor except workers compensation and professional liability.
 - 5) Provide a waiver of subrogation in favor of the County and other insurance terms and/or conditions as outlined below.
 - 6) Assign all warranties directly to the County; and
 - 7) Identify the County as an intended third-party beneficiary of the subcontract. The Contractor shall make available to each proposed Subcontractor, prior to the execution of the subcontract, copies of the Contract Documents to which the Subcontractor will be bound by this Section C and identify to the Subcontractor any terms and conditions of the proposed subcontract which may be at variance with the Contract Documents.
- D. Each insurance policy and/or certificate shall include the following terms and/or conditions:
- 1) The Named Insured on the Certificate of Insurance and insurance policy must match the entity's name that responded to the solicitation and/or is signing the agreement with the County.
 - 2) Companies issuing the insurance policy, or policies, shall have no recourse against County for payment of premiums or assessments for any deductibles which all are at the sole responsibility and risk of Contractor.
 - 3) The term "County" or "Pinellas County" shall include all Authorities, Boards, Bureaus, Commissions, Divisions, Departments and Constitutional offices of County and individual members, employees thereof in their official capacities, and/or while acting on behalf of Pinellas County.
 - 4) All policies shall be written on a primary, non-contributory basis.

The minimum insurance requirements and limits for this Agreement, which shall remain in effect throughout its duration and for two (2) years beyond final acceptance for projects with a Completed Operations exposure, are as follows:

- 1) **Workers' Compensation Insurance:** Worker's Compensation Insurance is required if required pursuant to Florida law. If, pursuant to Florida law, Worker's Compensation Insurance is required, employer's liability, also known as Worker's Compensation Part B, is also required in the amounts set forth herein.

Limits	Florida Statutory
Employers' Liability Limits	
Per Employee	\$ 500,000
Per Employee Disease	\$ 500,000
Policy Limit Disease	\$ 500,000

If Vendor/Contractor is not required by Florida law, to carry Workers Compensation Insurance in order to perform the requirements of this Agreement, County Waiver Form for workers compensation must be executed, submitted, and accepted by Risk Management. Failure to obtain required Worker's Compensation Insurance without submitting and receiving a waiver from Risk Management constitutes a material breach of this Agreement.

- 2) **Commercial General Liability Insurance:** including, but not limited to, Independent Contractor, Contractual Liability Premises/Operations, Products/Completed Operations, and Personal Injury.

Limits	
Combined Single Limit Per Occurrence	\$ 1,000,000
Products/Completed Operations Aggregate	\$ 2,000,000
Personal Injury and Advertising Injury	\$ 1,000,000
General Aggregate	\$ 2,000,000

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- 3) **Cyber Risk Liability (Network Security/Privacy Liability) Insurance:** including cloud computing and mobile devices, for protection of private or confidential information whether electronic or non-electronic, network security and privacy; privacy against liability for system attacks, digital asset loss, denial or loss of service, introduction, implantation or spread of malicious software code, security breach, unauthorized access and use; including regulatory action expenses; and notification and credit monitoring expenses with at least minimum limits as follows:

Limits

Each Occurrence	\$ 2,000,000
General Aggregate	\$ 2,000,000

For acceptance of Cyber Risk Liability coverage included within another policy required herein, a statement notifying the certificate holder must be included on the certificate of insurance and the total amount of said coverage per occurrence must be greater than or equal to the amount of Cyber Risk Liability and other coverage combined.

- 4) **Professional Liability (Technology Errors and Omissions) Insurance:** with at least minimum limits as follows. If "claims made" coverage is provided, "tail coverage" extending three (3) years beyond completion and acceptance of the project with proof of "tail coverage" to be submitted with the invoice for final payment. In lieu of "tail coverage", Contractor may submit annually to the County, for a three (3) year period, a current certificate of insurance providing "claims made" insurance with prior acts coverage in force with a retroactive date no later than commencement date of this contract.

Limits

Each Occurrence or Claim	\$ 2,000,000
General Aggregate	\$ 2,000,000

For acceptance of Professional Liability coverage included within another policy required herein, a statement notifying the certificate holder must be included on the certificate of insurance and the total amount of said coverage per occurrence must be greater than or equal to the amount of Professional Liability and other coverage combined.



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EXHIBIT C - PAYMENT SCHEDULE

PRICE SUMMARY	
1. Project Management	\$ 425,000.00
2. Initiation	\$ 200,000.00
3. Elaboration	\$ 240,000.00
4. Early Deployment	\$ 450,000.00
5. Hardware	\$ 274,000.00
6. Implementation	\$ 710,000.00
7. Transition	\$ 355,000.00
8. System Hosting	\$ 57,000.00
9. Soft Launch	\$ 270,000.00
10. Operations and Maintenance (6 months)	\$ 210,000.00
TOTAL PROJECT CONTRACT TO EXCEED	\$ 3,800,000.00

Design-Build Phase						
PROJECT DELIVERABLES	Target Delivery	QTY	UNIT OF MEASURE	UNIT COST	NOT TO EXCEED EXTENDED PRICE	PAYMENT TERMS
1. Project Management					\$ 425,000.00	
Monthly Project Management	1	10	LS	\$ 42,500.00	\$ 425,000.00	To be paid monthly
2. Initiation					\$ 200,000.00	
Updated Conops/SEMP/PMP/Baseline Schedule includes risk management and change control plans, detailed project plan	1	1	LS	\$ 100,000.00	\$ 100,000.00	Paid on Final Acceptance of Document Deliverables
System Requirements Spec + RTVM	1	1	LS	\$ 100,000.00	\$ 100,000.00	Paid on Final Acceptance of Document Deliverables
3. Elaboration					\$ 240,000.00	
System Design Document	2	1	LS	\$ 100,000.00	\$ 100,000.00	Paid on Final Acceptance of Document Deliverables
Test Plan (Verification Plan)	5	1	LS	\$ 60,000.00	\$ 60,000.00	Paid on Final Acceptance of Document Deliverables
Azure Environment Setup	5	1	LS	\$ 50,000.00	\$ 50,000.00	Paid on Demonstration and acceptance
Cybersecurity Plan	6	1	LS	\$ 30,000.00	\$ 30,000.00	Paid on Final Acceptance of Document Deliverables
4. Early Deployment					\$ 450,000.00	
Install updated Core PCC Systems (ETX, MDP, CMCC) and integrate new data sources	4	1	LS	\$ 200,000.00	\$ 200,000.00	Paid on Demonstration of completed task activities
Integrate Field devices with PCC	4	1	LS	\$ 250,000.00	\$ 250,000.00	Paid on Demonstration of completed task activities
5. Hardware Procurement					\$ 274,000.00	
Procure RSUs	1	80	LS	\$ 2,750.00	\$ 220,000.00	Paid upon delivery of materials to County
Procure IVA - OPTIONAL	2	8	LS	\$ 6,000.00	\$ 54,000.00	Paid upon delivery of materials to County
6. Implementation					\$ 710,000.00	
Proactive Analytics Module (PAM)	7	1	LS	\$ 300,000.00	\$ 300,000.00	75% Payable upon ready to SAT, 25% upon completion of SAT
Decision Support System & Demand Management Module	7	1	LS	\$ 180,000.00	\$ 180,000.00	
Mobile Applications	7	1	LS	\$ 150,000.00	\$ 150,000.00	
Dashboards & Reports	7	1	LS	\$ 80,000.00	\$ 80,000.00	
7. Transition					\$ 355,000.00	
System Acceptance Testing	8	1	LS	\$ 100,000.00	\$ 100,000.00	Paid on Acceptance of SAT
User and System Admin Documentation	9	1	LS	\$ 40,000.00	\$ 40,000.00	Paid on Final Acceptance of Deliverables
Training Plan	7	1	LS	\$ 25,000.00	\$ 25,000.00	Paid on Final Acceptance of Deliverables
Training	8	1	LS	\$ 25,000.00	\$ 25,000.00	Paid upon completion of Training
OBM Plan	8	1	LS	\$ 25,000.00	\$ 25,000.00	Paid on Final Acceptance of Deliverables
Go-Live	10	1	LS	\$ 100,000.00	\$ 100,000.00	Paid on Final System Acceptance
Interface Control Document	10	1	LS	\$ 40,000.00	\$ 40,000.00	Paid on Final Acceptance of Deliverables
8. System Hosting					\$ 57,000.00	
Azure Hosting for integration and production		6	Months	\$ 9,500.00*	\$ 57,000.00	To be paid monthly starting in Month 5

Soft Launch						
PROJECT DELIVERABLES	Units	QTY	UNIT OF MEASURE	Monthly Cost	NOT TO EXCEED EXTENDED PRICE	PAYMENT TERMS
Azure Hosting	1	6	Monthly	\$ 8,500.00*	\$ 87,000.00	To be paid Monthly
PCC License (ETX, MDP, CMCC, DSS, PAM, MobileApp)	1	6	Monthly	\$ 12,000.00	\$ 72,000.00	
System Calibration and Maintenance	1	6	Monthly	\$ 40,000.00	\$ 240,000.00	
IVA license (\$500 per intersection per month) -OPTIONAL	9	6	Monthly	\$ 4,900.00	\$ 27,000.00	

Maintenance Services - Hard Launch						
PROJECT DELIVERABLES	Units	QTY	UNIT OF MEASURE	Monthly Cost	NOT TO EXCEED EXTENDED PRICE	PAYMENT TERMS
Azure Hosting	1	6	Monthly	\$ 8,500.00*	\$ 57,000.00	To be paid Monthly
PCC License (ETX, MDP, CMCC, DSS, PAM, MobileApp)	1	6	Monthly	\$ 12,000.00	\$ 72,000.00	
Maintenance Services	1	6	Monthly	\$ 10,000.00	\$ 60,000.00	
IVA license (\$500 per intersection per month) -OPTIONAL	9	6	Monthly	\$ 4,900.00	\$ 27,000.00	

Optional Services		
Item	Unit of Measure	Price
Kapsch C-V2X RSU with Installation Kit	Per Unit	\$ 2,750.00
Kapsch IVA (Edge Device + 2 Cameras)	Per Unit	\$ 8,000.00
IVA monthly license	Per Intersection Per Month	\$ 500.00
Integration of Additional KAPSCH RSU into PCC	Per Unit	N/C
Integration of Non-Kapsch RSUs	Per Unit	\$ 250.00
Integration of Additional Kapsch IVA units into PCC	Per Unit	N/C
Integration of Non-Kapsch IVA into PCC	One-Time company integration	\$ 20,000.00
Blended Hourly rate for TAM Labor on Additional Services	Per Hour	\$ 200.00

* As stated in Paragraph 14 in the Contract, County agrees that it is responsible for the cloud hosting price, which will be the Azure hosting costs charged to Kapsch. County agrees that the \$9,500 shown in Exhibit C is an estimated amount and could increase or decrease throughout the life of the Agreement. For the purpose of clarity, County is responsible to Kapsch for any increase in hosting costs.

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EXHIBIT D - PAYMENT/INVOICES

PAYMENT/INVOICES:

CONTRACTOR shall submit invoices for payment due as provided herein with such documentation as required by Pinellas County and all payments shall be made in accordance with the requirements of Section 218.70 et. seq, Florida Statutes, "The Local Government Prompt Payment Act." Invoices shall be submitted to the address below unless instructed otherwise on the purchase order, or if no purchase order, by the ordering department:

Finance Division Accounts Payable
Pinellas County Board of County Commissioners
P. O. Box 2438
Clearwater, FL 33757

Each invoice shall include, at a minimum, the Contractor's name, contact information and the standard purchase order number. In order to expedite payment, it is recommended the Contractor also include the information shown in below. The County may dispute any payments invoiced by CONTRACTOR in accordance with the County's Dispute Resolution Process for Invoiced Payments, established in accordance with Section 218.76, Florida Statutes, and any such disputes shall be resolved in accordance with the County's Dispute Resolution Process.

INVOICE INFORMATION:

Contractor Information Company name, mailing address, phone number, contact name and email address as provided on the PO.

Remit To Billing address to which you are requesting payment be sent.

Invoice Date Creation date of the invoice

Invoice Number Company tracking number.

Shipping Address Address where goods and/or services were delivered.

Ordering Department Name of ordering department, including name and phone number of contact person

PO Number Standard purchase order number

Ship Date Date the goods/services were sent/provided.

Quantity Quantity of goods or services billed.

Description Description of services or goods delivered.

Unit Price Unit price for the quantity of goods/services delivered.

Line Total Amount due by line item

Invoice Total Sum of all of the line totals for the invoice

Pinellas County offers a credit card payment process (ePayables) through Bank of America. Pinellas County does not charge Contractors to participate in the program; however, there may be a charge by the company that processes your credit card transactions. For more information, please visit Pinellas County purchasing website at (www.pinellascounty.org/purchase).

AGREEMENT

EXHIBIT E - DISPUTE RESOLUTION FOR PINELLAS COUNTY BOARD OF COUNTY COMMISSIONERS IN MATTERS OF INVOICE PAYMENTS:

Payment of invoices for work performed for Pinellas COUNTY Board of COUNTY Commissioners (COUNTY) is made, by standard, in arrears in accordance with Section 218.70, et. seq., Florida Statutes, the Local Government Prompt Payment Act.

If a dispute should arise as a result of non. payment of a payment request or invoice the following Dispute Resolution process will apply:

A. Pinellas COUNTY will notify a vendor in writing within 10 days of receipt of an improper invoice. The notice will indicate what steps the vendor should undertake to correct the invoice and resubmit a proper invoice to the COUNTY. Such steps should include requiring the vendor to contact the requesting department to validate the invoice and receive a sign off from that entity that would indicate that the invoice in question is in compliance with the terms and conditions of the Agreement, and then resubmitting the invoice as a "Corrected Invoice" to the requesting department to initiate the payment timeline.

1. Requesting department for this purpose is defined as the COUNTY department for which the work is performed or to which goods are provided.
2. Proper invoice for this purpose is defined as an invoice submitted for work performed that meets prior agreed upon terms or conditions to the satisfaction of Pinellas COUNTY.

B. Should a dispute result between the vendor and the COUNTY about payment of a payment request or an invoice then the vendor should submit their dissatisfaction in writing to the Requesting Department. Each Requesting Department will assign a representative who will act as a "Dispute Manager" to resolve the issue at departmental level.

C. The Dispute Manager will first initiate procedures to investigate the dispute and document the steps taken to resolve the issue in accordance with section 218.76 Florida Statutes. Such procedures must be commenced no later than 30 days after the date on which the payment request or invoice was received by Pinellas COUNTY and will not extend beyond 45 days after the date on which the payment request or invoice was received by Pinellas COUNTY.

D. The Dispute Manager should investigate and ascertain that the work, for which the payment request or invoice has been submitted, was performed to Pinellas COUNTY's satisfaction, and duly accepted by the Proper Authority. Proper Authority for this purpose is defined as the Pinellas COUNTY representative who is designated as the approving authority for the work performed in the contractual document. The Dispute Manager will perform the required investigation and arrive at a solution before or at the 45-day timeframe for resolution of the dispute, per section 218.76, Florida Statutes. The COUNTY Administrator or his or her designee will be the final arbiter in resolving the issue before it becomes a legal matter. The COUNTY Administrator or his or her designee will issue their decision in writing.

E. Pinellas COUNTY Dispute Resolution Procedures will not be subject to Chapter 120 of the Florida Statutes. The procedures will also, per section 218.76, Florida Statutes, not be intended as an administrative proceeding which would prohibit a court from ruling again on any action resulting from the dispute.

F. Should the dispute be resolved in the COUNTY's favor interest charges begin to accrue 15 days after the final decision made by the COUNTY. Should the dispute be resolved in the vendor's favor the COUNTY will pay interest as of the original date the payment was due.

G. For any legal action to recover any fees due because of the application of sections 218.70 et. seq., Florida Statutes, an award will be made to cover court costs and reasonable attorney fees, including those fees incurred as a result of an appeal, to the prevailing party If it is found that the non. prevailing party held back any payment that was the reason for the dispute without having any reasonable lawful basis or fact to dispute the prevailing party's claim to those amounts.

EXHIBIT F

Pinellas Connected Community Software as a Service Agreement

This Software as a Service Agreement ("SaaS Agreement") is entered into as of DATE by and between Kapsch TrafficCom USA, Inc. a corporation organized under the laws of the State of Delaware ("Kapsch"), and Pinellas County, a political subdivision of the State of Florida ("Client"). Kapsch and Client are referred to herein individually as a "Party" and jointly as the "Parties".

BACKGROUND

Client has hired Kapsch to design, build, and maintain a Connected Community Software Platform for Pinellas County and the Parties agree that such maintenance shall be in the form of subscription service. Therefore, in consideration of the promises, mutual covenants, and agreements contained in this SaaS Agreement, and other good and valuable consideration, the Parties entering into this SaaS Agreement and subject to the terms and conditions of this SaaS Agreement, Client wishes to subscribe to and Kapsch wishes to provide Connected Community Software as a Service.

NOW, THEREFORE, the Parties to this SaaS Agreement agree as follows:

AGREEMENT

1 Definitions

All definitions below and elsewhere in this SaaS Agreement apply both to their singular and plural forms, as the context may require. The terms "**herein**", "**hereunder**", and "**hereof**" and similar expressions refer to this SaaS Agreement.

- 1.1 "**Affiliate**" shall mean any Entity (defined below) directly or indirectly controlling, controlled by or under common control with a Party, where control means the ownership or control, directly or indirectly, of more than fifty percent (50%) of all the voting power of the shares (or other securities rights) entitled to vote for the election of directors or other governing authority, as of the date this SaaS agreement was entered into or hereafter during the Term (defined below); provided that such entity shall be considered an Affiliate only for the time during which such control exists.
- 1.2 "**Application Platform**" or "**Platform**" means Kapsch's proprietary application software and/or website, including all modules, functions, features identified in an Order, SOW, or otherwise generally made available by SaaS Provider to its customers, and all technology resources and infrastructure (e.g., hardware, third party software, etc.) supporting the Services. The Application Platform includes all updates, releases, improvements, and corrections to the Application Platform

- 1.3 "*Client Data*" means any proprietary or confidential content, information, data and materials of any kind, which is provided to or processed by Kapsch in connection with its provision of the Services.
- 1.4 "*Data Center*" means the Microsoft Azure ("Azure") facility(ies) in which the servers, computer equipment and ancillary hardware used to host and operate the Application Platform reside. Kapsch will be hosting the application in Azure's Eastern Region.
- 1.5 "*Data Backup*" means the storage and backup provided by Azure pursuant to the SaaS Agreement between Kapsch and Azure. Currently, all Client Data will have a daily differential backup and a weekly full back up, but Data back-up is subject to change.
- 1.6 "*Documentation*" means Kapsch's user guides and manuals relating to the Services and Application Platform, including on-line help, as created pursuant to the SOW.
- 1.7 "*End User Data*" means all data and information collected from an end-user of Client or its Affiliates, including, without limitation, any personally identifiable information. This SaaS Agreement does not contemplate the existence of any End Users.
- 1.8 "*Entity*" means a corporation, partnership, limited liability company, or other enterprise, association, organization, or entity.
- 1.9 "*Intellectual Property*" or "*Intellectual Property Rights*" collectively means all of the following legal rights, title, or interest in or arising under the laws of the United States, or any other country or international treaty regime, whether or not filed, perfected, registered or recorded and whether now or hereafter existing, filed, issued or acquired: (i) patents, patent applications, or patent rights, including any and all continuations, divisions, reissues, reexaminations or extensions thereof; (ii) rights associated with works of authorship, including copyrights, copyright applications, copyright registrations, or moral rights; (iii) rights relating to know-how or trade secrets, including rights in industrial property, customer, vendor and prospect lists and all associated information or databases and other confidential or proprietary information; (iv) industrial design rights or mask work rights; (v) trademarks, service marks, logos, trade dress, trade names or service names; (vi) data rights; and (vii) any rights analogous to those set forth in the preceding clauses and any other proprietary rights relating to intangible property.
- 1.10 "*SaaS Services*" means the services that are provided under this SaaS Agreement, including (i) limited access and use rights to the Application Platform, (ii) hosting services, (iii) support services, and (iv) any other similar generally applicable services that Kapsch provides to its customers in accordance with the Documentation. SaaS Services do not include any professional services.



- 1.11 "Security Event" is an event where: (i) Confidential Information of Client in Kapsch's or its subcontractors' possession or control is accessed or received by an individual or entity not authorized to access or receive such information, (ii) there is a reasonable basis to believe that Confidential Information of Client in Kapsch's or its subcontractors' possession or control may have been accessed or received by an unauthorized individual or entity, (iii) an individual or entity authorized under this Agreement to use or access Confidential Information of Client is using, or reasonably suspected of using, any Confidential Information of Client in a manner not authorized under this Agreement, or (iv) Confidential Information of Client in Client's (or its third party contractors') possession or control is accessed (or there is a reasonable basis to believe may have been accessed) through the Application Platform in a manner or for a purpose not authorized under this Agreement or permitted under applicable laws or regulations.
- 1.12 "Statement of Work" or "SOW" means Exhibit A Statement of Work attached to the Agreement.
- 1.13 "Term" shall have the meaning set forth in Section 5.
- 1.14 "Zone Redundant Storage" means that the application data will be replicated in multiple Azure Zones within the Eastern Region to provide redundancy.

Other terms are defined in the context in which they are used throughout the Agreement.

2 Software-as-a-Service Rights, Obligations, and Limitations

2.1 Provision of SaaS Services and Application Platform.

Subject to the provisions of this SaaS Agreement, Kapsch will make available to Client and its designated Affiliates on a non-exclusive and non-transferable basis the SaaS Services, Application Platform, and Documentation in accordance with the Statement of Work, Documentation, and other terms of this SaaS Agreement. Unless expressly provided otherwise, Kapsch will be responsible for: (i) hosting, operating, maintaining, and supporting the Application Platform through Microsoft Azure ("Azure"); (ii) providing support as identified in the SLA; and (iii) implementing security fixes as necessary in Kapsch's sole discretion. The Application Platform and Client Data may only be hosted at the Data Center(s) identified in this SaaS Agreement or otherwise approved by Client.

2.2 Access and Use Rights.

Client will be responsible for providing its own Internet access to the Application Platform. Subject to the terms of this SaaS Agreement, Kapsch hereby grants to Client the non-transferable (except as otherwise permitted by this SaaS Agreement), non-exclusive, non-sublicensable, limited right and license to use and access the SaaS Services and Application Platform in accordance with the applicable Documentation, and other provisions of this SaaS Agreement. Such rights and license include the right for Client, its Affiliates, and all of their employees, representatives, contractors, customers, and members, as applicable, to use and access the Application Platform in connection with their relationship to Client.

2.3 Limitations on Use.

Except as otherwise provided in this SaaS Agreement, and as required by law, Client will not: (i) sell, rent, lease, sublicense or otherwise transfer or distribute the Application Platform or Documentation or any copies of the Application Platform or Documentation; (ii) modify, translate, reverse engineer, decompile or disassemble the Application Platform; (iii) create or prepare derivative works based upon the Application Platform; (iv) create any copy of or "mirror" the Application Platform; or (v) alter, destroy or otherwise remove any proprietary notices or labels on or embedded within the Application Platform or Documentation.

3 Term

3.1 Term

This SAAS Agreement shall commence upon the Soft Launch Phase as detailed in the SOW and shall conclude contemporaneously with the Goods and Services Agreement entered into between the Parties.

4 Service Levels

4.1 Service Levels

The SaaS Services and Application Platform will meet or exceed the minimum service level standards set out in Exhibit A: Statement of Work. ("**Service Level Agreement**" or "**SLA**" and collectively the "**Service Levels**" or "**SLAs**").

5 Fees

5.1 SaaS Fees

The Fees for this SaaS agreement are laid out in the Statement of Work (Exhibit A) and the corresponding Payment Schedule (Exhibit C).

6 Ownership

6.1 Ownership Rights

6.2 Ownership of Client Data

Kapsch acknowledges and agrees that, as between the Parties, Client exclusively owns all right, title, and interest in and to Client's Confidential Information and the Client Data, including all Intellectual Property Rights therein, irrespective of whether such Client Data is stored or processed through or in the Services or Application Platform. If Kapsch is deemed to have any ownership interest in Client's Confidential Information or the Client Data, including any and all derivative works, enhancements, or other modifications thereto, then Kapsch will assign, and hereby does assign, irrevocably and royalty-free, all of such ownership interest or other rights exclusively to Client and Kapsch will, at Client's reasonable request and expense, complete, execute, and deliver any and all documents necessary to effect or perfect such assignments.

6.3 Return of Client Data

Upon termination of this SaaS Agreement, Kapsch will return Client's Confidential Information and Client Data to Client in a form mutually agreeable to the Parties. Thereafter, Kapsch will delete all Client Data and any related production and test environments from Azure servers and verify such deletion in writing to Client.

6.4 Deliverables

Any written materials or deliverables (collectively "**Deliverables**") prepared for Client (excluding any derivative works to the Application Platform or Documentation) will be the property of Client, and Kapsch agrees to assign and hereby does assign to Client any and all of its rights in such Deliverables. Any Deliverable not assigned to Client is hereby licensed to Client as if it were part of the Application Platform or Documentation.

6.5 Residuals

7 Representations and Warranties

7.1 General

Kapsch represents and warrants to Client that:

- a) Kapsch is the owner of or licensee of all rights necessary and appropriate to perform the SaaS Services and grant the rights hereunder to the Application Platform and other Deliverables;
- b) The SaaS Services will be performed in a timely, professional and workman-like manner in accordance with industry standards, and with a degree of care, skill and expertise as is required for the provision of services of a similar nature;
- c) Kapsch will not violate any law or regulation or any agreements with any third party as a result of performing its obligations under this SaaS Agreement;
- d) There are neither pending nor threatened, nor to the best of Kapsch's knowledge, contemplated, any suits, proceedings, actions, or claims which would materially affect or limit the rights granted to Client under this SaaS.



Service Level Agreement

Attachment A to the Connected Community Software as a Service Agreement Between Kapsch and Pinellas County

This Service Level Agreement ("SLA") between Kapsch and Pinellas County *This document identifies the services required and the expected level of services for the Term of the SaaS Agreement.*

1. Definitions

All defined words in this SLA shall have the meaning proscribed to them in the SaaS Agreement unless otherwise defined in this SLA.

Term	Definition
Core Business Hours	6:00 am to 8:00 PM ET Monday-Friday
Service Availability	Service Availability means when the PCC is available to Pinellas County, subject to the exclusions defined under "Downtime" below Calculated per month as the (Available Hours minus Downtime Hours) divided by the Available Hours
Available Hours	Number of hours in the agreed upon calendar month that the system is available for use excluding scheduled and emergency maintenance.
Downtime Hours	"Downtime" means the total number of hours, outside Scheduled and Emergency Maintenance periods, that Pinellas County cannot access the PCC in the calendar month. The calculation of Downtime excludes time that Pinellas County is unable to access the PCC due to any of the following: <ul style="list-style-type: none"> • Scheduled Downtime • County's own Internet service provider • Microsoft Azure outages • Force majeure event • Any systemic Internet failures • Any failure in the County's own hardware, software, or network connection • County's bandwidth restrictions • County's acts or omissions • Anything outside of the reasonable control of Kapsch
Emergency Maintenance	Is any maintenance by Kapsch of which County has less than 5 Business Days' advance notice. Kapsch may schedule Emergency Maintenance if Kapsch deems it necessary to avoid any immediate threat to the environment or County sites. Maintenance Notifications will be sent to County's support contact

Pinellas Connected Community Software as a Service Agreement

Term	Definition
Maintenance Notifications	Communication from the Kapsch Maintenance Manager via an email to County's designated O&M and support contact, regarding the date and time that Kapsch intends to make the PCC unavailable. County understands and agrees that there may be instances where Kapsch needs to interrupt the PCC Service without notice to protect the integrity of the system due to security events, virus attacks, spam issues, or other unforeseen circumstances
Prescheduled Downtime Requirements	All prescheduled system downtime, unless otherwise agreed upon in advance by County, will occur outside of core business hours.
Response Time	Response Time starts upon County's notification of a defect to the Kapsch Support Team. Response time means the period until Kapsch's confirmation of the reported defect, from receipt of the information required from County to begin resolution and open a support ticket in Kapsch's ticketing support system. After receiving a report of a defect, Kapsch shall use an appropriate method to provide County with a progress update
Resolution Time	Defined as the amount of time between when the County first reports an issue and when a resolution plan to address the problem is presented to the County or the problem is actually solved
Service Credit	Means a percentage-based credit applied to County's invoice in the invoice period following successful confirmation by Kapsch of affected PCC Service metrics and validated by County. Credit to be calculated against and applied to monthly Maintenance and Support and License fees only (e.g., does not include cloud hosting fees).
Monthly SLA Status Summary	Once Deployed, Kapsch will provide Pinellas County with a monthly Service Level Agreement (SLA) status summary for each SLA below. The SLA status summary will be developed in tandem by Kapsch and the County to be due monthly during the term of the Contract. A template will be provided 60 days prior to Go Live. The SLA Status Summary will be subject to validation and verification by Pinellas County.

2. Service Levels**2.1 Service Availability (Uptime)**

Kapsch will use commercially reasonable efforts to maintain a 99.5% uptime goal. Should service availability in a calendar month falls below the target Service Availability, Kapsch will pay Service Credit equal to the percentage of the fees set forth in the table below. Service Availability shall be calculated based on hours of downtime across operational days in the calendar month (Excluding weekends and holidays).

Pinellas Connected Community Software as a Service Agreement

Table 1. Service Availability and Credits

Service Availability	Service Credit*
> 99.5%	0%
95.0- <= 99.5	5%
90.0%- <= 95.0	10%
80.0% - <= 90.0	15%
Below 80%	25%

2.2 Issue Response and Resolution

2.2.1 Service Desk (Telephone):

Kapsch's support is provided during core business hours via our Service Desk. All Level 1 & 2 issues must be reported via the help desk phone line. Calls are handled by a service agent, who will document the case and route it to the appropriate support engineer. The support engineer will provide an initial response within the stated response time.

2.2.2 Service Portal:

Kapsch will provide access to our Cherwell Service Portal, which will be available 24x7 to report Level 3-5 issues.

2.2.3 Severity levels:

Severity Level	Description
1 – Loss of Service	A security event, a complete system outage, or loss of essential functionality (ETX, CMP, CMCC) that renders the solution inaccessible.
2 – Degraded Service	A severe problem that causes a major impact on a customer's ability to operate the system and there is no workaround.
3 – Impacted Service	A major incident within a core area of the service that impacts service but does not prevent normal operations.
4 – Minor Impact	A minor problem that affects user experience without substantially degrading service or normal operations
5 – No Service Impact	General usage question, improvement request, or issue that is minor or cosmetic in nature that has no impact on Service

*Pinellas Connected Community Software as a Service Agreement***2.2.4 Response Times:**

A Kapsch support specialist shall use commercially reasonable efforts to acknowledge and respond to reported issues during normal business hours excluding weekends and Kapsch observed holidays.

Table 2. Severity and Response Times

Severity Level	Reporting Method	Response Time	Resolution Time
1	Telephone	1 Hour	Resolve issue or provide County with plan for resolution within 1 Business Day
2	Telephone	1 Hour	Resolve issue or provide County with plan for resolution within 1 Business Day
3	Service Portal	4 Hr (if reported during core business hours) or Next Business Day	Resolve issue or provide County with plan for resolution within 2 business day
4	Service Portal	Next Business Day	By Agreement or Next Planned release
5	Service Portal	2 Business Days	By Agreement or Next Planned release

EXHIBIT G - Pinellas Connected Community - System Requirements Matrix

No.	Requirement Function/Description	Restated Requirement	Req Type, Method & Source Documentation		
			Req Type	Verification Method	Parent Req
1.0	The Connected Community System shall provide multi-modal and multi-agency strategies and technologies to improve mobility and safety within the region	The Pinellas Connected Community System shall provide multi-modal and multi-agency strategies and technologies to improve mobility and safety within the region by successful implementation of IVA, DSS, DMM, and Mobile App technologies.	F	DEMO	
1.1	The Smart City Data Platform will store all necessary data for the Connected Community System	The Smart City Data Platform will store all necessary data for the Connected Community System	D	DEMO	1
1.1.1	The Connected Mobility Command Center (CMCC) shall monitor the status of CV Roadside equipment	The Connected Mobility Command Center (CMCC) shall monitor the status of CV Roadside equipment	F	DEMO	1.1
1.1.1.1	The CMCC shall send J2735 formatted messages to CV Roadside equipment	The CMCC shall send J2735 formatted messages to CV Roadside equipment	F	DEMO	1.1.1
1.1.1.2	The CMCC shall send data to the Connected Mobility Platform (CMP).	The CMCC shall send data to the Connected Mobility Platform (CMP).	F	DEMO	1.1.1
1.1.2	The CMP shall receive, aggregate, and send Smart City related data	The CMP shall receive, aggregate, and send Smart City related data	F	DEMO	1.1
1.1.2.1	The CMP shall receive CV related data from the CMCC	The CMP shall receive CV related data from the CMCC	F	DEMO	1.1.2
1.1.2.2	The CMP shall receive video analytics data from the video analytic system	The CMP shall receive video analytics data from the video analytic system	F	DEMO	1.1.2
1.2.1	The Performance Measures module shall display dashboards and reports of current system performance	The Performance Measures module shall display dashboards and reports of current system performance. 5 dashboards shall be provided as part of the initial delivery	F	DEMO	1.2
1.2.1.1	The Performance Measures module shall provide an interface for users to create new dashboards and reports	The Performance Measures module shall provide an interface for users to create new dashboards and reports. Integrator will train Pinellas County staff to create dashboards.	F	DEMO	1.2.1
1.2.1.2	The Performance Measures module shall display current versus historical travel times	One of the 5 dashboards to be delivered shall display current versus historical travel times	F	DEMO	1.2.1
1.2.1.3	The Performance Measures module shall receive data from the CMP	The Performance Measures module shall receive data from the CMP	F	DEMO	1.2.1
1.2.1.4	The Performance Measures module shall be viewable through a menu item selectable within the Smart City Platform	The Performance Measures module shall be viewable through a menu item selectable within the Smart City Platform	F	DEMO	1.2.1
1.2.2	The Predictive Analytics Module shall predict incident risk within the region	The Predictive Analytics Module shall predict incident risk along roadway segments of the two corridors (SR19, SR686) to use load balancing within the region. Segments will be identified during the design phase.	F	DEMO	1.2

Attachment 2 — Pinellas Connected Community Functional Requirements

1.2.2.1	The Predictive Analytics Module shall compute the location of an incident risk		F	DEMO	1.2.2
1.2.2.2	The Predictive Analytics Module shall receive current transportation data from the CMP	The Predictive Analytics Module shall receive current transportation data from the CMP	D	DEMO	1.2.2
1.2.2.3	The Predictive Analytics Module shall send appropriate agency users an alert when an incident is likely to occur	The PCC shall send appropriate agency users an alert when an incident is likely to occur.	F	DEMO	1.2.2
1.2.2.4	The Predictive Analytics Module shall send predicted incidents to the CMP	The Predictive Analytics Module shall send predicted incident risk by segments to the CMP	F	DEMO	1.2.2
1.2.3	The Demand Management Module shall calculate a recommended load balance between parallel routes.	The Demand Management Module shall calculate a recommended load balance between parallel routes; DMM/DSS will cover the 2 primary arterials - US 19 and SR-688. It will determine when LB is needed and what information should be displayed on county DMS and shared with mobile apps	F	DEMO	1.2
1.2.3.1	The Demand Management Module shall use route selection criteria based on travel time and traffic volumes	The Demand Management Module shall use route selection criteria based on travel time and traffic volumes; dependent on availability of traffic volume data from HERE feed or other data feeds.	F	DEMO	1.2.3
1.2.3.2	The Demand Management Module shall receive data from the CMP	The Demand Management Module shall receive data from the CMP	D	DEMO	1.2.3
1.2.3.3	The Demand Management Module shall provide recommendation of appropriate messages to be tested on physical DMS	The Demand Management Module will provide the comparative data between routes that may be used by an operator to create and post a message to the physical DMS.	F	DEMO	1.2.3
1.2.3.4	The Demand Management Module shall provide the adequate distribution of vehicles between main and alternative routes according to objective criteria	The Demand Management Module shall provide the adequate distribution of vehicles between main and alternative routes according to objective criteria. Criteria to be determined during design phase but must measurable to show the effects of Load Balancing.	F	DEMO	1.2.3
1.2.3.5	The Demand Management Module shall provide data for mobile app providers for visual and spoken notification of route recommendations, as in the Mobile Routing Analytics (MRA) application and Virtual Dynamic Messages (VDMS).	The Demand Management Module shall provide data for mobile app providers for visual and spoken notification of route recommendations, as in the Virtual Dynamic Messages (VDMS).	D	DEMO	1.2.3
1.2.4	The Decision Support Module shall provide recommended actions for events	The Decision Support Module shall provide recommended actions for events	F	DEMO	1.2
1.2.4.1	The Decision Support Module shall calculate when load balancing is needed	The Decision Support Module shall calculate when load balancing is needed	F	DEMO	1.2.4
1.2.4.2	The Decision Support Module shall calculate the optimal distribution of trips across the available network capacity based on speeds, travel times and current signal timings.	The Decision Support Module shall calculate the optimal distribution of trips across the available network capacity based on speeds, travel times and current signal timings.	F	DEMO	1.2.4
1.2.4.3	The Decision Support Module shall notify agency users when a load balance is recommended	The PCC shall notify agency users when a load balance is recommended	F	DEMO	1.2.4
1.2.4.4	The Decision Support Module shall provide recommendation for messages and timing plans for the load balance.	The Decision Support Module shall provide recommendation for messages for the load balance.	F	DEMO	1.2.4

Attachment 2 — Pinellas Connected Community Functional Requirements

1.3	Intersection Video Analytics (IVA) shall use video streams to develop various traffic data	Intersection Video Analytics (IVA) shall use video streams to develop various traffic data	F	DEMO	1.3
1.3.1	Intersection Video Analytics (IVA) shall recognize pedestrians within an instrumented intersection with a 90% accuracy	Intersection Video Analytics (IVA) shall recognize pedestrians within an instrumented intersection with a 90% accuracy	F	DEMO	1.3
1.3.2	Intersection Video Analytics (IVA) shall recognize bicycles within an instrumented intersection with a 90% accuracy	Intersection Video Analytics (IVA) shall recognize bicycles within an instrumented intersection with a 90% accuracy	F	DEMO	1.3
1.3.3	Intersection Video Analytics (IVA) shall send pedestrian and bicycle detections to the CMP	Intersection Video Analytics (IVA) shall send pedestrian and bicycle detections to the CMP	F	DEMO	1.3
1.3.4	Intersection Video Analytics (IVA) shall send pedestrian and bicycle detections to the CV infrastructure	Intersection Video Analytics (IVA) shall send pedestrian and bicycle detections to the CV infrastructure	F	DEMO	1.3
1.4.2	Mobile Routing Analytics (MRA) App shall display current event information from the Smart City Platform	Mobile App shall display current event information from the Smart City Platform via icon and message band on the app.	F	DEMO	1.4
1.4.4	Mobile Routing Analytics (MRA) App shall be available for users to download from the Apple App Store and/or Google Play Store	Mobile App shall be available for users to download from the Apple App Store and/or Google Play Store	F	DEMO	1.4
1.4.5	Virtual Dynamic Message Sign (VDMS) messages shall display current event information from the Smart City Platform	Virtual Dynamic Message Sign (VDMS) messages shall display current event information from the Smart City Platform	F	DEMO	1.4
1.4.6	Virtual Dynamic Message Sign (VDMS) messages shall display recommended routing	Virtual Dynamic Message Sign (VDMS) messages shall display information about current and alternative routes for user to decide which route to take	F	DEMO	1.4
1.6	CV Roadside Unit (RSU) shall be capable of being managed by the CMCC	CV Roadside Unit (RSU) shall be capable of being managed by the CMCC	F	DEMO	1
1.6.1	CV Roadside Unit (RSU) shall provide an ethernet connection to traffic signal controller	CV Roadside Unit (RSU) shall provide an ethernet connection to traffic signal controller	F	DEMO	1.6
1.6.2	CV Roadside Unit (RSU) shall use a power over ethernet connection	CV Roadside Unit (RSU) shall use a power over ethernet connection	F	DEMO	1.6
1.6.4	CV Roadside Unit (RSU) shall send J2735 and J2945 messages to OBU equipped vehicles	CV Roadside Unit (RSU) shall send J2735 and J2945 messages to OBU equipped vehicles	F	DEMO	1.6
1.6.5	CV Roadside Unit (RSU) shall send and receive signal phase and timing information	CV Roadside Unit (RSU) shall send and receive signal phase and timing information through C-OBUs	F	DEMO	1.6
1.6.6	CV Roadside Unit (RSU) shall be installed at county identified intersections	CV Roadside Unit (RSU) shall be installed at county identified intersections	F	DEMO	1.6
1.6.7	CV Roadside Unit (RSU) shall transmit data using DSRC, CV2X, and/or cellular standards	CV Roadside Unit (RSU) shall transmit data using CV2X	F	DEMO	1.6
DR001.1	The Connected and Automated Vehicle (CV) system shall use a CV Roadside Unit (RSU) at intersections within key to send and receive messages from Onboard Units (OBU) in vehicles, Cellular-OBUs (C-OBUs) and Personal Information Device (PID).	The Connected and Automated Vehicle (CV) system shall use a CV Roadside Unit (RSU) at intersections to send and receive messages from Onboard Units (OBU) in vehicles, Cellular-OBUs (C-OBUs) and Personal Information Device (PID).	F	DEMO	ConOps Section 4

Attachment 2 — Pinellas Connected Community Functional Requirements

DR001.2	RSUs shall be properly interfaced with traffic signal controllers, according to manufacturers' specifications and CEI verification.	RSUs shall be properly interfaced with traffic signal controllers, according to manufacturers' specifications and CEI verification.	I	INSPECT	ConOps Section 4
DR001.3	The system shall use Society of Automotive Engineers (SAE) most current J2735 message sets (e.g., Signal Phase and Timing (SPaT), MAP (roadway geometry), Basic Safety Message (BSM), Personal Safety Message (PSM), Traveler Information Message (TIM), Signal Request Message (SSM), Signal Status Message (SSM), etc.) and J2945 onboard system requirements.	The system shall use Society of Automotive Engineers (SAE) most current J2735 message sets (e.g., Signal Phase and Timing (SPaT), MAP (roadway geometry), Basic Safety Message (BSM), Personal Safety Message (PSM), Traveler Information Message (TIM), Signal Request Message (SSM), Signal Status Message (SSM), etc.) and J2945 onboard system requirements.	C	TEST	ConOps Section 4
DR001.5	In-vehicle C-OBUs equipment to meet Florida Design Standards and standard specifications	PID/C-OBUs mobile app shall meet Florida Design Standards and standard specifications	F	DEMO	Technical Special Provision
DR001.7	The CV system shall send out safety alerts to vehicle and pedestrian through C-OBUs and PIDs.	The CV system shall send out safety alerts to vehicle and pedestrian through OBUs , C-OBUs and PIDs.	F	DEMO	ConOps Section 4
DR001.8	The system shall deploy Intersection Video Analytics (IVAs) added to existing Pinellas County Closed-Circuit Television (CCTV) for both a pedestrian and work zone detection system.	The system shall include Intersection Video Analytics (IVAs) comprised of a machine learning device + 2 cameras per intersection for both a pedestrian and work zone detection system.	F	DEMO	ConOps Section 4
DR001.9	IVA equipment to meet Florida Design Standards and standard specifications	IVA equipment to meet Florida Design Standards and standard specifications	F	DEMO	Technical Special Provision
DR001.12	The CV system shall deploy PID-OBUs for Mobile Routing Analytics (MRAs) and Virtual Dynamic Message Sign (VDMS) messages to assist with in-vehicle rerouting.	The CV system shall include PID/C-OBUs for Virtual Dynamic Message Sign (VDMS) messages to assist with load balancing .	H	DEMO	ConOps Section 4
DR001.13	The CV system shall expand the existing Smart City Data Platform (SCDP) to provide a data interface to 3rd party mobile app developers	The CV system shall expand the existing Smart City Data Platform (SCDP) to provide a standardized data interface for 3rd party mobile app developers	I	DEMO	ConOps Section 4
DR001.14	The CV system shall expand SCDP to include demand management, load balancing and predictive analytics modules.	The CV system shall expand SCDP to include demand management, load balancing and predictive analytics modules.	F	DEMO	ConOps Section 4
DR001.15	The CV system shall collect and store/archive MRA, VDMS, IVA and MVA, demand management, load balancing and predictive analytics data for later retrieval and analysis.	The system shall collect and store/archive VDMS, and IVA, demand management / load balancing and predictive analytics data for later retrieval and analysis.	D	TEST	ConOps Section 4
DR001.16	The system shall collect and store/archive data for pedestrian and vehicle safety performance measurement. CEI shall verify that the data is collected at the TMC.	The system shall collect and store/archive data for pedestrian and vehicle safety performance measurement.	D	TEST	ConOps Section 4
DR001.17	The system shall allow collecting, storing and comparing before and after incident response times.	The system shall allow collecting, storing and comparing before and after incident response times.	D	TEST	ConOps Section 4
DR001.18	Pedestrian Safety application software on a PID shall receive and send messages to/from the RSU.	Pedestrian Safety application software on a PID shall receive and send messages from/to CV System .	F	DEMO	ConOps Section 4
DR001.19	The pedestrian PID shall use an application that receives notices from an RSU of an approaching vehicle, when an opposing pedestrian phase is active.	The pedestrian PID shall use an application that receives notices from the CV system of an approaching vehicle, when an opposing pedestrian phase is active.	F	DEMO	ConOps Section 4



Attachment 2 — Pinellas Connected Community Functional Requirements

DR001.20	The RSU shall log all BSMs, PSMs, TIMs and vehicle and PID alerts and forward data to storage per the system design.	The CV System shall receive all BSMs, PSMs, TIMs and vehicle and PID alerts and forward data to storage per the system design.	F	DEMO	ConOps Section 4
DR001.21	The PID application(s) shall provide transmission to storage using RSU/OBU logs	The PID application(s) shall provide transmission to storage using RSU/OBU logs	F	DEMO	ConOps Section 4
DR001.23	CAV RSUs shall comply with the FDOT Connected Vehicle Roadside Unit (RSU) Development Specification Section 681 for DSRC and C- V2X communications or as amended for the project.	CAV RSUs shall comply with the FDOT Connected Vehicle Roadside Unit (RSU) Development Specification Section 681 C- V2X communications or as amended for the project.	F	DEMO	Development Specification Dev681CV RSU
DR002.2	The system shall deploy a Decision Support System (DSS) for incident management.	The system shall deploy a Decision Support System (DSS) for incident management.	F	DEMO	ConOps Section 4
DR002.3	The system shall deploy IVAs on CCTVs for incident detection.	The system shall deploy IVAs on CCTVs for incident detection.	F	DEMO	ConOps Section 4
DR002.4	The FDOT Transportation Engineering Research Laboratory (TERL) approval of IVA and MVA equipment shall be conducted, as determined by application to TERL.	The FDOT Transportation Engineering Research Laboratory (TERL) approval of IVA equipment shall be conducted, as determined by application to TERL.	C	TEST	ConOps Section 4
DR003.1	The system shall expand the SCDP to interface with 3rd party applications.	The system shall expand the SCDP to interface with 3rd party applications. Integrator will provide general API interface to access.	I	DEMO	ConOps Section 4
DR004.1	The system shall deploy a load balancing algorithm to improve use of alternate underutilized corridors.	The system shall deploy a Demand Management Module/Decision Support System (DSS) that uses a load balancing algorithm to improve use of alternate underutilized corridors.	F	DEMO	ConOps Section 4
DR005.5	The smartphone/PID to be used as OBU shall be compatible with Personal Safety Message (PSM) data based on SAE J2735 and J2945 message set standards.	The smartphone/PID to be used as OBU shall be compatible with Personal Safety Message (PSM) data based on SAE J2735 and J2945 message set standards.	D	TEST	ConOps Section 4
DR005.6	The smartphone/PID to be used as OBU shall be compatible with Traveler Information Message (TIM) data based on SAE J2735 and J2945 message set standards.	The smartphone/PID to be used as OBU shall be compatible with Traveler Information Message (TIM) data based on SAE J2735 and J2945 message set standards.	D	TEST	ConOps Section 4
DR005.9	The MRA smartphone/PID app shall be capable of sending and receiving compatible information to the 3rd party SCDP interface.	The PID/C-OBU application shall be capable of sending and receiving compatible information to the 3rd party SCDP interface.	D	TEST	ConOps Section 4
DR005.11	The system shall provide for Virtual Dynamic Messages (VDMS) software on the SCDP.	The system shall provide for Virtual Dynamic Messages (VDMS) software on the SCDP.	F	DEMO	ConOps Section 4
DR005.12	The system shall provide for VDMS software to run on a smartphone/PID.	The system shall provide for VDMS software to run on a PID/C-OBU .	F	DEMO	ConOps Section 4
DR005.13	VDMS messages for an individual vehicle shall be transmitted from the TMC SCDP to the vehicle's OBU smartphone/PID via RSUs.	VDMS messages for an individual vehicle shall be transmitted from the CV System to the vehicle's C-OBU /PID .	F	DEMO	ConOps Section 4
DR005.14	VDMS messages for an individual vehicle shall be transmitted from the vehicle's OBU smartphone/PID to the TMC SCDP via RSUs.	VDMS messages for an individual vehicle shall be transmitted from the vehicle's C-OBU /PID to the CV System .	F	DEMO	ConOps Section 4



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DR005.15	The TIM or alert message shall be displayed on a PID with VDMS application.	The TIM or alert message shall be displayed on a PID with VDMS application.	F	DEMO	ConOps Section 4
DR005.17	TERL approval of VDMS application shall be conducted, as determined by application to TERL.	TERL approval of VDMS application shall be conducted, as determined by application to TERL.	P	TEST	ConOps Section 4
DR005.18	The equipment shall meet DMS, CCTV and all CV/ITS equipment requirements as denoted in the <i>FDOT Standard Specifications for Road and Bridge Construction</i> , most current edition	The equipment shall meet DMS, CCTV and all CV/ITS equipment requirements as denoted in the <i>FDOT Standard Specifications for Road and Bridge Construction</i> , most current edition	F	DEMO	ConOps Section 4
DR006.1	The PCC system with its new elements, information flows and services in Pinellas County, City of Clearwater and St. Petersburg shall be compatible with PCC ConOps revisions suggested to the FDOT District Seven Regional Intelligent Transportation System Architecture (RITSA)	The PCC system with its new elements, information flows and services in Pinellas County, City of Clearwater and St. Petersburg shall be compatible with PCC ConOps revisions suggested to the FDOT District Seven Regional Intelligent Transportation System Architecture (RITSA). Integrator will provide support.	F	DEMO	ConOps Section 4
DR006.2	The system shall provide a Data Mart for 3rd Party app developers, as defined by the system designers.	The system shall provide a Data Mart for 3rd Party app developers, as defined by the system designers.	D	DEMO	ConOps Section 4
DR006.3	The system shall provide for traffic control continuity with modular systems that can be maintained, expanded, or replaced at the end of their technological lifecycle.	The system shall provide for traffic control continuity with modular systems that can be maintained, expanded, or replaced at the end of their technological lifecycle.	F	DEMO	ConOps Section 4
DR006.4	RSU and all equipment warranties shall be transferrable and signed over to Pinellas County upon system acceptance.	RSU and all equipment warranties shall be transferrable and signed over to Pinellas County upon system acceptance.	C	DEMO	ConOps Section 4
DR006.5	The VENDOR shall train Pinellas County maintenance staff and contracted personnel on RSUs and all CV interfaces and systems prior to system acceptance.	The VENDOR shall train Pinellas County maintenance staff and contracted personnel on RSUs and all CV interfaces and systems prior to system acceptance.	F	DEMO	ConOps Section 4
DR006.6	CV system security shall be integrated with a Security Credential Management System (SCMS).	CV system security shall be integrated with a Security Credential Management System (SCMS).	I	TEST	ConOps Section 4
DR006.7	The SCMS used shall be compatible with or supplied by the statewide FDOT vendor.	The SCMS used shall be compatible with or supplied by the statewide FDOT vendor.	F	DEMO	ConOps Section 4
DR007.1	User privacy and Personally Identifiable Information (PII) of users, when collected, shall be protected (by scrubbing of PII, etc.).	User privacy and Personally Identifiable Information (PII) of users, when collected, shall be protected (by scrubbing of PII, etc.).	F	DEMO	ConOps Section 4
DR007.2	The software system(s) shall be password protected.	The software system(s) shall be password protected.	F	DEMO	ConOps Section 4
DR007.3	The system components (RSUs, etc.) shall be password protected.	System components, where enabled by hardware manufacturer, shall be password protected	F	DEMO	ConOps Section 4
DR007.4	The TMC facilities shall be secured from intrusion by persons without security clearance.	The TMC facilities shall be secured from intrusion by persons without security clearance.	F	DEMO	ConOps Section 4
DR007.5	The system shall log number of known attempted and successful breaches.	System security shall include at a minimum intrusion prevention/detection systems (IPS/IDS) to prevent, monitor, and alert in the event of malicious activity by external parties	D	TEST	ConOps Section 4

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DR007.6	The VENDOR shall provide a plan for cyber-incident response including a proposed cyber incident response team of Community Emergency Response Team (CERT) type make-up.	During project delivery a custom "Security Incident Response Plan" will be drafted and released with detailed team member specifications and appropriate response guidelines that ensure proper notification channels and management of incidents as well as after action reporting.	F	DEMO	ConOps Section 4
DR007.7	System software shall be updated to protect the software from breaches and failures as the software suppliers create updates.	System software shall be updated to protect the software from breaches and failures as the software suppliers create updates.	F	DEMO	ConOps Section 4
DR007.8	The VENDOR shall submit to Pinellas County a description of how the system will prevent, detect, log, and resolve attempted exploits.	Integrator shall provide continuously updated anti-malware installed on each system and shall perform monthly vulnerability scans on servers and network components to identify potential security exploit risks and patch them before they are compromised. Attempted exploits that are not automatically dealt with by anti-malware policies will be remediated on a case-by-case basis by the operations team.	F	DEMO	ConOps Section 4
DR007.9	The system shall have a means to prevent or terminate system access of devices having medium- or high-risk determination during regular, recurring operations monitoring.	The system shall have a means to prevent or terminate system access of devices having medium- or high-risk determination during regular, recurring operations monitoring.	F	DEMO	ConOps Section 4
DR008.1	Equipment and software shall meet requirements as denoted in the <i>FDOT Standard Specifications for Road and Bridge Construction</i> , most current edition, and other standards, such as NTCIP, IEEE, etc.	Equipment and software shall meet requirements as denoted in the <i>FDOT Standard Specifications for Road and Bridge Construction</i> , most current edition, and other standards, such as NTCIP, IEEE, etc.	F	DEMO	ConOps Section 4
DR008.2	CV, ITS and signal equipment shall come from the FDOT Approved Products List (APL) or be reviewed and proceed only with approval by the FDOT TERL.	CV, ITS and signal equipment shall come from the FDOT Approved Products List (APL) or be reviewed and proceed only with approval by the FDOT TERL.	F	DEMO	ConOps Section 4
DR008.3	New elements of the Traffic CV Management System shall be consistent with and compatible with the operational functions of the existing Traffic CV Management System.	New elements of the Traffic CV Management System shall be consistent with and compatible with the operational functions of the existing Traffic CV Management System.	F	TEST	ConOps Section 4
DR008.4	The Integrator shall assist County in obtaining licensing for the CV system (e.g., RSUs) from the Federal Communications Commission (FCC).	The Integrator shall assist County in obtaining licensing for the CV system (e.g., RSUs) from the Federal Communications Commission (FCC).	F	DEMO	ConOps Section 4
DR008.5	CV system shall use C-V2X communications and/or Dedicated Short-Range Communications (DSRC) as allowed by the most recent FCC regulations for CV communications.	CV system shall use C-V2X communications as allowed by the most recent FCC regulations for CV communications.	F	DEMO	ConOps Section 4
DR008.6	The CV system shall use CV V2I communications — SAE J2735 message set, latest version.	The CV system shall use CV V2I communications — SAE J2735 message set, latest version.	F	DEMO	ConOps Section 4
DR008.7	The CV system shall use CV V2I communications — SAE J2945 message set, latest version.	The CV system shall use CV V2I communications — SAE J2945 message set, latest version.	F	DEMO	ConOps Section 4
DR008.8	SAE J2735 and J2945 full-message-set transmission between the OBUs and RSU infrastructure (e.g., SPaT, MAP, TIM, BSM, SRM, and P SSM) shall occur with no errors and verified by CEI.	SAE J2735 and J2945 full-message-set transmission between the OBUs and RSU infrastructure (e.g., SPaT, MAP, TIM, BSM, SRM, and P SSM) shall occur with no errors and verified by CEI.	P	TEST	ConOps Section 4
DR008.09	The SCMS system shall be tested with a representative sample of project devices in accordance with the SCMS provider's guidance.	The SCMS system shall be tested with a representative sample of project devices in accordance with the SCMS provider's guidance.	D	TEST	ConOps Section 4

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DR008.10	C-V2X/DSRC message transmission between the OBUs and RSU infrastructure (e.g., SPaT, MAP, TIM, BSM, SRM, and SSM) shall occur with no errors and verified by CEI.	C-V2X message transmission between the OBUs and RSU infrastructure (e.g., SPaT, MAP, TIM, BSM, SRM, and SSM) shall occur with no errors and verified by CEI.	D	TEST	ConOps Section 4
DR008.11	The system shall offer low latency, secure applications, TMC control, and minor infrastructure modifications.	The system shall offer low latency, secure applications, TMC control, and minor infrastructure modifications.	F	TEST	ConOps Section 4
DR008.12	Initial testing must allow for drivers with CV equipment passing through the study area to not interfere with nor be interfered with by the equipment installation and tests.	Initial testing must allow for drivers with CV equipment passing through the study area to not interfere with nor be interfered with by the equipment installation and tests.	F	TEST	ConOps Section 4
DR008.14	Mean, median, maximum latency shall be within system tolerance. Latency is a time delay between the cause and the effect of some physical change in the system being observed.	Mean, median, maximum latency shall be within system tolerance. Latency is a time delay between the cause and the effect of some physical change in the system being observed.	P	TEST/ ANALYSIS	ConOps Section 4
DR008.15	Under failure of equipment or communications, the RSU system shall notify the Pinellas County TMC operator of the system problem.	Under failure of equipment or communications, the RSU system shall notify the Pinellas County TMC operator of the system problem.	F	DEMO	ConOps Section 4
DR008.16	Drivers and pedestrians shall view a local "no signal" message when the OBU or PID system is inoperable.	Drivers and pedestrians shall view a local "no signal" message when the C-OBU or PID system is inoperable.	F	DEMO	ConOps Section 4
DR008.17	The OBU Human Machine Interface (HMI) shall be mounted or installed in a location where it does not obstruct the line of sight of the vehicle operator nor distract from the primary task of driving.	The C-OBU/PID Human Machine Interface (HMI) shall be mounted or installed in a location where it does not obstruct the line of sight of the vehicle operator nor distract from the primary task of driving.	F	DEMO	ConOps Section 4
DR008.18	The OBU HMI shall be positioned in a location such that it can provide a visual output to the driver that can be read from the driver's normal seated position.	The C-OBU/PID HMI shall be positioned in a location such that it can provide a visual output to the driver that can be read from the driver's normal seated position.	F	DEMO	ConOps Section 4
DR008.19	The OBU HMI shall present alerts to drivers using a device that drivers are familiar with and limits driver interaction.	The C-OBU/PID HMI shall present alerts to drivers using a device that drivers are familiar with and limits driver interaction.	F	DEMO	ConOps Section 4
DR008.20	An OBU shall issue alerts to the vehicle operator via an HMI.	An C-OBU/PID shall issue alerts to the vehicle operator via an HMI.	F	DEMO	ConOps Section 4
DR008.21	The OBU HMI shall include both a visual and auditory interface for sharing traveler information that correlates with local signage (e.g., speed limits) per Manual on Uniform Traffic Control Devices (MUTCD) requirements.	The C-OBU/PID HMI shall include both a visual and auditory interface for sharing traveler information that correlates with local signage (e.g., speed limits) per Manual on Uniform Traffic Control Devices (MUTCD) requirements.	F	DEMO	ConOps Section 4
DR008.22	The OBU HMI shall notify the driver of MRA system status with the screen graphics and audio instructions.	The C-OBU/PID HMI shall notify the driver of MRA system status with the screen graphics and audio instructions.	F	DEMO	ConOps Section 4
DR008.23	The OBU HMI shall notify the driver of VDMS system status with the screen graphics and audio instructions.	The C-OBU/PID HMI shall notify the driver of VDMS system status with the screen graphics and audio instructions.	F	DEMO	ConOps Section 4
DR008.24	The number of calls for OBU maintenance, time required to maintain shall be tracked and logged.	The number of calls for C-OBU/PID maintenance, time required to maintain shall be tracked and logged.	D	TEST	ConOps Section 4
DR008.26	An RSU shall use Coordinated Universal Time (UTC) time for all logged data (e.g., events logs, probe vehicle data) based on the format defined in J2735 section 6.19 and epoch of January 1st, 1970.	An RSU shall use Coordinated Universal Time (UTC) time for all logged data (e.g., events logs, probe vehicle data) based on the format defined in J2735 section 6.19 and epoch of January 1st, 1970.	C	TEST	ConOps Section 4
DR008.27	RSU functionality failure shall not affect the safe operation of the signal controller.	RSU functionality failure shall not affect the safe operation of the signal controller.	C	DEMO	ConOps Section 4

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DR008.28	An RSU shall implement a firewall blocking all Internet protocol (IP) access from devices to any IP address other than those approved for specific applications.	An RSU shall implement a firewall blocking all Internet protocol (IP) access from devices to any IP address other than those approved for specific applications.	D	TEST	ConOps Section 4
DR008.29	An RSU shall support secure communication to/from the TMC.	An RSU shall support secure communication to/from the TMC.	F	TEST	ConOps Section 4
DR008.31	The Traffic CV Management System shall make the status of RSUs available to Traffic Management Staff.	The Traffic CV Management System shall make the status of RSUs available to Traffic Management Staff.	F	DEMO	ConOps Section 4
DR008.32	The Traffic CV Management System shall provide an alert to Traffic Management Staff via an email to the location of an RSU that is not running normally (off, not responding, in safe mode, etc.)	The Traffic CV Management System shall provide an alert to Traffic Management Staff via an email to the location of an RSU that is not running normally (off, not responding, in safe mode, etc.)	F	DEMO	ConOps Section 4
DR008.34	The Traffic CV Management System shall maintain a log of all alerts issued to traffic management staff	The Traffic CV Management System shall maintain a log of all alerts issued to traffic management staff	F	DEMO	ConOps Section 4
DR008.35	The CV equipment (e.g., RSUs, PIDs, IVA, MRA, MVA, VDMS, etc.) shall be connected so as not to interfere with the basic operations of the equipment it is attached to (e.g., traffic controller, CCTV camera, vehicle, etc.).	The CV equipment (e.g., RSUs, PIDs, IVA, VDMS, etc.) shall be connected so as not to interfere with the basic operations of the equipment it is attached to (e.g., traffic controller, CCTV camera, vehicle, etc.).	F	DEMO	ConOps Section 4
DR009.1	The system shall collect data to evaluate Component Effectiveness (false positives/negative alerts)	The system shall collect data to evaluate Component Effectiveness (false positives/negative alerts)	D	TEST	ConOps Section 4
DR009.2	The system shall collect data to evaluate System Effectiveness (reduced collisions, increased travel speed, reduced delay, reduced operational downtime)	The system shall collect data to evaluate System Effectiveness (reduced collisions, increased travel speed, reduced delay, reduced operational downtime)	D	DEMO	ConOps Section 4
DR009.3	Data from each CV App shall be collected in the Storage Area Network (SAN), Network Attached Storage (NAS) or cloud storage per the system design.	Data from each CV App shall be collected in the Storage Area Network (SAN), Network Attached Storage (NAS) or cloud storage per the system design.	D	DEMO	ConOps Section 4
DR009.4	The data retention, archival, and retrieval system of the data storage shall comply with: - Public Records Law, Chapter 119, Florida Statutes - Safety and Security Services, Section 281.301, Florida Statutes - Security of Data and Information Technology Resources Act, Section 282.318, Florida Statutes - Florida Cybersecurity Standards, Chapter 60GG-2, Florida Administrative Code The system shall be able to compare data from each CV App versus data from the "before" data to evaluate the effectiveness of the system.	The data retention, archival, and retrieval system of the data storage shall comply with: - Public Records Law, Chapter 119, Florida Statutes - Safety and Security Services, Section 281.301, Florida Statutes - Security of Data and Information Technology Resources Act, Section 282.318, Florida Statutes - Florida Cybersecurity Standards, Chapter 60GG-2, Florida Administrative Code The system shall be able to compare data from each CV App versus data from the "before" data to evaluate the effectiveness of the system.	D	VERIFY	ConOps Section 4
DR009.5	The system data shall meet or be consistent with constraints and conditions stated in the <i>PCC Data Management Plan</i>	The system data shall meet or be consistent with constraints and conditions stated in the <i>PCC Data Management Plan</i>	D	DEMO	DMP
DR009.6	The traffic data needed as defined in the Systems Validation Plan (Section 7.4) in the PCC ConOps will be physically stored and archived on a central data repository hosted in the Pinellas County TMC.	The PCC will be hosted in the cloud. The traffic data needed as defined in the Systems Validation Plan (Section 7.4) in the PCC ConOps will be physically stored and archived on a central data repository hosted in the Pinellas County TMC.	D	DEMO	ConOps Section 7.4



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DR009.7	The data repository will allow TMC operators to upload, archive, and manage project data for the purposes of analyzing traffic information regarding the CV applications for SPaT, IVA, MVA and MRA, VDMS, the DSS predictive analytics, demand management and so forth.	The data repository will allow TMC operators to upload, archive, and manage project data for the purposes of analyzing traffic information regarding the CV applications for SPaT, IVA, VDMS, the DSS predictive analytics, demand management and so forth.	D	DEMO	ConOps Section 7.4
DR009.8	Needed data required by FHWA and Pinellas County shall be readable and stored to the Project Open Data Metadata Schema resources.data.gov or other FHWA required platforms. Link: https://resources.data.gov/keywords/project-open-data-metadata-schema/	Integrator to support Pinellas County - Needed data required by FHWA and Pinellas County shall be readable and stored to the Project Open Data Metadata Schema resources.data.gov or other FHWA required platforms. Link: https://resources.data.gov/keywords/project-open-data-metadata-schema/	D	DEMO	DMP (pg. 7)
DR009.9	Data that is to be made publicly accessible shall follow the U.S. DOT Public Access Plan, as noted: https://www.transportation.gov/mission/open/official-dot-public-access-plan-v11	Integrator to support Pinellas County - Data that is to be made publicly accessible shall follow the U.S. DOT Public Access Plan, as noted: https://www.transportation.gov/mission/open/official-dot-public-access-plan-v11	D	DEMO	DMP (pg. 7)
DR009.10	The repository shall be indexed in the following site: https://www.re3data.org/search?query=transportation	Integrator to support Pinellas County - The repository shall be indexed in the following site: https://www.re3data.org/search?query=transportation	D	DEMO	DMP (pg. 7)
DR010.2	The system shall use equipment that is rated to have Mean Time Between Failure per USDOT RSU Requirements (USDOT_RSU_340- v001). The RSU shall remain operational for an average of 100,000 hours. CEI can verify this information from the VENDOR documentations of all equipment to be within FDOT and National Standards.	The system shall use equipment that is rated to have Mean Time Between Failure per USDOT RSU Requirements (USDOT_RSU_340- v001). The RSU shall remain operational for an average of 100,000 hours. CEI can verify this information from the VENDOR documentations of all equipment to be within FDOT and National Standards.	P	DEMO	ConOps Section 4
DR010.3	The RSU provider shall supply classroom training(s) of equipment installation, configuration, integration, and commissioning of its RSU, equipment, assemblies, and all related components and capabilities.	The RSU provider shall supply classroom training(s) of equipment installation, configuration, integration, and commissioning of its RSU, equipment, assemblies, and all related components and capabilities.	F	DEMO	ConOps Section 4
DR010.5	The VENDOR(s) shall supply classroom training(s) and related materials (handouts, slides, booklets, etc.) on equipment installation, configuration, integration, and commissioning of the RSU equipment assemblies, OBU devices, PID apps, and other related components to Pinellas County Department of Public Works (DPW) staff and asset maintenance Vendor.	The VENDOR(s) shall supply classroom training(s) and related materials (handouts, slides, booklets, etc.) on equipment installation, configuration, integration, and commissioning of the RSU equipment assemblies, C-OBU/PID apps, and other related components to Pinellas County Department of Public Works (DPW) staff and asset maintenance Vendor.	F	DEMO	ConOps Section 4
DR010.6	The VENDOR shall provide a Certificate of Completion to all individuals who successfully complete the VENDOR training.	The VENDOR shall provide a Certificate of Completion to all individuals who successfully complete the VENDOR training.	F	DEMO	ConOps Section 4
DR010.9	Test Plan and Operational Readiness Testing (ORT), per Test Readiness Review (TRR) and Operational Readiness Review (ORR), shall be completed prior to system acceptance and deployment.	Test Plan and Operational Readiness Testing (ORT), per Test Readiness Review (TRR) and Operational Readiness Review (ORR), shall be completed prior to system acceptance and deployment.	P	TEST	ConOps Section 4
DR010.11	The VENDOR shall train Pinellas County maintainers to install, test, and maintain the equipment.	The VENDOR shall train Pinellas County maintainers to install, test, and maintain the equipment.	F	DEMO	ConOps Section 4



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DR010.13	The RSU VENDOR shall provide a Software Development Kit (SDK) license to Pinellas County for the RSU.	The RSU VENDOR shall provide a Software Development Kit (SDK) license to Pinellas County for the RSU.	F	DEMO	ConOps Section 4
DR010.14	The VENDOR shall provide troubleshooting guides, firmware upgrades and customer service plan throughout duration of the project, and warranty documentations and ensure all warranties are transferred to the Pinellas County DPW.	The VENDOR shall provide troubleshooting guides, firmware upgrades and customer service plan throughout duration of the project, and warranty documentations and ensure all warranties are transferred to the Pinellas County DPW.	F	DEMO	ConOps Section 4
DR010.15	The Manufacturer's Warranty shall include all software and hardware upgrades required to comply with the latest version of the standards.	The Manufacturer's Warranty shall include all software and hardware upgrades required to comply with the latest version of the standards.	F	DEMO	ConOps Section 4
DR010.16	The on-site service includes the hardware and software technical support, firmware upgrades, software upgrades, licenses, product upgrades, and hardware repair and support with guaranteed response times for diverse levels of problems. CEI shall verify this with VENDOR documentations.	The on-site service includes the hardware and software technical support, firmware upgrades, software upgrades, licenses, product upgrades, and hardware repair and support with guaranteed response times for diverse levels of problems. CEI shall verify this with VENDOR documentations.	F	DEMO	ConOps Section 4
DR010.17	An MRA, VDMS, IVA and MVA Installation and Maintenance Plan shall be provided to the Pinellas County DPW for approval. The MRA, VDMS, IVA and MV Installation and Maintenance Plan shall include details about installation site locations, site layouts, ingress and egress, electrical service and power layout, logistics for the initial installation of equipment and applications in different types of vehicles and at intersections included in the project, vehicle operator training on OBU messages and alerts, and logistics for continuing the MRA, VDMS, IVA and MVA, RSU and OBU related Technical Support Services.	Kapsch wil develop installation plan for devices and support the county's installation team as needed. Details on installation, site layouts, and logistics shall be included for hardware/devices furnished by the Integrator.	F	DEMO	ConOps Section 4
DR010.18	System software shall be updated to protect the software from breaches as the software suppliers create updates.	System software shall be updated to protect the software from breaches as the software suppliers create updates.	F	DEMO	ConOps Section 4
DR010.19	The VENDOR shall present Standard Operating Procedures (SOPs) to the Pinellas County DPW for approval	The VENDOR shall present Operating Manuals to the Pinellas County DPW for approval	F	DEMO	ConOps Section 4
DR010.20	All warrantees for equipment shall be transferrable to Pinellas County	All warrantees for equipment shall be transferrable to Pinellas County	F	DEMO	ConOps Section 4
DR010.21	The VENDOR shall turn over all warranties for equipment to Pinellas County upon systems acceptance.	The VENDOR shall turn over all warranties for equipment to Pinellas County upon systems acceptance.	F	DEMO	ConOps Section 4